

**NORTH ELEVATION**

**COLOR / MATERIALS LEGEND**

CONCRETE TILT PANELS, SITE WALLS, MASONRY

- COLOR 1 SHERWIN WILLIAMS - CYBERSPACE - SW 7076
- COLOR 2 SHERWIN WILLIAMS - BLUSTERY SKY - SW 9140
- COLOR 3 SHERWIN WILLIAMS - SNOWBOUND - SW 7004

STOREFRONT WINDOW SYSTEM  
2" x 6" ALUMINUM - CLEAR ANODIZED FINISH

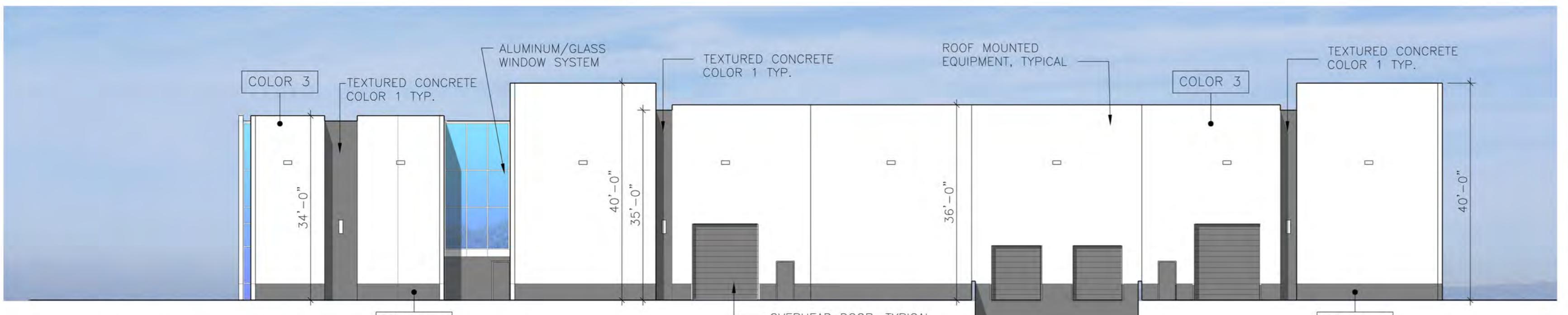
GLAZING  
VIRACON VUE 1-30  
1" BLUE INSULATED VISION/SPANDREL GLAZING

LIGHT FIXTURES AND POLES  
CLEAR ALUMINUM FINISH

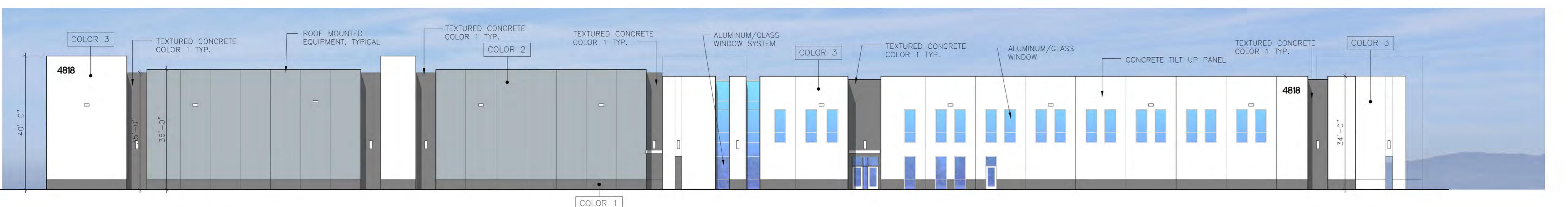
McCALL &  
associates, inc.

4307 n. civic center plaza  
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tel:(480) 946-0066  
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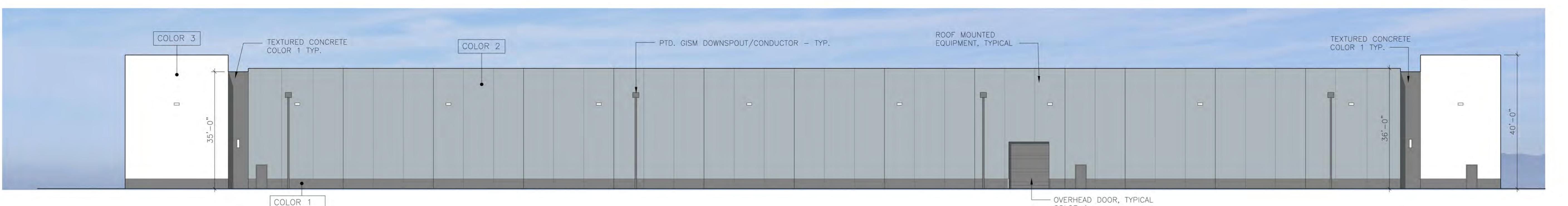
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of the architect.



**SOUTH ELEVATION**



**WEST ELEVATION**



**EAST ELEVATION**

sheet title:  
**BUILDING ELEVATIONS**

project:  
**PIPER PLASTICS**  
4818 EAST INDIGO STREET  
MESA, ARIZONA 85205

date: 05MAR18  
job no.: 17027  
revision:

*[Signature]*  
REGISTERED ARCHITECT  
CERTIFICATE NO.  
291337  
JEFFREY N.  
MC CALL  
Date Signed  
ARIZONA U.S.A.  
Expires  
06/30/2019



## PROJECT TEAM

OWNER: KRATOS DEVELOPMENT CORPORATION  
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DINO DIVENERE

ARCHITECT: MCCALL & ASSOCIATES  
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(480) 946-0066 946-5432 (FAX)  
JEFF MCCALL

ELECTRICAL: HAWKINS DESIGN GROUP  
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DAVE HAWKINS

CIVIL: CEG  
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NATHAN COTTRILL

LANDSCAPE: PHILIP R. RYAN  
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(480) 899-5813 963-3674 (FAX)  
PHIL RYAN

## BUILDING CODES

2006 International Building Code  
2005 National Electrical Code  
2006 International Plumbing Code  
2006 International Mechanical Code  
2006 International Fuel Gas Code  
2009 International Energy Conservation Code  
2006 International Fire Code

CURVE TABLE			
CURVE #	LENGTH	RADIUS	DELTA
C1	18.32'	12.00	87°28'19"
C2	164.56	1139.29	8°16'34"
C3	461.82	709.74	57°16'53"
C4	18.32'	12.00	87°28'17"
C5	486.32	940.00	89°38'33"

## FIRE CODE NOTES

REQUIRED FIRE APPARATUS ACCESS ROAD DURING CONSTRUCTION OR DEMOLITION. THE ACCESS ROAD SHALL BE A MINIMUM OF 20' WIDE AND SHALL BE AN ALL WEATHER DRIVING SURFACE, GRADED TO DRAIN STANDING WATER AND ENGINEERED TO BEAR THE IMPOSED LOADS OF FIRE APPARATUS (74,000 lbs/24,000 lbs PER AXLE) WHEN ROADS ARE WET. FOR EXAMPLE, A MINIMUM OF SIX (6) INCHES OF ABC COMPACTED TO 90% OVER AN APPROVED BASE WOULD MEET REQUIREMENTS.

THE ACCESS ROAD SHALL BE EXTENDED TO WITHIN 200 FEET OF ANY COMBUSTIBLE MATERIAL AND/OR ANY LOCATION ON THE JOBSITE WHERE ANY PERSON(S) SHALL BE WORKING FOR A MINIMUM OF FOUR (4) CONTINUOUS HOURS IN ANY DAY. A CLEARLY VISIBLE SIGN MARKED "FIRE DEPARTMENT ACCESS", IN RED LETTERS, SHALL BE PROVIDED AT THE ENTRY TO THE ACCESS ROAD.

ALL OPEN TRENCHES SHALL HAVE STEEL PLATES CAPABLE OF MAINTAINING THE INTEGRITY OF THE ACCESS ROAD DESIGN WHEN THESE TRENCHES CROSS AN ACCESS ROAD. THESE ACCESS ROADS MAY BE TEMPORARY OR PERMANENT. THIS POLICY APPLIES ONLY DURING CONSTRUCTION AND/OR DEMOLITION. PERMANENT ACCESS PER THE MESA FIRE CODE SHALL BE IN PLACE PRIOR TO ANY FINAL INSPECTION OR CERTIFICATE OF OCCUPANCY, IFC CHAPTER 14.

WATER SUPPLY FOR FIRE PROTECTION. AN APPROVED WATER SUPPLY FOR CONSTRUCTION SITE SHALL MEET THE REQUIREMENTS OF APPENDIX CHAPTER B AND C. THE MINIMUM FIRE FLOW REQUIREMENTS WHEN CONTRACTOR OR DEVELOPER BRINGS COMBUSTIBLE MATERIAL ON SITE IS 1,5000 GPM AT 25 PSI. AT LEAST ONE FIRE HYDRANT SHALL BE WITHIN 500 FEET OF ANY COMBUSTIBLE MATERIAL AND CAPABLE OF DELIVERING THE MINIMUM FIRE FLOW REQUIREMENT. THIS HYDRANT OR HYDRANTS MAY BE EITHER TEMPORARY OR PERMANENT AS THE PROJECT SCHEDULE PERMITS.

IN ADDITION, THERE ARE TIMES WHEN HYDRANTS AND VALVES MUST BE CLOSED TEMPORARILY FOR REPAIR WORK OR CONSTRUCTION OF THE WATER SYSTEM. THE DEVELOPER / CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE WATER SUPPLY IS AVAILABLE AT ALL TIMES. WHEN THE WORK IS COMPLETE, DEVELOPER / CONTRACTOR SHALL MAKE SURE THAT THE FIRE HYDRANTS ARE ACTIVE AND THE VALVES ARE OPEN, IFC CHAPTER 14.

COMPLIANCE IS REQUIRED WITH ALL PROVISIONS AND REQUIREMENTS OF IBC CHAPTER 33, SAFEGUARDS DURING CONSTRUCTION, AND IFC CHAPTER 14 AND NFPA 241, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

## KEY NOTES

- 3'-6" HIGH MASONRY SCREEN WALL, SEE DETAIL
- FIRE DEPARTMENT KNOX BOX
- 8'-2" HIGH MASONRY SCREEN WALL, SEE DETAIL
- LANDSCAPE VISION TRIANGLE PER CITY OF MESA ENGINEERING DESIGN STANDARDS
- ACCESSIBLE RAMP
- ACCESSIBLE PATH TO PUBLIC RIGHT OF WAY
- ELECTRICAL TRANSFORMER
- ELECTRICAL SES AND CONCRETE PAD
- 20' WIDE FIRE DEPARTMENT ACCESS WITH 45' CENTERLINE TURNING RADIUS
- 10'-0" CONCRETE APRON
- 6" VERTICAL CURB
- ASPHALT PAVING
- REFUSE PAD, SEE DETAIL 4/A1.2
- CONCRETE TRUCKWELL
- 22'-0" WIDE MANUAL SLIDING GATE WITH FD KNOX LOCK
- 40'-0" WIDE MANUAL SWINGING GATE WITH FD KNOX LOCK
- EXISTING STREET LIGHT
- EXISTING SIDEWALK
- NEW 5' WIDE SIDEWALK
- BIKE PARKING, SEE DETAIL 3/A1.2
- POLE MOUNTED LIGHT
- 40'-0" WIDE MANUAL SLIDING GATE
- 6' WIDE CONCRETE PAD
- LANDSCAPE PLANTING AREA
- ACCESSIBLE PARKING STALL, SEE DETAIL 2/A1.2
- FIRE LINE BACKFLOW PREVENTOR
- RETENTION BASIN
- COLORED, STAMPED ASPHALT

## PROJECT INFORMATION

DESIGN REVIEW  
ZONING

ZONING: (EXISTING / PROPOSED)  
APN:

LI-LIGHT INDUSTRIAL  
LOT 35: 141-34-318  
LOT 36: 141-34-319  
LOT 37: 141-34-320  
LOT 38: 141-34-321

5.88 ACRES - 256,313 S.F.  
4.85 ACRES - 211,247 S.F.  
77,185 S.F. / 211,247 S.F. = 36.5%

40'-0"

SITE AREA: (GROSS)  
SITE AREA: (NET)

LOT COVERAGE:

B/F1/S1  
III-B, SPRINKLERED  
UNLIMITED

BUILDING HEIGHT PROPOSED:

77,185 S.F.  
9,323 S.F.  
86,508 S.F.

OCCUPANCY CLASSIFICATION:

2,177 S.F. / 100 = 22 OCCUPANTS  
14,055 S.F. / 500 = 29 OCCUPANTS  
60,968 S.F. / 200 = 305 OCCUPANTS

TYPE OF CONSTRUCTION:

FIRST FLOOR:  
SECOND FLOOR:  
TOTAL BUILDING AREA:

BUILDING AREA:

77,185 S.F.

FIRE CODE:

9,322 S.F. / 100 = 94 OCCUPANTS  
450 OCCUPANTS

TOTAL OCCUPANT LOAD:

300' (B OCCUPANCY)  
250' (F-1/S-1 OCCUPANCY)

ACTUAL TRAVEL DISTANCE:

31 SPACES

PARKING CALCULATIONS

11,499 S.F. / 375 S.F. = 31 SPACES

WAREHOUSE:

14,055 S.F. / 900 S.F. = 16 SPACES

MANUFACTURING:

60,968 S.F. / 600 S.F. = 102 SPACES

TOTAL SPACES REQUIRED:

149 SPACES

STANDARD SPACE PROVIDED:

144 SPACES

ACCESSIBLE SPACES PROVIDED:

5 SPACES

TOTAL SPACES PROVIDED:

149 SPACES

BIKE PARKING REQUIRED:

149 SPACES / 10 = 15 SPACES

BIKE PARKING PROVIDED:

15 SPACES

16 SPACES

## LEGAL DESCRIPTION

LOT 35-38 OF "MESA COMMERCE CENTER", ACCORDING TO THE PLAT OF RECORD IN THE OFFICE OF COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA, RECORDED AS BOOK 292 OF MAPS, PAGE 21.

## PROJECT NARRATIVE

THE PROJECT IS THE DEVELOPMENT OF APPROXIMATELY 4.68 ACERS. THE SITE WILL INCLUDES A 2 STORY BUILDINGS DESIGNED FOR OFFICE, WAREHOUSE AND MANUFACTURING USES. THE BUILDING ARE CONSTRUCTED OF CONCRETE TILT UP WALLS WITH STORE FRONT GLAZING AND METAL TRELLIS WITH A FLAT, WOOD PANELIZED ROOF SYSTEM.

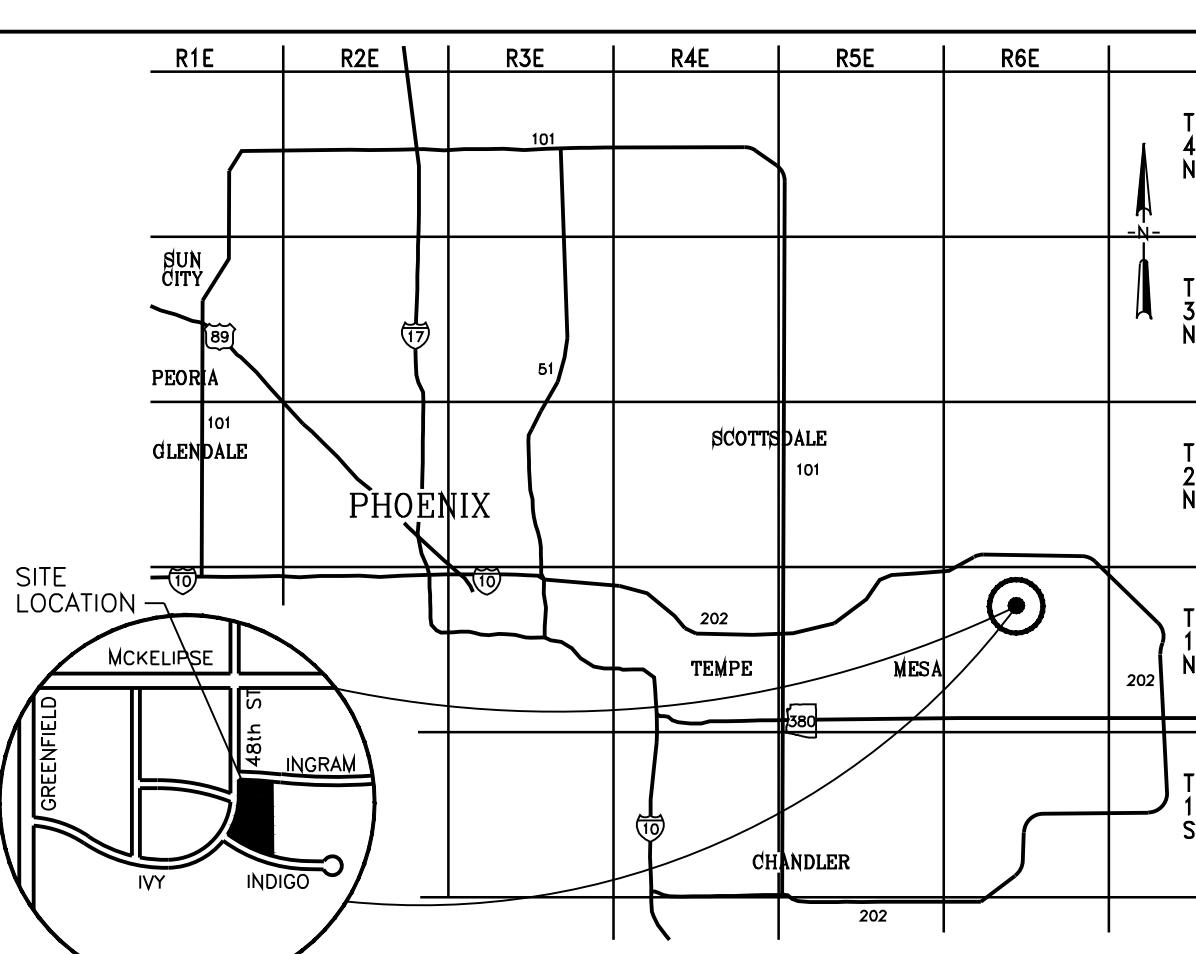
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project: PIPER PLASTICS  
4818 EAST INDIGO STREET  
MESA, ARIZONA 85205

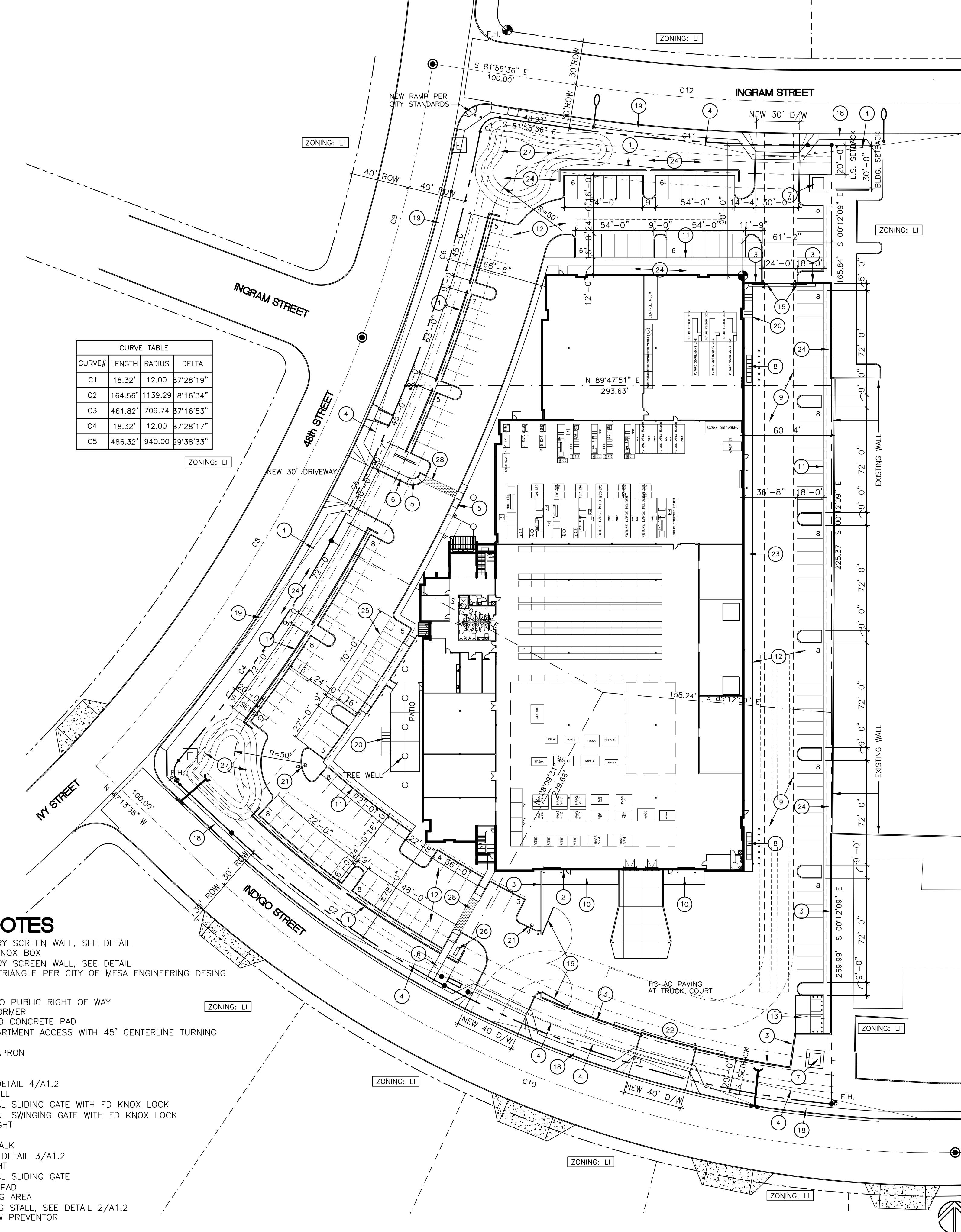
date: 05MAR18  
job no.: 17027  
revision:

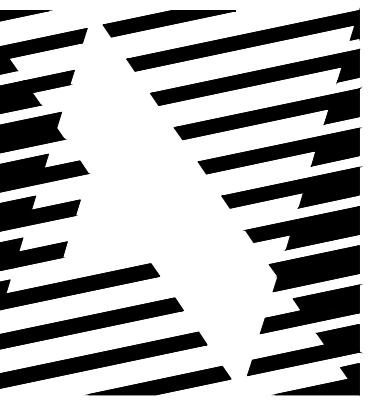
RECEIVED ARCHITECT  
CERTIFICATE NO.  
29137  
JEFFREY N.  
McCALL  
03/2018  
DRAFTS  
ARIZONA, USA  
06/30/2019

A1.1



VICINITY MAP





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associates, inc.

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NOTICE OF ALTERNATIVE BILLING CYCLE  
REGARDING THE SUBMISSION OF BILLINGS  
FOR THE PROJECT. THE SUBMISSION OF BILLINGS OTHER THAN  
SUCH OTHER BILLING CYCLE APPLICABLE TO  
THE PROJECT IS AVAILABLE FROM THE OWNER  
ADDRESS OWNERS AGENT OR ITS DESIGNED AGENT  
AND THE OWNER OR ITS DESIGNED AGENT  
SHALL PROVIDE THIS DESCRIPTION ON REQUEST.  
NOTICE OF EXTENDED PAYMENT PROVISION  
REGARDING THE SUBMISSION OF BILLINGS  
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*[Signature]*  
REGISTERED ARCHITECT  
CERTIFICATE NO.  
29137 JEFFREY N.  
MC CALL  
Date Signed.....  
ARIZONA, U.S.A.  
06/30/2019

## COLOR / MATERIALS LEGEND

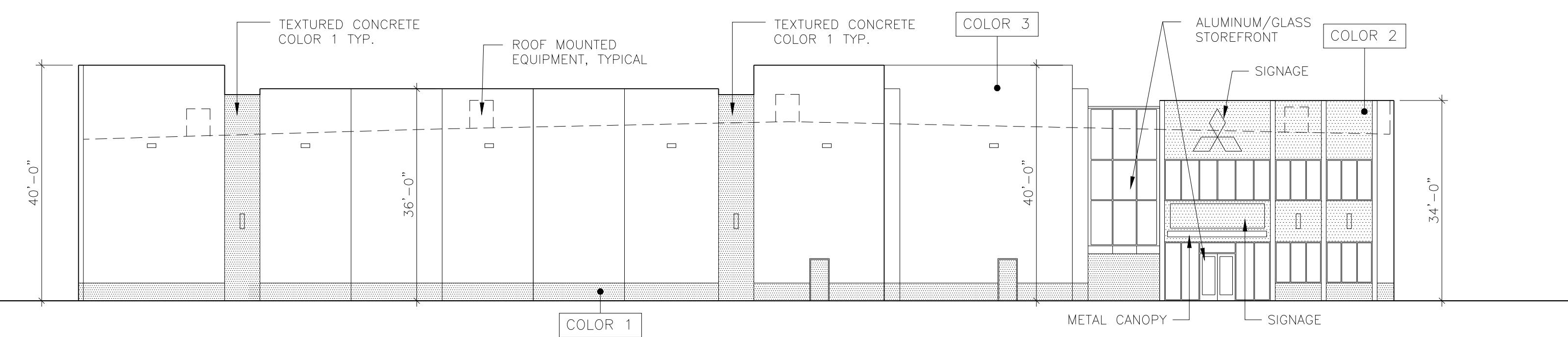
CONCRETE TILT PANELS, SITE WALLS, MASONRY

COLOR 1	SHERWIN WILLIAMS - CYBERSPACE - SW 7076
COLOR 2	SHERWIN WILLIAMS - BLUSTERY SKY - SW 9140
COLOR 3	SHERWIN WILLIAMS - SNOWBOUND - SW 7004

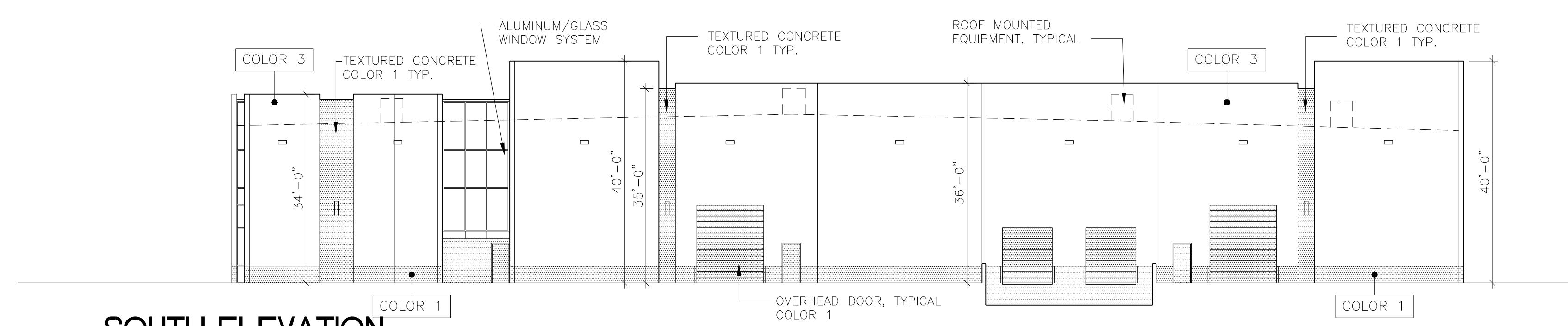
STOREFRONT WINDOW SYSTEM  
2" x 6" ALUMINUM - CLEAR ANODIZED FINISH

GLAZING  
VIRACON VUE 1-30  
1" ECLIPSE ADVANTAGE ARCTIC BLUE INSULATED VISION/SPANDREL GLAZING

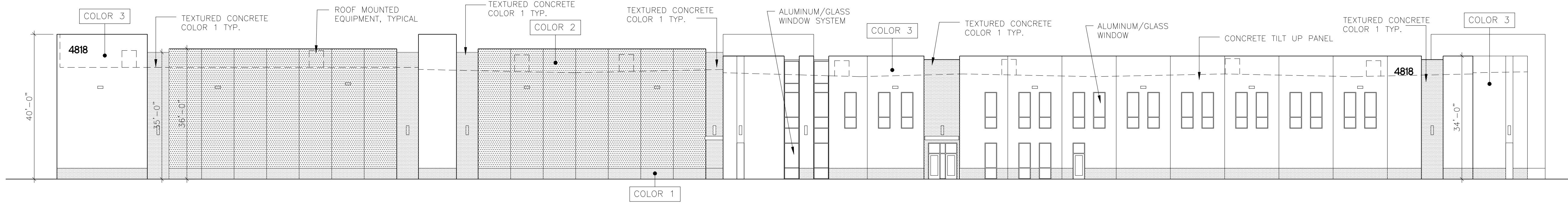
LIGHT FIXTURES AND POLES  
CLEAR ALUMINUM FINISH



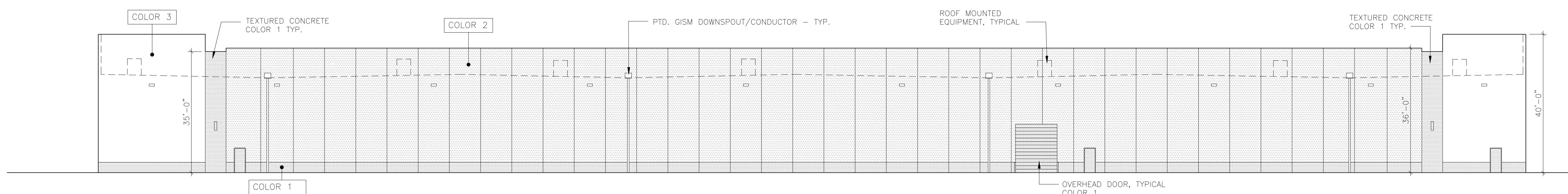
**NORTH ELEVATION**



**SOUTH ELEVATION**



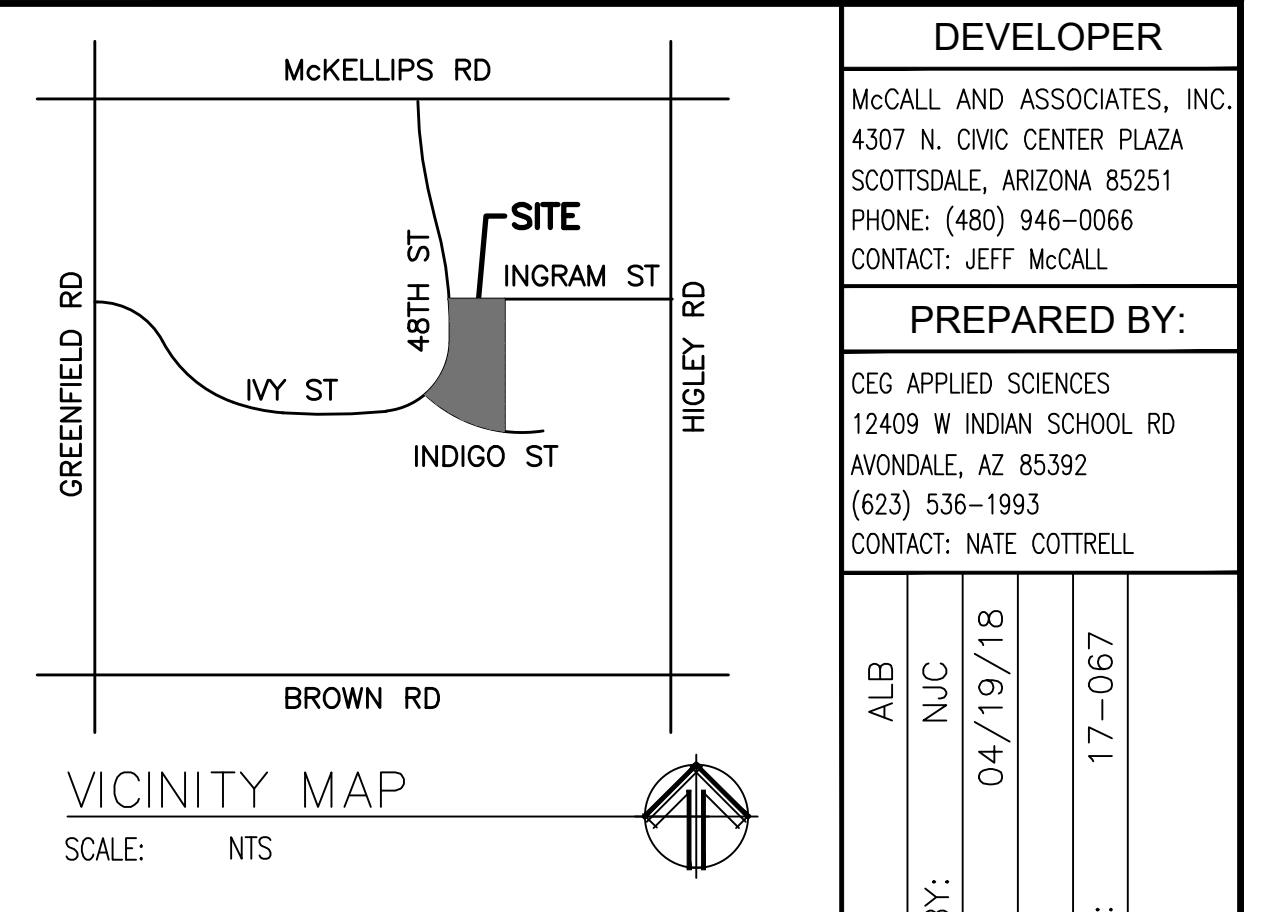
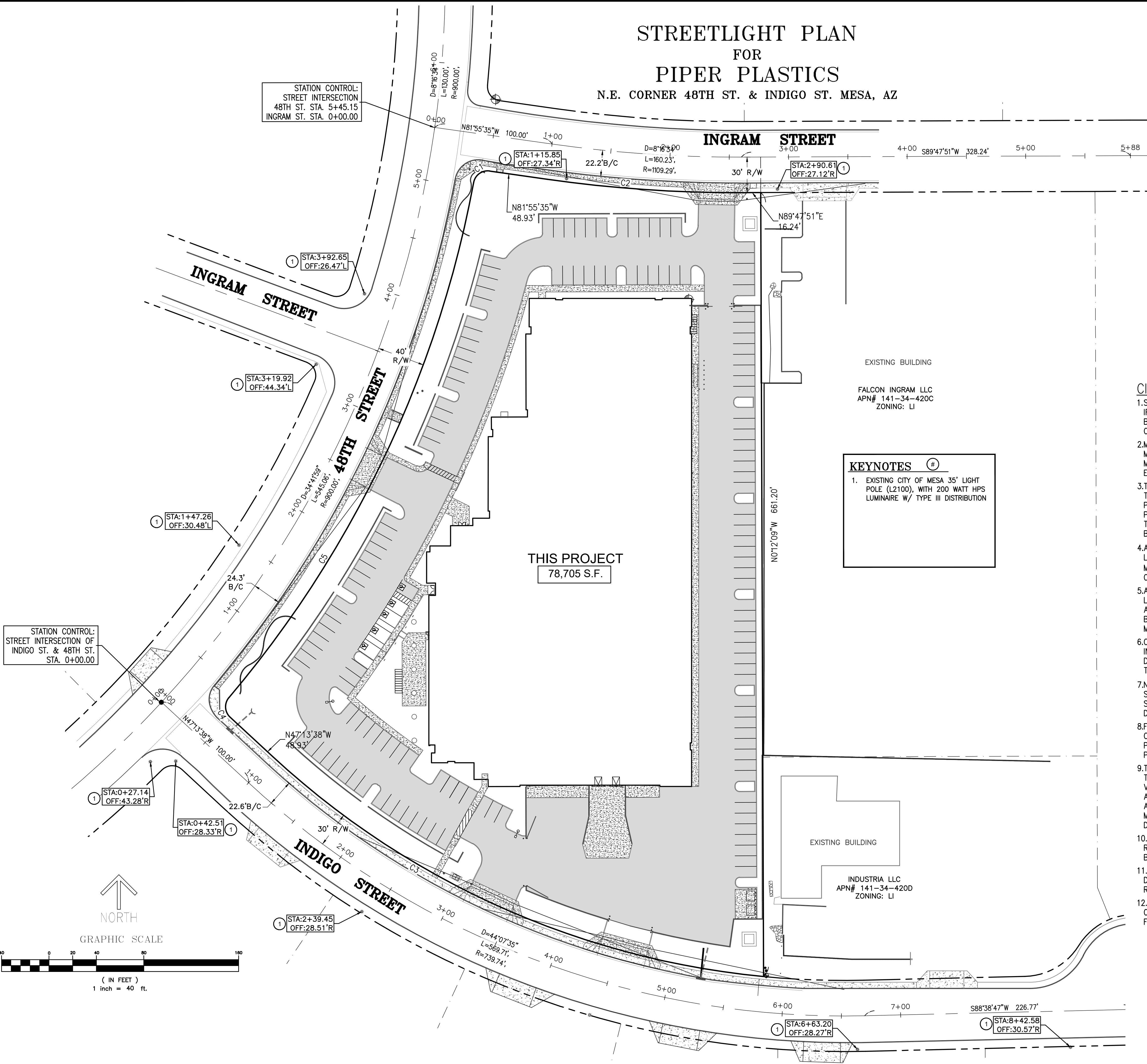
**WEST ELEVATION**



**EAST ELEVATION**

**STREETLIGHT PLAN  
FOR  
PIPER PLASTICS**

N.E. CORNER 48TH ST. & INDIGO ST. MESA, AZ



**LEGAL DESCRIPTION**

A PORTION OF THE NORTH 1/2 OF SECTION 10, TOWNSHIP 1 NORTH, RANGE 6 EAST, GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

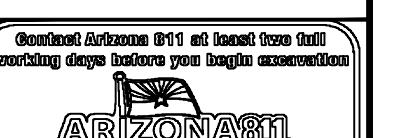
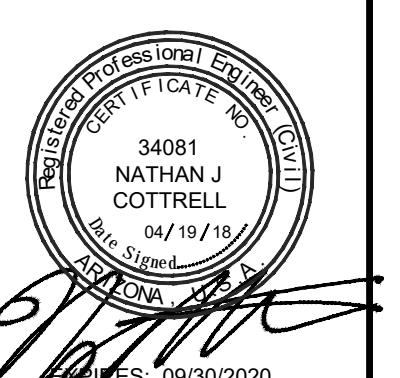
LOTS 35-38 OF "MESA COMMERCE CENTER", ACCORDING TO THE PLAT OF RECORD IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY, ARIZONA, RECORDED AS BOOK 292 OF MAPS, PAGE 21.

**AREA**  
GROSS AREA = 256,313 S.F. (5.88 AC)  
NET AREA = 211,247 S.F. (4.85 AC)

**CITY OF MESA PUBLIC STREET LIGHTING NOTES**

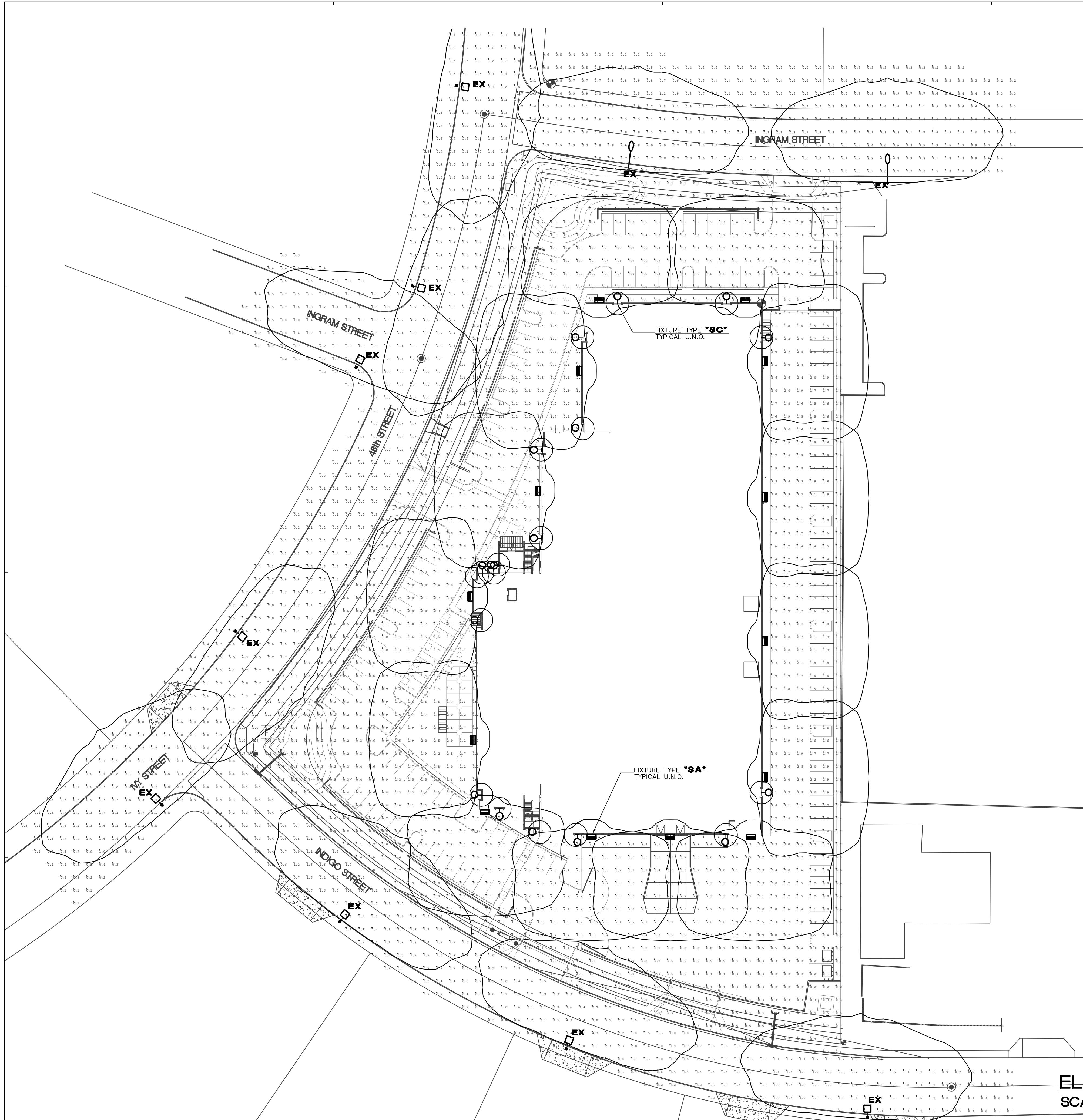
- STREET LIGHT CONDUITS SHOULD BE INSTALLED PRIOR TO DRIVEWAY INSTALLATIONS. IF STREETLIGHT CONDUIT IS INSTALLED AFTER DRIVEWAY INSTALLATION, CONTRACTOR SHALL BORE CONDUIT UNDER THE DRIVEWAY PER CITY OF MESA DETAIL M-18. MEANDERING THE CONDUIT BEHIND THE DRIVEWAY ENTRANCE WILL NOT BE PERMITTED.
- MATERIALS AND INSTALLATION OF THIS PROJECT SHALL COMPLY WITH THE CURRENT MESA STANDARD DETAILS, AMENDMENTS TO THE UNIFORM STANDARD DETAILS, THE CITY OF MESA ENGINEERING PROCEDURE MANUAL AND AMENDMENTS TO THE CITY OF MESA ENGINEERING PROCEDURE MANUAL.
- THE CONTRACTOR SHALL HAVE AT LEAST AN IMSA-CERTIFIED LEVEL 1 STREET LIGHT TECHNICIAN OR AN IMSA LEVEL 1 TRAFFIC SIGNAL TECHNICIAN ON SITE DURING ALL PHASES OF ANY STREET LIGHT WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE VERIFICATION OF THIS CERTIFICATION. IF A JOB SITE IS INSPECTED AND NO TECHNICIAN IS PRESENT ON SITE, ANY WORK ASSOCIATED WITH THE STREET LIGHTS WILL BE SUSPENDED.
- ALL TREES SHALL BE PLANTED A MINIMUM OF EIGHTEEN (18) FEET FROM STREET LIGHT POLES AND LIGHTING CONTROL CABINETS. ALL SHRUBS SHALL BE PLANTED A MINIMUM OF SEVEN (7) FEET FROM STREET LIGHT POLES AND LIGHTING CONTROL CABINETS.
- ALL CONDUIT, CONDUCTORS, WIRE, AND QUANTITIES SHALL BE MEASURED BY THE LINEAR FOOT HORIZONTALLY BETWEEN POLES, PULL BOXES AND CONTROL CABINETS. NO ADDITIONAL PAYMENT WILL BE MADE FOR SWEEPS AND VERTICAL RUNS, AS THEY SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND INCLUDED IN THE HORIZONTAL MEASUREMENT OF THE QUANTITIES.
- CONDUTS SHOULD BE INSTALLED PRIOR TO DRIVEWAY INSTALLATIONS. IF CONDUIT IS INSTALLED AFTER DRIVEWAY INSTALLATION, THE CONTRACTOR SHALL BORE CONDUIT UNDER THE DRIVEWAY PER CITY OF MESA DETAIL M-18, FOR CONDUIT INSTALLATION. MEANDERING THE CONDUIT BEHIND THE ENTRANCE WILL NOT BE ALLOWED.
- NOTE: THE LOCATION OF THE TRAFFIC SIGNAL FIBER OPTIC CONDUIT (TSFO) AS SHOWN IS DRAWN AT AN OFFSET AND IS FOR GRAPHICAL REPRESENTATION ONLY AND SHALL BE INSTALLED IN A JOINT TRENCH WITH THE STREET LIGHT CONDUIT PER COM DETAIL M-93.3 & 93.4.
- FOR AREAS WHERE 24-INCHES OF COVER IS NOT POSSIBLE, SEE CHAPTER 9 OF THE CITY OF MESA ENGINEERING & DESIGN STANDARDS. SAID AREAS SHALL BE IDENTIFIED ON PLANS. SUPPLY FULL CONFLICT DATA INCLUDING TOP OF CURB, SIZE & MATERIAL OF PIPE, INVERT, ETC.
- TO RETURN SALVAGED STREET LIGHT MATERIALS, THE CONTRACTOR SHALL CONTACT THE STREET LIGHT FOREMAN FOR THE AREA THE WORK IS OCCURRING IN. WEST OF VAL VISTA DRIVE, CALL 480-644-3178. EAST OF VAL VISTA DRIVE, CALL 480-644-5077. ARRANGEMENTS TO DELIVER MATERIALS MUST BE MADE A MINIMUM OF 48 HOURS IN ADVANCE. THE CONTRACTOR IS RESPONSIBLE FOR UNLOADING AND STACKING ALL MATERIALS. A CITY OF MESA STAFF MEMBER MUST BE PRESENT WHEN MATERIALS ARE DELIVERED TO GET CREDIT FOR THE SALVAGED MATERIALS.
- ALL EXISTING CONCRETE DISTURBED OR DAMAGED DURING THE INSTALLATION OR REMOVAL OF STREET LIGHTING SYSTEMS SHALL BE REPLACED IN KIND. THE WORK IS TO BE COORDINATED WITH THE CITY INSPECTOR.
- ALL EXISTING LANDSCAPE, HARDSCAPE OR SPRINKLER SYSTEMS DISTURBED OR DAMAGED DURING THE INSTALLATION OR REMOVAL OF STREET LIGHTING SYSTEMS SHALL BE REPLACED IN KIND. THE WORK IS TO BE COORDINATED WITH THE CITY INSPECTOR.
- THE CONTRACTOR IS TO USE UTMOST CAUTION WHILE WORKING AROUND ALL OVERHEAD AND UNDERGROUND UTILITIES, ESPECIALLY ELECTRIC, GAS, WATER, SEWER AND FIBER OPTIC LINES.

**PRE-CEG**  
12409 W INDIAN SCHOOL RD, AVONDALE, AZ 85392  
PHONE: (623) 536-1993 FAX: 623-748-9008



SHEET OF  
1 3

DR1.0



Luminaire Schedule		Manufacturer	Description	Mtn	LLF	Lumens	Watts	Qty
Label	Symbol							
EX	■	GE LIGHTING SOLUTIONS	EXISTING STREET LIGHT (ESTIMATED)	30°	0.750	28800	200	10
SA	□	Beacon Products	VPL-64L-135-4K7-4	28°	0.920	17386	137.6	14
SC	○	PRESCOLITE	LD4SUD6L40KFL30UFP	15°	1.000	1410	15.3	18

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	N.A.
48th_Planar	Illuminance	Fc	1.38	5.7	0.0	N.A.	N.A.	N.A.
Existing_Street_Planar	Illuminance	Fc	1.18	4.8	0.2	5.90	24.00	N.A.
Site_Planar	Illuminance	Fc	1.52	4.7	0.0	N.A.	N.A.	N.A.

McCALL & associates, inc.

4307 n. civic center plaza  
scottsdale, az 85251  
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fax: (480) 946-5432

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NOTICE OF ALTERNATIVE BUILDING CYCLE  
THIS CONTRACT ALLOWS THE OWNER TO REQUIRE THE SUBMISSION OF BILLINGS OR PAYMENT REQUESTS ON AN ALTERNATIVE BUILDING CYCLE, SUCH AS A MONTHLY CYCLE, WHICH IS APPLICABLE TO THE OWNER'S PROPERTY. THE OWNER MAY REQUEST A MONTHLY CYCLE FOR THE ENTIRE PROJECT, OR FOR PARTS THEREOF. THE OWNER OR ITS DESIGNATED AGENT SHALL PROVIDE THIS NOTICE IN REQUEST.

NOTICE OF EXTENDED PAYMENT PERIOD  
PAYMENT IS DUE WITHIN THIRTY (30) DAYS AFTER APPROVAL OF ESTIMATES.

sheet title:  
**ELECTRICAL SITE PHOTOMETRICS**

project:  
**PIPER PLASTICS  
4818 EAST INDIGO STREET  
MESA, ARIZONA 85205**

date: 05MAR18  
job no.: 17027  
revision:

**PRELIMINARY  
NOT FOR CONSTRUCTION**

Project Contact/Designer: MINDY ADLER  
Project #: 180083  
**HAWKINS DESIGN GROUP INC.**  
ELECTRICAL CONSULTING ENGINEERS  
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MESA, ARIZONA 85210  
PH: 480.813.9000 FAX: 480.813.9001  
E-MAIL: [www.hawkinsdesign.com](http://www.hawkinsdesign.com)

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NORTH

**ELECTRICAL SITE PHOTOMETRICS**  
SCALE : 1"-40'-0"

**PRELIMINARY  
NOT FOR CONSTRUCTION**

Expires: XX/XX/XX

DR2.0





## **PLAN KEY NOTES:**

- ① NEW SIDEWALK PER ARCH DWGS.
  - ② EXISTING SIDEWALK
  - ③ NEW 8' HIGH MASONRY WALL PER ARCH. DWGS.
  - ④ MASONRY SCREEN WALL PER ARCH. DWGS,
  - ⑤ EXISTING MASONRY WALL
  - ⑥ MANUAL ENTRY/EXIT GATE
  - ⑦ BICYCLE RACK PER ARCH. DWGS.
  - ⑧ INSTALL 2" DEEP,  $\frac{1}{2}$ " SCREENED DECOMPOSED GRANITE THRU-OUT PLANTING AREA
  - ⑨ INSTALL 4"-8" DIA. COBBLE
  - ⑩ ABOVE-GRADE ELECTRICAL TRANSFORMER
  - ⑪ UNDERGROUND STORM WATER RETENTION PIPE
  - ⑫ DRAINAGE PIPE
  - ⑬ RETENTION BASIN PER CIVIL DWGS.
  - ⑭ FIRE HYDRANT
  - ⑮ COBBLE PER CIVIL DWGS.
  - ⑯ FIRE DEPT. CONNECTION\*  
\*NOTE: PROVIDE CLEAR ACCESS TO FIRE DEPT. CONNECTION (FDC) FREE OF BUSHES, TREES, FENCES OR OTHER OBJECTS A MINIMUM OF 3 FEET PER IFC 912.3
  - ⑰ SITE LIGHT
  - ⑱ STAMPED COLORED ASPHALT PAVING
  - ⑲ MONUMENT SIGN- UNDER SEPARATE PERMIT
  - ⑳ SIGHT DISTANCE LINE

# **PLANT SCHEDULE: (FOR THIS SHEET ONLY)**

# **SIGHT VISIBILITY LINE NOTE**

EIGHT VISIBILITY LINES WERE PLOTTED BY USING THE EXHIBIT CASE BI- LEFT TURN MANEUVER FROM A COMPLETE STOP (PAGE 43- ENGINEERING AND DESIGN STANDARDS FOR PUBLIC STREETS). THE SPEED LIMITS POSTED FOR 48TH ST. IS 30 MPH AND SPEED LIMITS FOR INGRAM AND INGIDO ST. ARE 25 MPH. THE THROUGH ROAD SECTIONS ARE 2 LANES UNDIVIDED.

# MATCH SHEET L-1

10

A graphic scale bar and a north arrow are positioned on the left side of the map. The scale bar is labeled 'Scale 1:20' and features markings for 10, 0, and 20. The north arrow is a black diamond shape divided diagonally.

**phillip r. ryan**  
landscape architect p.c.  
landscape architecture & planning  
**4916 s. quiet way**  
gilbert, arizona 85298  
(480) 899-5813 fax (480) 963-3674

# McCALL & associates, inc.

4307 n. civic center plaza  
scottsdale, az 85251  
tel:(480) 946-0066  
fax:(480) 946-5432

this drawing is an instrument  
of service, and shall remain  
the property of the architect.  
this drawing shall not be  
reproduced or used for any  
purpose, in whole or in part,  
without the written consent  
of the architect.

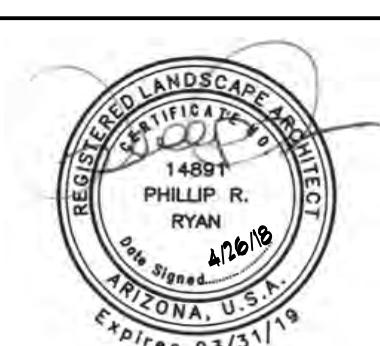
**NOTICE OF ALTERNATIVE BILLING CYCLE**  
THIS CONTRACT Allows THE OWNER TO  
REQUIRE THE SUBMISSION OF BILLINGS OR  
ESTIMATES IN BILLING CYCLES OTHER THAN  
THIRTY DAYS. A WRITTEN DESCRIPTION OF  
SUCH OTHER BILLING CYCLE APPLICABLE TO  
THE PROJECT IS AVAILABLE FROM THE OWNER  
OR THE OWNER'S DESIGNATED AGENT AT  
ADDRESS  
AND THE OWNER OR ITS DESIGNATED AGENT  
SHALL PROVIDE THIS DESCRIPTION ON REQUEST.

**NOTICE OF EXTENDED PAYMENT PROVISION**  
THE CONTRACT Allows THE OWNER TO MAKE  
PAYMENT WITHIN THIRTY (30) DAYS AFTER  
CERTIFICATION AND APPROVAL OF BILLING  
ESTIMATES.

# I ANDSCAPE PI AN

project:  
**PIPER PLASTICS**  
**4818 EAST INDIGO STREET**  
**MESA, ARIZONA 85205**

date: 05MAR18  
job no.: 17027  
revision: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



1-2

## SPECIFICATIONS

### Intended Use:

The Beacon Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS. Luminaires are suitable for wet locations.

### Construction:

- Manufactured with die cast aluminum.
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements.
- External hardware is corrosion resistant.
- One piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and microcellular polyurethane foam gasket ensures a weather-proof seal around each individual optic.

### Electrical:

- Luminaire accepts 100V through 277V, 50 Hz to 60 Hz (UNV), 347V, or 480V input.
- Power factor is  $\geq .90$  at full load.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.
- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices.
- Ambient operating temperature -40°C to 40°C
- Surge protection - 20kA.
- Lifeshield™ Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.).

### Controls/Options:

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.
- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night (see [www.beaconproducts.com/products/energeni](http://www.beaconproducts.com/products/energeni)).
- In addition, Viper can be specified with SiteSync™ wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7. For more details, see ordering information or visit: [www.hubbellighting.com/sitesync](http://www.hubbellighting.com/sitesync)

### Installation:

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included.

### Finish:

- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

### Certifications/Ratings:

- DesignLights Consortium (DLC) qualified, consult DLC website for more details: <http://www.designlights.org/QPL>
- Certified to UL 1598, UL 8750, and CSA C22.2
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at: [http://www.beaconproducts.com/products/viper\\_large](http://www.beaconproducts.com/products/viper_large)

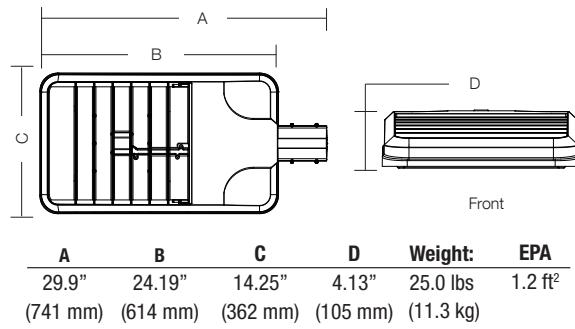
### Warranty:

Five year limited warranty for more information visit: [www.hubbellighting.com/resources/warranty](http://www.hubbellighting.com/resources/warranty)

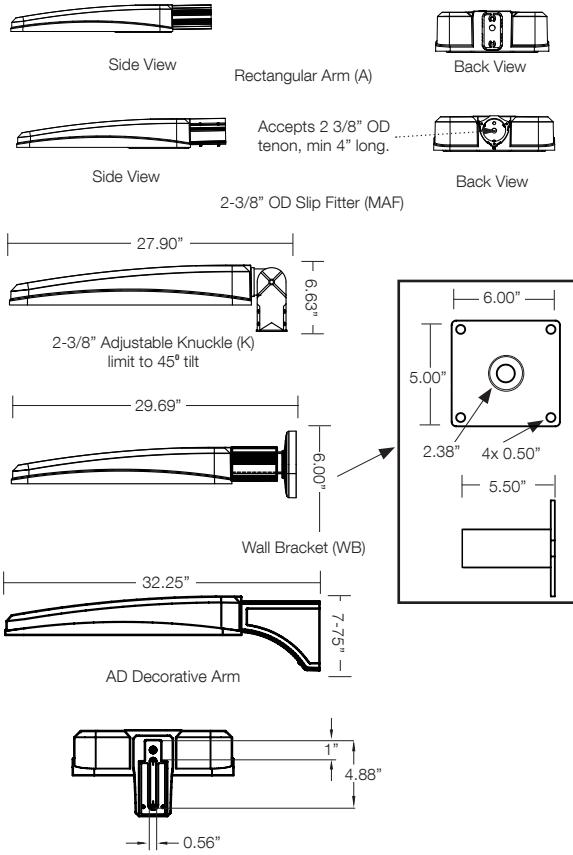
## PRODUCT IMAGE(S)



## DIMENSIONS



## MOUNTING OPTIONS



## CERTIFICATIONS/LISTINGS



\*3000K and warmer CCTs only



Beacon Products • 2041 58th Avenue Circle East Bradenton, FL 34203 • Phone: 800-345-4928

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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## ORDERING INFORMATION ORDERING EXAMPLE: VPL/96L-280/4K7/4W/UNV/A/DBT/7PR-TL/GENI-04/BC

<b>VPL</b>								
SERIES	LED ENGINE	CCT/CRI <sup>1</sup>	ROTATION	VOLTAGE	COLOR	OPTIONS		
VPL Viper	64L-135 135W LED array 80L-180 180W LED array 80L-235 235W LED array 96L-220 220W LED array 96L-280 280W LED array 96L-315 315W LED array 96L-395 395W LED array	3K7 3000K, 70 CRI 4K7 4000K, 70 CRI 5K7 5000K, 70 CRI	Leave blank for no rotation L <sup>5</sup> Optic rotation left R <sup>6</sup> Optic rotation right	UNV 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	DBT Dark Bronze Textured BMT Black Matte Textured PS Platinum Silver Smooth WHT White Textured CC Custom Color (RAL#)	F Fusing BSP Bird Spikes BC Backlight control (limited to Type 4W only)		
	DISTRIBUTION				MOUNTING		CONTROL OPTIONS	
	FR Type 1/Front Row 2 Type 2 3 Type 3 4 Type 4 4W Type 4 Wide 5QM Type 5QM 5QN Type 5QN 5R Type 5R (rectangular) 5W Type 5W (round wide)				A Rectangular Arm (formerly RA) for square or round pole MAF Mast Arm Fitter (formerly SF2) for 2-3/8" OD horizontal arm K Knuckle (formerly PK2) limit to 45° tilt or 2-3/8" OD horizontal arm or vertical tenon WB Wall Bracket AD Universal Arm for square pole AD3 Universal Arm for 2.4"-4.1" round pole AD4 Universal Arm for 4.2"-5.3" round pole AD5 Universal Arm for 5.5"-5.9" round pole AD6 Universal Arm for 6.0"-6.5" round pole		7PR 7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others) 7PR-SC 7-Pin Receptacle w/Shorting Cap 7PR-TL 7-Pin Receptacle w/Twist Lock photo control SCP/_F <sup>1,2,6</sup> Programmable Occupancy Sensor w/daylight control (120-277 volts only) GENI-XX <sup>3</sup> ENERGENI SWP <sup>1,4</sup> SiteSync Pre-Commission SWPM <sup>1,2,4</sup> SiteSync Pre-Commission w/ Sensor	
	HOUSE SIDE SHIELD ACCESSORIES							
	HSS/EVP-L/90-FB/XXX 90° shield front or back HSS/EVP-L/90-LR/XXX 90° shield left or right HSS/EVP-L/270-FB/XXX 270° shield front or back HSS/EVP-L/270-LR/XXX 270° shield left or right HSS/EVP-L/360/XXX Full shield							
	(Replace XXX with notation for desired finish color) (Refer to page 5 for shield images)							
MOUNTING ACCESSORIES								
	VPL-AD-RPA3 2.4"-4.1" Round Pole Adapter for AD arm VPL-AD-RPA4 4.2"-5.3" Round Pole Adapter for AD arm VPL-AD-RPA5 5.5"-5.9" Round Pole Adapter for AD arm VPL-AD-RPA6 6.0"-6.5" Round Pole Adapter for AD arm							

**PRECOMMISSIONED SITESYNC ORDERING INFORMATION:** When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit [www.hubbell-automation.com/products/sitesync/](http://www.hubbell-automation.com/products/sitesync/) or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: VP-L/80L-235/4K7/3/UNV/A/DBT/SWP/  
VP-L/80L-235/4K7/3/UNV/A/DBT/SWPM-40F/

SiteSync only  
SiteSync with Motion Control

<sup>1</sup> Not available with other wireless control or sensor options

<sup>2</sup> Specify mounting height; 8' = 8' or less, 40' = 9' to 40'

<sup>3</sup> Specify routine setting code (example GENI-04). See ENERGENI brochure and instructions for setting table and options. Not available with sensor or SiteSync options.

<sup>4</sup> Specify group and zone at time of order. See [www.hubbellighting.com/sitesync](http://www.hubbellighting.com/sitesync) for further details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node

<sup>5</sup> Only available with 1A, 2, 3, 4, 4W and 5R distributions

<sup>6</sup> Order at least one SCP-REMOTE per project location to program and control

<sup>7</sup> This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at: [http://cdn.beaconproducts.com/content/products/specs/specs\\_files/Viper\\_Large\\_LED\\_turtle\\_spec\\_sheet.pdf](http://cdn.beaconproducts.com/content/products/specs/specs_files/Viper_Large_LED_turtle_spec_sheet.pdf)

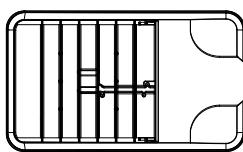
### Accessories and Services (Ordered Separately)

Catalog Number	Description
SWUSB*	SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
SWTAB*	Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node.
SWBRG	SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.
SCP-REMOTE	Remote Control for SCP/_F option. Order at least one per project to program and control

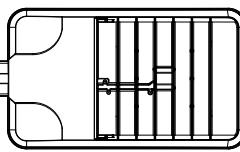
\* When ordering SiteSync at least one of these two interface options must be ordered per project.

+ If needed, an additional Bridge Node can be ordered.

### LEFT ROTATED OPTIC



### RIGHT ROTATED OPTIC



SiteSync Lighting Control is available from our most popular brands in a broad range of award-winning product families.

### Hubbell Control Solutions - Accessories (sold separately)

Catalog Number	Description	HCS System
NXOFM-1R1D-UNV	On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120-480VAC	NX Distributed Intelligence™
WIR-RME-L	On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110-480VAC	wiSCAPE™ Lighting Control

For additional information related to these accessories please visit [www.hubbellcontrolsolutions.com](http://www.hubbellcontrolsolutions.com). Options provided for use with integrated sensor, please view specification sheet ordering information table for details.

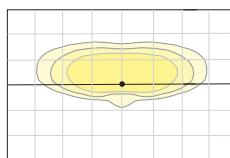
Performance Data				5K (5000K nominal, 70 CRI)				4K (4000K nominal, 70 CRI)				3K (3000K nominal, 70 CRI)						
# LED'S	Drive Current (Milliamps)	System Watts	Distribution Type	Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G	Lumens	LPW <sup>1</sup>	B	U	G
64	625 mA	135W	FR	18220	132	2	0	2	18783	137	2	0	2	16341	119	2	0	2
			2	17228	125	2	0	2	17761	129	2	0	2	15452	112	2	0	2
			3	17257	125	2	0	3	17791	129	2	0	3	15478	112	2	0	3
			4	16864	123	1	0	4	17386	126	1	0	4	15125	110	1	0	3
			4W	16797	122	2	0	3	17317	126	2	0	3	15066	109	2	0	3
			5QM	17259	125	4	0	2	17792	129	4	0	2	15479	112	4	0	2
			5QN	18023	131	4	0	0	18580	135	4	0	0	16165	117	4	0	0
			5R	17410	127	4	0	4	17948	130	4	0	4	15615	113	4	0	4
			5W	16498	120	4	0	2	17009	124	4	0	3	14797	108	4	0	2
			FR	23230	128	2	0	2	23948	132	2	0	2	20835	115	2	0	2
80	700 mA	180W	2	21965	121	3	0	3	22645	125	3	0	3	19701	109	2	0	3
			3	22003	121	2	0	4	22683	125	3	0	4	19734	109	2	0	4
			4	21502	119	2	0	4	22167	122	2	0	4	19285	106	2	0	4
			4W	21416	118	2	0	4	22079	122	2	0	4	19209	106	2	0	4
			5QM	22005	121	4	0	2	22686	125	4	0	2	19736	109	4	0	2
			5QN	22979	127	4	0	1	23689	131	4	0	1	20610	114	4	0	0
			5R	22197	122	4	0	4	22884	126	4	0	4	19909	110	4	0	4
			5W	21035	116	5	0	3	21686	120	5	0	3	18867	104	4	0	3
			FR	27849	121	2	0	2	28711	125	2	0	2	24978	108	2	0	2
			2	26334	114	3	0	3	27148	118	3	0	4	23619	102	3	0	3
80	875 mA	235W	3	26378	114	3	0	4	27194	118	3	0	4	23659	103	3	0	4
			4	25777	112	2	0	4	26575	115	2	0	5	23120	100	2	0	4
			4W	25675	111	3	0	4	26469	115	3	0	4	23028	100	3	0	4
			5QM	26381	114	4	0	2	27196	118	4	0	2	23661	103	4	0	2
			5QN	27548	119	5	0	1	28400	123	5	0	1	24708	107	5	0	1
			5R	26611	115	5	0	5	27434	119	5	0	5	23868	104	4	0	4
			5W	25218	109	5	0	3	25998	113	5	0	3	22618	98	5	0	3
			FR	27876	128	2	0	2	28738	132	2	0	2	25002	115	2	0	2
			2	26359	121	3	0	3	27174	125	3	0	4	23641	109	3	0	3
			3	26403	121	3	0	4	27220	125	3	0	4	23681	109	3	0	4
96	700 mA	220W	4	25802	119	2	0	4	26600	122	2	0	5	23142	106	2	0	4
			4W	25700	118	3	0	4	26494	122	3	0	4	23050	106	3	0	4
			5QM	26406	121	4	0	2	27222	125	4	0	2	23683	109	4	0	2
			5QN	27575	127	5	0	1	28427	131	5	0	1	24732	114	5	0	1
			5R	26637	122	5	0	5	27460	126	5	0	5	23890	110	4	0	4
			5W	25242	116	5	0	3	26023	120	5	0	3	22640	104	5	0	3
			FR	33419	121	3	0	2	34453	125	3	0	2	29974	108	2	0	2
			2	31600	114	3	0	4	32577	118	3	0	4	28342	102	3	0	4
			3	31654	114	3	0	5	32633	118	3	0	5	28390	103	3	0	4
			4	30933	112	2	0	5	31889	115	2	0	5	27744	100	2	0	5
96	875 mA	280W	4W	30810	111	3	0	5	31763	115	3	0	5	27634	100	3	0	4
			5QM	31657	114	5	0	3	32636	118	5	0	3	28393	103	4	0	2
			5QN	33058	119	5	0	1	34080	123	5	0	1	29650	101	5	0	1
			5R	31933	115	5	0	5	32921	119	5	0	5	28641	104	5	0	5
			5W	30262	109	5	0	4	31198	113	5	0	4	27142	98	5	0	3
			FR	35666	113	3	0	2	36769	117	3	0	2	31989	101	2	0	2
			2	33725	107	3	0	4	34768	110	3	0	4	30248	96	3	0	4
			3	33782	107	3	0	5	34827	110	3	0	5	30299	96	3	0	4
			4	33012	105	2	0	5	34033	108	2	0	5	29609	94	2	0	5
			4W	32882	104	3	0	5	33899	107	3	0	5	29492	93	3	0	5
96	1000mA	315W <sup>2</sup>	5QM	33785	107	5	0	3	34830	110	5	0	3	30302	96	5	0	2
			5QN	35280	112	5	0	1	36371	115	5	0	1	31643	100	5	0	1
			5R	34080	108	5	0	5	35134	111	5	0	5	30567	97	5	0	5
			5W	32302	102	5	0	4	33301	106	5	0	4	28972	92	5	0	4
			FR	39569	101	3	0	4	43125	110	3	0	3	37518	96	3	0	2
			2	39569	101	3	0	4	40793	104	3	0	4	35490	91	3	0	4
			3	39619	101	3	0	5	40845	104	3	0	5	35535	91	3	0	5
			4	38723	98	3	0	5	39921	101	3	0	5	34731	88	2	0	5
			4W	38570	98	3	0	5	39763	101	3	0	5	34594	88	3	0	5
			5QM	39623	101	5	0	3	40848	104	5	0	3	35538	90	5	0	3
96	1225mA	395W <sup>2</sup>	5QN	41394	105	5	0	1	42675	109	5	0	1	37127	95	5	0	1
			5R	39969	102	5	0	5	41205	105	5	0	5	35848	91	5	0	5
			5W	37877	97	5	0	4	39048	100	5	0	4	33986	87	5	0	4

<sup>1</sup>Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

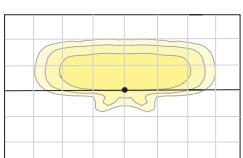
<sup>2</sup>315W and 395W 3000K versions are not DLC QPL listed. Reference highlighted cells in table.

## PHOTOMETRICS

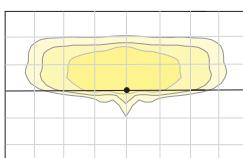
Type FR - Front Row/Auto Optic



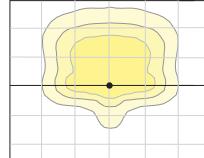
Type 2



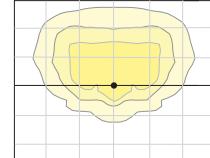
Type 3



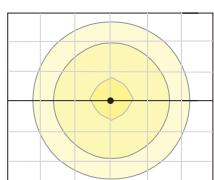
Type 4



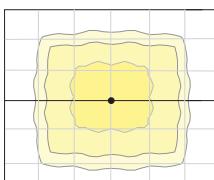
Type 4W



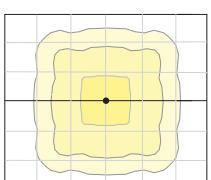
Type 5W



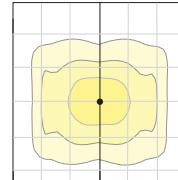
Type 5QN



Type 5QM



Type 5R



## ELECTRICAL DATA

# OF LEDs	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
64	1	625 mA	120	135	1.4
			277		0.6
			347		0.5
			480		0.3
80	2	700 mA	120	180	1.8
			277		0.8
			347		0.6
			480		0.5
80	2	875 mA	120	235	2.4
			277		1.0
			347		0.8
			480		0.6
96	2	700 mA	120	220	2.2
			277		1.0
			347		0.8
			480		0.6
96	2	875 mA	120	280	2.8
			277		1.2
			347		1.0
			480		0.7
96	2	1000 mA	120	315	3.2
			277		1.4
			347		1.1
			480		0.8
96	2	1225 mA	120	395	4.0
			277		1.7
			347		1.4
			480		1.0

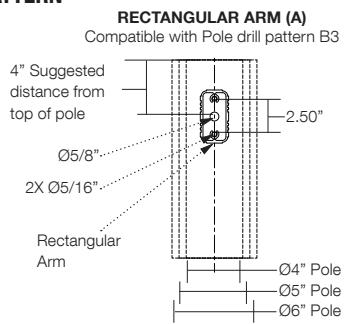
## PROJECTED LUMEN MAINTENANCE

AMBIENT TEMP.	0	25,000	50,000	TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°C	1	0.98	0.97	0.97	0.96	>377,000

<sup>1</sup> Projected per IESNA TM-21-11

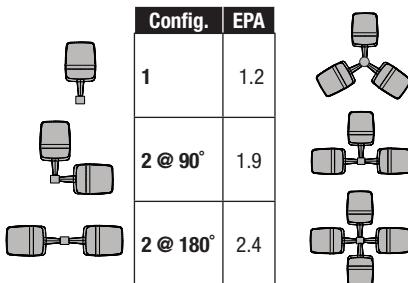
Data references the extrapolated performance projections for the 700mA base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

## DRILL PATTERN



## EPA

Config.	EPA
1	1.2
2 @ 90°	1.9
2 @ 180°	2.4



Config.	EPA
3 @ 120°	3.0
3 @ 90°	3.1
4 @ 90°	3.8

## TENON TOP POLE BRACKET ACCESSORIES (Order Separately)

(2 3/8" OD tenon)

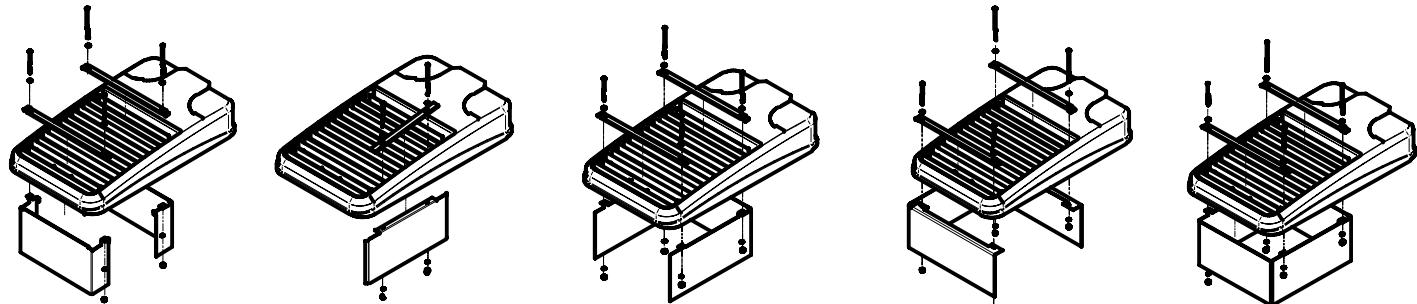
Catalog Number	Description
SETA2-XX <sup>1,2</sup>	Square tenon adapter (4 at 90 degrees)
RETA2-XX <sup>1,3</sup>	Round tenon adapter (4 at 90 degrees)
TETA2-XX <sup>1,2</sup>	Hexagonal tenon adapter (3 at 120 degrees)

1 Replace XX with color choice, eg.: DB for Dark Bronze

2 Only for use with AD mounting option

3 Only for use with AD3 mounting option

## HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES



**HSS/EVP-L/90-FB/XXX**  
90° shield front or back  
(2 shields shown)

**HSS/EVP-L/90-LR/XXX**  
90° shield left or right  
(1 shield shown in left orientation)

**HSS/EVP-L/270-FB/XXX**  
270° shield front or back  
(1 shield shown in back orientation)

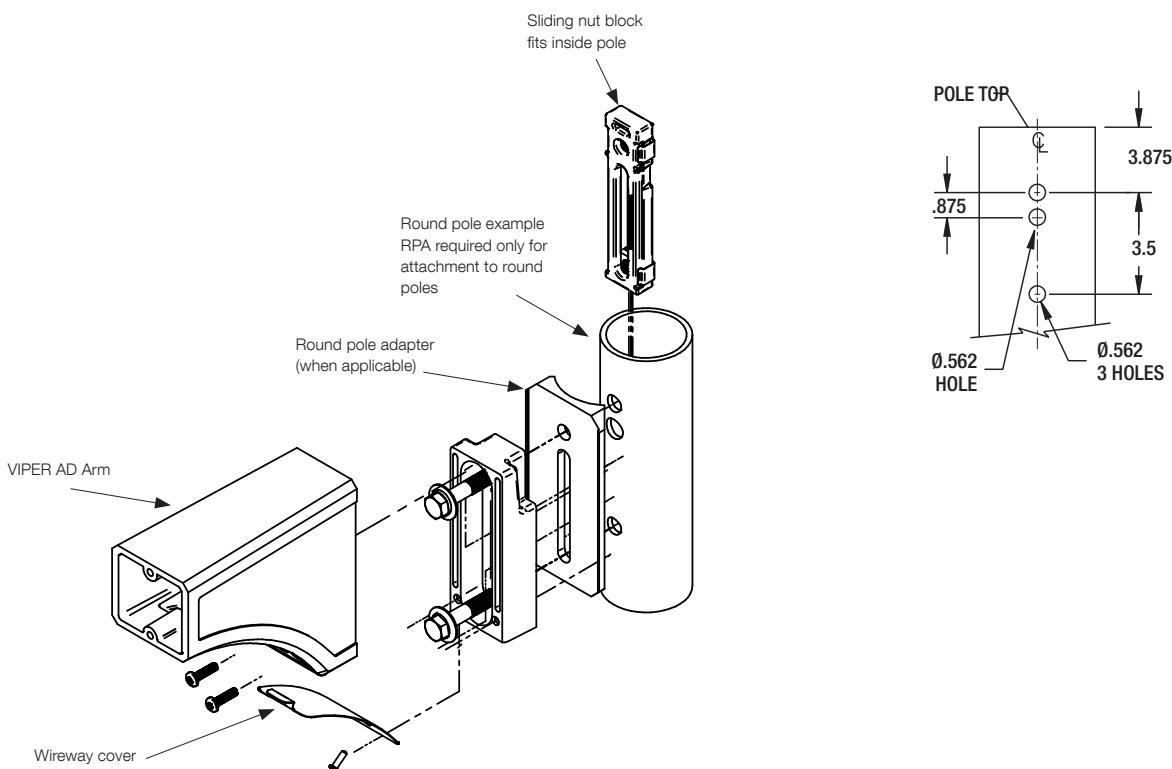
**HSS/EVP-L/270-LR/XXX**  
270° shield left or right  
(1 shield shown in right orientation)

**HSS/EVP-L/360/XXX**  
Full shield  
(1 shield shown)

## AD ARM MOUNTING INSTRUCTIONS

### DECORATIVE ARM (AD)

Compatible with pole drill pattern S2





# 4" Direct/Indirect LED Wall Mount Cylinder

## LD4

Wet Location  
120V or 277V

### APPLICATIONS:

The LD4 is a 4" direct/indirect wall mount LED cylinder to achieve illumination patterns on vertical walls or columns. The LD4 is suitable for a wide variety of commercial, retail and institutional applications including building exterior, column, and corridor illumination. Suitable applications with ambient temperatures up to 30°C (86°F) during operation.

### HOUSING:

.125" thick seamless extruded aluminum cylinder with diecast aluminum, arm, and mounting bracket. Interlocking parts insure proper cylinder alignment. Gasketed die cast lens ring is threaded to screw into cylinder for snug fit. The rings are provided with anti-rotation set screws that lock them in place. Durable powder coated paint finish. Specify: matte black, matte white, bronze, or Prescolite's exclusive Zet, metallic silver. All components are non-corrosive.

### LEDs:

Each array is equipped with (6) 1 watt, 80 CRI LEDs with integral heat sink that will provide 70% average lumen maintenance at 50,000 hours.

### LED DRIVER:

Energy efficient electronic constant current, non-dimming driver with 50,000 hour minimum anticipated life. Meets UL Class 2, FCC 47CFR Class A compliant, inherent short-circuit protection, self limited, over-load protected.

### LABELS:

CSA C/US Suitable for wet location.

### WARRANTY:

5 year warranty. See [www.prescolite.com](http://www.prescolite.com) for details.

DATE: \_\_\_\_\_ TYPE: \_\_\_\_\_

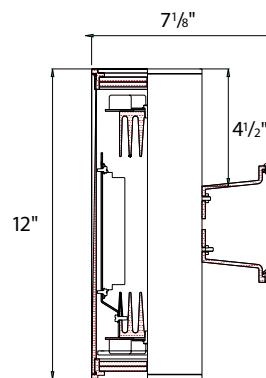
FIRM NAME: \_\_\_\_\_

PROJECT: \_\_\_\_\_

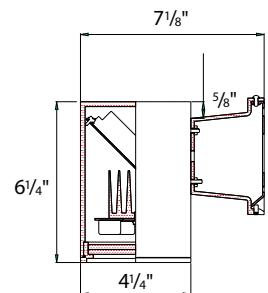
# LiteForms®

For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale

**LD4SUD**



**LD4SD**



CATALOG NUMBER:

EXAMPLE: LD4SUD120V6L40KFL30USPBL

CYLINDER	CYLINDER STYLE	MOUNTING	VOLTAGE	OUTPUT	COLOR TEMP	DOWN DISTRIBUTION	UP DISTRIBUTION	CYLINDER FINISH
<input type="checkbox"/> <b>LD4</b> 4" LED Cylinder	<input type="checkbox"/> <b>S</b> Smooth	<input type="checkbox"/> <b>D<sup>2</sup></b> Down	<input type="checkbox"/> <b>120V</b>	<input type="checkbox"/> <b>3L</b> 300 Delivered Lumens	<input type="checkbox"/> <b>30K</b> <input type="checkbox"/> <b>35K</b> <input type="checkbox"/> <b>40K</b> <input type="checkbox"/> <b>50K</b>	<input type="checkbox"/> <b>SP20</b> Nominal 20° cutoff spot down	<input type="checkbox"/> <b>Blank</b> Downlight Only	<input type="checkbox"/> <b>WH</b> White
		<input type="checkbox"/> <b>UD<sup>1</sup></b> Up/Down	<input type="checkbox"/> <b>277V<sup>3</sup></b>	<input type="checkbox"/> <b>6L</b> 600 Delivered Lumens		<input type="checkbox"/> <b>FL30</b> Nominal 30° cutoff flood down	<input type="checkbox"/> <b>BL</b> Black	
						<input type="checkbox"/> <b>USP</b> Nominal 20° cutoff spot up	<input type="checkbox"/> <b>Z</b> Zet	
						<input type="checkbox"/> <b>UFL</b> Nominal 30° cutoff flood up	<input type="checkbox"/> <b>BZ</b> Bronze	

<sup>1</sup>Up/Down can only have one output 3L or 6L, not both.  
Nominal lumen value is for each direction.

<sup>2</sup>For uplight only, select 'D' and install fixture to wall with light facing up

<sup>3</sup>Only available in 6L and 3L Up/Down

# PHOTOMETRIC DATA

**LiteForms® - LD4 - 4" Direct/Indirect LED Wall Mount Cylinder**

DRIVER DATA	LD4D (Down) 6L	LD4D (Down) 3L	LD4UD (Up/Down) 6L	LD4UD (Up/Down) 3L
Input Voltage	120V to 277V +/- 10%	120V +/- 10%	120V to 277V +/- 10%	120V to 277V +/- 10%
Input Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input Current	0.75A/.035A	0.034	0.125A/0.054A	0.0625A/0.027A
Input Power	9W	4W	15W	7.5W
Constant Current Output	700mA	350mA	700mA	350mA
Power Factor	$\geq 0.90 / > 0.75$			
THD	<20%	<20%	<20%	<20%
EMI Filtering	FCC 47CFR	FCC 47CFR	FCC 47CFR	FCC 47CFR
Operating Temperature	Part 15, Class A			
Dimming	-30°C to 30°C	-30°C to 30°C	-30°C to 30°C	-30°C to 30°C
	No	No	No	No

Over-voltage, over-current, short-circuit protected

Lumen Multiplier For Output/Color Temp Options				
<b>3L30K</b>	<b>0.47</b>		<b>6L30K</b>	<b>0.95</b>
<b>3L35K</b>	<b>0.49</b>		<b>6L35K</b>	<b>0.98</b>
<b>3L40K</b>	<b>0.5</b>		<b>6L40K</b>	<b>1.0</b>
<b>3L50K</b>	<b>0.5</b>		<b>6L50K</b>	<b>1.0</b>

## LD4SUD6L50KFL30USP

LED Light Engine: (2) 6-Ring Array w/  
(6) LEDs with Optical Lens

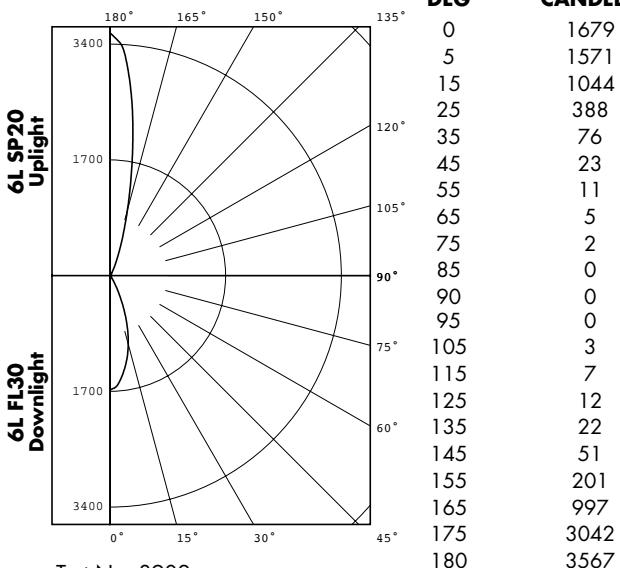
System Wattage: 15.3

Fixture delivered total lumens: 1410

Fixture Efficacy: 92.2

Spacing Criteria: 0.6

## CANDELA DISTRIBUTION



Test No. 8902

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

## ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	608	43.1
0-40	661	46.9
0-60	689	48.9
0-90	698	49.5
90-180	711	50.5
0-180	1410	100.0

## LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	SQ. METER				
	45°	55°	65°	75°	85°
45°	6075				
55°		3582			
65°			2210		
75°				1443	
85°				0	

## COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance				
	80%	70%	50%	30%	10%
	20% Effective Floor Cavity Reflectance				
% Wall Reflectance					
1	100	97	94	91	85
2	94	88	84	80	78
3	88	81	76	71	67
4	83	75	69	64	61
5	78	69	63	58	56
6	74	64	58	54	52
7	70	60	54	50	48
8	66	58	50	46	42
9	63	53	47	43	40
10	60	50	45	41	37

LD4SUD6L50KFL30USP

Test No. 8902



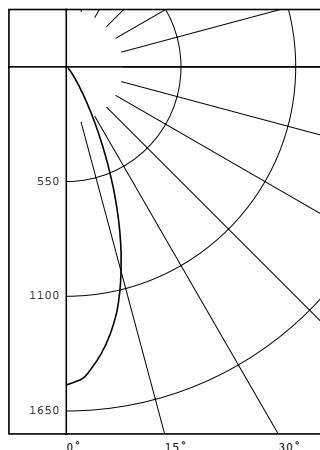
**HUBBELL**  
Lighting, Inc.

# PHOTOMETRIC DATA

## LiteForms® - LD4 - 4" Direct/Indirect LED Wall Mount Cylinder

### LD4SD6L50KFL30BL

LED Light Engine: (1) 6- Ring Array w/  
(6) LEDs w/ Optical Lens  
System Wattage: 8.4  
Fixture delivered lumens: 697  
Fixture Efficacy: 83  
Spacing Criteria: 0.6



### CANDELA DISTRIBUTION

DEG	CANDELA LUMENS
0	1525
5	1444
15	1014
25	398
35	89
45	26
55	11
65	6
75	3
85	0
90	0

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	595	85.3
0-40	656	94.1
0-60	687	98.6
0-90	697	100.0
90-180	0	0.0
0-180	697	100.0

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average - 0°
45°	5158
55°	2690
65°	1992
75°	1626
85°	0

### COEFFICIENTS OF UTILIZATION

Room Cavity Ratio	% Effective Floor Cavity Reflectance					Zonal Cavity Method				
	80%		70%		50%		30%		10%	
	20% Effective Floor Cavity Reflectance					% Wall Reflectance				
1	114	112	109	107	105	105	104	102	100	99
2	109	105	101	98	107	103	100	97	95	93
3	105	99	94	91	103	97	93	90	95	92
4	100	94	89	85	98	92	88	84	80	78
5	96	89	84	80	95	88	83	80	82	79
6	92	85	79	76	91	84	79	75	81	77
7	89	81	75	72	87	80	75	72	78	74
8	85	77	72	68	84	77	72	68	75	71
9	82	74	69	65	81	73	68	65	72	68
10	79	71	66	62	78	70	66	62	70	65

LD4SD6L50KFL30BL

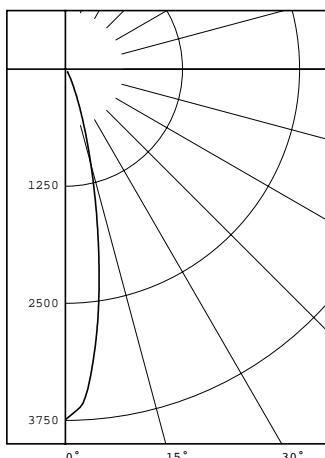
Test No. 8898

Test No. 8898

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

### LD4SD6L50KSP20BL

LED Light Engine: (1) 6- Ring Array w/  
(6) LEDs w/ Optical Lens  
System Wattage: 8.3  
Fixture delivered lumens: 736  
Fixture Efficacy: 88.7  
Spacing Criteria: 0.4



### CANDELA DISTRIBUTION

DEG	CANDELA LUMENS
0	3742
5	3221
15	1049
25	201
35	48
45	20
55	10
65	6
75	3
85	0
90	0

### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	669	90.9
0-40	702	95.3
0-60	727	98.7
0-90	736	100.0
90-180	0	0.0
0-180	736	100.0

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average - 0°
45°	4555
55°	2808
65°	2286
75°	1867
85°	0

### COEFFICIENTS OF UTILIZATION

Room Cavity Ratio	% Effective Floor Cavity Reflectance					Zonal Cavity Method				
	80%		70%		50%		30%		10%	
	20% Effective Floor Cavity Reflectance					% Wall Reflectance				
1	115	113	110	109	112	110	109	107	106	105
2	111	107	104	101	109	105	102	100	98	99
3	107	102	98	95	105	101	97	94	98	95
4	103	99	94	90	102	97	93	90	95	91
5	100	94	90	87	99	93	89	86	92	88
6	97	91	86	83	96	90	86	83	89	86
7	94	88	83	80	93	87	83	80	86	82
8	92	85	81	78	91	84	80	78	84	81
9	89	82	78	75	88	82	78	75	81	79
10	87	80	76	73	86	80	76	73	78	75

LD4SD6L50KSP20BL

Test No. 8899

Test No. 8899

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

**NOTES:** Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

1. Operation in ambient temperatures higher than those specified may shorten life and will void warranty.

Web: [www.prescolite.com](http://www.prescolite.com) • Tech Support: (888) 777-4832

701 Millennium Blvd., Greenville, SC 29607 U.S.A. • Phone (864) 678-1000

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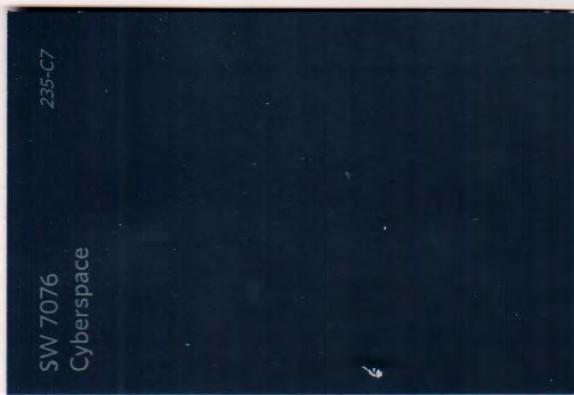
Specifications subject to change without notice. • Printed in U.S.A. • LFO-LED-001 • 1/22/15



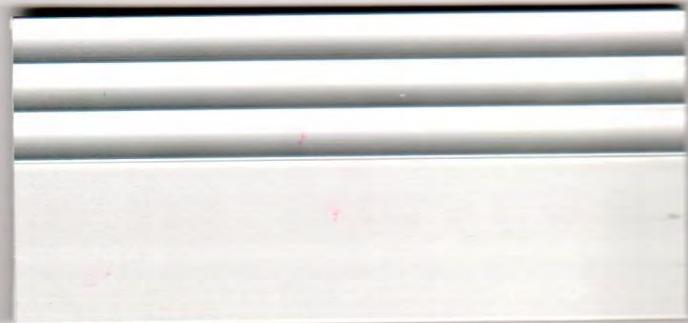
**HUBBELL**  
Lighting, Inc.

# MATERIAL BOARD

PIPER PLASTICS  
4818 EAST INDIGO STREET  
MESA, ARIZONA 85205



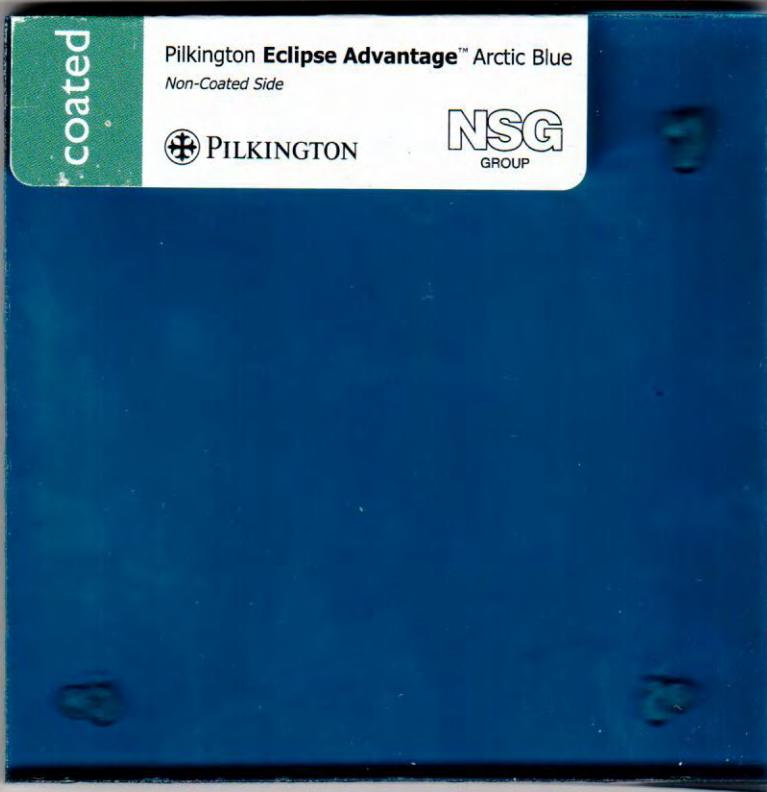
COLOR #1  
SHERWIN WILLIAMS - CYBERSPACE - SW 7076



ALUMINUM WINDOW FRAMES  
CLEAR ANODIZED FINISH



COLOR #2  
SHERWIN WILLIAMS - BLUSTERY SKY - SW 9140



ECLIPSE ADVANTAGE ARCTIC BLUE  
VISION SPANDREL GLAZING



COLOR #3  
SHERWIN WILLIAMS - SNOWBOUND - SW 7004