

PACKAGED AIR HANDLING UNIT SCHEDULE (DX COOLING & GAS HEAT)																																										
UNIT NO	SERVES	TOTAL CFM	% OA	OA CFM	SA FAN SYSTEM DATA										COOLING COIL DATA (DIRECT EXPANSION)										HOT GAS REHEAT COIL			GAS HEATING DATA						EA FAN SYSTEM DATA								
					SYSTEM MAX CFM	NO OF FANS	FAN MAX CFM	INT SP	EXT SP	DIRTY FILTER ALLOWANCE (SP)	TOTAL SP	HP	FAN RPM	BHP	TYPE OF WHEELS	FAN DIAMETER (IN)	E.A.T. °F DB	L.A.T. °F WB	TOT MBH	SENS MBH	COIL VEL FPM	COIL SP	REFRIGERANT	HEATING CAPACITY MBH	EAT °F	LAT °F	INPUT CAPACITY MBH	OUTPUT CAPACITY MBH	EAT °F	LAT °F	GAS PRESSURE (PSI) MIN	GAS PRESSURE (PSI) MAX	MODULATION	NO OF FANS	FAN MAX CFM	EXT SP	HP	FAN RPM	BHP	TYPE OF WHEELS	FAN DIAMETER (IN)	
AHU-1	AQUAPONICS	3,000	20	600	3000	1	3000	0.5	1.0	0.5	1.5	4.3	1428	1.08	SWSI AF	18	77.8	64.7	50.3	120	85.6	194	0.12	R32	64.0	50.3	70.0	200	162	59.0	108.8	0.18	0.5	MODULATING 5:1	1	3000	0.5	4.4	2128	0.65	SWSI AF	14

AHU-1 SHALL BE FURNISHED WITH THE FOLLOWING COMPONENTS:
 MIXING BOX / ECONOMIZER SECTION WITH RETURN, OUTSIDE AIR, AND EXHAUST DAMPERS
 POWERED EXHAUST FAN
 RETURN AIR DUCT CONNECTION ON BACK OF UNIT
 FILTER SECTION (MERV 8 & MERV 14)
 DIRECT EXPANSION COIL SECTION AND DRAIN PAN
 HOT GAS REHEAT COIL SECTION
 GAS HEAT SECTION
 SUPPLY FAN SECTION
 DISCHARGE PLENUM WITH FRONT DUCT CONNECTION
 UV LIGHTING
 NEEDLE POINT IONIZATION
 CONDENSING SECTION
 REFRIGERANT LEAK DETECTION

PACKAGED AIR HANDLING UNIT SCHEDULE (DX COOLING & GAS HEAT) (CONTINUED)																			
UNIT NO.	SERVES	COMPRESSOR DATA			CONDENSER DATA			FILTER DATA				POWER DATA (SINGLE POINT)				UNIT DATA			
		TYPE	QUANTITY	# OF REFRIGERANT CIRCUITS	# OF FANS	RATED EFF %	MAX SP DROP	INITIAL	FINAL	TYPE	FACE VEL FPM	MCA	MOP	ELEC CHAR	EER	IEER	APPROX WEIGHT LBS	UNIT DIMENSIONS (INCHES)	REMARKS
AHU-1	AQUAPONICS	INVERTER SCROLL	1	1	2	MERV 8 MERV 14	0.22	0.5	2" 4"	167	75.5	110	3-60-208	11.9	20.1	2295	102" L X 73" W X 86" H	SEE NOTES	

NOTES:

- THE MANUFACTURER BASIS OF DESIGN IS DAIKIN. ANY DEVIATION FROM WHAT IS SCHEDULED, EVEN THOUGH THE MANUFACTURER IS LISTED IN THE SPECIFICATION AS AN EQUIVALENT MANUFACTURER, SHALL BE THIS CONTRACTOR'S RESPONSIBILITY FOR COORDINATION, ADDITIONAL WORK FOR THIS OR OTHER TRADES AT NO COST TO THE PROJECT.
- COOLING CAPACITY BASED ON 95° DB/ 72° F W.B. AMBIENT AIR
- UNIT SHALL BE SET ON BIG FOOT SUPPORT SYSTEM ON A 6" HIGH CONCRETE PAD.
- PROVIDE ACCESS DOORS FOR ALL UNIT SECTIONS. REFER TO ROOF PLANS FOR ACCESS DOOR LOCATIONS AND QA INTAKE LOCATIONS
- UNIT MANUFACTURER IS TO FURNISH UV LIGHTING AND NEEDLE POINT IONIZATION. ALL OTHER CONTROLS AND CONTROL ACCESSORIES SHALL BE PROVIDED AND INSTALLED BY THE ATC CONTRACTOR. UNIT MANUFACTURER SHALL COORDINATE WITH THE ATC CONTRACTOR BEFORE ORDERING UNIT ENSURE ALL CONTROL COMPONENTS ARE COMPATIBLE.
- UNITS POWER CONNECTIONS ARE AS FOLLOWS:
 1-PHASE CONNECTION TO GFI RECEPTACLE / UV LIGHTING / BI-POLAR IONIZATION
- HEATING CAPACITY BASED ON -5° AMBIENT AIR
- UNITS TO BE PROVIDED WITH GFI RECEPTACLE BY UNIT MANUFACTURER
- PROVIDE FAN BLANK OFF PANEL FOR FAN ISOLATION IN THE EVENT OF FAN FAILURE. THE FAN BLANK OFF PANEL SHALL BE LOCATED INSIDE THE UNITS.
- THE H.C. SHALL PROVIDE CONDENSATE TRAP AS DETAILED AND EXTEND CONDENSATE DRAIN LINE TO ROOF DRAIN.
- PROVIDE A MINIMUM OF 36" OF CLEARANCE ON ALL SIDES OF UNIT.
- DUCT CONNECTIONS SHALL BE MADE TO UNIT WITH FLEXIBLE CONNECTIONS.
- UNITS SHALL BE INTERLOCKED WITH DUCT MOUNTED SMOKE DETECTORS AND SMOKE DAMPERS IN THE SUPPLY AIR AND RETURN AIR DUCTS. UPON DETECTION OF SMOKE THE UNITS SHALL SHUT DOWN AND THE FIRE ALARM SYSTEM SHALL BE ALARMED.
- UNIT CONTROL PANELS SHALL BE PROVIDED BY THE UNIT MANUFACTURER AND MOUNTED ON UNIT IN NEMA 3R ENCLOSURES.
- PROVIDE INTERNAL OVER CURRENT PROTECTION ON ALL UNIT COMPONENTS. PROVIDE UNIT DISCONNECT SWITCH MOUNTED ON UNIT.
- THE UNIT MANUFACTURER TO PROVIDE OR APPROVE ALL UNIT PENETRATIONS. THE UNIT MANUFACTURER IS RESPONSIBLE FOR EDUCATING ALL CONTRACTORS ON THE REQUIREMENTS OF THE FACTORY. AIR LEAKAGE FROM THE UNIT OR CONDENSATION BUILD UP ON THE UNIT SHALL NOT BE ACCEPTABLE. THE UNIT MANUFACTURER SHALL BE FULLY RESPONSIBLE FOR THE INTEGRITY OF THE UNIT.
- UNITS SHALL BE PROVIDED WITH ULTRA VIOLET LIGHTING DOWNSTREAM OF THE COOLING COIL. THE UV LIGHTING SHALL BE FURNISHED BY THE EQUIPMENT MANUFACTURER AS PART OF THE UNIT PACKAGE. THE COMPONENTS OF THE UV LIGHTING SHALL BE WIRED BY THE H.C. TO A JUNCTION BOX WITHIN THE UNIT. THE E.C. SHALL PROVIDE AN ELECTRICAL SERVICE OF 20 AMPS @ 140-120V TO THE JUNCTION BOX. UV LIGHTING SHALL SHUT OFF ANYTIME ACCESS DOORS ARE OPENED. PROVIDE WARNING SIGN ON OUTSIDE OF UNIT TO ALERT MAINTENANCE THAT UV LIGHTING IS PRESENT INSIDE UNIT. DISCONNECTS FOR THE UV LIGHTING SYSTEM BY MANUFACTURER. NOTE THAT THE NEEDLE POINT IONIZATION AND UV LIGHTING SHALL BE POWERED OFF OF THE SAME 20 AMP CIRCUIT. PROVIDE DISCONNECT SWITCHES FOR BOTH SYSTEMS.
- UNITS SHALL BE PROVIDED WITH NEEDLE POINT IONIZATION UPSTREAM OF THE COOLING COIL. THE NEEDLE POINT IONIZATION SHALL BE FURNISHED BY THE EQUIPMENT MANUFACTURER AS PART OF THE UNIT PACKAGE. THE COMPONENTS OF THE NEEDLE POINT IONIZATION SHALL BE WIRED TO A JUNCTION BOX WITHIN THE UNIT BY THE H.C. THE E.C. SHALL PROVIDE AN ELECTRICAL SERVICE OF 20 AMPS @ 140-120V TO THE JUNCTION BOX. DISCONNECTS FOR THE NEEDLE POINT IONIZATION SYSTEM BY MANUFACTURER. NOTE THAT THE NEEDLE POINT IONIZATION AND UV LIGHTING SHALL BE POWERED OFF OF THE SAME 20 AMP CIRCUIT. PROVIDE DISCONNECT SWITCHES FOR BOTH SYSTEMS.
- UNIT SHALL BE PROVIDED WITH REFRIGERANT LEAK DETECTION SYSTEM.
- UNIT SHALL BE PROVIDED WITH FACTORY CONTROLS.

NOTES

PACKAGED DEHUMIDIFICATION AIR HANDLING UNIT SCHEDULE (GAS & DX COOLING)																																					
SYMBOL	SERVES	SUPPLY FAN DATA						EXHAUST FAN DATA				COMPRESSOR DATA				EVAPORATOR COIL DATA				REHEAT COIL DATA		POOL HEATING COILS DATA				HEATING DATA (GAS FURNACE)				ELECTRICAL DATA				WEIGHT	REMARKS		
		TOTAL CFM	MIN % OA	OA CFM	ESP	QNTY	HP	FLA	DRIVE	TOTAL CFM	EXT SP	HP	FLA	DRIVE	TYPE	RLA	LRA	REFRIGERANT	SENS MBH	TOTAL MBH	LATENT LBSH	CIRCUITS	TOTAL HEAT REJECTION MBH	MBH	GPM	PD	PIPE CONNECTION SIZE	INPUT MBH	OUTPUT MBH	GAS PRESSURE MAX (IN W.C.)	CONTROL	MCA	MOP			FLA	ELEC CHAR
DAH-1	AQUAPONICS	3,000	20	600	1.0	1	3.6	6.5	DIRECT	660	0.0	1.5	5.5	DIRECT	SCROLL	27.7	178.5	R454B	60.6	86.3	23.8	1	107.9	63	12	10.0	1 1/4"	200	162	14 / 7	MODULATED	50	70	43	3-60-208	1700	SEE NOTES

NOTES:

- THE MANUFACTURER BASIS OF DESIGN IS DETRON BY DETRON. ANY DEVIATION FROM WHAT IS SCHEDULED, EVEN THOUGH THE MANUFACTURER IS LISTED IN THE SPECIFICATION AS AN APPROVED EQUIVALENT MANUFACTURER, HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL ADDITIONAL COST INCURRED TO COMPLETE FINAL INSTALLATION OF THE UNIT. THIS INCLUDES BUT IS NOT LIMITED TO: SUBMITTALS, RE-DESIGN, INSTALLATION, CONNECTIONS AND FINAL START UP.
- CAPACITIES BASED ON 80°F AQUAPONICS WATER TEMPERATURE, 75°F SPACE AIR TEMPERATURE AND 50% RELATIVE HUMIDITY.
- THE UNIT SHALL BE MOUNTED ON BIG FOOT SUPPORT SYSTEM ON 6" HIGH CONCRETE PAD OUTSIDE.
- UNIT SHALL BE CONSTANT VOLUME W/ HEAT RECOVERY CIRCUIT.
- HEATING CAPACITY BASED ON -5° AMBIENT OUTSIDE AIR.
- UNIT SHALL BE A SINGLE POINT POWER CONNECTION. UNIT SHALL BE 3-60-208V.
- UNIT SHALL BE PROVIDED WITH HOT GAS REHEAT COIL, POOL HEATING COIL, GAS FURNACE, EVAPORATOR DX COIL, AND ALL OTHER ASSOCIATED ACCESSORIES.
- UNIT SHALL BE PROVIDED WITH A FULL MANUFACTURER'S CONTROL SYSTEM WITH BACNET INTERFACE.
- UNIT SHALL BE PROVIDED WITH REFRIGERANT LEAK DETECTION SYSTEM.

UNIT TO BE PROVIDED UNDER ALTERNATE BID H-1 WORK ONLY

BLOWER COIL UNIT SCHEDULE (DX COOLING & HW HEATING) (CAV)																																						
UNIT NO	SERVES	TOTAL CFM	% OA	OA CFM	SUPPLY FAN DATA										DX COOLING COIL										HEATING DATA (HOT WATER)						FILTER DATA		OVERALL UNIT DATA		REMARKS			
					SYSTEM CFM	NO OF FANS	INT SP	EXT SP	TOTAL SP	HP EACH	DRIVE	FAN RPM	BHP EACH	ELECT CHAR	MCA	MOP	EAT °F DB	LAT °F WB	TOT MBH	SENS MBH	COIL VEL FPM	COIL SP	REFRIGERANT	EAT °F DB	LAT °F WB	TOT MBH	EWT	GPM	RUNOUT PIPESIZE	LWT	PD FT	RATED EFF %	TYPE	APPROX WEIGHT LBS		UNIT DIMENSIONS (INCHES)	MAXIMUM UNIT DIMENSIONS (INCHES)	
BCU-1	CLRM 102	850	20	170	850	1	1.0	0.5	1.5	1	DIRECT	1325	0.37	1-60-120	14.3	25	78.9	65.6	55.0	54.1	29.7	22.3	350	0.23	R32	51	99.5	45.2	180	3.1	3/4"	150	2.81	PLEATED 2"	MERV 8	357	46" L X 37" W X 18" H	SEE NOTES
BCU-1	105 & 104	850	20	170	850	1	1.0	0.5	1.5	1	DIRECT	1325	0.37	1-60-120	14.3	25	78.9	65.6	55.0	54.1	29.7	22.3	350	0.23	R32	51	99.5	45.2	180	3.1	3/4"	150	2.81	PLEATED 2"	MERV 8	357	46" L X 37" W X 18" H	SEE NOTES

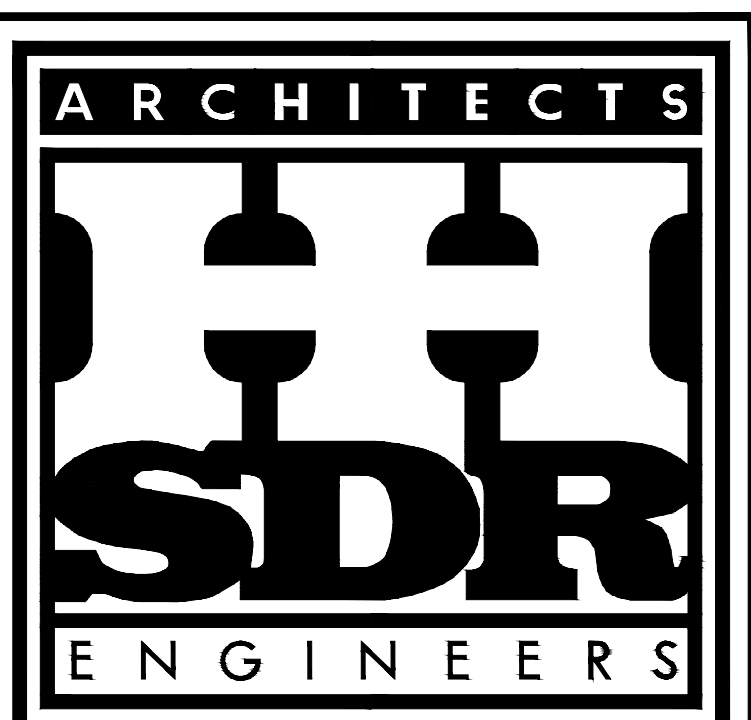
NOTES:

- PROVIDE ACCESS PANELS FOR ALL UNIT SECTIONS. REFER TO PLANS FOR ACCESS DOOR LOCATIONS.
- UNITS POWER CONNECTIONS ARE AS FOLLOWS:
 1-PHASE CONNECTION TO SA FAN
 1-PHASE CONNECTION TO UNIT CONTROL PANEL
 1-PHASE CONNECTION TO UV LIGHTING / NEEDLEPOINT IONIZATION
- ALL CONTROLS AND CONTROL ACCESSORIES SHALL BE PROVIDED AND INSTALLED BY THE UNIT MANUFACTURER.
- THE SPACE IN WHICH THE BC IS TO BE INSTALLED IS VERY LIMITED, THEREFORE UNIT SHALL BE NO LARGER THAN SHOWN ON DRAWINGS. H.C TO FIELD VERIFY INSTALLATION TO ENSURE ADEQUATE SPACE FOR UNIT INSTALLATION.
- THE MANUFACTURER BASIS OF DESIGN IS DAIKIN. ANY DEVIATION FROM WHAT IS SCHEDULED, EVEN THOUGH THE MANUFACTURER IS LISTED IN THE SPECIFICATION AS AN EQUIVALENT MANUFACTURER, SHALL BE THIS CONTRACTOR'S RESPONSIBILITY FOR COORDINATION AND ADDITIONAL WORK FOR THIS OR OTHER TRADES AT NO COST TO THE PROJECT.
- ALL DUCT CONNECTIONS TO UNIT SHALL BE MADE WITH FLEXIBLE CONNECTIONS.
- UNITS SHALL BE MOUNTED ABOVE CEILING AND SUSPENDED FROM STRUCTURE. HVAC CONTRACTOR SHALL PROVIDE ALL RELATED MOUNTING ACCESSORIES AS REQUIRED TO SUSPEND UNIT FROM STRUCTURE.
- UNITS SHALL BE PROVIDED WITH ULTRA VIOLET LIGHTING DOWNSTREAM OF THE COOLING COIL. THE UV LIGHTING SHALL BE FURNISHED BY THE EQUIPMENT MANUFACTURER AS PART OF THE UNIT PACKAGE.
- THE H.C. SHALL PROVIDE CONDENSATE TRAP AS DETAILED.
- UNIT DIMENSIONS SHALL NOT EXCEED WHAT IS SCHEDULED.
- UNIT SHALL BE PROVIDED WITH REFRIGERANT LEAK DETECTION SYSTEM.
- UNITS SHALL BE PROVIDED WITH FACTORY CONTROLS.

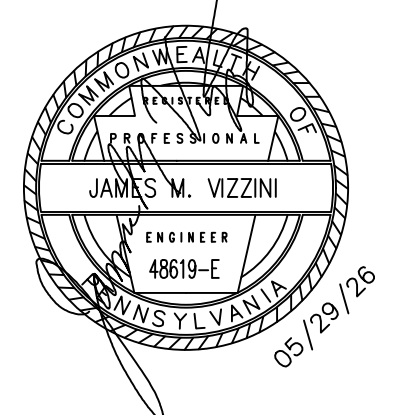
REMOTE MOUNTED CONDENSING UNIT SCHEDULE																	
UNIT NO.	SERVES	CAPACITY TONS	COMPRESSORS	FANS	STEPS OF CONTROL	# OF CIRCUITS	# OF REFRIG PIPES	SEER	REFRIGERANT	SUCTION TEMP	MCA	MOP	ELEC CHAR	APPROX WT. LB.	UNIT DIMENSIONS L X W X H (INCHES)	AMBIENT TEMP °F	REMARKS
RCU-1	BCU-1	2.5	1	1	SINGLE STAGE COOLING W/ INVERTER SCROLL COMPRESSOR	1	2	14.5	R32	45	17	25	1-60-208V	174	29" L X 29" W X 32.5" H	95	SEE NOTES
RCU-2	BCU-2	2.5	1	1	SINGLE STAGE COOLING W/ INVERTER SCROLL COMPRESSOR	1	2	14.5	R32	45	17	25	1-60-208V	174	29" L X 29" W X 32.5" H	95	SEE NOTES

NOTES:

- THE MANUFACTURER BASIS OF DESIGN IS DAIKIN. ANY DEVIATION FROM WHAT IS SCHEDULED, EVEN THOUGH THE MANUFACTURER IS LISTED IN THE SPECIFICATION AS AN EQUIVALENT MANUFACTURER, SHALL BE THIS CONTRACTOR'S RESPONSIBILITY FOR COORDINATION, ADDITIONAL WORK FOR THIS OR OTHER TRADES AT NO COST TO THE PROJECT.
- UNIT SHALL BE PROVIDED WITH A SINGLE POINT POWER CONNECTION
- UNIT SHALL BE PROVIDED WITH CONTROL AND OPERATION DOWN TO AMBIENT TEMPERATURES OF 40 DEGREES F.
- UNIT SHALL BE SET ON 4" HIGH CONCRETE PAD.
- UNIT SHALL BE PROVIDED WITH REFRIGERANT LEAK DETECTION SYSTEM.
- UNITS SHALL BE PROVIDED WITH FACTORY CONTROLS.



40 SHENANGO AVE., SHARON, PA 16146 • (724) 981-8820
 130 SEVENTH ST., PITTSBURGH, PA 15222 • (412) 281-2280



MERCER COUNTY AGRICULTURAL AND CONSERVATION COMMUNITY LEARNING CENTER AT MUNNELL RUN FARM 41 MUNNELL RUN LANE MERCER, PA 16137

FOR THE
 MERCER COUNTY COMMISSIONERS
 125 SOUTH DIAMOND STREET
 MERCER, PA 16137

SCHEDULES - HVAC

REVISIONS	
△	6/25/26 ADDENDUM #5

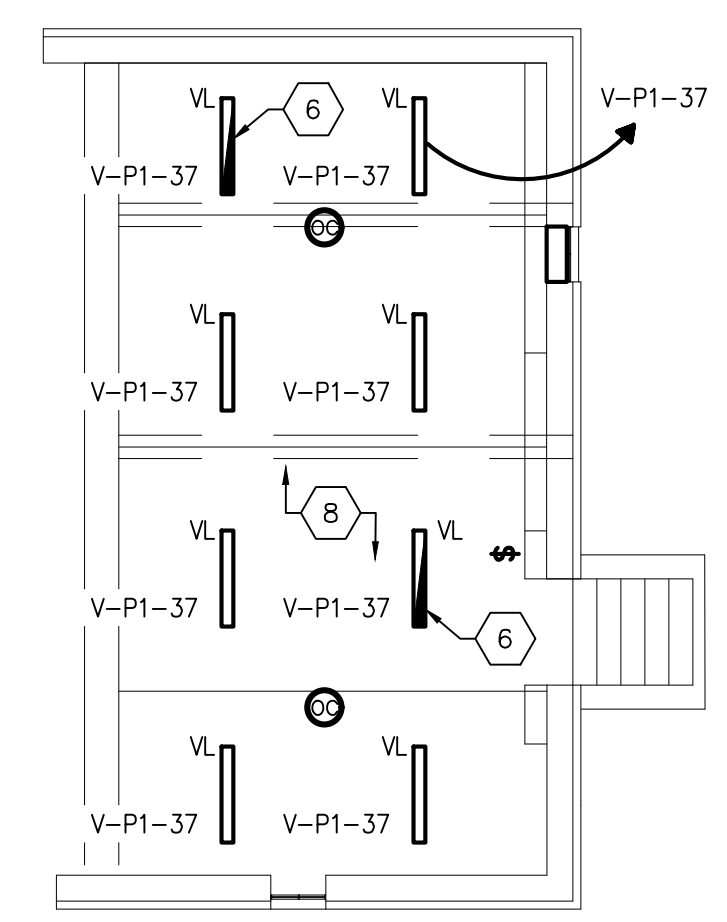
NOTES

GENERAL NOTES

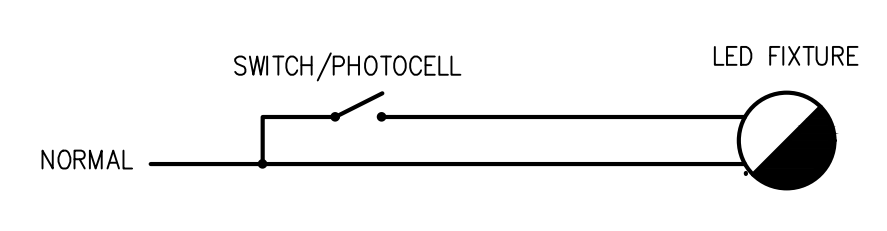
- CONDUIT ROUTING SHALL RUN PARALLEL OR PERPENDICULAR TO BUILDING WALLS.
- CONTRACTOR SHALL PROVIDE ALL FIXTURES, LIGHTING CONTROL DEVICES, WIRING/CONDUIT, CLIPS, BRACKETS, HANGERS, SUPPORTS, BOXES, ETC. REQUIRED TO PROVIDE A COMPLETE INSTALLATION.
- FOR LIGHTING FIXTURE SCHEDULE, REFER TO DRAWING E-602.
- WIRE EMERGENCY/EGRESS LIGHTING & EXIT SIGNS TO AC CIRCUIT AHEAD OF ANY SWITCHING UNLESS INDICATED OTHERWISE. PROVIDE ALL EMERGENCY/EGRESS LIGHTING FIXTURES AND EXIT SIGNS WITH A BACK UP BATTERY PACK.
- PROVIDE ALL DAYLIGHT ZONE LIGHTING FIXTURES WITH DIMMING CAPABILITY.

NEW WORK KEY NOTES

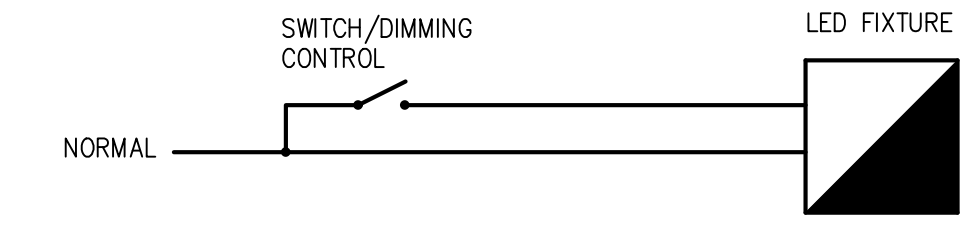
- EXTERIOR BUILDING WALL PACK LIGHTING FIXTURE. LIGHTING FIXTURE SHALL BE CONTROLLED VIA PHOTOCELL AND LIGHTING CONTROL PANEL. FIXTURE MOUNTING HEIGHT SHALL BE 1' ABOVE TOP OF WINDOWS. COORDINATE EXACT LOCATION WITH FACILITIES MANAGEMENT.
- PHOTOCELL SHALL BE COMMERCIAL GRADE IN A WEATHERPROOF ENCLOSURE MOUNTED ABOVE ROOF LEVEL FACING NORTH ON NORTH SIDE OF BUILDING. EXACT LOCATION TO BE DETERMINED BY THE CONTRACTOR. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- EXTERIOR BUILDING WALL PACK LIGHTING FIXTURE. LIGHTING FIXTURE SHALL BE CONTROLLED VIA PHOTOCELL AND LIGHTING CONTROL PANEL. FIXTURE SHALL BE MOUNTED 2' ABOVE DOOR FRAME. COORDINATE EXACT LOCATION WITH FACILITIES MANAGEMENT.
- PROVIDE INDICATED LIGHTING FIXTURE WITH BACKUP BATTERY PACK AND DIMMABLE DRIVER. WIRE FIXTURE UNSWITCHED FOR BATTERY BACKUP CHARGING AND SAME CIRCUIT SWITCHED VIA PHOTOCELL FOR 30% DIMMING OF DUSK TO DAWN LIGHTING. SEE TYPICAL EXTERIOR EGRESS LIGHTING DETAIL THIS DRAWING.
- PROVIDE INDICATED EMERGENCY EGRESS LIGHTING FIXTURE WITH BACKUP BATTERY PACK. WIRE FIXTURE UNSWITCHED FOR BATTERY BACKUP CHARGING AND SAME CIRCUIT SWITCHED VIA DIMMING CONTROL. COORDINATE ALL WIRING REQUIREMENTS WITH FACILITIES LIGHTING CONTROLS REPRESENTATIVE AND VENDOR DRAWINGS. SEE EMERGENCY/EGRESS WITH DIMMING DETAIL THIS DRAWING.
- PROVIDE INDICATED EMERGENCY EGRESS LIGHTING FIXTURE WITH BACKUP BATTERY PACK. WIRE FIXTURE UNSWITCHED TO CIRCUIT SHOWN.
- PROVIDE LEVITON EZ MAX II 8-CIRCUIT RELAY PANEL SYSTEM OR EQUAL LOW-VOLTAGE LIGHTING-CONTROLLER. COORDINATE EXACT LOCATIONS, QUANTITIES, ZONES AND WIRING REQUIREMENTS OF ALL LIGHTING CONTROLS, OCCUPANCY SENSING, DAYLIGHT SENSING, ETC. WITH LIGHTING CONTROL REPRESENTATIVE AND VENDOR DRAWINGS.
- PROVIDE ALL ELECTRICAL ROUTING IN RGS CONDUIT AND ALL BACKBOXES AS HOT DIPPED GALVANIZED STEEL WITH METAL WEATHERPROOF COVERPLATES.



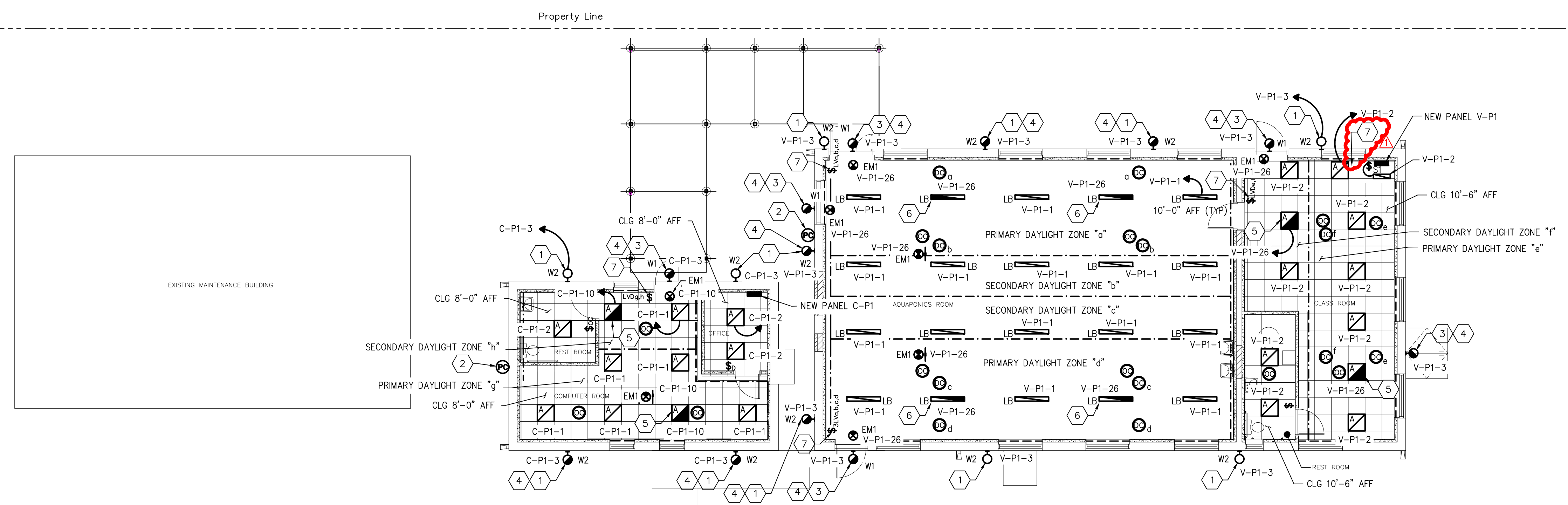
ELECTRICAL BASEMENT PLAN – NEW WORK LIGHTING
SCALE: 1/8" = 1'-0"



TYPICAL EXTERIOR EGRESS LIGHTING DETAIL
SCALE: NTS



EMERGENCY/EGRESS WITH DIMMING DETAIL
SCALE: NTS



ELECTRICAL SITE AND BUILDINGS PLAN – NEW WORK LIGHTING
SCALE: 1/8" = 1'-0"

ARCHITECTS
SDR
ENGINEERS

40 SHENANGO AVE., SHARON, PA 16146 • (724) 981-8820
130 SEVENTH ST., PITTSBURGH, PA 15222 • (412) 281-2280

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER W. LINDSAY
048153-E
PENNSYLVANIA
JUNE 25, 2026

MERCER COUNTY AGRICULTURAL AND CONSERVATION COMMUNITY LEARNING CENTER AT MUNNELL RUN FARM
41 MUNNELL RUN LANE
MERCER, PA 16137

FOR THE
MERCER COUNTY COMMISSIONERS
125 SOUTH DIAMOND STREET
MERCER, PA 16137

ELECTRICAL LIGHTING PLAN

COMM. NO. 4826	SHEET NO. E-101
DATE 5/29/26	©Copyright 2026

REVISIONS	
△	6/25/26 ADDENDUM #5

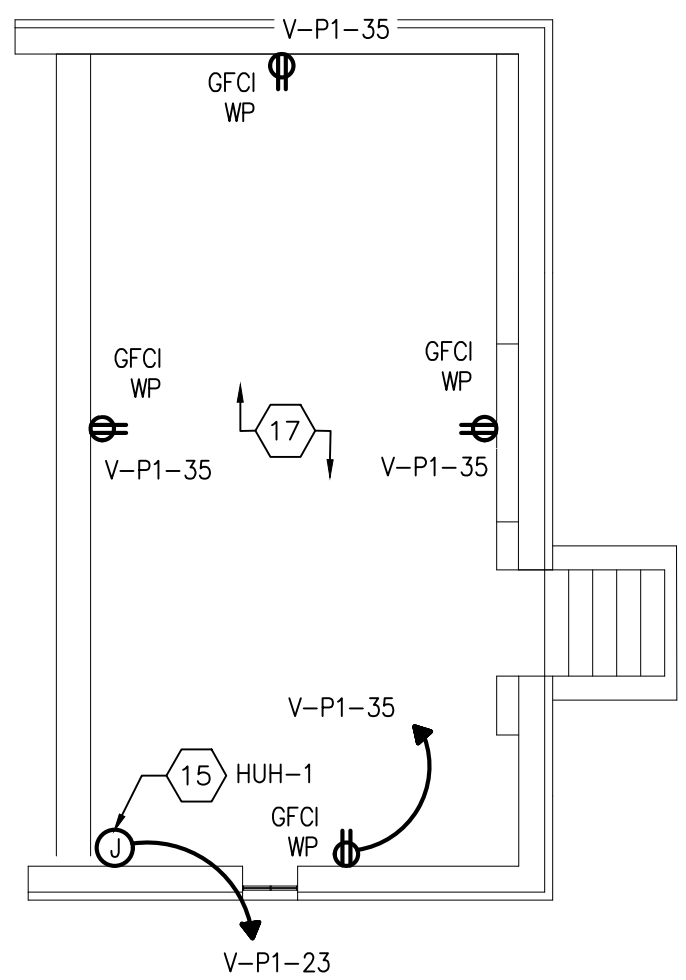
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GENERAL NOTES

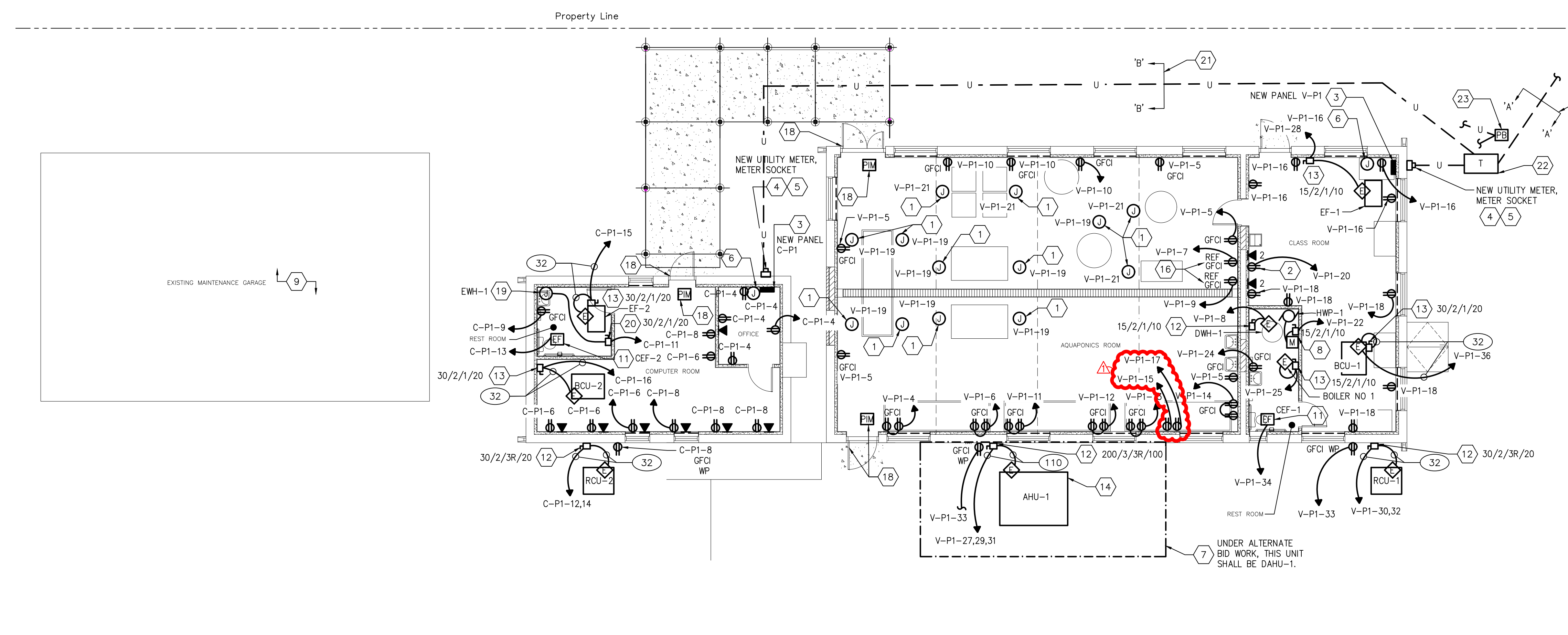
- CONTRACTOR SHALL PROVIDE ALL WIRING/CONDUIT, CLIPS, BRACKETS, HANGERS, SUPPORTS, BOXES, ETC. REQUIRED TO PROVIDE A COMPLETE INSTALLATION.
- PROVIDE FIRE STOPPING FOR FIRE RATED WALL PENETRATIONS WHERE REQUIRED. PATCH AND TOUCH UP PAINT TO MATCH EXISTING ADJACENT CONSTRUCTION.
- PROVIDE ALL REQUIRED PULLBOXES AND JUNCTION BOXES PER THE NATIONAL ELECTRICAL CODE.
- REFER TO ELECTRICAL COVER SHEET SYMBOLS AND NOTES DRAWING E-001 FOR ABBREVIATIONS, NOTES AND OTHER ADDITIONAL INFORMATION AND REQUIREMENTS.
- DRAWING IS DIAGRAMATIC IN NATURE. E.C. SHALL PROVIDE ALL INCIDENTAL MATERIAL AND LABOR THAT IS REQUIRED FOR A FULLY COMPLETE AND OPERABLE SYSTEM OF THE DESIGN(S) SHOWN ON DRAWING. ALL WORK AND FUNCTIONALITY SHALL MEET REQUIRED STANDARDS AND CODES.
- PROVIDE AND INSTALL ALL REQUIRED BACKBOXES AND 1" CONDUIT WITH PULLSTRING UP INTO CEILING FOR ALL DATA ROUTING. ALL DATA WIRE ROUTING AND CONNECTIONS SHALL BE BY OTHERS. COORDINATE ALL NEW DATA OUTLET REQUIREMENTS WITH OWNER/FACILITIES MANAGEMENT.
- SEE DEVICE MOUNTING HEIGHTS TABLE ON ELECTRICAL COVER SHEET SYMBOLS AND NOTES DRAWING E-001 FOR ALL DEVICE HEIGHTS (ALL DEVICE HEIGHTS NOTED ARE TO CENTER OF DEVICE).
- MAINTAIN ALL REQUIRED CLEARANCES FOR ELECTRICAL EQUIPMENT PER NEC, INCLUDING MAIN DISTRIBUTION PANELS, PANELBOARDS, SWITCHES, TRANSFORMERS, ETC.
- SEE SINGLE LINE DRAWING E-601 FOR ALL NEW ELECTRICAL EQUIPMENT (I.E., PANELBOARDS, DISCONNECTS, TRANSFORMERS, ETC.) AND THEIR FEEDER INFORMATION, ROUTING, WIRING AND INSTALLATION REQUIREMENTS.

NEW WORK KEY NOTES

- PROVIDE 120V CORD REEL WITH GFCI DUPLEX RECEPTACLE ABOVE PUMP STATIONS, BEDS, ETC. CORD REEL SHALL HAVE 30' OF EXTENSION CORD. COORDINATE AND LOCATE EXACT LOCATION, QUANTITIES AND HEIGHT WITH FACILITIES MANAGEMENT BEFORE ROUGH-IN.
- PROVIDE DEDICATED 120V CIRCUIT AND DATA OUTLET FOR SMARTBOARD. COORDINATE EXACT TYPE OF CONNECTION FOR DATA OUTLET WITH SMARTBOARD MANUFACTURER. COORDINATE EXACT LOCATION, QUANTITIES AND MANUFACTURER TYPE AND MODEL WITH FACILITIES MANAGEMENT.
- PROVIDE SERVICE RATED PANEL. SEE SINGLE LINE DRAWING FOR MORE INFORMATION.
- COORDINATE ALL REQUIREMENTS AND TIMING OF WORK ASSOCIATED WITH EXISTING AND NEW UTILITY POLES, TRANSFORMERS, PRIMARY SERVICE FEEDS, ETC. WITH UTILITY COMPANY PRIOR TO START OF WORK. PROVIDE ALL LABOR AND MATERIAL REQUIRED FOR COMPLETE INSTALLATION. SEE SINGLE LINE DRAWING FOR MORE INFORMATION.
- COORDINATE EXACT LOCATION OF NEW UTILITY METER WITH UTILITY COMPANY PRIOR TO START OF WORK.
- PROVIDE 120V POWER CIRCUIT INDICATED FOR LIGHTING CONTROL PANEL. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH LIGHTING REPRESENTATIVE AND FACILITIES MANAGEMENT.
- DAHU-1 FOR ADD ALTERNATE 1 SHALL BE 3 PHASE, 208V. PROVIDE 70A 3 POLE BREAKER IN PANEL V-P1 POSITIONS 27,29,31. PROVIDE (3) #4 AND (1) #8 GROUND IN 1" CONDUIT FOR FEEDER WITH A 100A, 3 POLE, NEMA 3R FUSED DISCONNECT. FUSES SHALL BE 60A. COORDINATE EXACT LOCATIONS WITH MECHANICAL CONTRACTOR.
- COMBINATION MOTOR STARTER DISCONNECT PROVIDED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. COORDINATE EXACT SWITCH TYPE AND WIRING REQUIREMENTS WITH THE MECHANICAL CONTRACTOR. PROVIDE ALL NECESSARY UNISTRUT, HARDWARE, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION AND A FLEXIBLE LIQUID TIGHT METAL CONDUIT CONNECTION TO THE UNIT. CIRCUIT SHALL BE SIZED THE SAME AS THE FEEDER CIRCUIT. ALL BOILER ACCESSORIES INCLUDING BUT NOT LIMITED TO HWP-1, MS, ETC. SHALL BE WALL MOUNTED ABOVE THE CEILING.
- INTERCEPT, EXTEND AND CONNECT EXISTING POWER FEEDER, SERVING EXISTING MAINTENANCE GARAGE. TO NEW POWER PANEL C-P1. MAINTAIN CONTINUITY TO EXISTING TO REMAIN CIRCUITS IN EXISTING MAINTENANCE GARAGE. PROVIDE REQUIRED SIZED BREAKER FOR EXISTING FEEDER TO MAINTENANCE GARAGE IN NEW PANEL C-P1. FIELD VERIFY EXISTING CONDITION OF EXISTING FEEDER TO MAINTENANCE GARAGE AND IF FEEDER IS COMPROMISED OR TOO SMALL FOR MAINTENANCE GARAGE LOADS CONTACT SANTANGELO AND LINDSAY ENGINEERING FOR FURTHER INSTRUCTION.
- INSTALL NEW UTILITY POWER FEED AND COMMUNICATIONS CONDUITS OUT TO UTILITY POLE AS SHOWN. SEE PANEL SCHEDULES AND DETAIL DRAWING E-602 FOR DUCT BANK DETAIL A-A AND SINGLE LINE DRAWING E-601 FOR MORE INFORMATION. FIELD VERIFY EXACT LENGTHS REQUIRED.
- EXHAUST FAN AND FAN CONTROLS PROVIDED BY MECHANICAL CONTRACTOR. PROVIDE 120V CIRCUIT FOR POWER AS INDICATED. COORDINATE EXACT LOCATION AND CONTROL REQUIREMENTS WITH MECHANICAL CONTRACTOR.
- DISCONNECT SWITCH PROVIDED BY THE MECHANICAL CONTRACTOR. PROVIDE ALL NECESSARY UNISTRUT, HARDWARE, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION AND A LIQUID TIGHT FLEXIBLE METAL CONDUIT CONNECTION TO THE UNIT; CIRCUIT SHALL BE SIZED THE SAME AS THE FEEDER CIRCUIT.
- DISCONNECT SWITCH PROVIDED BY THE MECHANICAL CONTRACTOR. PROVIDE ALL NECESSARY UNISTRUT, HARDWARE, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION. CIRCUIT SHALL BE SIZED THE SAME AS THE FEEDER CIRCUIT.
- NEW DUCT TYPE SMOKE DETECTORS FOR SUPPLY AIR DUCTWORK IN NEW AHU UNIT SHALL BE PROVIDED AND INSTALLED BY OTHERS.
- PROVIDE INDICATED 120V CIRCUIT FOR HUH-1. CONTROLS/SWITCH SHALL BE BY THE MECHANICAL CONTRACTOR. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- COORDINATE EXACT LOCATION OF REFRIGERATOR WITH FACILITIES MANAGEMENT. PROVIDE AND INTERCONNECT A REMOTE GFCI INDICATOR PILOT LIGHT ON WALL NEAR REFRIGERATOR WHERE CLEARLY VISIBLE.
- PROVIDE ALL ELECTRICAL ROUTING IN RGS CONDUIT AND ALL BACKBOXES AS HOT DIPPED GALVANIZED STEEL WITH METAL WEATHERPROOF COVERPLATES.
- THIS DOOR REQUIRES ACCESS CONTROL USING AN INTELLI-SITE SECURITY HEAD-END SYSTEM. THE HEAD-END SYSTEM AND THE ACCESS CONTROL PANEL IS PROVIDED BY OTHERS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A PIM400-485 PANEL INTERFACE MODULE (PIM) ABOVE THE TILE CEILING LOCATED INSIDE NEAR THE DOOR. IF CEILING IS OPEN, LOCATE THE PIM IN THE OPEN CEILING AREA NEAR THE RESPECTIVE DOOR. E.C. SHALL PROVIDE ALL WIRING FROM THE ACCESS CONTROL PANEL TO THE PIM AND ALL ASSOCIATED CONDUIT, WIRING, JUNCTION BOXES, MATERIAL AND LABOR ETC. FOR A COMPLETE AND OPERATING DOOR ACCESS SYSTEM. COORDINATE EXACT WIRING REQUIREMENTS WITH THE MANUFACTURER'S INSTRUCTIONS AND THE SECURITY INTEGRATOR, ALLEGHENY SAFE & LOCK. E.C. SHALL PROVIDE THE AD-400 NETWORKED WIRELESS ELECTRONIC LOCK AND THE GENERAL CONTRACTOR SHALL INSTALL AND PROGRAM THE AD-400 LOCK. ALL DOOR SECURITY/CARD ACCESS REQUIREMENTS SHALL BE COORDINATED WITH THE SECURITY INTEGRATOR ALLEGHENY SAFE & LOCK. THE GENERAL CONTRACTOR, ARCHITECTURAL DRAWINGS, MANUFACTURER'S INSTRUCTIONS AND FACILITIES MANAGEMENT.
- PROVIDE INDICATED 120V CIRCUIT FOR EWH-1. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
- DISCONNECT SWITCH PROVIDED BY THE MECHANICAL CONTRACTOR. PROVIDE ALL NECESSARY UNISTRUT, HARDWARE, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION. PROVIDE CONDUIT TO THE JUNCTION/BACK BOX FOR THE UNIT; CIRCUIT SHALL BE SIZED THE SAME AS THE FEEDER CIRCUIT.
- INSTALL NEW UTILITY POWER FEED AND COMMUNICATIONS CONDUITS OUT TO UTILITY PAD MOUNTED TRANSFORMER AS SHOWN. SEE PANEL SCHEDULES AND DETAIL DRAWING E-602 FOR DUCT BANK DETAIL B-B AND SINGLE LINE DRAWING E-601 FOR MORE INFORMATION. FIELD VERIFY EXACT LENGTHS REQUIRED.
- UTILITY PAD MOUNTED TRANSFORMER. COORDINATE ALL REQUIREMENTS AND TIMING OF WORK ASSOCIATED WITH EXISTING AND NEW UTILITY POLES, TRANSFORMERS, PRIMARY SERVICE FEEDS, ETC. WITH UTILITY COMPANY PRIOR TO START OF WORK. PROVIDE ALL LABOR AND MATERIAL REQUIRED FOR COMPLETE INSTALLATION. SEE SINGLE LINE DRAWING FOR MORE INFORMATION. SEE E-602, ELECTRICAL SCHEDULES AND DETAILS DRAWING, FOR FIRST ENERGY'S CONCRETE FLAT - PAD FOUNDATION DETAIL.
- ARMSTRONG UTILITY NEW HANDHOLE PULL BOX. PROVIDE HANDHOLE PULL BOX AND CONDUIT WITH PULL STRING FROM EXISTING UTILITY POLE TO NEW HANDHOLE PULLBOX. PROVIDE CONDUIT WITH PULL STRING FROM NEW HANDHOLE PULLBOX TO NEW AQUAPONICS BUILDING AND FROM NEW HANDHOLE PULLBOX TO NEW COMPUTER ROOM BUILDING. SEE DUCT BANK DETAILS ON DRAWING E-602 FOR ROUTING COMMUNICATIONS CONDUITS TO AND FROM PULL BOX. COORDINATE EXACT LOCATIONS AND QUANTITIES OF HANDHOLE PULLBOXES. COORDINATE EXACT ROUTING AND TERMINATIONS WITH ARMSTRONG UTILITIES PRIOR TO START OF WORK. SEE SINGLE LINE DRAWING E-601 FOR MORE INFORMATION.



ELECTRICAL BASEMENT PLAN – NEW WORK POWER
SCALE: 1/8" = 1'-0"



18 A. THIS DOOR REQUIRES ACCESS CONTROL USING AN INTELLI-SITE SECURITY HEAD-END SYSTEM. THE HEAD-END SYSTEM AND THE ACCESS CONTROL PANEL IS PROVIDED BY OTHERS. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A PIM400-485 PANEL INTERFACE MODULE (PIM) ABOVE THE TILE CEILING LOCATED INSIDE NEAR THE DOOR. IF CEILING IS OPEN, LOCATE THE PIM IN THE OPEN CEILING AREA NEAR THE RESPECTIVE DOOR.

B. E.C. SHALL PROVIDE ALL WIRING FROM THE ACCESS CONTROL PANEL TO THE PIM AND ALL ASSOCIATED CONDUIT, WIRING, JUNCTION BOXES, POWER SUPPLIES, MATERIAL AND LABOR ETC. FOR A COMPLETE AND OPERATING DOOR ACCESS SYSTEM. COORDINATE EXACT WIRING REQUIREMENTS WITH THE MANUFACTURER'S INSTRUCTIONS AND THE SECURITY INTEGRATOR, ALLEGHENY SAFE & LOCK.

C. E.C. SHALL PROVIDE THE AD-400 NETWORKED WIRELESS ELECTRONIC LOCK AND THE SECURITY INTEGRATOR SHALL INSTALL AND PROGRAM THE AD-400 LOCK. ALL DOOR SECURITY/CARD ACCESS REQUIREMENTS SHALL BE COORDINATED WITH THE SECURITY INTEGRATOR ALLEGHENY SAFE & LOCK. THE GENERAL CONTRACTOR, ARCHITECTURAL DRAWINGS, MANUFACTURER'S INSTRUCTIONS AND FACILITIES MANAGEMENT.

ELECTRICAL SITE AND BUILDINGS PLAN – NEW WORK POWER AND SYSTEMS
SCALE: 1/8" = 1'-0"

ARCHITECTS

SDR ENGINEERS

40 SHENANGO AVE., SHARON, PA 16146 • (724) 981-8820
130 SEVENTH ST., PITTSBURGH, PA 15222 • (412) 281-2280

MERCER COUNTY AGRICULTURAL AND CONSERVATION COMMUNITY LEARNING CENTER AT MUNNELL RUN FARM
41 MUNNELL RUN LANE
MERCER, PA 16137

FOR THE
MERCER COUNTY COMMISSIONERS
125 SOUTH DIAMOND STREET
MERCER, PA 16137

ELECTRICAL POWER AND SYSTEMS PLAN