alley, williams, carmen & king, Inc.

ENGINEERING • ARCHITECTURE • SURVEYING

ADDENDUM NO. 1 TO PLANS AND SPECIFICATIONS

Project: Orange Grove Vol. Fire Station # 2 Bldg. Addition (6801 Rocky Ridge Road)

Date: Friday, March 6, 2026

By: Jorge Rodriguez, AIA JRS

Bid Date: March 12, 2026

Bid Time: 2:00 P.M. EST

Bid Location: Orange Grove Fire Station # 1 (6800 Orange Grove Road, Hillsborough, NC 27278)

The following changes, additions, interpretations and corrections are herewith made a part of the scope of the referenced project and shall take preference over previous requirements. Contractors shall familiarize themselves with the content of this addendum, as it will become a part of this Contract.

List of items:

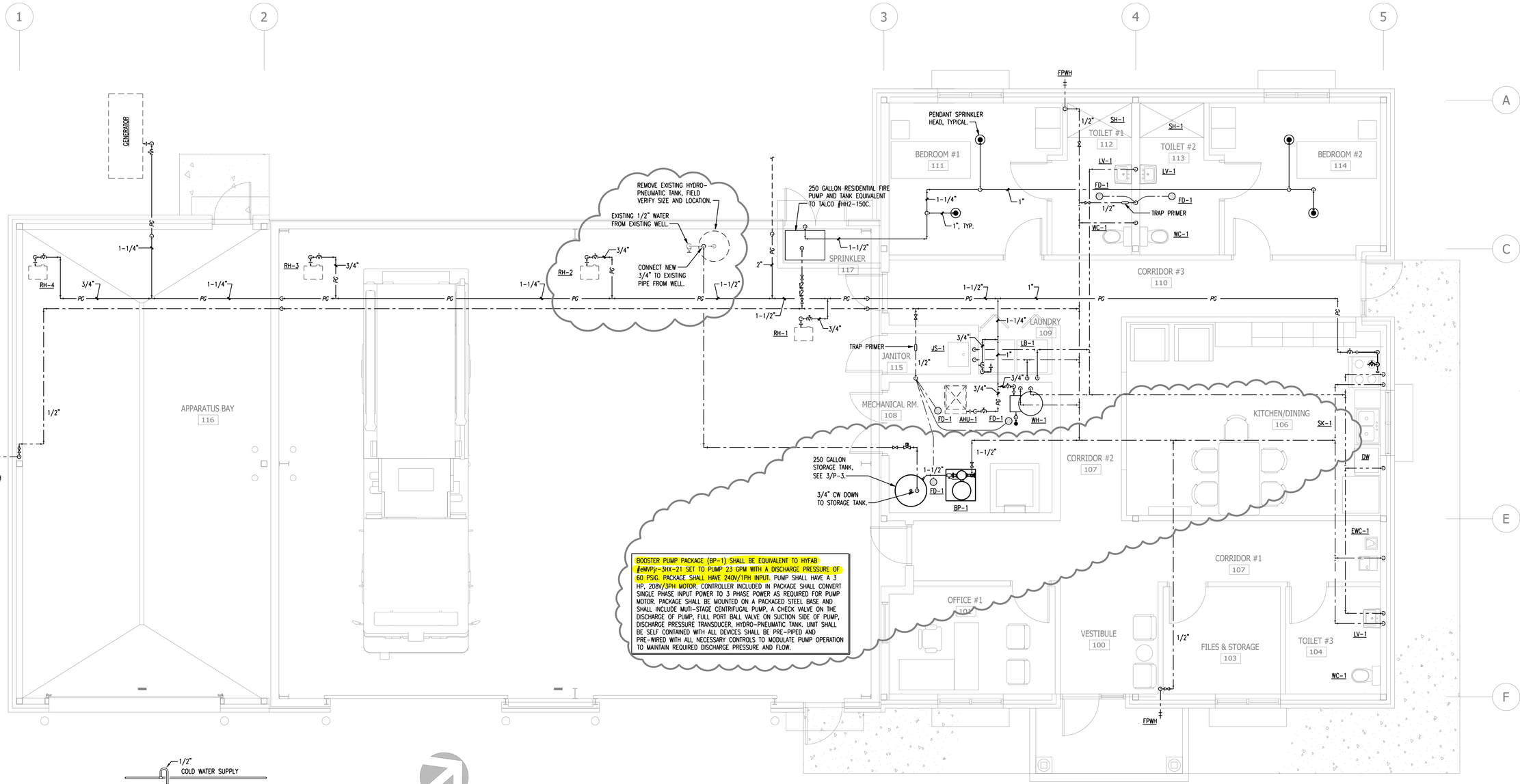
1. **Sheet P-1:**
   a. Remove existing hydro pneumatic tank on well system (located in apparatus bay). Connect new water line to existing water line where it enters the building.
   b. Replace booster pump and new large hydro-pneumatic tank with packaged booster system which includes booster pump and hydro-pneumatic tank, BP-1 (in Mechanical Room).
   c. Replace pressure rated steel storage tank with plastic, vented, non-rated storage tank. Provide storage tank with level controller and solenoid valve. Interlock level controller with well pump control. 1 (in Mechanical Room).

2. **Sheet P-3:**
   a. New Water Storage Tank Detail # 3 / P-3.

3. **Sheet E-3:**
   a. Provide 120 V., 30A rated, 1P toggle switch for Booster Pump.

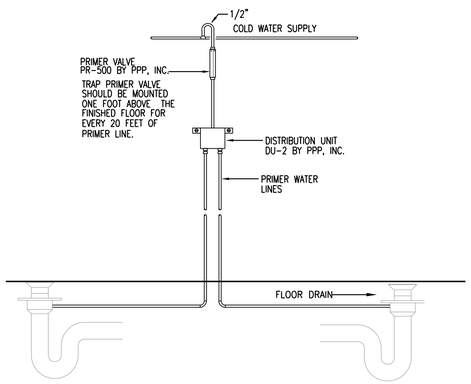
4. **Sheet E-4:**
   a. See Booster Pump on Panel A2.

End of Addendum No. 1



BOOSTER PUMP PACKAGE (BP-1) SHALL BE EQUIVALENT TO HYFAB FMMVPV-3HX-21 SET TO PUMP 23 GPM WITH A DISCHARGE PRESSURE OF 60 PSIG. PACKAGE SHALL HAVE 240V/1PH INPUT. PUMP SHALL HAVE A 3 HP, 208V/3PH MOTOR. CONTROLLER INCLUDED IN PACKAGE SHALL CONVERT SINGLE PHASE INPUT POWER TO 3 PHASE POWER AS REQUIRED FOR PUMP MOTOR. PACKAGE SHALL BE MOUNTED ON A PACKAGED STEEL BASE AND SHALL INCLUDE MUTI-STAGE CENTRIFUGAL PUMP, A CHECK VALVE ON THE DISCHARGE OF PUMP, FULL PORT BALL VALVE ON SUCTION SIDE OF PUMP, DISCHARGE PRESSURE TRANSDUCER, HYDRO-PNEUMATIC TANK. UNIT SHALL BE SELF CONTAINED WITH ALL DEVICES SHALL BE PRE-PIPED AND PRE-WIRED WITH ALL NECESSARY CONTROLS TO MODULATE PUMP OPERATION TO MAINTAIN REQUIRED DISCHARGE PRESSURE AND FLOW.

1 / P-1 SUPPLY FLOOR PLAN
1/4"=1'-0"



2 / P-1 TRAP PRIMER DETAIL
NOT TO SCALE

GENERAL NOTES:

1 - ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL STATE AND LOCAL CODES.

2 - THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL PIPING AND EQUIPMENT WITH ALL OTHER TRADES PRIOR TO BEGINNING INSTALLATION TO AVOID CONFLICTS AND INTERFERENCE WITH OTHER TRADES.

3 - FINAL UTILITY CONNECTIONS (GAS, ELECTRIC, WATER ETC.) TO EQUIPMENT SHALL BE MADE BY THE CONTRACTOR INSTALLING THE EQUIPMENT REQUIRING THE UTILITIES.

4 - PLANS AND ISOMETRICS ARE DIAGRAMMATIC. THERE IS NO INTENT TO INDICATE ALL AND FITTINGS REQUIRED. GENERALLY, PIPING SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO AND PLUMB WITH WALL CONSTRUCTION. SPECIAL CARE SHALL BE TAKEN TO COORDINATE EQUIPMENT AND PIPING LOCATIONS WITH ALL OTHER TRADES. IF INTENT OF DESIGN IS NOT CLEAR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

5 - ON FLOOR PLAN DRAWINGS, SOIL AND WASTE AND RAINWATER PIPING IS SHOWN BELOW FLOOR. DOMESTIC WATER, VENTS, AND OTHER SUPPLY PIPING (UNLESS NOTED OTHERWISE) IS ABOVE CEILING OR AS HIGH AS POSSIBLE IN SPACE.

6 - SOIL AND WASTE PIPING SHALL BE LAID ON MINIMUM 1/4" PER FT. SLOPE FOR PIPE SIZES LESS THAN 4", AND MINIMUM 1/8" PER FT. FOR PIPE 4" AND LARGER.

7 - UNLESS OTHERWISE NOTED, PLUMBING CONTRACT SHALL TERMINATE AT A POINT FIVE (5) FEET OUTSIDE THE BUILDING. FOR WORK BY OTHER CONTRACTORS OUTSIDE THE 5 FOOT TERMINATION, REFER TO SITE UTILITY DRAWINGS.

8 - CONSTRUCTION INTERFACE BETWEEN PLUMBING AND OTHER SUB-CONTRACTS (I.E. SITE WORK, HVAC EQUIPMENT, ELECTRICAL WORK, ETC.) SHALL BE CLOSELY COORDINATED WITH OTHER DRAWINGS INCLUDED WITH THESE DOCUMENTS.

9 - VALVES AND DEVICES INSIDE CHASES OR WALLS OR ABOVE NON-ACCESIBLE CEILINGS SHALL BE PROVIDED WITH APPROPRIATELY SIZED ACCESS PANEL COMPATIBLE WITH SURROUNDING FINISHES. SUCH ACCESS PANELS SHALL BE FURNISHED BY THE PLUMBING CONTRACTOR FOR INSTALLATION BY THE GENERAL CONTRACTOR.

10 - PLUMBING VENT PIPING PENETRATING ROOF SHALL BE INSTALLED BY THE PLUMBING CONTRACTOR. CUTTING OF HOLES AND FLASHING OF PENETRATIONS SHALL BE BY THE GENERAL CONTRACTOR.

11 - REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS OF WALLS AND PARTITIONS AND FOR PARTITION THICKNESS AND CONSTRUCTION MATERIALS.

12 - REFER TO STRUCTURAL DRAWINGS FOR DIMENSIONED COLUMN AND STRUCTURE LOCATIONS.

SYMBOLS SCHEDULE

AFF	ABOVE FINISHED FLOOR
UNO	UNLESS NOTED OTHERWISE
SAN	SANITARY SEWER
FD	FLOOR DRAIN
WCO	WALL CLEAN OUT
FCO	FLOOR CLEAN OUT
— — —	DOMESTIC COLD WATER
— - —	DOMESTIC HOT WATER
V	VENT
ø	DIAMETER OR POWER PHASE
	PIPE ELBOW
	PIPE ELBOW DOWN
	UNION
	PIPE TEE
	ISOLATION VALVE

1. All seismic load calculations for this project shall be based upon a 1 second spectral response acceleration of, SD1= 0.079%; a short period spectral response acceleration of, SDS=0.158%; a seismic design category B; a seismic use group II and an importance factor of 1.0. These seismic design parameters were provided by the Structural Engineer, Landwehrmann Engineering, PLLC.
2. All seismic restraining device designs are to be executed, signed and sealed by a Registered North Carolina Engineer.
3. All plumbing and fire protection piping and it's associated attachments and supports shall be designed to meet the force and displacement requirements of chapter 16 of the North Carolina Building Code.
4. The simplified analysis procedures of ASME 31.9, Section 919.4.1(a) shall not be used for design of plumbing piping and it's associated attachments and supports.

NORTH CAROLINA PROFESSIONAL SEAL 19293 ENGINEER MICHAEL B. SPRAGUE 3-5-26

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BLACK MOUNTAIN ENGINEERING
Plumbing and Mechanical Design

CONSULTANT JOB NO.
24-125

ADDITION TO EXISTING ORANGE GROVE VOLUNTEER FIRE STATION

6801 ROCKY RIDGE RD, HILLSBOROUGH, NORTH CAROLINA

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REVISIONS

1	8/19/25: PERMIT REVIEW COMMENTS
2	3/5/26: CHANGE DOMESTIC WATER BOOSTER PUMP

SUPPLY PIPING FLOOR PLAN, NOTES & DETAILS

DATE: APRIL 21, 2025

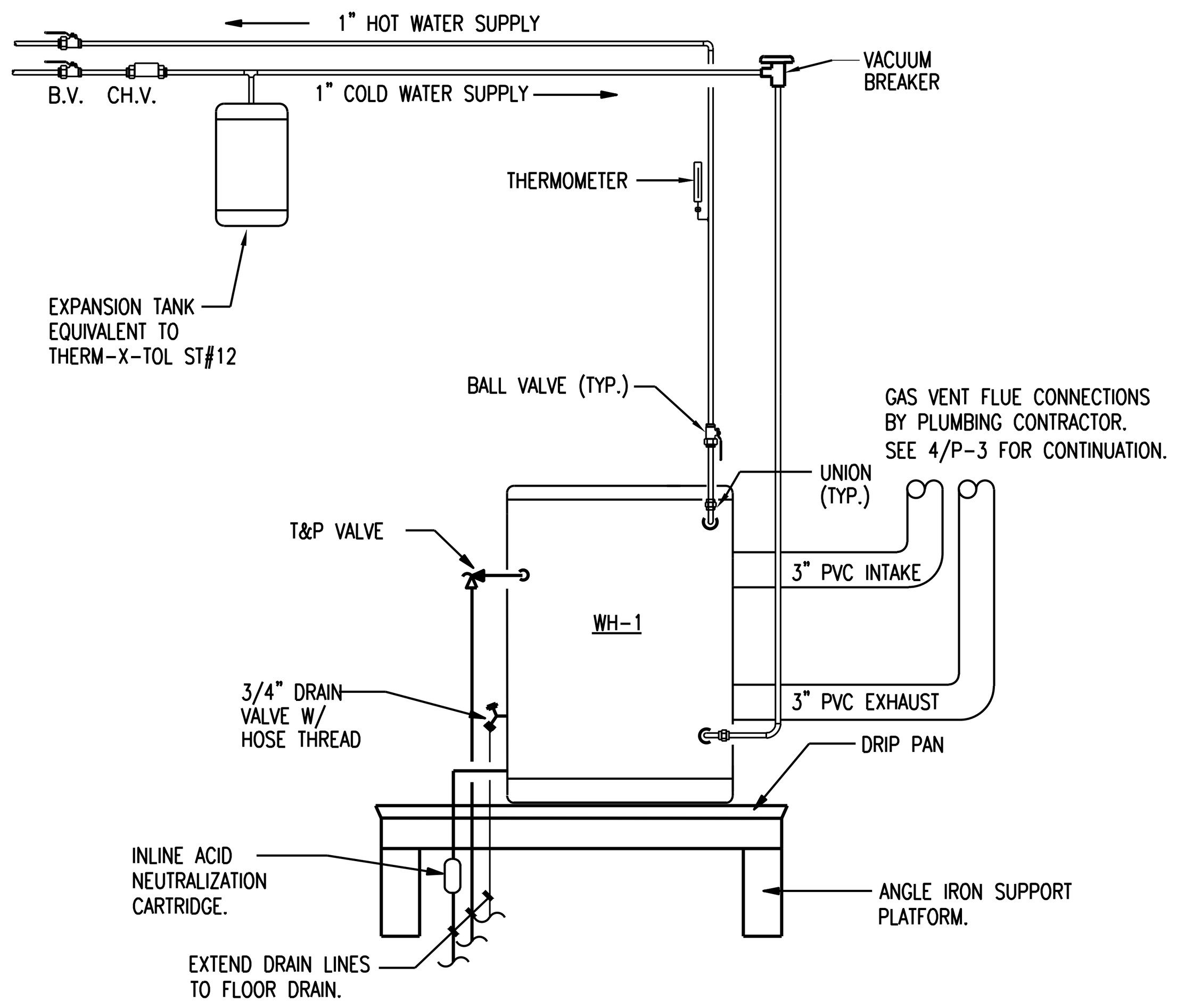
DRAWN BY: MBS | CHECKED: MBS

JOB NO. 24039

SHEET NO. P-1

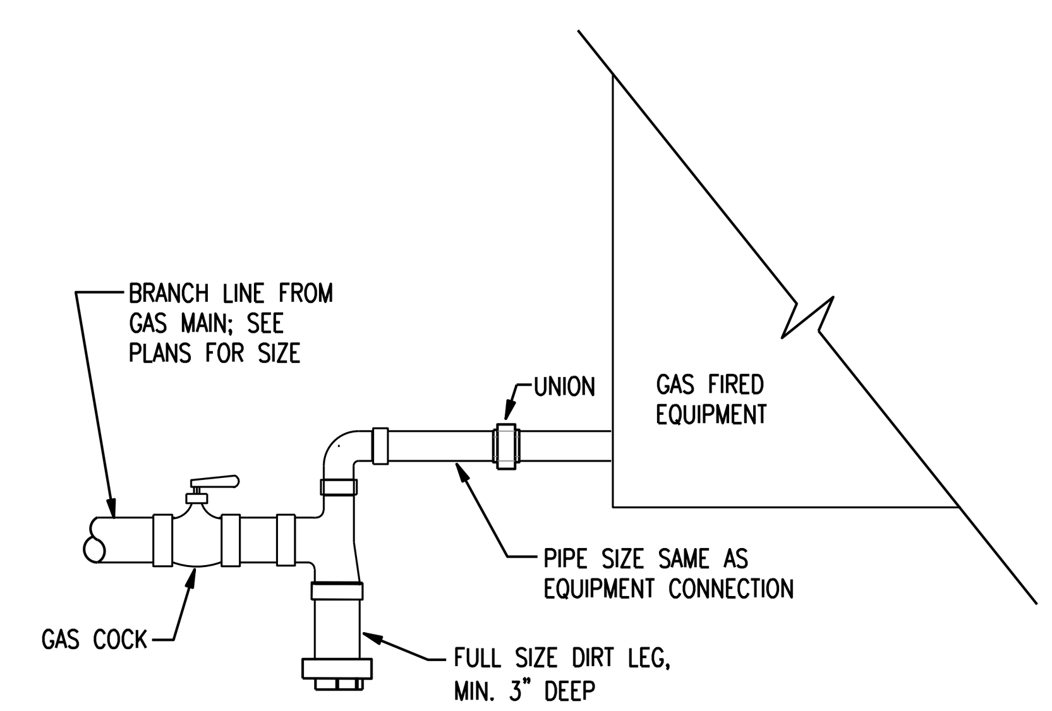
GAS WATER HEATER SCHEDULE

MARK	TANK VOLUME	RECOVERY	MINIMUM OUTPUT	MINIMUM EFFICIENCY	POWER	MANUFACTURER	MODEL
WH-1	55 GALLON	113 GPH	94.0 MBH	94%	120V/1ø	RHEEM	#HE55-100

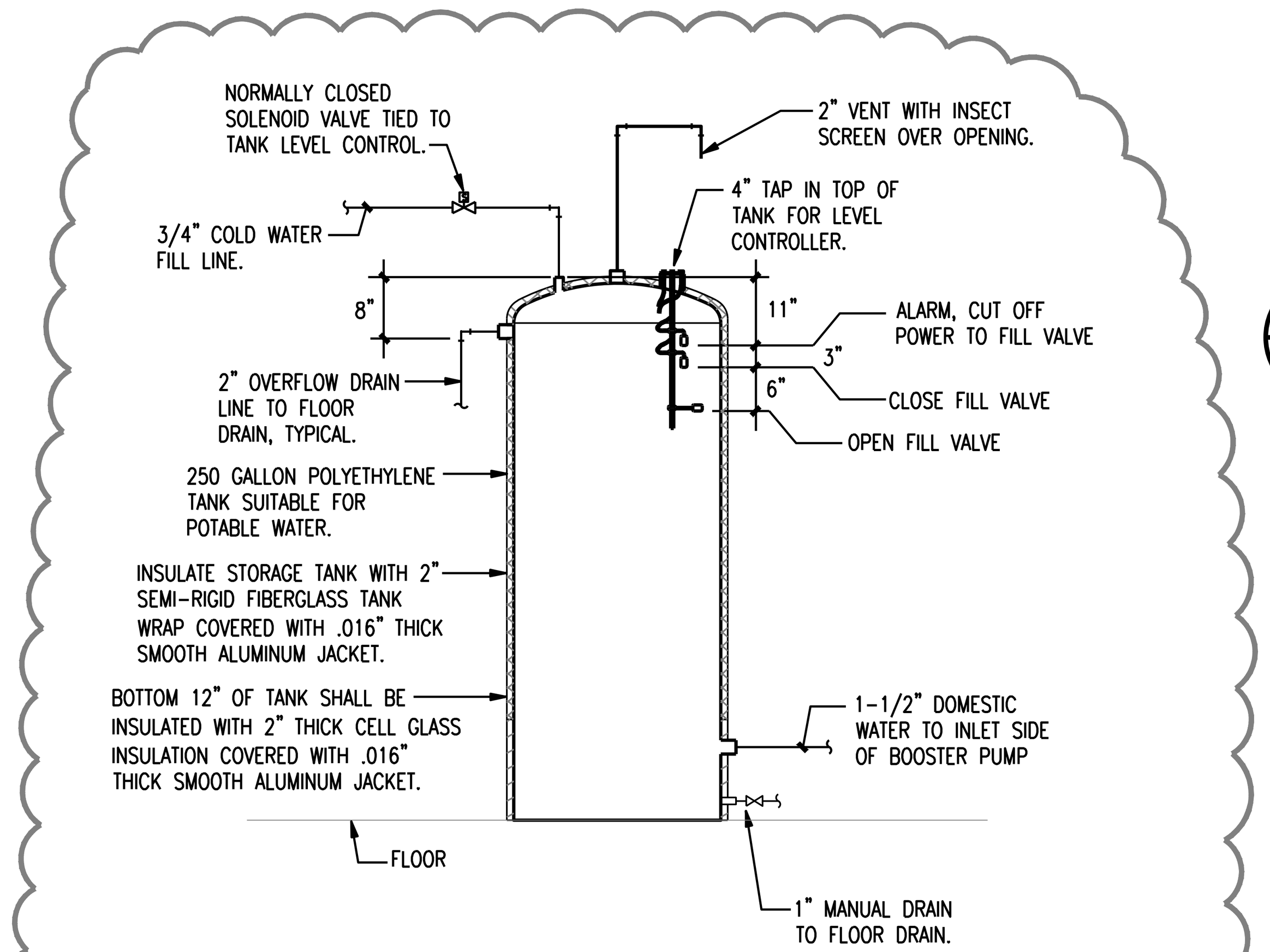


WH-1 , WATER HEATER SHALL BE MODEL #HE55-100 AS MANUFACTURED BY RHEEM OR EQUIVALENT. WATER HEATER SHALL BE OF GLASS-LINED DESIGN, AND GAS-FIRED, EQUIPPED TO BURN NATURAL GAS AND DESIGN CERTIFIED BY THE AMERICAN GAS ASSOCIATION, AND SHALL BE APPROVED BY THE NATIONAL SANITATION FOUNDATION. HEATERS MUST MEET ALL APPLICABLE CODES. HEATER SHALL BE SUITABLE FOR SEALED COMBUSTION DIRECT VENTING. THE CONDENSING FLUE COIL SHALL BE COATED ON THE FLUE GAS SIDE WITH ACID RESISTANT GLASS LINING DESIGNED FOR USE IN CONDENSING HEATERS. HEATER SHALL HAVE A WORKING PRESSURE OF 160 PSI. HEATER SHALL BE PROVIDED WITH AN AUTOMATIC SHUTOFF DEVICE AND SAFETY SHUTOFF IN EVENT OF FLAME FAILURE; A GAS PRESSURE REGULATOR SET FOR THE TYPE OF GAS SUPPLIED, AND EXTRUDED ANODE ROD RIGIDLY SUPPORTED FOR CATHODIC PROTECTION. AN A.G.A/ASME RATED PRESSURE AND TEMPERATURE RELIEF VALVE SHALL BE FURNISHED AND INSTALLED BY MANUFACTURER. THE TANK SHALL BE FOAM INSULATED. THE OUTER JACKET SHALL HAVE A BAKED ENAMEL FINISH OVER A BONDERIZED UNDERCOATING. ALL INTERNAL SURFACES OF THE HEATER EXPOSED TO WATER SHALL BE GLASS-LINED WITH AN ALKALINE BOROSILICATE COMPOSITION THAT HAS BEEN FUSED TO STEEL BY FIRING AT A TEMPERATURE RANGE OF 1400° TO 1600°F. HEATER SHALL HAVE A THREE YEAR LIMITED WARRANTY AGAINST CORROSION AND TANK FAILURE DUE TO SEDIMENT BUILD-UP AS OUTLINE IN WRITTEN WARRANTY. HEATER SHALL BE DESIGN CERTIFIED BY A.G.A.

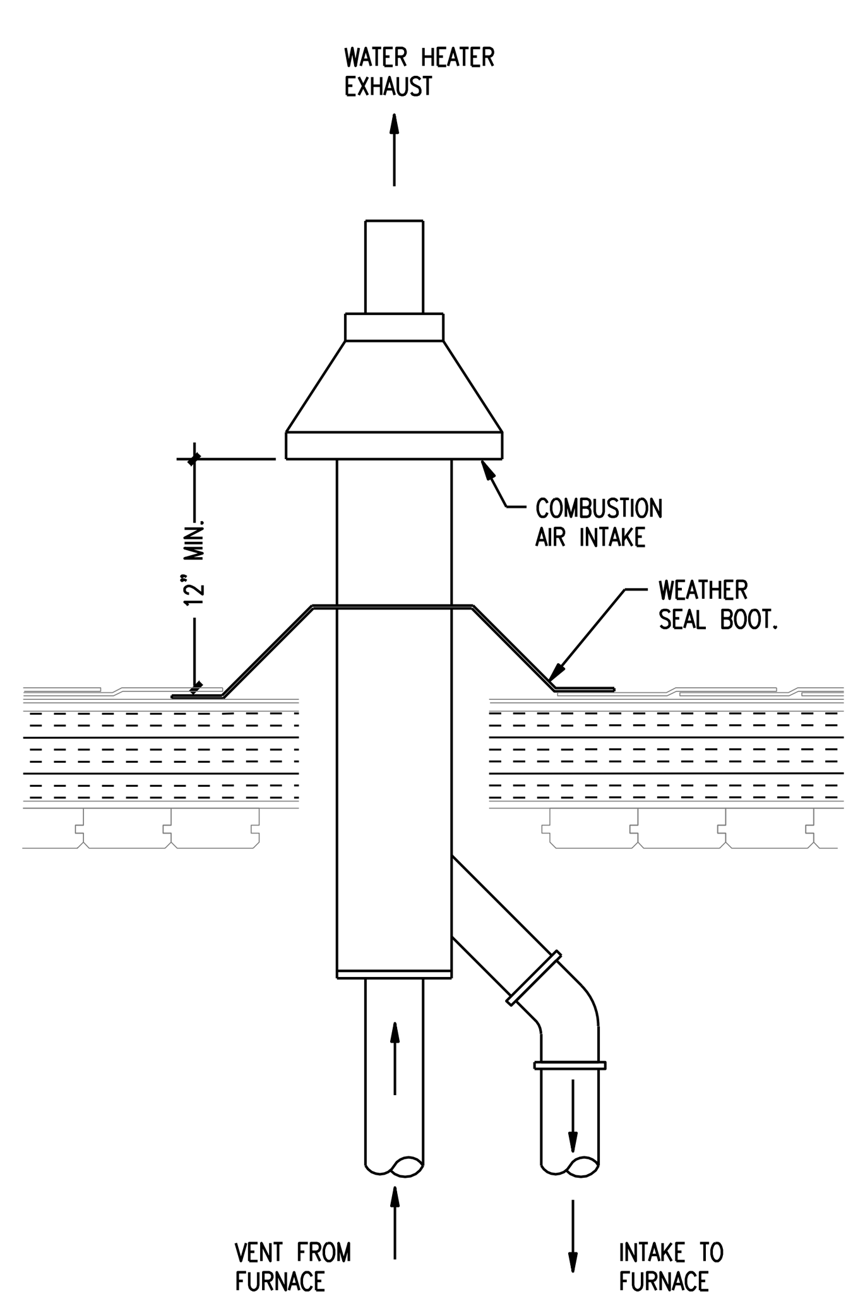
1 P-3 GAS WATER HEATER DETAIL
NOT TO SCALE



2 P-3 GAS DIRT LEG DETAIL
NOT TO SCALE



3 P-3 WATER STORAGE TANK DETAIL
NOT TO SCALE



4 P-3 COMBINATION GAS VENT/INTAKE DETAIL
NOT TO SCALE

PLUMBING SPECIFICATIONS

General:

Provide all materials, equipment, manpower etc. required to install a complete and functioning system as specified, shown or implied herein on this sheet.

Submit shop drawings and product data grouped to include complete submittals of related systems, products, and accessories in a single submittal.

Obtain and pay for all required permits,request and arrange for all required inspections. Deliver all certificates of inspection to the Architect. Final pay application will not be approved until all inspections are complete and a Certificate of Occupancy has been issued.

All work and materials shall be in compliance with applicable state, local and national codes. Code provisions shall be the absolute minimum standards, where provisions herein exceed code requirements the contractor shall provide the work as specified.

Thoroughly review the entire set of construction documents and coordinate work with the work of all other trades to avoid conflicts and interference.

The contractor shall visit the site prior to bid, and shall verify every aspect of the proposed work and existing field conditions which might affect the completion of the work. Failure or neglect to throughly investigate the contract documents and/or the site shall not be sufficient cause for additional compensation to the contractor.

The contractor shall be responsible for all cutting and patching required for the proper installation of his or her work and shall be responsible for any damaged caused by himself or his workmen. All patching and repairs shall be done by individuals regularly engaged in the installation of like materials or systems.

All materials and equipment shall be new and shall be listed and labeled by Underwriters Laboratories, Inc. (UL) or Electronics Testing Labs, Inc. (ETL) for it's intended use.

The drawings are diagrammatic in nature and are not intended to include every detail of construction. Contractor shall coordinate actual installation with the work of other trades and existing site conditions. Finish dimensions shall be taken in the field in lieu of scaling from the plans.

The contractor shall warrant all materials and workmanship to be free from defect for a period of one year. The warranty period shall start upon time of acceptance by the owner. If within the warranty period any work or equipment is found to be defective, the contractor shall correct the defect promptly at no cost to the owner.

All final utility connections (electrical, water, gas, etc.) to equipment shall be by the contractor providing the equipment requiring the utilities. Coordinate utility connections with mechanical and electrical contractors.

Supports and Hangers:

All pipes sizes 1/2" to 1-1/2" shall be supported with carbon steel adjustable swivel split ring hangers.

All pipes sizes 2" and larger shall be supported with carbon steel adjustable clevis hangers.

Uninsulated copper pipe shall be supported with hangers as noted above with a PVC coating.

Pipe supports for insulated pipe shall be provided with either pipe shields or pipe saddles to protect the insulation. All pipe supports for insulated cold water piping shall be provided with pipe shields. All pipe supports for hot water pipe sizes 2-1/2" or greater shall be provided with steel pipe saddles.

Install hangers within 12" of all horizontal elbows.

Support horizontal cast iron pipe adjacent to each hub, with a maximum spacing of five feet between hangers. Support vertical cast iron pipe at each hub and at each floor. PVC drain piping shall have a maximum spacing between the hangers of six feet.

All other piping shall be supported with a maximum spacing between hangers as follows:

Pipe size	Maximum Hanger Spacing
1/2" to 1-1/4"	6'-6"
1-1/2" to 6"	10'-0"

Piping Insulation:

Insulation shall be installed by a contractor specializing in applying pipe insulation with a minimum of three years experience.

Deliver materials to the site in original factory packaging, labeled with manufacturer's indentification, including product density and thickness. Store insulation in original wrapping to protect from weather and construction traffic. Any damaged insulation will be replaced by the contractor at no additional expense to the owner.

Insulation shall not be installed unless ambient temperatures and conditions meet the requirements of the manufacturers of adhesives, mastics, and insulation cements. Maintain ambient temperature for 24 hours (minimum) after installation of insulation.

Insulate all hot & cold domestic water with 1" thick fiberglass pipe insulation with ASJ jacket.

All insulation shall have a maximum flame spread/smoke developed rating of 25/50.

Piping:

All valves shall have manufacturer's name and pressure rating stamped on valve body.

Conform to City of Hillsborough department of Water Resources requirements for installation of backflow prevention devices.

Accept valves on site in shipping containers with labeling in place. Inspect for damage. Provide temporary protective coating on cast iron and steel valves.

Provide temporary end caps and closures on piping and fittings. Maintain in place until installation. Protect piping systems from entry of foreign materials by temporary covers, completing sections of the work, and isolating parts of the completed system.

Underground sanitary and storm drainage piping with-in five feet of building shall be service weight cast iron pipe with hub & spigot joints sealed with neoprene gaskets. Contractor may, at his option, use PVC DWV piping in lieu of cast iron pipe.

Above grade sanitary and storm drainage piping shall be service weight cast iron no-hub pipe and fittings. No-hub gaskets shall be a heavy duty coupling equivalent to Charlotte Pipe and Foundry Co. Fig. No. HD-1. Contractor may, at his option except in return air plenums, use PVC DWV piping in lieu of cast iron pipe for sanitary system. All piping in return air plenums shall be cast iron.

Domestic water piping shall be copper tubing with wrought copper or bronze fittings. Below grade piping shall be type "K" tubing. Joints shall be kept to a minimum below grade. No joints will be permitted below building slab. Above grade piping shall be type "L" tubing.

Install piping to conserve building space and not interfere with the use of the space. Group piping at common elevations whenever practical. Install piping to allow for expansion and contraction without stressing pipe, joints or connected equipment. Provide clearance for installation of insulation and access to valves and fittings.

Provide access doors where valves or equipment are not exposed.

Provide unions downstream of valves and at equipment or apparatus connections.

Provide brass male adapters each side of valves in copper piped systems. Sweat solder adapters to pipe.

Provide ball valves for shut-off and to isolate equipment, part of system, and where indicated on the plans on domestic water systems.

Provide ball or globe valves for flow control in water recirculating systems where indicated.

Disinfect domestic water system after verifing that the system is complete. Ensure PH of water to be treated is between 7.4 and 7.6 by adding caustic soda, soda ash, or hydrochloric acid. Inject chlorine throughout system to obtain 50 to 80 mg/L residual. Bleed water from outlets to ensure distribution of disinfectant. Maintain disinfectant in system for 24 hours. If final disinfectant residual tests less than 25 mg/L, repeat treatment. Flush disinfectant from system until residual is equal to that of incoming water or 1.0 mg/L.

Before commencing with sanitary or storm drainage piping, field verify invert elevations of existing sewers. Confirm inverts are adequate to maintain proper pitch and cover for new sanitary and storm drainage systems. Notify architect if inverts do not appear to be adequate.

Plumbing Fixtures:

Fixtures shall be delivered to the site in factory packaging. The contractor shall inspect fixtures upon delivery and replace any damaged fixtures. Protect installed fixtures from damage by securing areas and by leaving factory packaging in place until final clean-up.

Verify that field measurements are as indicated on the shop drawings and confirm that millwork is constructed with adequate provision for the installation of sinks.

Provide one year warranty for all plumbing fixtures to be free from material or manufacturing defect.

Provide two extra sets of faucet washers for each sink at completion of the project.

Water Closet (WC-1)
Provide a floor mounted tank type toilet with elongated bowl, everclean antimicrobial surface, 16-1/2" rim hieght and champion 4 flushing system with 4" non-adjustable piston action accelerator flush valve equivalent to American Standard Champion #731AA001S, 16.5"H EL 1.6/PA with 1/2"x 3/8" stop equivalent to Maguire #2165LX. Acceptable manufacturers: American Standard, Kohler, Sloan and Zurn.

Lavatory: (LV-1)
Bowl: Wall hung vitreous china lavatory equivalent to American Standard Lucerne #0356.012. Mount with top rim 34" A.F.F.. Acceptable manufacturers: American Standard, Kohler, and Zurn.
Faucet: Brass single lever handle lavatory faucet with 4" handle, 4" spout and 1/2 gpm vandal resistant aerator equivalent to Moen 8416F05. Acceptable manufacturers: Delta HDF, Moen, and Zurn.
Trim: Chrome plated 17 Gauge P-trap with pre-wraped protective cover and offset grid strainer equivalent to McGuire #PW 2125-WC. Angle wheel handle stops equivalent to McGuire #175 with 12" long 1/2" o.d. riser, and 3/8" o.d. inlet.
Carrier: Cast iron and steel frame with tubular legs, lugs for the floor and wall attachment, concealed arm support, bearing plate and studs equivalent to Zurn #Z-1231. Acceptable Manufactureres: Jay R. Smith, Josam and Zurn.

Sink (SK-1)
Bowl: Double Compartment with 14 X 14 X 7 compartments, 20 Gauge 304 Stainless Steel equivalent to Just # DL-1933-B-GR. Acceptable Manufacturers: Elkay, Just and Moen.
Faucet: Single handle kitchen faucet with 4" handle with shanks on 8" centers, 12" wall form spout, and grid waste assembly equivalent to Moen # 8712. Acceptable manufacturers: Delta HDF, Moen, and Zurn.
Trim: Chrome plated 17 Gauge P-trap Equivalent to McGuire #8912. Angle wheel handle stops equivalent to McGuire #175 with 12" long 1/2" o.d. riser, and 3/8" o.d. inlet.

Shower (SH-1):

Shower:
Molded open top, gel coated acrylic, one piece ADA compliant shower stall, with slip-resistant bottom surface, padded seat, and grab bars. Stall to be constructed from a molded acrylic. Stall shall have an inside clear dimension of 60" x 36" (1525 mm x 915 mm) equivalent to Clarion #MP6036. Color as selected by Architect. Acceptable manufacturer: Acryline USA, Inc, Aquarius Bathware, Clarion Bathware, Kohler and Praxis Industries.

Trim:
Concealed shower supply with pressure balanced mixing valves, bent shower arm with integral service stops, adjustable spray ball joint shower head, diverter valve, wall/hand shower head with integral vacuum breaker, and 30" slide bar, equivalent to Symmons Industries, Inc. Model 25-500-B30-V. Acceptable manufacturers: Leonard Valve Co., Symmons Industries, Inc. and Zurn Industries.

Mop Sink (JS-1)
Basin: Terrazzo 24X24X12 floor mounted service sink equivalent to Stern Williams #HL1800-SB-2 with 3" drain, and an integral cast one-piece 20 gage stainless steel cap. Acceptable Manufacturers: Fiat, Florstone and Stern Williams.
Faucet: Two handled cast brass service sink faucet with vacuum breaker and wall bracket equivalent to Moen #8124. Acceptable manufacturers: Delta, Moen, Stern Williams, and Symmons.
Trim: Two 12" high stainless steel back panels, 24" long stainless steel mop hanger with 3 spring loaded grips, 36" long hose and stainless steel wall bracket.

Electric Water Cooler (EWC-1)
Provide a wall mounted split level water cooler equivalent to an Ebco Oasis Model P8AMSL with McGuire #8902C chrome plated 17 gauge p-trap and McGuire #175 angle wheel stops. Cooler capacity to equal 8.0 GPH 50° water. 120 volt electrical outlet is required in concealed apron area of cooler. Color to be selected by the Architect.

Double Check Assembly - Potable (1/2" to 2")

A Double Check Valve assembly shall be installed at each noted location. The assembly shall consist of two positive seating check modules with captured springs and rubber seat discs. The check module seats and seat discs shall be replaceable. Service of all internal components shall be through a single access cover secured with stainless steel bolts. The Double Check Valve assemblies shall be constructed using Lead Free* cast
copper silicon alloy. Lead Free* Double Check Valve assemblies shall comply with state codes and standards, where applicable, requiring reduced lead content. The assembly shall also include two resilient seated isolation valves; four top mounted, resilient seated test cocks. The assembly shall meet the requirements of ASSE Standard 1015 and AWWA Standard C510. Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

Assembly shall be equivalent to Watts Series LF007.

Floor Drain (FD-1)
Provide an adjustable floor drain with Dura-Coated cast iron body, bottom outlet, combination invertible membrane clamp and "Type N" deep flange grate, equivalent to Zurn #ZB-415-N. Acceptable manufacturers: Jay R. Smith, Josam, and Zurn.

Laundry Box: (LB-1)
Box: 8-3/4" X 7-1/2" X 3-5/8" polystyrene box with 2" center drain, and two 1/2" MIP valves equivalent to Oatey Model # 38735. Provide 2" cast iron P-trap below floor.

Internal Hose Bibb (HB-1)
Model HB-1 by Watts or equivalent. Brass body type hose bibb with built in vacuum breaker. 1/2" male I.P. Meets ASSE Std. 1011.

Freezeless Wall Hydrant: (FPWH-1)
Provide a wall mounted, non-freeze, anti-siphon, automatic draining, with bronze casing and all bronze interior parts, equivalent to Zurn model Z-1310 with loose operating key. Acceptable manufacturers: Jay R. Smith, Josam, and Zurn.

Cleanouts: Floor cleanout shall be equivalent to Zurn #ZB-1400. Wall cleanouts shall be equivalent to Zurn #Z-1442. Yard cleanouts in paved areas shall be equivalent to Zurn #Z-1400-HD. Yard cleanouts in non-paved areas shall be equivalent to Zurn #Z-1474 with a #Z-1400 ferrule. Acceptable manufacturers: Jay R. Smith, Josam and Zurn.

GAS EQUIPMENT SCHEDULE

MARK	DESCRIPTION	BTU/hr.
AHU-1	FURNACE	100,000
RH-1	RADIANT HEATERS	50,000
RH-2	RADIANT HEATERS	60,000
RH-3	RADIANT HEATERS	60,000
RH-4	RADIANT HEATERS	60,000
GENSET	ELECTRICAL GENERATOR	521,300
HD-1	DRYER	165,000
RANGE	RANGE/GRILLE/OVEN	268,000
WH-1	WATER HEATER	100,000
	TOTAL	1,384,300

PIPE SIZE BASED ON PROPANE GAS THRU STEEL SCHEDULE PIPE WITH AN INLET PRESSURE OF 11" W.C. AND A MAXIMUM EQUIVALENT PIPE LENGTH OF 125 FEET.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19293 MICHAEL B. SPRAGUE 3-5-26

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CONSULTANT JOB NO. 24-125

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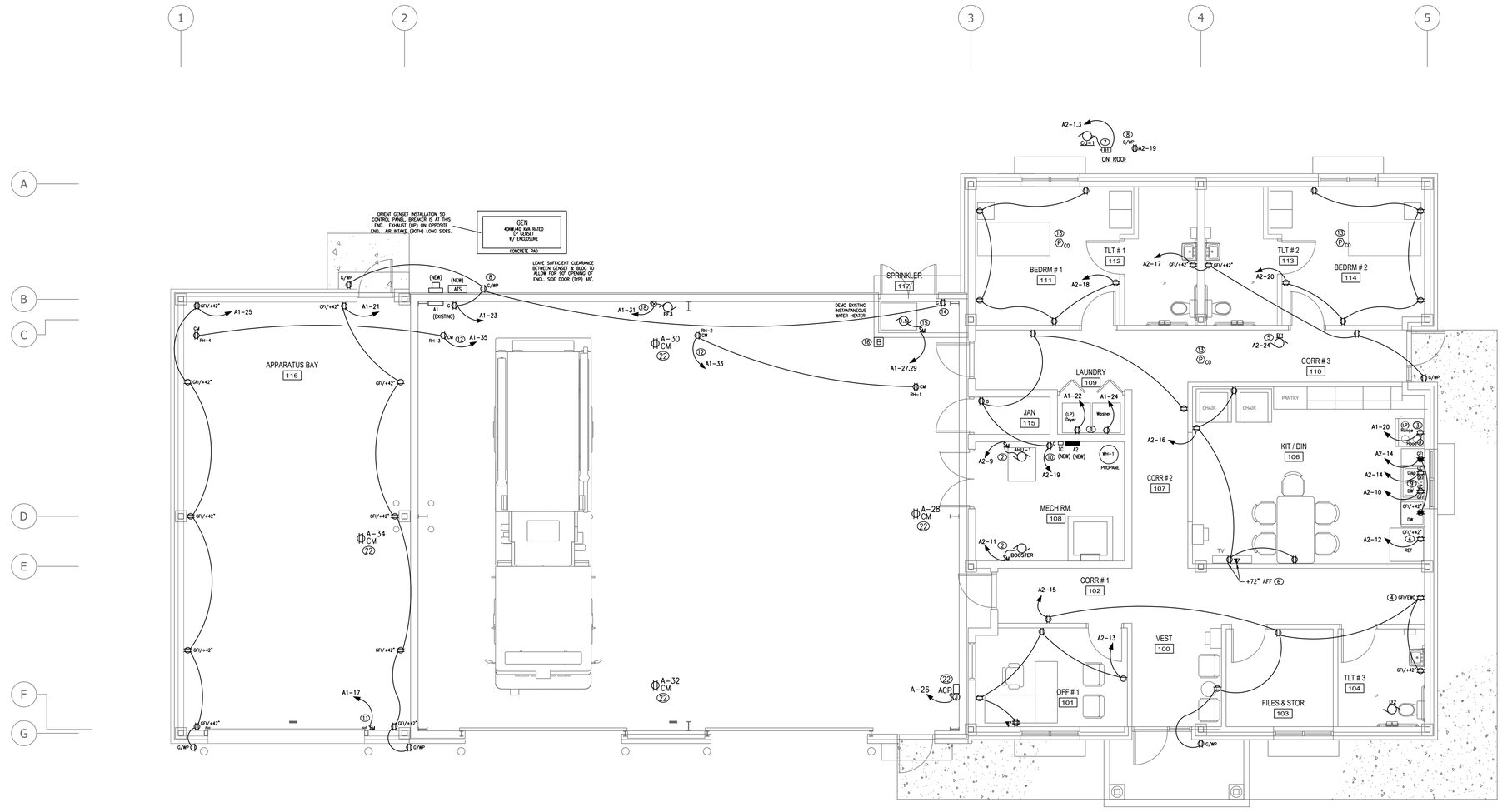
	REVISIONS
1	8/19/25: PERMIT REVIEW COMMENTS
2	3/5/26: CHANGE DOMESTIC WATER BOOSTER PUMP

PLUMBING SPECIFICATION AND DETAILS

DATE: APRIL 21, 2025
DRAWN BY: MBS
CHECKED: MBS
JOB NO. 24039
SHEET NO. P-3



REFERENCED ELECTRICAL POWER NOTES:

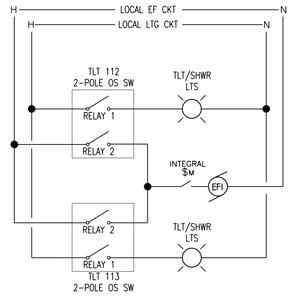
- REFER TO GENERAL POWER NOTES (THIS SHEET)
- COORDINATE ALL ELECTRICAL INSTALLATION W/ WORK OF OTHER TRADES TO AVOID INTERFERENCE

1. PROVIDE GFI BREAKERS FOR WASHER/(LP)DRYER. (DRYER BOD: 120V, 12.5A)
2. PROVIDE 120V, 20A RATED, 1P TOGGLE SWITCH FOR AHU1 & 120V, 30A RATED, 1P TOGGLE SWITCH FOR BOOSTER PUMP. CIRCUIT AS SHOWN & EXTEND TO EQUIPMENT.
3. PROVIDE GFI CB FOR (LP) RANGE. (BOD: 120V, 15A). COORDINATE LOCATION W/ MANUF. INSTALLATION INSTRUCTIONS.
4. LOCATE GFI RECEPTACLE SO THAT IT IS ACCESSIBLE FOR EASE OF RESET.
5. REFER TO DETAIL 2/E3 FOR WIRING. EF1 TO OPERATE IF EITHER WM SENSOR IN TLT 112 OR 113 DETECTS OCCUPANCY.
6. PROVIDE OUTLETS AT 72" FOR TV MONITOR. COORDINATE LOCATION WITH OWNER PRIOR TO ROUGH-IN.
7. PROVIDE HVAC DISCONNECTS. COORDINATE LOCATIONS & ALL ELECTRICAL CONNECTIONS W/ EQUIPMENT SUPPLIED, PTRI. CIRCUIT AS SPEC'D & EXTEND TO UNIT. SEE PANEL SCHED'S FOR COND. SIZES.
8. PROVIDE GFI/WP RECEPTACLE FOR SERVICE/HVAC EQUIPMENT.
9. PROVIDE GFI RECEPTACLES UNDER SINK TO ACCOMMODATE DISHWASHER & DISPOSAL. FOR DISPOSAL, PROVIDE A SWITCH (ABOVE CNTR) FOR OPERATION. COORDINATE PLACEMENT IN FIELD PTRI.
10. PROVIDE DUPLEX RECEPTACLE TO SERVICE PROPANE WATER HEATER. COORDINATE LOCATION & ALL ELECTRICAL CONNECTIONS W/ EQUIPMENT SUPPLIED, PTRI. CIRCUIT AS SPEC'D & EXTEND TO WATER HEATER. SEE PANEL SCHED'S FOR COND. SIZES.
11. PROVIDE 120V, 30A RATED, 1P TOGGLE SWITCH FOR GARAGE OPENER. CIRCUIT AS SHOWN & EXTEND TO OPENER. PROVIDE ALL LV CABLING (AS REQ'D) BETWEEN OPENER & ACCESSORIES. COORDINATE ALL WORK W/ THE GARAGE DOOR INSTALLER PTRI. (BOD) 120V, 15A
12. PROVIDE CM RECEPTACLE FOR (LP) RADIANT HEATERS (RH1/RH2). COORDINATE LOCATIONS & ALL ELECTRICAL CONNECTIONS W/ EQUIPMENT SUPPLIED, PTRI. CIRCUIT AS SPEC'D. PROVIDE WIRING FROM UNITS TO LINE-VOLTAGE THERMOSTAT'S (BY MC). COORDINATE ALL WORK W/ MC & FOLLOW MANUFACTURER'S INSTRUCTIONS FOR PROPER INSTALLATION. COORDINATE W/ MC SO BOTH LTG & HEATERS ARE INSTALLED AT SAME HEIGHT (TYP: 16/17'AFF). MAINTAIN (MIN) 36" SPACING BETWEEN HEATERS & LTG.
13. PROVIDE COMBINATION SMOKE PLUS CARBON MONOXIDE DETECTOR WITH ALARM (KIDDE OR EQUAL). HARDWIRED WITH 10-YEAR BACKUP BATTERY. CONNECT TO CIRCUIT "A2-21".
14. PROVIDE DUPLEX RECEPTACLE TO SERVICE SPRINKLER ROOM HEATER. COORDINATE LOCATION & ALL ELECTRICAL CONNECTIONS W/ EQUIPMENT SUPPLIED, PTRI.
15. PROVIDE ELECTRICAL CONNECTION TO RESIDENTIAL HOME HYDRANT PUMP. COORDINATE EXACT LOCATION WITH PC, PTRI. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.
16. PROVIDE 120V ELECTRICAL CONNECTION FOR BELL NOTIFICATION DEVICE/ALARM TO BE ACTIVATED BY THE HOME HYDRANT SPRINKLER SYSTEM. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS.
17. PROVIDE CM DUPLEX RECEPTACLE W/ DEDICATED CIRCUIT FOR EACH AIRVAC 911 EXHAUST REMOVAL FAN. CIRCUIT AS SHOWN. COORDINATE EXACT LOCATION W/ EACH UNIT TO FACILITATE CORD/PLUG CONNECTION. PROVIDE 120V, 20A DEDICATED CIRCUIT, W/ 20A, 1P RATED TOGGLE DISCONNECT, TO AIRVAC 911 CONTROL PANEL (ACP). EC TO ROUTE WIRING BETWEEN EACH EXHAUST REMOVAL FAN & CONTROL PANEL, AS WELL AS WIRING FROM PHOTO EYES & TRACK-MOUNTED DOOR SWITCHES TO CONTROL PANEL. EC TO INSTALL AIRVAC 911 CONTROL PANEL AS WELL AS PHOTO-EYES & TRACK-MOUNTED DOOR SWITCHES. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR PROPER INSTALLATION.
18. PROVIDE DEDICATED CIRCUIT FOR VENTILATION FAN. MC TO PROVIDE COMBINATION DISCON/STARTER. WIRE TO DISCON/STARTER & EXTEND TO FAN. COORDINATE LOCATION W/ MC.

DISCONNECT SCHEDULE:
D1: 240/60/2/NF/3R
D2: 240/30/2/NF/3R
D3: 240/60/2/NF/1
D4: 240/30/2/NF/1
D5: 240/100/2/NF/1

1 / E3 POWER PLAN
SCALE: 3/16" = 1'-0"

REFER TO SEISMIC REQUIREMENTS ON SHEET E4



NOTE: WIRING SHOWN IS NOTIONAL. COORDINATE W/ ACTUAL DEVICES PROVIDED TO ENSURE PROPER INSTALLATION. NEUTRAL & GND CONNECTIONS ARE NOT SHOWN FOR EASE OF ILLUSTRATION. COORDINATE SWITCH SETTINGS W/ OWNER.

Toilets 112/113
2 / E3 (TYP) LTS/EF WIRING
NO SCALE

GENERAL POWER NOTES:

- EC TO SCHEDULE A FIELD COORDINATION MEETING W/ ARCH/OWNER/GC TO COORDINATE ALL OUTLET, DEVICE & EQUIPMENT LOCATIONS, MOUNTING HEIGHTS, ETC., PTRI. PRIOR TO LOCATING ANY & ALL DEVICES AT CASEWORK, COUNTERTOPS, ETC., REFER TO ARCHITECTURAL CASEWORK ELEVATIONS & SHOP DRAWINGS TO VERIFY MOUNTING HEIGHTS & LOCATIONS. WHERE UC RCPT'S/DEVICES ARE SHOWN, PROVIDE GROMMETED CASEWORK OPENINGS FOR EASE OF CABLE ROUTING.
- PROVIDE GFCI PROTECTION FOR PERSONNEL IAW 210.8(B) THRU (E). IN PARTICULAR, IN THE FOLLOWING AREAS:
  - 210.8(B)(2): ALL OUTLETS (AS SPEC'D BY CODE) INSTALLED IN KITCHEN
  - 210.8(B)(5): ALL OUTLETS (AS SPEC'D BY CODE) W/I 6' OF SINK (TOP INSIDE EDGE)
  - 210.8(E): EQUIPMENT REQUIRING SERVICE (SEE ALSO 210.63).
  - 422.5(2): DRINKING WATER COOLERS & BOTTLE FILL STATIONS.
  - 422.5(5): VENDING MACHINES
  - 422.5(7): DISHWASHERS
- COORDINATE ALL DEVICE(S) & FACEPLATE(S) (BOTH PWR & LTG) FINISHES W/ OWNER/ARCH, PTO. (TYP: LT. ALMOND W/ MATCHING PLATES).
- COORDINATE EXACT LOCATIONS & PWR REQT'S OF ALL MECH. AND/OR PLUMBING EQUIPMENT W/ MC & PC, PTRI & PTO OF DISTRIBUTION EQUIPMENT.

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CONSULTANT JOB NO.
SSE: 25014

RENOVATION / ADDITION
FOR
ORANGE GROVE FIRE STATION #2
HILLSBOROUGH, NORTH CAROLINA

THESE DOCUMENTS ARE INSTRUMENTS OF SERVICE AND AS SUCH REMAIN THE PROPERTY OF THE ARCHITECT. PUBLISH OR USE THEM ONLY WITH ARCHITECT'S WRITTEN APPROVAL.

REVISIONS

1	3/6/26 - BOOSTER PUMP CHG

PWR PLANS & NOTES

DATE 4/21/25 (FOR CONSTR.)

DRAWN BY: RES | CHECKED: JLP

JOB NO. 24039

SHEET NO. E3 OF

SOLE SOURCE ENGINEERING, P.C. CERT. NO. C-2317 GIBSONVILLE, NC

PANEL A1 (EXISTING)

Voltage: **240V, 1Ø, 3W** | MLO: | X | Equipment Ground Bus | Mfg: **Surface** | Min AIC Rating: **10k** | SE Rated
Main Bus: **200A** | X | MCB: **200A** | Isolated Ground Bus | Constr: **Load-Ctr** | Neutral Rating: **100%** | Lockable Cover | X
Location: **STORAGE** | UL Listed Feed-Thru Lugs | NEMA Rating: **1**

Ckt #	Description	Notes	Load (VA)	Breaker P	Breaker Trip	Branch Circuit*	Phase A	Phase B	Branch Circuit*	Breaker Trip	Breaker P	Load (VA)	Notes	Description	Ckt #
1	EXISTING			2	20	EXISTING			EXISTING	20	2			EXISTING	2
3															4
5	EXISTING			1	20	EXISTING			EXISTING	20	2			EXISTING	6
7	EXISTING			1	20	EXISTING								-	8
9	EXISTING			2	20	EXISTING			EXISTING	20	2			EXISTING	10
11															12
13	EXISTING	3		1	20	EXISTING			EXISTING	20	1			EXISTING	14
15	SPARE			1	20				EXISTING	20	1			EXISTING	16
17	GARAGE DOOR	**NB**	1000	**1**	**20**		1000		EXISTING	20	1			EXISTING	18
19	SPARE	**NB**		**1**	**20**			1500		**20**	**1**	1500	**NB,3**	RANGE/HOOD	20
21	GARAGE REC	**NB**	1080	**1**	**20**		2280			**20**	**1**	1200	**NB,3**	DRYER	22
23	GARAGE REC	**NB**	720	**1**	**20**			1920		**20**	**1**	1200	**NB,3**	WASHER	24
25	GARAGE REC	**NB**	1080	**1**	**20**		1580			**20**	**1**	500	**NB,3**	AIRVAC CNTRL	26
27	HOME HYDRANT SPRK PUMP	**NB**	900	**2**	**20**			2340		**20**	**1**	1440	**NB**	AIRVAC EF	28
29	-		900				2340			**20**	**1**	1440	**NB**	AIRVAC EF	30
31	EF3	**NB**	1440	**1**	**20**			2880		**20**	**1**	1440	**NB**	AIRVAC EF	32
33	RH1, RH2	**NB**	708	**1**	**20**		2148			**20**	**1**	1440	**NB**	AIRVAC EF	34
35	RH3, RH4	**NB**	708	**1**	**20**			708		**20**	**1**		**NB**	SPARE	36
37	SPARE	**NB**		**1**	**20**		9427.25		**SEE RISER**	**100**	**2**	9427	**NB**	**PANEL A2**	38
39	SPARE	**NB**		**1**	**20**			9600.05				9600		-	40

*** ALL WIRING TO BE 2-#12, 1-#12G IN 1/2"C, UON.**

**			
	20033	20206	(VA/Phase)
	167	168	(Amps/Phase)

Referenced Notes:
1 Provide HACR Circuit Breaker
2 Provide Arc-Fault Circuit Interrupter Protection iaw NEC 210.12(A)
3 Provide Ground-Fault Protected Circuit Breaker.
4 Furnish Breaker w/ Locking Device. Lock in "ON" Position
5 Furnish Breaker w/ Permanent Locking Device.

**** includes new loads plus Peak Demand load per NEC 220.87 x 125%, minus deleted loads.**

TOTAL LOAD		
KVA	AMPS	LOAD DESCRIPTION
40.2	168	CONNECTED
36.5	152	CALCULATED

PANEL A2 (NEW-FED FROM PANEL A1)

Voltage: **240V, 1Ø, 3W** | MLO: | X | Equipment Ground Bus | Mfg: **Surface** | Min AIC Rating: **10k** | SE Rated
Main Bus: **100A** | MCB: | Isolated Ground Bus | Constr: **Load-Ctr** | Neutral Rating: **100%** | Lockable Cover | X
Location: **STORAGE** | NEMA Rating: **1**

Ckt #	Description	Notes	Load (VA)	Breaker P	Breaker Trip	Branch Circuit*	Phase A	Phase B	Branch Circuit*	Breaker Trip	Breaker P	Load (VA)	Notes	Description	Ckt #
1	CU-1 (MCA: 28 / MOCP: 50)		2630	2	50	2#10, #10G 3/4"C	2730			20	1	100		TIMECLOCK "TC"	2
3	-		2630					3316		20	1	686		CORR/BEDROOM LTG VIA TC	4
5	DISPOSAL		500	1	20		1186			20	1	686		OFFICE/RR/EQ RM LIGHTING	6
7	SPARE			1	20			342		20	1	342		EXTERIOR LTG VIA TC	8
9	AHU1		1351	1	15		2351			20	1	1000		REFRIGERATOR	10
11	BOOSTER PUMP		1920	1	30	2#10, #10G 3/4"C		2420		20	1	500		DISHWASHER	12
13	OFF 101 RCPT		900	1	20		1260			20	1	360		KITCHEN RECEPTACLES	14
15	CORR 102 RCPTS		1080	1	20			1800		20	1	720		KITCHEN/DINING 106 RCPTS	16
17	CORR./RR/EXTERIOR RCPTS		900	1	20		1800			20	1	900		BEDROOM 111 RCPTS	18
19	CORR/EQ. RM RCPTS		720	1	20			1620		20	1	900		BEDROOM 112 RCPTS	20
21	SMOKE/CO2 DETECTORS	4	100	1	20		100			20	1			SPARE	22
23	SPARE			1	20			102		15	1	102		EF1	24
25	SPARE			1	20					20	1			SPARE	26
27	SPARE			1	20					20	1			SPARE	28
29	SPARE			1	20					20	1			SPARE	30
31	SPARE			1	20					20	1			SPARE	32
33	SPACE ONLY													SPACE ONLY	34
35	SPACE ONLY													SPACE ONLY	36
37	SPACE ONLY													SPACE ONLY	38
39	SPACE ONLY													SPACE ONLY	40

*** ALL WIRING TO BE 2-#12, 1-#12G IN 1/2"C, UON.**

9427	9600	(VA/Phase)
79	80	(Amps/Phase)

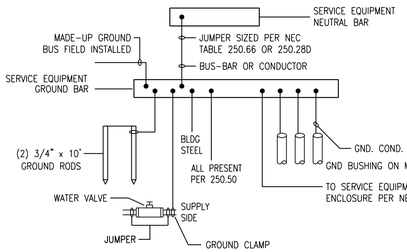
Referenced Notes:
1 Provide HACR Circuit Breaker
2 Provide Arc-Fault Circuit Interrupter Protection iaw NEC 210.12(A)
3 Provide Ground-Fault Protected Circuit Breaker.
4 Furnish Breaker w/ Locking Device. Lock in "ON" Position
5 Furnish Breaker w/ Permanent Locking Device.

***ROUTE CIRCUIT VIA TIMECLOCK "TC"**

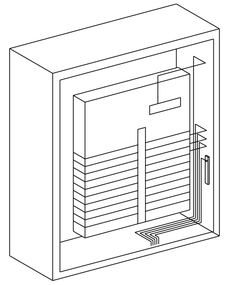
TOTAL LOAD		
KVA	AMPS	LOAD DESCRIPTION
19.0	79	CONNECTED
19.5	81	CALCULATED

GENERAL PANEL SCHEDULE NOTES:

1. UON, PROVIDE EQUIPMENT GROUNDING CONDUCTOR FOR ALL CIRCUITS. SIZE PER NEC ARTICLE 250.
2. UON, SIZE RACEWAY BASED ON CONDUCTOR FILL & TYPE OF RACEWAY USED (EMT, RIGID METAL CONDUIT, ETC.).
3. FOR 240V, 1ø CIRCUITS, PROVIDE NEUTRAL CONDUCTOR IF REQUIRED BY EQUIPMENT SERVED.
4. DO NOT MODIFY PANEL RATINGS / SIZE WITHOUT PRIOR APPROVAL OF DESIGN ENGINEER.
5. IN EXISTING PANELS, RECONFIGURE AS SPECIFIED IN PANEL SCHEDULE. FIELD VERIFY EXISTING PANEL CONFIGURATION, PRIOR TO BID.

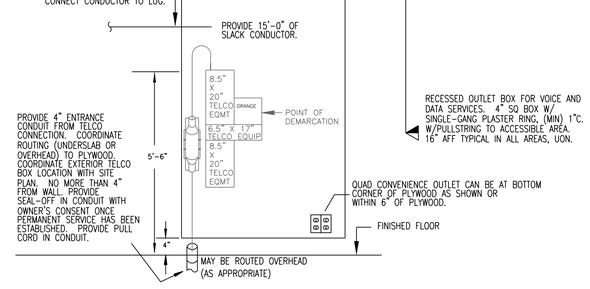


2 E4 SERVICE ENTRANCE GROUNDING
NO SCALE

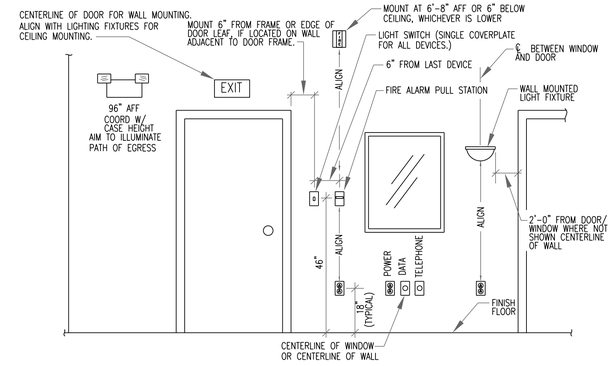


NOTES:
1. ALL BENDS IN CONDUCTORS #10 AND SMALLER SHALL BE 90 DEGREES STRAIGHT AND TRUE. BENDS IN LARGER SIZE CONDUCTORS SHALL HAVE A UNIFORM RADIUS.
2. BEND CONDUCTORS TOWARD THE BACK CORNERS OF THE PANEL CAN. BEND CONDUCTORS FORWARD TO CONNECT TO CIRCUIT BREAKERS.
3. TIE WRAP CONDUCTORS TO FORM NEAT AND ORDERLY BUNDLES. AVOID EXCESSIVE USE OF TIE WRAPS.
4. NO CONDUCTORS SHALL TOUCH PANEL CAN.
5. FINISHED PANEL SHALL PRESENT A CLEAN, SHARP, AND ORDERLY APPEARANCE.
6. EACH ELECTRICAL PANEL SHALL HAVE:
   a. AN ENGRAVED NAMEPLATE PERMENANTLY ATTACHED TO THE EXTERIOR COVER,
   b. A TYPEWRITTEN CIRCUIT DIRECTORY INSIDE EACH DOOR,
   c. A TYPEWRITTEN WIRING COLOR CODE INSIDE EACH DOOR.
7. EACH CIRCUIT SHALL HAVE A LOOP WITH 6" OF SLACK FOR REVISIONS.

3 E4 TYPICAL PANELBOARD WORKMANSHIP
NO SCALE



4 E4 (TYP) COMMUNICATION DIAGRAM
NO SCALE



NOTE: ANY SPECIFIC DIMENSIONING OR INSTRUCTIONS GIVEN ELSEWHERE ON THE DRAWINGS SHALL SUPERSEDE THESE INSTRUCTIONS.

1 E4 MOUNTING HEIGHTS AND ALIGNMENT CRITERIA
NO SCALE

SEISMIC NOTES:

BASED ON STRUCTURAL DESIGN PARAMETERS PROVIDED IN STRUCTURAL DRAWINGS (PROVIDED VIA EMAIL ON 5/1/25) FROM LANDWEHRMANN ENGINEERING, PLLC. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS ARE AS FOLLOWS:

S_{DS} = 0.1685g (DESIGN SPECTRAL RESPONSE ACCELERATION, SHORT PERIOD)
S_{D1} = 0.1264g (DESIGN SPECTRAL RESPONSE ACCELERATION, 1 SECOND PERIOD)

ADDITIONAL DESIGN PARAMETERS PROVIDED BY AND/OR DETERMINED USING INFORMATION FURNISHED BY STRUCTURAL ENGINEER:
RISK CATEGORY = IV — SITE CLASS = D
SEISMIC DESIGN CATEGORY = C — IMPORTANCE FACTOR = 1.5

1. BASED ON ABOVE PARAMETERS, EC TO USE MECHANICAL VIBRATION CONTROLS & SEISMIC RESTRAINT MEASURES IAW PROVISIONS OF NC BLDG CODE 2018, ASCE 7-05 & OTHER APPLICABLE CODES/STANDARDS, AS REQ'D, TO MITIGATE THE EFFECTS OF VERTICAL AND/OR HORIZONTAL, MOVEMENT OF ELECTRICAL SYSTEM COMPONENTS DURING A SEISMIC EVENT.

2. ELECTRICAL COMPONENTS REQUIRING MECHANICAL VIBRATION CONTROLS & SEISMIC RESTRAINTS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
- CONDUIT (>2.5"D). CONDUITS, CABLE TRAYS & TRAPEZE ASSEMBLIES WEIGHING MORE THAN 10lbs/ft
- CONDUIT SUSPENDED BY INDIVIDUAL HANGARS > 12" IN LENGTH FROM TOP OF CONDUIT TO BOTTOM OF HANGAR SUPPORT
- SWITCHBOARDS, PANELBOARDS, DISCONNECTS
- LUMINAIRES (INCL EXIT SIGNS AND/OR EMERG. LTS), LIGHTING CONTROL PANELS & ASSOCIATED EQUIPMENT
- TRANSFORMERS (EXCLUDING UTILITY TRANSFORMERS)
- GENERATORS, FUEL TANKS & ASSOCIATED AUTOMATIC AND/OR MANUAL TRANSFER SWITCHES
- NETWORK EQUIPMENT (UPS, TELE/DATA RACKS & EQUIPMENT)
- FIRE ALARM (LIFE SAFETY COMPONENTS)

3. EC SHALL PROVIDE SUBMITTALS & PRODUCT DATA TO ILLUSTRATE & INDICATE TYPES, STYLES, MATERIALS, STRENGTHS, FASTENING PROVISIONS & FINISH FOR EACH TYPE & SIZE OF SEISMIC RESTRAINT COMPONENTS USED. ALL SEISMIC RESTRAINING DEVICE DESIGNS TO BE EXECUTED, SIGNED & SEALED BY A REGISTERED NC PROFESSIONAL ENGINEER.

4. PROVIDE PRODUCT CERTIFICATES, SIGNED BY MANUFACTURES OF SEISMIC RESTRAINTS CERTIFYING COMPLIANCE OF PRODUCTS FURNISHED.

5. FURNISH ALL MATERIALS, EQUIPMENT & LABOR NECESSARY TO TEST & DEMONSTRATE TO THE OWNER & ENGINEER ALL ELECTRICAL COMPONENTS (SPECIFIED ABOVE) HAVE BEEN INSTALLED, SUPPORTED & BRACED TO MEET MECHANICAL VIBRATION & SEISMIC RESTRAINT REQUIREMENTS OF APPLICABLE CODES/STANDARDS. ALL TESTING SHALL BE CONDUCTED BY A TESTING AGENCY, ACCEPTABLE TO THE LOCAL AHJ WITH THE EXPERIENCE & CAPABILITY TO CONDUCT THE TESTING REQ'D.

6. EC TO COORDINATE THE LAYOUT & INSTALLATION OF SEISMIC BRACING WITH THE BUILDING STRUCTURAL SYSTEM & ARCHITECTURAL FEATURES & WITH MECHANICAL, FIRE-PROTECTION, ELECTRICAL & OTHER BUILDING FEATURES IN THE VICINITY. CONCRETE BASES SHALL BE COORDINATED WITH BLDG STRUCTURAL SYSTEMS.

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CONSULTANT JOB NO.
SSE: 25014

RENOVATION / ADDITION
FOR
ORANGE GROVE FIRE STATION #2
HILLSBOROUGH, NORTH CAROLINA

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REVISIONS

1	3/6/26 - BOOSTER PUMP CHG

PANEL SCHEDULES, DETAILS

DATE 4/21/25 (FOR CONSTR.)

DRAWN BY: RES | CHECKED: JLP

JOB NO. 24039

SHEET NO. E4 OF

SOLE SOURCE ENGINEERING, P.C. CERT. NO. C-2317 GIBSONVILLE, NC