

# DOOR SCHEDULE DOOR

SECTION A

\_\_3/4" PLYWOOD

STEEL PANELS -

\_\_2"X8" @ 16" O.C.

-1"X3" WD. **FURRING STRIPS** 

24" O.C.

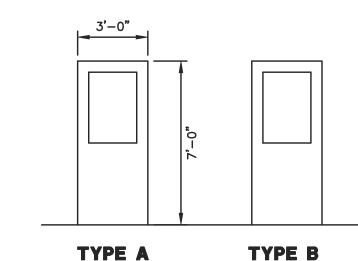
2"X4" @ 24" O.C.

- STEEL PANELS

#### TYPE MATERIAL SIZE (3)3'-0"X7'-0"X1 3/4" A НМ (1)3'-0"X7'-0"X1 3/4" (1)3'-0"X7'-0"X1 3/4"

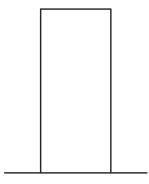
#### HARDWARE SET

1) BLDG LOCKSET, PANIC BAR, CLOSERS, HCP LEVER HANDLES. (2) HCP HEIGHT PUSH/PULLHARDWARE, CLOSER, WALL DOOR STOP.



INSULATED METAL "A" LABEL DOOR AND FRAME W/ PANIC AND HCP HARDWARE

INSULATED METAL "B" LABEL DOOR AND FRAME W/ HCP HARDWARE



TYPE C

INDULATED METAL "C" LABEL DOOR AND FRAME W/ HCP HARDWARE

> DOOR TYPES NO SCALE

## **INTENT OF DRAWINGS**

THE DRAWINGS PROVIDED SHALL BE CONSIDERED AS BASIC WORKING DRAWINGS WITH MINIMUM DETAILS AS AGREED UPON BETWEEN THE ENGINEER, OWNER, AND CONTRACTOR. THE DRAWING INTENT IS TO PROVIDE THE CONTRACTOR WITH THE OWNER'S REQUIREMENTS FOR THE SCOPE OF THE PROPOSED WORK TO BE PERFORMED AND AS SUCH, THE DRAWINGS SHALL BE CONSIDERED SUFFICIENT FOR COORDINATION AND TO RESOLVE THE BUILDING SYSTEMS,

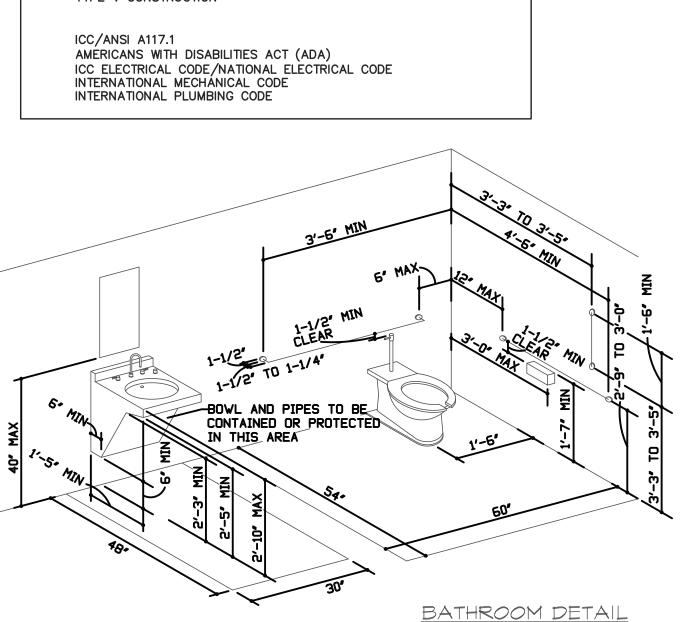
#### **ACCURACY OF DRAWINGS**

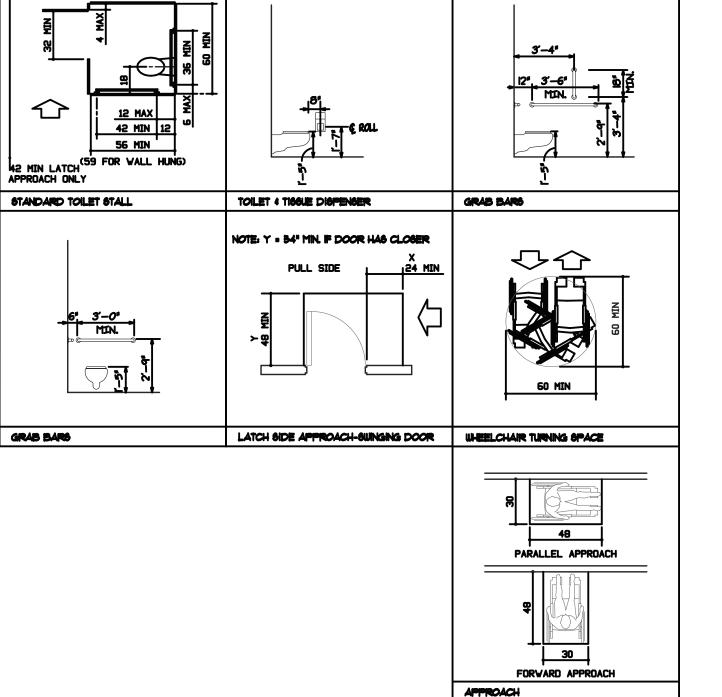
WITH THE OWNER.

#### **CONTRACTOR'S RESPONSIBILITY:**

ARE THE RESPONSIBILITY OF THE CONTRACTOR.

- 1. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL EXISTING CONDITIONS PRIOR TO SHOP DRAWING PRESENTATION FOR THE PROJECT.
- 2. DISCREPANCIES IN DETAILS AND EXISTING CONDITIONS, AND/OR NOTES BETWEEN DRAWINGS AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE SUBMISSION OF APPROVAL.
- 3. ALL WORK SHALL COMPLY WITH STATE CODES, ACTS, AND REGULATIONS, AND LOCAL MUNICIPALITY ORDINANCES AND REQUIREMENTS.
- 4. THE BUILDING PERMIT SHALL BE SECURED BY THE OWNER FOR THIS PROJECT AND ALL OTHER REQUIRED PERMITS AND TAXES REQUIRED SHALL BE OBTAINED BY CONTRACTOR AND/OR SUBCONTRACTOR AS REQUIRED.
- 5. ALL WORK AND OPENINGS IN EXTERIOR WALL, ROOF, AND CEILINGS SHALL BE PROTECED FROM CLIMATIC
- CONDITIONS AND THE SECURITY OF THE BUILDING AS THE WORK PROGRESS. 6. THE CONTRACTOR SHALL TAKE ALL SAFETY PRECAUTIONS AS REQUIRED TO PROTECT HIS WORKMEN AND THE
- PUBLIC FROM INJURY. 7. ANY CHANGES IN CONSTRUCTION THAT ARE IN CONFLICT WITH OR DEVIATE FROM THE ENGINEER'S DRAWINGS
- 8. PROVIDE ALL NECESSARY GUY WIRES, SHORES, BRACING, ETC., AS REQUIRED TO PROTECT STRUCTURE FROM DAMAGE DUE TO ANY CAUSE.
- 9. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF ANY UNUSUAL CONDITIONS ARE ENCOUNTERED.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE CONSTRUCTION OF MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS WITH THE GENERAL CONSTRUCTION.
- 11. ALL WORK FOR THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE TO THE 2009 INTERNATIONAL BUILDING CODE ALONG WITH THE MECHANICAL, PLUMBING CODES AND ADA REQUIREMENTS.

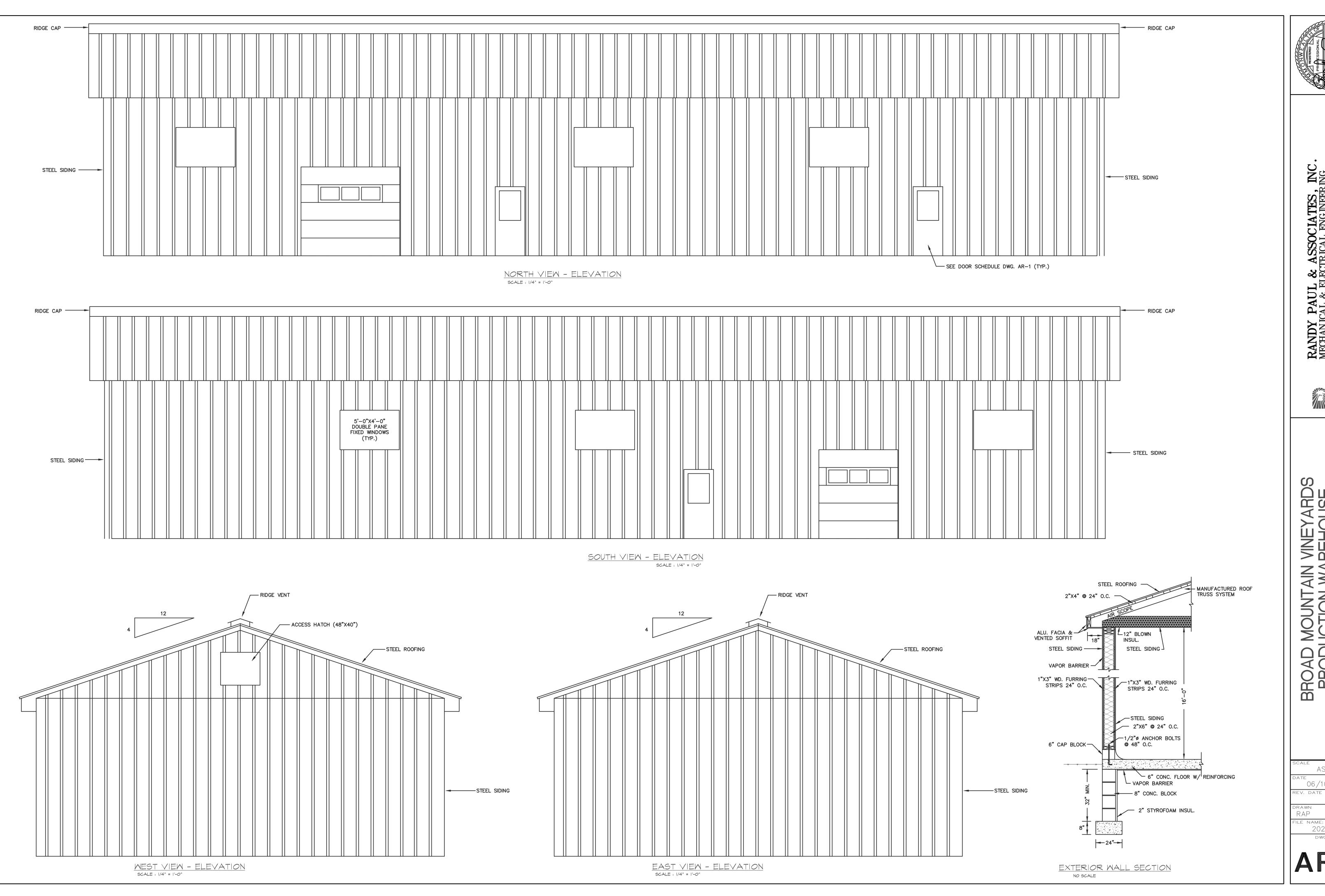


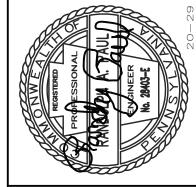


₹ O TYPE B

> AS NOTED 06/10/20 RAP RAP

2029AR1 DWG. NO.





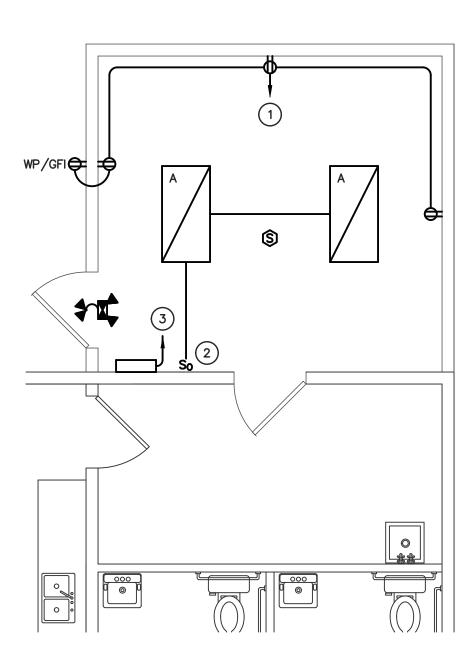
BROAD MOUNTAIN VINEYARDS PRODUCTION WAREHOUSE

AS NOTED 06/10/20

DRAWN RAP CHECKED RAP 2029AR2 DWG. NO.

#### **MECH/ELEC. PLAN NOTES**

- (1) CONNECT NEW RECEPTACLES TO EXISTING CIRCUIT. (2#12 W/G)
- 2 CONNECT NEW LIGHTING FIXTURES TO EXISTING LIGHTING CIRCUIT. (2#12 W/G)
- 3 SURFACE MOUNTED ELECTRIC UNIT HEATER BERKO #FRC2024, 2000 WATT, 240V-1PH W/ THERMOSTAT.
  CONNECT NEW SURFACE MTD. ELECTRIC WALL UNIT HEATER TO EXISTING ELECTRICAL PANEL. (2#12 W/G)
- 4) NEW CEILING MOUNTED SMOKE DETECTOR.

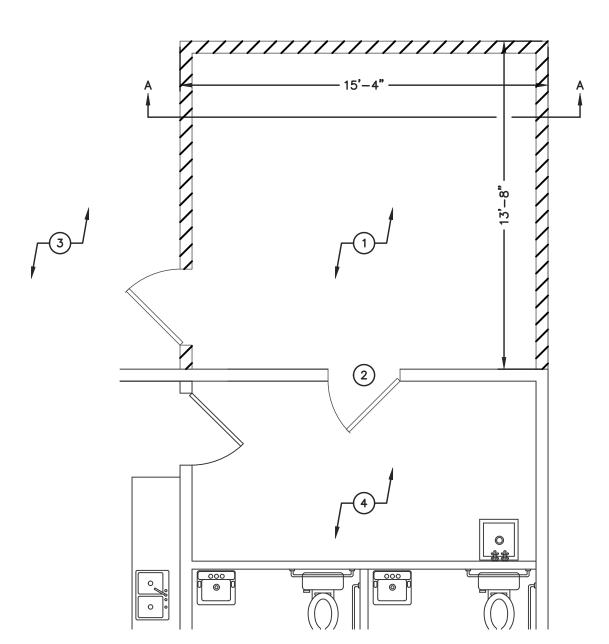


# FLOOR PLAN - MECH/ELEC.

SCALE : 1/4" = 1'-0"

#### **ARCH. PLAN NOTES**

- 1) 15'-4" X 13'-8" ADDITION.
- (2) INSTALL NEW 3'-0" X 6'-8" DOOR THRU EXISTING WALL.
- 3 EXISTING PATIO.
- (4) EXISTING JANITOR CLOSET.



FLOOR PLAN - ARCH. SCALE : 1/4" = 1'-0"

#### **ELECTRICAL SPECIFICATIONS**

- 1. ALL WORK SHALL BE IN COMPLIANCE WITH LATEST VERSION OF NEC, IBC, AND ALL OTHER APPLICABLE CODES.
- 2. ELECTRICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, TESTS, INSPECTIONS, AND FEES.
- 3. COORDINATE WITH ALL TRADES.
- 4. THE DRAWINGS ARE INDICATIVE OF THE WORK TO BE INSTALLED. ALL OUTLET AND EQUIPMENT LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. ELECTRICAL CONTRACTOR SHALL CAREFULLY INVESTIGTATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING HIS WORK. PROVIDE ALL WORK AS SHOWN, REQUIRED, AND INFERRED BY THE DRAWINGS, SPECIFICATIONS AND GENERAL/SPECIAL CONDITIONS ISSUED BY THE ARCHITECT.
- 5. WIRE SHALL BE COPPER CONDUCTOR, THHN/THWN INSULATION, #12 AWG MINIMUM ALL RECEPTACLES AND LIGHTING CIRCUITS.
- 6. ALL WIRING SHALL EB RUN IN FLEXIBLE MATALIC CONDUIT OR EMT.
- 7. LIGHTING FIXTURES SHALL BE PROVIDED BY OWNER. ALL FIXTURES SHALL BE COMPLETE WITH HANGERS, ACCESSORIES, AND LAMPS. LAMPS SHALL BE GENERAL ELECTRIC OR SYLVANIA.
- 8. RECEPTACLES SHALL BE HUBBELL 5262 (DUPLEX), 5361 (SINGLE), IG5262 (ISOLATED GROUND), GF5362 (GFI), OR APPROVED EQUAL. RECEPTACLES TO BE WHITE IN COLOR.
- 9. LIGHT SWITCHES SHALL BE 20A, 277V, HUBBELL 1221, 1223, 1224, OR APPROVED EQUAL. LIGHT SWITCHES TO BE WHITE IN COLOR.
- 10. WALL PLATES SHALL BE HIGH IMPACT NYLON. WALL PLATES TO BE WHITE IN COLOR.
- 11. PROVIDE ALL GROUNDING AS REQUIRED BY CODE. ALL FEEDERS AND BRANCH CIRCUITS SHALL INCLUDE A GREEN EQUIPMENT GROUNDING CONDUCTOR.
- 12. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CUTTING, PATCHING, AND FIREPROOFING RELATED TO HIS WORK.
- 13. PANELBOARDS ARE EXISTING. BRANCH BREAKERS SHALL BE PLUG TYPE. PROVIDE TYPEWRITTEN CIRCUIT DIRECTORIES. BALANCE LOADS, MAKING ADJUSTMENTS AS
- 14. ALL ELECTRICAL EQUIPMENT SHALL BE UL LISTED.

#### **GENERAL NOTES**

1. EMERGENCY LIGHTS CONNECT TO LIGHTING CIRCUIT AHEAD OF SWITCHING.

\_5/8" EXT. OSB APA 24/16

└1/2" GWB.

-4" 3500 PSI CONC. SLAB W/ FIBER MESH

└MIN. 4" 2-B STONE

**HVAC GENERAL NOTES** 

SEALED BY A PROFESSIONAL ENGINEER.

NOT TO SCALE

1. ALL FRAMING LUMBER (EXCEPT AS NOTED) SHALL BE #2 SPRUCE/PINE/FIR OR BETTER.

ENGINEERED SYSTEMS/DESIGNS SHALL BE AVAILABLE FOR THE CODE OFFICIALS AND BE

2. ALL NAILING/FASTENERS SHALL COMPLY WITH THE LATEST IBC CODE REQUIREMENTS. 3. THE ENGINEERED ROOF TRUSS SYSTEM SHALL COMPLY WITH THE LATEST APPLICABLE BUILDING CODES AND SHALL INCLUDE ALL REQUIRED BLOCKING, BRACING, HANGERS AND ANY OTHER STRUCTURAL REQUIREMENTS FOR THE COMPLETION OF ALL FRAMING. ALL

BUILDING SECTION A-A

6 MIN POLYETHYLENE VAPOR BARRIER, LAP MIN. 6" AND TAPE ALL VAPOR BARRIER JOINTS.

12" R-38 F'GL. INSULATION VAPOR BARRIER DOWN

MATCH EXIST. METAL ROOF ON 30# ROOF FELT

PRE-ENGINEERED ROOF TRUSSES @ 24" O.C., SEE MFGRS. PLANS & DETAILS (30#/SF SNOW LOAD)

	LIGHTING FIXTURE SCHEDULE												
I.D.	DESCRIPTION	MANUF.	CAT. NO.	LAMPS	MTG.								
Α	LED 2'x4'	LITHONIA	2RTLX4 40L LP835	LED 39W	SURFACE								
1	EXIT SIGN W/ EM HEADS	LITHONIA	LHQM LED R HO										
<b>4</b>	EXTERIOR REMOTE HEADS	LITHONIA	ELA T QWP L0304										

<sup>\*</sup> OWNER MY SUBSTITUTE LIKE FIXTURES

TRUSS DESIGN DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER AND SHALL BE AVAILABLE FOR THE BUILDING CODE OFFICIAL.
ALL LOADS AND BRACING SHALL MEET OR EXCEED THE CURRENT IBC CODE REQUIREMENTS.

ICE BARRIER

LALUM. COV. 2X6 FASCIA

→ AIR INFILT. BARRIER ON 1/2" OSB.

- SIMPSON MAB15 ANCHORS (MIN. 2 ANCHORS PER SILL PLATE) MIN. 7" PENETRATION INTO CONCRETE @ 36"O.C. AND 12"(MAX.) FROM EA. CORNER & ENDS OF EA. PLATE

FIN. GRADE, SLOPE AWAY FROM STRUCTURE

LAERATED ALUM. SOFFIT

✓ VINYL SIDING

24"

HURRICANE ANCHORS EA. TRUSS EA. END-

2X6 @ 16" O.C.—

1/2" GWB.—

(2) 2X6 TOP PLATE ONE W/ (2) 16d NAILS NAILS @ 16" O.C.

6" R-21 FBRGL. INSUL.-

2X6 PRESS. TR'TD. SOLE PLATE ON SILL SEALER W/ (2) 16d NAILS @ 16" O.C.

THERMAL BREAK ENTIRE PERIMETER-

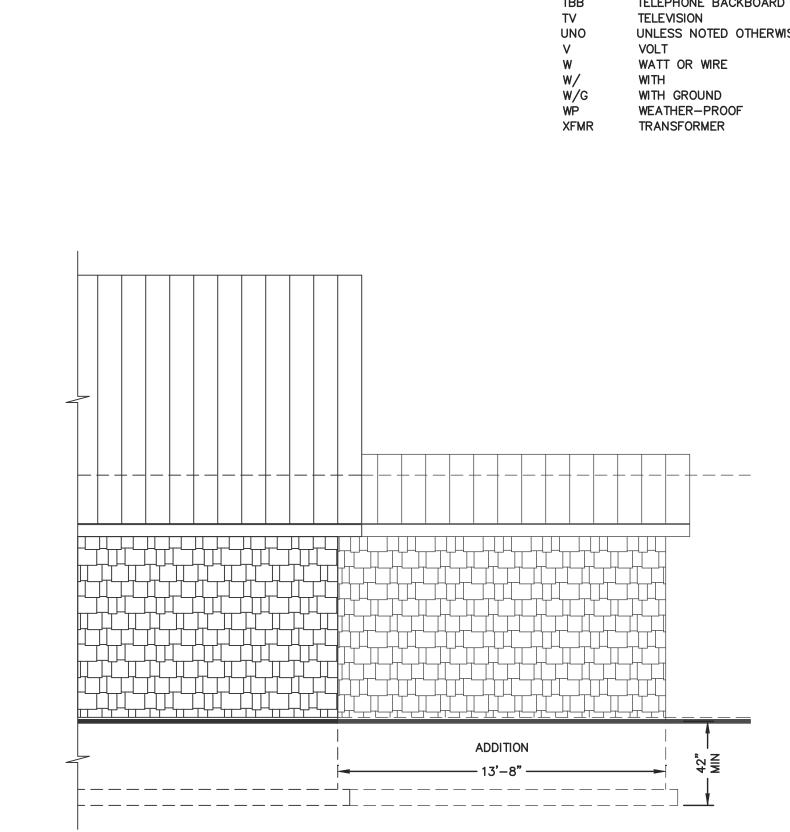
RIGID INSUL. 8" CMU-

3000 PSI CONC. FTG. -

20"

#### SYMBOLS

	SIMDU	<u>/L5</u>		_
	NOTE 1			Α
	LIGHT FIXTURE, CEILING	STP	MANUAL STARTER W/ THERMAL OVERLOAD & PILOT LIGHT	AB AF
	LIGHT FIXTURE W/ EMERGENCY	S <sub>M</sub>	MANUAL STARTER W/O THERMAL OVERLOAD	AT
$\Theta$	LIGHT FIXTURE, WALL		DISCONNECT SWITCH	C CK
S	SINGLE POLE SWITCH		CONTACTOR	CP
			AC MAGNETIC STARTER	CT CU
S <sub>2</sub>	DOUBLE POLE SWITCH			C/
S <sub>3</sub>	THREE-WAY SWITCH	,	COMBINATION STARTER/DISCONNECT	DIS DN
S <sub>4</sub>	FOUR-WAY SWITCH	9	MOTOR	DS
SD	DIMMER SWITCH	(1)	JUNCTION BOX	DW EB
So	OCCUPANCY SENSOR SWITCH - WALL	F	FIRE ALARM PULL STATION	EC ET
os	OCCUPANCY SENSOR SWITCH - CEILING	-ÞĒ	FIRE ALARM HORN/STROBE	EW
Φ	DUPLEX RECEPTACLE	ÞĒ	FIRE ALARM HORN	FU FD
¥	C — MOUNTED ABOVE COUNTER CL — CLOCK HANGER RECEPTACLE	<u>-</u>	FIRE ALARM STROBE	FD FT
•	SPECIAL PURPOSE RECEPTACLE	\$	SMOKE DETECTOR	GC GF
<del>•</del>	QUADRUPLEX RECEPTACLE	$\oplus$	HEAT DETECTOR	GN
<b>•</b>	GROUND FAULT INTERRUPTING RECEPTACLE	<b>(</b>	DUCT DETECTOR	HC H-
''	WP — WEATHERPROOF	•	HOMERUN TO PANEL INDICATED	HP HT
P	ISOLATED GROUND RECEPTACLE	_ · · -	EMERGENCY LIGHTING CIRCUIT	HU
Ф	CEILING MOUNTED DUPLEX RECEPTACLE		CIRCUIT UNDERGROUND OR UNDERFLOOR	IG JB
lacktriangle	FLOOR MOUNTED DUPLEX RECEPTACLE		PANELBOARD	KW LT
$\nabla$	TELEPHONE OUTLET — ANALOG W — WALL PHONE OUTLET	4	EMERGENCY BATTERY PACK	MC MT
lacksquare	TELEPHONE/DATA OUTLET	<b>&gt;</b>	REMOTE EMERGENCY HEAD	MT ML
_	DATA OUTLET		EXIT SIGN	Ø P
•	DATA GOTEL		EXIT SIGN WITH EMERGENCY HEADS	P PC
				PN
	NOTE:			PW PH
	1. THIS SYMBOL SCHEDULE IS TYPICAL, N	OT ALL SYMBO	LS MAY BE USED.	RG
				SW TB
				TV
-ALUM. GUT	TER			UN V
ALUM. GUT	ILIX			W
7				W,



EAST ELEVATION

NOT TO SCALE

**ABBREVIATIONS** 

AMPERE

ABOVE ABOVE FINISHED FLOOR AUTOMATIC TRANSFER SWITCH CONDUIT CIRCUIT CONTROL POWER TRAMSFORMER CURRENT TRANSFORMER CIRCUIT BREAKER DISCONNECT DISCONNECT SWITCH DRAWING ELECTRICAL BASEBOARD ELECTRICAL CONTRACTOR EXISTING TO REMAIN ELECTRIC WATER COOLER **FUSED** FEEDER FUSED DISCONNECT SWITCH GENERAL CONTRACTOR GROUND FAULT INTERRUPTING GROUND HEATING CONTRACTOR HAND-OFF-AUTO HORSEPOWER HEATER HORIZONTAL UNIT HEATER ISOLATED GROUND JUNCTION BOX KILOWATT LIGHTING MECHANICAL CONTRACTOR MOUNTED MOTOR MLO MAIN LUG ONLY PHASE POLE PLUMBING CONTRACTOR PANELBOARD POWER PHASE RIGID GALVANIZED STEEL CONDUIT SWITCH TELEPHONE BACKBOARD UNLESS NOTED OTHERWISE

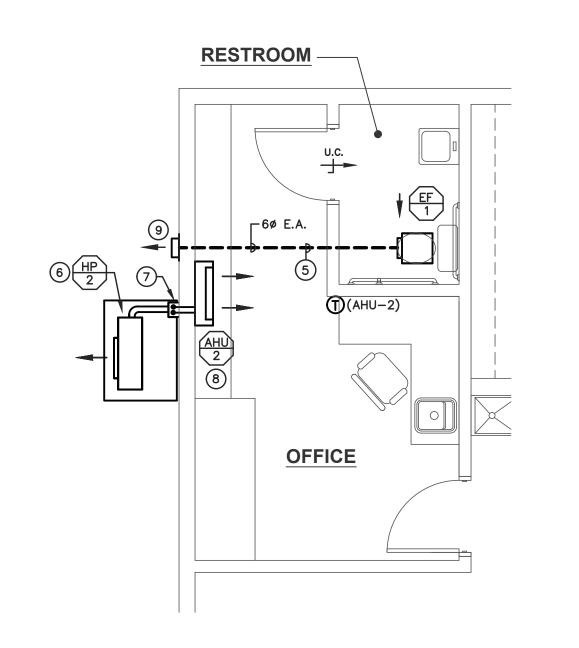
BRO

Ø

AS NOTED

06/10/20

RAP LE NAME: 2029AR3



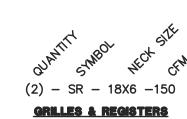
#### **PLAN NOTES**

- 1) MOUNT DUCTWORK 14'-6" A.F.F.
- 2 DUCTWORK TRANSITION (TYP.)
- (3) MANUAL VOLUME DAMPER (TYP.)
- (4) TURNING VANES (TYP.)
- (5) DUCTWORK RUN WITHIN CEILING SPACE (BELOW LOFT FLOOR).
- 6 HP CONDENSING UNIT MOUNTED ON 4" THICK CONCRETE FOUNDATION PAD BY G.C., W/ (4) 6" HIGH ROUND PLASTIC EQUIPMENT STANDS
- 7 REFRIGERANT LINE SET RISE UP ALONG WALL TO AHU ABOVE AS INDICATED. CONTRACTOR SHALL RUN LINE SET WITHIN PLASTIC LINE SET ENCLOSURE AS REQUIRED. 3/4" CONDENSATE DRAIN LINE DROP DOWN ALONG WALL WITHING PLASTIC LINE SET ENCLOSURE AND SPILL TO GRADE BELOW.
- (8) AHU MOUNTED IN LOFT ABOVE.
- 9) 8"ø EXHAUST AIR WALL CAP W/ B.D.D. (GREENHECK MODEL WC-8)
- 10 LINE SET TO BE RUN ABOVE CEILING. EXTEND AND CONNECT TO
- REFRIGERANT LINE SET RISE UP ALONG OUTSIDE WALL AND EXTEND INTO CEILING SPACE. H.C. TO FURNISH AND INSTALL EXTERIOR LINE SET COVER. (AIRTEC FORTRESS SERIES)
- (12) 36"H. X 12'-0"L. RAILING

OFFICE FLOOR PLAN - HVAC

- (13) 4" THICK CONCRETE FOUNDATION PAD BY G.C.
- (14) WALL MOUNTED CO AND NO2 DUAL GAS DETECTOR WITH VISUAL AUDIBLE ALARM AND PROTECTIVE GUARD BY H.C. (HONEYWELL E3 MODEL NO. E3SARSCO, REMOTE SENSOR E3SRMNO2, ALARM P2WL-P) DETECTOR AND SENSORS SHALL BE MOUNTED PER MANUFACTURERS RECOMMENDATIONS. POWER REQUIREMENT: 24 VAC NOMINAL, 75VA. NO2 DETECTOR SHALL CONTROL O.A. DAMPER.

#### **DIFFUSER & REGISTER KEY**



#### **LEGEND**

- SR = SUPPLY REGISTER (ROUND DUCT MTD.) SRR = SIDE-WALL RETURN REGISTER
- CD = CEILING DIFFUSER RG = RETURN AIR GRILLE

SR = TITUS S300FL/FS 3/4" ADJ. BLADE SPACING (DOUBLE DEFLECTION W/ RADIUS END CAP) SRR = TITUS 350RL

#### **NOTES**

- 1. DIFFUSER KEY UNDER ROOM NAME & NUMBER IS TYP. FOR ALL DIFFUSERS IN THAT SPACE UNLESS NOTED
- 2. THIS CONTRACTOR SHALL COORDINATE ALL DIFFUSER LOCATIONS WITH THE REFLECTED CEILING PLANS & LIGHTING PLANS.
- 3. ALL SUPPLY AIR REGISTERS AND DIFFUSERS SHALL BE INSTALLED WITH OPPOSED BLADE DAMPERS AT DUCT CONNECTION.
- 4. ALL ROUND BRANCH DUCTS SHALL BE SIZED TO MATCH LISTED DIFFUSER NECK SIZE LISTED UNDER ROOM NAME.

#### HVAC ABBREVIATIONS

AIR HANDLING UNIT CONDENSING UNIT HEAT PUMP EXHAUST FAN LD LOUVER DAMPER G.C. GENERAL CONTRACTOR H.C. HVAC CONTRACTOR E.C. ELECTRICAL CONTRACTOR P.C. PLUMBING CONTRACTOR S.A. SUPPLY AIR R.A. RETURN AIR O.A. OUTSIDE AIR E.A. EXHAUST AIR DIA. DIAMETER

MTD. MOUNTED B.D.D. BACK DRAFT DAMPER A.F.F. ABOVE FINISHED FLOOR DWG.

DRAWING TYP. **TYPICAL** WITH

# HVAC SYMBOLS

1 THERMOSTAT AIR FLOW DIRECTION SIDE WALL RETURN AIR REGISTER SPIRAL DUCT SUPPLY REGISTER

MANUAL DAMPER

EQUIPMENT I.D.TAG

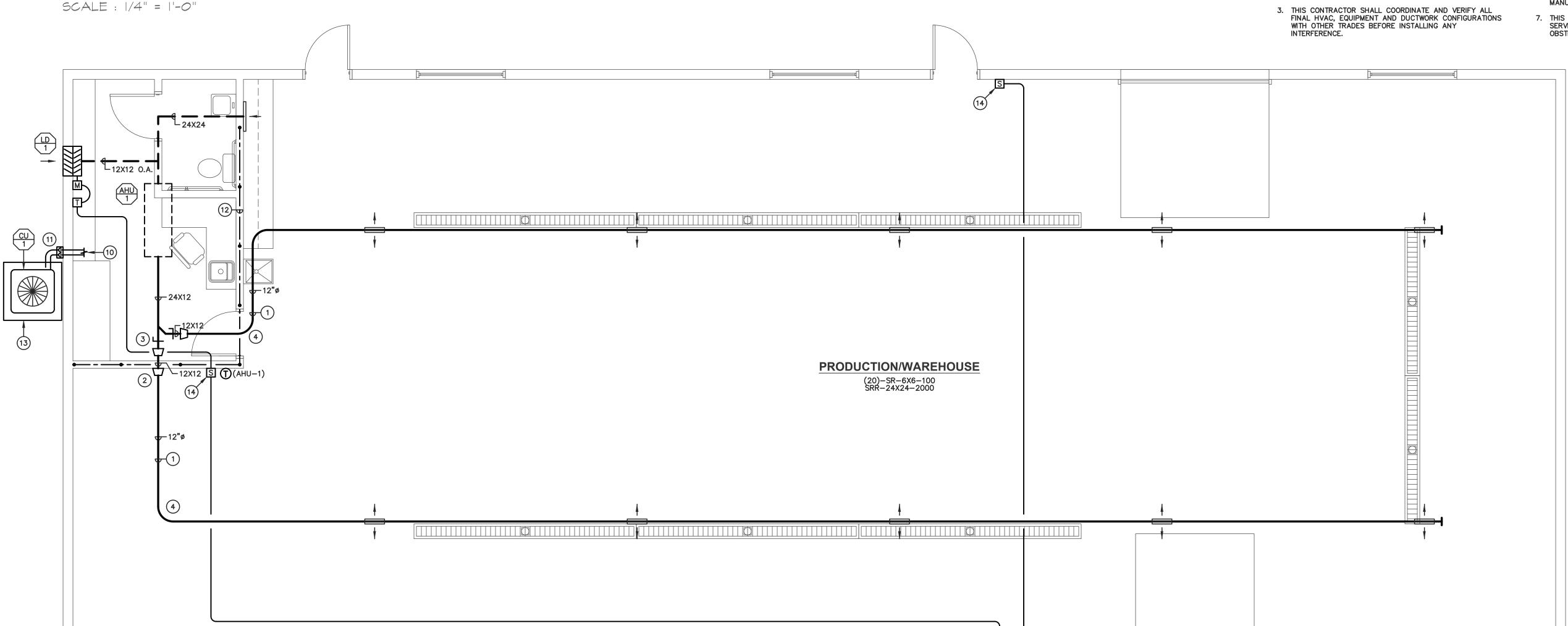
DUCT TRANSITION S.A. DUCTWORK R.A. DUCTWORK

E.A. DUCTWORK

#### **HVAC GENERAL NOTES**

ROUND

- 1. THE FOLLOWING CODES APPLY TO THIS BUILDING: 2015 INTL. BLDG. CODE AND 2015 INTL. MECHANICAL CODE. ALL WORK SHALL BE DOWN AS PER THESE CODES AND THE AUTHORITIES HAVING JURISDICTION.
- 2. ALL CONTROL REQUIREMENTS SHALL BE BY THIS CONTRACTOR. CONTRACTOR SHALL FURNISH AND INSTALL ALL THERMOSTATS, RELAYS, CONTRACTORS, MOTOR STARTERS, WIRING AND CONDUITS ETC. REQUIRED FOR A COMPLETE WORKING SYSTEM.
- 3. THIS CONTRACTOR SHALL COORDINATE AND VERIFY ALL
- 4. PROVIDE DUCT TRANSITIONS REQUIRED TO CONNECT DUCT TO NEW EQUIPMENT. COORDINATE DUCT CONNECTION SIZE WITH NEW EQUIPMENT.
- 5. REFER TO EQUIPMENT SCHEDULES FOR EQUIPMENT CAPACITIES AND TO EQUIPMENT DETAILS FOR INSTALLATION REQUIREMENTS.
- 6. THIS CONTRACTOR SHALL INSTALL EQUIPMENT, PIPING, AND CONTROLS ETC. TO PROVIDE CLEARANCES ACCORDING TO MANUFACTURER AND INDUSTRY STANDARDS.
- 7. THIS CONTRACTOR SHALL INSTALL EQUIPMENT TO MAINTAIN SERVICE CLEARANCE AROUND EQUIPMENT, FREE OF ANY OBSTRUCTIONS.



OVERALL FLOOR PLAN - HVAC

SCALE : 1/4" = 1'-0"



ING

AS NOTED

06/10/20

CHECKED RAP

<u>REMARKS</u>

(1) UNIT SHALL BE FURNISHED AND INSTALLED WITH FLANGED FRAME AND BIRD/INSECT SCREEN.

(2) UNIT SHALL BE FURNISHED AND INSTALLED WITH MOTORIZED ACTUATOR. INTERLOCKED

WITH CORRESPONDING CO2 SENSOR.

EF					EXHA	UST	FAN S	CHEDUI	LE		
SYMBOL	TYPE	MFG.	MODEL NO.	C.F.M.	E.S.P.	R.P.M.	ELECTRIC MOTOR WATTS/(HP)	AL DATA. VOLTAGE	CONTROL	SONES	REMARKS
EF-1	С	GREENHECK	SP-A110	85	.25"	1400	113	120V-1PH	ON-OFF-AUTO W/OCC. SENSOR	2.0	12

C = CEILING EXHAUST FAN(1) UNIT SHALL BE FURNISHED AND INSTALLED WITH INTERNAL BACK DRAFT DAMPER, PLUG TYPE DISCONNECT AND VIBRATION

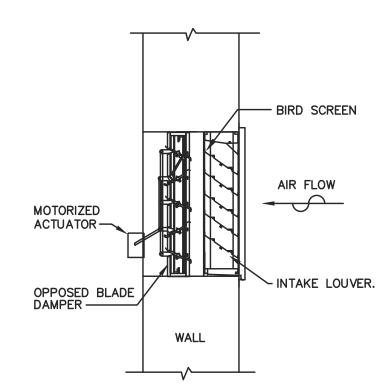
(2) UNIT SHALL BE INTERLOCKED WITH WALL MOUNTED ON-OFF-AUTO SWITCH WITH INFRARED OCCUPANCY SENSOR. (LEVITON MODEL PR150-1LW)

#### **HVAC SPECIFICATIONS**

- 1. THE WORK REQUIRED UNDER THIS CONTRACT SHALL INCLUDE ALL LABOR, MATERIALS, APPURTENANCES, EQUIPMENT AND SERVICES NECESSARY/REQUIRED TO FURNISH AND INSTALL ALL ITEMS INDICATED OR REQUIRED FOR COMPLETE INSTALLATION IN ACCORDANCE WITH STANDARD PROCEDURES UNDER HVAC CONSTRUCTIONS.
- 2. THE ENTIRE INSTALLATION SHALL CONFORM WITH ALL PERTINENT CODES AND REGULATIONS OF LOCAL, MUNICIPAL, COUNTY AND STATE AUTHORITIES, THE NATIONAL BOARD OF FIRE UNDERWRITERS, NATIONAL ELECTRIC CODE, AND 2015 INTERNATIONAL BUILDING CODE.
- 3. WHERE APPLICABLE MATERIALS AND EQUIPMENT SHALL BEAR STAMPS OR SEALS OF NBFU, ASME, NEMA AND ANY OTHER INDUSTRY REGULATIONS AGENCIES. IF ANY OF THE WORK SHOWN OR SPECIFIED SHOWN CONFLICT WITH CODES OR REGULATIONS THE CONTRACTOR SHALL MAKE SURE CHANGES ARE AS REQUIRED WITHOUT ADDITIONAL COST TO THE OWNER.
- 4. ALL WORK UNDER THIS SPECIFICATION SHALL BE GUARANTEED FREE OF DEFECTS IN MATERIAL, DESIGN, OR WORKMANSHIP FOR A PERIOD OF (1) YEAR FROM DATE OF FINAL ACCEPTANCE OF THE WORK, ANY DEFECTS IN THE WORK DEVELOPING DURING THIS PERIOD SHALL BE REMEDIED WITHOUT COST TO THE OWNER.
- 5. HVAC CONTRACTOR SHALL SECURE AND PAY FOR ANY PERMITS OR
- 6. HVAC CONTRACTOR SHALL FURNISH AND INSTALL MISCELLANEOUS STEEL AS REQUIRED FOR EQUIPMENT SUPPORTS, BRACING, HANGERS, FRAMING FOR EQUIPMENT, AND ALL STEEL ITEMS NEEDED FOR THE COMPLETION
- 7. SUBMIT SHOP DRAWINGS AND SPECS COVERING ALL ITEMS TO BE
- 8. HVAC CONTRACTOR SHALL PROVIDE AIR BALANCE OF INSTALLED HVAC SYSTEM AND SUBMIT REPORT.
- 9. ALL PIPING AND DUCTWORK SHALL BE INSTALLED AS REQUIRED TO PROVIDE MAXIMUM HEAD ROOM.
- 10. HVAC CONTRACTOR SHALL FURNISH AND INSTALL ALL HANGERS AND SUPPORTS FOR DUCTWORK AND PIPING AS REQUIRED AND IN ACCORDANCE WITH STANDARD CONSTRUCTION PROCEDURES.
- 11. ELECTRICAL CONTRACTOR WILL FURNISH, INSTALL, AND CONNECT CONDUIT DISCONNECT SWITCHES AND POWER WIRING OF REQUIRED SIZE AND VOLTAGE FROM PANELBOARD OR SIMILAR SOURCE, TO EQUIPMENT FURNISHED BY HVAC CONTRACTOR. WHERE COMPONENTS ARE INSTALLED IN LOCATIONS EXPOSED TO WEATHER, THEY SHALL BE WEATHERPROOFED.
- 12. ALL CONTROL SYSTEMS, CONTROL DEVICES, SENSORS, WIRING, AND THERMOSTATS SHALL BE FURNISHED AND INSTALLED BY HVAC CONTRACTOR.
- 13. ALL DIFFUSERS, REGISTERS, GRILLES SHALL BE OF THE STYLE, DESIGN, AND MODEL AS INDICATED ON THESE DWG'S.
- 14. SUPPLY, RETURN, OUTDOOR AIR, AND GENERAL EXHAUST DUCTWORK CONSTRUCTION SHALL BE 24 GAUGE ZINC-COATED IRON OR STEEL. ROUND DUCTWORK CONSTRUCTION SHALL BE 18 GAUGE GALVANIZED STEEL. SIMILAR TO UNITED MCGILL UNI-SEAL SPIRAL LOCKSEAM DUCT. SHEET METAL FOR CLIPS AND DRIVE CAPS SHALL BE OF THE SAME MATERIAL AND THICKNESS AS THE DUCTWORK. ALL DUCTWORK SHALL BE SEALED AIRTIGHT WITH DUCT SEALER. SIZES INDICATED ARE NET INSIDE CLEARANCE REQUIRED INCLUDING DUCT LINER. ELBOWS SHALL HAVE A CENTERLINE RADIUS EQUAL TO 1.5 TIMES THE WIDTH OF THE DUCT IN DIRECTION OF TURN UNLESS DRAWINGS INDICATE SQUARE ELBOWS IN WHICH CASE, TURNING VANES SHALL BE PROVIDED AS MANUFACTURED BY HART & COOLEY. (DUCTURNS)

MANUAL VOLUME DAMPERS SHALL BE INSTALLED IN DUCTS WHERE SHOWN AND WHEREVER REQUIRED TO PERMIT COMPLETE ADJUSTMENT OF AIR QUANTITIES AT ALL OUTLETS. DAMPERS SHALL BE LOCATED WHERE THEY CAN BE ADJUSTED AT ANY TIME AFTER COMPLETION OF THE

- 15. INSULATION FOR ALL OUTSIDE AIR DUCTWORK SHALL BE OWENS/CORNING 0.75 LB. DENSITY TYPE 75 EXTERIOR DUCT WRAP INSULATION. INSULATION SHALL HAVE FACTORY APPLIED FOIL—SCRIM—KRAFT FACING AND SHALL BE 3" THICK WITH INSTALLED R-VALUE OF 8.0 MIN. DUCT WRAP SHALL MEET FLAME SPREAD RATINGS OF 25 AND SMOKE RATINGS 50 IN ACCORDANCE WITH UL 723 AND REQUIREMENTS OF N.F.P.A. 90A/90B FOR FIRE RESISTANCE. DUCT WRAP SHALL BE OWNES/CORNING ALL SERVICE WRAP OR CERTAINTEED ALL SERVICE WRAP.
- ALL DUCTWORK INSULATION SHALL CONFORM TO SMACNA AND ASHRAE
- 16. FURNISH AND INSTALL AS INDICATED ON DRAWINGS INTAKE LOUVER IN COLOR AS SELECTED BY ARCHITECT. UNITS SHALL BE CONSTRUCTED OF ALUMINUM W/ 45° ANGLE BLADES, 4" FIXED BLADES O.C., AND SHALL BE COMPLETE WITH BIRD SCREEN. LOUVER SHALL BE MANUFACTURED BY GREENHECK OR APPROVED EQUAL.



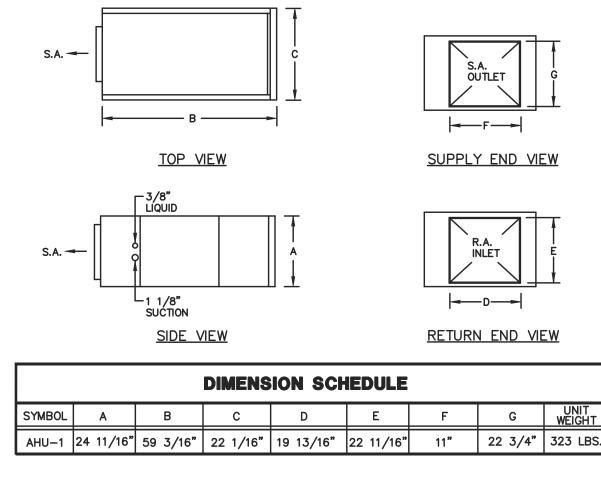
**TYPE** 

O.A. INTAKE LOUVER WITH **MOTORIZED DAMPER DETAIL** NO SCALE

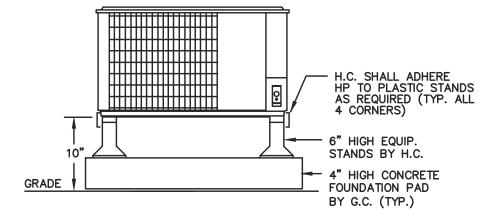
17. FURNISH AND INSTALL CEILING MOUNTED EXHAUST FAN. FAN SHALL BE OF CENTRIFUGAL DIRECT DRIVE TYPE. THE FAN HOUSING SHALL BE CONSTRUCTED OF STEEL AND SHALL INCLUDE A BACK DRAFT DAMPER. THE GRILLE SHALL BE CONSTRUCTED OF HIGH IMPACT POLYSTYRENE AND ATTACHED TO THE HOUSING WITH SCREWS. THE ACCESS FOR WIRING SHALL BE EXTERNAL . THE MOTOR DISCONNECT SHALL BE INTERNAL AND OF THE PLUG IN TYPE.

THE MOTOR SHALL BE MOUNTED IN VIBRATION ISOLATERS. THE FAN WHEEL SHALL BE OF THE FORWARD CURVED CENTRICUGAL TYPE, AND DYNAMICALLY BALANCED. ALL FANS SHALL BEAR THE AMCA CERTIFIED RATINGS SEAL FOR SOUND AND AIR PERFORMANCE AND SHALL BE U.L. LISTED AND C.S.A. APPROVED. CEILING MOUNTED FANS SHALL BE AS MANUFACTURED BY GREENHECK OR APPROVED EQUAL.

- 18. THIS CONTRACTOR SHALL PROTECT AT HOS OWN EXPENSE ALL OF THE WORK, MATERIALS, AND/OR EQUIPMENT THAT IS ABLE TO BE DAMAGED DURING THE CONSTRUCTION PERIOD. ALL OPENINGS INTO ANY DUCTS OR EQUIPMENT SHALL BE SECURELY CLOSED SO AS TO PREVENT ANY OBSTRUCTION GETTING INTO THE SYSTEMS OF EQUIPMENT.
- 19. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE THAT IS DUE TO HIS FAILURE TO PROPERLY PROTECT EQUIPMENT AND DUCT OPENINGS DURING CONSTRUCTION AND THE GUARANTEE PERIOD.
- 20. BEFORE THE PURCHASE OF THE ITEMS HEREINBEFORE MENTIONED. NOTIFY THE ENGINEER OF ANY MODIFICATIONS IN THE BUILDING ARRANGEMENT NECESSARY TO ACCOMMODATE THE PROPOSED EQUIPMENT. IF MODIFICATIONS CANNOT BE MADE THIS WILL BE REASON TO REJECT THE PROPOSED ITEMS.
- 21. ALL MAJOR EQUIPMENT SHALL BE LABELED WITH THE UNIT NAME AND
- 22. IT IS THE FULL RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO ENSURE THAT EQUIPMENT HE IS PROVIDING FULLY CONFORMS TO THIS SPECIFICATION. THE MECHANICAL CONTRACTOR SHALL INCUR AND SHALL BE FULLY RESPONDIBLE FOR ANY AND ALL COSTS ASSOCIATED WITH THE EQUIPMENT PROVIDED BY A SUBSTITUTE MANUFACTURER.
- 23. APPROVAL OF MATERIALS/SUBSTITUTIONS
- THE SPECIFICATIONS ARE GENERALLY OF THE PRODUCT TYPE, AND AS SUCT ARE WRITTEN AROUND THE PRODUCTS OF ONE MANUFACTURER. THE MANUFACTURER'S NAME AND MODEL INFORMATION ARE INCLUDED WITH THE PRODUCT DESCRIPTION.
- THE PRODUCT SPECIFIED LIST PRE-APPROVED MANUFACTURERS.

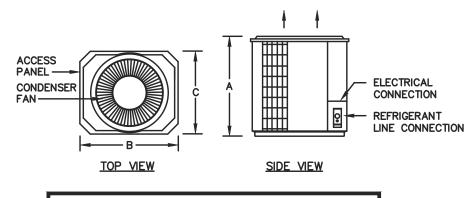


AIR HANDLING - ELECTRIC HEAT PUMP UNIT DETAIL



## TYPICAL MOUNTING DETAIL PAD MOUNTED HP CONDENSING UNIT

NO SCALE



D	IMENSI	ON SC	HEDULE	
SYMBOL	Α	В	С	UNIT WEIGHT
CU-1	40 5/8"	35"	35"	323 LBS

TYPICAL CONDENSING UNIT DETAIL

AIR HANDLING - ELECTRIC HEAT PUMP UNIT SCHEDULE (ARI STANDARDS)												
SYMBOL	MFG.	MODEL NO.	NOMINAL TONS	CFM <b>©</b> 6" B.P.	MAX. O.A.	COOLING MBH	FAN HP	AUX HEAT K.W.	VOLTAGE	SINGLE POINT LOAD AMPS	MOUNTING	
AHU-1	CARRIER	FE4ANB006T00	5	2000	2000	60.0	3/4	20.0	240V-1ø	84.0	HORIZONTAL	

			CONE	ENSI	NG I	JNIT S	SCHI	EDULI	E (ARIS	STANDARDS)		
SYMBOL	MFG.	MODEL NO.	NOMINAL TONS		OD LIQUID	OD SUCTION	SEER	COMP. FLA	FAN FLA	VOLTAGE	M.C.A.	AL DATA M.O.P.
CU-1	CARRIER	25HNB560A-30	5		3/8	1 1/8	15.0	26.4	1.2	240V-1ø	34.2	50

DIMENSION SCHEDULE												
SYMBOL	Α	В	С	D	E	F						
AHU-1/HP-1	11 5/8"	37"	10 5/8"	11 7/16"	24 7/16"	31 1/8"						

INDOOR WALL MOUNTED AIR HANDLING UNIT

<u>TYPE</u>

I = INTAKE

# MINI-SPLIT SYSTEM HEAT PUMP UNIT DETAIL

HP	MINI-SPLIT SYSTEM HEAT PUMP (ARI CAPACITIES)												
				COOLING CAPACITY			HEATING	CAPACITY	ELECTF	RICAL CHAF	RACTERISTICS	UNIT	
SYMBOL	TYPE	MFG.	MODEL	TOTAL	CEED	AIR	TOTAL	H.F.S.P.	POWER SUPPLY		VOLTAGE	WEIGHT	REMARKS
				MBH	S.E.E.R.	ON COND.	MBH	п.г.з.г.	MCA	MOP	VOLTAGE		
HP-2	S	FUJITSU	AOU9RLS3H	9.0	33	95° F	12.0 14.0		10.0	15	240V-1PH	86 LBS.	12

- UNIT SHALL BE FURNISHED AND INSTALLED WITH THE FOLLOWING ACCESSORIES: BASE PAN HEATER, R-410A REFRIGERANT, LOW AMBIENT CONTROLLER (HARD START KIT), ANTI-SHORT CYCLE TIMER, HIGH AND LOW PRESSURE CONTROL.
- (2) CONTRACTOR SHALL FURNISH AND INSTALL (4)-6" HIGH SUPPORT LEGS AS REQUIRED FOR MOUNTING ON NEW CONCRETE PAD.

ÁHÚ			MINI-S	PLIT S	SYSTE	M HE	AT P	UMP A	IR HAN	IDLING	UNIT	SCHE	DUL	E (ARI CAP	ACITIES)	
SYMBOL	TYPE	MFG.	MODEL	TOTAL C.F.M.	O./A. C.F.M.		FAN SPEEDS	TOTAL	S.E.E.R.	HEATING COI TOTAL MBH	L CAPACITY H.F.S.P.		UNIT M.O.P.	RACTERISTICS VOLTAGE	TOTAL WEIGHT	REMARKS
AHU-2	W	FUJITSU	ASU9RLS3	489	N/A	.20"	4	9.0	33	12.0	14.0	N/A	N/A	240V-1PH	31 LBS.	12345

OUTDOOR CONDENSING UNIT

(1) UNIT SHALL BE FURNISHED AND INSTALLED WITH FILTER AND LOW

3 UNIT SHALL BE FURNISHED AND INSTALLED WITH FACTORY

INSTALLATION INSTRUCTIONS.

INSULATED REFRIGERANT LINE SET, SIZED PER MANUFACTURERS

- AMBIENT CONTROL.
- PROGRAMMABLE THERMOSTAT (2) AIR HANDLING UNIT SHALL BE VERTICAL WALL MOUNT CONFIGURATION.
  - (5) UNIT SHALL BE FURNISHED AND INSTALLED WITH MINI CONDENSATE PUMP KIT. (BLUE DIAMOND PUMPS INC. MODEL MINI BLUE) 2.1 GPH, 23 FT/HD., 16.5 FT. SUCTION LIFT.

4) UNIT SHALL BE FURNISHED AND INSTALLED WITH WIRELESS WALL MOUNTED 7-DAY

W = WALL MOUNTED UNIT

S = SINGLE ZONE

RAP RAP LE NAME 2029H2 DWG. NO.

REV. DATE

RAWN

E S

**∀**□

| | | |

₹0

Ĭ

 $\overline{\mathbf{m}}$ 

AS NOTED

CHECKED

06/10/20

	PLUMBING FIXTURE SCHEDULE												
I.D.	DESCRIPTION	H.W.	C.W.	W.	V.	SPECIFICATIONS							
P-1A	WATER CLOSET-FLOOR MTD.	_	1/2"	4"	2"	MANSFIELD NO. 384-387 FLOOR MOUNTED TANK TYPE TOILET, (1.28 GPF), W/BEMIS NO. 1955 OPEN FRONT SOLID PLASTIC SEAT W/NO LID, SUPPLY, STOP, ETC.							
P-3A	LAVATORY-WALL HUNG	1/2"	1/2"	1 1/2"	1 1/2"	MANSFIELD NO. 2018HBNS WALL HUNG LAVATORY W/CHICAGO NO. 802-1000ABCP FAUCET LEVER HANDLES, J.R. SMITH CONCEALED ARM CARRIER, OFF-SET P-TRAP, GRID DRAIN, SUPPLIES, & STOPS. PROVIDE LAWLER NO. TMM-1070 TEMPERING VALVE ON H.W. SUPPLY TO REDUCE TEMP. TO 110° F.							
P-4	UTILITY SINK	1/2"	1/2"	2"	2"	E.L. MUSTEE NO. 16 WALL MOUNTED UTILITY SINK W/CHICAGO NO. 540-LD897SWXFABCP WALL MOUNTED FAUCET, GRID DRAIN, SUPPLIES, P-TRAP, ETC.							
P-7	HAND SINK	1/2"	1/2"	1 1/2"	1 1/2"	ELKAY NO. DLR192210 STAINLESS STEEL, SINGLE BOWL SINK W/CHICAGO NO. 1100—GN2AE35XKABCP FAUCET, BASKET DRAIN, P—TRAP, SUPPLIES, STOPS, ETC.							
P-10	TRENCH DRAIN	-	-	3"	-	ZURN NO. Z-886-DGE-USA HDPE, 12" WIDE, PRE-SLOPED TRENCH DRAIN W/GALVANIZED STEEL FRAME, HEAVY DUTY DUCTILE GRATE, CLASS E, H-20 RATING, P-TRAP W/SURESEAL TRAP PROTECTOR INSERT. CONCRETE ENCASEMENT SHALL BE BY G.C.							
P-13	WALL FAUCET	1/2"	1/2"	-	-	WOODFORD NO. C22 FREEZELESS HOT AND COLD WALL FAUCET.							
P-20	WATER HEATER-PROPANE	3/4"	3/4"	_	-	NAVIEN NO. NPE-240S TANKLESS, PROPANE WATER HEATER MOUNT W/5.7 GPM FLOW RATE AT 67° F RISE, 199 CFH GAS INPUT. DRAIN RELIEF VALVE TO SPILL TO MOP SINK. RUN (2) 3" CPVC FLUES THRU EXTERIOR WALL AS NOTED ON THIS DWG. PROVIDE ALL NECESSARY HARDWARE FOR MOUNTING OF UNIT TO WALL SURFACE.							
	S: ( )) INDICATES THE ONLY ALTERNATION COVERS SYMBOL INDICATES FIXTURE TO	FOR TRA	APS AND	SUPPLIES	SHALL E	BE TRUEBRO, INC.							

INSTALLATION NOTES:

1. CLEARANCE FROM COMBUSTIBLES: TOP OF HEATER: 6" FRONT OF HEATER: 24" SIDES OF HEATER: 2" BOTTOM OF HEATER: 12" 2. CLEARANCE FROM NON-COMBUSTIBLES: TOP OF HEATER: 2" FRONT OF HEATER: 24" SIDES OF HEATER: 1/2" BOTTOM OF HEATER: 12" 3. 120 V- 1 PH POWER TO BE PROVIDED BY E.C. FOR CONTROLS TO EACH WATER HEATER. 4. AIR INTAKE AND FLUE DUCTS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. 5. P.C. SHALL BE RESPONSIBLE TO PROVIDE ALL REQUIRED MOUNTING HARDWARE FOR WATER HEATERS TO INSTALL ON WALL. 6. ALL PIPES SHALL BE SECURED TIGHT AGAINST THE WALL. COORDINATE FINAL LOCATIONS OF WATER HEATERS W/ALL NEARBY WALL, AND FLOOR SURFACES, ETC. PRIOR TO CONSTRUCTION. THERMOMETER, (TYP.) DIRT LEG (TYP.) -PRESSURE GAGE, (TYP.)— FINISHED FLOOR. AMTROL ST-5 EXPANSION TANK.—

P-20 WATER HEATER INSTALLATION DETAIL

#### SYMBOLS & ABBREVIATIONS PLUMBING SPECIFICATIONS

BE FULL PORT TYPE.

——S—— SANITARY SEWER

—— C —— CONDENSATE

----- COLD WATER

— - - — HOT WATER

O— RISE

C- DROP

ELBOW

BALL VALVE

\_\_\_\_\_ CLEANOUT

———— CHECK VALVE

SHOCK ABSORBER

FLOOR DRAIN

BUILDING

FXISTING

INVFRT

CLEAN OUT

GAS SHUT-OFF VALVE

ABOVE FINISHED FLOOR

CLEAN OUT TO GRADE.

EXISTING TO REMAIN

GENERAL CONTRACTOR

HOT & COLD WATER

HEATING CONTRACTOR

LIQUIFIED PETROLEUM

ROOF TOP UNIT

SANITARY

WASTE

THE ABOVE SYMBOLS AND ABBREVIATIONS ARE

A GENERAL LIST. SOME OF THE ITEMS ABOVE

SAFE WASTE

SOIL & WASTE VENT RISER

VENT-THRU-ROOF

WATER COLUMN

PLUMBING CONTRACTOR

FLOOR CLEAN OUT

GAS REGULATOR ASSEMBLY

A.F.F.

BLDG.

C.O.

C.O.G. EXIST.

E.T.R.

G.C.

INV.

L.P.

P.C.

R.T.U.

SAN.

SW

S. & W.

MAY NOT BE APPLICABLE.

V.T.R.

F.C.O.

H. & C.W.

---- VENTING

- 1. ALL PLUMBING WORK SHOULD BE IN ACCORDANCE TO THE 2015 EDITION OF THE INT'L. BUILDING CODE, INT'L. PLUMBING CODE, AND THE LOCAL AUTHORITIES HAVING JURISDICTION.
- 2. P.C. SHALL FIELD VERIFY ALL EXIST. CONDITIONS PRIOR TO BID.
- 3. ALL ABOVE FLOOR WATER PIPING SHALL BE INSULATED WITH ARMSTRONG AP ARMAFLEX INSULATION. COLD WATER PIPING INSULATION SHALL BE MIN. 1/2" THICK. HOT WATER PIPING INSULATION SHALL BE MIN. 1" THICK.
- 4. ALL WORK SHALL BE GUARANTEED TO BE FREE OF DEFECTIVE WORK, MATERIALS, OR PARTS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER. REPAIR, REVISE OR REPLACE AT NO COST TO THE OWNER, ANY SUCH DEFECTS OCCURRING WITHIN THE GUARANTEE PERIOD.
- 5. PIPES AND FITTINGS SPECIFICATIONS:
  DOMESTIC WATER PIPING: COPPER TUBING TYPE "L" WITH COPPER PRESSURE
  FITTINGS JOINED WITH LEAD-FREE SOLDER OR PEX. PRESS-FIT FITTINGS ARE
  APPROVED AS A SUBSTITUTE FOR SOLDER FITTINGS. ALL BALL VALVES SHALL

SANITARY SEWER AND VENT PIPING: PVC SCHEDULE 40 W/ SOLVENT WELD

CONDENSATE PIPING: PVC SCHEDULE 40 W/ SOLVENT WELD FITTINGS.

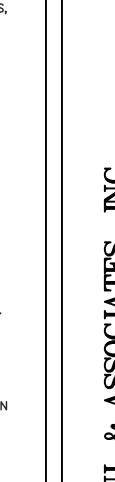
PROPANE PIPING: (ABOVE GROUND) SCH. 40 ASTM A53 BLACK STEEL W/MALLEABLE FITTINGS 2 1/2" AND BELOW AND BUTT WELD FORGED FITTINGS FOR 3" AND UP. INSTALLATION SHALL COMPLY WITH NFPA 54 AND UTILITY REQUIREMENTS. PROVIDE ELECTRICAL GROUNDING OF GAS PIPING PER NFPA

- 6. SLOPE SANITARY SEWER PIPING AT MIN. 1/8" PER FOOT IN DIRECTION OF FLOW.
- 7. PROVIDE DRAINS, OVERFLOWS, STRAINERS, P-TRAPS, STOPS & SUPPLIES, ETC. AS REQUIRED. KOHLER, CHICAGO, BRASS CRAFT, OR MCGUIRE ARE ACCEPTABLE MANUFACTURERS FOR THESE ITEMS.
- 8. PROVIDE HANDICAPPED FIXTURE INSTALLATION WITH ALL ADA CODE RECOM—
  MENDATIONS & REQUIREMENTS INCLUDING MOUNTING HEIGHTS & PIPE INSULATION
  COVERINGS. PIPE INSULATION COVERS SHALL BE 'LAV—GUARD' HANDICAP
  COVERS BY TRUEBRO, INC. NO SUBSTITUTIONS.
- PROVIDE WATER STOP VALVES IN AN ACCESSIBLE LOCATION FOR EVERY PLUMBING FIXTURE.
- 10. TEST ALL PLUMBING PIPING FOR LEAKS IN ACCORDANCE WITH THE REGULATIONS OF THE LOCAL AUTHORITY PRIOR TO CONSTRUCTION COMPLETION. AT COMPLETION OF PLUMBING WORK, BUT BEFORE THE FINAL INSPECTION IS MADE, THOROUGHLY CLEAN ALL PLUMBING FIXTURES, EQUIPMENT, ESCUTCHEONS, ETC. TO BE FREE FROM ALL MARKS, SCRATCHES, STAINS, ETC. REPLACE ANY DAMAGED OR MARRED ITEMS AT NO COST TO THE OWNER.
- A. INSTALLATION OF ABOVE GROUND PROPANE (L.P. GAS) STORAGE VESSEL SHALL BE PER THE REQUIREMENTS OF NFPA—58, THE LOCAL CODE, AND AUTHORITIES HAVING JURISDICTION.
- B. THE PROPANE STORAGE VESSEL SHALL BE A.S.M.E. RATED CONSTRUCTION, AND INSTALLED ON A 4" THICK CONCRETE PAD, SPANNING THE ENTIRE LENGTH AND WIDTH OF THE VESSEL. THE FEET OF THE VESSEL SHALL REST ON CONCRETE BLOCKS, AND FIRMLY SECURED TO THE BLOCKS WITH SCREWS AND BOLTS TO PREVENT TIPPING.
- C. THE CONCRETE PAD AND VESSEL SHALL BE LEVEL WHEN INSTALLED.
- D. THE STORAGE VESSEL SHALL INCLUDE ALL OF THE FOLLOWING FACTORY
- EQUIPPED OPTIONS:

  (1) HINGED, ACCESS DOME COVER
- (1) FILL VALVE
  (1) LIQUID WITHDRAWAL FITTING (THREADED SCREW TYPE) WITH CHECK-LOC
- (1) VAPOR SERVICE VALVE WITH FIXED LIQUID LEVEL TUBE
  (1) PRESSURE RELIEF VALVE
- (1) PRESSURE REGULATOR
  (1) MAIN SHUT-OFF VALVE

# PLAN NOTES

- 1) PIPING RUN BELOW FLOOR.
- 2 PIPING RUN EXPOSED AT CEILING.
- 3 1 1/2" W. & V.
- 4 2" W. & V.
- 5 2" V.R.
- (6) 3" V.T.R.
- 7 3/4" C.W. RISER ALONG WALL TO RUN AT CEILING.
- (8) PROVIDE 2" CAST IRON PIPE SLEEVE THRU WALL AND FIRE RATED CAULKING AROUND PIPING.
- 9 PROPANE TANK BY OTHERS. P.C. SHALL PROVIDE 3/4" SHUT-OFF REGULATOR, AND CONNECTION TO TANK. RUN AT 7" W.C. PRESSURE.
- P-20 GAS FIRED INSTANTANEOUS WATER HEATER MOUNTED ON WALL. REFER TO DETAIL ON THIS DWG. FOR ADDITIONAL INFO.
- 4" SAN. SEWER RUN MIN. 36" BELOW FINISHED GRADE. REFER TO SITE DWG. FOR CONTINUATION.
- SITE DWG. FOR CONTINUATION.
- (12) 3/4" C.W. RUN MIN. 36" BELOW FINISHED GRADE. REFER TO SITE PLAN FOR CONTINUATION.
- (13) 3/4" CONDENSATE DROP ALONG WALL AND SPILL TO GRADE.
- (14) 3/4" CONDENSATE THRU WALL AND SPILL TO GRADE.
- (15) DUCTLESS WALL MOUNTED HVAC UNIT BY H.C.
- (16) HORIZONTAL UNIT MOUNTED ON PLATFORM BY H.C.
- EXTEND AND CONNECT 3" PVC EXHAUST AND AIR INTAKE FROM WATER HEATER TO IPEX NO. 196-985 LOW PROFILE TERMINATION KIT FLUSH WITH EXTERIOR WALL.





UNI AIN VINEYAR
ION WAREHOUS

SOC HARI

AS NOTED

OBJECT

AS NOTED

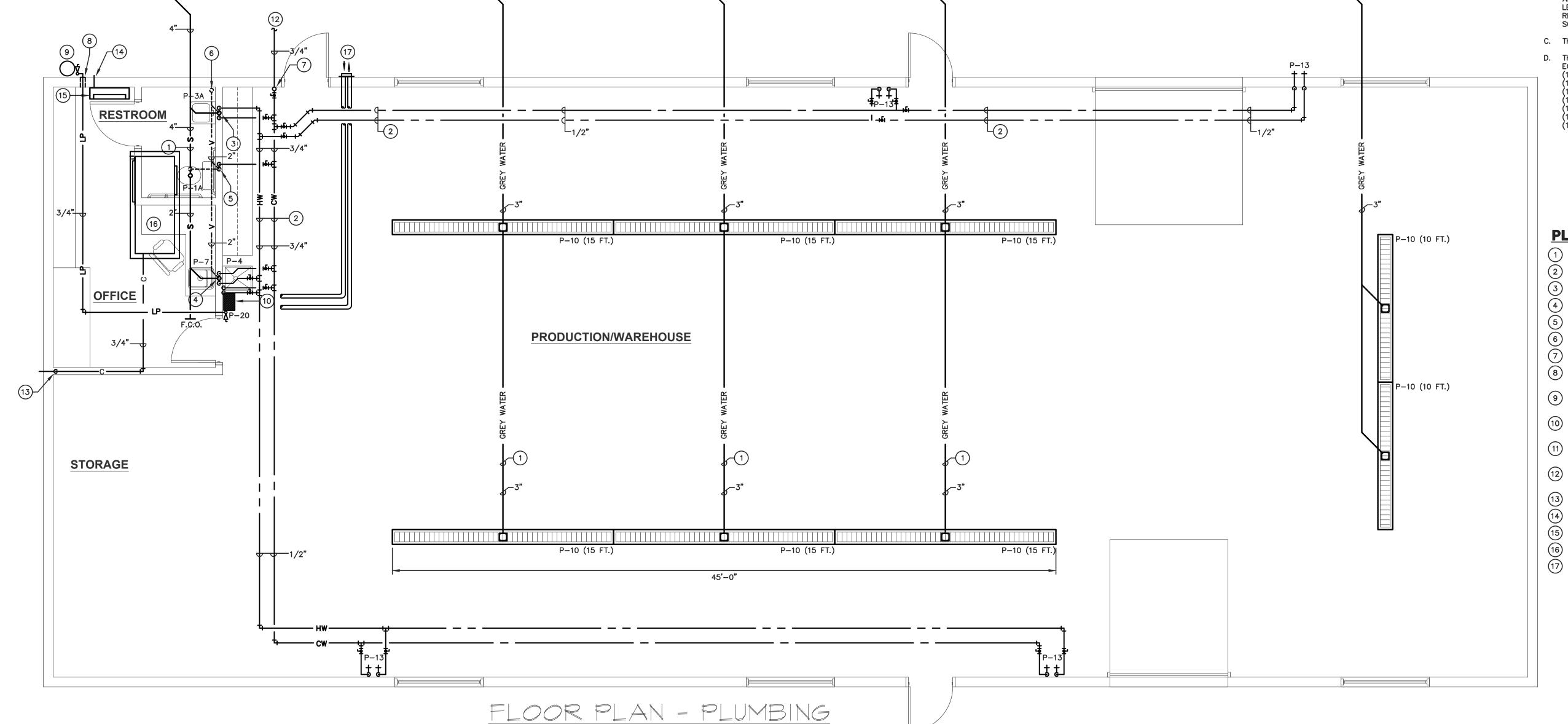
OBJECT

OB

RAWN CHECKED
JES RAP
LE NAME:

DWG. NO.

2029P1

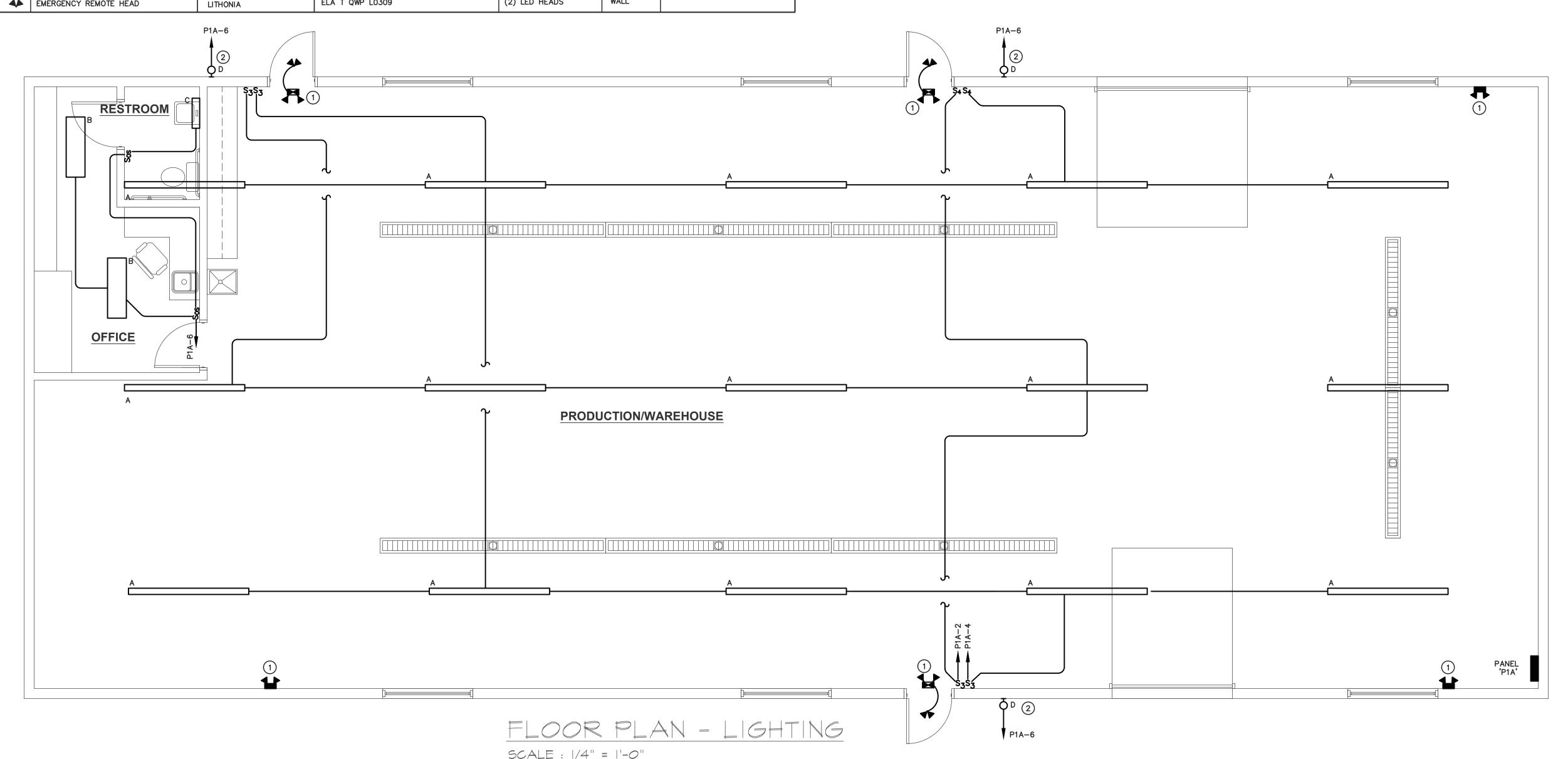


SCALE : 1/4" = 1'-0"

LIGHT FIXTURE SCHEDULE												
I.D.	DESCRIPTION	MANUF.	CAT. NO.	LAMPS	MTG.	REMARKS						
Α	ENCLOSED & GASKETED LED	LITHONIA	FEM8 LED 8 6L 35 IMACD 120	6000 LUMES LED	SURFACE							
В	SURFACE WRAPAROUND LED	LITHONIA	LPL4 LP840 4' 4000LUMENS 4000K 120	4000 LUMES LED	SURFACE							
С	ARCHER LED WALL LIGHT	HEALTHCARE-LIGHTING	HPW336 120 LED35 OU2DMT FLAT WHITE	LED	WALL							
D	WALL MOUNTED LED	LITHONIA	TWS LED 1 50K 120 PE	1017 LUMES LED	WALL							
4	EXIT SIGN/BATTERY UNIT/EMERG. LIGHT	LITHONIA	LHQM LED R HO	LED	WALL							
1	BATTERY UNIT/EMERGENCY LIGHT	LITHONIA	ELM2L-SD-DL	(2) LED LAMPS	WALL							
44	EMERGENCY REMOTE HEAD	LITHONIA	FLA T QWP L0309	(2) LED HEADS	WALL							

### PLAN NOTES:

- 1) CONNECT TO LOCAL LIGHTING CIRCUIT AHEAD OF SWITCHING.
- 2 EXTERIOR LIGHTS TO BE CONNECTED THRU TIME CLOCK AND PHOTO-ELECTRIC CELL.



## **ELECTRICAL SPECIFICATIONS**

### BASIC ELECTRICAL MATERIALS AND METHODS

- 1.) COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS OF PUBLIC BODIES BEARING ON THE CONDUCT OF THE WORK, INCLUDING BUT NOT LIMITED TO INTERNATIONAL BUILDING CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION, THE AMERICANS WITH DISABILITIES ACT, AND THE OWNERS INSURING
- 2.) COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, INCLUDING AMENDMENTS.
- 3.) IN GENERAL, CIRCUITING SHALL BE AS SHOWN ON THE DRAWINGS. DETERMINE EXACT LOCATIONS OF CONDUIT, BOXES AND WIRING DEVICES IN THE FIELD AND COORDINATE WITH THE OTHER TRADES.

#### PANELBOARDS

1.) EVENLY BALANCE LOADS ON ALL PANELBOARDS AND PROVIDE TYPED CIRCUIT DIRECTORIES FOR NEW PANELS.

#### RACEWAY SYSTEMS

<u>WIRING</u>

- 1.) CONDUIT: (1/2") INCH TRADE SIZE MINIMUM.
  - ELECTRICAL METALLIC TUBING (EMT): DRY INTERIOR LOCATIONS ONLY, AND ABOVE FINISHED FLOOR.
  - INTERMEDIATE METAL CONDUIT (IMC): OUTDOOR LOCATIONS.
  - FLEXIBLE METALLIC CONDUIT: CONCEALED LOCATIONS, CONNECTION TO MOTORS, TRANSFORMERS, AND RECESSED LIGHTING FIXTURES, AND TO "FISH" EXISTING WALLS.

    NON-METALLIC CONDUIT (PVC) IN EXPOSED LOCATIONS IN WINERY PROCESSING AREA SUBJECT TO WASH-DOWN.
- 2.) SECURE EXPOSED RACEWAYS TO BUILDING STRUCTURES WITH ANCHOR BOLTS. BOLTS SHALL BE SPACED ON 3-FOOT CENTERS (MAXIMUM).
- 3.) USE SCREW TYPE FITTINGS FOR EMT AND THREADED TYPE FOR IMC. USE GALVANIZED LOCKNUTS AND BUSHINGS AT BOXES. CHEMICALLY WELD PVC CONDUITS.
- 4.) SQUARE BOXES AND SECURE IN POSITION. SUPPORT BOXES INDEPENDENTLY OF CONDUITS. OUTLET BOXES SHALL BE SHEET STEEL, ZINC COATED AND BE OF A CLASS TO SATISFY THE CONDITIONS FOR EACH OUTLET. ALL OUTLET AND DEVICE BOXES INSTALLED IN EXPOSED CONDUIT SHALL BE CAST ALUMINUM FD BOXES.
  - WIRE AND INSULATION APPLICATIONS
    FEEDERS: TYPE THHN/THWN, IN RACEWAY.
    BRANCH CIRCUITS: TYPE THHN/THWN, IN RACEWAY.
    CLASS 1 CONTROL CIRCUITS: TYPE THHN/THWN, IN RACEWAY.
    CLASS 2 CONTROL CIRCUITS: POWER-LIMITED CABLE, CONCEALED IN BUILDING FINISHES.

- CONDUCTORS SHALL BE COPPER. NO. 12 MINIMUM, EXCEPT FOR CONTROL WIRING WHICH SHALL NOT BE SMALLER THAN NO. 14.
- 3.) COLOR-CODE 240/120V SYSTEM SECONDARY SERVICE, FEEDER, AND BRANCH-CIRCUIT CONDUCTORS THROUGHOUT THE ELECTRICAL SYSTEM AS FOLLOWS: PHASE A: BLACK, PHASE B: RED, NEUTRAL: WHITE, GROUND: GREEN.

#### MOUNTING HEIGHTS

LOCAL SWITCHES: 42" A.F.F. RECEPTACLES: 24" A.F.F. UNLESS OTHERWISE NOTED.

#### WIRING DEVICES

SAFETY SWITCHES :

- MANUFACTURED BY HUBBELL, LEVITON OR PASS & SEYMOUR. COLOR: GENERAL PURPOSE BY ARCHITECT.
- 2.) SNAP SWITCHES: HEAVY-DUTY GRADE, QUIET TYPE. 20 A, 120/277-V AC. COLOR: GENERAL PURPOSE BY ARCHITECT.
- DEVICE PLATES: SMOOTH, HIGH-IMPACT THERMOPLASTIC. COLOR: AS SELECTED BY ARCHITECT.
- .) STANDARD DUTY, FUSED TO EQUIPMENT MANUFACTURER'S REQUIREMENTS, NEMA 3R ENCLOSURE, UNLESS OTHERWISE INDICATED. SAFETY SWITCHES SHALL BE SQUARE D, GENERAL ELECTRIC, SIEMANS OR CUTLER—HAMMER.

## IDENTIFICATION AND TAGS.

- 1.) PROVIDE A CORRECTED, TYPED DIRECTORY IN PANELBOARDS, INDICATING THE NEW ITEM OR ITEMS CONTROLLED BY EACH CIRCUIT.
- 2.) IDENTIFY CIRCUITS WITH IN OUTLET BOXES.

#### GROUNDING

- 1.) GROUNDING SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE NATIONAL ELECTRICAL CODE.
- 2.) MAKE CONNECTIONS TO APPARATUS AND CONDUITS WITH AN APPROVED TYPE OF SOLDERLESS CONNECTOR. BOLT OR CLAMP CONNECTORS TO THE EQUIPMENT. CLEAN ALL CONTACT SURFACES BEFORE CONNECTIONS ARE MADE.

#### <u>LIGHTING</u>

- FURNISH AND INSTALL ALL LAMPS, BOXES, SUPPORTS, SUSPENSION SYSTEM, ETC. REQUIRED FOR THE COMPLETE INSTALLATION OF ALL LIGHTING FIXTURES PROVIDED AND INSTALLED UNDER THIS PROJECT, WHETHER OR NOT INDICATED IN THE FIXTURE
- EVERY LIGHTING OUTLET SHALL HAVE A LIGHTING FIXTURE UNLESS OTHERWISE DIRECTED. WHERE A SPECIFIC TYPE OF FIXTURE HAS NOT BEEN ASSIGNED TO AN OUTLET, PROVIDE A COMPLETE FIXTURE OF THE TYPE AND WATTAGE DESIGNATED FOR OUTLETS OF SIMILAR FUNCTION AND/OR AS DIRECTED BY THE ARCHITECT.



EER ING

NDY PAUL & ASSOCIATES
HANICAL & ELECTRICAL ENGINEE
PETER'S MOUNTAIN ROAD
FAX, PENNSYLVANIA 17032



NTAIN VINEYARDS ON WAREHOUSE

BROAD MOUNT PRODUCTION

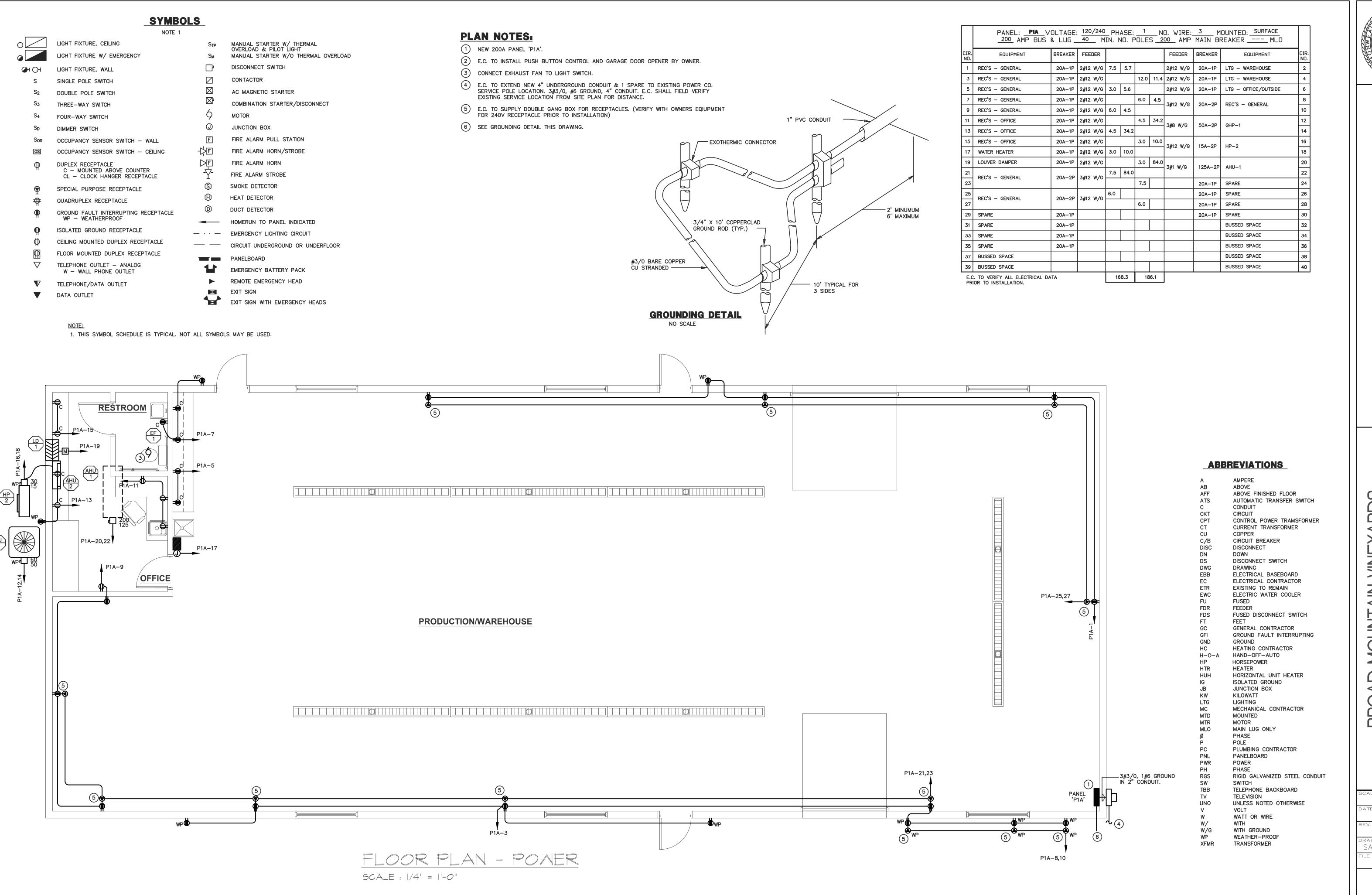
AS NOTED

RAWN CHECKED RAP

06/10/20

LE NAME: 2029E1 DWG. NO.

**E-1** 





AS NOTED 06/10/20

CHECKED RAP SAP LE NAME: 2029E2

DWG. NO.