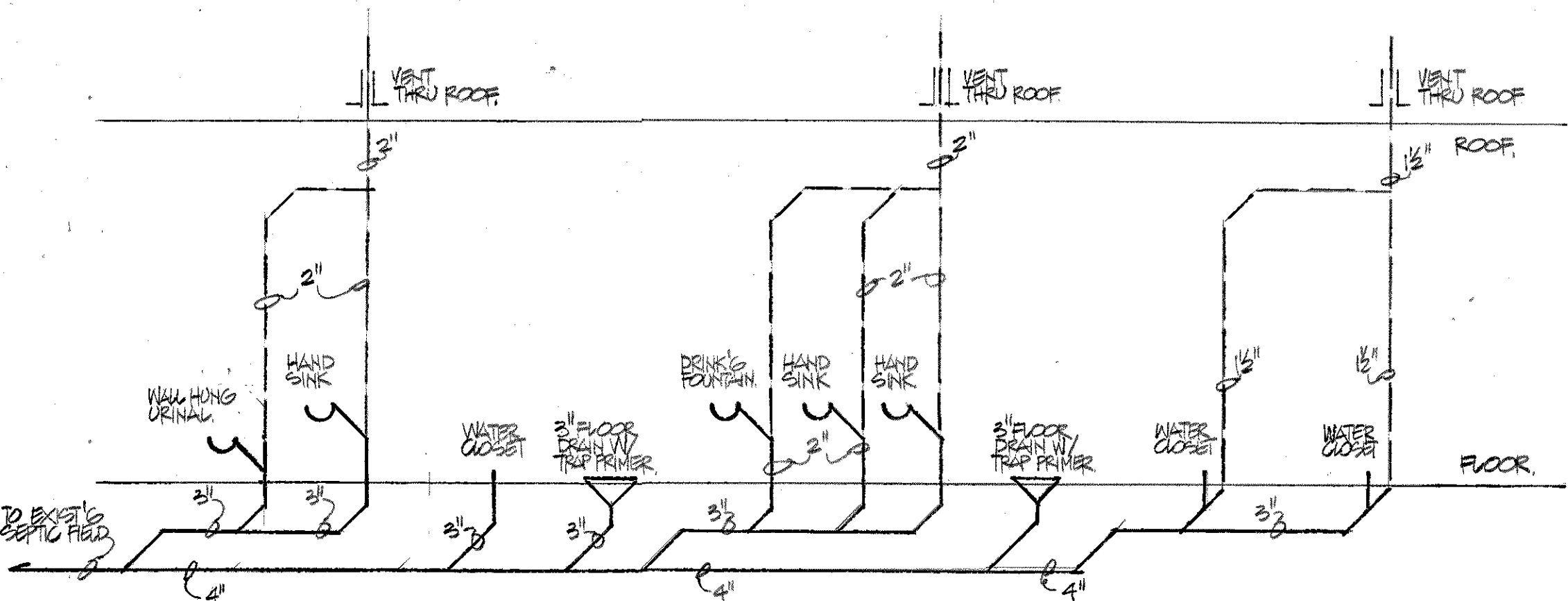


① MAIN LEVEL MEP LAYOUT DIAGRAMS  
1/4" = 1'-0"

NOTE: SMOKE ALARMS SHALL BE INTEGRATED INTO EXISTING SYSTEM EITHER THROUGH HARDWARE OR MODIFIED WIRELESS CONNECTION. ALL PROPOSED SYSTEMS ARE DIAGRAMMATIC ONLY SUBJECT TO REVISION.

② ATTIC ELECTRIC  
1/4" = 1'-0"



③ PLUMBING RISER DIAGRAM  
N.T.S.

**ELECTRICAL LEGEND**

**GENERAL**

# INDICATES A NOTE

△ INDICATES A REVISION, CLOUDED AREA CONTAINS THE REVISION

**LIGHTING**

○ NEW 2'x4' FLUORESCENT LIGHTING FIXTURE

○ NEW 2'x2' FLUORESCENT LIGHTING FIXTURE

○ BATTERY PACK EMERGENCY LIGHTING

○ FIXTURE ON EMERGENCY CIRCUIT

○ NEW FLOOR DOWNLIGHT

○ WALL OR CEILING MOUNTED EXIT LIGHT ON EMERGENCY CIRCUIT, DARKENED QUARTER SECTION(S) DENOTES FACE(S), WITH DIRECTIONAL ARROW(S) AS INDICATED ON PLANS. PROVIDE BUILDING STANDARD FIXTURES.

○ NEW SINGLE POLE TUMBLER SWITCH, FLUSH MOUNTED AT 4'-0" AFF OR AS NOTED

○ NEW THREE WAY TUMBLER SWITCH FLUSH MOUNTED AT 4'-0" AFF OR AS NOTED.

○ OCCUPANCY SENSOR

**POWER**

○ CONDUIT CONCEALED IN CEILING OR WALL HOMERUN TO PANEL. ARROWS INDICATE NUMBER OF CIRCUITS. TICKS INDICATE NUMBER OF CONDUCTORS WHEN MORE THAN TWO ARE REQUIRED.

○ PANELBOARD

○ DOUBLE RECEPTACLE: 2P, 3W, 20A, 125V, M.H. 18" A.F.F. U.O.N.

○ DUPLEX RECEPTACLE WITH COMMON COVER PLATE: 2P, 3W, 20A, 125V

○ GFI DUPLEX RECEPTACLE

○ JUNCTION BOX WALL OR CEILING MOUNTED

○ MOTOR CONNECTION

○ MOTOR THERMAL SWITCH

○ DISCONNECT SWITCH H.P. RATED

**ELECTRICAL SPECIFICATION NOTES**

- GENERAL**
- IT IS THE DESIGN INTENT OF THESE CONSTRUCTION DOCUMENTS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN TO PURCHASE AND INSTALL COMPLETE AND READY FOR USE.
  - ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST NATIONAL ELECTRICAL CODE (NEC), NFPA, LOCAL, STATE AND MONTGOMERY COUNTY CODES.
  - CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND OBTAINING ALL PERMITS AND LICENSES AND SHALL BEAR THE COST OF ALL NECESSARY PERMITS AND INSPECTIONS.
  - THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS AND TO MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT. ALL WORK MUST BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCES WITH EXISTING AND NEW EQUIPMENT, PIPING, STRUCTURE, MASONRY, ETC. AND PRESERVE CLEARANCES ABOVE CEILING AND HEADROOM BELOW CEILING.
  - PROVIDE ALL MATERIALS, BRACING, HANGERS AND EQUIPMENT AS REQUIRED TO PROVIDE A COMPLETE OPERATIONAL ELECTRICAL SYSTEM. ALL MATERIAL AND EQUIPMENT INSTALLED AS PART OF THIS WORK SHALL BE NEW AND U.L. TESTED.
  - CEILING GRID LAYOUTS INDICATED ON THE PLANS ARE SHOWN FOR CONVENIENCE PURPOSES ONLY. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE LIGHTING FIXTURES AND WITH THE ARCHITECT. THE GENERAL CONTRACTOR AND MECHANICAL CONTRACTOR BEFORE THE CEILING GRID, AIR OUTLETS OR LIGHT FIXTURES ARE INSTALLED.
  - COORDINATE ALL WORK AND MAKE ALL FINAL CONNECTIONS REQUIRED FOR A COMPLETE INSTALLATION OF MECHANICAL EQUIPMENT AND CONTROLS. EQUIPMENT RATINGS ARE APPROXIMATE AND MAY VARY BY MANUFACTURERS. VERIFY EXACT ELECTRICAL REQUIREMENTS WITH APPROVED SHOP DRAWINGS. ADJUSTMENTS SHALL BE MADE IN SIZE OF BREAKERS, SWITCHES, FUSES, WIRE AND MOTOR CONTROLS INCLUDING HEATER ELEMENTS BASED UPON THE ACTUAL EQUIPMENT INSTALLED AT NO ADDITIONAL COST TO THE TENANT.
  - IDENTIFICATION PLATES OF BLACK LAMINATED PLASTIC WITH 1/2" INCH WHITE LETTERS FASTENED WITH SELF-TAPPING METAL SCREWS, SHALL BE PROVIDED FOR THE NEW PANELBOARD.
  - IN THE EVENT OF CONFLICT BETWEEN VARIOUS PARTS OF THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO DRAWINGS, SPECS, AND GENERAL CONDITIONS THE MORE STRINGENT (MORE COSTLY) OF THE CONDITIONS SHALL APPLY FOR BUILDING PURPOSES.
  - CONTRACTOR SHALL PROVIDE RECORD DRAWINGS (A MARKED UP SET OF PRINTS) INDICATING ALL CHANGES MADE TO DESIGN DOCUMENTS AND SHALL BE GIVEN TO THE GENERAL CONTRACTOR FOR DELIVERY TO THE OWNER AS PART OF PROJECT CLOSE OUT.
  - ALL RECEPTACLES SHALL BE INSTALLED WITH GROUND PIN ON THE BOTTOM SIDE OF DEVICE WHERE MOUNTED VERTICALLY.
- B. MATERIAL**
- CONDUIT/RACEWAYS: CONDUIT SHALL BE MINIMUM 3/4" SIZE AND SHALL BE INSTALLED CONCEALED IN ALL AREAS. BRANCH CIRCUIT/TELEPHONE/CONTROL CONDUIT MAY BE EXPT. FMC SHALL BE USED FOR FINAL CONNECTIONS TO MOTORS. ARMORED CABLE (EO) OR METAL-CLAD CABLE (MC) WHERE GROUND WIRES ARE INDICATED, MAY BE USED ONLY WHERE PERMITTED BY LOCAL AUTHORITIES AND IN ACCORDANCE WITH CODE. CONDUIT FITTINGS MAY BE SET SCREW TYPE UNLESS OTHERWISE PROHIBITED.
  - CONDUCTORS: MINIMUM CONDUCTOR SIZE FOR POWER AND LIGHTING CIRCUITS SHALL BE NO. 12 AWG AND NO. 14 AWG FOR CONTROL CIRCUITS. CONDUCTORS SHALL BE COPPER WITH TYPE THIN/THIN 90° INSULATION AND SHALL BE COLOR CODED TO MATCH EXISTING. ALL 120 VOLT BRANCH CIRCUITS EXCEEDING 75 FEET FROM THE PANEL TO THE FIRST OUTLET OR DEVICE SHALL BE PROVIDED WITH THE NEXT LARGER SIZE WIRE, WHETHER INDICATED IN PANEL SCHEDULE OR NOT.
  - OUTLET BOXES: ALL OUTLET, DEVICE, JUNCTION AND PULL BOXES SHALL BE GALVANIZED STEEL IN DRY LOCATIONS AND CAST ALUMINUM WITH THREADED HUBS IN DAMP OR WET LOCATIONS. DEVICE BOXES SHALL BE OF SUITABLE SIZE FOR THE DEVICE TO BE MOUNTED AND THE PARTITIONS IN WHICH THEY ARE INSTALLED. MINIMUM SIZE OF OUTLET BOXES SHALL BE 4" ROUND, HEXAGONAL OR SQUARE. PULL BOXES SHALL BE SIZED PER NEC. VERIFY ALL DOOR SWINGS BEFORE INSTALLING LIGHT SWITCH BACKBOXES. SWITCHES SHALL BE LOCATED ON LOCK SIDE OF DOOR UNLESS OTHERWISE INDICATED.
  - DEVICES: ALL DEVICES SHALL BE SPECIFICATION GRADE, WHITE AND AS FOLLOWS:
    - TOGGLE SWITCHES SHALL BE RATED 120/277 VOLT, 20 AMP
    - SINGLE POLE - HUBBELL NO. HBL-1221
    - ALL RECEPTACLES SHALL BE GROUNDING TYPE
      - DUPLEX (NEMA 5-20R) - HUBBELL NO. 5362
      - GROUND FAULT TYPE - HUBBELL NO. 5382
  - DEVICE PLATES SHALL BE ONE PIECE TYPE, SINGLE OR MULTIPLE GANG WITH THE FOLLOWING MATERIAL AND FINISH:
    - BRUSHED STAINLESS STEEL COVER PLATES SHALL BE USED.
  - LIGHT FIXTURES: PROVIDE ALL MOUNTING HARDWARE AND ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
  - PANELBOARDS: SHALL BE DEAD-FRONT TYPE WITH CONVENTIONAL BOLT-ON THERMAL MAGNETIC MOLDED CASE CIRCUIT BREAKERS RATED AS INDICATED ON DRAWINGS. PANELS SHALL BE AS MANUFACTURED BY GE, SQUARE D, CUTLER-HAMMER OR SIEMENS. PANELBOARD ENCLOSURE SHALL BE PROVIDED WITH TYPEWRITTEN CIRCUIT DIRECTORY INDICATING THE LOADS SERVED. ALL BUSES SHALL BE MADE OF SILVER PLATED COPPER.
  - DISCONNECT SWITCHES: SHALL BE QUICK-MAKE QUICK-BREAK TYPE, FUSIBLE, HEAVY DUTY, H.P. RATED. SWITCHES SHALL BE AS MANUFACTURED BY G.E., SQUARE "D" CO., CUTLER-HAMMER OR SIEMENS.
- C. EXECUTION**
- SECURE ALL RACEWAY SUPPORTS TO BUILDING STRUCTURE PER NEC REQUIREMENTS. SUPPORT HORIZONTAL RUNS OF METALLIC RACEWAYS NO MORE THAN TEN FEET APART. RUN EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO THE WALLS.
  - ROUTE RACEWAYS OVER WATER OR OTHER PIPING WHEN PULL ROPES ARE NOT REQUIRED. NO RACEWAY SHALL BE INSTALLED WITHIN THREE INCHES OF HOT WATER PIPING OR APPLIANCES.
  - CUT CONDUIT ENDS SQUARE AND REAM SMOOTH TO REMOVE ALL BURRS. PAINT MALLE THREADS OF FIELD THREADED RACEWAYS WITH GRAPHITE BASE PIPE COMPOUND. DRAW UP TIGHT WITH RACEWAY COUPLINGS.
  - SUPPORT JUNCTION AND PULL BOXES TO BUILDING STRUCTURE DIRECTLY SO THAT NO WEIGHT BEARS ON RACEWAYS.
  - ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. ANY CONFLICT BETWEEN MANUFACTURERS RECOMMENDATIONS AND THE CONTRACT DRAWINGS AND SPECIFICATIONS SHALL PROMPTLY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
  - CONTRACTOR SHALL GUARANTEE ALL LABOR AND MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK BY OWNER.

**PLUMBING SYSTEMS GENERAL NOTES**

- PIPING LAYOUT IS DIAGRAMMATIC. LOCATE EXACT PIPING ROUTING COORDINATED WITH ALL STRUCTURAL, MECHANICAL, ELECTRICAL & OTHER OBSTRUCTIONS.
- COMPLY WITH LOCAL PLUMBING CODES AND ALL APPLICABLE NATIONAL CODES.
- CONTRACTOR SHALL SUBMIT, PAY FOR AND OBTAIN ALL REQUIRED PERMITS PRIOR TO COMMENCING WORK.
- ALL MATERIAL SHALL BE NEW.
- SANITARY, VENT & STORM PIPING SHALL BE SCHEDULE 40 PVC.
- UNDERGROUND WATER PIPING SHALL BE ASTM B 88 TYPE "C" COPPER WATER TUBE WITH LEAD-FREE SOLDER JOINT PRESSURE FITTINGS. ABOVE GROUND PIPING SHALL BE TYPE "L" COPPER.
- PROVIDE VALVES AND UNIONS WHEN CONNECTING PIPING TO EQUIPMENT. LOCATE VALVES FOR EASY ACCESS AND SERVICING OF EQUIPMENT.
- INSULATE HOT AND COLD WATER PIPING WITH 1" THICK MOLDED FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET. SEAL ALL JOINTS.
- SUBMIT SHOP DRAWINGS OF ALL PLUMBING FIXTURES. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO ORDERING THEM.
- APPLY PIPE IDENTIFICATION TO ALL NEW PIPING. PIPE ID SHALL IDENTIFY THE CONTENTS (E. COLD WATER, HOT WATER, SANITARY, VENT) AND DIRECTION OF FLOW. FLOW ARROWS SHALL OVERLAP BY WRAPPING AROUND THE PIPE ID.
- PRESSURE TEST ALL NEW WATER PIPES, MINIMUM OF 24 HOURS BEFORE APPLYING PIPE INSULATION. ALL TESTS SHALL BE IN COMPLIANCE WITH REQUIREMENTS OF LOCAL WATER AUTHORITY.
- ALL WORK SHALL BE COORDINATED WITH THE OTHER TRADES.
- ALL LABOR AND MATERIAL SHALL BE WARRANTED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER.
- IN THE EVENT OF CONFLICT BETWEEN THE SPECS, DRAWINGS, CODE REQUIREMENTS OR ANY OTHER PART OF THE CONTRACT DOCUMENTS THE MORE STRINGENT (THE MORE COSTLY) OF THE OPTIONS WILL GOVERN. CONTRACTOR SHALL SEEK RESOLUTION OF CONFLICTS BEFORE AWARD OF CONTRACT AND STARTING WORK.
- CONTRACTOR SHALL PROVIDE CHROME PLATED P-TRAPS, SUPPLIES AND STOPS FOR ALL THE PLUMBING FIXTURES.
- ALL THE EXPOSED PLUMBING PIPING UNDER THE SINK SHALL BE PROVIDED WITH ADA COMPLIANT SAFETY SHIELD.

**LEGEND**

SYMBOL	ABBREVIATION	DESCRIPTION
—	S OR W	SOIL OR WASTE PIPING
—	V	VENT PIPING
—	CW	COLD WATER PIPING
—	HW	HOT WATER PIPING
—	UNION	UNION
—	CO / WCO	CLEANOUT / WALL CLEANOUT
—	VTR	VENT THROUGH ROOF
—	SV	SHUTOFF VALVE
—	FD	FLOOR DRAIN
—	WD	WATER RISER DESIGNATION
—	SV	SOIL AND VENT STACKS DESIGNATION
—	①	KEYED NOTE

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE # 6164      EXPIRES

**PROJECT TITLE**

**ST. JOSEPH'S CHURCH ENTRY VESTIBULE  
ADDITION AND MODIFICATIONS**  
4590 St. Joseph's Way  
Pomfret MD 20675

**Thomas K. Reinecker AIA  
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**REVISIONS**

NO.	DATE	DESCRIPTION

**SHEET TITLE**  
ELECTRICAL NOTES  
PLUMBING NOTES  
WIRING PIPING DIAGRAM  
RISER DIAGRAM

DATE 12.20.15      SHEET NUMBER  
**MEP 1**