

PLUMBING GENERAL NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL CODES, BASE BUILDING SPECIFICATIONS AND AUTHORITIES HAVING JURISDICTION.
- PLUMBING CONTRACTOR SHALL COORDINATE WITH EXISTING CONDITIONS, ARCHITECTURAL, MECHANICAL, AND ELECTRICAL TRADES TO AVOID INTERFERENCE.
- WASTE AND VENT PIPING ABOVE GRADE SHALL BE NO-HUB SERVICE WEIGHT CAST IRON PIPING OR DWV TYPE COPPER. NO PVC PIPING PERMITTED IN AREAS USED AS PLENUMS.
- WATER (DOMESTIC AND NON-POTABLE) PIPING SHALL BE TYPE "L" COPPER TUBING WITH 95/5 SOLDER. PROVIDE WITH 1" FIBERGLASS INSULATION WITH VAPOR BARRIER AND SELF-SEALING LAP.
- STORM WATER DRAINAGE PIPING SHALL BE SERVICE CLASS, CAST-IRON SOIL PIPE AND FITTINGS, GASKETS, AND GASKETED JOINTS. ALL HORIZONTAL STORM WATER PIPING SHALL BE SLOPED AT 1/4" FOR EVERY 1'.
- REFER TO FIXTURE CONNECTION SCHEDULE FOR EQUIPMENT AND FIXTURE SPECIFICATIONS AND CONNECTION SIZES. CONTRACTOR SHALL PROVIDE ANGLE SUPPLY PIPES WITH STOP VALVES P-TRAPS AND ALL OTHER ITEMS NECESSARY TO INSTALL ALL FIXTURES AND EQUIPMENT FOR A COMPLETE SYSTEM.
- CONTRACTOR SHALL PROVIDE SUBMITTAL DATA FOR REVIEW OF ALL PLUMBING, FIXTURES, TRIM, ACCESSORIES AND EQUIPMENT.
- PLUMBING CONTRACTOR SHALL SURVEY EXISTING CONDITIONS AND DEVELOP A FULL UNDERSTANDING OF THE PROJECT PRIOR TO THE BID.
- CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS, AND EXACT LOCATION AND SIZE OF EXISTING PIPING PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO ENGINEER.
- PLUMBING CONTRACTOR SHALL CONNECT ALL ITEMS OF EQUIPMENT FURNISHED BY OTHERS AND UNDER OTHER SECTIONS OF THE SPECIFICATIONS, CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO COMPLETE THE PLUMBING INSTALLATION.
- NON-POTABLE WATER PIPING SHALL BE CLEARLY LABELED "CAUTION: NON-POTABLE WATER. DO NOT INGEST." SPACING BETWEEN LABELING SHALL BE NO MORE THAN 25 FEET.
- ALL WATER CLOSETS SUPPLIED BY NON-POTABLE WATER SHALL BE LABELED WITH WARNING SIGN THAT READS "AS A WATER CONSERVATION MEASURE, THIS FIXTURE IS SUPPLIED BY CAPTURED RAINWATER. DO NOT INGEST."

PLUMBING EQUIPMENT NOTES

- VF 1** MEDIUM CAPACITY VORTEX RAINWATER FINE FILTER WITH POLYPROPYLENE FILTER HOUSING, UPPER RING, HOUSING I.D. 0.015 INCH STAINLESS STEEL FINE MESH FILTER AND STAINLESS STEEL LIFT HANDLE. PROVIDE STAINLESS STEEL WALL BRACKET FOR MOUNTING. FLOWRATE: 65 GALLONS/MINUTE. CONNECTION SIZES: RAINWATER INLET 6", CLEAN RAINWATER OUTLET 4", AND STORMWATER OUTLET 6". BASIS OF DESIGN: WISY FINE FILTER - RH9520-06. AVAILABLE FROM JAY R. SMITH MFG. CO.
- ST 1** 4000 GALLON VERTICAL POLYETHYLENE STORAGE TANK. DIMENSIONS: DIAMETER 90", HEIGHT 162". DRY WEIGHT: 782 LBS. COLOR: BLACK. PROVIDE ALL NECESSARY FLANGES/FITTINGS/GASKETS/ACCESS OPENING FOR PIPING INTO AND OUT OF TANK. BASIS OF DESIGN: ASSMANN CORPORATION OF AMERICA.
- BP 1** SIMPLEX BOOSTER PUMP SYSTEM. PUMP: 20 GPM @ 56 PSI BOOST. ALL BRONZE. SELF-PRIMING. 208V/3Ø/60HZ - 3HP. BASIS OF DESIGN: WEIL MODEL 8716. EXPANSION TANK: BLADDER TYPE FOR USE WITH POTABLE WATER - 135 GALLON CAPACITY. BASIS OF DESIGN: TIGERFLOW TF-132. CONTROL PANEL: NEMA 3R ENCLOSURE WITH INTEGRAL SYSTEM DISCONNECT.

SUBMITTAL NOTES

- THE "BASIS OF DESIGN" INDICATED FOR EACH OF THE PRODUCTS WILL ESTABLISH THE TYPE, FUNCTION, DIMENSION, IN-SERVICE PERFORMANCE, PHYSICAL PROPERTIES, APPEARANCE, AND OTHER CHARACTERISTICS FOR PURPOSES OF EVALUATING COMPARABLE PRODUCTS OF OTHER MANUFACTURERS. WHERE THE CONTRACTOR PROPOSES ALTERNATE PRODUCTS, PROVIDE SUFFICIENT INFORMATION TO ALLOW THE ENGINEER TO DETERMINE IF THE PROPOSED PRODUCT IS COMPARABLE.
- PROVIDE PRODUCT DATA, SHOP DRAWINGS, COORDINATION DRAWINGS, TEST REPORTS AND CERTIFICATES AS INDICATED. SUBMITTALS MUST CLEARLY INDICATE THE INTENDED APPLICATION, INSTALLATION CONFIGURATION, AND ACCESSORIES INTENDED FOR USE ON THIS PROJECT. PRODUCT DATA MUST INCLUDE ALL INFORMATION NECESSARY TO VERIFY COMPLIANCE WITH THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.
- SUBMIT MANUFACTURER'S STANDARD COLOR CHARTS FOR ALL EQUIPMENT AND COMPONENTS EXPOSED TO VIEW IN OCCUPIED SPACE.
- SUBMIT PRODUCT DATA FOR THE FOLLOWING: STORAGE TANK; FILTERS; BOOSTER PUMP; VALVES; PIPE LABELS; FIXTURE WARNING TAGS.
- NO SUBMITTAL ITEM SHALL BE FABRICATED, DELIVERED TO THE SITE, OR INSTALLED UNTIL ITS SUBMITTAL HAS BEEN REVIEWED BY THE ENGINEER AND MARKED WITH EITHER "NO EXCEPTIONS TAKEN" OR "MAKE CORRECTIONS NOTED."
- PROVIDE OPERATING AND MAINTENANCE DATA FOR ALL PRODUCTS FOR USE BY THE OWNER'S MAINTENANCE PERSONNEL.
- WHEN FACTORY REPRESENTATIVES ARE PRESENT TO SUPERVISE INSTALLATION, START-UP, ADJUSTMENTS AND/OR PROPER OPERATION OF EQUIPMENT OR SYSTEMS, PROVIDE A SIGNED STATEMENT FROM SAID REPRESENTATIVE THAT ALL SERVICES HAVE BEEN SATISFACTORILY COMPLETED, BEFORE FINAL PAYMENT APPLICATION IS MADE FOR THAT PORTION OF THE WORK.

RAINWATER HARVESTING OPERATIONAL SEQUENCE

STORAGE TANK SHALL BE EQUIPPED WITH LOW LEVEL FLOAT SWITCH. SWITCH SHALL BE LOCATED 12" FROM BOTTOM OF STORAGE TANK (APPROX. 350 GALLON MARK). WHEN WATER LEVEL IN TANK FALLS TO OR BELOW LOW LEVEL FLOAT SWITCH, MUNICIPAL WATER 2-WAY CONTROL VALVE SHALL OPEN AND BOOSTER PUMP SHALL TURN OFF. WHEN WATER LEVEL IN TANK IS ABOVE LOW LEVEL FLOAT SWITCH, MUNICIPAL WATER 2-WAY CONTROL VALVE SHALL BE CLOSED AND BOOSTER PUMP SHALL BE ON.

SYMBOLS & ABBREVIATIONS

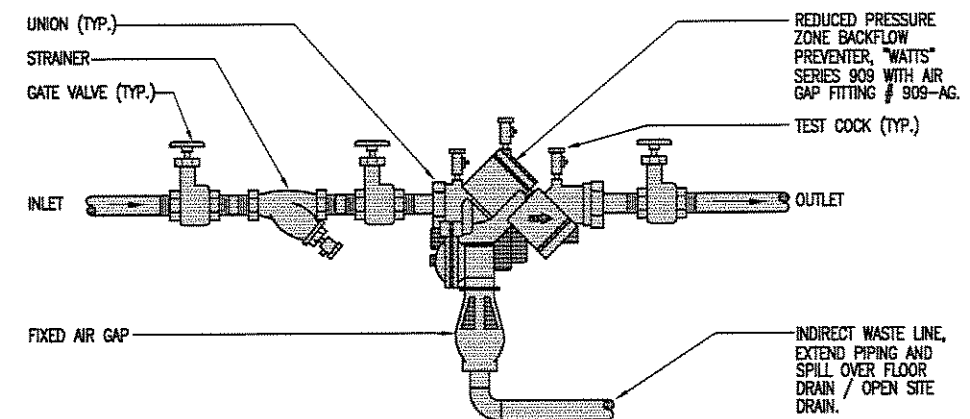
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|-----------|--|
| — | EXISTING PIPING |
| ##### | DEMOLITION OF PIPING |
| — | SANITARY PIPING |
| —FM— | FORCED MAIN |
| ---- | VENT PIPING |
| ---- | DOMESTIC COLD WATER PIPING (C.W.) |
| ---- | NON-POTABLE SUPPLY WATER PIPING (N.P.W.) |
| ---- | STORM WATER PIPING (S.W.) |
| ⊗ | GATE VALVE |
| ⊙ | BALL VALVE |
| ⊕ | BUTTERFLY VALVE |
| ⊖ | 2-WAY CONTROL VALVE |
| ⊗ | CHECK VALVE |
| ⊕ | FLOOR CLEANOUT (F.C.O.) |
| ⊖ | CLEANOUT PLUG (C.O.) |
| ⊗ | PIPE SIZE REDUCTION |
| ⊙ | EMERGENCY FLOOR DRAIN (E.F.D.) |
| ⊖ | OPEN SITE DRAIN |
| ⊗ | PLUMBING EQUIPMENT DESIGNATOR |
| ① | APPLICABLE DESIGN NOTE |
| ⊗ | POINT OF CONNECTION NEW TO EXISTING |
| (E) | EXISTING |
| (TYP.) | TYPICAL |
| ABV. CLG. | ABOVE CEILING |
| B.P. | BACKFLOW PREVENTER |
| C.O. | CLEANOUT |
| D.W. | DISHWASHER |
| E.W.C. | ELECTRIC WATER COOLER |
| F.D. | FLOOR DRAIN |
| G.W.H. | GAS WATER HEATER |
| H.B. | HOSE BIBB |
| L | LAVATORY |
| M.B. | MOP BASIN |
| O.S.D. | OPEN SITE DRAIN |
| P.S. | PANTRY SINK |
| R.D. | ROOF DRAIN |
| R.P.Z. | REDUCED PRESSURE ZONE |
| S | SINK |
| SH. | SHOWER |
| T.P.V. | TRAP PRIMER VALVE |
| UR. | URINAL |
| V.T.R. | VENT THROUGH ROOF |
| W.C. | WATER CLOSET |

FIXTURE CONNECTION SCHEDULE

| ITEM | DESCRIPTION | WASTE | VENT | C.W. | H.W. | REMARKS |
|------|--------------------------------|-------|------|------|------|--|
| WC-1 | EXISTING WATER CLOSET (A.D.A.) | 4" | 2" | 1/2" | | AMERICAN STANDARD "CADET" M#2998.012 TANK TYPE "SLOAN" FLUSHMATE M#101526-F4 1.1 GAL/FLUSH OPEN FRONT SEAT |
| WC-2 | EXISTING WATER CLOSET | 4" | 2" | 1/2" | | AMERICAN STANDARD "CADET" M#2998.012 TANK TYPE "SLOAN" FLUSHMATE M#101526-F4 1.1 GAL/FLUSH OPEN FRONT SEAT |

NOTES:

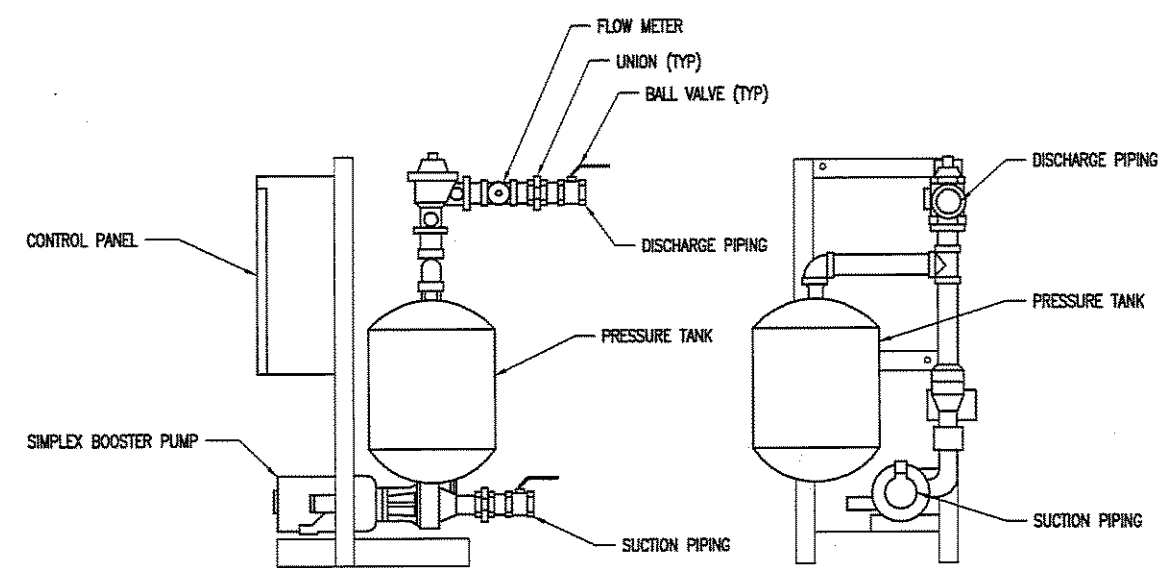
- PROVIDE CHROME PLATED SUPPLIES WITH STOP VALVES FOR EACH HOT AND COLD WATER CONNECTIONS TO PLUMBING FIXTURES AND EQUIPMENT.



NOTE: BACKFLOW PREVENTER SHALL BE MOUNTED 4'-0" ABOVE THE FINISHED FLOOR.

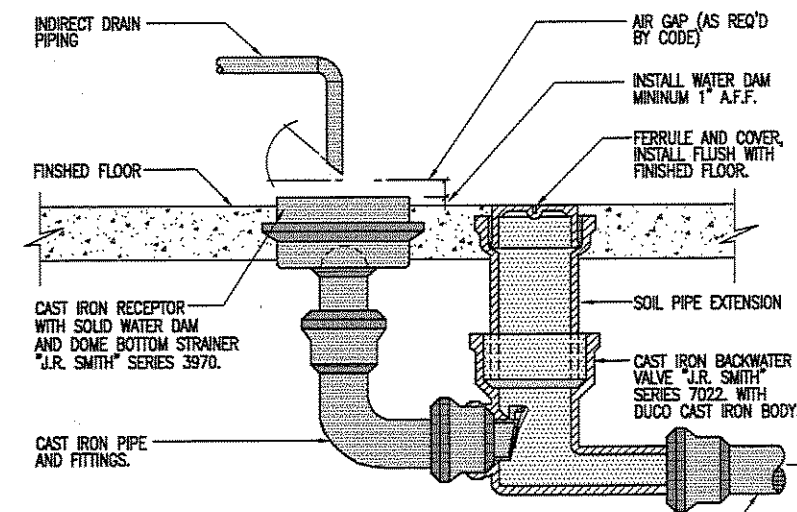
1 BACKFLOW PREVENTER DETAIL

MULTIPLE (P1) SCALE: NONE



2 BOOSTER PUMP PIPING DIAGRAM

MULTIPLE (P1) SCALE: NONE



3 OPEN SITE DRAIN DETAIL

MULTIPLE (P1) SCALE: NONE

- NOTE:
- REMOVE PIN FROM BACKWATER VALVE FLAPPER TO ALLOW FLAPPER TO HANG OPEN 1/4" TO PERMIT AIR CIRCULATION.
 - REFER TO FLOOR PLANS FOR PIPE SIZES.



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WSSI RAINWATER HARVESTING

Drawing Title:

GENERAL NOTES,
SYMBOLS &
ABBREVIATIONS,
SCHEDULES
- PLUMBING

Stamp:

No: Submission/Revision: Date:
PROGRESS SET 3/17/08

Scale: AS SHOWN
Designed: JEM
Drawn: JEM
Checked: BAJ
Date: MARCH 17, 2008

WSSI RAINWATER
 HARVESTING

EKFOX Project Number: 1086

Drawing Title:

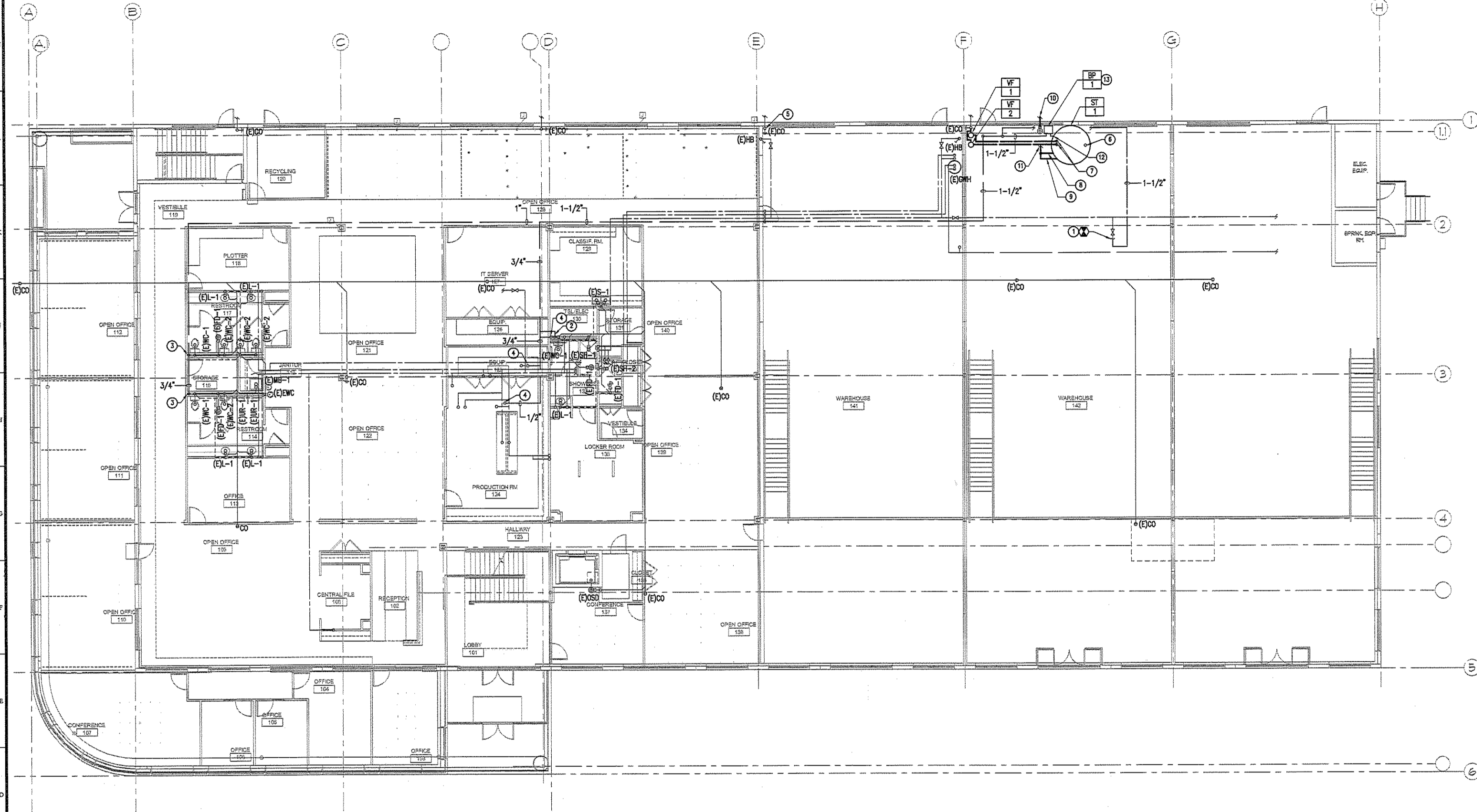
**LEVEL 1
 NEW WORK PLAN
 - PLUMBING**

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| Designed: | JEM |
| Drawn: | JEM |
| Checked: | BAJ |
| Date: | MARCH 17, 2008 |

P-2



SHEET KEYED NOTES:

- ① CONNECT NEW 1-1/2" PIPE TO EXISTING DOMESTIC COLD WATER STUB-OUT.
- ② NEW 1/2" NON-POTABLE WATER PIPE DOWN TO EXISTING WATER CLOSET.
- ③ NEW 3/4" NON-POTABLE WATER PIPE DOWN TO EXISTING WATER CLOSETS.
- ④ NEW 1/2" NON-POTABLE WATER PIPE UP TO EXISTING WATER CLOSET.
- ⑤ DEMOLISH EXISTING STORM WATER PIPE SEGMENT. CAP JUST ABOVE CLEANOUT.
- ⑥ NEW 6" SCHEDULE 40 PVC, 180 DEGREE "U" BEND STORAGE TANK VENT.
- ⑦ NEW 4" FILTERED RAINWATER PIPING (STORM WATER PIPING) INTO STORAGE TANK WITH SMOOTHING INLET.
- ⑧ NEW 6" STORAGE TANK OVERFLOW PIPING (STORM WATER PIPING).
- ⑨ NEW 2" STORAGE TANK DRAIN PIPING (STORM WATER PIPING).
- ⑩ NEW 8" OPEN SITE DRAIN AND BACKWATER VALVE. CONNECT TO EXISTING STORM WATER PIPING. SEE DETAIL X, SHEET P-1.
- ⑪ 6" STORAGE TANK RUNOFF PIPING (STORM WATER PIPING) TO SPILL INTO NEW OPEN SITE DRAIN.
- ⑫ 1-1/2" NON-POTABLE WATER PIPE FROM STORAGE TANK TO BOOSTER PUMP.

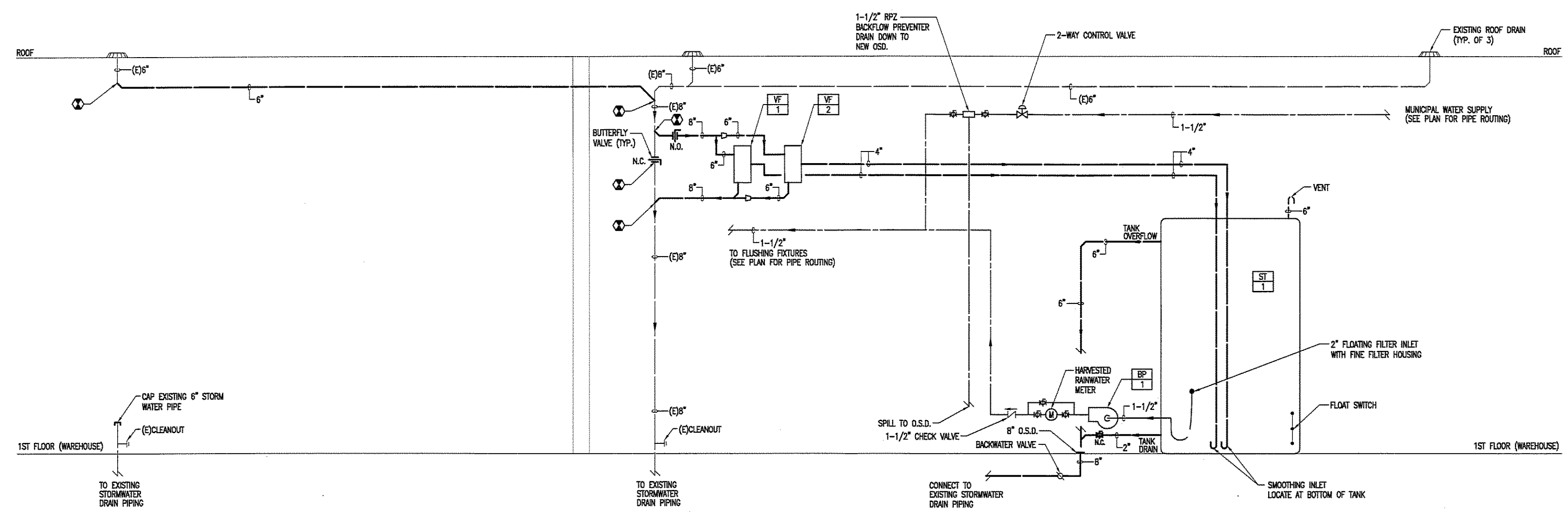
- ⑬ MOUNT SIMPLEX BOOSTER PUMP, TANK, AND CONTROL PANEL SYSTEM ON FLOOR ADJACENT TO STORAGE TANK. COORDINATE LOCATION WITH OWNER IN ORDER TO MINIMIZE USE OF WAREHOUSE FLOOR SPACE.

1 LEVEL 1 NEW WORK PLAN - PLUMBING
 SCALE: 1/8" = 1'-0"

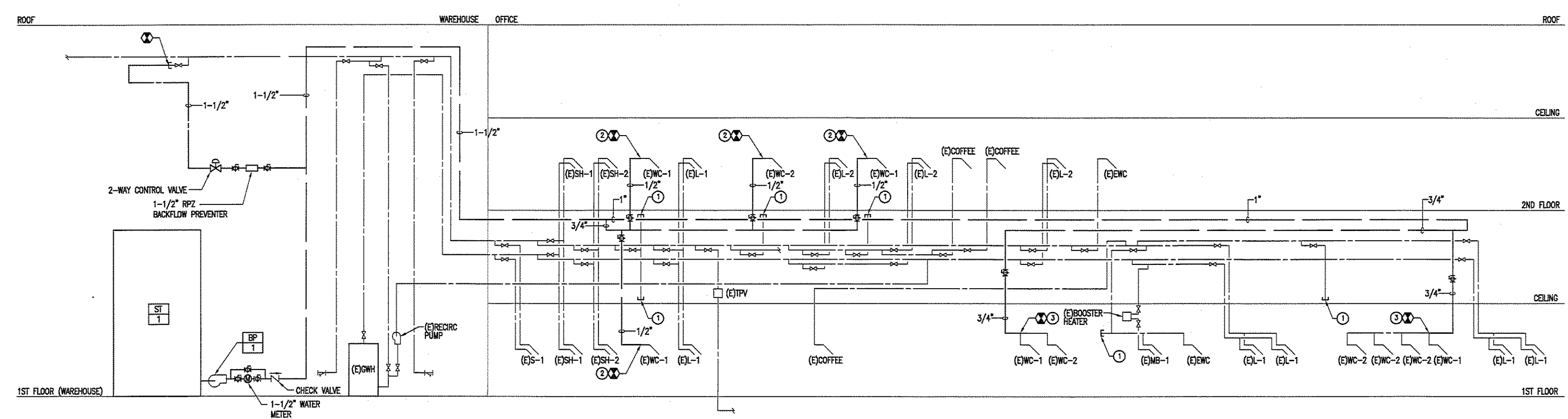


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WSSI RAINWATER HARVESTING



1 RAINWATER CATCHMENT SYSTEM DIAGRAM - PLUMBING
 SCALE: NONE



- ① CAP EXISTING DOMESTIC WATER SUPPLY IN CEILING/CHASE.
- ② CONNECT NEW 1/2" NON-POTABLE SUPPLY WATER PIPING TO EXISTING WATER CLOSET.
- ③ CONNECT NEW 3/4" NON-POTABLE SUPPLY WATER PIPING TO EXISTING WATER CLOSET(S).

2 WATER RISER DIAGRAM - PLUMBING
 SCALE: NONE

Drawing Title:
WATER RISER DIAGRAM - PLUMBING

Stamp:

| No. | Submission/Revision | Date |
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