

C:\Users\unrussell\opdata\local\temp\AcPublish...21900\Pecos Gateway Site Electrical.dwg

DEMOLITION NOTES:

- A. THE EXISTING CONDITIONS SHOWN WERE TAKEN FROM AVAILABLE RECORD INFORMATION. FIELD VERIFY ALL CONDITIONS THAT MAY AFFECT CONSTRUCTION. IF ANY DISCREPANCIES ARE DISCOVERED, NOTIFY THE ENGINEER IN WRITING AND REQUEST DIRECTION PRIOR TO COMMENCING WORK.
- B. EXISTING LIGHT FIXTURES SHALL BE CAREFULLY REMOVED (DO NOT DAMAGE) AND RETURNED TO THE OWNER.
- C. ANY AND ALL EQUIPMENT HAVING ELECTRICAL CONNECTIONS THAT REQUIRE DISCONNECTING AND/OR RE-CONNECTING AS A RESULT OF CONSTRUCTION SHALL BE INCLUDED AS A PART OF THIS CONTRACT.
- D. THE EXISTING ELECTRICAL DEVICES, CONDUIT, AND/OR EQUIPMENT THAT FOR ANY REASON OBSTRUCTS CONSTRUCTION SHALL BE RELOCATED UNLESS OTHERWISE NOTED. LOCATION IS TO BE AS CLOSE AS POSSIBLE TO THE ORIGINAL LOCATION.
- E. ALL CIRCUITS, CONDUIT AND WIRE THAT ARE NOT TO REMAIN IN SERVICE SHALL BE REMOVED BACK TO THE FIRST ACCESSIBLE JUNCTION BOX WHERE IT SHALL BE TIED OFF AND LABELED AS SPARE WITH CIRCUIT NUMBER INDICATED.
- F. REMOVE ALL ABANDONED WIRE AND CABLING.

GENERAL NOTES:

1. SYMBOLS LEGENDS ARE PROVIDED FOR REFERENCE PURPOSES ONLY. THE SYMBOLS REPRESENT THE TYPE OF DEVICES THAT MAY BE REQUIRED IN THE WORK; QUANTITIES AND LOCATIONS ARE AS SHOWN ON THE PLAN SHEETS.
2. PROVIDE 3/4" CONDUIT & #12 CONDUCTORS UNLESS NOTED OTHERWISE. PROVIDE ONE NEUTRAL CONDUCTOR FOR EACH UNGROUNDED CONDUCTOR OF SINGLE PHASE LINE-NEUTRAL BRANCH CIRCUITS. DO NOT SHARE NEUTRAL CONDUCTORS.
3. EACH FEEDER AND BRANCH CIRCUIT CONDUIT SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NFPA 70, ARTICLE 250.
4. ALL ELECTRICAL EQUIPMENT IN PORTIONS OF THE BUILDING NOT BEING REMODELED SHALL BE LEFT IN WORKING CONDITION. RESTORE ANY CIRCUITS INTERRUPTED.
5. ALL NEW LIGHT FIXTURES AND FIXTURES IN AREAS ADJACENT DEMOLITION & CONSTRUCTION AREAS ARE TO BE THOROUGHLY CLEANED IMMEDIATELY PRIOR TO NOTICE OF SUBSTANTIAL COMPLETION.
6. THE FOLLOWING IS PART OF THIS PROJECT AND ALL COSTS PERTAINING THERETO SHALL BE INCLUDED IN THE BASE BID:
- A. NEW ELECTRICAL EQUIPMENT AND APPARATUS SHALL BE COORDINATED AND CONNECTED INTO THE EXISTING SYSTEM AS REQUIRED.
- B. POWER WIRING AND CABLE INSTALLATIONS SHALL BE CONCEALED ABOVE ACCESSIBLE CEILINGS AND IN WALLS. EXPOSED WIRING SHALL BE INSTALLED IN APPROVED SURFACE METAL RACEWAY WHERE INDICATED.
- C. WHERE EXISTING CONDUITS ARE INDICATED FOR REUSE, FIELD VERIFY INTEGRITY OF REUSED RACEWAYS PRIOR TO INSTALLATION OF CONDUCTORS. PROVIDE NEW RACEWAYS WHERE EXISTING ARE UNUSABLE.
- D. LOCATIONS OF ALL WALL MOUNTED DEVICES SUCH AS SWITCHES, RECEPTACLE, AND OUTLETS ARE SHOWN DIAGRAMMATICALLY. VISIT THE SITE TO CONFIRM EXACT DEVICE LOCATIONS AND COORDINATE INSTALLATIONS WITH FIXED CASEWORK, DOORS AND RELITES.
- E. PROVIDE PENETRATIONS THROUGH WALLS, FLOORS, AND CEILINGS AS REQUIRED. PROVIDE SUITABLE FIRE RATED MATERIALS AND SEAL ALL CEILING, FLOOR, AND WALL PENETRATIONS TO MATCH FIRE RATING OF SURFACES PENETRATED.

LIGHTING AND RECEPTACLE NOTES:

1. LIGHTING SYSTEMS SHALL BE PROVIDED WITH CONTROLS AS ZONED ON THE LIGHTING PLANS. SWITCHING AND DIMMING ZONES ARE INDICATED ADJACENT TO EACH FIXTURE.
2. MANUAL CONTROLS SHALL ALLOW OCCUPANTS TO UNIFORMLY REDUCE ILLUMINATION LEVELS AT LEAST 50% EXCEPTION: CORRIDORS, RESTROOMS, LOBBIES, MECHANICAL, ELECTRICAL, AND INFORMATION TECHNOLOGY (IDF) ROOMS CONTROLLED BY OCCUPANCY SENSORS.
3. EACH AREA THAT IS REQUIRED TO HAVE A MANUAL CONTROL SHALL ALSO HAVE AUTOMATIC TIME SWITCH CONTROL. PROVIDE TIMED OVERRIDE SWITCHES THAT WILL SERVE A MAXIMUM AREA OF 2500 S.F. IN LOCATIONS SHOWN ON PLANS.
- EXCEPTIONS:
A. EMERGENCY EGRESS LIGHTING CONTROLLED BY OCCUPANCY SENSORS.
B. LIGHTING IN SPACES CONTROLLED BY OCCUPANCY SENSORS.
4. LUMINARIES PROVIDING MEANS OF EGRESS ILLUMINATION AND HAVING BOTH NORMAL AND EMERGENCY POWER SOURCES SHALL BE CONTROLLED BY A COMBINATION OF U.L. 924 LISTED EMERGENCY RELAYS AND OCCUPANCY SENSORS THAT ENABLES THE LIGHTING TO BE SHUT OFF WHEN THE AREAS SERVED ARE UNOCCUPIED AND AUTOMATICALLY ILLUMINATES IN THE EVENT OF NORMAL POWER SOURCE FAILURE.
5. THE MAXIMUM LIGHTING POWER THAT MAY BE CONTROLLED FROM A SINGLE SWITCH OR AUTOMATIC CONTROL SHALL NOT EXCEED THAT WHICH IS PROVIDED BY A 20 AMPERE CIRCUIT LOADED TO NOT MORE THAN 80 PERCENT.
6. PROVIDE FUNCTIONAL TESTING OF AUTOMATIC LIGHTING CONTROLS. SUBMIT WRITTEN PROCEDURES FOR FUNCTIONAL TESTING OF ALL AUTOMATIC CONTROLS WITH DESCRIPTION OF THE EXPECTED SYSTEM RESPONSE.

ABBREVIATIONS

@	AT	MAG	MAGNETIC
A/C	AIR CONDITIONING(ER)	MAN	MANUAL
A (AMP)	AMPERE	MAT	MATERIAL
AC	ABOVE COUNTER, ALTERNATING CURRENT	MAX	MAXIMUM
ADJ	ADJUSTABLE	MCA	MINIMUM CIRCUIT AMPACITY
ADJ	ADJACENT	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AHJ	AUTHORITY HAVING JURISDICTION	MEZZ	MEZZANINE
AIC	AMPERE INTERRUPTING CAPACITY	MG	MOTOR GENERATOR
ALT	ALTERNATE	MH	METAL HALIDE / MANHOLE
ANN	ANNUNCIATOR	MIN	MINIMUM
ARCH	ARCHITECT; ARCHITECTURAL	MISC	MISCELLANEOUS
ATS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUG ONLY
AUTO	AUTOMATIC	MOCP	MAXIMUM OVERCURRENT PROTECTION
AUX	AUXILIARY	MS	MAGNETIC STARTER
AWG	AMERICAN WIRE GAUGE	MTD	MOUNTED
		MTG	MOUNTING
		MTR	MOTOR
BKBD	BACKBOARD		
BKR	BREAKER	N	NORTH; NEUTRAL
BLDG	BUILDING	N/A	NOT APPLICABLE
		NC	NORMALLY CLOSED
C	CONDUIT	NEC	NATIONAL ELECTRICAL CODE
CAP	CAPACITY	NEMA	NATIONAL ELECTRIC MANUFACTURERS ASSOCIATION
CB	CIRCUIT BREAKER		NATIONAL ELECTRICAL SAFETY CODE
CKT	CIRCUIT		NEUTRAL
CLG	CEILING	NESC	NATIONAL FIRE PROTECTION AGENCY
CLR	CLEAR	NEUT	NOT IN CONTRACT
COL	COLUMN	NFFA	NORMALLY OPEN
COMM	COMMUNICATION	NIC	NO
CPS	CYCLES PER SECOND	NO	NOT TO SCALE
CT	CURRENT TRANSFORMER	NTS	
CTL	CONTROL		
CU	COPPER	OC	ON CENTER
		OFCl	OWNER FURNISHED CONTRACTOR INSTALLED
DC	DIRECT CURRENT	OFCl	OWNER FURNISHED OWNER INSTALLED
DISC SW	DISCONNECT SWITCH	OL	OVERLOAD
DISC	DISCONNECT	OS	OPTIONAL STANDBY
DN	DOWN		
DWG	DRAWING	P	PRIMARY
		PA	PUBLIC ADDRESS
E	EXIST, EAST	PAR	PARALLEL
EDH	ELECTRIC DUCT HEATER	PB	PULL BOX
EF	EXHAUST FAN	PE	PHOTO ELECTRIC
EGC	EQUIPMENT GROUNDING CONDUCTOR	PF	POWER FACTOR
EL	ELEVATION	PH	PHASE
ELEC	ELECTRIC(AL)	PV	POST INDICATOR VALVE
ELEV	ELEVATOR	PNL	PANEL
EM	EMERGENCY	POC	POINT OF CONNECTION
EMT	ELECTRICAL METALLIC TUBING	PWR	POWER
ENCL	ENCLOSURE		
ENTR	ENTRANCE	QTY	QUANTITY
EP	EXPLOSION PROOF		
EPO	EMERGENCY POWER OFF	R (R)	RELOCATE (D)
EQUI/EPQ	EQUIPMENT	RAD	RADIUS
EWC	ELECTRIC WATER COOLER	RECPT	RECEPTACLE
EWB	ELECTRIC WATER HEATER	REF	REFRIGERATOR
EXH	EXHAUST	RLA	RATED LOAD AMPS
EXT	EXTERIOR	RPM	REVOLUTIONS PER MINUTE
EXIST	EXISTING		
		S	SOUTH
F	FAHRENHEIT/FUSE	SC	SECURITY
FA	FIRE ALARM	SCCR	SHORT CIRCUIT CURRENT RATING
FAA	FIRE ALARM ANNUNCIATOR	SD	SMOKE DETECTOR
FACP	FIRE ALARM CONTROL PANEL	SECT	SECTION
FC	FOOTCANDLE	SF	SUPPLY FAN
FCU	FAN COIL UNIT	SHT	SHEET
FD	FIRE DAMPER	SPD	SURGE PROTECTIVE DEVICE
FDR	FEEDER	SPEC	SPECIFICATION
FIXT	FIXTURE	SPL	SPECIAL
FLA	FULL LOAD AMPS	SQ	SQUARE
FSD	FIRE/SMOKE DAMPER	STOR	STORAGE
		SW	SWITCH
GEN	GENERATOR	SWBD	SWITCHBOARD
GFI	GROUND FAULT CIRCUIT INTERRUPTER	SYM	SYMMETRICAL
GFR	GROUND FAULT RELAY	SYS	SYSTEM
		T	THERMOSTAT
H	HEIGHT	TB	TERMINAL BOX
HID	HIGH INTENSITY DISCHARGE	TC	TIME CLOCK
HOA	HAND OFF AUTOMATIC	TEL	TELEPHONE
HOR	HORIZONTAL	TV	TELEVISION
HP	HORSEPOWER	TYP	TYPICAL
HR	HOUR		
HT	HEIGHT	UFC	UNIFORM FIRE CODE
HW	HOT WATER	UG	UNDERGROUND
HZ	HERTZ	UH	UNIT HEATER
		UL	UNDERWRITERS LABORATORIES
IBC	INTERNATIONAL BUILDING CODE	UON	UNLESS OTHERWISE NOTED
IC	INTERCOM	UV	UNIT VENTILATOR
IES	ILLUMINATING		
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS	V	VOLT
		VAV	VARIABLE AIR VOLUME
IG	ISOLATED GROUND	VEL	VELOCITY
IMC	INTERMEDIATE METAL CONDUIT	VM	VOLTMETER
IN	INCH	VOL	VOLUME
JB	JUNCTION BOX	W	WATT, WEST
		W/	WITH
KCMIL	THOUSAND CIRCULAR MILLS	W/O	WITHOUT
KVA	KILOVOLT AMPERES	WH	WATER HEATER
KVAR	KILOVOLT AMPERES REACTIVE	WHM	WATT HOUR METER
KW	KILOWATT	WP	WEATHERPROOF
KWH	KILOWATT HOUR		
		X	REACTANCE
LBS	POUNDS	XFMR	TRANSFORMER
LF	LINEAR FEET (FEET)	XMTR	TRANSMITTER
LRA	LOOKED ROTOR AMPS		
LS	LIFE SAFETY		
LT	LIGHT	Z	IMPEDANCE
LTG	LIGHTING		
LV	LOW VOLTAGE	&	AND
		IE.:	THAT IS

WARE MALCOMB
Leading Design for Commercial Real Estate

architecture
planning
interiors
graphics
civil engineering
2777 E. Camelback Rd, Suite 325
Phoenix, AZ 85016
P 602.967.1601
F 602.967.2288



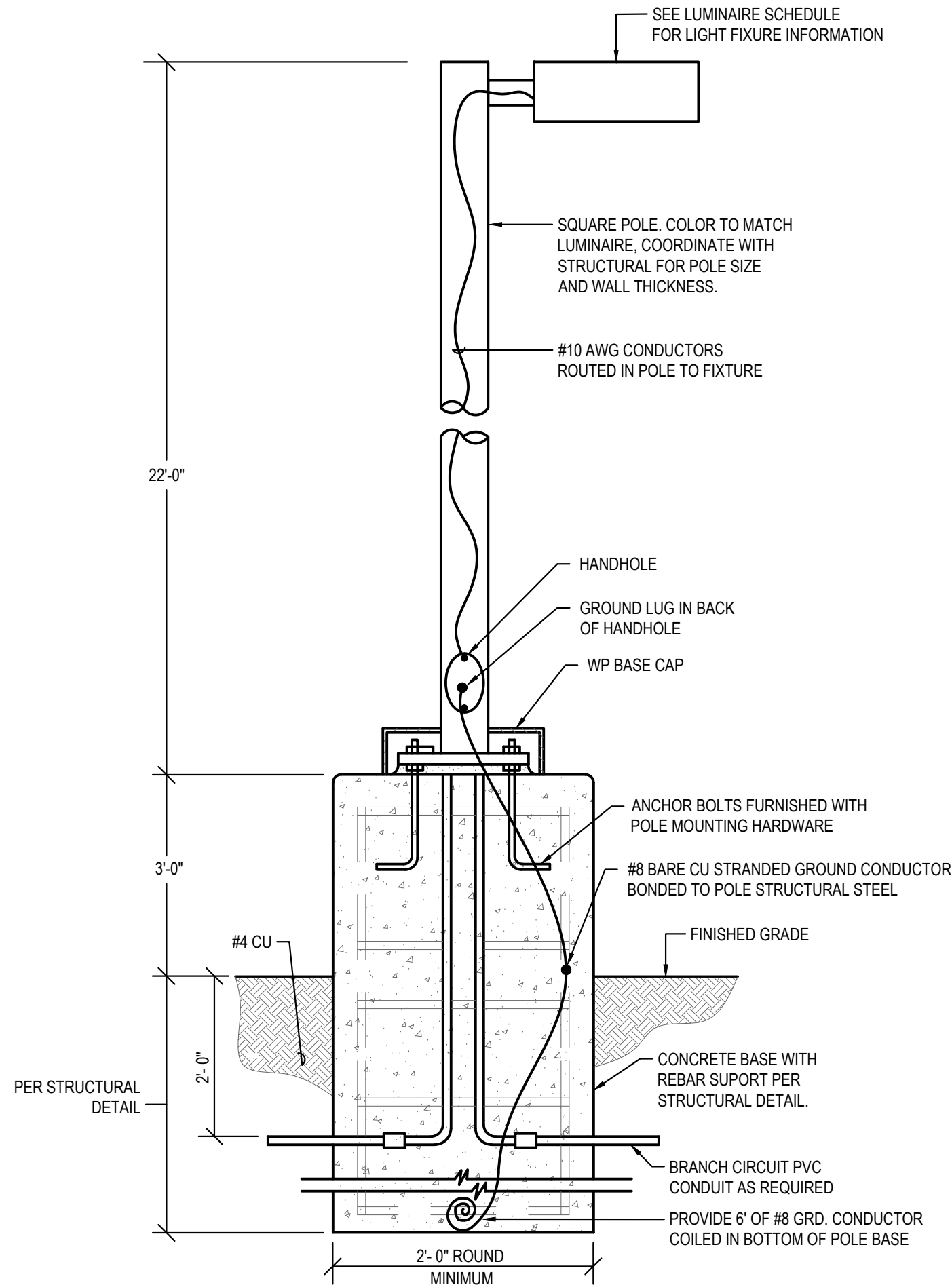
PECOS GATEWAY INDUSTRIAL
NEC E. PECOS RD. & S. 80TH ST.
MESA, ARIZONA

GENERAL INFORMATION			
DATE	REMARKS	DATE	REMARKS
05/05/2022	PREAPPLICATION SUBMITTAL		
7/13/2022	CITY COMMENTS		

PA / PM:	B. HENRY
DRAWN BY:	
JOB NO.:	PHX21-0149-00

SHEET
E0.0

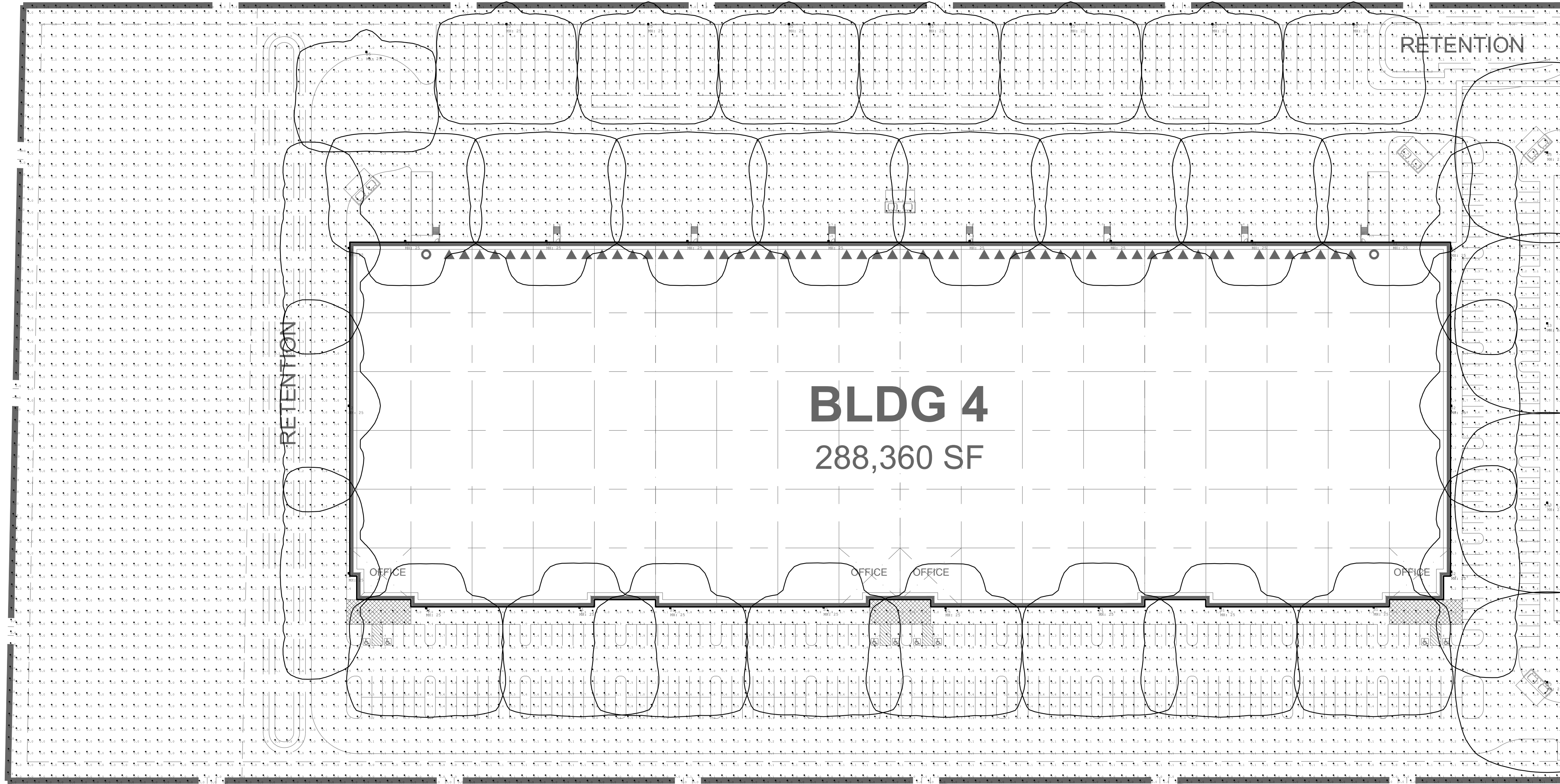
C:\Users\crussell\appdata\local\temp\AcPublish_21900\Pecos Gateway Site Electrical.dwg



NOTE: THE POLE MANUFACTURER SHALL PROVIDE AN ENGINEERED POLE BASE DESIGN FOR 100 MPH WIND LOADING WITH A 1.3 GUST FACTOR. THE POLE BASE DESIGN SHALL BE FROM A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF ARIZONA. THE STRUCTURAL ENGINEER SHALL VERIFY THE WIND LOADING AND GUST FACTOR CRITERIA ABOVE ARE ADEQUATE FOR THE AREA OF INSTALLATION.

LIGHT POLE BASE DETAIL

SCALE: NTS



Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	[MANUFAC]
□	31	S1	Single	GALN-SA3C-740-U-T4FT-BZ-WM	0.900	20941	160	MCGRW EDISON
□	27	S2	Single	GALN-SA3C-740-U-SL3-BZ-WM	0.900	20802	160	MCGRW EDISON
□	8	S3	Single	GALN-SA3C-740-U-5WQ-BZ/ SSS. 2.5' WITH 2.5' BASE	0.900	21966	160	MCGRW EDISON
□	4	S4	Single	GALN-SA3C-740-U-SL3-BZ/ SSS. 2.5' WITH 2.5' BASE	0.900	20802	160	MCGRW EDISON
□	8	S5	Single	GALN-SA3C-740-U-T4FT-HSS-BZ/ SSS. 2.5' WITH 2.5' BASE	0.900	15113	160	MCGRW EDISON

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROPERTY LINE @ 3' AFG	Illuminance	Fc	0.06	0.3	0.0	N.A.	N.A.
SITE	Illuminance	Fc	1.14	9.6	0.0	N.A.	N.A.

PHOTOMETRIC PLAN

DATE	REMARKS
1 05/06/2022	PREAPPLICATION SUBMITTAL
2 7/13/2022	QTY COMMENTS

PA / PM:

B. HENRY

DRAWN BY:

JOB NO.:

PHX21-0149-00

△

SHEET

E1.0

Wkst. 13 Jul 2022



PECOS GATEWAY INDUSTRIAL
NEC E. PECOS RD. & S. 80TH ST.
MESA, ARIZONA

architecture
planning
interiors
graphics
civil engineering
2777 E. Camelback Rd, Suite 325
Phoenix, AZ 85016
p 480.767.1001
f 480.907.2288

WARE MALCOMB
Leading Design for Commercial Real Estate
wm|reen

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK.

CONTINUATION ON SHEET E1.1

The site plan illustrates the layout of the proposed detention facility. It features three main buildings, each with an associated office area:

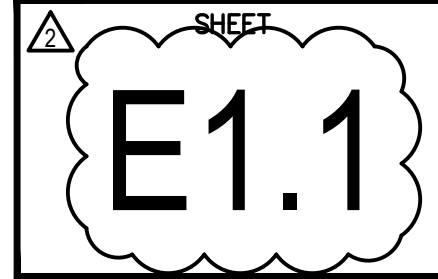
- BLDG 3**: 123,312 SF, located on the left side of the plan.
- BLDG 2**: 107,712 SF, located in the center of the plan.
- BLDG 1**: 92,112 SF, located on the right side of the plan.

Each building has an "OFFICE" area indicated by a small rectangle and an arrow. The buildings are surrounded by a "RETENTION" area, which is a large, irregularly shaped area defined by a dashed line. The plan also shows various other features, including parking areas, roads, and utility lines.

EPecos RD

[illegible]

PA / PM:	B. HENRY
DRAWN BY:	
JOB NO.:	PHX21-0149-00



**PECOS GATEWAY
INDUSTRIAL**
NEC E. PECOS RD. & S. 80TH ST.
MESA, ARIZONA



architecture
planning
interiors
graphics
civil engineering

2777 E. Camelback Rd, Suite 325
Phoenix, AZ 85016
p 480.767.1001
f 480.907.2288

WARE MALCOMB
Leading Design for Commercial Real Estate

