

"IT" REQUIREMENTS

THERE ARE A TOTAL OF 12 LINES THAT SERVICE EACH STORE FOR PHONE AND DATA. INTERNET SERVICE VIA LOCAL CABLE SERVICE WILL BE INSTALLED POST OPENING. ALL LINES TERMINATE AT "D-MARC" BOARD IN UTILITY AREA.

PROVIDE ALL POWER AND LOW VOLTAGE CONDUITS, PER CODE, AND THIS INCLUDES OPTIONAL STATE INSPECTIONS EQUIPMENT.

CLEAR ACCESS WILL BE MAINTAINED IN ORDER FOR BSRO "IT" DEPARTMENT TO INSTALL ALL NECESSARY WIRING. BSRO "IT" DEPARTMENT WILL INSTALL ALL WIRING AND EQUIPMENT UNLESS OTHERWISE NOTED.

"POD" REQUIREMENTS IN CUSTOMER SALES AREA: PROVIDE ONE (1) QUAD RECEPTACLE WHICH SHOULD TERMINATE IN A JUNCTION BOX MOUNTED ON THE BACK SIDE OF THE PANEL, APPROXIMATELY 20 INCHES ABOVE THE BOTTOM OF CABINET AND BELOW THE LOWEST FIXED SHELF.

CONDUIT

UTILITY ROOM AND EXTERIOR SITE CONDUIT: PROVIDE SUFFICIENT LENGTH OF 2" CONDUIT AND EXTEND THE 2" CONDUIT FROM THE EXTERIOR TO THE "D-MARC" LOCATION ON THE UTILITY ROOM BOARD. SEE NOTE 15.

"IT" CLOSET AND UTILITY ROOM: PROVIDE 2" EMT CONDUIT FROM IT CLOSET BACKBOARD TO TELEPHONE "D-MARC" LOCATED ON THE UTILITY ROOM BOARD. START CONDUIT IN IT CLOSET AT 7'-6" AFF. MOUNT CONDUIT ON RIGHT SIDE OF IT CLOSET PLYWOOD. PROVIDE GROMMET ON BOTH ENDS OF CONDUIT. THIS CONDUIT IS USED TO SERVE WIRES RUN FROM THE "D-MARC" TO THE "IT" CLOSET BOARD. PROVIDE ADDITIONAL 2" PVC CONDUIT ON RIGHT SIDE OF IT CLOSET PLYWOOD FOR WIRING ORGANIZATION.

"IT" CLOSET: PROVIDE ONE (1) 2" CONDUITS AT CORNER OF ROOM OPPOSITE PLYWOOD WALL. CONDUIT SHALL BE MOUNTED AT BOTTOM OF JOIST, AND AS CLOSE TO POSSIBLE OF JOIST. CONDUIT IS USED TO SERVE WIRES RUN FROM THE "CUSTOMER SALES" AREA "PODS" AND THE "MVS" DESK IN THE "SERVICE AREA". PROVIDE ROUND GROMMET IN THE WALL WHERE THE DATA CABLING FROM THE IT CLOSET PASSES THROUGH FULL HEIGHT PARTITION WALLS.

"MVS" POWER POLE: PROVIDE SUFFICIENT LENGTH OF 2" CONDUIT MOUNTED AT STRUCTURE FROM THE "SERVICE AREA" TO A POINT WITHIN 1' OF THE TOP OF THE POWER POLE SERVICING THE "MVS" DESK AND THROUGH THE WALL SEPARATING THE "SERVICE AREA" AND THE "CUSTOMER SALES" AREA. CONTINUE WITH SUFFICIENT LENGTH TO CONNECT TO THE "IT" CLOSET BOARD. INSULATED BUSHING AT EACH END. THIS CONDUIT IS USED TO SERVE WIRES RUN FROM THE "MVS" DESK TO THE "IT" CLOSET BOARD AS DESCRIBED ABOVE.

SERVICE PHONE: PROVIDE SUFFICIENT LENGTH OF 1" CONDUIT UP AT STRUCTURE IN THE "SERVICE AREA" FROM A JUNCTION BOX WITHIN 1' OF THE TOP OF THE POWER POLE SERVICING THE "MVS" DESK. THIS CONDUIT IS USED TO SERVE WIRE RUN FROM "IT" CLOSET THROUGH THE ABOVE 2" CONDUIT TO THE PHONE IDENTIFIED IN NOTE 26. THE JUNCTION BOX AT THE STRUCTURE IS FOR MOUNTING HORN/SPEAKER.

"HUB" REQUIREMENTS: POWER AND CONDUIT REQUIREMENTS ARE INDICATED ON THE FLOOR PLAN. PROVIDE A 1 INCH GAP BETWEEN WALL AND CABINET. DO NOT CUT OUT FACES OF CABINETS.

POWER

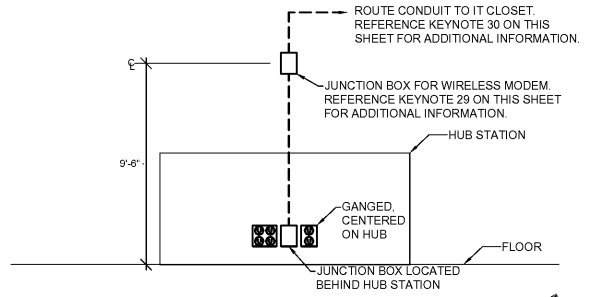
"SERVER RACK" REQUIREMENTS IN "IT" CLOSET OF "MANAGER OFFICE": PROVIDE TWO (2) QUAD RECEPTACLES AS SHOWN, ONE (1) AT 78" AFF WITHIN 6" OF SLIDING DOOR WALL AND THE OTHER AT 24" AFF AT 36" DISTANCE FROM THE "IT" CLOSET BOARD.

"MVS" STATION REQUIREMENTS IN SERVICE AREA: PROVIDE TWO (2) QUAD RECEPTACLES, USING A 15'-0" LONG POWER POLE. THE POWER POLE SHOULD COMMENCE FROM INSIDE THE "MVS" DESK AND EXTEND VERTICALLY TO 6 INCHES BELOW THE "SERVICE AREA" CEILING SO THAT THE TOP OF THE POWER POLE IS OPEN TO ACCEPT THE POWER CABLE AND PHONE/DATA WIRES FOR THE "MVS" DESK. SUPPORT THE POWER POLE AT THE TOP TO THE STRUCTURE WITH ONE FOOT LONG MISCELLANEOUS ANGLE. CONTRACTOR TO INSTALL AT EACH END OF THE CABINET ONE (1) QUAD RECEPTACLE. THE POWER SHOULD TERMINATE IN A JUNCTION BOX MOUNTED ON THE BACK SIDE OF THE CABINET IN THE BOTTOM RIGHT AND LEFT CORNERS AS YOU FACE THE CABINET.

ELECTRICAL SHOP EQUIPMENT SCHEDULE

ITEM #	QUANTITY	DESCRIPTION	VOLTS	PHASE	POLE	AMPS	REMARKS
2	9	OVERHEAD CORD REEL LIGHTS	120	1	1	20	SEE "LIGHTING PLAN KEYED NOTES" #8 ON SHEET E1 AND "LIGHTING FIXTURE SCHEDULE" ON SHEET E3
9	1	AIR DRYER	120	1	1	20	SEE "POWER PLAN KEYED NOTES" #7 ON THIS SHEET
10	1	BRAKE SHOP (INSTALLED BY HUNTER)	120	1	1	20	
13A	1	ELECTRONIC WHEEL BALANCER GSP9700 (INSTALLED BY HUNTER)	208	1	2	20	SEE "POWER PLAN KEYED NOTES" #2 ON THIS SHEET
13B	1	ELECTRONIC WHEEL BALANCER GSP9200 (INSTALLED BY HUNTER)	208	1	2	20	SEE "POWER PLAN KEYED NOTES" #12 ON THIS SHEET
17	3	HEAVY DUTY CORD REEL	120	1	1	20	SEE "POWER PLAN KEYED NOTES" #1 ON THIS SHEET
18B	1	RIM CLAMP TIRE CHANGER HUNTER AUTO #TR1 (INSTALLED BY HUNTER)	208	1	2	30	SEE "POWER PLAN KEYED NOTES" #20 ON THIS SHEET
28	2	5 HP AIR COMPRESSOR	208	3	3	30	SEE "POWER PLAN KEYED NOTES" #7 ON THIS SHEET
42	8	SHOP FAN	120	1	1	20	SEE "POWER PLAN KEYED NOTES" #17 ON THIS SHEET

NOTES:
VERIFY ALL ELECTRICAL REQUIREMENTS AND NEMA CONFIGURATIONS TO ACTUAL EQUIPMENT SUPPLIED PRIOR TO ROUGH-IN.



2 HUB STATION DETAIL
SCALE: 1/8" = 1'-0"

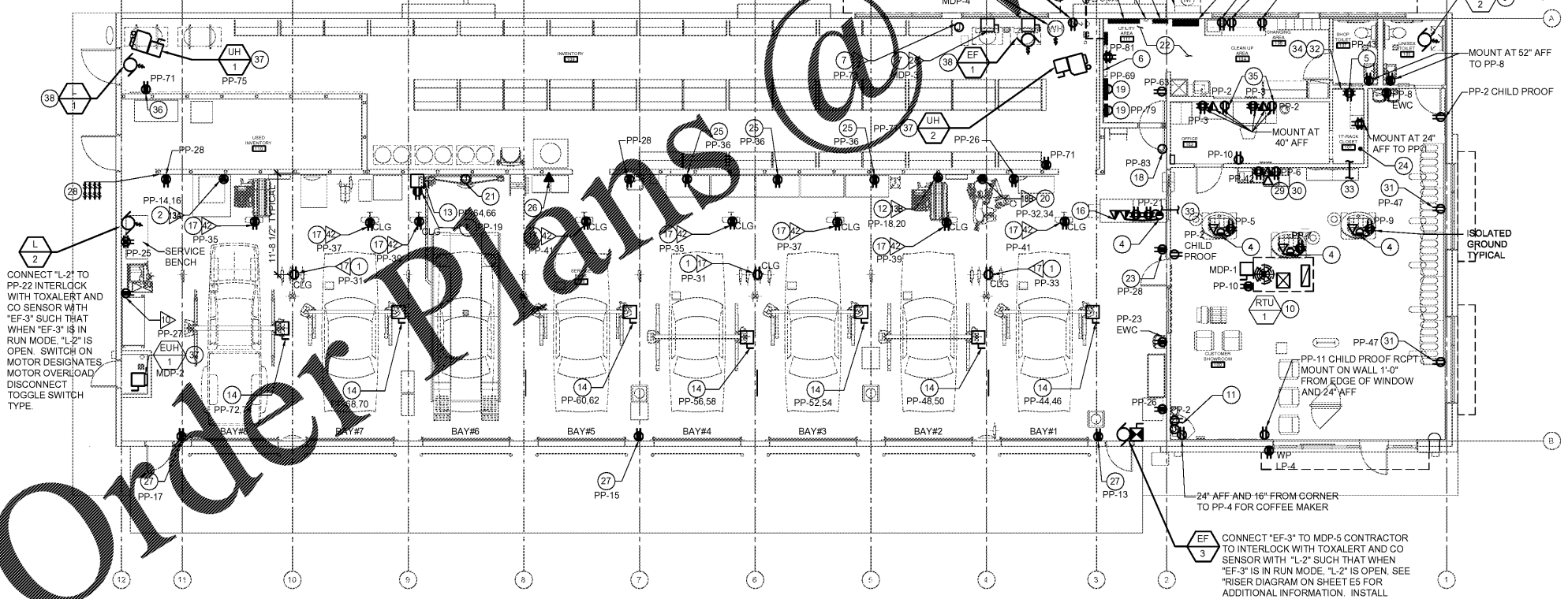
POWER PLAN GENERAL NOTES

- ALL CONDUITS IN SERVICE AREA TO CLEAR GAS FIRED RADIANT HEATERS.
- ALL SWITCHES AND OTHER LIKE DEVICES TO BE 48" MIN. AFF, UNLESS OTHERWISE NOTED.
- ALL ELECTRICAL CONDUITS ALONG "CMU" WALLS NEED TO BE DROPPED DIRECTLY FROM STRUCTURE DOWN TO DEVICE BELOW. NO HORIZONTAL CONDUIT RUNS ALLOWED.
- ALL DEVICES LOCATED IN "SERVICE AREA" SHALL BE MOUNTED AT 48" AFF UNLESS NOTED OTHERWISE.
- ALL DEVICES LOCATED IN THE FOLLOWING ROOMS: "CUSTOMER SHOW ROOM", "OFFICE", "BREAK AREA", "SHOP TOILET", AND "UNISEX TOILET", SHALL BE MOUNTED AT 24" AFF, UNLESS NOTED OTHERWISE.
- ALL WIRING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE "NEC" AND LOCAL CODE AUTHORITIES HAVING JURISDICTION FOR ROUTING OF ALL CONDUITS. SEE NOTE 15 IN THE "GENERAL ELECTRICAL NOTES" ON SHEET "E3".
- CONTRACTOR TO WIRE ALL HVAC CONTROL DEVICES, AND COORDINATE WITH OTHERS. SEE NOTE 15 IN THE "GENERAL ELECTRICAL NOTES" ON SHEET E3 FOR ADDITIONAL INFORMATION.

POWER PLAN KEYNOTES

- HEAVY DUTY CORD REEL EQUIPMENT TAG 17, MOUNT TO ROOF STRUCTURE AT LOCATION SHOWN. RECEPTACLE SHALL BE GFI PER PANEL SCHEDULE. INSTALL TO AVOID CONFLICT WITH OTHER EQUIPMENT. SEE DETAIL 3 ON SHEET E4 FOR ADDITIONAL INFORMATION.
- PROVIDE 20 AMPERE, 208 VOLT, SINGLE PHASE, 3 WIRE RECEPTACLE "NEMA" L6-20R AT 3'-10" AFF. FOR ELECTRONIC WHEEL BALANCER EQUIPMENT TAG 13A. VERIFY RECEPTACLE CONFIGURATION WITH PLUG PROVIDED WITH EQUIPMENT.
- PROVIDE JUNCTION BOX WITH 20 AMPERE, SINGLE POLE, SINGLE THROW TOGGLE SWITCH, FOR ELECTRIC IGNITER FOR GAS FIRED WATER HEATER. THIS UNIT COMES EQUIPPED WITH A CORD AND PLUG. CONTACTORS TO HARD WIRE UNIT INTO JUNCTION BOX.
- TELE-POWER POLE EXTEND POLE FROM SALES POD AND OR DESKS AS SHOWN UP TO STRUCTURE. SEE "DETAIL 1" ON SHEET "E4" FOR ADDITIONAL INFORMATION. FLEX FROM POLE AND MOUNT AND WIRE DEVICES AS SHOWN, AND VERIFY REQUIREMENTS WITH MILLWORK VENDOR. COORDINATE EXACT POWER POLE DROP LOCATION PRIOR TO ROUGH-IN.
- MOUNT THIS RECEPTACLE AT 84" A.F.F. AND WITHIN 6" OF SLIDING DOOR WALL.
- PLYWOOD BACKBOARD SEE ARCHITECTURAL INTERIOR ELEVATION FOR DETAIL DESCRIPTION OF BACKBOARD. MOUNT TELEPHONE TERMINAL CABINET AND OTHER ELECTRICAL EQUIPMENT. FOR TELEPHONE "GROUNDING DETAIL", SEE SHEET "E3" FOR ADDITIONAL INFORMATION.
- AIR COMPRESSOR EQUIPMENT TAG 28 SEE "RISER DIAGRAM" ON SHEETS "E5" AND "DET 1" ON SHEET "E4" FOR ADDITIONAL INFORMATION. MAKE ALL FINAL POWER TERMINATIONS, AS WELL AS ALL TERMINATIONS TO AIR DRYER, TAG 9, AT 120 VOLT, SINGLE PHASE LOCATED ADJACENT TO AIR PIPE MANIFOLD ON AIR COMPRESSORS.
- DEDICATED LINE ISOLATED GROUND RECEPTACLE WITH ALIGNMENT COMPUTER. COORDINATE EXACT LOCATION AND CONNECTION REQUIRED WITH WIRE MOUNTING STRUCTURE TO CART AS REQUIRED. CART MUST BE IN PLACE PRIOR TO CONDUIT INSTALLATION TO ENSURE CONDUIT DROP DOES NOT INTERFERE WITH PROPER EQUIPMENT OPERATION. REFERENCE ARCHITECTURAL DRAWINGS FOR UNDER SLAB CONDUIT LOCATION FROM THE ALIGNMENT PIT TO THE ALIGNMENT CONTROL.
- TOILET FAN EXHAUST FAN, 120 VOLT, SINGLE PHASE. PROVIDE ALL ACCESSORIES AS REQUIRED TO CONTROL EXHAUST FAN FROM OCCUPANCY SENSORS IN BATH RESTROOMS AS SHOWN. SWITCH ON MOTOR DESIGNATES MOTOR OVERLOAD DISCONNECT TOGGLE SWITCH TYPE.
- PROVIDE ELECTRICAL CONNECTION TO FACTORY MOUNTED DISCONNECT SWITCH AND WP/GFCI RECEPTACLE. "RISER DIAGRAM" ON SHEET "E5" FOR ADDITIONAL INFORMATION.
- RECEPTACLES AND TOILET FAN, JUNCTION BOX AT 7'-0" AFF ABOVE FURNITURE FOR TV EQUIPMENT UNLESS NOTED OTHERWISE. THE DEVICES SHALL BE 16" OFF THE CORNER OF THE WALL. CONDUIT AND JUNCTION BOX FOR TV EQUIPMENT SHALL ALSO BE PROVIDED IN THIS LOCATION.
- PROVIDE 30 AMPERE, 208 VOLT, SINGLE PHASE, 3 WIRE RECEPTACLE "NEMA" L6-20R AT 3'-10" AFF. FOR ELECTRONIC WHEEL BALANCER EQUIPMENT TAG 13B. VERIFY RECEPTACLE CONFIGURATION WITH PLUG PROVIDED WITH EQUIPMENT.
- PROVIDE 30 AMPERE, 2 POLE, NON-FUSED, LOCKABLE, WITH LOCK PROVIDED, DISCONNECT SWITCH FOR ALIGNMENT LIFT EQUIPMENT CONTROL UNIT. INSTALL DISCONNECT ON SIDE OF ALIGNMENT EQUIPMENT CONSOLE CABINET. CONTRACTOR TO PROVIDE ALL POWER AND SIGNAL WIRING AND CIRCUITING. CONTRACTOR TO PROVIDE 2 #10 (3) 3/4" CONDUIT FROM DISCONNECT SWITCH TO CIRCUIT IN PANEL AS SHOWN. VERIFY ALL REQUIREMENTS WITH VENDOR. ROUTE CONDUIT FROM STRUCTURE TO DISCONNECT DOWN THE SIDE OF THE EQUIPMENT POST. LIFT EQUIPMENT MUST BE IN PLACE PRIOR TO CONDUIT DROP TO ENSURE CONDUIT ROUTING DOES NOT INTERFERE WITH PROPER EQUIPMENT OPERATION.
- ONE (1) 2" EMPTY CONDUIT WITH PULL WIRE FOR TELEPHONE SERVICE. (12 LINES 25 PAIR CABLE). VERIFY EXACT REQUIREMENTS WITH LOCAL PHONE COMPANY. PROVIDE CONDUIT SEAL AT 18" AFF COORDINATE ROUTING AND TERMINATION POINTS WITH SITE UTILITIES.
- PROVIDE DEVICES INDICATED IN "MVS DESK" AND WIRE TO POWER POLE AS SHOWN. VERIFY EXACT LOCATIONS OF ALL EQUIPMENT WITH OWNER PRIOR TO ROUGH-IN.
- RECEPTACLE MOUNTED AT ROOF DECK, FOR SHOP FAN ITEM 42. INSTALL AIR KING # AK-9325, 1/4 HP, 120 VOLT OSCILLATING FAN. SEE "DETAIL 9" FOR UNISTRUT FRAME MOUNTING. ON SHEET "E4" FOR ADDITIONAL INFORMATION. PROVIDE WALL SWITCHES AT 48" AFF FOR CONTROL OF FAN. FOR FURNISHING OF EQUIPMENT SEE SHEET "F1". REFERENCE KEYNOTE 39 FOR ADDITIONAL INFORMATION.
- TOXALERT CO SENSOR PANEL, 120 VOLT POWER CONNECTION.
- PROVIDE JUNCTION BOX FOR FIRE ALARM EQUIPMENT AND OPTIONAL SECURITY CONTROL PANEL. VERIFY EXACT ELECTRICAL CONNECTION OF EQUIPMENT IN FIELD AND PROVIDE RECEPTACLE AS REQUIRED. COORDINATE EXACT REQUIREMENTS WITH OWNER.
- PROVIDE A L6-30R RECEPTACLE TO A SEPARATE 30 AMPERE, 208 VOLT, SINGLE PHASE CIRCUIT FOR ITEM 18B RIM CLAMP TIRE CHANGER TRC1. RECEPTACLE SHALL BE FED WITH # 8 AWG WIRE.
- ALIGNMENT EQUIPMENT SENSOR RECEIVES POWER FROM ALIGNMENT CONSOLE CABINET. ROUTE ALL WIRING FROM CABINET TO SENSOR EQUIPMENT AS REQUIRED BY MANUFACTURER FOR A COMPLETE INSTALLATION.
- SEE FLOOR PLAN "A1" FOR ALL ELECTRICAL EQUIPMENT CLEARANCE BOTH HORIZONTALLY AND VERTICALLY IN THIS SPACE.
- PROVIDE RECEPTACLE FOR "NO LOSS DAYS" SIGN AT 11'-0" AFF. VERIFY EXACT LOCATION WITH CONSTRUCTION MANAGER PRIOR TO ROUGH-IN.
- SEE "IT" REQUIREMENT NOTES ON THIS SHEET.
- MOUNT RECEPTACLE ON PLYWOOD AT 6'-0" AFF FOR TEMPORARY POWER FOR SMALL HAND TOOL BATTERY RECHARGING.
- THIS PHONE DEVICE ONLY SHALL BE MOUNTED AT 60" AFF. FOR ADDITIONAL INFORMATION SEE "IT" NOTE "SERVICE PHONE".
- THIS RECEPTACLE ONLY TO BE MOUNTED AT 64" AFF.
- PROVIDE WALL SWITCHES FOR THE CONTROL OF SHOP FANS ITEM 42. LABEL ALL SWITCHES TO CORRESPOND WITH THE CONTROLLED FAN. REFERENCE KEYNOTE 17 FOR ADDITIONAL INFORMATION.
- PROVIDE JUNCTION BOX AND CONDUIT BACK TO IT CLOSET FOR BSRO SUPPLIED WIRELESS MODEM. MOUNT JUNCTION BOX AT 9'-6" AFF. VERIFY FINAL LOCATION WITH BSRO. RE. DETAIL 2 ON THIS SHEET FOR ADDITIONAL INFORMATION.
- CONDUIT ASSOCIATED WITH DATA BOX SHALL BE EXTENDED TO IT CLOSET. DAYLIGHT CONDUIT IN IT CLOSET APPROXIMATELY 15" A.F.F. ON PLYWOOD WALL. PROVIDE PULL STRINGS IN CONDUIT. RE. DETAIL 2 ON THIS SHEET FOR ADDITIONAL INFORMATION.
- PROVIDE RECEPTACLE ABOVE WINDOWS FOR NEC SHOW WINDOW REQUIREMENTS.
- PROVIDE 2" EMT CONTINUOUS CONDUIT FROM IT CLOSET BACKBOARD TO TELEPHONE DEMARCATION POINT ON PLYWOOD IN UTILITY AREA. START CONDUIT IN IT CLOSET AT 7'-6" A.F.F. MOUNT CONDUIT ON RIGHT SIDE OF IT CLOSET PLYWOOD.
- PROVIDE 8" LONG - 2" DIAMETER PVC CONDUIT THRU WALL AS SHOWN. MOUNT CONDUIT AT SAME HEIGHT AS BOTTOM OF JOIST, AND AS CLOSE AS POSSIBLE TO JOIST. PROVIDE GROMMET ON BOTH ENDS OF PVC. RE. ARCHITECTURAL SHEETS FOR ADDITIONAL INFORMATION.
- PROVIDE 2" PVC CONDUIT IN IT CLOSET MOUNTED ON RIGHT SIDE OF PLYWOOD, START AT 7'-6" A.F.F. AND EXTEND UP WALL TO BOTTOM OF JOIST. PROVIDE GROMMET ON BOTH ENDS OF CONDUIT.
- CONDUIT ASSOCIATED WITH DATA BOX SHALL BE EXTENDED TO IT CLOSET. DAYLIGHT CONDUIT IN IT CLOSET APPROXIMATELY 15" A.F.F. ON PLYWOOD WALL. PROVIDE PULL STRINGS IN CONDUIT.
- CONNECT IRRIGATION CONTROLLER TO THIS OUTLET.
- PROVIDE POWER TO FACTORY MOUNTED DISCONNECT SWITCH. COORDINATE ALL WORK WITH MECHANICAL CONTRACTOR.
- CONNECT "L-1" AND "EF-1" TO LP-7. INTERLOCK "L-1" AND "EF-1" SUCH THAT WHEN "EF-1" IS IN RUN MODE, "L-1" IS OPEN. SWITCH ON MOTOR DESIGNATES MOTOR OVERLOAD DISCONNECT TOGGLE SWITCH TYPE. EXHAUST FAN SHALL BE CONTROLLED BY OCCUPANCY SENSORS IN SPACE. PROVIDE ALL ACCESSORIES AS REQUIRED.

Aug. 08, 2017 - 3:37pm - USER ryanr@freestone.com - Williamsburg, VA Sheets E2 POWER PLAN.dwg



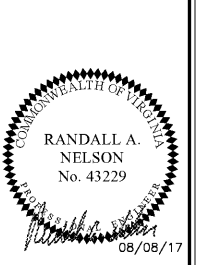
1 POWER PLAN
SCALE: 1/8" = 1'-0"

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1900 RICHMOND ROAD
WILLIAMSBURG, VA



ISSUE BLOCK	
PROPERTY NO.:	167739
6 DIGIT NO.:	785533
4 DIGIT NO.:	6868
AOR PROJECT NUMBER:	1655B14
TO PERMIT:	DATE: 08/10/17
TO BID:	DATE: TBD
DRAWN BY:	ZS,MJ,RC
CHECKED BY:	CF,AR
SHEET TITLE: POWER PLAN	
SHEET NUMBER: E2	