

PROJECT DATA	
PROJECT NAME:	COBBLESTONE AUTO SPA #17 SEC PECOS PARKWAY AND ELLSWORTH ROAD MESA, ARIZONA 85204
EXISTING USE:	VACANT
PROPOSED USE:	EXPRESS CAR WASH WITH CONVENIENCE STORE AND FUEL CANOPY
OWNER:	COBBLESTONE AUTO SPA 3739 E. BELL RD. PHOENIX, AZ 85032 (602) 787-0808 CONTACT: TUCK BETTIN
ARCHITECT:	PM DESIGN GROUP 76 EAST MITCHELL DRIVE PHOENIX, ARIZONA 85012 (602) 457-5288 OFFICE (602) 457-5755 FAX CONTACT: PAT MUSSER

SITE DATA	
SITE GROSS AREA:	134,145 S.F. / 3.08 AC
SITE NET AREA:	87,490 S.F. / 2.01 AC
APN #:	PART OF 304-62-004P
ZONING:	LI (LIGHT INDUSTRIAL)
GENERAL PLAN DESIGNATION:	COMMERCIAL
BUILDING FOOTPRINT:	10,409 S.F.
FUEL CANOPY:	3,447 S.F.
EQUIPMENT ENCLOSURE:	331 S.F.
FOOTPRINT TOTAL:	14,187 S.F.
PARKING CANOPIES:	4,233 S.F.
P.O.S. CANOPIES:	450 S.F.
BUILDING COVERAGE:	14,187 S.F. / 87,490 S.F. = 16.2%
LANDSCAPE:	14,826 S.F. / 87,490 S.F. = 16.7%
IMPERVIOUS COVERAGE:	72,864 S.F. / 87,490 S.F. = 83.3%
BUILDING HEIGHT:	MAXIMUM: 40'-0" PROVIDED: ±30'-0"

PARKING:	REQUIRED: (1) SPACE PER 375 S.F. OF BUILDING AREA 9,552 S.F. / 375 = 26 SPACES	26 SPACES
	PARKING PROVIDED: COVERED PARKING SPACES: COVERED ACCESSIBLE PARKING SPACES: STANDARD PARKING SPACES: ACCESSIBLE PARKING SPACES:	25 SPACES 1 SPACE 19 SPACES 1 SPACE
	TOTAL PROVIDED: 46 SPACES	
SETBACKS:	SETBACKS STREET FRONT (NORTH) SIDE STREET (WEST) SIDE (EAST) REAR (SOUTH)	REQ'D: 15' 15' 0' 0' PROVIDED: 16'-2" (TO BUILDING) 60'-0" (TO CANOPY) 95'-6" (TO CANOPY) 92'-0" (TO CANOPY)
TYPE OF CONSTRUCTION:	CAR WASH / C-STORE: FUEL CANOPY:	VB - SPRINKLERED IB - NON-SPRINKLERED
OCCUPANCY TYPE:	CAR WASH: C-STORE & FUEL CANOPY:	B (BUSINESS) M (MERCANTILE)

SCOPE OF WORK	
SCOPE OF WORK: NEW EXPRESS CAR WASH FACILITY WITH CONVENIENCE STORE AND FUEL CANOPY WITH SIX (6) MULTI-PRODUCT DISPENSERS. 27 SELF-SERVE, COVERED VACUUM STANCHIONS. THREE (3) COVERED EXPRESS LANE PAY STATIONS.	

VICINITY MAP	

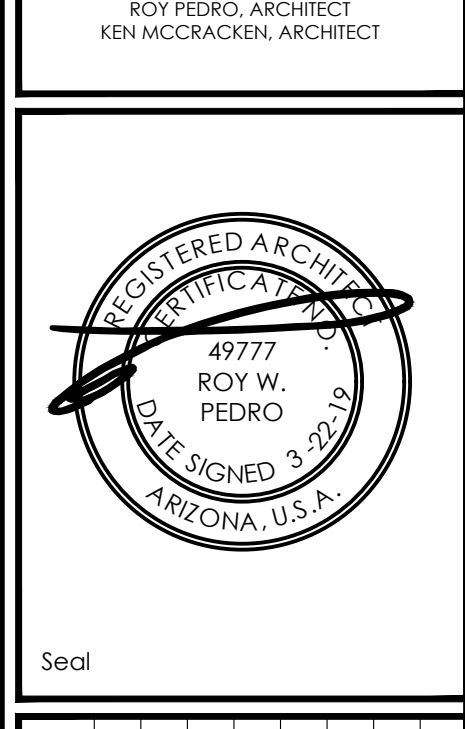
PROJECT SITE
NORTH

PM DESIGN
Architectural
Solutions Group

76 E MITCHELL DRIVE
PHOENIX, AZ 85012

PHONE: (602) 457-5757
FAX: (602) 457-5755

ROY PEDRO, ARCHITECT
KEN MCCrackEN, ARCHITECT

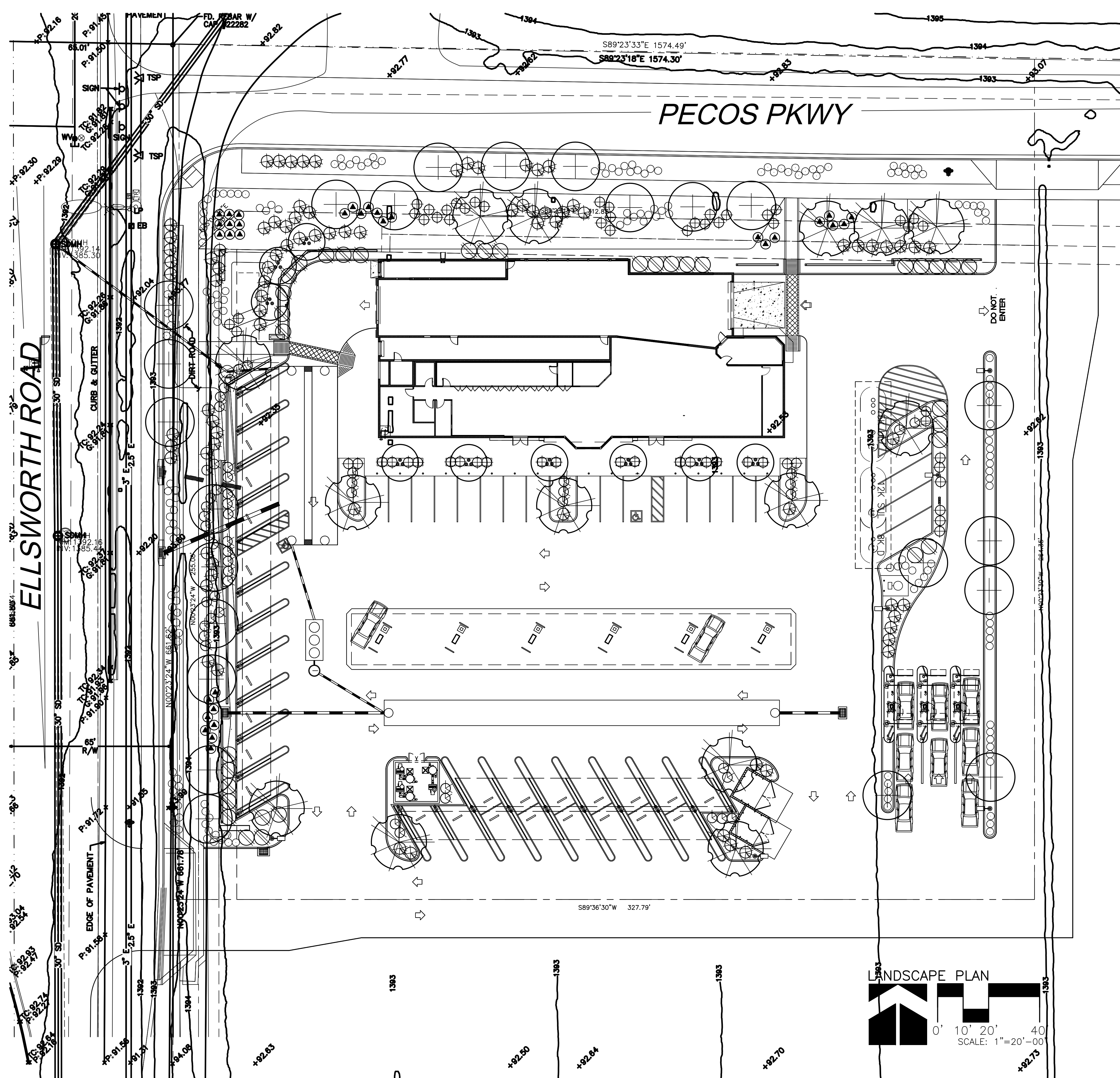


REVISION	DATE	DESCRIPTION
1	03/22/2019	DESIGN REVIEW SUBMITTAL

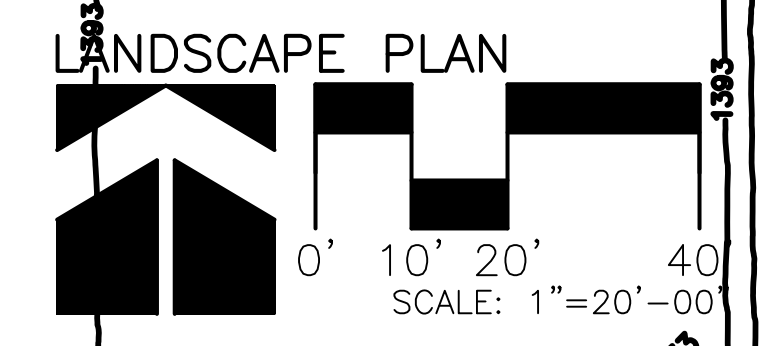
COBBLESTONE AUTO SPA #17
SEC PECOS PKWY AND
ELLSWORTH RD
MESA, AZ

COBBLESTONE
AUTO SPA

Project Number	CBL18001
Sheet Name	SITE PLAN
Sheet Number	SD1



- LANDSCAPE LEGEND
- QUERCUS VIRGINIANA
LIVE OAK
24" BOX
 - ACACIA ANEURA
MULGA
24" BOX
 - SOPHORA SECUNDIFLORA
TEXAS MOUNTAIN LAUREL
24" BOX
 - CALLISTOMON 'LITTLE JOHN'
LITTLE JOHN BOTTLE BRUSH
5 GALLON
 - RUPELLIA PENINSULARIS
BAJA RUELLIA
5 GALLON
 - TECOMA 'ORANGE JUBILEE'
ORANGE JUBILEE
5 GALLON
 - HESPERALOE PARVIFLORA
RED YUCCA
5 GALLON
 - AGAVE GEMNIFLORA
TWIN FLOWERED AGAVE
5 GALLON
 - LANTANA MONTEVIDENSIS
'GOLD MOUND'
5 GALLON
 - LANTANA 'RADIATION'
RADIATION LANTANA
5 GALLON
- 1/2" SCREENED EXPRESS 'PAINTED DESERT'
DECOMPOSED GRANITE
2" DEPTH IN ALL LANDSCAPE AREAS

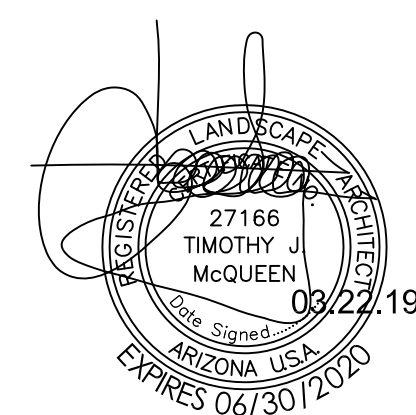


T.J. McQUEEN & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
URBAN DESIGN
SITE PLANNING

10450 N. 74th Street, Suite 120
Scottsdale, Arizona 85258
P. (602) 265-0320

EMAIL: timmcqueen@tjmla.net

TJM
ASSOCIATES



PM
DESIGN
Architectural
Solutions Group

76 E MITCHELL DRIVE
PHOENIX, AZ 85012

PHONE: (602) 457-5757
FAX: (602) 457-5755

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KEN MCCracken, ARCHITECT

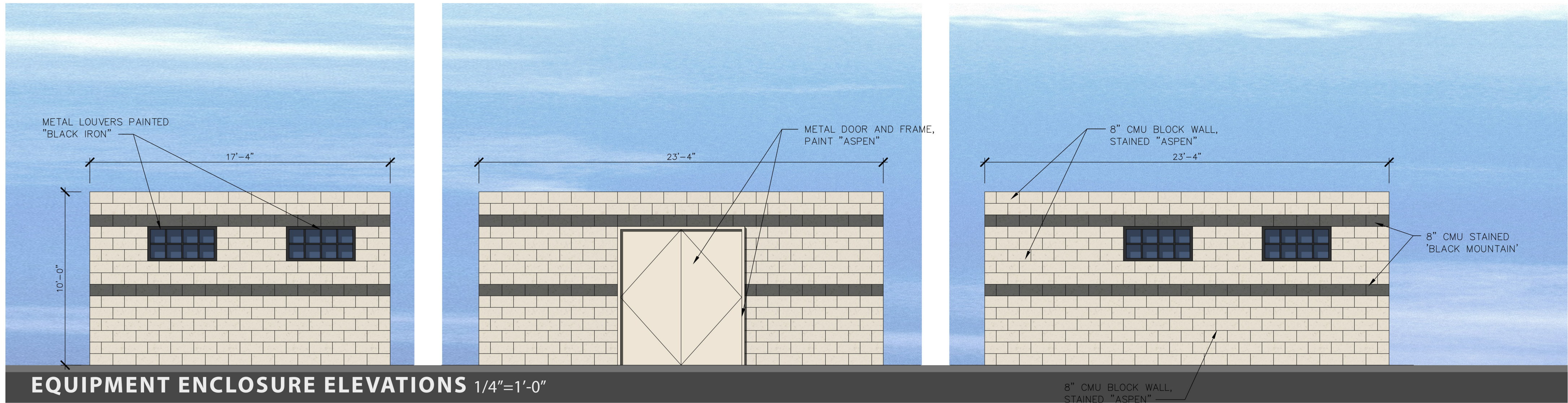
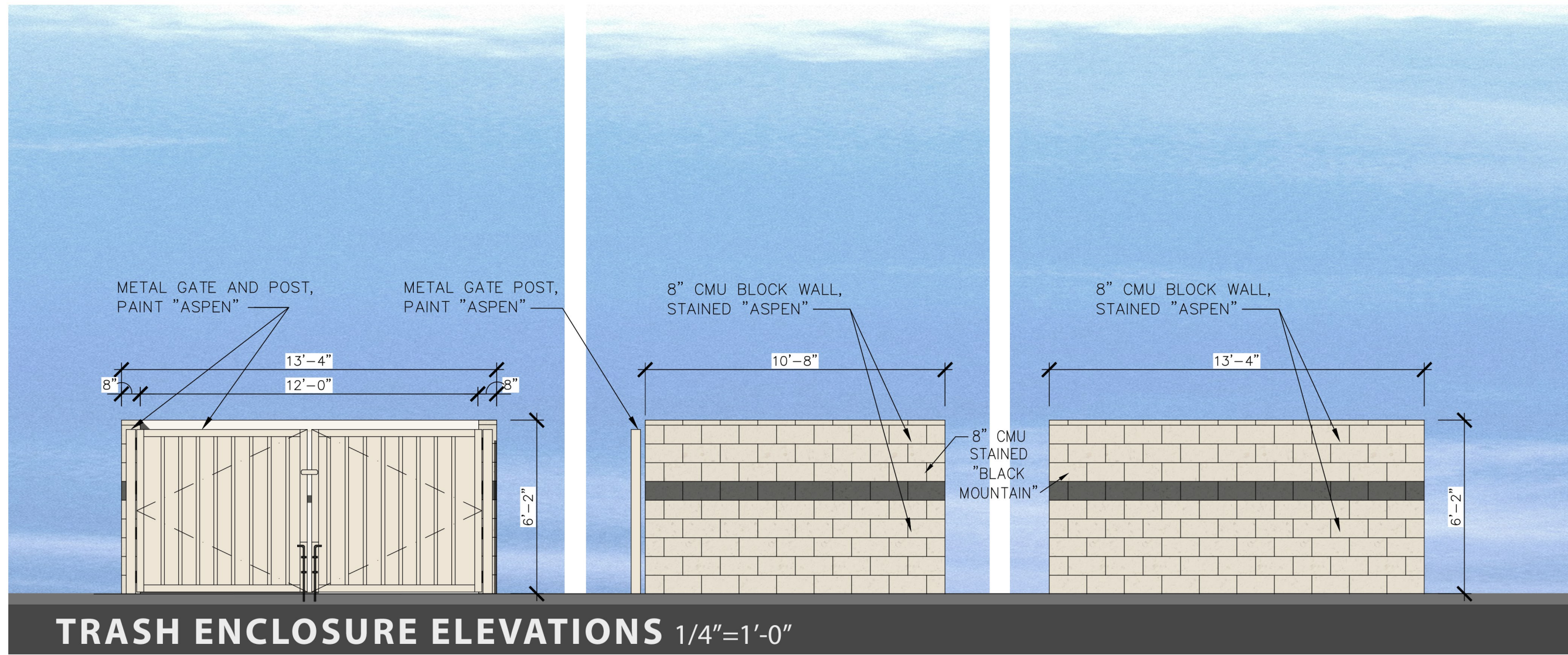
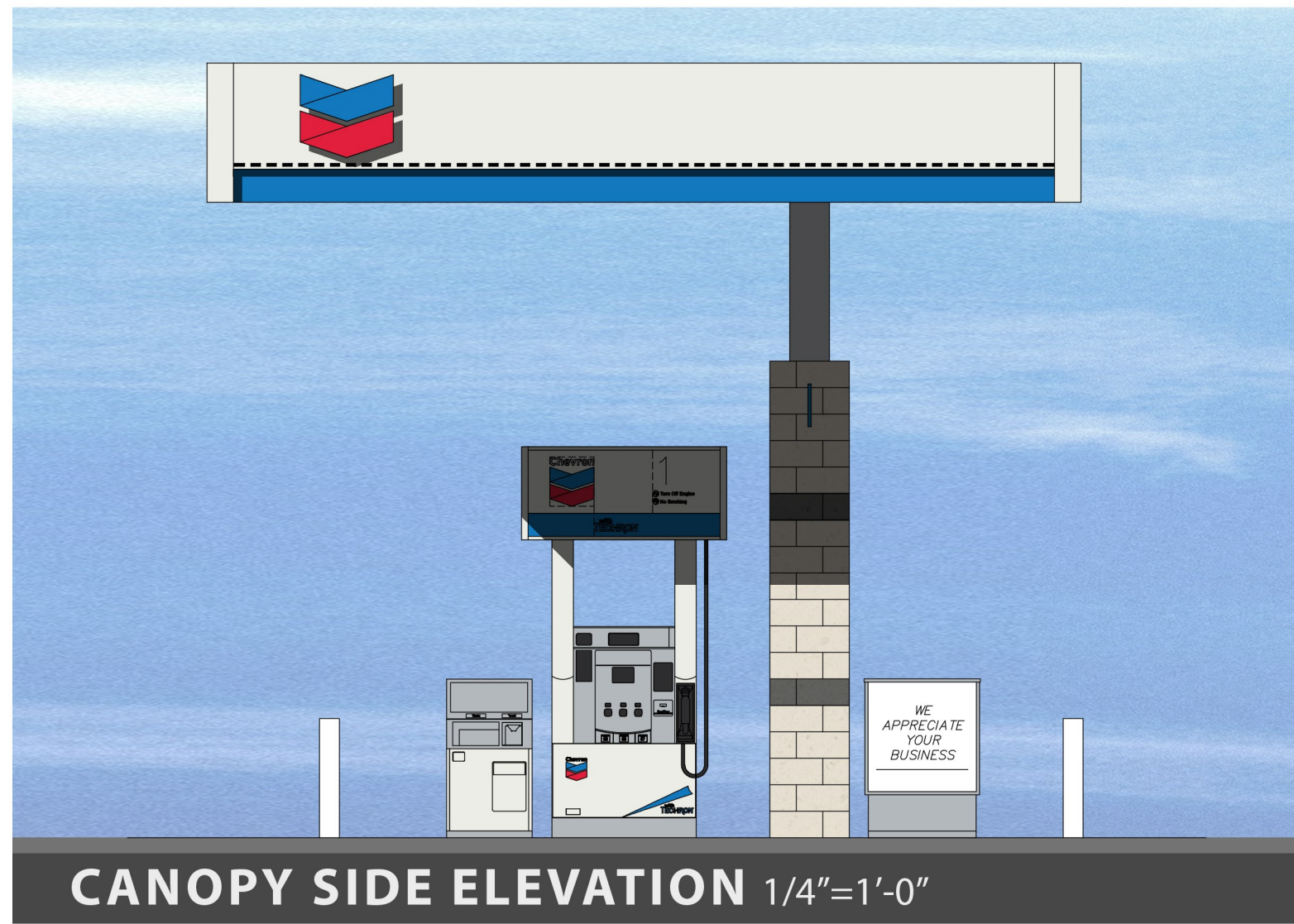
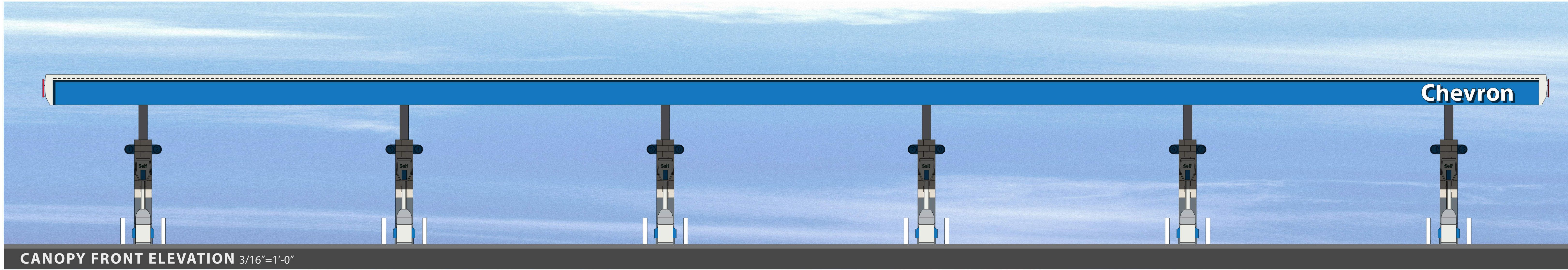
MARK	DATE	REVISION
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COBBLESTONE AUTO SPA #17
SEC PECOS RD AND
ELLSWORTH RD
MESA, AZ

Project Number
CBL18001

Sheet Name
**LANDSCAPE
PLAN**

Sheet Number
La.01



MATERIAL LEGEND:



"BLACK MAGIC"



"IR LIGHT RED"
PMS 186c



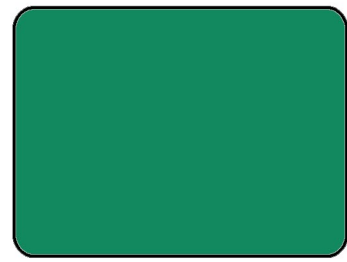
"DARK GRAY"
PMS 431C



"IR DARK BLUE"
PMS 2935C



"LIGHT GRAY"
PMS 428C



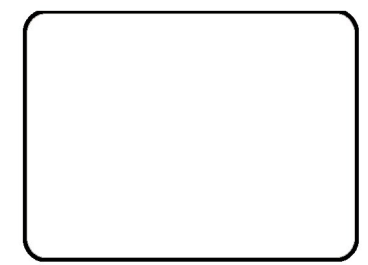
"GREEN"
PMS 3415c



"IR WHITE"



"ASPEN" CMU



"WHITE"



"BLACK MOUNTAIN" CMU



SOUTH ELEVATION (FRONT)



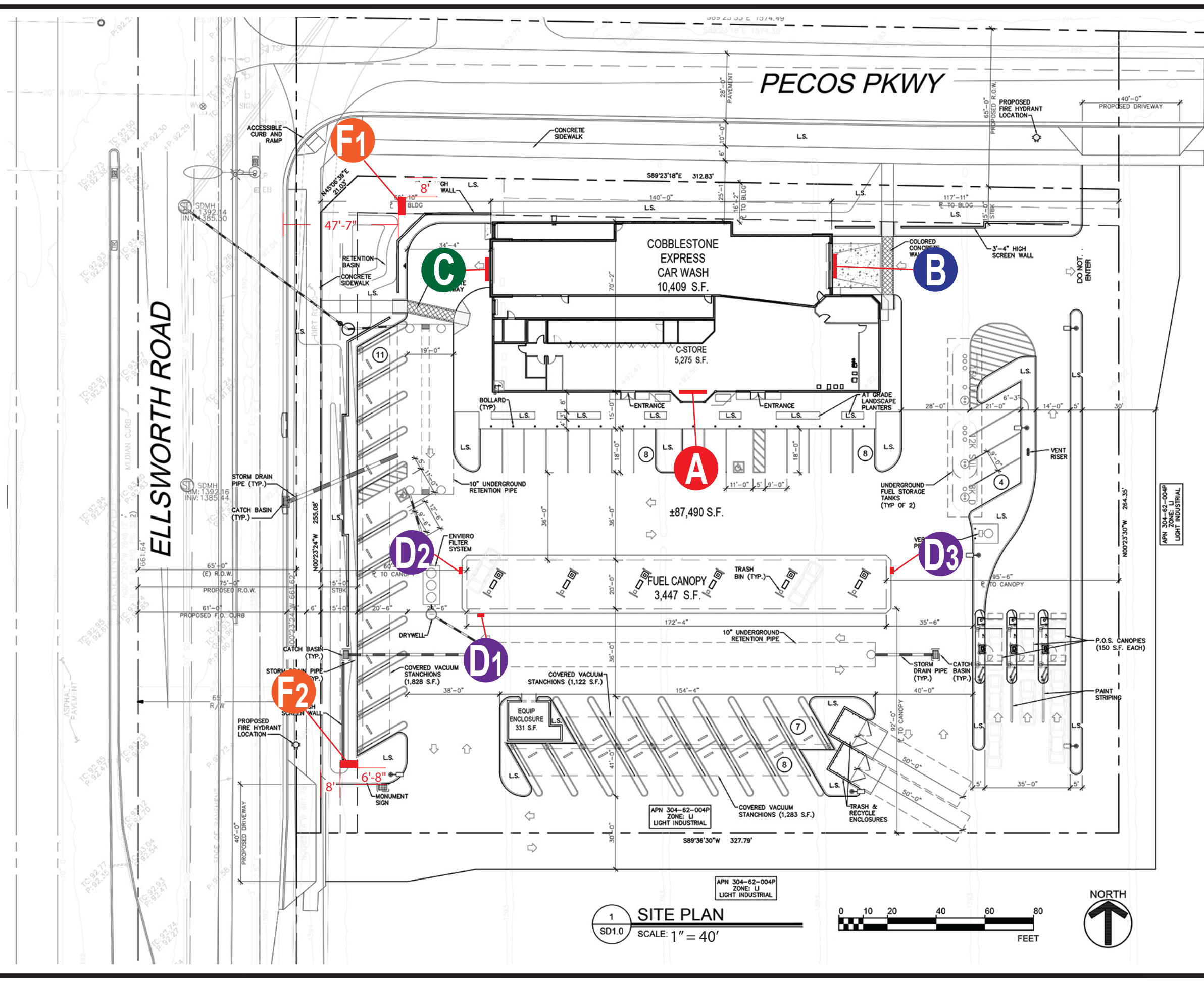
EAST ELEVATION (CAR WASH ENTRANCE)



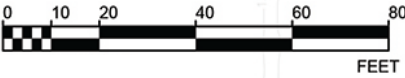
NORTH ELEVATION (REAR)



WEST ELEVATION (CAR WASH EXIT)



1 SITE PLAN
SD1.0 SCALE: 1" = 40'



CUSTOMER APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

LANDLORD APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

PROJECT: Cobblestone 17

9200 Valley Rd.
Prescott Valley,
Arizona
86314



Account Executive:
Dale Johnson

Designer:
AL

Design Number:
4706

Job Number:

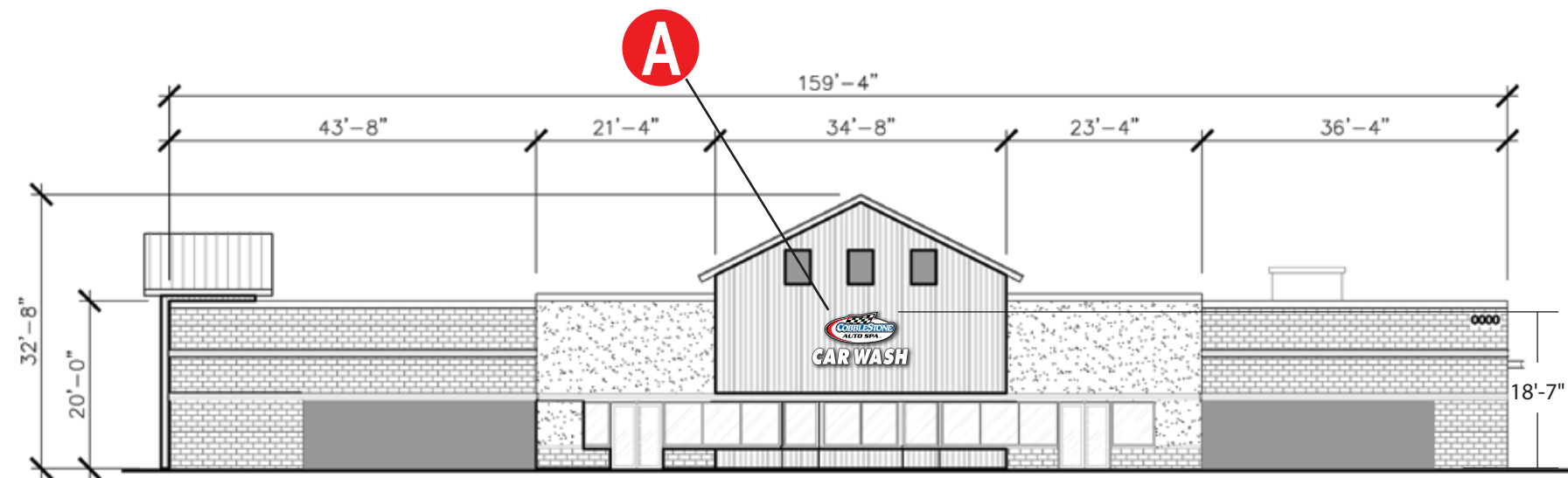
DATE:
03/20/2019

SCALE:
AS NOTED

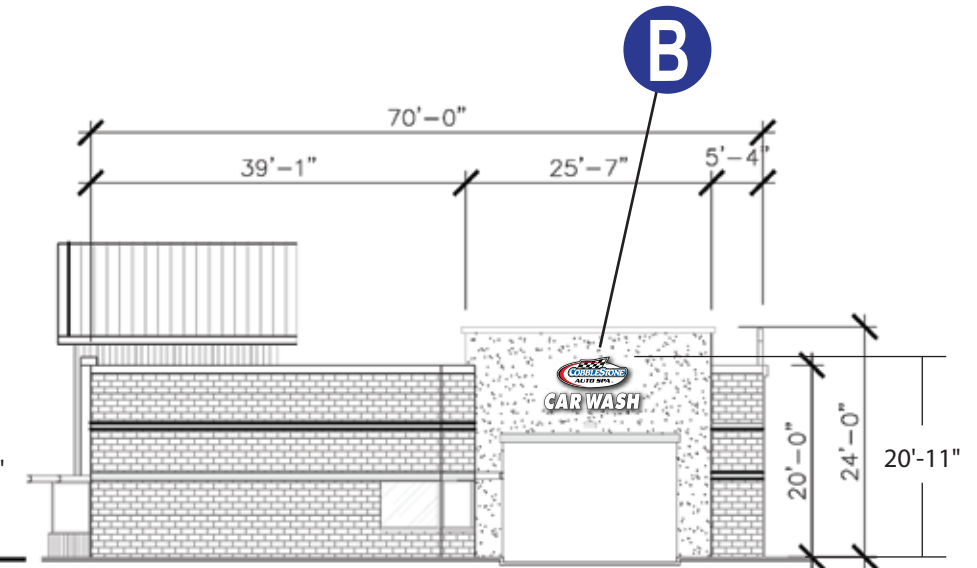
REVISIONS:

SHEET:

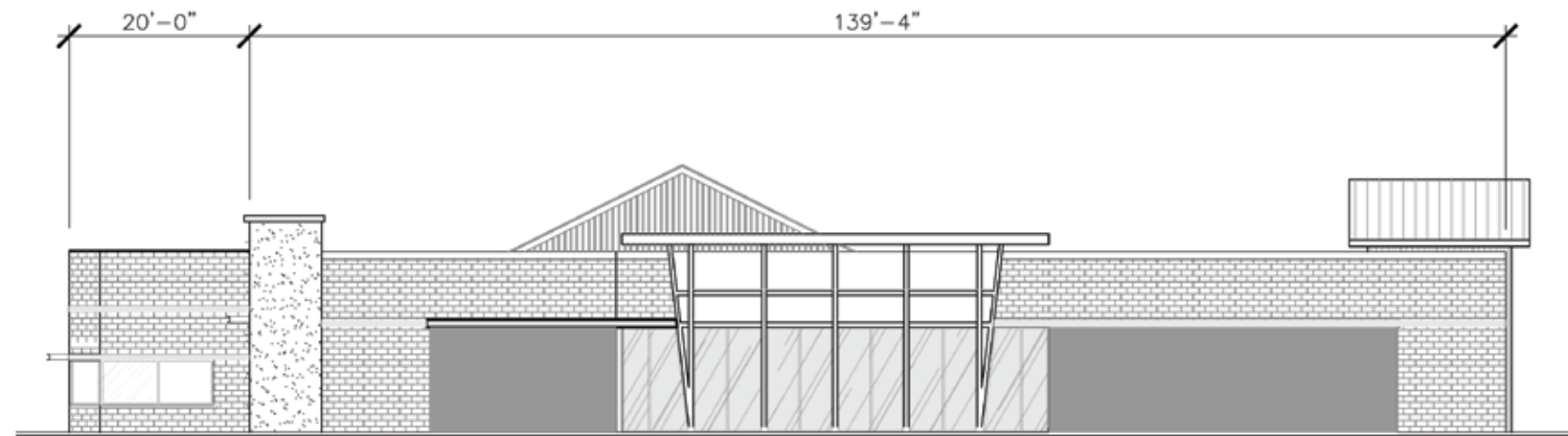
1 OF 8



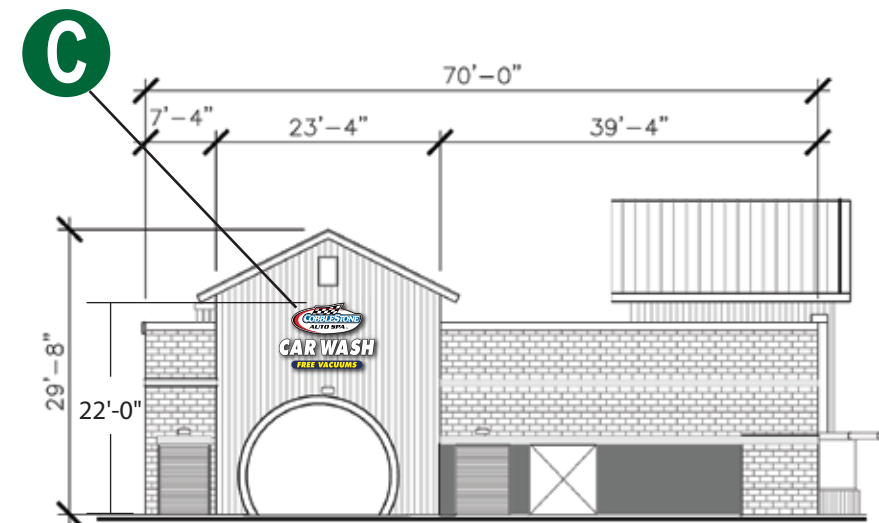
SOUTH ELEVATION (FRONT)
SCALE: 1/8"=1'-0"



EAST ELEVATION (CAR WASH ENTRY)
SCALE: 1/8"=1'-0"



NORTH ELEVATION (REAR)
SCALE: 1/8"=1'-0"



WEST ELEVATION (CAR WASH EXIT)
SCALE: 1/8"=1'-0"

ELEVATIONS

Scale:
1" = 20'-0"

CUSTOMER APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

LANDLORD APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

PROJECT: Cobblestone 17

LOCATION: Ellsworth & Pecos Mesa AZ

9200 Valley Rd.
Prescott Valley,
Arizona
86314
800-257-5095

SIGNS PLUS

Account Executive:
Dale Johnson

Designer:
AL

Design Number:
4706

Job Number:

DATE:
03/20/2019

SCALE:
AS NOTED

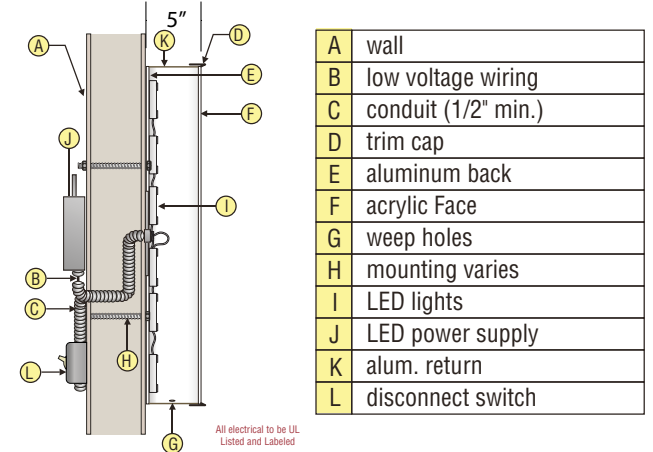
REVISIONS:

SHEET:

2 OF 8



PC Letter / LEDs - Cross Section Detail



This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the signs

A

SOUTH ELEVATION

ALUMINUM PAN CHANNEL LETTERS

Scale:
1/2" = 1'-0"

SQFT:
59.6

36.12+ 36.80 = 59.6sqft

Fabricate & install one (1) white LED illuminated pan channel letter display.

Logo - Fabricate & install two (2) white LED illuminated pan channel logo. Will have 5" black aluminum returns with a 1.5" aluminum retainer and a white lexan face overlaid with 3M Trans White, 3M Intense Blue (3630-127), 3M Red (3630-33), 3M Black (3630-22) vinyl

"CAR WASH" - will be pan channel letters with a .040 5" deep black alum. return and black 1" trim cap with white plex faces overlaid with 3M black vinyl.

Vinyl Colors			
	3M Intense Blue (3630-127)		3M Black (3630-22)
	3M Red (3630-33)		3M Bristol Blue (3630-97)
	3M Yellow (3630-015)		

CUSTOMER APPROVAL

BY: _____

DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

LANDLORD APPROVAL

BY: _____

DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

PROJECT: Cobblestone 17

LOCATION: Ellsworth & Pecos Mesa AZ

9200 Valley Rd.
Prescott Valley,
Arizona
86314
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03/20/2019

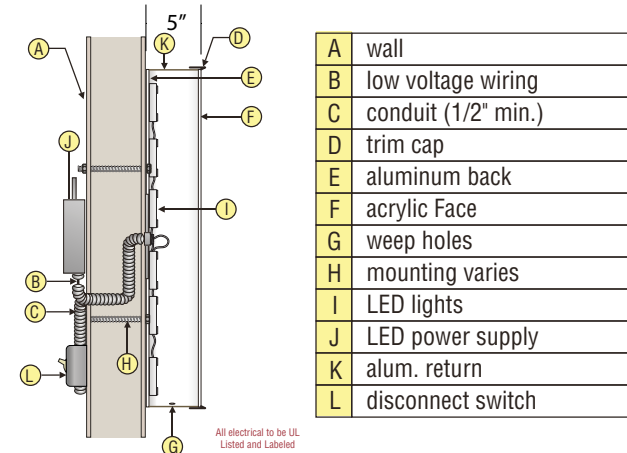
SCALE:
AS NOTED

REVISIONS:

SHEET:
3 OF 8



PC Letter / LEDs - Cross Section Detail



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B

EAST
ELEVATION

ALUMINUM PAN
CHANNEL LETTERS

Scale:
1/2" = 1'-0"

SQFT:
45.11





$28.41 + 16.7 = 45.11 \text{ sqft}$

Fabricate & install one (1) white LED illuminated pan channel letter display.

Logo - Fabricate & install two (2) white LED illuminated pan channel logo. Will have 5" black aluminum returns with a 1.5" aluminum retainer and a white lexan face overlaid with 3M Trans White, 3M Intense Blue (3630-127), 3M Red (3630-33), 3M Black (3630-22) vinyl

"CAR WASH" - will be pan channel letters with a .040 5" deep black alum. return and black 1" trim cap with white plex faces overlaid with 3M black vinyl.

Vinyl Colors

	3M Intense Blue (3630-127)		3M Black (3630-22)
	3M Red (3630-33)		3M Bristol Blue (3630-97)
	3M Yellow (3630-015)		

CUSTOMER APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

LANDLORD APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

PROJECT: Cobblestone 17

LOCATION: Ellsworth & Pecos Mesa AZ

9200 Valley Rd.
Prescott Valley,
Arizona
86314
800-257-5095



Account Executive:
Dale Johnson

Designer:
AL

Design Number:
4706

Job Number:

DATE:
03/20/2019

SCALE:
AS NOTED

REVISIONS:

CUSTOMER APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

LANDLORD APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

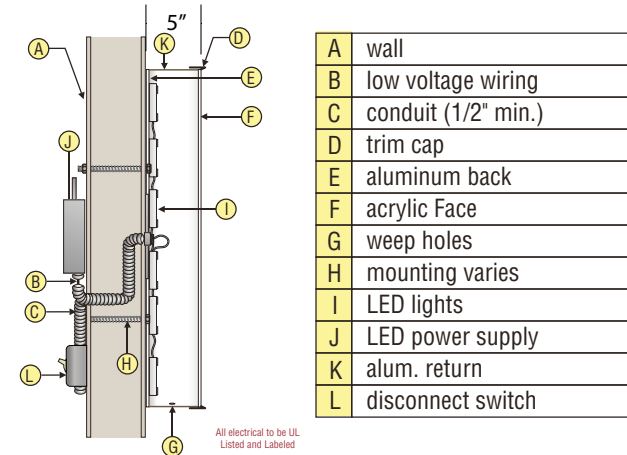
SHEET:

4 OF 8

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PC Letter / LEDs - Cross Section Detail



This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the signs



WEST ELEVATION	ALUMINUM PAN CHANNEL LETTERS	Scale: 1/2" = 1'-0"	SQFT: 55.64	28.41+ 16.7+10.53 = 55.64sqft
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Fabricate & install one (1) white LED illuminated pan channel letter display.

Logo - Fabricate & install two (2) white LED illuminated pan channel logo. Will have 5" black aluminum returns with a 1.5" aluminum retainer and a white lexan face overlaid with 3M Trans White, 3M Intense Blue (3630-127), 3M Red (3630-33), 3M Black (3630-22) vinyl

"CAR WASH" - will be pan channel letters with a .040 5" deep black alum. return and black 1" trim cap with white plex faces overlaid with 3M black vinyl.

"FREE VACUUMS" - will be a contour can with a 5" deep black return and black 1" trim cap with white plex faces overlaid with 3M vinyl.

Vinyl Colors

	3M Intense Blue (3630-127)		3M Black (3630-22)
	3M Red (3630-33)		3M Bristol Blue (3630-97)
	3M Yellow (3630-015)		

CUSTOMER APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS


LANDLORD APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

PROJECT: Cobblestone 17

LOCATION: Ellsworth & Pecos Mesa AZ

9200 Valley Rd.
Prescott Valley,
Arizona
86314
800-257-5095



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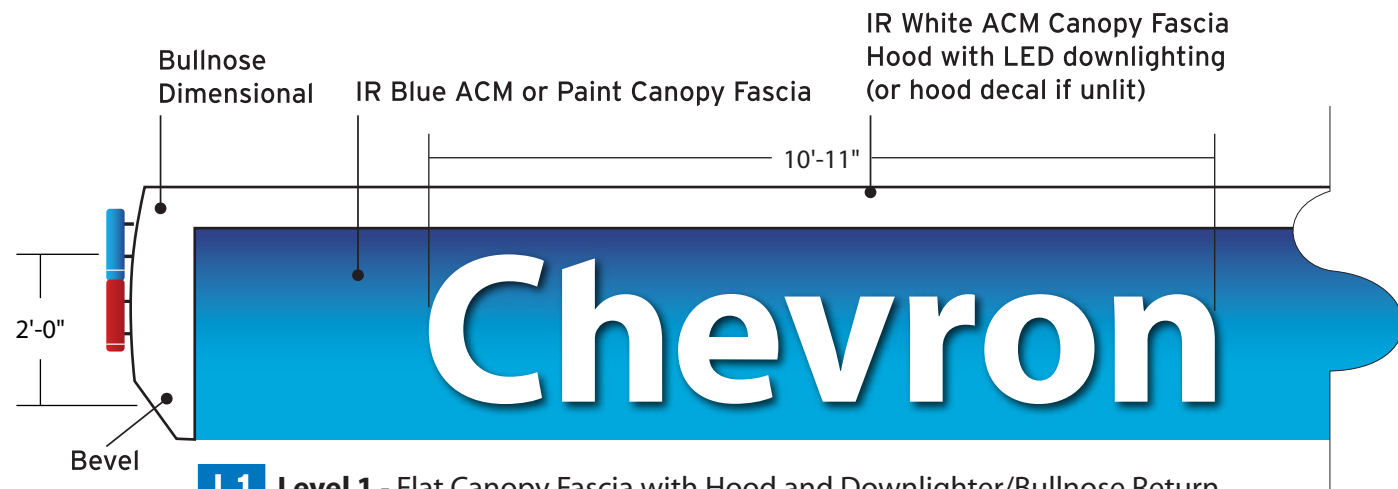
DATE:
03/20/2019

SCALE:
AS NOTED

REVISIONS:

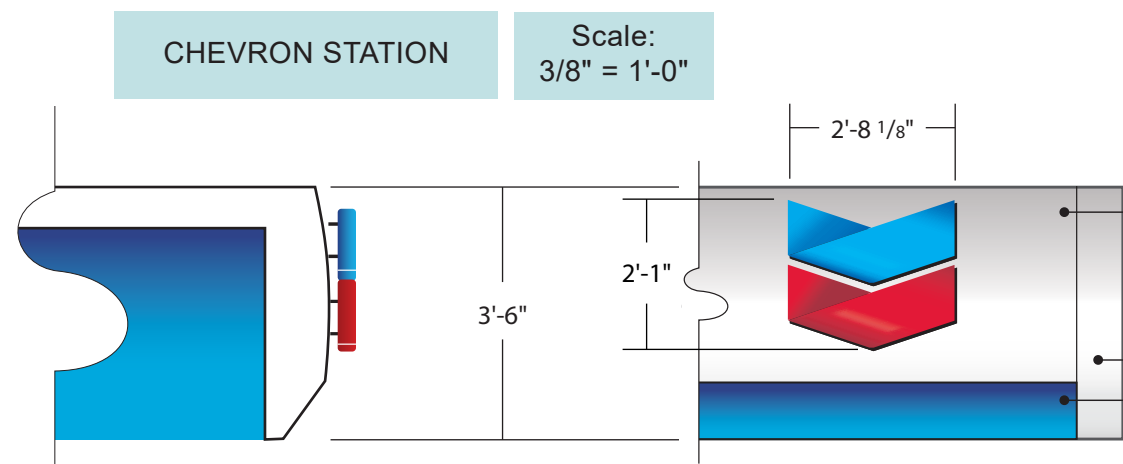
SHEET:
5 OF 8

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L1 Level 1 - Flat Canopy Fascia with Hood and Downlighter/Bullnose Return

SQFT:
21.84 EA.

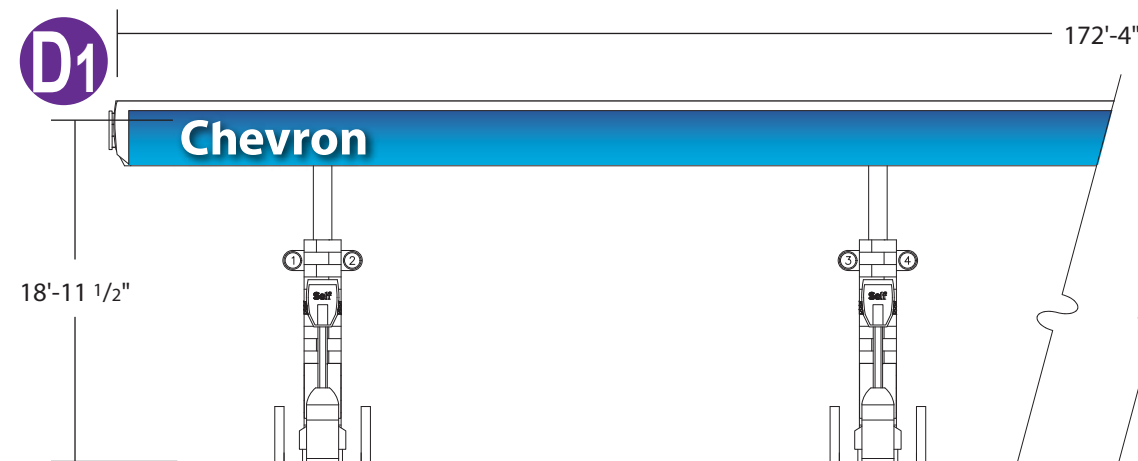


Flat fascia end cap if fascia return unlit.

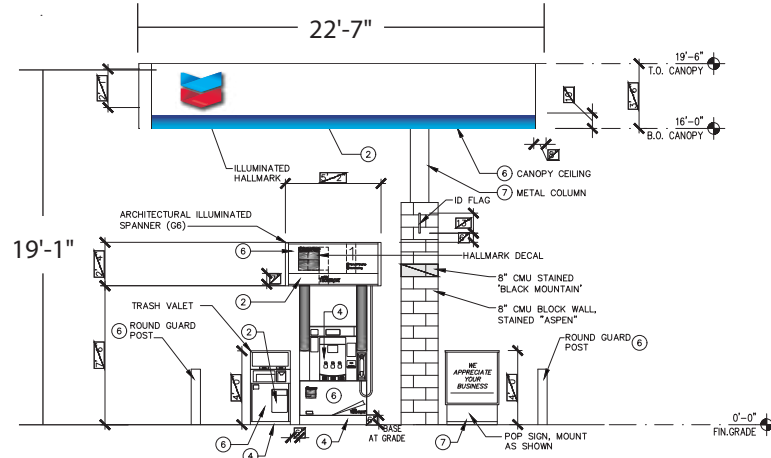
L1 Level 1 - Dimensional Bullnose Canopy Return

Lit Return

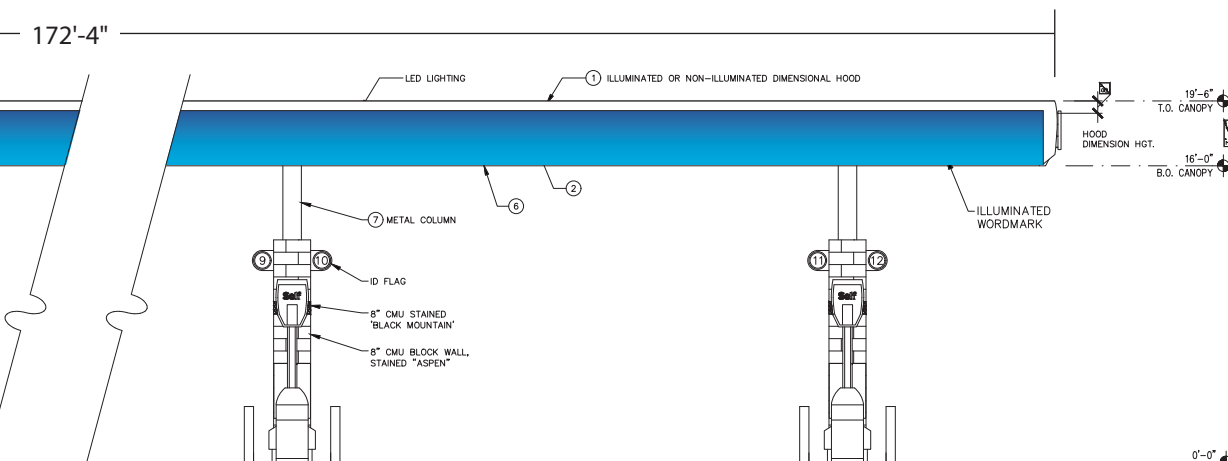
SQFT:
5.55



SOUTH ELEVATION Scale: 3/32" = 1'-0"



WEST ELEVATION Scale: 3/32" = 1'-0"



EAST ELEVATION Scale: 3/32" = 1'-0"

CUSTOMER APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

LANDLORD APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

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Prescott Valley,
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86314
800-257-5095

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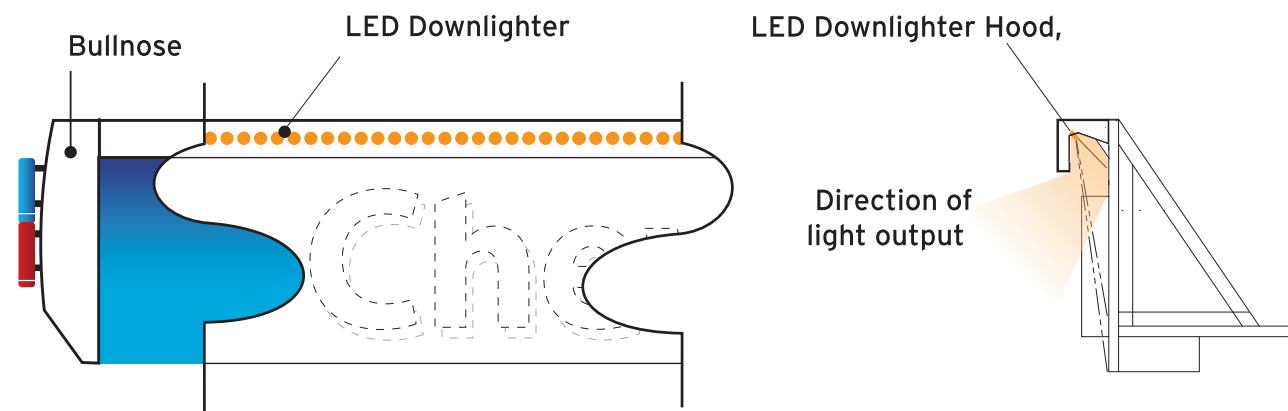
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03/20/2019

SCALE:
AS NOTED

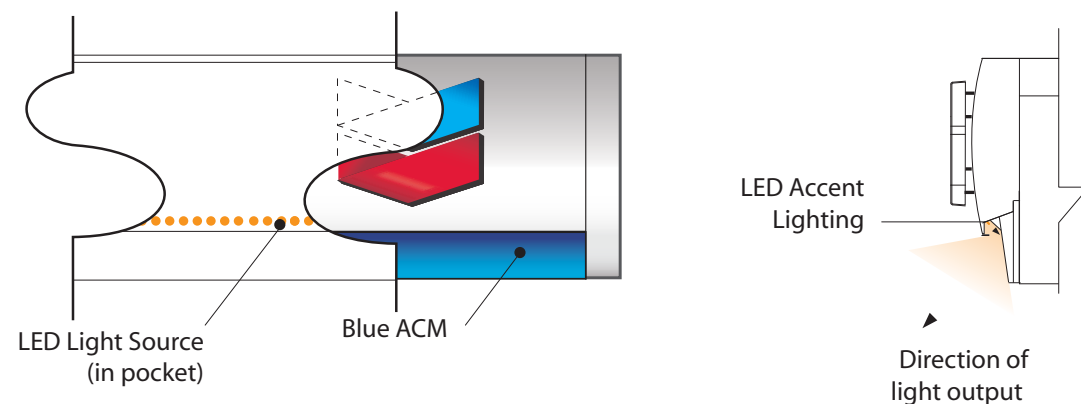
REVISIONS:

SHEET:

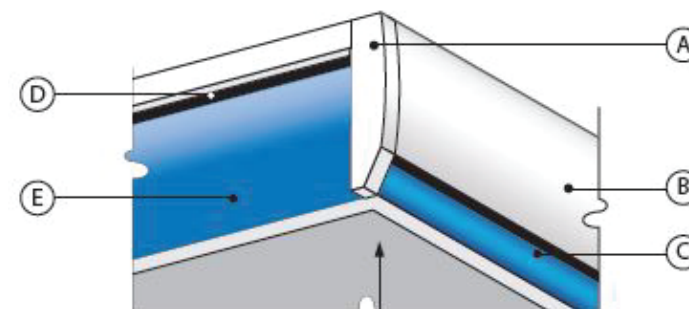
6 OF 8



D1 **L1** Level 1 - LED Fascia Downlighter

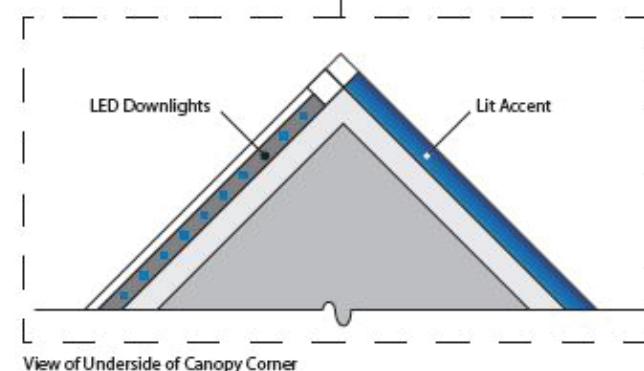


D2 **D3** **L1** Level 1 - Canopy Return LED Accent Lighting



**Level 1
Canopy Corner Treatments
Bullnosed Faced Return**

- (A) ACM End Cap, IR White
- (B) Bullnosed ACM return, IR White
- (C) Accent - Angled back IR Blue ACM with LED Downlight in pocket above
- (D) LED Downlighter fixture, inside ACM fascia hood
- (E) ACM fascia, IR Blue



L1 Level 1 - Dimensional Hood + Bullnosed Face Canopy Return

CUSTOMER APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

LANDLORD APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

9200 Valley Rd.
Prescott Valley,
Arizona
86314



Account Executive:
Dale Johnson

Designer:
AL

Design Number:
4706

Job Number:

DATE:
03/20/2019

SCALE:
AS NOTED

REVISIONS:

SHEET:

7 of 8

STREET SIDE



F1 F2

ILLUMINATED
MONUMENT SIGN

Scale:
1/2" = 1'-0"

SQFT:
58.10

Manufacture and install two (2) LED illuminated monument signs.

This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the signs.

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BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

LANDLORD APPROVAL

BY: _____
DATE: _____ ☐ W/O CHGS ☐ W/ CHGS

PROJECT: Cobblestone 17

9200 Valley Rd.
Prescott Valley,
Arizona
86314

SIGNS PLUS

Account Executive:
Dale Johnson

Designer:
AL

Design Number:
4706

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03/20/2019

SCALE:
AS NOTED

REVISIONS:

SHEET:

8 OF 8

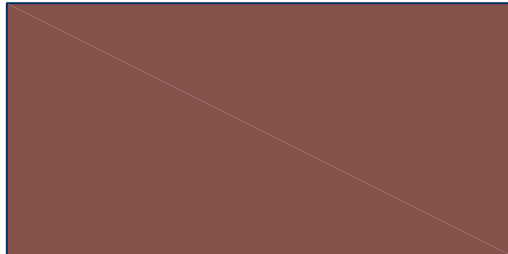
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STANDING SEAM METAL ROOF
TOWER GABLE
WESTERN "CHARCOAL GRAY"



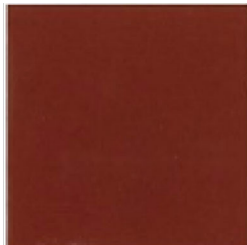
STANCHION FABRIC AWNING
GALE PACIFIC
COMMERCIAL 95 #444938
"AQUATIC BLUE"



TUBE STEEL TOWER
SHERWIN WILLIAMS
SW7591 "RED BARN"



SMOOTH CMU BLOCK
MAIN BUILDING
"ASPEN"



TOWER VERTICAL METAL SIDING
WESTERN METAL
"COLONIAL RED"



SPLIT-FACE/SMOOTH ACCENT
CMU BLOCK
"BLACK MOUNTAIN"



STUCCO FINISH
"COBBLESTONE BLUE"



STEEL CANOPIES/METAL FASCIAS
SW 6991
"BLACK MAGIC"

MATERIALS BOARD

COBBLESTONE AUTO SPA
SEC ELLSWORTH & PECOS
MESA, ARIZONA



PHILIPS



Site & Area

EcoForm

ECF-S small



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Qty: _____
 Notes: _____

The Philips Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 26,400 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings.

Ordering guide

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	Options					Finish
							Dimming controls	Motion sensing	Photo-sensing	Electrical	Luminaire	
ECF-S												
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules)	530 530mA 700 700mA 1A 1050mA 1.2A 1200mA	WW-G2 Warm White 3000K, 70CRI Generation 2 NW-G2 Neutral White 4000K, 70CRI Generation 2	AR Arm Mount (standard) ⁹ <i>The following mounting kits must be ordered separately (See accessories)</i> SF Slip Fitter Mount ¹¹ (fits to 2 1/8" O.D. tenon) WS Wall mount with surface conduit rear entry permitted RAM Retrofit arm mount kit ⁹	Type 2 2 Type 2 2-90 Rotated left 90° 2-270 Rotated right 270° Type 3 3 Type 3 3-90 Rotated left 90° 3-270 Rotated right 270° Type 4 4 Type 4 4-90 Rotated left 90° 4-270 Rotated right 270° Type 5 5 Type 5 5W Type 5W AFR Auto Front Row AFR-90 Auto Front Row, Rotated left 90° AFR-270 Auto Front Row, Rotated right 270°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)	DD 0-10V External dimming (by others) ⁵ DCC Dual Circuit Control ¹⁴ FAWS Field Adjustable ¹⁴ SW Interface module for SiteWise ^{12,13} LLC2 Integral module with #2 lens ^{1,6} LLC3 Integral module with #3 lens ^{1,6} LLC4 Integral module with #4 lens ^{1,6} DynaDimmer: Automatic Profile Dimming CS50 Safety 50% Dimming, 7 hours ¹ CM50 Median 50% Dimming, 8 hours ¹ CE50 Economy 50% Dimming, 9 hours ¹ DA50 All Night 50% Dimming ¹ CS30 Safety 30% Dimming, 7 hours ¹ CM30 Median 30% Dimming, 8 hours ¹ CE30 Economy 30% Dimming, 9 hours ¹ DA30 All Night 30% Dimming ¹	IMRI3 Integral with #3 lens ⁸ IMRI7 Integral with #7 lens ⁸ IMRO Pole mounted motion sensor ⁵ (see accessories)	PCB Photocontrol Button ^{2,3} TLRD5 Twist Lock Receptacle 5 Pin ¹⁵ TLRD7 Twist Lock Receptacle 7 Pin ¹⁵ TLRPC Twist Lock Receptacle w/ Photocell ²	Fusing F1 Single (120, 277, 347VAC) ² F2 Double (208, 240, 480VAC) ² Pole Mount Fusing FP1 Single (120, 277, 347VAC) ² FP2 Double (208, 240, 480VAC) ² FP3 Canadian Double Pull (208, 240, 480VAC) ² Surge Protection (10kA standard) SP2 Increased 20kA	Square Pole Adapter included in standard product TB Terminal Block ⁷ RPA Round Pole Adapter (fits to 3"-3.9" O.D. pole) ¹⁰ HIS Internal Housing Side Shield ⁴	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: RAL7024) CC Custom color (Must supply color chip for required factory quote)

1. Available only on 120, 208, 240, and 277 (or UNV)

2. Specify Voltage

3. Not available with 347 or 480 voltage

4. HIS not available with Type 5 or SW optics

5. DD is required for LLC2/3/4 not available with any other controls
 6. DCC and LLC2/3/4 not available with any other controls

7. TB not available with DCC

8. ECF-IMRI equipped with out-boarded sensor housing when
 voltage is HVU (347-480V)

9. Mounts to a 4" round pole with adapter included for
 square poles.

10. Not available with SF and WS. RPAs provided with black
 finish standard

11. Limited to a maximum of 45 degrees aiming above horizontal

12. SW option is not available with any other control options with the
 exception of IMRI3, IMRI7 and SW-IMRO motion response options

13. Available only on 120V and 277V

14. Not available with DCC, IMRI3, IMRI7, SW, LLC and CS/CM/CE/DA
 (DynaDimmer).

15. TLRD5/7 option not available with LLC, PCB, TLRPC or DCC.
 Max aiming angle 45°. Works with 3 or 5 pin NEMA photocell/dimming.
 Dimming will not be connected to NEMA receptacle if ordering with
 DD, CS/CM/CE/DA, IMRI and IMRO.

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Site & Area

EcoForm Accessories (ordered separately, field installed)

Controls Accessories

Pole Mount Motion Sensor

MS-A-120V¹¹ 120V Input
MS-A-277V¹¹ 277V Input

Wireless systems Remote mount module

LLCR2-(F)¹¹ #2 lens
LLCR3-(F)¹¹ #3 lens
LLCR4-(F)¹¹ #4 lens

Central Remote Motion Response (used connected to SiteWise main panel)

MS2-A-FVR-3
MS2-A-FVR-7

11. DD option required

12. Not available with Type 5 or 5W optics

Shielding Accessories¹⁰

House Side shield

Standard orientation:

HIS-32-H¹² Internal House Side Shield for 32 LEDs (2 modules)
HIS-48-H¹² Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-H¹² Internal House Side Shield for 64 LEDs (4 modules)

At 90 or 270 orientation:

HIS-32-V¹² Internal House Side Shield for 32 LEDs (2 modules)
HIS-48-V¹² Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-V¹² Internal House Side Shield for 64 LEDs (4 modules)

Luminaire Accessories

ECF-BD-G2 Bird deterrent

PTF2-(F) Pole top fitter fits 2 3/8-2 1/2" OD x 4" depth tenon with 1, 2, 3 or 4 luminaires at 90°

PTF3-(F) Pole top fitter fits 3-3 1/2" OD x 6" depth tenon with 1, 2, 3 or 4 luminaires at 90°

PTF4-(F) Pole top fitter fits 3 1/2-4" OD x 6" depth tenon with 1, 2, 3 or 4 luminaires at 90°

ECF-SF-G2-(F) Slip Fitter Mount (fits to 2 3/8" O.D. tenon)

ECF-RAM-G2-(F) Retrofit Arm mount kit

ECF-WS-G2-(F) Wall mount with surface conduit rear entry permitted

(F) = Specify finish

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>60,000 hours	>88%

LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp. ³	Average System Watts ¹	Type 2			Type 3			Type 4		
					Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-NW-G2-x	32	530	4000	56	6,864	B2-U0-G2	123	6,715	B1-U0-G2	121	7,025	B1-U0-G2	126
ECF-S-32L-700-NW-G2-x	32	700	4000	73	8,853	B2-U0-G2	121	8,661	B2-U0-G2	119	9,062	B1-U0-G2	124
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	12,464	B3-U0-G2	118	12,194	B2-U0-G2	115	12,757	B2-U0-G3	121
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	13,826	B3-U0-G3	114	13,526	B2-U0-G3	111	14,151	B2-U0-G3	116
ECF-S-48L-900-NW-G2-x	48	900	4000	135	16,409	B3-U0-G3	121	16,053	B2-U0-G3	119	16,795	B2-U0-G3	124
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	18,581	B3-U0-G3	117	18,178	B3-U0-G3	115	19,018	B2-U0-G4	120
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	20,627	B3-U0-G3	113	20,180	B3-U0-G4	110	21,112	B3-U0-G4	116
ECF-S-64L-900-NW-G2-x	64	900	4000	178	21,717	B3-U0-G3	122	21,246	B3-U0-G4	119	22,228	B3-U0-G4	125
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	24,467	B3-U0-G3	119	23,936	B3-U0-G4	116	25,043	B3-U0-G4	122

Ordering Code	Total LEDs	LED Current (mA)	Color Temp. ³	Average System Watts ¹	Type 5			Type 5W			Type AFR		
					Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,414	B3-U0-G2	133	7,175	B3-U0-G2	129	7,111	B2-U0-G1	128
ECF-S-32L-700-NW-G2-x	32	700	4000	73	9,563	B3-U0-G2	131	9,255	B4-U0-G2	127	9,172	B2-U0-G1	126
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,462	B4-U0-G2	127	13,030	B4-U0-G2	123	12,912	B3-U0-G2	122
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	14,933	B4-U0-G2	123	14,453	B4-U0-G2	119	14,322	B3-U0-G2	118
ECF-S-48L-900-NW-G2-x	48	900	4000	135	17,723	B4-U0-G2	131	17,154	B5-U0-G3	127	16,999	B3-U0-G2	126
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,069	B5-U0-G3	126	19,424	B5-U0-G3	122	19,248	B3-U0-G2	121
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	22,279	B5-U0-G3	122	21,563	B5-U0-G3	118	21,368	B3-U0-G2	117
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,456	B5-U0-G3	132	22,702	B5-U0-G3	128	22,497	B3-U0-G2	127
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,427	B5-U0-G3	128	25,577	B5-U0-G4	124	25,346	B3-U0-G2	123

1. Wattage and lumen output may vary due to LED manufacturer forward volt specification and ambient temperature.
Wattage shown is average for 120V through 277V input. Measured wattage may vary due to variation in input voltage.

2. Lumen values based on photometric tests performed in compliance with IESNA LM-79.
3. Warm white color temperature will result in decreased lumen output.
Contact outdoorlightingapplications@philips.com for details or additional information.

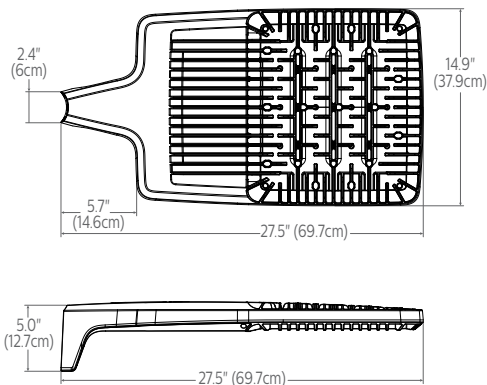
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Site & Area

Dimensions

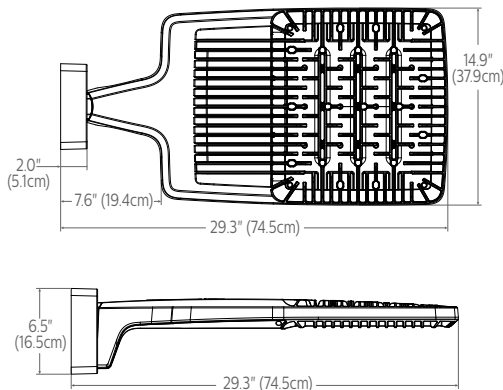
Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)



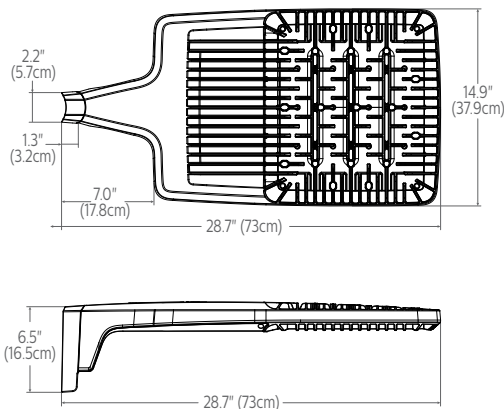
Wall (WS)

Weight: 27 Lbs (12.2 Kg) EPA: 0.27ft² (.025m²)



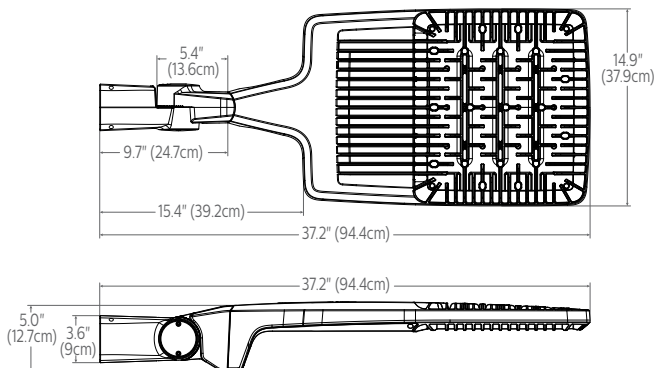
Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

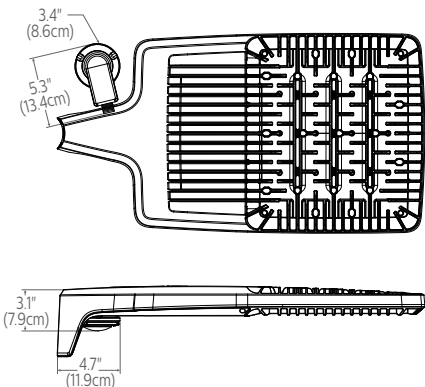


Slip fitter (SF)

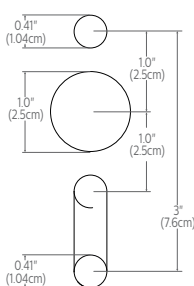
Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft² (.031m²)



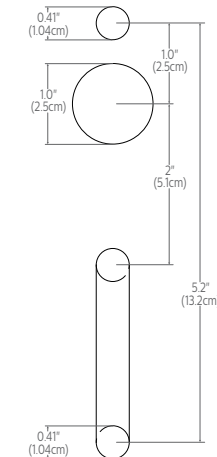
Outboard IMR-HVU sensor



Standard Arm (AR) drill pattern



Retrofit Arm (RAM) drill pattern



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Luminaire options

DD: 0-10V dimming driver with leads supplied through back of luminaire (for secondary dimming controls by others).

TLRD5: Twist Lock Receptacle with 5 pins enabling dimming, can be used with a twistlock photoelectric cell or a shorting cap. Can also be used with Philips or third party control system. Receptacle located on top of luminaire housing.

TLRD7: Twist Lock Receptacle with 7 pins enabling dimming and additional functionality (by others), can be used with twistlock photoelectric cell or a shorting cap. Can also be used with Philips or third party control system. Receptacle located on top of luminaire housing.

TLRDPC: Receptacle with twistlock photoelectric cell (must specify voltage). Receptacle located on top of luminaire housing.

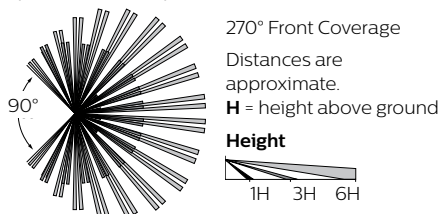
Dynadimmer Automatic Profile Dimming: Automatic dimming profiles (CS50/CM50/CE50) offer safety, median, or economy settings, for shorter or longer duration. Dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. 50% dimming is standard. DA50 offers 50% instantaneous dimming all night (during all dark hours). 75% and 25% dimming is also available if different light levels are required (contact Technical Support for details).

Profile	Dimming		
	Level	Duration	Example
Economy	50%	9 hours	9 PM - 6 AM
Median	50%	8 hours	10 PM - 6 AM
Safety	50%	7 hours	11 PM - 6 AM
Reactive 50	50%	dynamic	all night

IMRI3, IMRI7: Infrared Motion Response Integral. IMRI module is mounted integral on driver door and is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges (see charts for approximate detection patterns on page 7). Motion response used in combination of Dynadimmer and SiteWise are not programmable and used to override controllers schedule when motion is detected. When used not combined with any controller, IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minute default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. IMRI can also be specified with automatic profile dimming for the added benefit of a combined dimming profile with sensor detection, where the PIR sensor will override the dimming profile when occupancy is detected. Passive infrared (PIR) motion sensor.

IMRO: Infrared Motion Response Outboard pole mounted sensor, must be specified with an available automatic profile dimming option. Combines the benefits of both automatic profile dimming and motion response using the Philips Dynadimmer technology. PIR sensor features a pole mounted Wattstopper EW-200-120-W or the EW-200-277-W. One motion sensor per pole is required (order MS-A-120 or MS-A-277 separately). Available in 120 or 277V only, IMRO sensors require single voltage 120V or 277V input (see chart for approximate detection patterns). If motion is detected during the time that the luminaire is operating at profile dimming mode specified, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns back to automatic profile dimming. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes. The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Pole Details: IMRO requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Philips Gardco poles, order the pole with the Motion Sensor



Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole (see Gardco Poles specification sheets for more information).

DCC: Dual Circuit Control permits separate switching of a specific number of LED modules. Available as an option with 2 through 4 modules.

SW: SiteWise option is a fully integrated controller that connects to Philips SiteWise system in order to offer a complete area lighting management system. The communication signal is based on Philips patented central dimming technology. SiteWise delivers it deliver optimal energy

savings using your site's existing cabling. No additional wiring required, installation and commissioning are simple. An intuitive, mobile app makes it easy for authorized users to set schedules to meet site specific lighting needs, local regulations, and energy codes.

Wireless systems: Controller radio/sensor module attached to luminaire arm and includes radio, photocell and motion sensor. Available with #2 lens (LLC2) for 8' to 15' mounting height" or #3 lens (LLC3) for 15-25' mounting heights or #4 lens (LLC4) for 25-40' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall (see accessories and wireless system information page 5-7).

F1: Fusing Single (for 120, 277 or 347VAC)

F2: Fusing Double (for 208, 240 or 480VAC)

FP1: Fusing Pole Single (pole mounted near handhole, for 120, 277 or 347VAC)

FP2: Fusing Pole Double (pole mounted near handhole, for 208, 240 or 480VAC).

FP3: Fusing Pole Canadian Double Pull (pole mounted near handhole, for 208, 240 or 480VAC)

SP1: Surge Protection, 10kV/5kA, 120-277V or 347-480V

SP2: Surge Protection, 20kV/10kA, 120-277V or 347-480V

HIS: Internal House Side Shield. Injection molded in black finish. Ships installed with 1 per 16 LED module. Also available shipped separately as an accessory for 2-4 LED modules.

FAWS: Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level – see the FAWS multiplier chart for more details. *Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the other dimming or controls.*

Field adjustable wattage (FAWS) multiplier chart

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage
1	0.31	0.28
2	0.53	0.50
3	0.62	0.58
4	0.70	0.67
5	0.78	0.75
6	0.83	0.81
7	0.89	0.87
8	0.92	0.91
9	0.96	0.95
10	1.00	1.00

Note: Typical value accuracy +/- 5%

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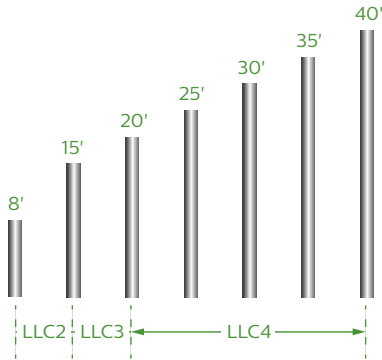
Site & Area

Wireless system – luminaire configuration information

LLC2/LLC3/LLC4 Luminaire Mounted Controller

Controller pod attached to luminaire and includes radio, photocell and motion sensor with #2, #3 or #4 lens for 8–40' mounting heights.

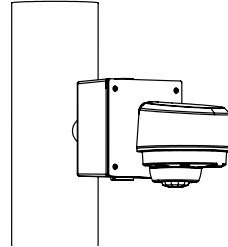
Recommended Sensor by Pole Height



LLCR2/LLCR3/LLCR4 Pole Mounted Controller

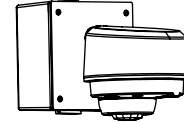
In this configuration, the wireless controller will be mounted to the pole at a fifteen foot mounting height. The number of luminaires on each pole, as well as the specific wattage chosen, will determine how many controllers will be required.

When using the wireless remote accessory option (LLCR-F) in a pole mount application, specify pole option (CL=Coupling Internal Thread, 3/4" size). Confirm required orientation of luminaire and wireless controller. Indicate height above pole base and orientation to hand hole. Recommended min pole height is 18ft, with option (CL) 15ft above pole base. Other heights are possible when choosing the appropriate sensor lens type. See pole specification sheets for more information.

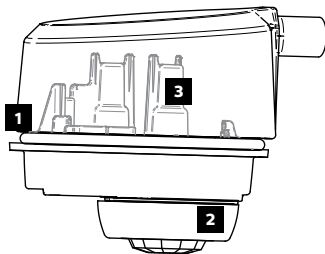


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Wireless system sensor



1. Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

2. Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations.
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings.
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height.

3. Wireless Radio

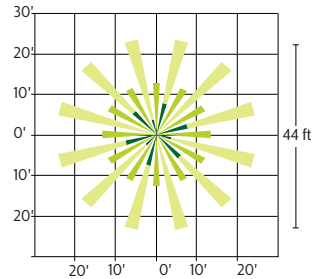
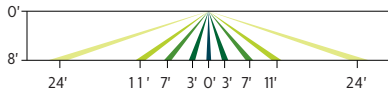
- 1.8 Watts max (no load draw)
- Operating voltage 120–277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400–2483.5Mhz
- RoHS Compliant

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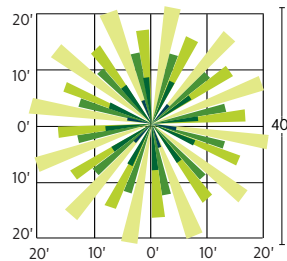
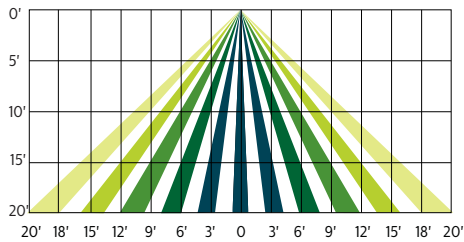
Site & Area

Infrared Motion Response – Coverage Patterns

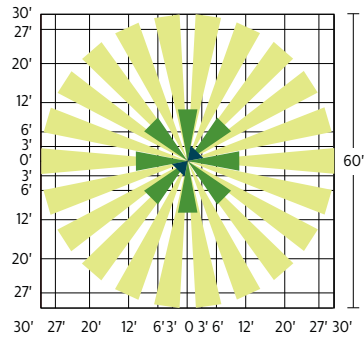
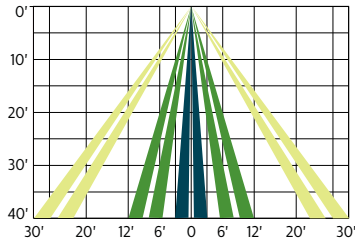
LLC2/LLCR2
Luminaire or remote mount controller
with #2 lens



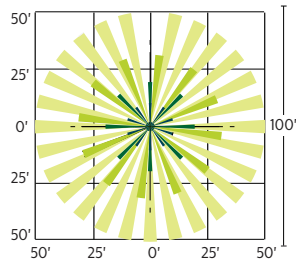
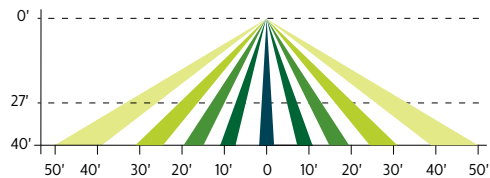
IMRI3/LLC3/LLCR3
Luminaire or Remote mount controller
with #3 lens



LLC4/LLCR4
Luminaire or Remote mount controller
with #4 lens



IMRI7
Integral motion response
with #7 lens



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Site & Area

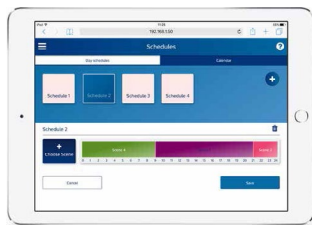
SiteWise system

SiteWise is a complete area lighting management system including a luminaire integrated controller, dimming signal transmitter cabinet, and locally accessible user interface. Installation and commissioning are simple. The cabinet communicates with the Philips luminaires using a patented central dimming technology. The control signal is embedded on the existing electrical line – no new cabling is required. An intuitive, locally accessible interface makes it easy for authorized users to set schedules in order to meet site specific lighting needs, local regulations, and energy codes.

SiteWise system diagram



SiteWise system interface



SiteWise has an intuitive user interface that makes it easy to plan, edit, and implement lighting schedules for your site. Authorized users can access the interface via a local app.

To ensure that only authorized users can access your lighting, SiteWise offers two user types, each with different permissions. An advanced user, or administrator, can set and edit schedules using the ten pre-set scenes, assign those schedules to calendar days, and check system status.

For everyday use, a basic user can manually override a schedule that is currently running but cannot create or edit schedules.

SiteWise system specifications

The SiteWise system includes both luminaires and controls. The controls used for SiteWise are circuit load dependent. Required for a complete installation are the following Philips SiteWise components: user interface, control kit, dimming signal transmitter cabinet, and dimming signal receiver located in the Philips luminaire (**SW** option). Optional luminaire-integrated or external motion sensors may also be specified as required. Within the electrical closet, the control kit and dimming signal transmitter cabinet are installed into the electrical system between the existing breaker panel and the site luminaires. New LED luminaires containing the dimming signal receiver are installed on the site. Once completed, use of the interface allows for scheduling and override capabilities. Wireless access point and tablet should be supplied by others. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise

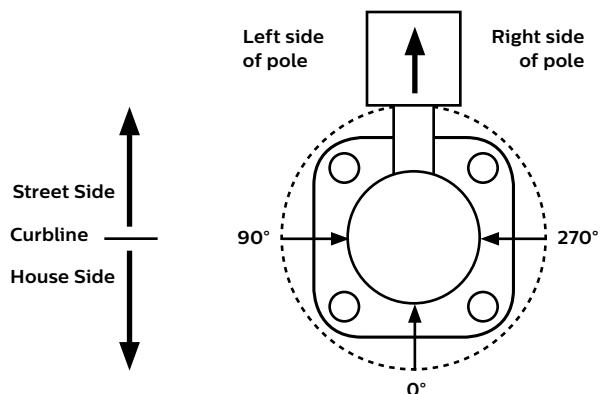
ECF-S EcoForm small

Site & Area

Optical Orientation Information

Standard Optic Position

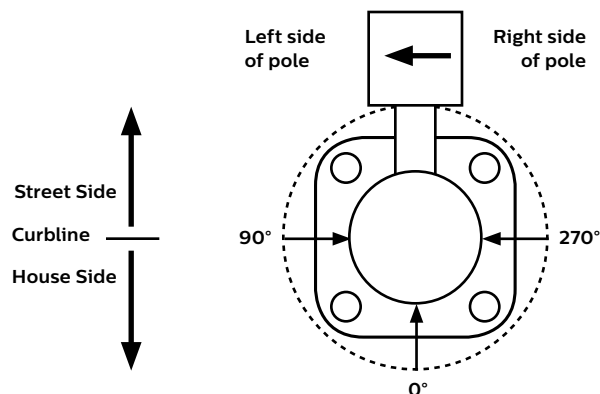
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

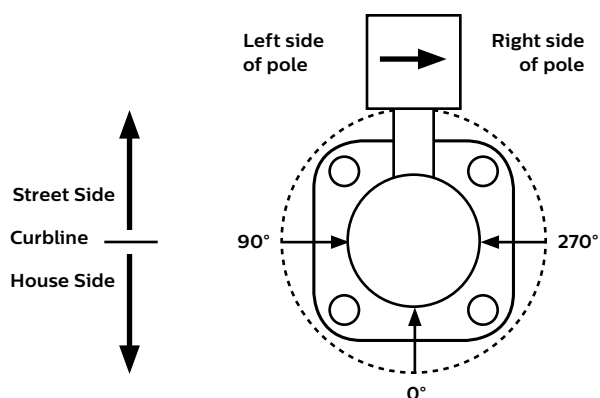
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

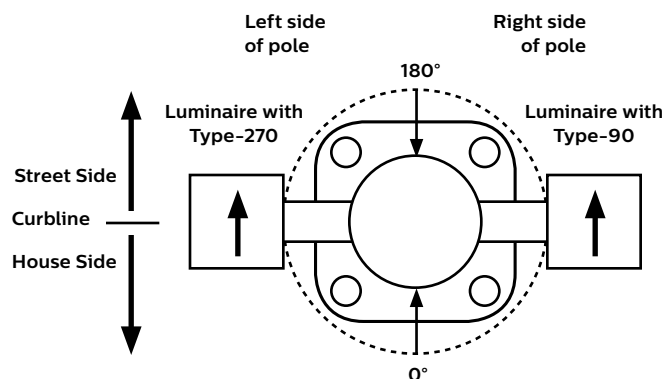
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

ECF-S EcoForm small

Site & Area

Specifications

Housing

One piece die cast aluminum housing with integral arm and separate, self retained hinged, one piece die cast door frame.

IP Rating

LED light engine rated IP66. Driver compartment rated to IP65.

Vibration resistance

EcoForm with Standard Arm carries a 3G vibration rating that conforms to standards set forth by ANSI C136.31. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Electrical

Driver efficiency (>90% standard). 120–480V available (restrictions apply). Open/short circuit protection. Optional 0–10V dimming to 10% power. RoHS compliant. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

LED Board and Array

32, 48, or 64 LEDs. Color temperatures: 3000K +/- 125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Aluminum metal clad board. RoHS compliant.

LED Thermal management

The housing design allows the one piece housing to provide excellent thermal management critical to long LED system life.

Energy saving benefits

System efficacy up to 133lm/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

SiteWise network system

SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using Philips patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems.

Wireless system

EcoForm luminaires are available with optional wireless controllers ready to be connected to a Limelight system (sold by other). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution.

Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions to control backlight.

Types 2, 3, 4, and AFR, when specified and used as rotated, are factory set only.

Mounting

Standard luminaire arm mounts to 4" round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3–3.9" poles.

Retrofit Arm Mount

EcoForm features an innovative retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately.

Listings

UL/cUL listed to the UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40° to 40°C (-40° to 104°F). The quality systems of this facility have been registered by UL to the ISO 9001 series standards. Most EcoForm configurations are DesignLights Consortium® qualified. Consult DLC Qualified Products list for more details.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Warranty

EcoForm luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED Drivers also carry a 5 year limited warranty. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer. See philips.com/warranties for complete details and exclusions.



PHILIPS



Site & Area

EcoForm

ECF-S small



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Qty: _____
 Notes: _____

The Philips Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 26,400 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings.

Ordering guide

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	Options					Finish
							Dimming controls	Motion sensing	Photo-sensing	Electrical	Luminaire	
ECF-S												
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules)	530 530mA 700 700mA 1A 1050mA 1.2A 1200mA	WW-G2 Warm White 3000K, 70CRI Generation 2 NW-G2 Neutral White 4000K, 70CRI Generation 2	AR Arm Mount (standard) ⁹ <i>The following mounting kits must be ordered separately (See accessories)</i> SF Slip Fitter Mount ¹¹ (fits to 2 1/8" O.D. tenon) WS Wall mount with surface conduit rear entry permitted RAM Retrofit arm mount kit ⁹	Type 2 2 Type 2 2-90 Rotated left 90° 2-270 Rotated right 270° Type 3 3 Type 3 3-90 Rotated left 90° 3-270 Rotated right 270° Type 4 4 Type 4 4-90 Rotated left 90° 4-270 Rotated right 270° Type 5 5 Type 5 5W Type 5W AFR Auto Front Row AFR-90 Auto Front Row, Rotated left 90° AFR-270 Auto Front Row, Rotated right 270°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz)	DD 0-10V External dimming (by others) ⁵ DCC Dual Circuit Control ¹⁴ FAWS Field Adjustable ¹⁴ SW Interface module for SiteWise ^{12,13} LLC2 Integral module with #2 lens ^{1,6} LLC3 Integral module with #3 lens ^{1,6} LLC4 Integral module with #4 lens ^{1,6} DynaDimmer: Automatic Profile Dimming CS50 Safety 50% Dimming, 7 hours ¹ CM50 Median 50% Dimming, 8 hours ¹ CE50 Economy 50% Dimming, 9 hours ¹ DA50 All Night 50% Dimming ¹ CS30 Safety 30% Dimming, 7 hours ¹ CM30 Median 30% Dimming, 8 hours ¹ CE30 Economy 30% Dimming, 9 hours ¹ DA30 All Night 30% Dimming ¹	IMRI3 Integral with #3 lens ⁸ IMRI7 Integral with #7 lens ⁸ IMRO Pole mounted motion sensor ⁵ (see accessories)	PCB Photocontrol Button ^{2,3} TLRD5 Twist Lock Receptacle 5 Pin ¹⁵ TLRD7 Twist Lock Receptacle 7 Pin ¹⁵ TLRPC Twist Lock Receptacle w/ Photocell ²	Fusing F1 Single (120, 277, 347VAC) ² F2 Double (208, 240, 480VAC) ² Pole Mount Fusing FP1 Single (120, 277, 347VAC) ² FP2 Double (208, 240, 480VAC) ² FP3 Canadian Double Pull (208, 240, 480VAC) ² Surge Protection (10kA standard) SP2 Increased 20kA	Square Pole Adapter included in standard product TB Terminal Block ⁷ RPA Round Pole Adapter (fits to 3"-3.9" O.D. pole) ¹⁰ HIS Internal Housing Side Shield ⁴	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: RAL7024) CC Custom color (Must supply color chip for required factory quote)

- Available only on 120, 208, 240, and 277 (or UNV)
- Specify Voltage
- Not available with 347 or 480 voltage
- HIS not available with Type 5 or SW optics
- DD is required for LLC2/3/4 not available with any other controls
- DD is required for LLC2/3/4 not available with any other controls
- TB not available with DCC
- ECF-IMRI equipped with out-boarded sensor housing when voltage is HVU (347-480V)
- Mounts to a 4" round pole with adapter included for square poles.
- Not available with SF and WS. RPAs provided with black finish standard
- Limited to a maximum of 45 degrees aiming above horizontal
- SW option is not available with any other control options with the exception of IMRI3, IMRI7 and SW-IMRO motion response options
- Available only on 120V and 277V
- Not available with DCC, IMRI3, IMRI7, SW, LLC and CS/CM/CE/DA (DynaDimmer).
- TLRD5/7 option not available with LLC, PCB, TLRPC or DCC. Max aiming angle 45°. Works with 3 or 5 pin NEMA photocell/dimming. Dimming will not be connected to NEMA receptacle if ordering with DD, CS/CM/CE/DA, IMRI and IMRO.

ECF-S EcoForm small

Site & Area

EcoForm Accessories (ordered separately, field installed)

Controls Accessories

Pole Mount Motion Sensor

MS-A-120V¹¹ 120V Input
MS-A-277V¹¹ 277V Input

Wireless systems Remote mount module

LLCR2-(F)¹¹ #2 lens
LLCR3-(F)¹¹ #3 lens
LLCR4-(F)¹¹ #4 lens

Central Remote Motion Response (used connected to SiteWise main panel)

MS2-A-FVR-3
MS2-A-FVR-7

11. DD option required

12. Not available with Type 5 or 5W optics

Shielding Accessories¹⁰

House Side shield

Standard orientation:

HIS-32-H¹² Internal House Side Shield for 32 LEDs (2 modules)
HIS-48-H¹² Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-H¹² Internal House Side Shield for 64 LEDs (4 modules)

At 90 or 270 orientation:

HIS-32-V¹² Internal House Side Shield for 32 LEDs (2 modules)
HIS-48-V¹² Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-V¹² Internal House Side Shield for 64 LEDs (4 modules)

Luminaire Accessories

ECF-BD-G2 Bird deterrent

PTF2-(F) Pole top fitter fits 2 3/8-2 1/2" OD x 4" depth tenon with 1, 2, 3 or 4 luminaires at 90°

PTF3-(F) Pole top fitter fits 3-3 1/2" OD x 6" depth tenon with 1, 2, 3 or 4 luminaires at 90°

PTF4-(F) Pole top fitter fits 3 1/2-4" OD x 6" depth tenon with 1, 2, 3 or 4 luminaires at 90°

ECF-SF-G2-(F) Slip Fitter Mount (fits to 2 3/8" O.D. tenon)

ECF-RAM-G2-(F) Retrofit Arm mount kit

ECF-WS-G2-(F) Wall mount with surface conduit rear entry permitted

(F) = Specify finish

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>60,000 hours	>88%

LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp. ³	Average System Watts ¹	Type 2			Type 3			Type 4		
					Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-NW-G2-x	32	530	4000	56	6,864	B2-U0-G2	123	6,715	B1-U0-G2	121	7,025	B1-U0-G2	126
ECF-S-32L-700-NW-G2-x	32	700	4000	73	8,853	B2-U0-G2	121	8,661	B2-U0-G2	119	9,062	B1-U0-G2	124
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	12,464	B3-U0-G2	118	12,194	B2-U0-G2	115	12,757	B2-U0-G3	121
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	13,826	B3-U0-G3	114	13,526	B2-U0-G3	111	14,151	B2-U0-G3	116
ECF-S-48L-900-NW-G2-x	48	900	4000	135	16,409	B3-U0-G3	121	16,053	B2-U0-G3	119	16,795	B2-U0-G3	124
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	18,581	B3-U0-G3	117	18,178	B3-U0-G3	115	19,018	B2-U0-G4	120
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	20,627	B3-U0-G3	113	20,180	B3-U0-G4	110	21,112	B3-U0-G4	116
ECF-S-64L-900-NW-G2-x	64	900	4000	178	21,717	B3-U0-G3	122	21,246	B3-U0-G4	119	22,228	B3-U0-G4	125
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	24,467	B3-U0-G3	119	23,936	B3-U0-G4	116	25,043	B3-U0-G4	122

Ordering Code	Total LEDs	LED Current (mA)	Color Temp. ³	Average System Watts ¹	Type 5			Type 5W			Type AFR		
					Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)	Lumen Output ^{1,2}	BUG Rating	Efficacy (LPW)
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,414	B3-U0-G2	133	7,175	B3-U0-G2	129	7,111	B2-U0-G1	128
ECF-S-32L-700-NW-G2-x	32	700	4000	73	9,563	B3-U0-G2	131	9,255	B4-U0-G2	127	9,172	B2-U0-G1	126
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,462	B4-U0-G2	127	13,030	B4-U0-G2	123	12,912	B3-U0-G2	122
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	14,933	B4-U0-G2	123	14,453	B4-U0-G2	119	14,322	B3-U0-G2	118
ECF-S-48L-900-NW-G2-x	48	900	4000	135	17,723	B4-U0-G2	131	17,154	B5-U0-G3	127	16,999	B3-U0-G2	126
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,069	B5-U0-G3	126	19,424	B5-U0-G3	122	19,248	B3-U0-G2	121
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	22,279	B5-U0-G3	122	21,563	B5-U0-G3	118	21,368	B3-U0-G2	117
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,456	B5-U0-G3	132	22,702	B5-U0-G3	128	22,497	B3-U0-G2	127
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,427	B5-U0-G3	128	25,577	B5-U0-G4	124	25,346	B3-U0-G2	123

1. Wattage and lumen output may vary due to LED manufacturer forward volt specification and ambient temperature.
Wattage shown is average for 120V through 277V input. Measured wattage may vary due to variation in input voltage.

2. Lumen values based on photometric tests performed in compliance with IESNA LM-79.
3. Warm white color temperature will result in decreased lumen output.
Contact outdoorlightingapplications@philips.com for details or additional information.

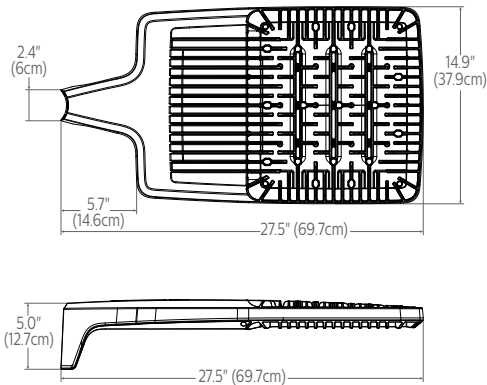
ECF-S EcoForm small

Site & Area

Dimensions

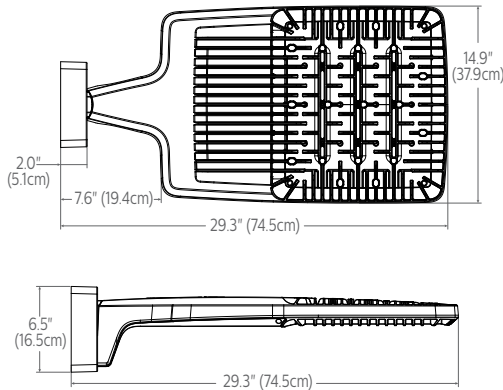
Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)



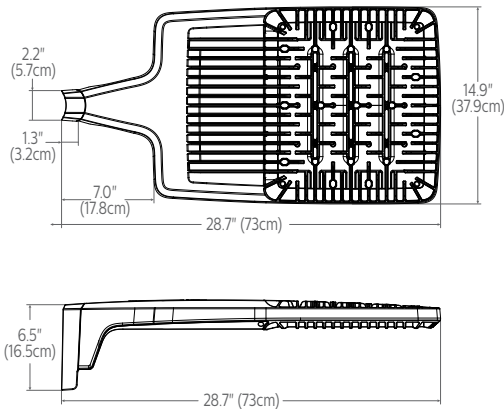
Wall (WS)

Weight: 27 Lbs (12.2 Kg) EPA: 0.27ft² (.025m²)



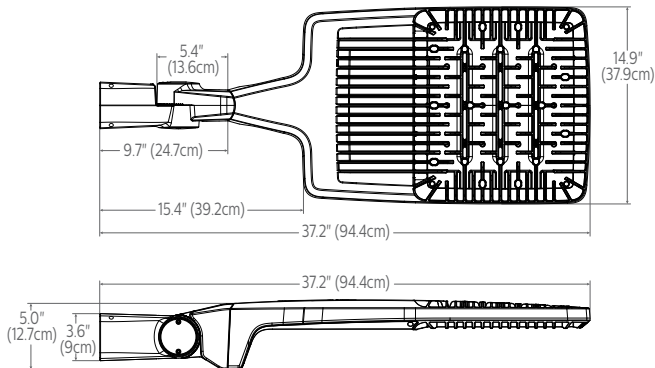
Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

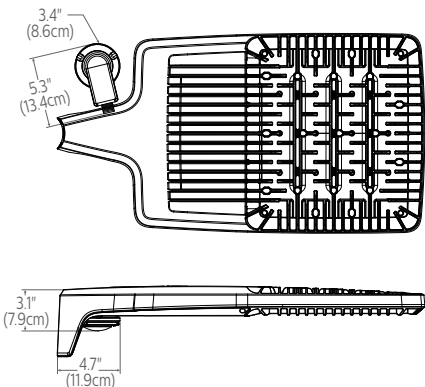


Slip fitter (SF)

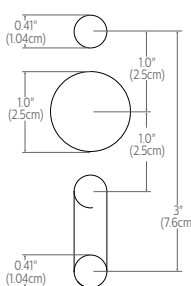
Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft² (.031m²)



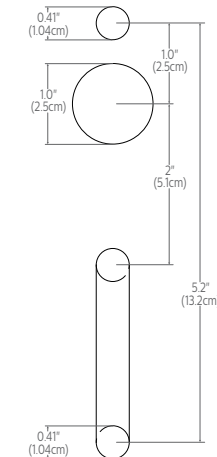
Outboard IMR-HVU sensor



Standard Arm (AR) drill pattern



Retrofit Arm (RAM) drill pattern



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Site & Area

Luminaire options

DD: 0-10V dimming driver with leads supplied through back of luminaire (for secondary dimming controls by others).

TLRD5: Twist Lock Receptacle with 5 pins enabling dimming, can be used with a twistlock photoelectric cell or a shorting cap. Can also be used with Philips or third party control system. Receptacle located on top of luminaire housing.

TLRD7: Twist Lock Receptacle with 7 pins enabling dimming and additional functionality (by others), can be used with twistlock photoelectric cell or a shorting cap. Can also be used with Philips or third party control system. Receptacle located on top of luminaire housing.

TLRDPC: Receptacle with twistlock photoelectric cell (must specify voltage). Receptacle located on top of luminaire housing.

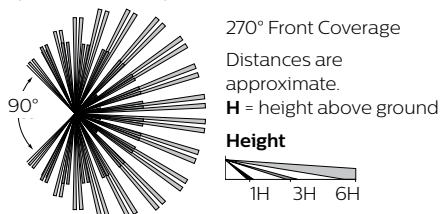
Dynadimmer Automatic Profile Dimming: Automatic dimming profiles (CS50/CM50/CE50) offer safety, median, or economy settings, for shorter or longer duration. Dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. 50% dimming is standard. DA50 offers 50% instantaneous dimming all night (during all dark hours). 75% and 25% dimming is also available if different light levels are required (contact Technical Support for details).

Profile	Dimming		
	Level	Duration	Example
Economy	50%	9 hours	9 PM - 6 AM
Median	50%	8 hours	10 PM - 6 AM
Safety	50%	7 hours	11 PM - 6 AM
Reactive 50	50%	dynamic	all night

IMRI3, IMRI7: Infrared Motion Response Integral. IMRI module is mounted integral on driver door and is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges (see charts for approximate detection patterns on page 7). Motion response used in combination of Dynadimmer and SiteWise are not programmable and used to override controllers schedule when motion is detected. When used not combined with any controller, IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minute default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. IMRI can also be specified with automatic profile dimming for the added benefit of a combined dimming profile with sensor detection, where the PIR sensor will override the dimming profile when occupancy is detected. Passive infrared (PIR) motion sensor.

IMRO: Infrared Motion Response Outboard pole mounted sensor, must be specified with an available automatic profile dimming option. Combines the benefits of both automatic profile dimming and motion response using the Philips Dynadimmer technology. PIR sensor features a pole mounted Wattstopper EW-200-120-W or the EW-200-277-W. One motion sensor per pole is required (order MS-A-120 or MS-A-277 separately). Available in 120 or 277V only, IMRO sensors require single voltage 120V or 277V input (see chart for approximate detection patterns). If motion is detected during the time that the luminaire is operating at profile dimming mode specified, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns back to automatic profile dimming. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes. The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Pole Details: IMRO requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Philips Gardco poles, order the pole with the Motion Sensor



Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole (see Gardco Poles specification sheets for more information).

DCC: Dual Circuit Control permits separate switching of a specific number of LED modules. Available as an option with 2 through 4 modules.

SW: SiteWise option is a fully integrated controller that connects to Philips SiteWise system in order to offer a complete area lighting management system. The communication signal is based on Philips patented central dimming technology. SiteWise delivers it deliver optimal energy

savings using your site's existing cabling. No additional wiring required, installation and commissioning are simple. An intuitive, mobile app makes it easy for authorized users to set schedules to meet site specific lighting needs, local regulations, and energy codes.

Wireless systems: Controller radio/sensor module attached to luminaire arm and includes radio, photocell and motion sensor. Available with #2 lens (LLC2) for 8' to 15' mounting height" or #3 lens (LLC3) for 15-25' mounting heights or #4 lens (LLC4) for 25-40' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall (see accessories and wireless system information page 5-7).

F1: Fusing Single (for 120, 277 or 347VAC)

F2: Fusing Double (for 208, 240 or 480VAC)

FP1: Fusing Pole Single (pole mounted near handhole, for 120, 277 or 347VAC)

FP2: Fusing Pole Double (pole mounted near handhole, for 208, 240 or 480VAC).

FP3: Fusing Pole Canadian Double Pull (pole mounted near handhole, for 208, 240 or 480VAC)

SP1: Surge Protection, 10kV/5kA, 120-277V or 347-480V

SP2: Surge Protection, 20kV/10kA, 120-277V or 347-480V

HIS: Internal House Side Shield. Injection molded in black finish. Ships installed with 1 per 16 LED module. Also available shipped separately as an accessory for 2-4 LED modules.

FAWS: Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level – see the FAWS multiplier chart for more details. *Note: It is not recommended to use FAWS with other dimming or controls; if you do, set the switch to position 10 (maximum output) to enable the other dimming or controls. Switching FAWS to any position other than 10 will disable the other dimming or controls.*

Field adjustable wattage (FAWS) multiplier chart

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage
1	0.31	0.28
2	0.53	0.50
3	0.62	0.58
4	0.70	0.67
5	0.78	0.75
6	0.83	0.81
7	0.89	0.87
8	0.92	0.91
9	0.96	0.95
10	1.00	1.00

Note: Typical value accuracy +/- 5%

ECF-S EcoForm small

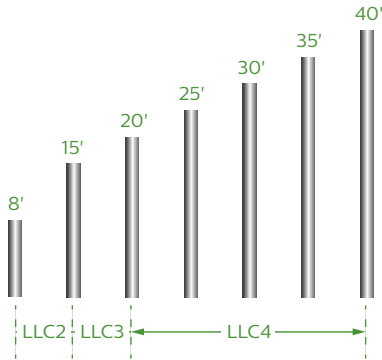
Site & Area

Wireless system – luminaire configuration information

LLC2/LLC3/LLC4 Luminaire Mounted Controller

Controller pod attached to luminaire and includes radio, photocell and motion sensor with #2, #3 or #4 lens for 8–40' mounting heights.

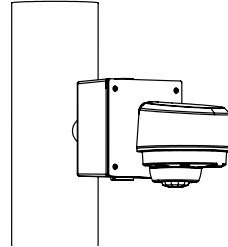
Recommended Sensor by Pole Height



LLCR2/LLCR3/LLCR4 Pole Mounted Controller

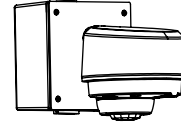
In this configuration, the wireless controller will be mounted to the pole at a fifteen foot mounting height. The number of luminaires on each pole, as well as the specific wattage chosen, will determine how many controllers will be required.

When using the wireless remote accessory option (LLCR-F) in a pole mount application, specify pole option (CL=Coupling Internal Thread, 3/4" size). Confirm required orientation of luminaire and wireless controller. Indicate height above pole base and orientation to hand hole. Recommended min pole height is 18ft, with option (CL) 15ft above pole base. Other heights are possible when choosing the appropriate sensor lens type. See pole specification sheets for more information.

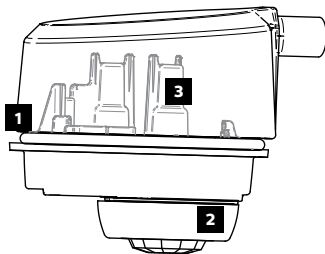


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Wireless system sensor



1. Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

2. Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations.
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings.
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height.

3. Wireless Radio

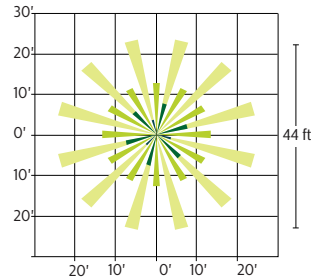
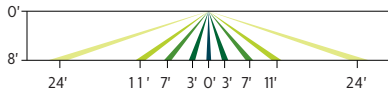
- 1.8 Watts max (no load draw)
- Operating voltage 120–277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400–2483.5Mhz
- RoHS Compliant

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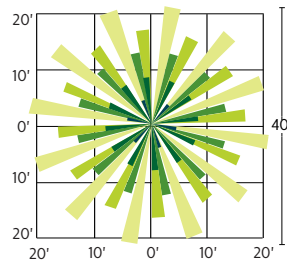
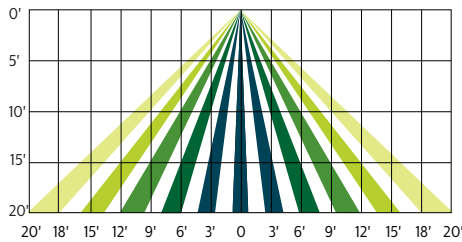
Site & Area

Infrared Motion Response – Coverage Patterns

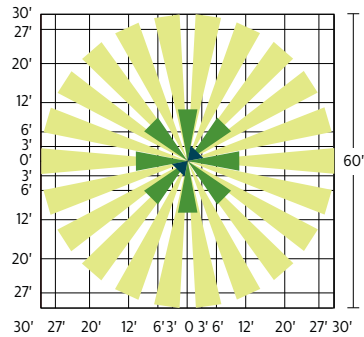
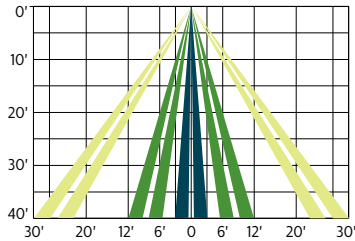
LLC2/LLCR2
Luminaire or remote mount controller
with #2 lens



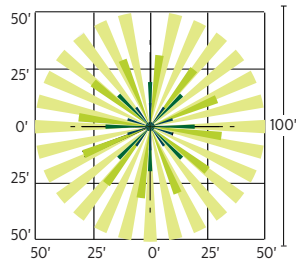
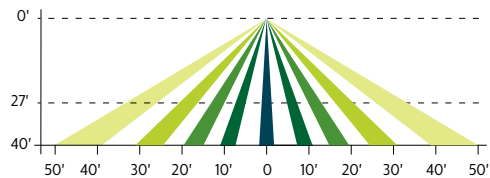
IMRI3/LLC3/LLCR3
Luminaire or Remote mount controller
with #3 lens



LLC4/LLCR4
Luminaire or Remote mount controller
with #4 lens



IMRI7
Integral motion response
with #7 lens



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Site & Area

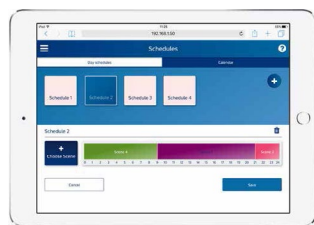
SiteWise system

SiteWise is a complete area lighting management system including a luminaire integrated controller, dimming signal transmitter cabinet, and locally accessible user interface. Installation and commissioning are simple. The cabinet communicates with the Philips luminaires using a patented central dimming technology. The control signal is embedded on the existing electrical line – no new cabling is required. An intuitive, locally accessible interface makes it easy for authorized users to set schedules in order to meet site specific lighting needs, local regulations, and energy codes.

SiteWise system diagram



SiteWise system interface



SiteWise has an intuitive user interface that makes it easy to plan, edit, and implement lighting schedules for your site. Authorized users can access the interface via a local app.

To ensure that only authorized users can access your lighting, SiteWise offers two user types, each with different permissions. An advanced user, or administrator, can set and edit schedules using the ten pre-set scenes, assign those schedules to calendar days, and check system status.

For everyday use, a basic user can manually override a schedule that is currently running but cannot create or edit schedules.

SiteWise system specifications

The SiteWise system includes both luminaires and controls. The controls used for SiteWise are circuit load dependent. Required for a complete installation are the following Philips SiteWise components: user interface, control kit, dimming signal transmitter cabinet, and dimming signal receiver located in the Philips luminaire (**SW** option). Optional luminaire-integrated or external motion sensors may also be specified as required. Within the electrical closet, the control kit and dimming signal transmitter cabinet are installed into the electrical system between the existing breaker panel and the site luminaires. New LED luminaires containing the dimming signal receiver are installed on the site. Once completed, use of the interface allows for scheduling and override capabilities. Wireless access point and tablet should be supplied by others. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise

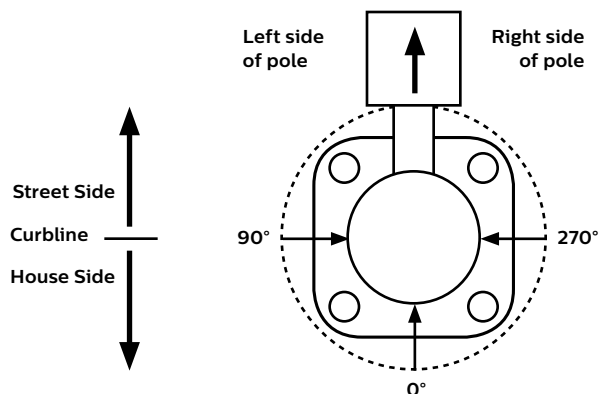
ECF-S EcoForm small

Site & Area

Optical Orientation Information

Standard Optic Position

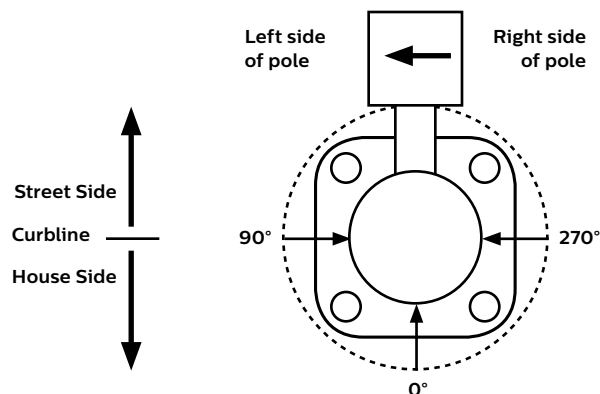
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

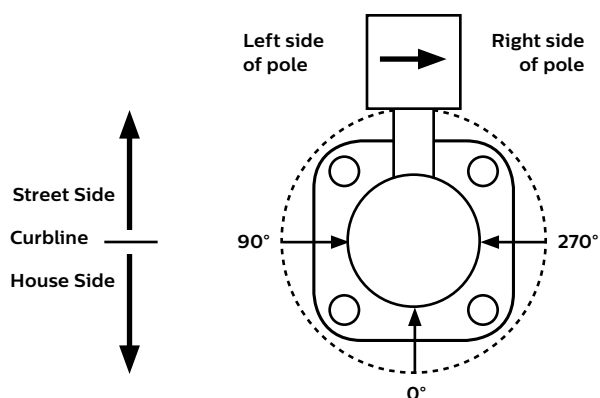
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

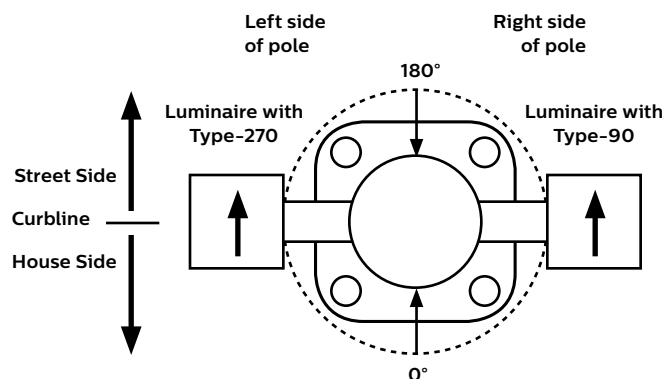
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

ECF-S EcoForm small

Site & Area

Specifications

Housing

One piece die cast aluminum housing with integral arm and separate, self retained hinged, one piece die cast door frame.

IP Rating

LED light engine rated IP66. Driver compartment rated to IP65.

Vibration resistance

EcoForm with Standard Arm carries a 3G vibration rating that conforms to standards set forth by ANSI C136.31. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Electrical

Driver efficiency (>90% standard). 120–480V available (restrictions apply). Open/short circuit protection. Optional 0–10V dimming to 10% power. RoHS compliant. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

LED Board and Array

32, 48, or 64 LEDs. Color temperatures: 3000K +/- 125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Aluminum metal clad board. RoHS compliant.

LED Thermal management

The housing design allows the one piece housing to provide excellent thermal management critical to long LED system life.

Energy saving benefits

System efficacy up to 133lm/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

SiteWise network system

SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using Philips patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems.

Wireless system

EcoForm luminaires are available with optional wireless controllers ready to be connected to a Limelight system (sold by other). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution.

Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions to control backlight.

Types 2, 3, 4, and AFR, when specified and used as rotated, are factory set only.

Mounting

Standard luminaire arm mounts to 4" round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3–3.9" poles.

Retrofit Arm Mount

EcoForm features an innovative retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately.

Listings

UL/cUL listed to the UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40° to 40°C (-40° to 104°F). The quality systems of this facility have been registered by UL to the ISO 9001 series standards. Most EcoForm configurations are DesignLights Consortium® qualified. Consult DLC Qualified Products list for more details.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Warranty

EcoForm luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED Drivers also carry a 5 year limited warranty. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer. See philips.com/warranties for complete details and exclusions.



PHILIPS
Stonco

Wall mount

LytePro LED Sconce

LPW32



Project:

Location:

Cat.No:

Type:

Quantity:

Notes:

The Philips Stonco LytePro LED Small Wall Sconce LPW32 features outstanding value in a compact, architectural design. This wall sconce features state-of-the-art, long-life and maintenance savings, in a combined discreet LED package with high precision over-optic design. This powerful and precise combination offers outstanding energy savings with excellent photometric performance. LPW32 is ideal for building perimeters and corridors in addition to wall lighting applications requiring strong lateral spacing and forward pattern projection.

Stocked luminaires – Ordering guide¹

Catalog Number	Description	Master Pack, Qty	UPC Code
LPW32-78DGY	LPW32, 71W, 700mA, 4000K, 120-277V, Dark gray textured paint	3	786034960564
LPW32-78BZ	LPW32, 71W, 700mA, 4000K, 120-277V, Bronze textured paint	3	786034960588
LPW32-71BZPCB	LPW32, 71W, 700mA, 4000K, 120V, Bronze textured paint, w/button photocell	3	786034960595
LPW32-7DTBZMR	LPW32, 71W, 700mA, 4000K, 120 or 277V, Bronze textured paint, w/motion response	3	786034960601

Stocked accessories – Ordering guide (Must be ordered separately)

Catalog Number	Description	Master Pack, Qty	UPC Code
LPWCVRPLT-BZ	LPW Universal wall cover mounting plate, Bronze textured paint	(none)	786034960618

Description of catalog codes

Family	Drive current	Voltage	Finish	Options
LPW32 = LytePro 32 LED Small Wall Sconce	7 = 700mA drive current	8 = 120-277V 1 = 120V DT = Dual Tap, 120V or 277V	BZ = Bronze textured paint DGY = Dark gray textured paint	PCB = Button photocontrol MR = Motion response

1. Color availability and options vary by model; consult stock luminaires ordering guide above.

LPW32 LytePro LED Small Wall Sconce

Features

LPW32 wall sconce delivers 6,913 lumens at 71W, with an efficacy of 98 lumens per watt.

- LP32W-7, 71W LED may effectively replace 150-250W HID luminaires²
- 4000K neutral white at 70 CRI (minimum) is standard
- LPW32 offers two in-stock colors on standard units
- Button photocell available in 120V, bronze luminaires only
- Motion sensor available in bronze luminaires only, operates on 120V or 277V input only. After 10 minutes, dims down to 25% of full light output if no occupancy is detected
- 5-year limited warranty, see philips.com/warranties for specific details

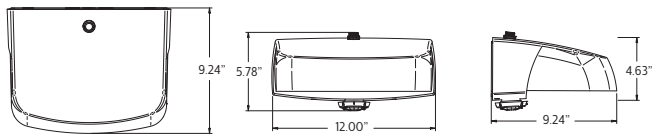
Performance/Specifications

Distribution	Type 3
Initial Lumens	6,913
Average Wattage	71
Lumens/Watt	98
BUG Rating*	B1/U0/G1
Luminaire Weight	~11 lbs (5Kg)

Ratings/Approbations/Certifications

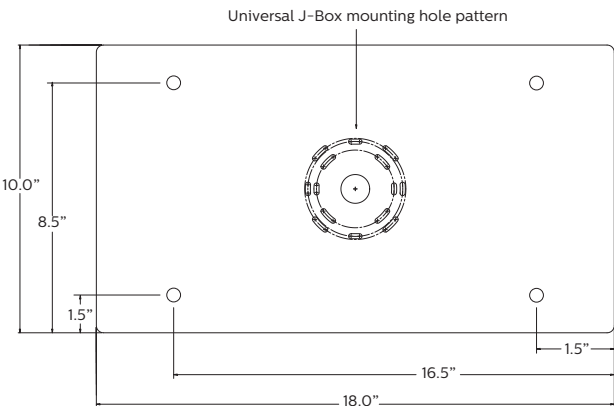
Ingress Protection	IP65 Optical
DLC Listed	DLC QPL
cETLus	Certified for use in wet locations
Rated Ambient Temperature	-40°C (-40°F) to 40°C (104°F)

Fixture Dimensions³



Accessory Dimensions (ordered separately)

LPWCVRPLT-BZ LPW Universal wall cover mounting plate, 0.08" aluminum, bronze textured paint (used to cover larger pre-existing opening or surfaces, field installed). Offers same J-Box pattern as luminaire or may lagged to wall using (4) knockouts.

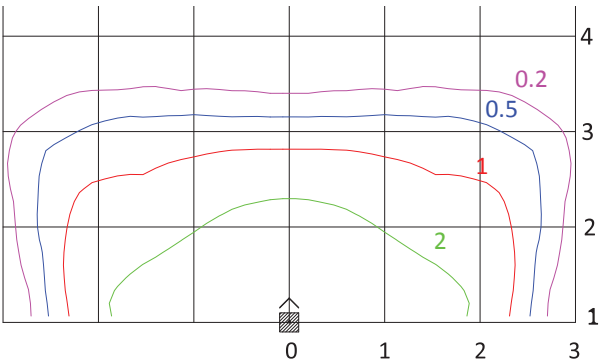


2. Comparable equivalency to HID and other lamp sources depends on multiple criteria including mounting height, fixture spacing, efficiency, performance and classification of the luminaire being replaced and application lighting criteria required for the given project.
3. PCB and MR shown for placement only, available on specific models only (see ordering guide).

Distribution Pattern

LPW32 15' MOUNTING HEIGHT			
MOUNTING HEIGHT	12'	15'	18'
MULTIPLIER	1.56	1.0	0.67

- Isolines shown at 2.0, 1.0, 0.5, & 0.2 FC.
- Choose mounting height. Use MULTIPLIER (X) EXISTING FC VALUE = NEW FC VALUE.
- FC values are based on initial lumen output.
- Gridline spacing is in units of chosen mounting height



LPW32 LytePro LED Small Wall Sconce

General Description

The Philips Stonco LytePro LED Small Wall Sconce LPW32 combines excellent performance, design and value to meet the needs of the energy and budget conscious. The LPW32 is available for use in downward facing, surface wall mount applications, over recessed j-boxes or where power can be directly fed through back surface, whereby connections splices can be made inside the luminaire housing. Four SKU's are available as in-stock configurations (2-day quick ship).

Two standard units are available in two different finishes. A button photocell is available in 120V in bronze finish only. Motion response with occupancy sensor is available in bronze finish only and is California Title 24 compliant.

Housing

Die-cast housing houses both the LED and driver assemblies. Design incorporates an integrated heat sink to maximize thermal performance and reliability. Backplate is corrosion free, composite polycarbonate, with built-in level bubble, offers integral interlocking hook and mount design for easy installation.

Mounting

Easy interlocking hook and mount housing/backplate design for easy installation. Mounts over 3.5", 4" octagonal j-boxes and single gang switch boxes or can be directly lagged to surface. Ensure proper steps for gasket/sealing luminaire to surface.

IP Rating

Optical compartment is IP65 rated.

LED Board and Array

Provides up to 98 lm/W in LPW32 at the system level. Standard color temp is 4000K +/- 250K, minimum 70 CRI.

Electrical

Driver efficiency (>90% standard). 120-277V. Temp range: -40°C (-40°F) to 40°C (104°F). Open/short circuit protection. Inherent surge protection up to (4KVA). RoHS compliant.

Listings

Product is cETLus listed suitable for Wet Locations. Suitable for use in ambients from -40°C to 40°C (-40°F to 104°F). DesignLights Consortium® qualified. Stocked SKUs of the LPW family are made in China.

Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Two standard colors are available: Dark Grey and Bronze. Specific options are only available in bronze.

Motion Response (MR)

LPW32 luminaires with option "MR" include a passive infrared (PIR) motion sensor (WattStopper® FSP-211 equipped with an FS-L2W lens) capable of detecting motion within 22 feet of the sensor, 360° around the luminaire, when placed at an 8 foot mounting height. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts. When no motion is detected for 10 minutes, the Motion Response system reduces the wattage by 75%, to 25% of the normal constant wattage reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. Dimming on low is factory set to 75% with duration set at 10 minutes. Reprogramming of the sensor is possible through the Wattstopper FSIR-100 remote handheld programming tool (sold separately). More information on the FSIR-100 is available at www.wattstopper.com or contact Philips Technical Support.

Warranty

LPW32 luminaires, the LED arrays, and the drivers are all covered by a 5-year limited warranty. See philips.com/warranties for details.

LED Performance:

PREDICTED LUMEN DEPRECIATION DATA^{4,6}

Ambient Temp. °C	Calculated L70 hrs ⁵	Reported L70 Per TM-21 ^{5,6}	Calculated Lumen Maint. % @60,000 hrs
up to 40°C	>200,000 hrs	>60,000 hrs	94.0%

4. Calculated performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.

5. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output.

6. Reported per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.



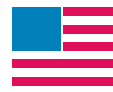
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philips.com/luminaires

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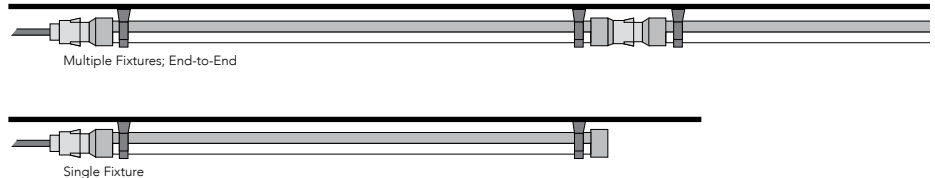


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A division of Philips Electronics Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008



**DIRECT AC
DRIVERLESS**



DRIVERLESS AC LED LUMINAIRE

Product Features

Maintenance-Free Driverless Design

Connects directly to AC line voltage without an LED driver or electrolytic capacitors, for extreme reliability and lifetime. Requires zero maintenance.

Easy to Install Quick-Connect Cabling

Convenient push-and-click connectors and cabling make GPX Series fixtures easy to install and daisy chain.

Coextruded Copolyester/Aluminum Housing

Our patented process combines copolyester and aluminum together, with no seals or gaskets. The result is a single piece enclosure with excellent heatsinking characteristics for long lifetime.

Superior Chemical & UV Resistance

Seamless polymeric outer shell provides IP67 ingress protection and is specialized for superior chemical resistance. An additional protective coating is available which integrates a UV inhibitor and UV blocker for outdoor applications.

Ordering Information

Product	Length	Color Temp.	Lens Diffusion	UV Protection	Through Wired	Voltage
GPX						
2 2-Foot		50K (standard) 5000 Kelvin	Blank (standard) Chemical Resistant Clear Lens	Blank (standard) No Coating, Rated for Indoor Use	Blank (standard) Connectors on Input & Output for ability to Daisy Chain fixtures	120V 120 VAC Input
4 4-Foot		40K 4000 Kelvin	GC (glare control) Chemical Resistant Lens with Added Diffusion Sheet	UVO Outdoor-Rated with UV-Blocking Coating	SE (Single-Ended) Connector on Input Only, No Daisy Chain, for Standalone Install	277V 277 VAC Input
6 6-Foot		35K 3500 Kelvin				
8 8-Foot						

Power & Connection Accessories

Cable	Type	Length	Wire	Mounting Hardware	Description
*No Jumper Cable Required on End-to-End Connection				GPX-MNT-NM	Non-Metalic Quick Latch
GPX-JMP-1	Jumper	1ft	18 AWG SJTW	GPX-MNT-SS	Stainless Steel Bolt Latch
GPX-JMP-2	Jumper	2ft	18 AWG SJTW		
GPX-JMP-4	Jumper	4ft	18 AWG SJTW		
GPX-JMP-8	Jumper	8ft	18 AWG SJTW		
GPX-LDR-10	Leader Cable	10ft	18 AWG SJTW		
GPX-LDR-25	Leader Cable	25ft	18 AWG SJTW		

*For serviceability and expansion/contraction considerations G&G limits the number of luminaires connected end-to-end (without a jumper cable) to a maximum of 4.

GPX CONNECTORIZED LED

Product Specifications

Construction & Materials

Convenient push-and-click connectors let you easily and rapidly install Leader Cables and Jumper Cables. Multiple cable lengths support a variety of layouts.

Integrated aluminum heat spreader.

Seamless polymeric outer shell provides IP67 ingress protection and is specialized for superior chemical resistance. An additional protective coating is available which integrates a UV inhibitor and UV blocker for outdoor applications.

All G&G luminaires and components (with the exception of our LED boards and drivers) are proudly manufactured and assembled in the USA.

Electrical System

Power Factor: 0.9 nominal.

Input Power: Stays consistent over life.

Temperature Rating: Designed to operate in temperatures -40°C to 55°C.

Total Harmonic Distortion: < 20%

Regulatory Qualifications

cULus Listed

UL Listed for Wet Locations

DLC pending



**DIRECT AC
DRIVERLESS**

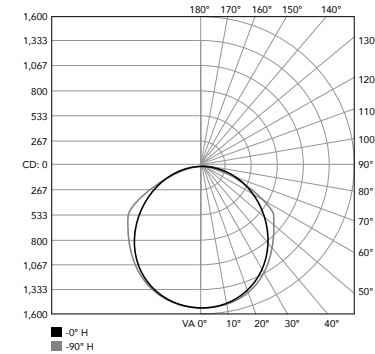
Photometry

GPX Series

Based on DTC Report Test #: 14404-T

Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.

Polar Candela Distribution



Zonal Lumen Summary

Zone	Luminaire
0-30	26.2%
0-40	43.2%
0-60	77.4%
0-90	98.5%
0-180	100%

Data: Electrical Output

Length & Output	Lumens	Wattage	Amps @120V	Amps @277V
GPX2	1200	9	0.075	0.032
GPX4	2400	18	0.150	0.065
GPX6	3600	27	0.225	0.097
GPX8	4800	36	0.300	0.130

Maximum Fixture Run

Maximum Fixture Run: 120VAC				
	GPX2 (9W)	GPX4 (18W)	GPX6 (27W)	GPX8 (36W)
JMP1 (1FT)	66 (198')	37 (185')	26 (182')	20 (180')
JMP2 (2FT)	59 (236')	34 (204')	24 (192')	19 (190')
JMP4 (4FT)	50 (300')	31 (248')	22 (220')	17 (204')
JMP8 (8FT)	40 (400')	26 (312')	19 (266')	15 (240')

Maximum Fixture Run: 277VAC				
	GPX2 (9W)	GPX4 (18W)	GPX6 (27W)	GPX8 (36W)
JMP1 (1FT)	157 (471')	89 (445')	63 (441')	48 (432')
JMP2 (2FT)	141 (564')	83 (498')	59 (472')	46 (460')
JMP4 (4FT)	119 (714')	73 (584')	54 (540')	42 (504')
JMP8 (8FT)	95 (950')	61 (732')	46 (644')	37 (592')