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PROJECT:
RE-MODEL O'REILLY AUTO PARTS STORE
 103 E. GORDON AVE.
 GORDONSVILLE, VA 22942
PLUMBING PLAN

Professional of Record
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 License # 058515
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 SHEET:

P1

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- ### PLUMBING NOTES
- DRAWING IS DIAGRAMMATIC & IS NOT TO BE SCALED. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS.
 - ALL PLUMBING WORK IS TO BE DONE IN ACCORDANCE WITH THE APPLICABLE CODE(S) NOTED ON THE COVER SHEET.
 - VALVES ON WATER LINES SHALL BE BRONZE BALL VALVES. DO NOT SUBSTITUTE GATE OR GLOBE VALVES. VALVES SHALL BE THE SAME SIZE AS THEIR INLET PIPING.
 - ALL PLUMBING FIXTURES ARE TO BE FURNISHED COMPLETE WITH NECESSARY STOPS, TRAPS, TAILPIECES, TRIM, ETC.
 - THE CONTRACTOR SHALL COOPERATE WITH ALL OTHER CONTRACTORS & SUBCONTRACTORS IN LAYING HIS OUT & INSTALLING HIS WORK. COOPERATION DOES NOT MEAN "I WAS HERE FIRST."
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING A COMPLETE & FUNCTIONAL SYSTEM IN ACCORDANCE WITH THE INTENT OF THE PLANS, WHETHER OR NOT EVERY ELEMENT THEREOF IS SPECIFICALLY CALLED OUT.
 - DO NOT INSTALL CAPPED AIR CHAMBERS AT FIXTURES. INSTALL WATER HAMMER ARRESTERS AS CALLED FOR ON PLAN. ARRESTERS ARE TO BE RATED FOR INSTALLATION IN CONCEALED LOCATIONS.
 - ALL HOT & COLD WATER SUPPLY PIPING CONNECTION TO FIXTURES ARE TO BE 3/4" UNLESS NOTED OTHERWISE.
 - PLUMBING PIPING SHALL NOT BE INSTALLED ABOVE ELECTRICAL PANELS. PROVIDE REQUIRED CLEARANCES PER "N.E.C." COORDINATE ELECTRICAL PANEL LOCATIONS WITH THE ELECTRICAL CONTRACTOR.
 - INSTALL PIPE INSULATION ON ALL DOMESTIC WATER LINES ABOVE FINISH FLOOR.
 - CONTRACTOR SHALL COORDINATE WITH ALL STATE & LOCAL BUILDING REGULATION AGENCIES & UTILITY COMPANY(S) IN THE PROCUREMENT OF & PAYMENT OF ALL PERMITS, LICENSES, FEES & CHARGES REQUIRED FOR THE PERFORMANCE OF THE WORK.
 - PROVIDE CHROME ESCUTCHEON COVER PLATES AT ALL PIPE PENETRATIONS OF FINISHED WALL SURFACES.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO ROUTE ALL WATER PIPING AROUND SPACES WITH TEMPERATURES BELOW FREEZING (i.e. ATTICS, CHASES, EXTERIOR WALLS, ETC.). IF FREEZING OF ANY WATER PIPING OCCURS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR THE PIPING THRU A NON-FREEZING SPACE TO THE FIXTURE/APPLIANCE ORIGINALLY SERVED BY THE FROZEN PIPING.
 - ALL CAULKING ON BUILDING PENETRATIONS SHALL BE A 1-COMPONENT NON-SAG URETHANE SEALANT. ANY CONTRACTOR WHO USED SILICONE OR ANY OTHER CAULKING WILL BE REQUIRED TO REMOVE & REPLACE WITH A SPECIFIED SEALANT. PLUMBING SUB-CONTRACTOR SHALL INFORM THE ELECTRICAL SUB-CONTRACTOR OF THE VOLTAGE & POWER REQUIREMENTS OF ALL PLUMBING EQUIPMENT TO BE INSTALLED.
 - ALL GAS PIPING INSTALLATIONS SHALL COMPLY WITH "NFPA-54" NATURAL GAS OR "NFPA-58" LP GAS (latest edition).
 - ALL WATER HEATERS & HOT WATER STORAGE TANKS SHALL HAVE A DRAIN VALVE INSTALLED AT THE BOTTOM OF THE TANK AS REQUIRED BY CODE.

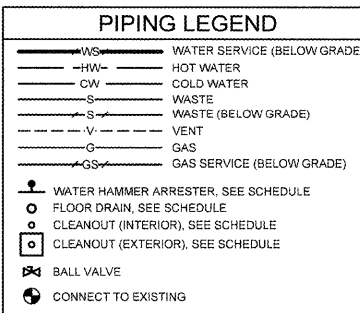
- ### KEYED NOTES
- EXTEND NEW SANITARY PIPING (SEE RISER FOR SIZE, SHEET P2) TO EXISTING 4" MINIMUM SANITARY PIPE. FIELD VERIFY EXACT LOCATION, INVERT, FLOW, ETC. PRIOR TO ROUGHING IN OR INSTALLING NEW SANITARY PIPING.
 - EXTEND NEW 3" VENT THROUGH ROOF. COORDINATE ROOF PENETRATION REQUIREMENTS WITH OWNERS ROOFING CONTRACTOR.
 - EXTEND AND CONNECT NEW 1" WATER LINE FROM EXISTING (1" MIN.) WATER LINE IF NOT EXISTING. PROVIDE SHUT OFF VALVE, METER WITH REMOTE READER OR SUB-METER, BACKFLOW PREVENTER, PRESSURE REDUCING VALVE, ETC. AS REQUIRED. ON EXISTING DOMESTIC WATER SERVICE LINE. FIELD VERIFY EXACT SIZE, LOCATION, PRESSURE, ETC. OF EXISTING PIPING PRIOR TO ROUGHING IN OR INSTALLING NEW PIPING. VERIFY EXACT UTILITY REQUIREMENTS.
 - CONNECT NEW GAS PIPING TO EXISTING GAS METER. CONTRACTOR SHALL VERIFY GAS METER IS PROPERLY SIZED FOR NEW CONNECTED LOAD (CUSTOMER SIDE) AND TEST PIPING FOR LEAKAGE/DEFECTS PRIOR TO NEW CONNECTIONS. SHOULD ANY REPAIRS BE REQUIRED, CONTACT OWNERS REPRESENTATIVE AND SUBMIT A WRITTEN COST PROPOSAL INCLUDING COMPLETE COST TO REPAIR IN "LIKE NEW" CONDITION AND TIME ESTIMATE TO COMPLETE REPAIRS.
 - ROUTE PRIMARY AND OVERFLOW RAINWATER CONDUCTORS AS HIGH AS POSSIBLE WHILE MAINTAINING 1% SLOPE.
 - ROUTE PRIMARY AND OVERFLOW RAINWATER LEADER THRU EXTERIOR WALL, DOWN, TIGHT TO EXTERIOR WALL, TERMINATE WITH 90° ELBOW AND SPLASH BLOCK.

GAS LOAD

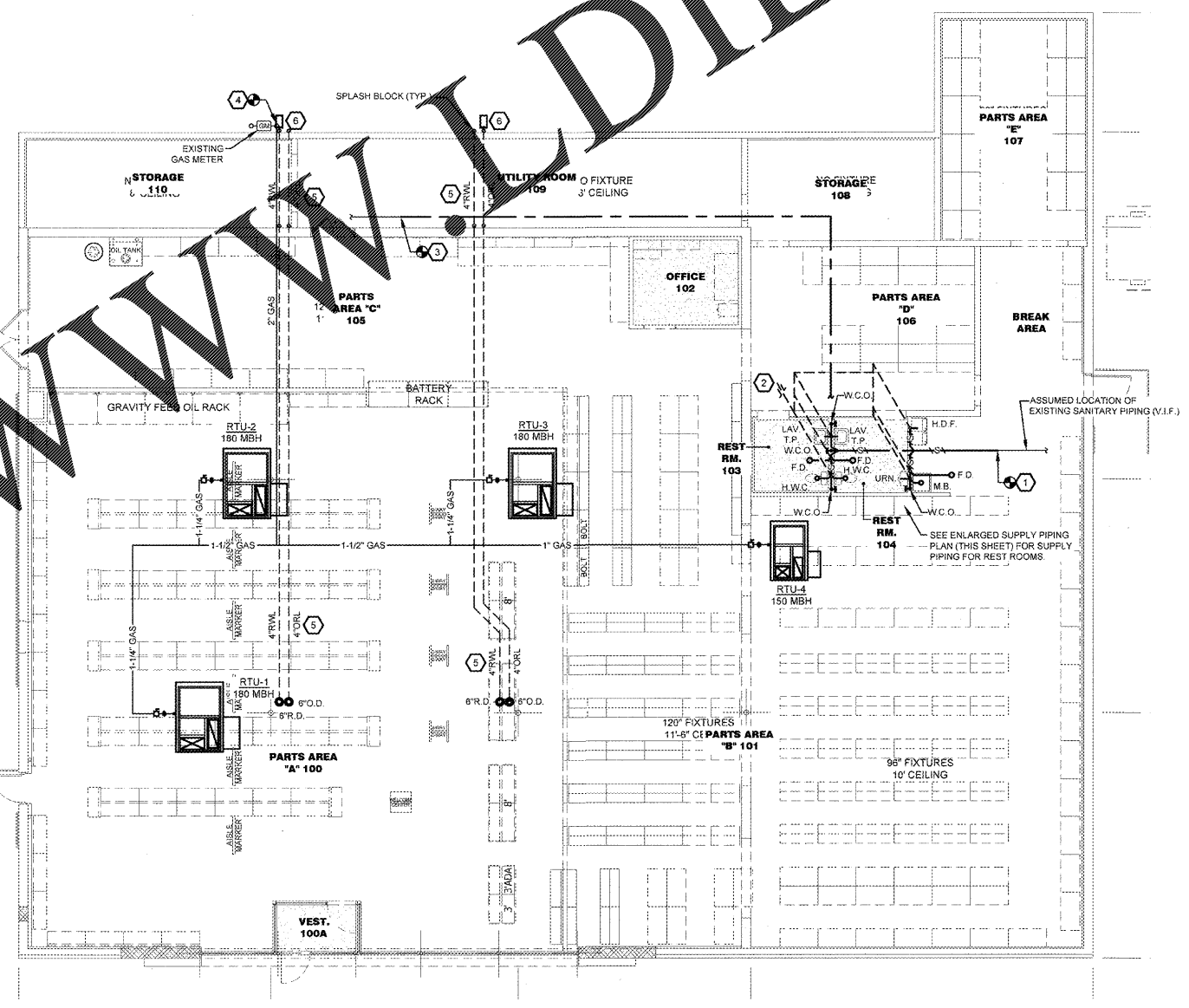
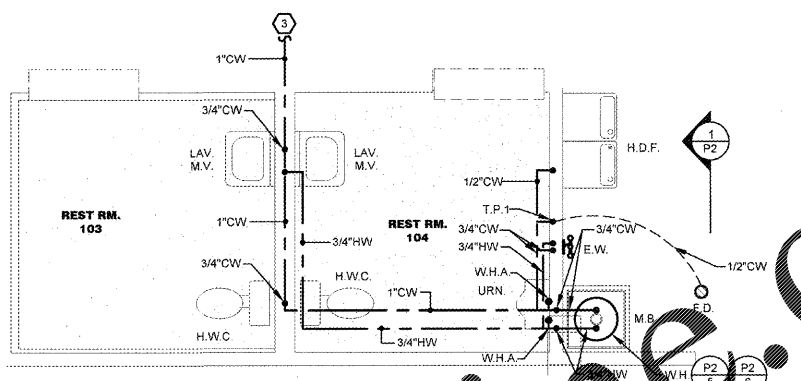
(PIPE SIZING BASED ON 2012 VIRGINIA FUEL GAS CODE, TABLE 402.4.2)

ITEM	MBH/INPUT
ROOFTOP UNIT (RTU-1-3)	180 (E.A.)
ROOFTOP UNIT (RTU-4)	180
TOTAL CONNECTED LOAD	690

GAS PIPING SIZED USING LONGEST MAXIMUM RUN OF EQUIVALENT LENGTH OF PIPING = 150'
 INLET PRESSURE = 7in W.C. OR 1/4 psig
 MAXIMUM PRESSURE DROP = 5 INCH W.C. AND 6 SPECIFIC GRAVITY.



- ### PLUMBING PIPE MATERIALS
- A. THE FOLLOWING APPLICATIONS ARE FOR INSIDE, BELOW & ABOVE THE BUILDING SLAB AND ENDING AT A POINT 5'-0" OUTSIDE THE PERIMETER BUILDING WALLS.
- DOMESTIC WATER DISTRIBUTION PIPING BELOW GROUND: ALL INTERIOR DOMESTIC WATER PIPING SHALL BE TYPE "K" HARD DRAWN COPPER TUBING (SIL-FOS 2, FOS-FLO 7 OR OTHER SILVER BRAZING MATERIAL). THIS IS REQUIRED FOR THE WATER SERVICE LINE FROM THE SHUT-OFF VALVE IN THE BUILDING TO A POINT 5 FEET OUTSIDE THE BUILDING.
 - DOMESTIC WATER DISTRIBUTION PIPING ABOVE GROUND: HARD COPPER TUBE, TYPE L.
 - SOIL, WASTE, AND VENT PIPING BELOW GROUND: SCHEDULE 40 POLY VINYL CHLORIDE (PVC) PLASTIC DWV PIPE.
 - SOIL, WASTE, AND VENT PIPING ABOVE GROUND: HUBLESS CAST-IRON SOIL PIPE OR POLY VINYL CHLORIDE (PVC) PLASTIC DWV PIPE.
- NOTE: PVC PIPING IS NOT PERMITTED IN AIR-HANDLING CEILING SPACES, USE ONLY CAST-IRON OR DUCTILE IRON PIPE IN THESE LOCATIONS.
- B. THE FOLLOWING APPLICATIONS ARE FOR ONLY FROM 5'-0" OUTSIDE THE BUILDING TO THE UTILITY POINT OF CONNECTION (POC).
- UNDERGROUND DOMESTIC WATER SERVICE PIPING FROM A POINT 5 FEET OUTSIDE THE BUILDING TO THE POC
 (SEE SITE UTILITIES PLAN FOR WHICH PIPING MATERIAL (COPPER OR PVC) IS REQUIRED):
- 3/4" - 1-1/2" SCHEDULE 40 PVC PIPE WITH SOLVENT-WELDED JOINTS.
 - 1-1/2" - 3" SDR-21, PVC PIPE (ASTM D2241) CLASS 200, BELL AND SPIGOT WITH RUBBER GASKETED JOINTS.
 - 3/4" - 3" TYPE "K" HARD DRAWN COPPER TUBING (SIL-FOS 2, FOS-FLO 7 OR OTHER SILVER BRAZING MATERIAL).
 - 4" AND LARGER, SDR-18 PVC PIPE (AWWA C-900) CLASS 150 BELL AND SPIGOT WITH RUBBER GASKETED JOINTS.
- UNDERGROUND SANITARY SEWER SERVICE PIPING FROM A POINT 5 FEET OUTSIDE THE BUILDING TO THE POC
- POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL CONFORM TO ASTM D3034 (SDR-35).
 - CAST IRON OR DUCTILE IRON PIPE SHALL CONFORM TO USASI #A-21 CLASS 50.
- C. GAS PIPE MATERIAL (WHEN REQUIRED):
 LOW PRESSURE GAS SYSTEMS, ABOVE GROUND WITHIN OR OUTSIDE BUILDING.
- USE THE FOLLOWING:
- 2 INCHES AND SMALLER: STEEL PIPE, MALLEABLE IRON, THREADED FITTINGS, AND THREADED JOINTS.
 - 2-1/2 INCHES AND LARGER: STEEL PIPE, BUTT WELDING FITTINGS, AND WELDED JOINTS.



PLUMBING PLAN
 SCALE: 1/8" = 1'-0"
 TRUE NORTH

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