

# RAIN WATER HARVESTING SYSTEM PICO BRANCH LIBRARY 2201 PICO BLVD. SANTA MONICA, CA 90404

## GENERAL NOTES

### RAIN WATER HARVESTING SYSTEM GENERAL NOTES:

- WHEN APPLICABLE, WORK SHOWN HEREON SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," LATEST EDITION AND SUPPLEMENTS, THE UNIFORM BUILDING CODE (EXCAVATION AND GRADING), AND CITY OF SANTA MONICA ORDINANCES AS APPLICABLE.
- RAIN WATER HARVESTING SYSTEM PLANS ARE BASED UPON THE FOLLOWING:
  - ARCHITECTURAL PLANS PROVIDED BY KONING EIZENBERG ARCHITECTURE, DATED MAY 7, 2012.
  - GRADING AND DRAINAGE PLANS PROVIDED BY KPFF CONSULTING ENGINEERS, DATED FEBRUARY 21, 2012.
  - PLUMBING PLANS PROVIDED BY GLUMAC, DATED FEBRUARY 21, 2012.
  - ELECTRICAL PLANS PROVIDED BY GLUMAC, DATED FEBRUARY 21, 2012.
- EXISTING TOPOGRAPHY SHOWN HEREON WAS PROVIDED BY OWNER.
- THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
- PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS FOR GRADING, DRAINAGE AND UNDERGROUND UTILITIES INCLUDING LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AT CROSSINGS WITH PROPOSED UNDERGROUND UTILITIES. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED.
- THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS, WHERE NO ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- THE EXISTENCE, LOCATION AND CHARACTERISTICS OF UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM A REVIEW OF AVAILABLE RECORD DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- IF AT ANY TIME DURING GRADING OPERATIONS, ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, GRADING IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED.
- ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.
- ALL FILL SOILS OR SOILS DISTURBED OR OVEREXCAVATED DURING CONSTRUCTION SHALL BE COMPACTED PER THE REQUIREMENTS OF THE SOILS REPORT BUT NOT LESS THAN 90% MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D-1557.
- THE CONTRACTOR SHALL OBTAIN AN O.S.H.A. PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER.
- ALL STORM DRAIN AND SANITARY SEWER PIPE, FITTINGS AND JOINTS SHALL BE POLYVINYL CHLORIDE SDR 35 OR SCH 80 IN ACCORDANCE WITH SECTION 207-17 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.
- ALL WATER LINES SHALL BE POLYVINYL CHLORIDE CLASS 150 AND SHALL MEET THE REQUIREMENTS OF AWWA C900 PVC PRESSURE PIPE, UNLESS OTHERWISE NOTED.
- THRUST BLOCKS SHALL BE INSTALLED AT WATERLINE HORIZONTAL AND VERTICAL BENDS, TEES, CAPPED ENDS AND REDUCERS ACCORDING TO THE STANDARD PLAN METRIC 508-1 THRUST BLOCKS FOR PLASTIC PIPE.
- THE CONTRACTOR SHALL REPLACE ALL EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION TO MATCH EXISTING, INCLUDING PERMANENT TRENCH RESURFACING.
- CONTRACTOR TO BE AWARE OF ALL OVERHEAD LINES AT ALL TIMES, SO AS NOT TO DISTURB THEM.
- WATER SHALL BE PROVIDED ONSITE AND USED TO CONTROL DUST DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS FROM THE APPROPRIATE LOCAL REGULATOR FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, INCLUDING NPDES, FROM THE APPROPRIATE JURISDICTIONAL AGENCIES FOR DISCHARGE OF GROUNDWATER THAT MAY BE NECESSARY TO ACCOMPLISH EXCAVATIONS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL CONSTRUCTION SURVEYING THAT MAY BE REQUIRED. ALL CONSTRUCTION STAKING, AS REQUIRED, SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR. THE WORK SHALL BE CERTIFIED IN WRITING AS TO LINE AND GRADE PER APPROVED PLANS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- THE DRAWINGS AND SPECIFICATIONS BY THE ENGINEER REPRESENT THE COMPLETED CONSTRUCTION. ALL BRACING, TEMPORARY SUPPORTS, SHORING, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. OBSERVATION VISITS TO THE JOB SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF CONSTRUCTION METHODS AND SAFETY CONDITIONS AT THE WORK SITE. THESE VISITS SHALL NOT BE CONSTRUED AS CONTINUOUS AND DETAILED INSPECTIONS.
- ALL PIPING ABOVE-GRADE FOR THE PUMPS AND EQUIPMENT, AND PIPING MANIFOLDS, SHALL BE STRUCTURALLY SUPPORTED BY ADEQUATE PIPE SUPPORTS OR HANGERS, PER LOCAL CODES AND ORDINANCES.
- ALL PIPE AND CONDUIT TRENCH BACKFILL, MATERIAL, AND COMPACTION SHALL CONFORM TO LOCAL STANDARDS. BORING OR TUNNELING UNDER EXISTING IMPROVEMENTS IS NOT ALLOWED. NO OPEN EXCAVATIONS SHALL BE ALLOWED OVERNIGHT. BEFORE THE END OF EVERY WORK DAY, THE CONTRACTOR SHALL BACKFILL OR PLATE OVER ALL OPEN EXCAVATIONS, TO THE SATISFACTION AND APPROVAL OF THE OWNER AND/OR ENGINEER.
- ALL PIPING SHALL BE COMPLETELY CONCEALED, WHEREVER POSSIBLE. ANY EXPOSED PVC PIPE AND FITTINGS SHALL BE ULTRAVIOLET-RESISTANT (UVR-PVC) OR SHALL BE PAINTED, SUBJECT TO APPROVAL OF THE ENGINEER.
- ALL PUMPS, VAULTS, VALVE BOXES, OTHER STRUCTURES, PIPELINES, ETC., MUST BE INSTALLED OUTSIDE OF THE UTILITY EASEMENTS, AND OUTSIDE OF ANY OTHER PROHIBITED EASEMENTS AND AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME KNOWLEDGEABLE OF, AND TO COMPLETELY UNDERSTAND, THESE EASEMENTS AND AREAS, AND TO AVOID CONSTRUCTION THEREIN; AS POSSIBLE, FOR THE SAKE OF CLARITY IN THESE DESIGN PLANS, PUMPS, VAULTS, VALVE BOXES, PIPELINES, ETC., MAY NOT ALL BE SHOWN OUTSIDE OF THE EASEMENTS, AS SUCH DEPICTIONS ARE SCHEMATIC ONLY.
- ALL PIPING LOCATIONS SHOWN ON THESE DESIGN PLANS ARE SCHEMATIC ONLY, AND ARE SUBJECT TO MINOR RELOCATION(S). PIPELINE CIRCUITRY/LAYOUT (BRANCHING), HOWEVER, SHALL BE EXACTLY AS PER THE PLANS. PIPELINES SHOULD BE INSTALLED IN THE MOST DIRECT ROUTE(S) POSSIBLE; FROM INTAKES TO PUMPS, AND FROM PUMPS TO DISCHARGE POINTS. A COPY OF AS-BUILT CONDITIONS SHALL BE MAINTAINED ON THE JOB SITE, AND SHALL BE DELIVERED TO THE OWNER AND TO THE ENGINEER WHENEVER REQUESTED, AND WHEN CONSTRUCTION IS COMPLETED; FOR APPROVAL.
- WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- PIPING SHALL BE INSTALLED IN TRENCHES IN THE MOST UNIFORM GRADE AS IS POSSIBLE, AND SHALL HAVE NO LOCAL HIGH OR LOW POINTS.
- HORIZONTAL PIPE RUNS SHALL HAVE 18" MINIMUM COVER WHEN UNDER PAVED SURFACES AND 12" MINIMUM COVER OTHERWISE.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, AT (800) 227-2600, AT LEAST TWO WORKING DAYS BEFORE ANY DIGGING. NOTE THAT THE USA CENTER ONLY NOTIFIES THOSE UTILITIES BELONGING TO THE CENTER. THERE MAY BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY.
- ALL WORK SPECIFIED HEREIN SHALL, AT ALL TIMES, COMPLY WITH ALL APPLICABLE CURRENT BUILDING CODES, PLUMBING CODES, ELECTRICAL CODES, ADA REQUIREMENTS, AND WITH ALL LOCAL REGULATIONS AND ORDINANCES. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT CALIFORNIA AND UNIFORM BUILDING CODE (CBC, UBC) AS TO DESIGN AND CONSTRUCTION, TITLE 24 PERTAINING TO "DISABLED ACCESS REGULATIONS."
- ANY INCIDENTAL INSTALLATION PROCEDURE, MATERIAL, OR EQUIPMENT NOT MENTIONED IN THESE CONSTRUCTION DOCUMENTS, INCLUDING THE PLANS AND SPECIFICATIONS, WHICH MAY BE NECESSARY FOR COMPLETION AND SATISFACTORY OPERATION OF THE DESIGN OR SYSTEM, SHALL BE FURNISHED AND INSTALLED, AS BASED ON THE INDUSTRY STANDARDS; AS THOUGH SHOWN OR PROVIDED FOR IN THE CONSTRUCTION DOCUMENTS.
- INTERPRETATION OF THE DESIGN DOCUMENTS, INCLUDING PLANS AND SPECIFICATIONS, SHALL BE MADE BY THE AUTHOR, ARCHITECT, OR ENGINEER OF RECORD OF THE RESPECTIVE DOCUMENT. SUCH INTERPRETATION(S) SHALL BE CONSIDERED FINAL. ANY POSSIBLE AMBIGUITY SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR PRIOR TO SUBMITTING FORMAL BIDS. ALL CLARIFICATIONS SHALL BE PREPARED IN WRITING BY THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO BIDDING. THE CONTRACTOR SHALL ACCEPT THE INTERPRETATION(S) OF THE ARCHITECT OR ENGINEER OF RECORD AS THE CORRECT AND FINAL INTERPRETATION(S).
- ALL OMISSIONS, DISCREPANCIES, ERRORS, AND CONFLICTS IN THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER, THE OWNER, AND ITS DESIGNATED REPRESENTATIVE(S) INTENT BEFORE PROCEEDING WITH WORK.
- THESE CONSTRUCTION DOCUMENTS, INCLUDING ALL PLANS, NOTES, DETAILS, AND SPECIFICATIONS, ARE INTENDED TO FACILITATE THE INSTALLATION CONTRACTOR, BY PROVIDING GENERAL GUIDELINES OF THE DESIGN INTENT. IT IS THE GOAL OF THE DOCUMENTS THAT THE CONSTRUCTION WORK BE COMPLETED WITHOUT CHANGE ORDERS. ALL QUANTITIES SHOWN IN THE DOCUMENTS ARE ESTIMATES ONLY, AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL SUPPLY ALL MATERIALS, LABOR, AND EQUIPMENT IN ORDER TO FULFILL THE DESIGN INTENT.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY PROTECTIVE FENCING FOR OPEN TRENCH EXCAVATION AND AS REQUIRED IN WORK AREAS FOR PEDESTRIAN AND VEHICULAR SAFETY. TO SECURE EQUIPMENT AND PERSONNEL FROM PUBLIC AT ALL TIMES FOR JOBSITE SECURITY. NEW OR USED MATERIAL MAY BE FURNISHED.
- CONTRACTOR SHALL PROVIDE AND INSTALL SIGNAGE TO PROVIDE DIRECTIONAL, IDENTIFICATION, AND CONTACT INFORMATION TO CONSTRUCTION PERSONNEL AND PUBLIC.
- EPD CONSULTANTS, INC ASSUMES NO LIABILITY, REAL OR ALLEGED, REGARDING THE ACCURACY OF THE TOPOGRAPHIC INFORMATION SHOWN.
- CONTRACTOR SHALL BE APPROPRIATELY LICENSED WITH THE STATE OF CALIFORNIA TO PERFORM THE WORK OUTLINED IN THESE PLANS. NO WORK IS TO PROCEED WITHOUT OBTAINING A VALID PERMIT FROM THE LOCAL DEPARTMENT OF ENVIRONMENTAL HEALTH.
- THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT; EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- SANITARY WASTEWATER AND PROCESS WASTEWATER SYSTEMS TO OBSERVE ALL SETBACKS REQUIRED BY THE CITY DEPARTMENT OF ENVIRONMENTAL HEALTH.
- NO VEHICULAR TRAFFIC, CUTS OR FILLS TO OCCUR WITHIN THE BOUNDARY OF CONSTRUCTION FENCING, CONSTRUCTION FENCING TO REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION PROJECT.
- ENGINEERS APPROVED SUBMITTALS PRIOR TO ORDERING RAIN WATER HARVESTING SYSTEM SHALL BE AS FOLLOWS:
  - SELECT FILL MATERIAL, (b) PIPING AND APPURTENANCES, (c) GRAVITY FLOW LINES FROM ALL PIPE CONNECTIONS AND TANKS TO INVERTS, (d) TANKS AND APPURTENANCES, (e) NOT USED, (f) TREATMENT SYSTEM & PUMPS, (g) CONTROL PANEL(S), (h) A WRITTEN REPORT OF THE HYDROSTATIC AND LEAKAGE TEST PROCEDURE AND RESULTS, (i) WATER TABLE ANALYSIS TO WAIVE TANK ANCHOR REQUIREMENT OR INSTALLATION OF CONCRETE DEADMEN ANCHORS.
- ENGINEER REQUIRED INSPECTIONS:
  - SEE CONSTRUCTION NOTE (L) PER SHEET W-2. IF SYSTEM DESIGNER (EPD) DOES NOT OBSERVE THE CONSTRUCTION, ALL LIABILITY IS RELEASED TO THE INSTALLER, (b) PRIOR TO ORDERING THE RAIN WATER HARVESTING SYSTEM COMPONENTS, A PRE CONSTRUCTION MEETING SHALL TAKE PLACE AT THE JOBSITE TO DETERMINE FINAL ELEVATIONS AND LOCATIONS OF ALL RAIN WATER HARVESTING SYSTEM COMPONENTS.

### RAIN WATER HARVESTING SYSTEM SPECIAL NOTES:

- EXISTING UNDERGROUND UTILITIES: BEFORE STARTING ANY UNDERGROUND WORK, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A COMPANY CERTIFIED TO PERFORM UNDERGROUND SCANNING SERVICES ALONG THE SITE UTILITY TRENCH FOR THE PURPOSE OF ESTABLISHING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY LINES. APPROPRIATE DIGGING METHODS AND TOOLS SHALL BE UTILIZED TO AVOID DAMAGE TO THE EXISTING UTILITY LINES. IN THE EVENT THAT DURING THE UNDERGROUND WORK, THE CONTRACTOR WILL DAMAGE ANY OF EXISTING LINES, IT WILL BE HIS RESPONSIBILITY TO DO ALL NECESSARY REPAIR WORK REPAIR WORK AT HIS EXPENSES.
- CROSSING UNDERGROUND UTILITIES: IN MOST CASES CROSSING AT EXISTING UNDERGROUND UTILITIES SHALL BE RUN UNDER THE EXISTING LINES. ACTION REQUIRED FOR UNFORESEEN CONDITIONS AND LINES NOT INDICATED ON PLANS SHALL BE VERIFIED WITH THE DISTRICT INSPECTOR AND THE ENGINEER.
- THE EXISTING CONDITIONS ABOVE GROUND: STRUCTURES SUCH AS BUILDINGS, FENCES, CONCRETE PAVEMENT AND SLABS, EQUIPMENT SUPPORT PADS AND DRIVEWAY AS SHOWN ON THE PLANS ARE TAKEN FROM EXISTING RECORD DRAWINGS AND VERIFIED BY FIELD OBSERVATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ACCURATELY LOCATE ANY ABOVE GROUND STRUCTURE THAT MAY INTERFERE WITH THE INSTALLATION OF THE WORK. ANY DAMAGE TO EXISTING STRUCTURES RESULTING FROM THIS WORK SHALL BE REPAIRED TO MATCH EXISTING AT NO ADDITIONAL COST TO THE PICO BRANCH LIBRARY.

**PRELIMINARY  
NOT FOR CONSTRUCTION**

- PEDESTRIAN AND VEHICULAR PATH OF TRAVEL: CONTRACTOR TO LOCATE SITE PATH OF TRAVEL FOR BOTH PEDESTRIAN & VEHICULAR TRAFFIC OVER THE SITE UTILITY TRENCHES. CONTRACTOR TO USE STEEL PLATES OF SUFFICIENT WIDTH AND THICKNESS TO COVER THE TRENCH. FURTHERMORE, THE CONTRACTOR SHALL PROVIDE CHAIN LINK FENCING ON EACH SIDE OF THE PATH OF TRAVEL. THE CONTRACTOR SHALL COOPERATE WITH THE SCHOOL ADMINISTRATORS AND THE PICO BRANCH LIBRARY REPRESENTATIVES AT ALL TIMES TO MAINTAIN ACCESS TO THE SITE. WIDTH OF PATHS OF TRAVEL FOR PEDESTRIAN AND VEHICULAR TRAFFIC SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER.
- SHORING REQUIREMENTS: ANY PROPOSED SHORING SHALL BE SUBMITTED FOR ENGINEERS APPROVAL PRIOR TO CONSTRUCTION AND SHALL COMPLY WITH ALL APPLICABLE REGULATIONS AND THE RECOMMENDATIONS OF THE PROJECT SOILS ENGINEER.
- PAVING REPAIR: SAWCUT EXISTING PAVEMENT FOR NEW INSTALLATION WHERE REQUIRED. UP ON COMPLETION OF THE INSTALLATION OF THE SEPTIC SYSTEM, BACKFILL AND RE-PAVE TO MATCH EXISTING SURROUNDINGS.

### STORM WATER POLLUTION CONTROL REQUIREMENTS FOR CONSTRUCTION ACTIVITIES, MINIMUM WATER QUALITY PROTECTION REQUIREMENTS FOR ALL CONSTRUCTION PROJECTS/CERTIFICATION STATEMENT

THE FOLLOWING SHALL BE EITHER INCORPORATED OR ATTACHED TO THE APPROVED CONSTRUCTION/GRADING PLANS AND REPRESENT THE MINIMUM STANDARDS OF GOOD HOUSEKEEPING WHICH MUST BE IMPLEMENTED IN ALL CONSTRUCTION PROJECTS. CONSTRUCTION INCLUDES ACTIVITIES SUCH AS CONSTRUCTING, CLEARING, GRADING OR EXCAVATION THAT RESULTS IN SOIL DISTURBANCE. CONSTRUCTION INCLUDES STRUCTURE TEARDOWN. IT DOES NOT INCLUDE ROUTINE MAINTENANCE TO MAINTAIN THE ORIGINAL LINE AND GRADE, HYDRAULIC CAPACITY, OR ORIGINAL PURPOSE OF FACILITIES; EMERGENCY CONSTRUCTION ACTIVITIES REQUIRED TO IMMEDIATELY PROTECT PUBLIC HEALTH AND SAFETY; INTERIOR REMODELING WITH NO OUTSIDE EXPOSURE OF CONSTRUCTION MATERIAL OR CONSTRUCTION WASTE TO STORM WATER; MECHANICAL PERMIT WORK; OR SIGN PERMIT WORK.

—ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSE OR WIND.

—STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIAL MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY WIND OR WATER.

—FUELS, OIL'S, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LIST AND NOT TO CONTAMINATE THE SOIL OR THE SURFACE WATER. ALL APPROVED TOXIC STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.

—NON-STORM WATER RUNOFF FROM EQUIPMENTS AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED AT THE PROJECT SITE.

—EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTE ON-SITE UNTIL THEY CAN BE APPROPRIATELY DISPOSED OF OR RECYCLED.

—TRASH AND CONSTRUCTION-RELATED WASTE MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.

—SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAYS. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR BY ANY OTHER MEANS.

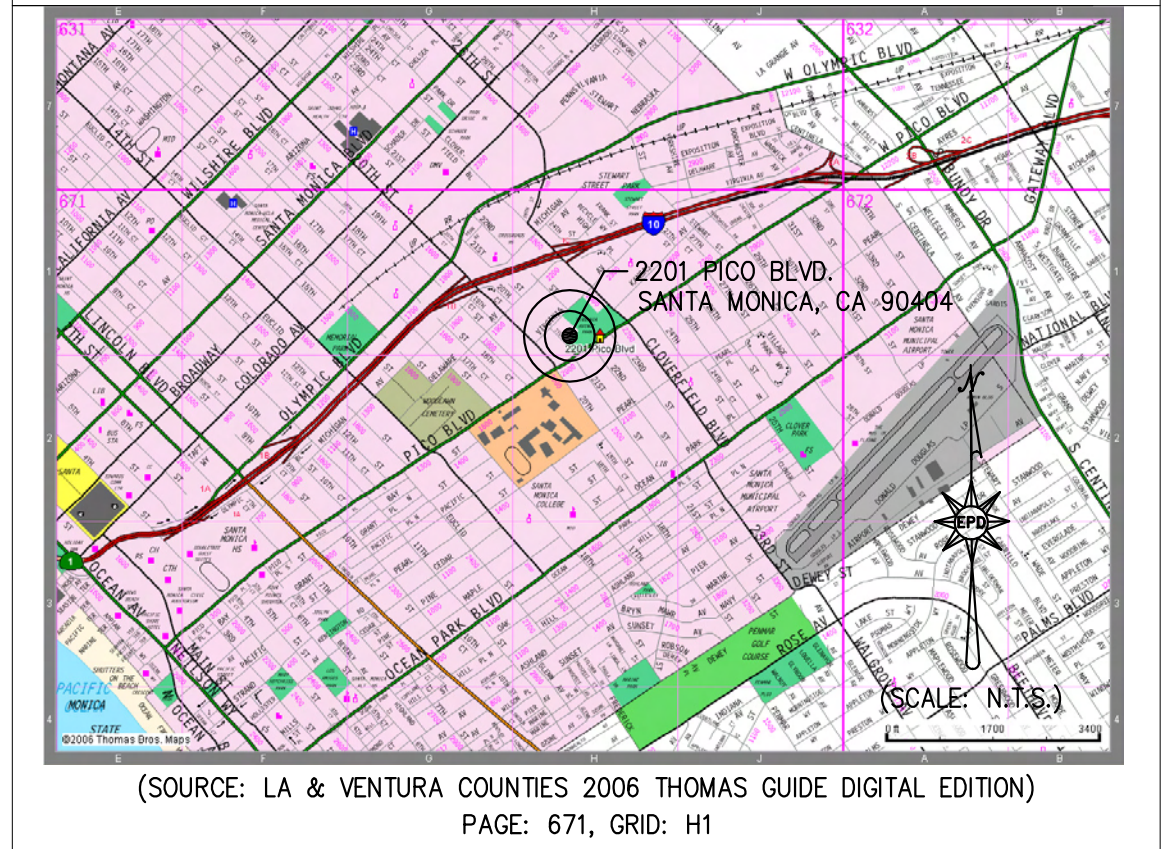
AS A PROJECT OWNER OR AUTHORIZED AGENT OF THE OWNER I HAVE READ AND UNDERSTAND THE REQUIREMENTS, LISTED ABOVE, NECESSARY TO CONTROL STORM WATER POLLUTION FROM SEDIMENTS, EROSION, AND CONSTRUCTION MATERIALS, AND I CERTIFY THAT I WILL COMPLY WITH THESE REQUIREMENTS.

PRINT NAME \_\_\_\_\_  
(OWNER OR AUTHORIZED AGENT OF THE OWNER)

SIGNATURE \_\_\_\_\_  
(OWNER OR AUTHORIZED AGENT OF THE OWNER)

DATE \_\_\_\_\_

## VICINITY MAP



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## DRAWING INDEX

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REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ 20\_\_

REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ 20\_\_

REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ 20\_\_

ISSUE  
**PRELIMINARY-NOT FOR CONSTRUCTION**  
DATE: 06/12/2012  
DRAWING NO. **6693**

SHEET TITLE  
**RAIN WATER HARVESTING TITLE SHEET AND NOTES**

SHEET NO. **W-1**

**LEGEND & ABBREVIATIONS:**

- PROPERTY LINE
- BUILDING OUTLINE
- RWS FORCE MAIN
- RWS ELECTRICAL LINE
- RWS AIR LINE
- TREATED WATER FEED LINE
- POTABLE WATER FEED LINE
- STORM DRAIN
- SANITARY SEWER
- DOMESTIC WATER SUPPLY LINE
- ELECTRICAL UTILITY LINE
- GAS UTILITY LINE
- FIRE WATER LINE
- NORMALLY OPEN VALVE
- NORMALLY CLOSED VALVE
- BALL VALVE
- CHECK VALVE
- HOSE BIB
- SOLENOID VALVE
- BACKWATER VALVE
- REVERSE PRESSURE PRINCIPAL (RP)
- BACKFLOW PREVENTER PUMP
- DIAMETER
- ANTHRACITE FILTER ARRAY
- AIR GAP
- BLADDER TANK
- CARBON FILTER ARRAY
- CONTROL PANEL
- CALIFORNIA PLUMBING CODE
- COPPER DISINFECTION
- DOMESTIC WATER LINE
- ELECTRICAL LINE
- EVER GREEN SYSTEM BY WRS
- ELEVATION
- FM
- GAS LINE
- MANUFACTURER
- PUMP NUMBER
- PROPERTY LINE
- POTABLE WATER
- TREATED WATER (RECYCLED)
- RAIN WATER SYSTEM
- RAIN WATER TANK
- SAND FILTER ARRAY
- STORM DRAIN
- SANITARY SEWER
- TREATED WATER TANK
- ULTRAVIOLET DISINFECTION
- VORTEX FILTER

- 1 VF-1: VORTEX RAIN WATER FILTER 1, J.R. SMITH MFG. CO. WISY MODEL WF3011 WITH ALUMINUM LID FOR LIGHT TRAFFIC AREAS WITH 30" EBW H-20 TRAFFIC RATED SLAB/LID AT GRADE.
- 2 RWT-1: RAIN WATER TANK 1, CONTAINMENT SOLUTIONS MODEL SWT D-6 10'Ø, 12,000-GAL BELOW GROUND FRP CISTERN WITH TWO (2) 30" LIDS/RISERS PER MFR WITH EBW H-20 TRAFFIC RATED SLAB/LID AT GRADE. TANK CONTAINS ONE (1) 1/2 HP FILTRATION PUMP. TANK SHALL BE GAS AND WATERTIGHT AND VENTED TO ROOF PER CPC.
- 3 2"Ø AND 6"Ø SPEARS PVC BACKWATER VALVES MODEL NO. S275P OR S675P, OR APPROVED EQUAL FOR SD AND SS LINES WITH H-20 TRAFFIC RATED SLAB AND GROUND LEVEL ACCESS KIT FOR ROUTINE MAINTENANCE.
- 4 TWT-1: TREATED WATER TANK 1, 46"Ø CHEM-TAINER 305-GAL ABOVE GROUND FRP TREATED WATER TANK PER MFR WITH ONE (1) 1/2 HP SUPPLY PUMP AND ONE (1) 1/2 HP RECIRCULATION PUMP. TANK SHALL BE GAS AND WATERTIGHT.
- 5 S-1: SAND FILTER 1, 18"Ø ABOVE GROUND SAND MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- 6 A-1: ANTHRACITE FILTER 1, 16"Ø ABOVE GROUND ANTHRACITE MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- 7 C-1: CARBON FILTER 1, 16"Ø ABOVE GROUND GRANULAR ACTIVATED CARBON MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- 8 UV-1: ULTRAVIOLET FILTER 1, 3"Ø ABOVE GROUND ULTRAVIOLET DISINFECTION FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- 9 Cu-1: COPPER FILTER 1, ABOVE GROUND ELECTROLYTIC COPPER IONIZATION DISINFECTION FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- 10 BT-1: BLADDER TANK 1, 25"Ø ABOVE GROUND 80-GAL BLADDER TANK, WESSELS COMPANY MODEL FX-300V.
- 11 MICROSEPTIC HIBLOW HP-120 ABOVE GROUND AIR COMPRESSOR OR EQUAL. CONTRACTOR TO LOCATE IN SHADED AREA AWAY OUT OF DIRECT SUBLIGHT OR PROVIDE SHADE COVER.
- 12 RWS CONTROL PANEL PER WATER RECYCLING SYSTEM. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
- 13 RWS ELECTRICAL DISCONNECT PER WATER RECYCLING SYSTEM. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
- 14 SQUARE D PRESSURE SWITCH CLASS 9013 TYPE GMG SERIES C INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.

**2 RAIN WATER HARVESTING SYSTEM KEYNOTES** Scale: N.T.S.

- A CONTRACTOR TO VERIFY EXACT LOCATION OF PROPERTY LINES.
- B ALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD-VERIFIED BY CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ENGINEER IN WRITING IN THE EVENT OBSERVED DIMENSIONS DIFFER FROM DIMENSIONS SHOWN ON THE ONSITE WASTEWATER TREATMENT SYSTEM PLANS.
- C ANY CHANGES IN PLANS OR SPECIFICATIONS SHALL BE MADE ONLY WITH THE WRITTEN AUTHORIZATION OF SYSTEM ENGINEER.
- D ALL EXCAVATIONS SHALL COMPLY WITH OSHA STANDARDS.
- E IF APPLICABLE, A REGISTERED GEOTECHNICAL ENGINEER, UNDER THE DIRECTION OF THE OWNER, SHALL DETERMINE IF THE WASTEWATER LOADING RATE WILL CAUSE THE EXISTING SLOPE TO BECOME UNSTABLE.
- F ALL IRRIGATION SYSTEM COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT UNIFORM PLUMBING CODE, INCLUDING BUT NOT LIMITED TO VENTING OF SYSTEM COMPONENTS AND INSTALLING OF CLEANOUTS.
- G LICENSED ELECTRICIAN SHALL VERIFY CONDUCTOR AND CONDUIT SIZES PRIOR TO SYSTEM INSTALLATION USING MANUFACTURER'S PUBLISHED FULL LOAD AMPS (FLA) FOR CONDUCTOR SHALL BE SIZED PER LATEST APPLICABLE ELECTRIC CODE.
- H ALL ELECTRICAL EQUIPMENT AND APPURTENANCES RELATED TO ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH LATEST APPLICABLE ELECTRIC CODE, LOCAL UTILITY COMPANY REGULATIONS AND ALL STATE AND MUNICIPAL CODES AND ORDINANCES. ALL EQUIPMENT SHALL BE UNDERWRITER LABORATORY (UL) LISTED.
- I AS NECESSARY AND UPON COMPLETION OF INSTALLATION, CONTRACTOR TO THOROUGHLY FLUSH ALL PIPELINES TO REMOVE ANY DIRT, SCALE, OR OTHER MATERIAL.
- J PRIOR TO SYSTEM STARTUP, CONTRACTOR TO PRESSURE TEST ALL LINES, INCLUDING AIR VENTS (USE STIRRED VALVES FOR EASY READINGS). PRESSURE TESTING TO BE CONDUCTED IN THE PRESENCE OF OWNER OR SYSTEM ENGINEER.
- K SYSTEM ENGINEER TO BE NOTIFIED PRIOR TO COMMENCEMENT OF WORK.
- L SYSTEM ENGINEER OR AUTHORIZED AGENT TO CONDUCT PERIODIC INSPECTIONS, INCLUDING AT A MINIMUM VERIFICATION OF STAKED SITE LAYOUT, OBSERVATION OF INSTALLED PIPING PRIOR TO BURIAL, AND SYSTEM STARTUP. IF SYSTEM ENGINEER DOES NOT OBSERVE THE CONSTRUCTION, ALL LIABILITY IS RELEASED TO THE INSTALLER.
- M CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF PROJECT SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE FINAL PROJECT SPECIFICATIONS FROM THE SYSTEM ENGINEER PRIOR TO PROCEEDING WITH WORK.
- N CONTRACTOR SHALL PROVIDE A COMPLETE WORKING SYSTEM, & WARRANT ALL MATERIALS FREE FROM DEFECTS FOR A PERIOD NOT LESS THAN 1 YEAR.
- O THESE PLANS ACCURATE FOR WATER REUSE IRRIGATION SYSTEM ONLY.
- P CONTRACTOR SHALL VERIFY LOCATION OF PRESSURE PUBLIC WATER MAIN AND ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND MAINTAIN ALL APPLICABLE SETBACKS PER CPC.

**3 CONSTRUCTION NOTES** Scale: N.T.S.

1. THESE PLANS ARE ACCURATE FOR RAIN WATER HARVESTING SYSTEM ONLY.
2. RAIN WATER HARVESTING SYSTEM PLANS ARE BASED ON THE FOLLOWING: (A) ARCHITECTURAL PLANS PROVIDED BY KONING EIZENBERG ARCHITECTURE, DATED MAY 7, 2012; (B) GRADING AND DRAINAGE PLANS PROVIDED BY KPFF CONSULTING ENGINEERS, DATED FEBRUARY 21, 2012 (C) PLUMBING PLANS PROVIDED BY GLUMAC, DATED FEBRUARY 21, 2012; (D) ELECTRICAL PLANS PROVIDED BY GLUMAC, DATED FEBRUARY 21, 2012.
3. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. HOWEVER, THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES, OR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN ON THESE DRAWINGS.
4. IN THE EVENT THAT THE SUBSURFACE OR LATENT PHYSICAL CONDITIONS ARE FOUND MATERIALLY DIFFERENT FROM THOSE INDICATED IN THESE DOCUMENTS, AND DIFFERING MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN THE CHARACTER OF WORK COVERED IN THESE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY, AND BEFORE SUCH CONDITIONS ARE DISTURBED, NOTIFY THE ENGINEER IN WRITING OF SUCH CHANGED CONDITIONS.
5. PROVIDE SCREEN ON VENT(S) SO THAT VENT(S) ARE PROTECTED FROM VERMIN/ MOSQUITOES
6. REFER TO CONSTRUCTION NOTES PER DETAIL 3 THIS SHEET.

**4 GENERAL NOTES** Scale: N.T.S.

- A EXACT MATERIALS LIST AND SPECIFICATIONS ARE PROVIDED BY THE MANUFACTURER. MATERIALS SPECIFICATIONS PER THESE PLANS ARE INTENDED TO ASSIST THE CONTRACTOR IN THE SELECTION OF MATERIALS NECESSARY AND APPROPRIATE TO COMPLETE THE INSTALLATION OF A RAIN WATER HARVESTING SYSTEM AT THE SUBJECT PROPERTY. ADDITIONAL COMPONENTS WILL BE NECESSARY, THAT INCLUDE BUT ARE NOT LIMITED TO PIPING, ELECTRICAL CONDUIT, FITTINGS, AGGREGATE MATERIALS AND MULCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCURATELY ESTIMATE THE TYPE AND QUANTITY OF MATERIALS THAT WILL BE NECESSARY TO COMPLETE THE INSTALLATION PER THE SYSTEM DESIGNER'S, MANUFACTURER'S, AND PERTINENT REGULATORY AGENCIES SATISFACTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT SHOP DRAWINGS AND A LIST OF ALL MATERIALS TO THE SYSTEM DESIGNER FOR APPROVAL PRIOR TO PURCHASE.

**5 MATERIALS LIST** Scale: N.T.S.

- A INSPECT AND CLEAN FILTER AND SCREENS, AND REPLACE (IF NECESSARY) EVERY 3 MONTHS MINIMUM.
- B INSPECT AND VERIFY THAT DISINFECTION, FILTERS AND WATER QUALITY TREATMENT DEVICES AND SYSTEMS ARE OPERATIONAL AND MAINTAINING MINIMUM WATER QUALITY REQUIREMENTS AS DETERMINED BY THE AUTHORITY HAVING JURISDICTION, AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- C INSPECT AND CLEAR DEBRIS FROM RAIN WATER GUTTERS, DOWNSPOUTS, AND ROOF WASHERS EVERY 6 MONTHS MINIMUM.
- D INSPECT AND CLEAR DEBRIS FROM ROOF AND OTHER ABOVE GROUND RAIN WATER COLLECTION SURFACES EVERY 6 MONTHS MINIMUM.
- E REMOVE TREE BRANCHES AND VEGETATION OVERHANGING ROOF OR OTHER ABOVE GROUND RAIN WATER COLLECTION SURFACES AS NEEDED.
- F INSPECT PUMPS AND VERIFY OPERATION AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- G INSPECT VALVES AND VERIFY OPERATION AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- H INSPECT PRESSURE TANKS AND VERIFY OPERATION AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- I CLEAR DEBRIS FROM AND INSPECT STORAGE TANKS, LOCKING DEVICES AND VERIFY OPERATION AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- J INSPECT CAUTION LABELS AND MARKINGS AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- K INSPECT AND MAINTAIN MULCH BASINS AS NEEDED TO MAINTAIN MULCH DEPTH AND PREVENT PONDING AND RUNOFF.
- L INSPECT CROSS CONNECTIONS AND TEST AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER. THE CROSS CONNECTION TEST SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE PLUMBING CODE.
- M TEST WATER QUALITY OF RAIN WATER CATCHMENT SYSTEMS AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION PROCEDURES TO MAINTAIN A MINIMUM WATER QUALITY EVERY 3 TO 12 MONTHS, OR AFTER ANY SYSTEM RENOVATION OR REPAIR.

**6 RWS MINIMUM SOURCE TESTING, INSPECTION, AND MAINTENANCE** Scale: N.T.S.

**PROPRIETARY MANUFACTURER NOTES:**  
 1. ALL PROPRIETARY SPECIFICATIONS ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.



**1 RAIN WATER HARVESTING SYSTEM SITE PLAN** Scale: 1"=20'

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 DATE  
 06/12/2012  
 DRAWING NO. **6693**

SHEET TITLE  
**RAIN WATER HARVESTING SYSTEM SITE PLAN**  
 SHEET NO. **W-2**

SHEET NO. OF

DRAWING NO.

TITLE OF PROJECT

**LEGEND & ABBREVIATIONS:**

- PROPERTY LINE
- ▬ BUILDING OUTLINE
- RWS FORCE MAIN
- RWS ELECTRICAL LINE
- RWS AIR LINE
- RW RW RW POTABLE WATER FEED LINE
- PW PW PW POTABLE WATER FEED LINE
- SD SD SD STORM DRAIN
- S S S SANITARY SEWER
- DW DW DW DOMESTIC WATER SUPPLY LINE
- E E E ELECTRICAL UTILITY LINE
- G G G GAS UTILITY LINE
- FW FW FW FIRE WATER LINE
- ⊗ NORMALLY OPEN VALVE
- ⊘ NORMALLY CLOSED VALVE
- ⊙ BALL VALVE
- ⊕ CHECK VALVE
- ⊕ HOSE BIB
- ⊕ SOLENOID VALVE
- ⊕ BACKWATER VALVE
- ⊕ REVERSE PRESSURE PRINCIPAL (RP)
- ⊕ BACKFLOW PREVENTER
- ⊕ PUMP
- ⊕ DIAMETER
- A ANTHRACITE FILTER ARRAY
- AG AIR GAP
- BT BLADDER TANK
- C CARBON FILTER ARRAY
- CP CONTROL PANEL
- CPC CALIFORNIA PLUMBING CODE
- Cu COPPER DISINFECTION
- DW DOMESTIC WATER LINE
- E ELECTRICAL LINE
- EGS-1 EVERGREEN SYSTEM BY RWS
- ELEV ELEVATION
- FM FORCE MAIN
- G GAS LINE
- MFR MANUFACTURER
- P-X PUMP NUMBER
- P PROPERTY LINE
- PW POTABLE WATER
- RW TREATED WATER (RECYCLED)
- RWS RAIN WATER SYSTEM
- RWT RAIN WATER TANK
- S SAND FILTER ARRAY
- SD STORM DRAIN
- SS SANITARY SEWER
- TWT TREATED WATER TANK
- UV ULTRAVIOLET DISINFECTION
- VF VORTEX FILTER

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5. PROVIDE SCREEN ON VENT(S) SO THAT VENT(S) ARE PROTECTED FROM VERMIN/ MOSQUITOES
6. REFER TO CONSTRUCTION NOTES PER DETAIL 3/SHEET W-2.

**3 GENERAL NOTES**

- (A) EXACT MATERIALS LIST AND SPECIFICATIONS ARE PROVIDED BY THE MANUFACTURER. MATERIALS SPECIFICATIONS PER THESE PLANS ARE INTENDED TO ASSIST THE CONTRACTOR IN THE SELECTION OF MATERIALS NECESSARY AND APPROPRIATE TO COMPLETE THE INSTALLATION OF A RAIN WATER HARVESTING SYSTEM AT THE SUBJECT PROPERTY. ADDITIONAL COMPONENTS WILL BE NECESSARY, THAT INCLUDE BUT ARE NOT LIMITED TO PIPING, ELECTRICAL CONDUIT, FITTINGS, AGGREGATE MATERIALS AND MULCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCURATELY ESTIMATE THE TYPE AND QUANTITY OF MATERIALS THAT WILL BE NECESSARY TO COMPLETE THE INSTALLATION PER THE SYSTEM DESIGNER'S, MANUFACTURER'S, AND PERTINENT REGULATORY AGENCIES SATISFACTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT SHOP DRAWINGS AND A LIST OF ALL MATERIALS TO THE SYSTEM DESIGNER FOR APPROVAL PRIOR TO PURCHASE.

**4 MATERIALS LIST**

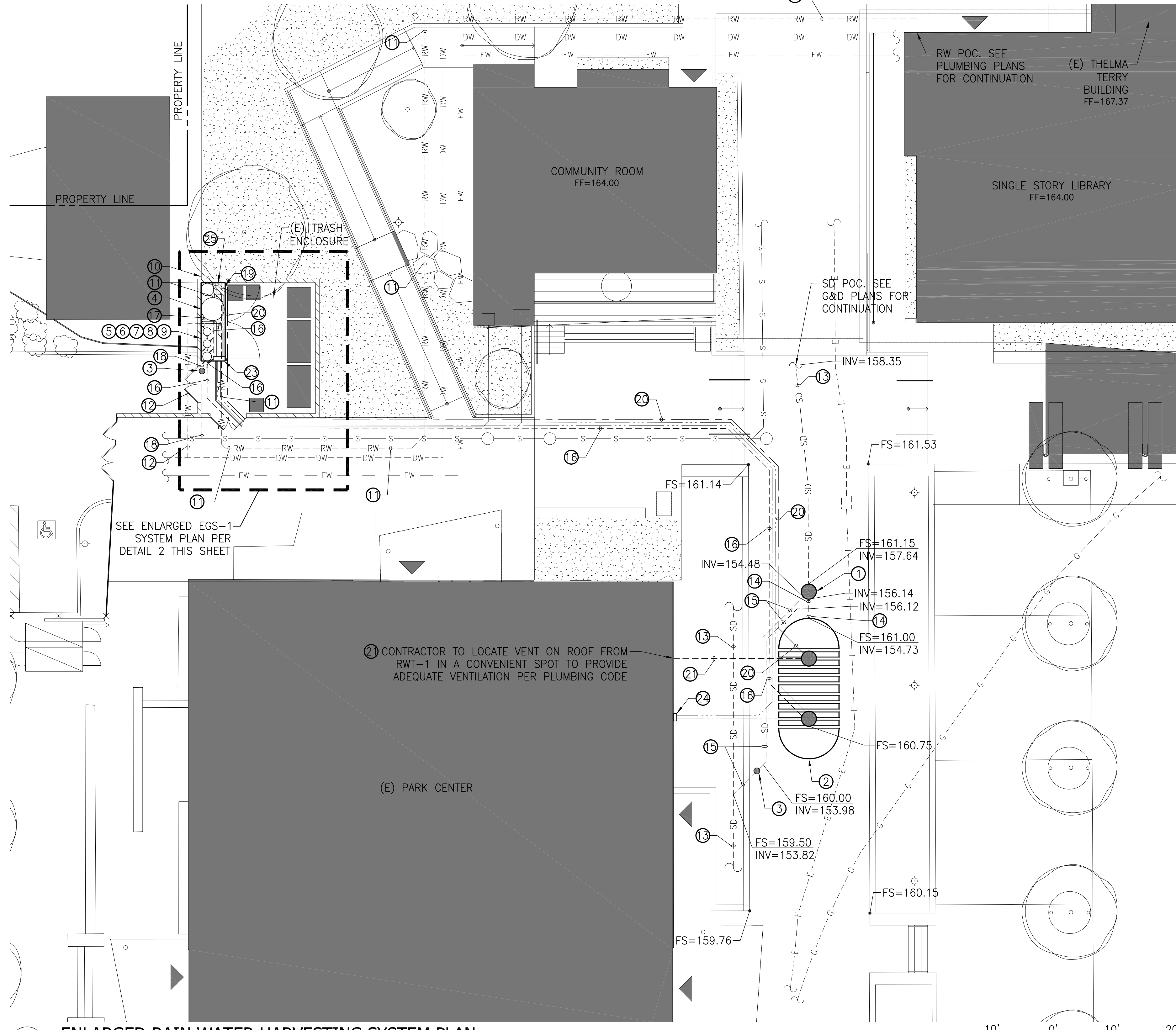
- ① VF-1: VORTEX RAIN WATER FILTER 1, J.R. SMITH MFG. CO. WISY MODEL WF3011 WITH ALUMINUM LID FOR LIGHT TRAFFIC AREAS WITH 30" EBW H-20 TRAFFIC RATED SLAB/LID AT GRADE.
- ② RWT-1: RAIN WATER TANK 1, CONTAINMENT SOLUTIONS MODEL SWT D-6 10'x12, 12,000-GAL BELOW GROUND FRP CISTERN WITH TWO (2) 30" LIDS/RISERS PER MFR WITH EBW H-20 TRAFFIC RATED SLAB/LID AT GRADE. TANK CONTAINS ONE (1) 1/2 HP FILTRATION PUMP. TANK SHALL BE GAS AND WATERTIGHT AND VENTED TO ROOF PER CPC.
- ③ 2" AND 6" SPEARS PVC BACKWATER VALVES MODEL NO. S275P OR S675P, OR APPROVED EQUAL FOR SD AND SS LINES WITH H-20 TRAFFIC RATED SLAB AND GROUND LEVEL ACCESS KIT FOR ROUTINE MAINTENANCE.
- ④ TWT-1: TREATED WATER TANK 1, 46" CHEM-TAINER 305-GAL ABOVE GROUND FRP TREATED WATER TANK PER MFR WITH ONE (1) 1/2 HP SUPPLY PUMP AND ONE (1) 1/2 HP RECIRCULATION PUMP. TANK SHALL BE GAS AND WATERTIGHT.
- ⑤ S-1: SAND FILTER 1, 18" ABOVE GROUND SAND MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑥ A-1: ANTHRACITE FILTER 1, 16" ABOVE GROUND ANTHRACITE MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑦ C-1: CARBON FILTER 1, 16" ABOVE GROUND GRANULAR ACTIVATED CARBON MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑧ UV-1: ULTRAVIOLET FILTER 1, 3" ABOVE GROUND ULTRAVIOLET DISINFECTION FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑨ Cu-1: COPPER FILTER 1, ABOVE GROUND ELECTROLYTIC COPPER IONIZATION DISINFECTION FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑩ BT-1: BLADDER TANK 1, 25" ABOVE GROUND 80-GAL BLADDER TANK, WESSELS COMPANY MODEL FX-300V.
- ⑪ 1-1/4" SCH 80 PVC TREATED WATER LINE FROM EGS-1 TO FLUSH FIXTURES.
- ⑫ 1-1/4" SCH 80 PVC POTABLE WATER FEED LINE FROM DOMESTIC WATER SERVICE TO FLUSH FIXTURES.
- ⑬ 6" PVC SDR 35 STORM DRAIN LINE BY OTHERS. CONTRACTOR TO VERIFY EXACT DEPTH AND LOCATION.
- ⑭ 6" PVC SDR 35 STORM DRAIN FEED LINE. CONTRACTOR TO VERIFY EXACT DEPTH AND LOCATION.
- ⑮ 6" PVC SDR 35 STORM DRAIN OVERFLOW FROM VF-1 AND RWT-1 TO STORM DRAIN LINE. CONTRACTOR TO VERIFY EXACT DEPTH AND LOCATION.
- ⑯ 2" SCH 80 PVC FORCE MAIN FROM RWT-1 TO BT-1.
- ⑰ 2" SCH 80 PVC TREATED WATER LINE FROM UV-1 TO BT-1.
- ⑱ 2" SCH 80 PVC SANITARY SEWER LINE FROM S-1 AND A-1 TO SANITARY SEWER SYSTEM.
- ⑲ MICROSEPTIC HIBLOW HP-120 ABOVE GROUND AIR COMPRESSOR OR EQUAL. CONTRACTOR TO LOCATE IN SHADED AREA AWAY OUT OF DIRECT SUNLIGHT OR PROVIDE SHADE COVER.
- ⑳ 1-1/4" SCH 80 PVC AIR LINE FROM AIR COMPRESSOR TO RWT-1.
- ㉑ 3" SCH 80 PVC VENT LINE WITH VENT SCREEN FROM RWT-1 TO ROOF PER CPC.
- ㉒ RWS CONTROL PANEL PER WATER RECYCLING SYSTEM. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
- ㉓ RWS ELECTRICAL DISCONNECT PER WATER RECYCLING SYSTEM. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
- ㉔ SQUARE D PRESSURE SWITCH CLASS 9013 TYPE GMG SERIES C INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.

**5 RAIN WATER HARVESTING SYSTEM KEYNOTES**

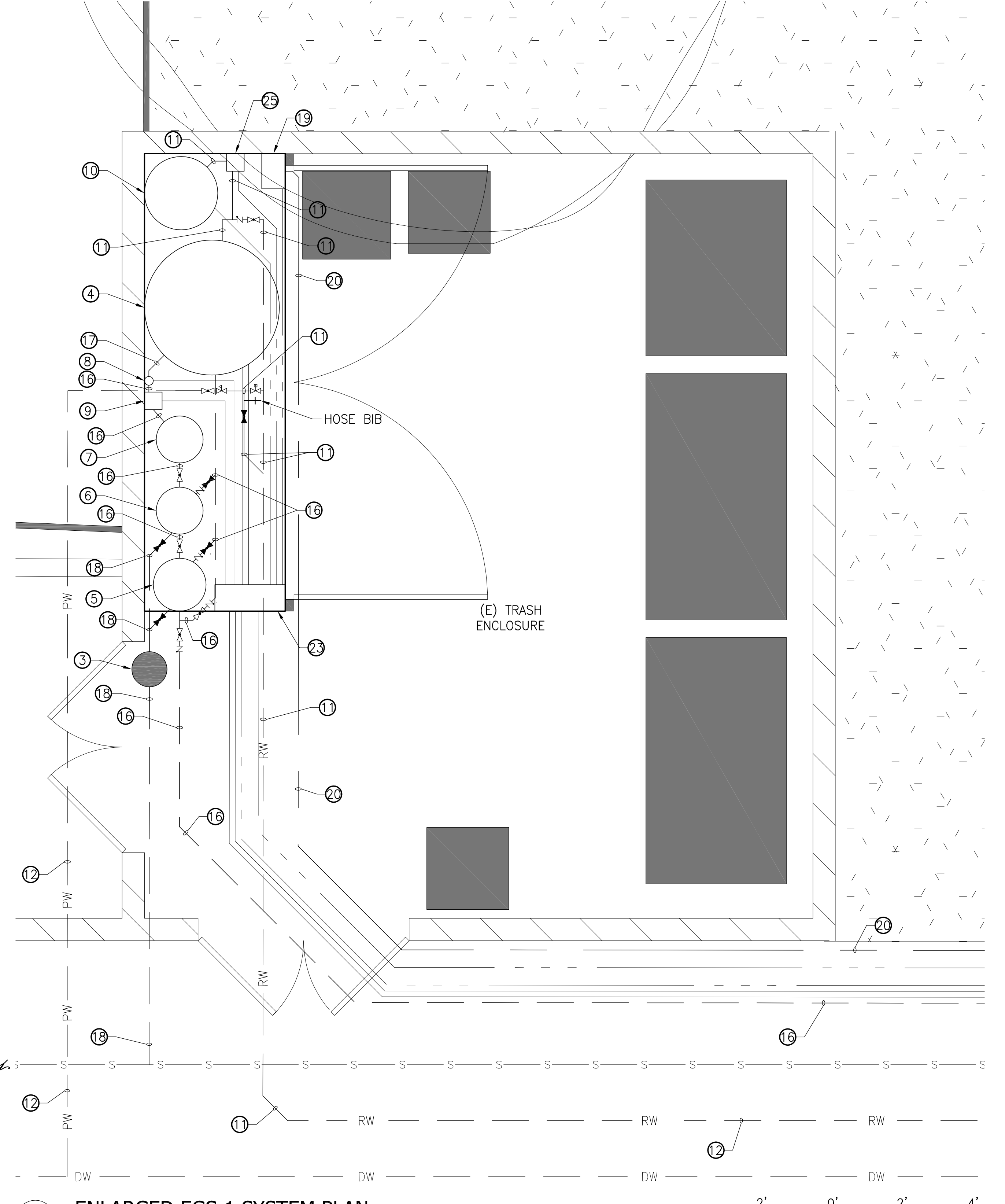
**PROPRIETARY MANUFACTURER NOTES:**  
1. ALL PROPRIETARY SPECIFICATIONS ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.

- (A) INSPECT AND CLEAN FILTER AND SCREENS, AND REPLACE (IF NECESSARY) EVERY 3 MONTHS MINIMUM.
- (B) INSPECT AND VERIFY THAT DISINFECTION, FILTERS AND WATER QUALITY TREATMENT DEVICES AND SYSTEMS ARE OPERATIONAL AND MAINTAINING MINIMUM WATER QUALITY REQUIREMENTS AS DETERMINED BY THE AUTHORITY HAVING JURISDICTION, AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- (C) INSPECT AND CLEAR DEBRIS FROM RAIN WATER GUTTERS, DOWNSPOUTS, AND ROOF WASHERS EVERY 6 MONTHS MINIMUM.
- (D) INSPECT AND CLEAR DEBRIS FROM ROOF AND OTHER ABOVE GROUND RAIN WATER COLLECTION SURFACES EVERY 6 MONTHS MINIMUM.
- (E) REMOVE TREE BRANCHES AND VEGETATION OVERHANGING ROOF OR OTHER ABOVE GROUND RAIN WATER COLLECTION SURFACES AS NEEDED.
- (F) INSPECT PUMPS AND VERIFY OPERATION AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- (G) INSPECT VALVES AND VERIFY OPERATION AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- (H) INSPECT PRESSURE TANKS AND VERIFY OPERATION AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- (I) CLEAR DEBRIS FROM AND INSPECT STORAGE TANKS, LOCKING DEVICES AND VERIFY OPERATION AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- (J) INSPECT CAUTION LABELS AND MARKINGS AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER.
- (K) INSPECT AND MAINTAIN MULCH BASINS AS NEEDED TO MAINTAIN MULCH DEPTH AND PREVENT PONDING AND RUNOFF.
- (L) INSPECT CROSS CONNECTIONS AND TEST AFTER INITIAL INSTALLATION AND EVERY 12 MONTHS THERE AFTER. THE CROSS CONNECTION TEST SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE PLUMBING CODE.
- (M) TEST WATER QUALITY OF RAIN WATER CATCHMENT SYSTEMS AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION PROCEDURES TO MAINTAIN A MINIMUM WATER QUALITY EVERY 3 TO 12 MONTHS, OR AFTER ANY SYSTEM RENOVATION OR REPAIR.

**6 RWS MINIMUM SOURCE TESTING, INSPECTION, AND MAINTENANCE**



**1 ENLARGED RAIN WATER HARVESTING SYSTEM PLAN**



**2 ENLARGED EGS-1 SYSTEM PLAN**

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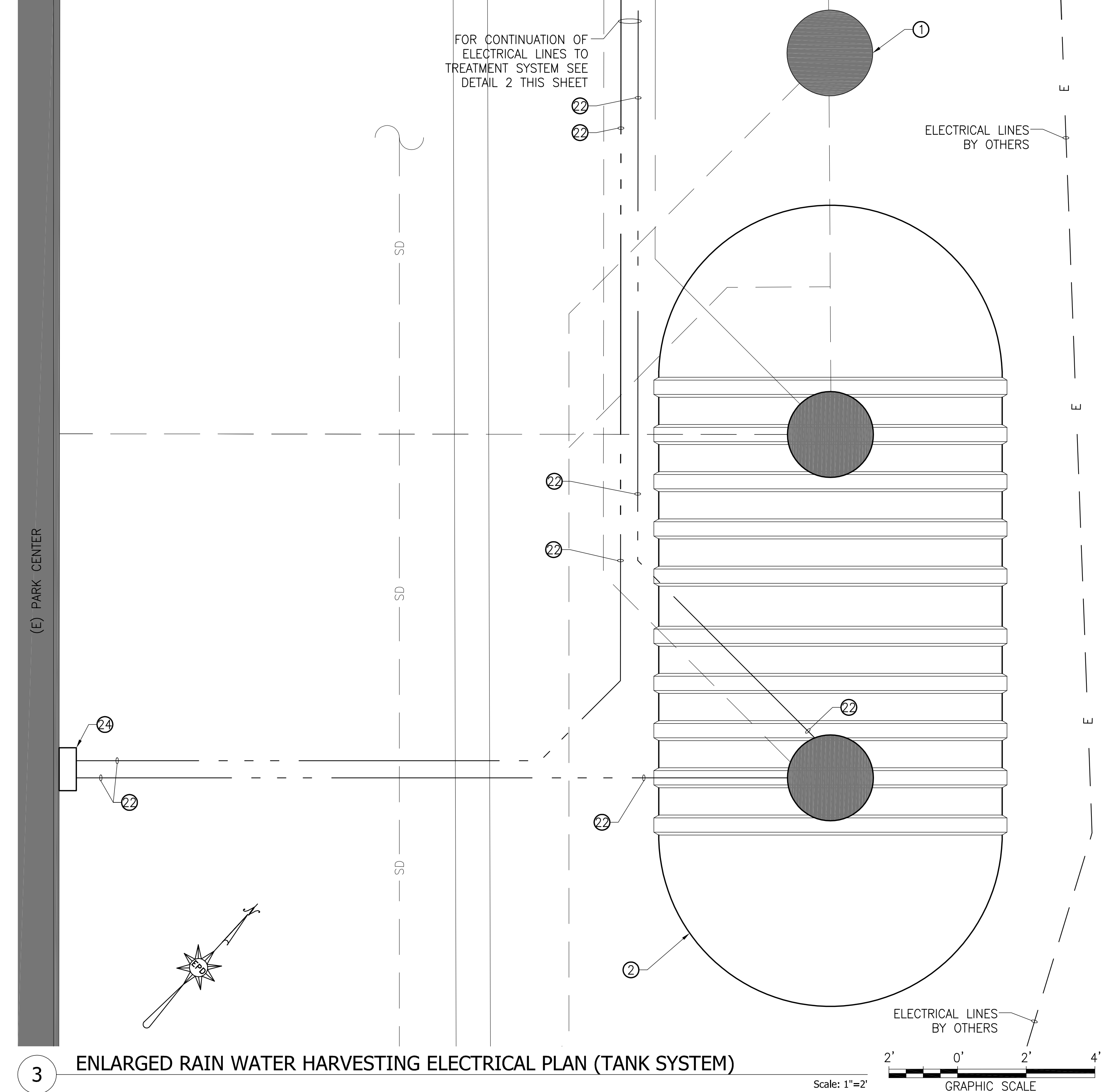
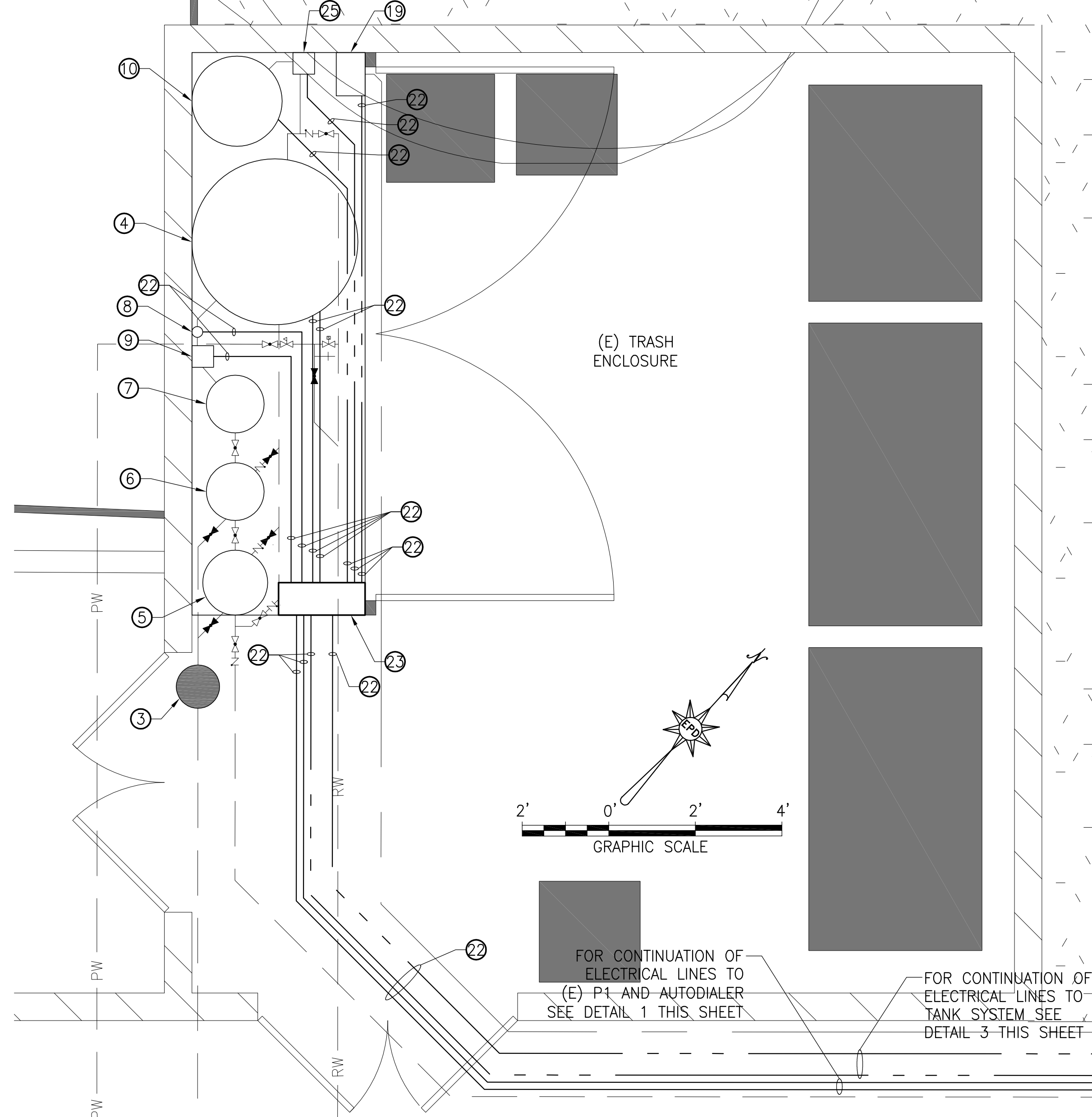
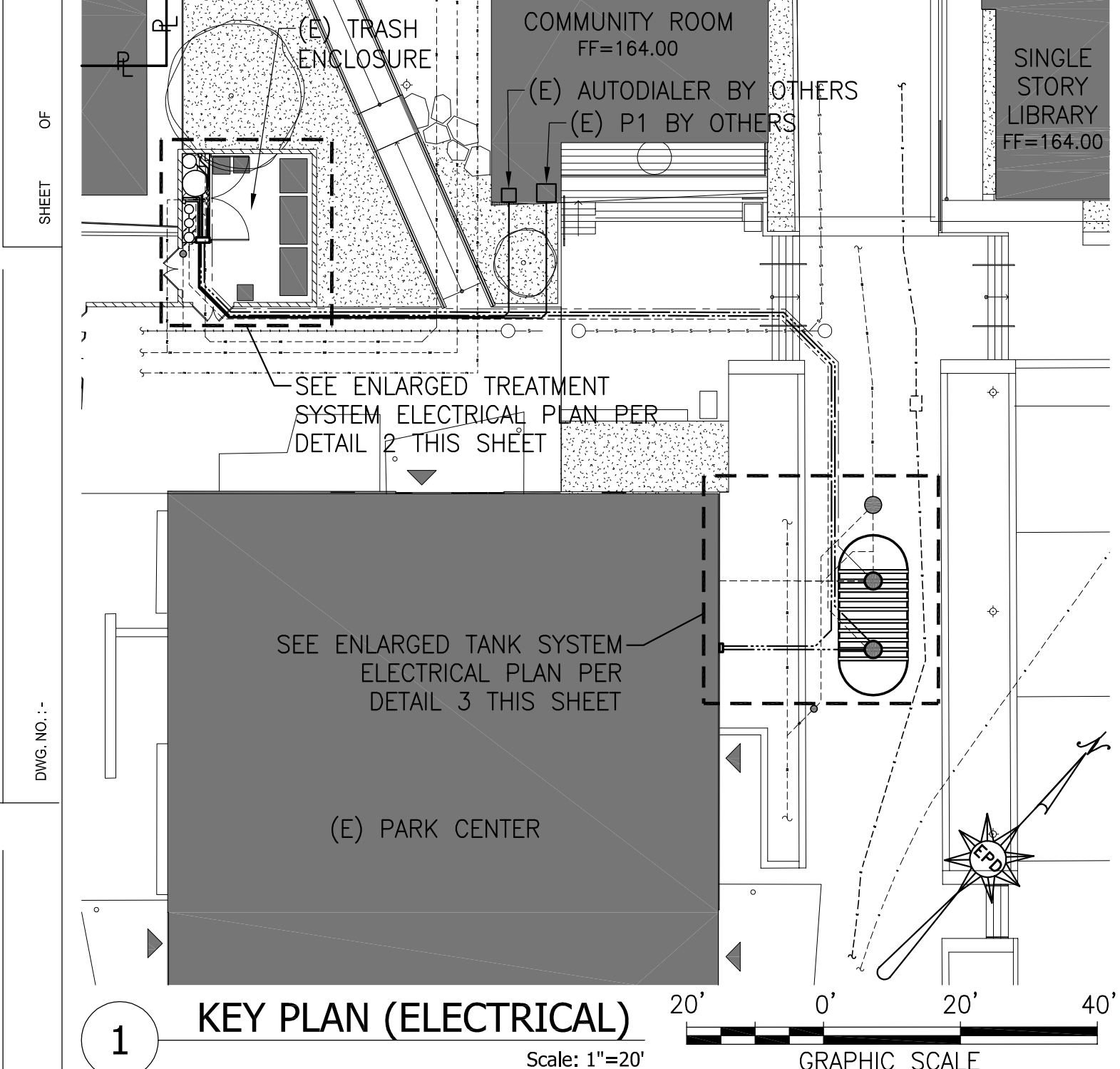
NO.	DATE	BY	DESCRIPTION

**PRELIMINARY - NOT FOR CONSTRUCTION**

DATE: 06/12/2012  
DRAWING NO: 6693

**SHEET TITLE**  
**ENLARGED RAIN WATER HARVESTING SYSTEM PLAN**

**SHEET NO.**  
**W-3**

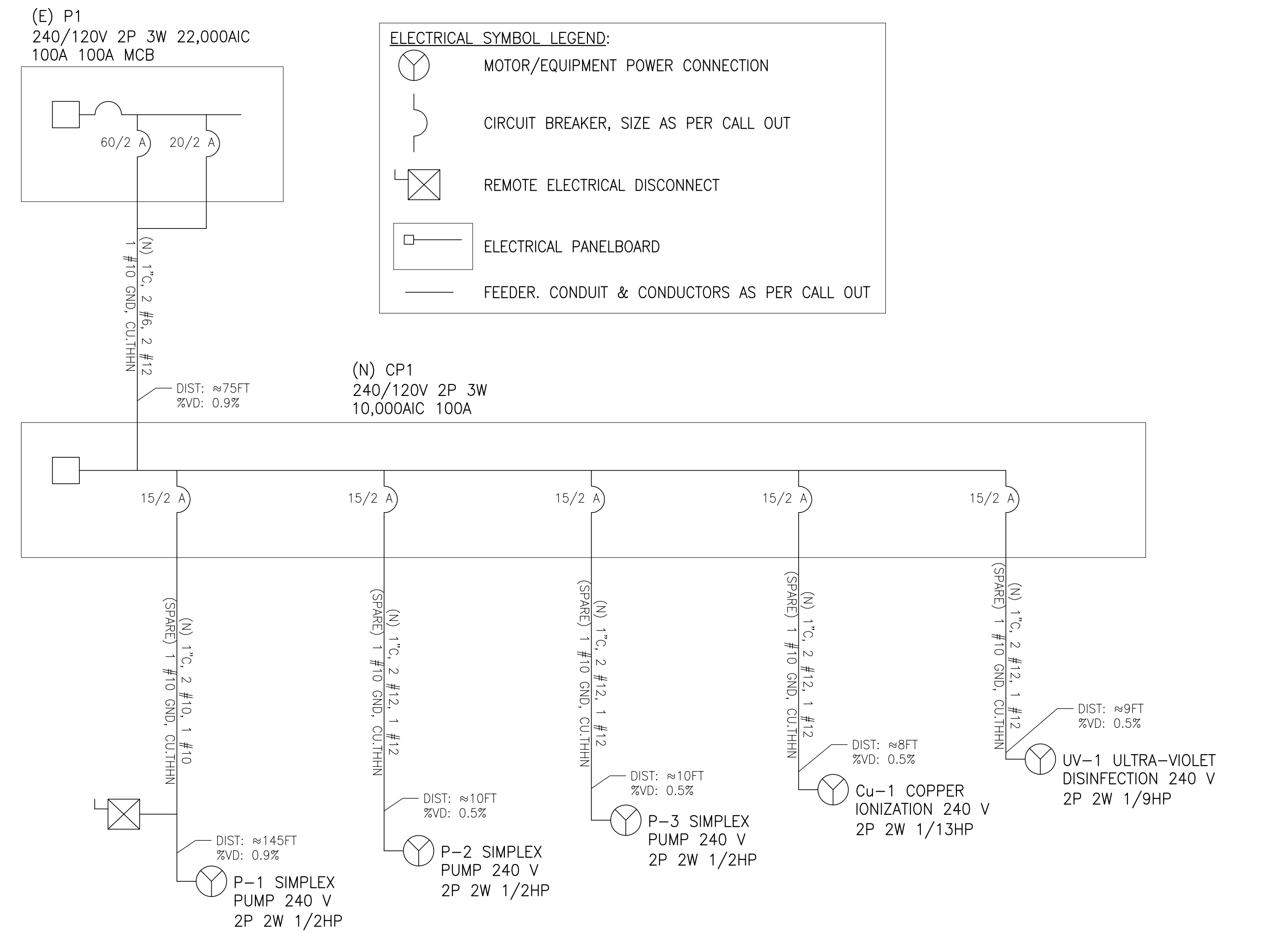


- LEGEND & ABBREVIATIONS:**
- PROPERTY LINE
  - BUILDING OUTLINE
  - RWS FORCE MAIN
  - RWS ELECTRICAL LINE
  - RWS AIR LINE
  - RW --- RW --- RW --- TREATED WATER FEED LINE
  - PW --- PW --- PW --- POTABLE WATER FEED LINE
  - SD --- SD --- SD --- STORM DRAIN
  - SS --- SS --- SS --- SANITARY SEWER
  - DW --- DW --- DW --- DOMESTIC WATER SUPPLY LINE
  - EL --- EL --- EL --- ELECTRICAL UTILITY LINE
  - GU --- GU --- GU --- GAS UTILITY LINE
  - FW --- FW --- FW --- FIRE WATER LINE
  - NO --- NO --- NO --- NORMALLY OPEN VALVE
  - NC --- NC --- NC --- NORMALLY CLOSED VALVE
  - BV --- BV --- BV --- BALL VALVE
  - CV --- CV --- CV --- CHECK VALVE
  - HB --- HB --- HB --- HOSE BIB
  - SV --- SV --- SV --- SOLENOID VALVE
  - RP --- RP --- RP --- REVERSE PRESSURE PRINCIPAL (RP)
  - BP --- BP --- BP --- BACKFLOW PREVENTER
  - P --- P --- P --- PUMP
  - D --- D --- D --- DIAMETER
  - A --- A --- A --- ANTHRACITE FILTER ARRAY
  - AG --- AG --- AG --- AIR GAP
  - BT --- BT --- BT --- BLADDER TANK
  - CP --- CP --- CP --- CONTROL PANEL
  - CF --- CF --- CF --- CARBON FILTER ARRAY
  - CPC --- CPC --- CPC --- CALIFORNIA PLUMBING CODE
  - Cu --- Cu --- Cu --- COPPER DISINFECTION
  - DW --- DW --- DW --- DOMESTIC WATER LINE
  - EL --- EL --- EL --- ELECTRICAL LINE
  - EGS-1 --- EGS-1 --- EGS-1 --- EVER GREEN SYSTEM BY WRS
  - ELEV --- ELEV --- ELEV --- ELEVATION
  - FM --- FM --- FM --- FORCE MAIN
  - G --- G --- G --- GAS LINE
  - MFR --- MFR --- MFR --- MANUFACTURER
  - P --- P --- P --- PUMP NUMBER
  - PL --- PL --- PL --- PROPERTY LINE
  - PW --- PW --- PW --- POTABLE WATER
  - RW --- RW --- RW --- TREATED WATER (RECYCLED)
  - RWS --- RWS --- RWS --- RAIN WATER SYSTEM
  - RWT --- RWT --- RWT --- RAIN WATER TANK
  - S --- S --- S --- SAND FILTER ARRAY
  - SD --- SD --- SD --- STORM DRAIN
  - SS --- SS --- SS --- SANITARY SEWER
  - TWT --- TWT --- TWT --- TREATED WATER TANK
  - UV --- UV --- UV --- ULTRAVIOLET DISINFECTION
  - VF --- VF --- VF --- VORTEX FILTER

- GENERAL NOTES**
1. THESE PLANS ARE ACCURATE FOR RAIN WATER HARVESTING SYSTEM ONLY.
  2. RAIN WATER HARVESTING SYSTEM PLANS ARE BASED ON THE FOLLOWING: (A) ARCHITECTURAL PLANS PROVIDED BY KONIG EISENBERG ARCHITECTURE, DATED MAY 7, 2012; (B) GRADING AND DRAINAGE PLANS PROVIDED BY KPFF CONSULTING ENGINEERS, DATED FEBRUARY 21, 2012 (C) PLUMBING PLANS PROVIDED BY GLUMAC, DATED FEBRUARY 21, 2012; (D) ELECTRICAL PLANS PROVIDED BY GLUMAC, DATED FEBRUARY 21, 2012.
  3. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. HOWEVER, THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES, OR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN ON THESE DRAWINGS.
  4. IN THE EVENT THAT THE SUBSURFACE OR LATENT PHYSICAL CONDITIONS ARE FOUND MATERIALLY DIFFERENT FROM THOSE INDICATED IN THESE DOCUMENTS, AND DIFFERING MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN THE CHARACTER OF WORK COVERED IN THESE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY, AND BEFORE SUCH CONDITIONS ARE DISTURBED, NOTIFY THE ENGINEER IN WRITING OF SUCH CHANGED CONDITIONS.
  5. REFER TO CONSTRUCTION NOTES PER DETAIL 3/SHEET W-2.

- RAIN WATER HARVESTING SYSTEM KEYNOTES**
- 1 VF-1: VORTEX RAIN WATER FILTER 1, J.R. SMITH MFG. CO. WISY MODEL WF3011 WITH ALUMINUM LID FOR LIGHT TRAFFIC AREAS WITH 30% EBW H-20 TRAFFIC RATED SLAB/LID AT GRADE.
  - 2 RWT-1: RAIN WATER TANK 1, CONTAINMENT SOLUTIONS MODEL SWT D-6 10', 12,000-GAL BELOW GROUND FRP CISTERN WITH TWO (2) 30" LIDS/RISERS PER MFR WITH EBW H-20 TRAFFIC RATED SLAB/LID AT GRADE. TANK CONTAINS ONE (1) 1/2 HP FILTRATION PUMP. TANK SHALL BE GAS AND WATERTIGHT AND VENTED TO ROOF PER CPC.
  - 3 2" AND 6" SPEARS PVC BACKWATER VALVES MODEL NO. S275P OR S675P, OR APPROVED EQUAL FOR SD AND SS LINES WITH H-20 TRAFFIC RATED SLAB AND GROUND LEVEL ACCESS KIT FOR ROUTINE MAINTENANCE.
  - 4 TWT-1: TREATED WATER TANK 1, 46" CHEM-TAINER 305-GAL ABOVE GROUND FRP TREATED WATER TANK PER MFR WITH ONE (1) 1/2 HP SUPPLY PUMP AND ONE (1) 1/2 HP RECIRCULATION PUMP. TANK SHALL BE GAS AND WATERTIGHT.
  - 5 S-1: SAND FILTER 1, 18" ABOVE GROUND SAND MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
  - 6 A-1: ANTHRACITE FILTER 1, 16" ABOVE GROUND ANTHRACITE MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
  - 7 C-1: CARBON FILTER 1, 16" ABOVE GROUND GRANULAR ACTIVATED CARBON MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
  - 8 UV-1: ULTRAVIOLET FILTER 1, 3" ABOVE GROUND ULTRAVIOLET DISINFECTION FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
  - 9 Cu-1: COPPER FILTER 1, ABOVE GROUND ELECTROLYTIC COPPER IONIZATION DISINFECTION FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
  - 10 BT-1: BLADDER TANK 1, 25" ABOVE GROUND 80-GAL BLADDER TANK, WESSELS COMPANY MODEL FX-300V.
  - 11 MICROSEPTIC HIBLOW HP-120 ABOVE GROUND AIR COMPRESSOR OR EQUAL. CONTRACTOR TO LOCATE IN SHADED AREA AWAY OUT OF DIRECT SUBLIGHT OR PROVIDE SHADE COVER.
  - 12 1" SCH 80 PVC RWS ELECTRICAL LINES. CONTRACTOR SHALL HAVE LICENSED ELECTRICIAN DETERMINE THE NUMBER AND SIZING OF WIRES.
  - 13 RWS CONTROL PANEL PER WATER RECYCLING SYSTEM. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
  - 14 RWS ELECTRICAL DISCONNECT PER WATER RECYCLING SYSTEM. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
  - 15 SQUARE D PRESSURE SWITCH CLASS 9013 TYPE GMG SERIES G INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.

**PROPRIETARY MANUFACTURER NOTES:**  
 1. ALL PROPRIETARY SPECIFICATIONS ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.



SUBMITTED BY:	DATE:	20__
APPROVED BY:	DATE:	20__
Miriam Muller Architecture Services Manager CITY OF SANTA MONICA DEPARTMENT OF PUBLIC WORKS		
REVIEWED BY:	DATE:	20__
REVIEWED BY:	DATE:	20__
REVIEWED BY:	DATE:	20__

CITY CLIENT		
NO.	DATE	BY DESCRIPTION

LEGEND & ABBREVIATIONS:

- RWS FORCE MAIN
- S --- RWS SANITARY SEWER
- RWS ELECTRICAL LINE
- RWS AIR LINE
- TREATED WATER FEED LINE
- POTABLE WATER FEED LINE
- STORM DRAIN
- W --- DOMESTIC WATER SUPPLY LINE
- ⊗ --- NORMALLY OPEN VALVE
- ⊗ --- NORMALLY CLOSED VALVE
- ⊗ --- BALL VALVE
- ⊗ --- CHECK VALVE
- ⊗ --- HOSE BIB
- ⊗ --- SOLENOID VALVE
- ⊗ --- BACKWATER VALVE
- ⊗ --- REVERSE PRESSURE PRINCIPAL (RP)
- ⊗ --- BACKFLOW PREVENTER
- ⊗ --- PUMP
- ⊗ --- DIAMETER
- ⊗ --- ANTHRACITE FILTER ARRAY
- ⊗ --- AIR GAP
- ⊗ --- BLADDER TANK
- ⊗ --- CARBON FILTER ARRAY
- ⊗ --- CONTROL PANEL
- ⊗ --- CALIFORNIA PLUMBING CODE
- ⊗ --- COPPER DISINFECTION
- ⊗ --- DOMESTIC WATER LINE
- ⊗ --- ELECTRICAL LINE
- ⊗ --- EVER GREEN SYSTEM BY WRS
- ⊗ --- ELEVATION
- ⊗ --- FORCE MAIN
- ⊗ --- GAS LINE
- ⊗ --- MANUFACTURER
- ⊗ --- PUMP NUMBER
- ⊗ --- PROPERTY LINE
- ⊗ --- POTABLE WATER
- ⊗ --- TREATED WATER (RECYCLED)
- ⊗ --- RAIN WATER SYSTEM
- ⊗ --- RAIN WATER TANK
- ⊗ --- SAND FILTER ARRAY
- ⊗ --- STORM DRAIN
- ⊗ --- SANITARY SEWER
- ⊗ --- TREATED WATER TANK
- ⊗ --- ULTRAVIOLET DISINFECTION
- ⊗ --- VORTEX FILTER

EQUIPMENT TABLE			
TYPE	SIZE	MANUFACTURER	PRODUCT #
BALL VALVE	1-1/4"	SPEARS PVC TRUE UNION BALL VALVE	USA BLUEBOOK STOCK #76903
BALL VALVE	2"	SPEARS PVC TRUE UNION BALL VALVE	USA BLUEBOOK STOCK #76905
CHECK VALVE	1-1/4"	SPEARS PVC TRUE UNION CHECK VALVE	SPEARS #2223-012
CHECK VALVE	2"	SPEARS PVC TRUE UNION CHECK VALVE	SPEARS #2223-020
SOLENOID VALVE	1-1/4"	BURKERT BRASS SOLENOID VALVE	USA BLUEBOOK STOCK #72699
BACKWATER VALVE	2"	SPEARS PVC BACKWATER VALVE WITH EXTENSIONS	USA BLUEBOOK STOCK #28282
BACKWATER VALVE	6"	SPEARS PVC BACKWATER VALVE WITH EXTENSIONS	USA BLUEBOOK STOCK #28285
HOSE BIB	3/4"	J.R. SMITH NON-FREEZE ABOVE GROUND HYDRANT	J.R. SMITH MODEL #5616
BACKFLOW PREVENTER	1-1/4"	WILKINS 975XL RPZ BRASS BACKFLOW PREVENTER	USA BLUEBOOK STOCK #15873

ALL RAIN WATER HARVESTING EQUIPMENT COMPONENTS LISTED IN THE EQUIPMENT TABLE ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.

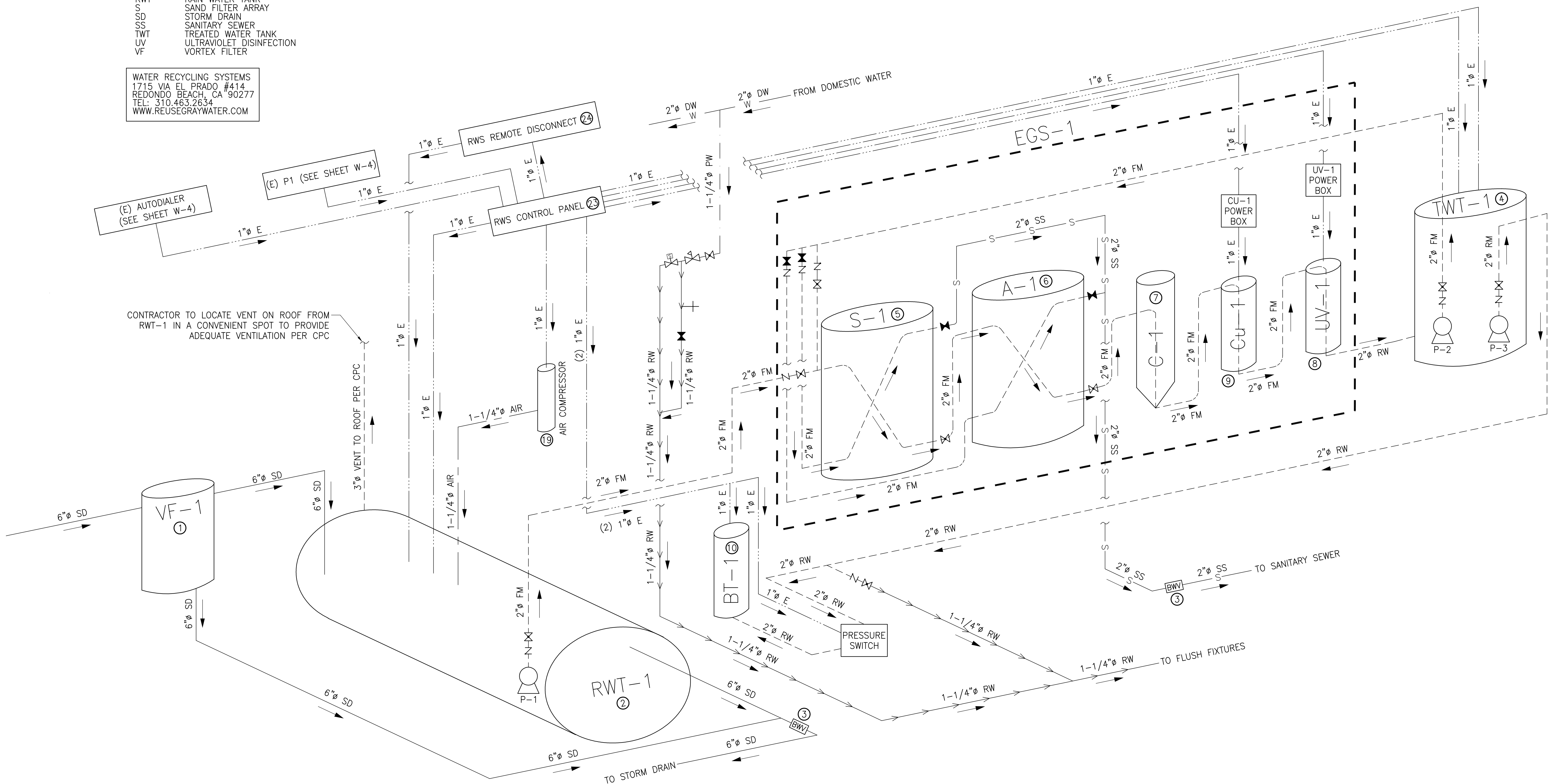
PROPRIETARY MANUFACTURER NOTES:  
 1. ALL PROPRIETARY SPECIFICATIONS ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.

WATER RECYCLING SYSTEMS  
 1715 VIA EL PRADO #414  
 REDONDO BEACH, CA 90277  
 TEL: 310.465.2634  
 WWW.REUSEGRAYWATER.COM

- ① VF-1: VORTEX RAIN WATER FILTER 1, J.R. SMITH MFG. CO. WISY MODEL WF3011 WITH ALUMINUM LID FOR LIGHT TRAFFIC AREAS WITH 30"Ø EBW H-20 TRAFFIC RATED SLAB/LID AT GRADE.
- ② RWT-1: RAIN WATER TANK 1, CONTAINMENT SOLUTIONS MODEL SWT D-6 10'Ø, 12,000-GAL BELOW GROUND FRP CISTERN WITH TWO (2) 30"Ø LIDS/RISERS PER MFR WITH EBW H-20 TRAFFIC RATED SLAB/LID AT GRADE. TANK CONTAINS ONE (1) 1/2 HP FILTRATION PUMP. TANK SHALL BE GAS AND WATERTIGHT AND VENTED TO ROOF PER CPC.
- ③ 2"Ø AND 6"Ø SPEARS PVC BACKWATER VALVES MODEL NO. S275P OR S675P, OR APPROVED EQUAL FOR SD AND SS LINES WITH H-20 TRAFFIC RATED SLAB AND GROUND LEVEL ACCESS KIT FOR ROUTINE MAINTENANCE.
- ④ TWT-1: TREATED WATER TANK 1, 46"Ø CHEM-TAINER 305-GAL ABOVE GROUND FRP TREATED WATER TANK PER MFR WITH ONE (1) 1/2 HP SUPPLY PUMP AND ONE (1) 1/2 HP RECIRCULATION PUMP. TANK SHALL BE GAS AND WATERTIGHT.
- ⑤ S-1: SAND FILTER 1, 18"Ø ABOVE GROUND SAND MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑥ A-1: ANTHRACITE FILTER 1, 16"Ø ABOVE GROUND ANTHRACITE MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑦ C-1: CARBON FILTER 1, 16"Ø ABOVE GROUND GRANULAR ACTIVATED CARBON MEDIA FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑧ UV-1: ULTRAVIOLET FILTER 1, 3"Ø ABOVE GROUND ULTRAVIOLET DISINFECTION FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑨ CU-1: COPPER FILTER 1, ABOVE GROUND ELECTROLYTIC COPPER IONIZATION DISINFECTION FILTER, INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.
- ⑩ BT-1: BLADDER TANK 1, 25"Ø ABOVE GROUND 80-GAL BLADDER TANK, WESSELS COMPANY MODEL FX-300V.
- ⑪ MICROSEPTIC HIBLOW HP-120 ABOVE GROUND AIR COMPRESSOR OR EQUAL CONTRACTOR TO LOCATE IN SHADED AREA AWAY OUT OF DIRECT SUBLIGHT OR PROVIDE SHADE COVER.
- ⑫ RWS CONTROL PANEL PER WATER RECYCLING SYSTEM. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
- ⑬ RWS ELECTRICAL DISCONNECT PER WATER RECYCLING SYSTEM. LICENSED ELECTRICIAN TO DETERMINE NUMBER AND SIZING OF WIRES.
- ⑭ SQUARE D PRESSURE SWITCH CLASS 9013 TYPE GMG SERIES C INCLUDED IN EGS-1 WATER RECYCLING SYSTEMS EVERGREEN SYSTEM.

2 RAIN WATER HARVESTING SYSTEM KEYNOTES

Scale: N.T.S.



1 PROCESS FLOW SCHEMATIC / ISOMETRIC

Scale: N.T.S.



411 N. HARBOR BLVD., STE. 304  
 SAN PEBRE, CA 90371  
 Phone (310) 241-6565  
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CONSULTANT  
 City of Santa Monica  
 Architecture Services  
 1437 4TH STREET, SUITE 300  
 SANTA MONICA, CA 90401  
 TEL. (310) 458-2205  
 FAX. (310) 389-1541  
 architecture@smgov.net

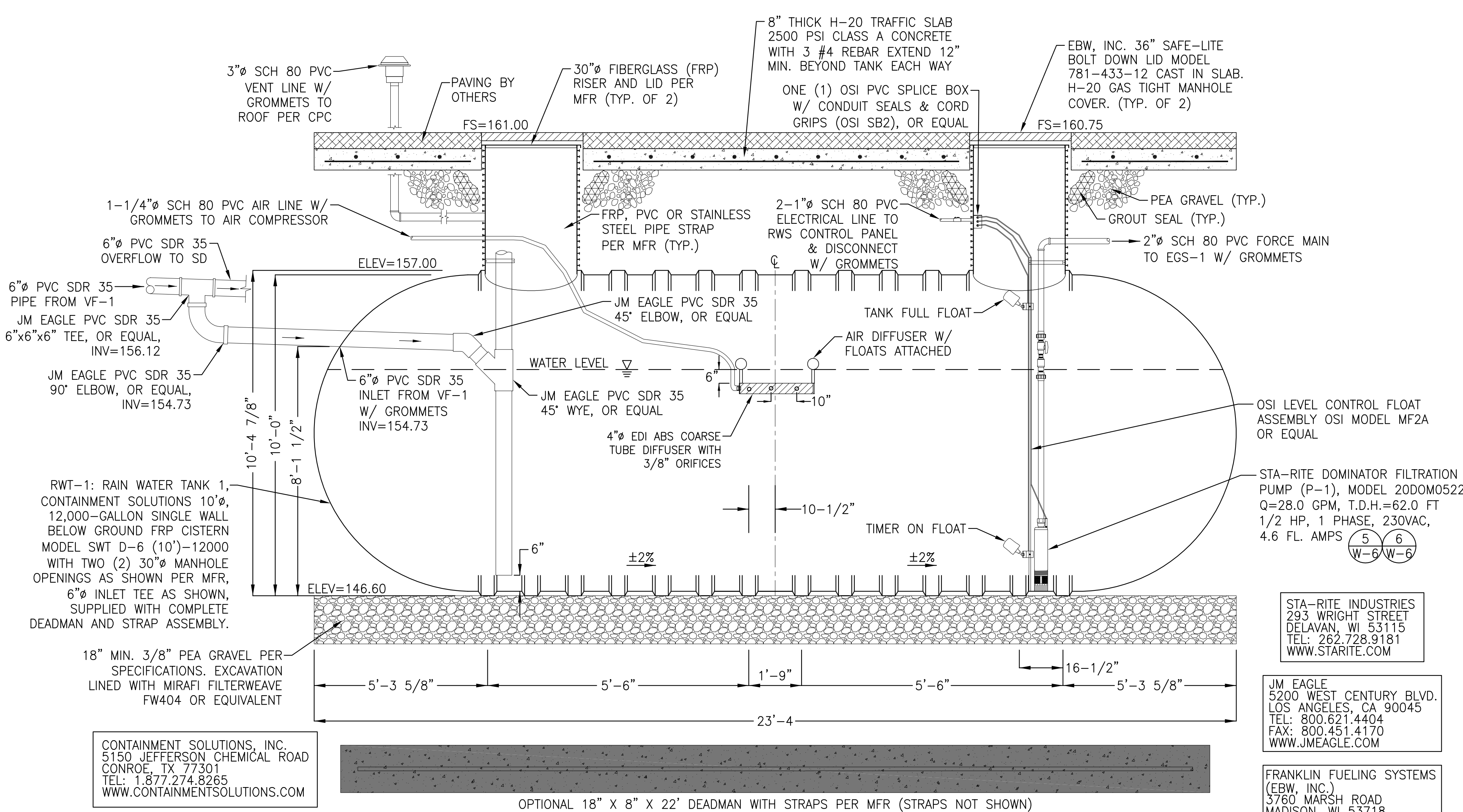
SUBMITTED BY: DATE: \_\_\_\_/\_\_\_\_/20\_\_  
 APPROVED BY: Miriam Muller, Architecture Services Manager  
 CITY OF SANTA MONICA  
 DEPARTMENT OF PUBLIC WORKS  
 REVIEWED BY: DATE: \_\_\_\_/\_\_\_\_/20\_\_  
 REVIEWED BY: DATE: \_\_\_\_/\_\_\_\_/20\_\_  
 REVIEWED BY: DATE: \_\_\_\_/\_\_\_\_/20\_\_

CITY CLIENT

NO.	DATE	BY	DESCRIPTION

ISSUE  
**PRELIMINARY-NOT FOR CONSTRUCTION**  
 DATE: 06/12/2012  
 DRAWING NO. **6693**

SHEET TITLE  
**PROCESS FLOW SCHEMATIC/ISOMETRIC**

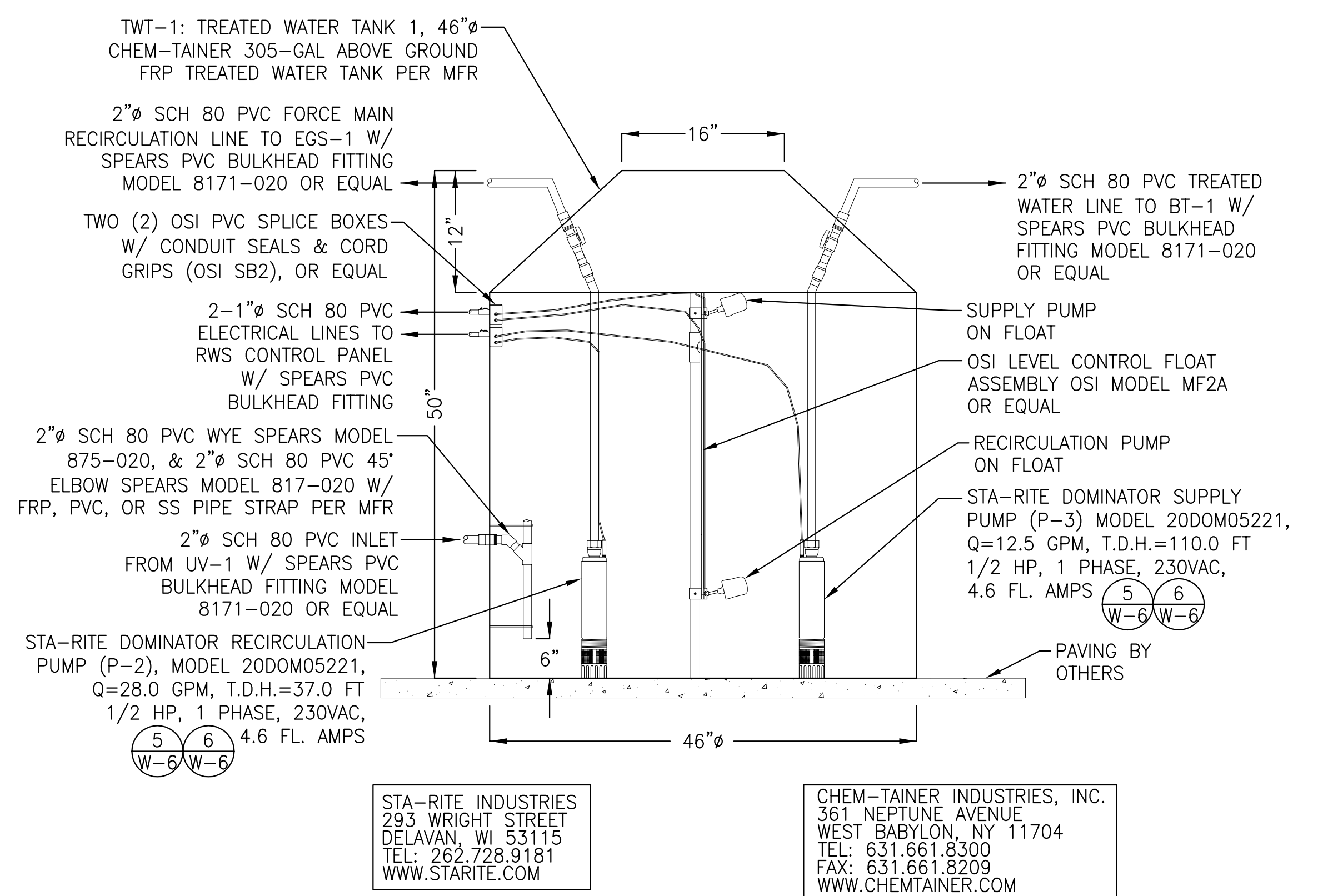


- GENERAL NOTES:**
- CONTRACTOR SHALL FOLLOW TANK MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT CONTAINMENT SOLUTIONS OR WATER RECYCLING SYSTEMS.
  - ALL MANHOLES SHALL BE GAS AND WATER TIGHT.
  - THE MAXIMUM BURIAL DEPTH IS 7' OF EARTH COVER OVER THE TOP OF THE TANK PER MANUFACTURER. FOR DEEPER BURIAL DEPTHS CONTACT MFR.
  - REFER TO TANK NOTES PER DETAIL 2 THIS SHEET.
  - TANK SHALL BE PERMANENTLY MARKED WITH THE FOLLOWING, "RAIN WATER HARVESTING SYSTEM, CAUTION-UNSAFE WATER."
  - FLOAT AND CONTROL PANEL WIRING SUBMITTALS SHALL BE PROVIDED BY THE CONTRACTOR TO THE SYSTEM DESIGNER PRIOR TO COMMENCEMENT OF ELECTRICAL WORK.

**1 RW1-1: RAIN WATER TANK 1 DETAIL**

Scale: N.T.S.

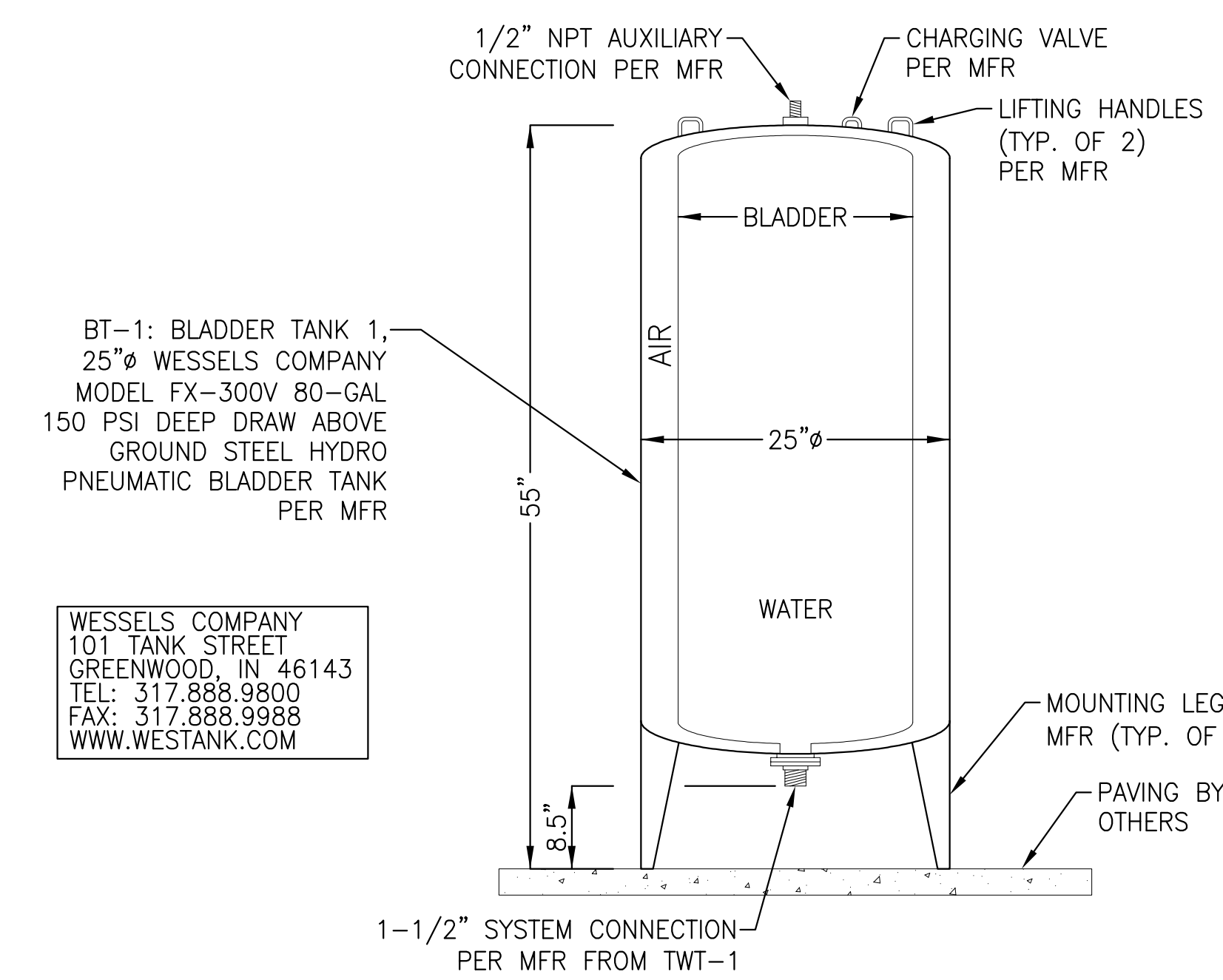
**PROPRIETARY MANUFACTURER NOTES:**  
 1. ALL PROPRIETARY SPECIFICATIONS ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.



- GENERAL NOTES:**
- CONTRACTOR SHALL FOLLOW TANK MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT CHEM-TAINER INDUSTRIES, INC. OR WATER RECYCLING SYSTEMS.
  - THE ABOVE GROUND TANK SHALL BE ANCHORED TO THE GROUND OR PAVING PER TANK MANUFACTURER'S RECOMMENDATIONS.
  - REFER TO TANK NOTES PER DETAIL 2 THIS SHEET.
  - TANK SHALL BE PERMANENTLY MARKED WITH THE FOLLOWING, "RAIN WATER HARVESTING SYSTEM, CAUTION-UNSAFE WATER."
  - ALL PUMPS, FLOATS AND CONTROL PANEL WIRING SUBMITTALS SHALL BE PROVIDED BY THE CONTRACTOR TO THE SYSTEM DESIGNER PRIOR TO COMMENCEMENT OF ELECTRICAL WORK.

**3 TWT-1: TREATED WATER TANK 1 DETAIL**

Scale: N.T.S.



- GENERAL NOTES:**
- CONTRACTOR SHALL FOLLOW TANK MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT WESSELS COMPANY OR WATER RECYCLING SYSTEMS.
  - THE ABOVE GROUND TANK SHALL BE ANCHORED TO THE GROUND OR PAVING PER TANK MANUFACTURER'S RECOMMENDATIONS.
  - REFER TO TANK NOTES PER DETAIL 2 THIS SHEET.

**4 BT-1: BLADDER TANK 1 DETAIL**

Scale: N.T.S.

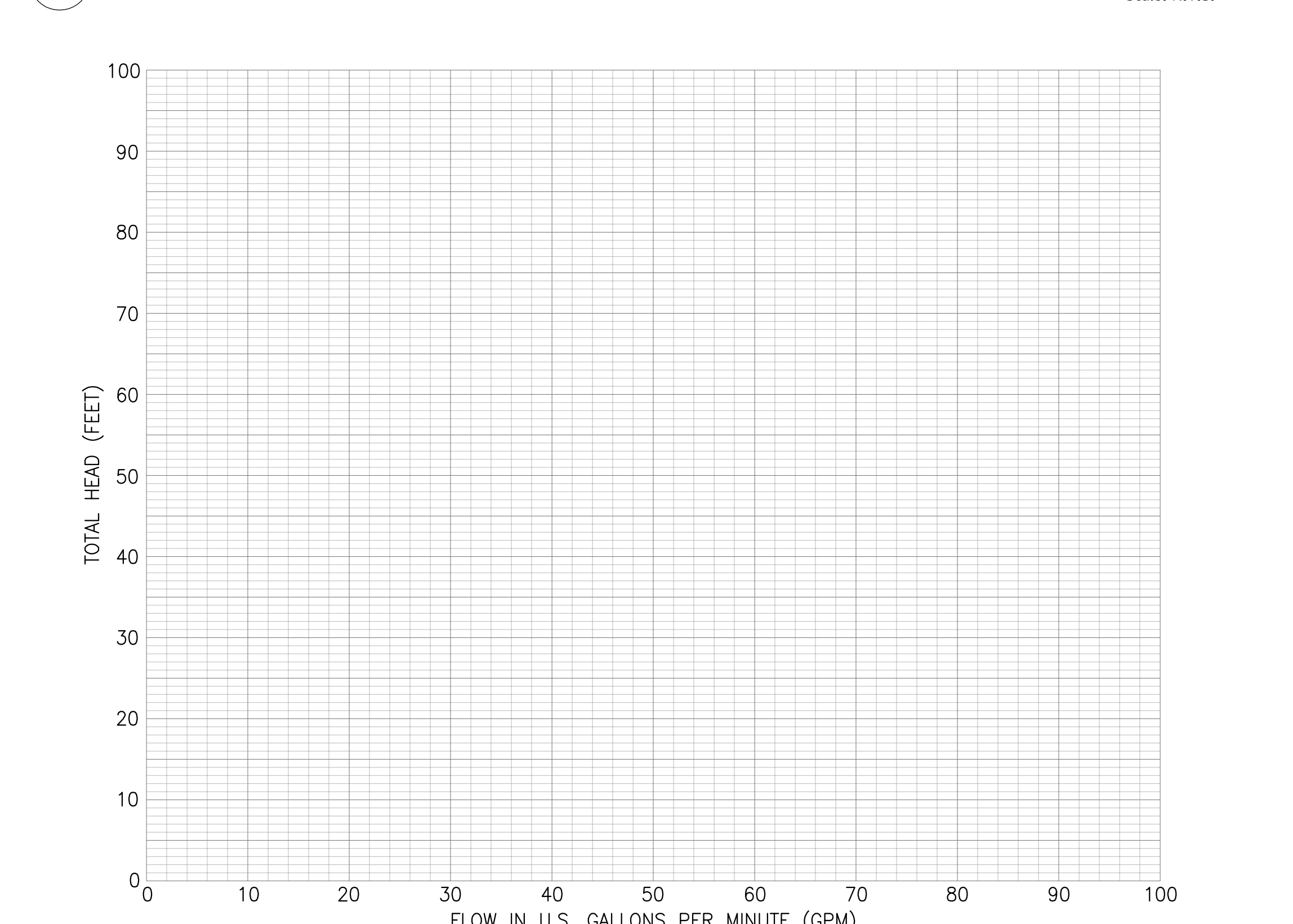
- TANKS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND CERTIFIED BY MANUFACTURER AND/OR CONTRACTOR.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FROM TANK MANUFACTURER DETAILING TANK PENETRATIONS, BRACKETS, & OTHER APPURTENANCES PRIOR TO TANK CONSTRUCTION.
- IF THE SOIL HAS LESS THAN 750 LBS./SQ.FT. COHESION AS CALCULATED FROM AN UNCONFINED COMPRESSION TEST; OR IN SOILS HAVING AN ULTIMATE BEARING CAPACITY OF LESS THAN 3,500 LBS./SQ. FT.; OR WHERE SOIL WILL NOT MAINTAIN A VERTICAL WALL, THE EXCAVATION MUST ALLOW A MINIMUM SPACE EQUAL TO HALF THE DIAMETER OF THE TANK BETWEEN THE SIDE AND THE ENDCAP OF THE TANK, AND THE EXCAVATION WALL TO ENHANCE LATERAL RESISTANCE.
- A REINFORCED CONCRETE SLAB MAY BE REQUIRED UNDER THE TANK AS A FOUNDATION IN THE EXCAVATION WHERE THE BOTTOM IS UNSTABLE. ASPHALT AND CONCRETE SLABS MUST EXTEND A MINIMUM OF 12" BEYOND THE TANK IN ALL DIRECTIONS.
- TANKS SHALL BE ANCHORED PER MANUFACTURER'S RECOMMENDATIONS IN INSTALLATIONS IN WHICH THE TANK COULD BE EXPOSED TO WATER. SITES SHALL BE THOROUGHLY EVALUATED FOR THE POTENTIAL OF A RISE IN THE LOCAL WATER TABLE OR OF TRAPPED WATER. CONTRACTOR OR SOLS ENGINEER SHALL PROVIDE EVALUATION TO SYSTEM DESIGNER FOR REVIEW PRIOR TO INSTALLATION OF TANK.
- THE MAXIMUM DESIGNED TANK BURY DEPTH IS 7' OF COVER OVER THE TOP OF THE TANK PER MANUFACTURER. ANY TANK BURIED BEYOND RANGE NEEDS TO BE ANALYZED BY A CIVIL/ GEOTECHNICAL ENGINEER PER MANUFACTURER.
- ACCESS RISERS TO BE SET/GLUED IN FIELD BY CONTRACTOR AND WATER TESTED AFTER INSTALLATION IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS AND IN THE PRESENCE OF ENGINEER, OWNER, OR OWNER'S AGENT. LIDS SHALL BE LOCKING AND MARKED "RAIN WATER HARVESTING SYSTEM, CAUTION-UNSAFE WATER".
- IF THERE IS AN UNATTACHED RISER OVER AN ACCESS OPENING, IT MUST NOT TRANSMIT LOAD FROM THE ASPHALT OR CONCRETE SLAB TO THE TANK. A MINIMUM SPACE OF 6" MUST EXIST BETWEEN THE BOTTOM OF THE RISER AND THE TOP OF THE TANK.
- IF THERE IS AN ATTACHED RISER ON AN ACCESS OPENING, IT MUST NOT TRANSMIT LOAD FROM THE ASPHALT OR CONCRETE SLAB TO THE TANK. A MINIMUM SPACE OF 3" MUST EXIST BETWEEN THE RISER OR SUMP AND THE SLAB.
- TANKS SUBJECT TO TRAFFIC LOADS (H-20 LOADS) MUST HAVE A COVER DEPTH OF AT LEAST 18" OF BACKFILL (36" FOR 12' TANKS) PLUS 6" OF REINFORCED CONCRETE OR 9" OF ASPHALT. TANKS NOT SUBJECT TO TRAFFIC LOADS MUST HAVE A COVER DEPTH OF AT LEAST 24" OF BACKFILL (48" FOR 12' TANKS) OR 12" OF BACKFILL (36" FOR 12' TANKS) PLUS 4" OF REINFORCED CONCRETE OR 6" OF ASPHALT.
- ALL PENETRATIONS THROUGH TANK AND ACCESS RISERS SHALL BE GAS AND WATERTIGHT. INSTALLER SHALL USE EPOXY, GROMMETS, OR OTHER APPROVED METHODS.
- EACH CONDUIT RUN TO CONTROL PANEL SHALL BE INSTALLED WITH TWO (2) CONDUIT SEALS (O-Z/GENEY CAT NO EYA-125), ONE (1) EACH AT CONTROL PANEL AND SPLICE BOX.
- ACCESS RISERS AND COVERS SHALL BE GAS-TIGHT, AND WATER TESTED AFTER INSTALLATION IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS AND IN THE PRESENCE OF DESIGNER, OWNER, OR OWNER'S AGENT.
- A 24-HOUR WATERTIGHT TEST SHALL BE CONDUCTED ON ALL GRAYWATER SYSTEM COMPONENTS PER CONSTRUCTION SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR WATER TESTING THE TANKS ONCE THE TANKS INSTALLATION HAS BEEN COMPLETED AND ALLOWED TO SET OVERNIGHT. WATER TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM C1227.9.2. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CLEAN WATER FOR THE TESTING, FILLING THE TANKS, AND PUMPING THE TANKS DRY ONCE TESTING IS COMPLETE.
- TANKS SHALL BE INSTALLED WITH A MINIMUM OF 12" OF COMPACTED CRUSHED STONE BEDDING. SELECT FILL SHALL BE USED IF BACKFILLING AROUND TANKS. NATIVE MATERIAL MAY BE USED IF APPROVED BY THE DESIGN ENGINEER.
- CONTRACTOR IS RESPONSIBLE FOR SUPPLYING AND INSTALLING ALL EXTERIOR PIPING PER INSTALLATION DRAWINGS.
- ALL ELECTRICAL WORK IS THE RESPONSIBILITY OF THE CONTRACTOR'S LICENSED ELECTRICIAN AND IS NOT PROVIDED BY SYSTEM ENGINEER. SYSTEM CONTROLLER, IF APPLICABLE, SHOULD BE INSTALLED IN A HEATED BUILDING WHERE AN AMBIENT TEMPERATURE RANGE OF 60 TO 90° F IS MAINTAINED. IF THE CONTROL PANEL MUST BE LOCATED OUTSIDE AND FREEZING TEMPERATURES ARE ANTICIPATED, NOTIFY MANUFACTURER SO A HEATER MAY BE INSTALLED WITHIN THE ENCLOSURE.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING A DEDICATED ANALOG PHONE LINE, IF APPLICABLE, TO THE CONTROL PANEL FOR THE AUTODIALER/MODEM. PHONE LINE MUST BE INSTALLED AND WORKING IN ORDER TO HAVE ANY WORK PERFORMED UNDER WARRANTY. ANY WORK PERFORMED ON THE SYSTEM WITHOUT THE INSTALLATION OF THE PHONE LINE SHALL BE AT THE SOLE EXPENSE OF THE OWNER.

**2 TANK NOTES**

Scale: N.T.S.

RWT-1 FILTRATION PUMP (P-1) SYSTEM PUMP CALCULATIONS:	TWT-1 RECIRCULATION PUMP (P-2) SYSTEM PUMP CALCULATIONS:	TWT-1 SUPPLY PUMP (P-3) SYSTEM PUMP CALCULATIONS:
MAKE: STA-RITE DOMINATOR MODEL NO: 20DOM05221 RATING: 28.0 GPM 62.0 TDH MOTOR: 1/2 HP 1 PH ELEC: 60 HZ 230V ELEC: 4.6 FL AMPS	MAKE: STA-RITE DOMINATOR MODEL NO: 20DOM05221 RATING: 28.0 GPM 37.0 TDH MOTOR: 1/2 HP 1 PH ELEC: 60 HZ 230V ELEC: 4.6 FL AMPS	MAKE: STA-RITE DOMINATOR MODEL NO: 20DOM05221 RATING: 12.5 GPM 110.0 TDH MOTOR: 1/2 HP 1 PH ELEC: 60 HZ 230V ELEC: 4.6 FL AMPS

**5 RAIN WATER HARVESTING SYSTEM PUMP CALCULATIONS & SPECIFICATIONS**



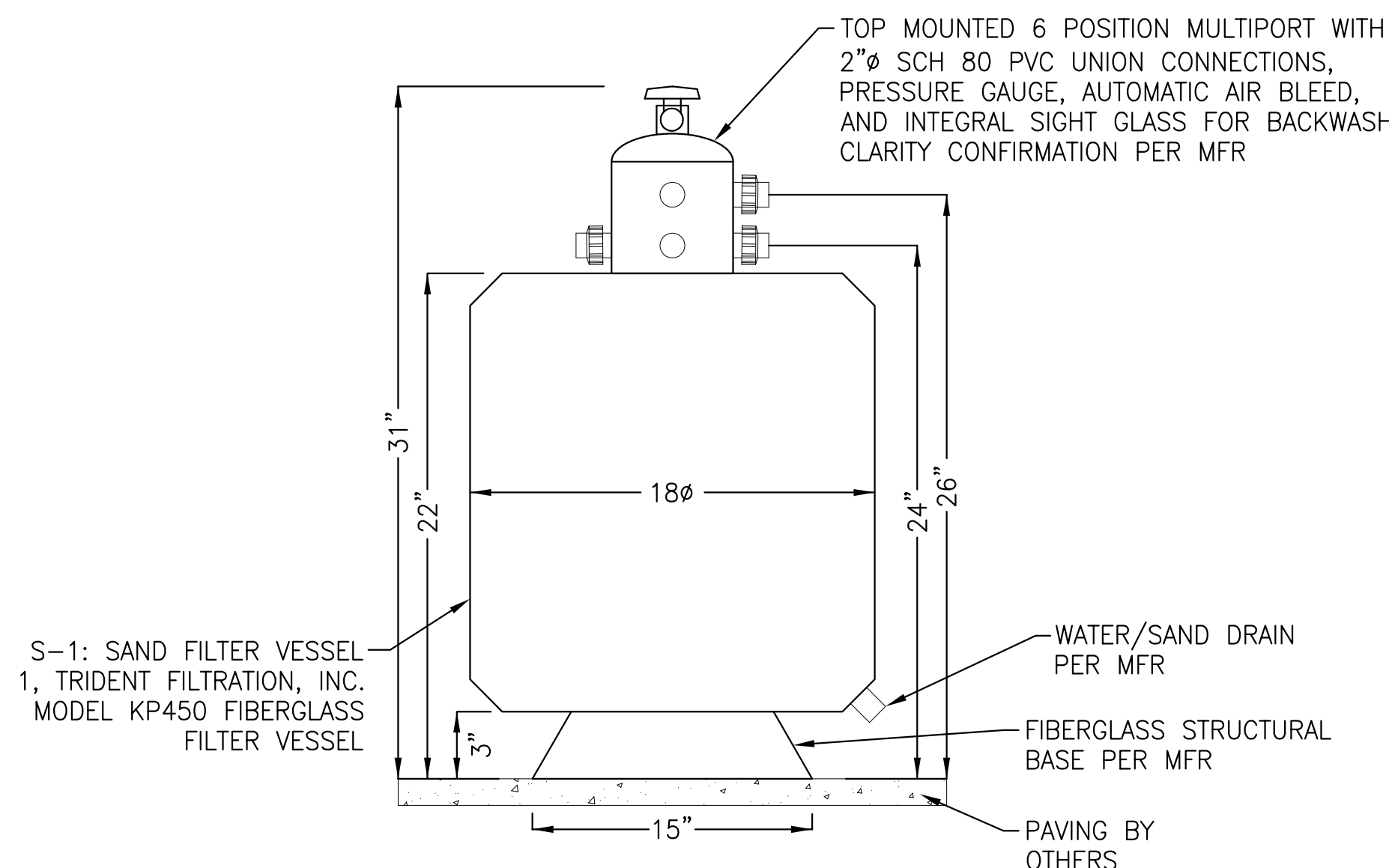
**6 RAIN WATER HARVESTING SYSTEM PUMP CURVES**

Scale: N.T.S.



SUBMITTED BY:	DATE: _____ 20__
APPROVED BY:	DATE: _____ 20__
REVIEWED BY:	DATE: _____ 20__
REVIEWED BY:	DATE: _____ 20__
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NO.	DATE	BY	DESCRIPTION



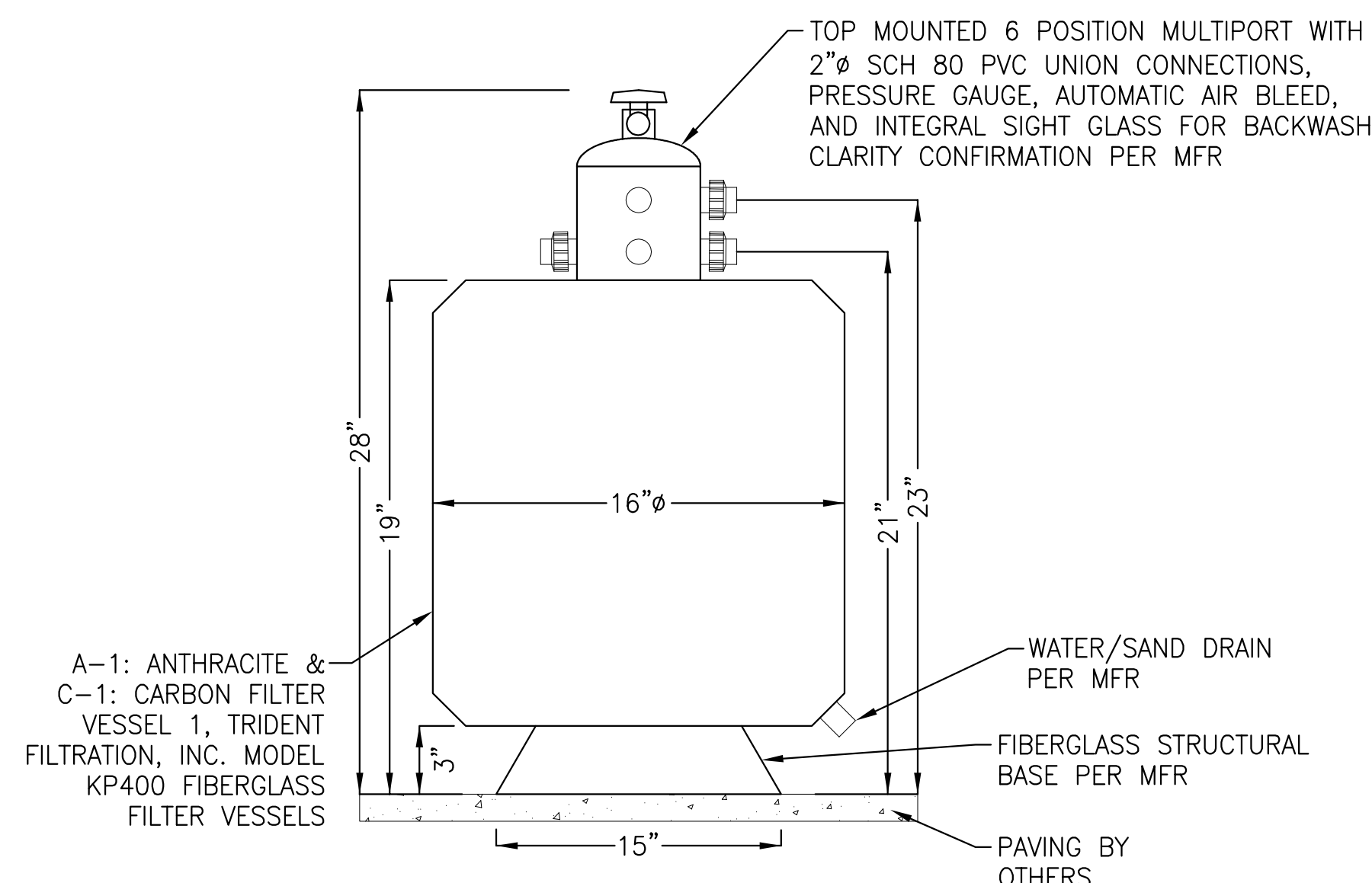
TRIDENT FILTRATION, INC.  
4270 PROMENADE WAY SUITE D  
MARINA DEL RAY, CA 90290  
TEL: 310.577.7060  
WWW.TRIDENTFILTRATION.COM

WATER RECYCLING SYSTEMS  
1715 VIA EL PRADO #414  
REDONDO BEACH, CA 90277  
TEL: 310.463.2634  
WWW.REUSEGRAYWATER.COM

- NOTES:**
- CONTRACTOR SHALL FOLLOW FILTER VESSEL MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT TRIDENT FILTRATION, INC. OR WATER RECYCLING SYSTEMS.
  - THE FILTER VESSEL SHOULD BE PLACED ON A LEVEL CONCRETE SLAB, VERY FIRM GROUND, OR EQUIVALENT. POSITION THE FILTER SO THAT THE PIPING CONNECTIONS, CONTROL VALVE, ARE CONVENIENT AND ACCESSIBLE FOR OPERATION AND SERVICE.
  - LOADING THE FILTER VESSEL WITH MEDIA SHALL BE PERFORMED IN ACCORDANCE WITH THE MFR SPECIFICATIONS.
  - ALL CONNECTIONS TO FILTER VESSEL SHALL BE WATERTIGHT PER MFR.
  - THE FILTER VESSEL OPERATES UNDER HIGH PRESSURE, PRIOR TO SERVICING FILTER VESSEL, TURN PUMP OFF TO PREVENT DAMAGE TO THE SYSTEM.

**1 S-1: SAND FILTER VESSEL 1 DETAIL**

N.T.S.



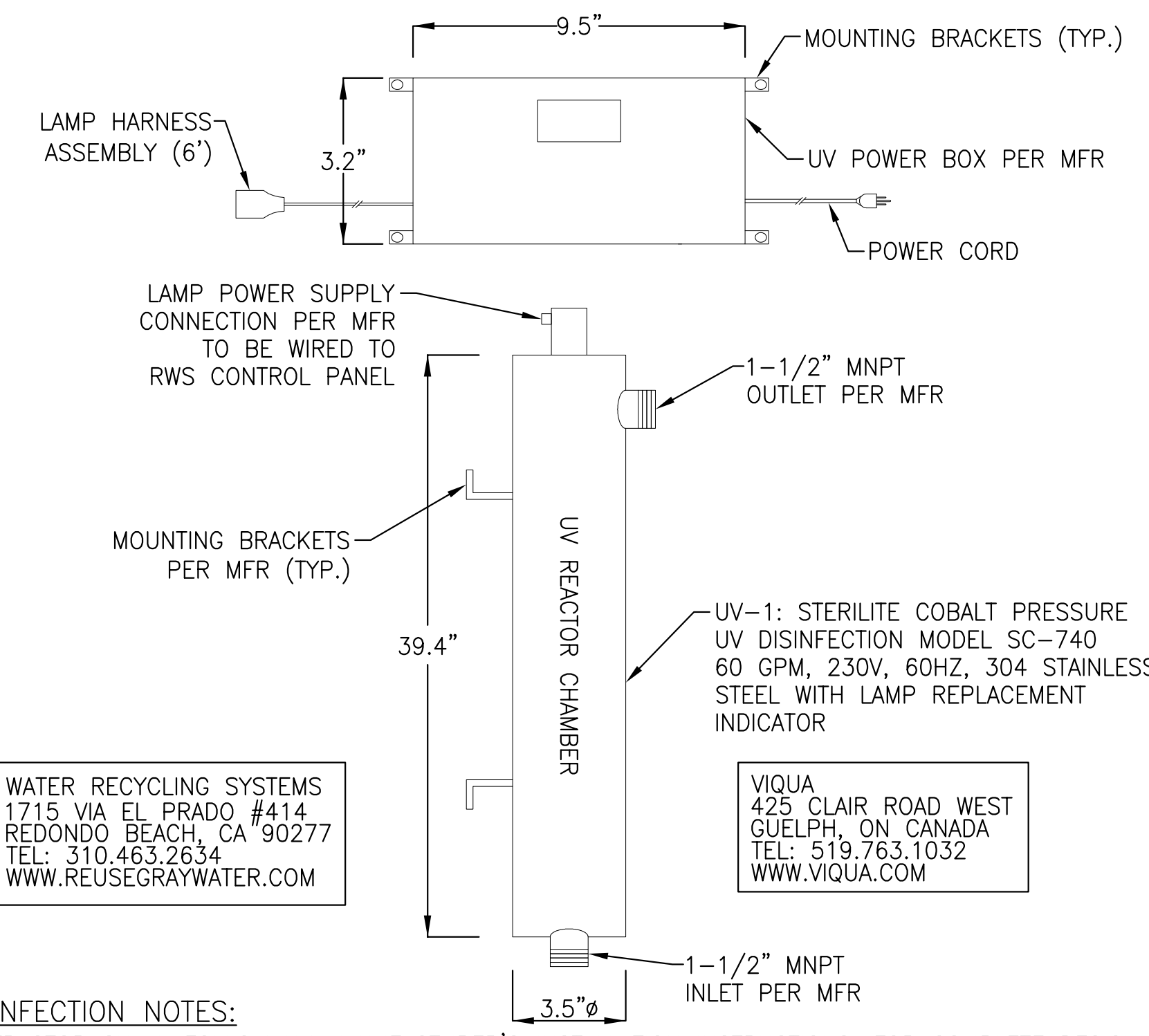
TRIDENT FILTRATION, INC.  
4270 PROMENADE WAY SUITE D  
MARINA DEL RAY, CA 90290  
TEL: 310.577.7060  
WWW.TRIDENTFILTRATION.COM

WATER RECYCLING SYSTEMS  
1715 VIA EL PRADO #414  
REDONDO BEACH, CA 90277  
TEL: 310.463.2634  
WWW.REUSEGRAYWATER.COM

- NOTES:**
- CONTRACTOR SHALL FOLLOW FILTER VESSEL MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT TRIDENT FILTRATION, INC. OR WATER RECYCLING SYSTEMS.
  - THE FILTER VESSEL SHOULD BE PLACED ON A LEVEL CONCRETE SLAB, VERY FIRM GROUND, OR EQUIVALENT. POSITION THE FILTER SO THAT THE PIPING CONNECTIONS, CONTROL VALVE, ARE CONVENIENT AND ACCESSIBLE FOR OPERATION AND SERVICE.
  - LOADING THE FILTER VESSEL WITH MEDIA SHALL BE PERFORMED IN ACCORDANCE WITH THE MFR SPECIFICATIONS.
  - ALL CONNECTIONS TO FILTER VESSEL SHALL BE WATERTIGHT PER MFR.
  - THE FILTER VESSEL OPERATES UNDER HIGH PRESSURE, PRIOR TO SERVICING FILTER VESSEL, TURN PUMP OFF TO PREVENT DAMAGE TO THE SYSTEM.

**2 A-1 AND C-1: ANTHRACITE AND CARBON FILTER VESSEL 1 DETAIL**

N.T.S.



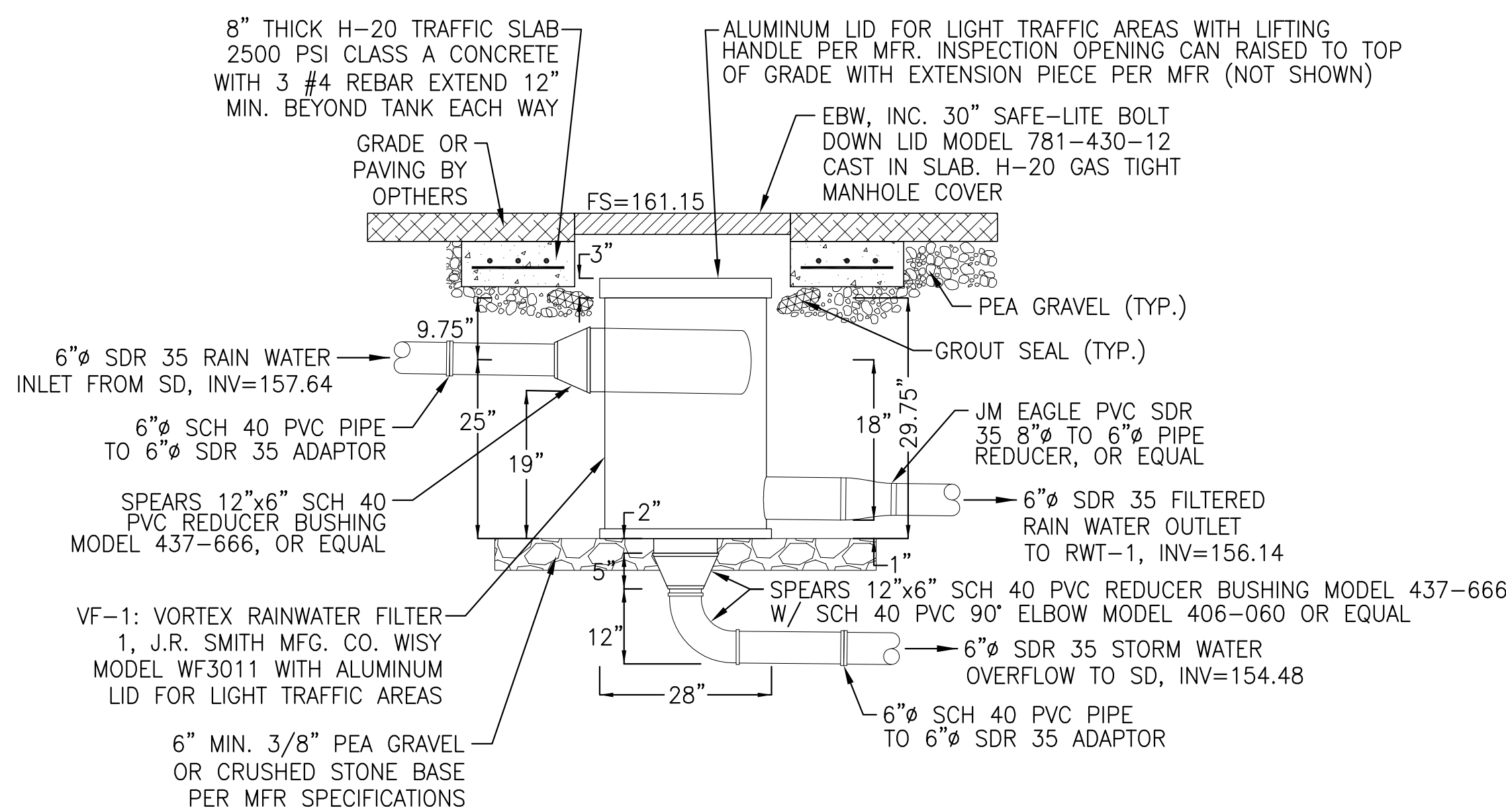
WATER RECYCLING SYSTEMS  
1715 VIA EL PRADO #414  
REDONDO BEACH, CA 90277  
TEL: 310.463.2634  
WWW.REUSEGRAYWATER.COM

VIQUA  
425 CLAIR ROAD WEST  
GUELPH, ON CANADA  
TEL: 519.763.1032  
WWW.VIQUA.COM

- UV DISINFECTION NOTES:**
- CONTRACTOR SHALL FOLLOW UV MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT VIQUA OR WATER RECYCLING SYSTEMS.
  - UV DISINFECTION UNIT NEEDS TO BE MAINTAINED. CHANGE YOUR LAMP ON A YEARLY BASIS OR PER MANUFACTURER'S RECOMMENDATIONS TO INSURE THAT THE QUARTZ SLEEVE IS CLEAN ON A REGULAR BASIS.
  - THE ELECTRONICS HAVE BEEN DESIGNED TO WORK WITH STANDARD POWER SUPPLIES. SINCE THE UNIT IS SUSCEPTIBLE TO POWER FLUCTUATIONS, WE RECOMMEND THAT THE SYSTEM BE KEPT OFF ANY LINES WHERE THERE ARE SURGES. THIS INCLUDES PUMPS OR MOTORS. IF THERE ARE FLUCTUATIONS, PLEASE USE A SURGE SUPPRESSOR. SEE MANUFACTURER'S RECOMMENDATIONS.
  - WHEN INSTALLING, REMEMBER THAT YOU WILL NEED TO BE ABLE TO REMOVE LAMPS AND QUARTZ AS PART OF MAINTENANCE SCHEDULE. ALLOW YOURSELF ENOUGH ROOM TO ACCOMPLISH THESE TASKS. UNIT IS DESIGNED TO BE MOUNTED VERTICALLY AND SECURED TO WALL OR SOLID SURFACE. CONTRACTOR SHALL VERIFY UV UNIT HAS ENOUGH CLEARANCE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

**3 UV-1: UV DISINFECTION 1 DETAIL**

SCALE: N.T.S.



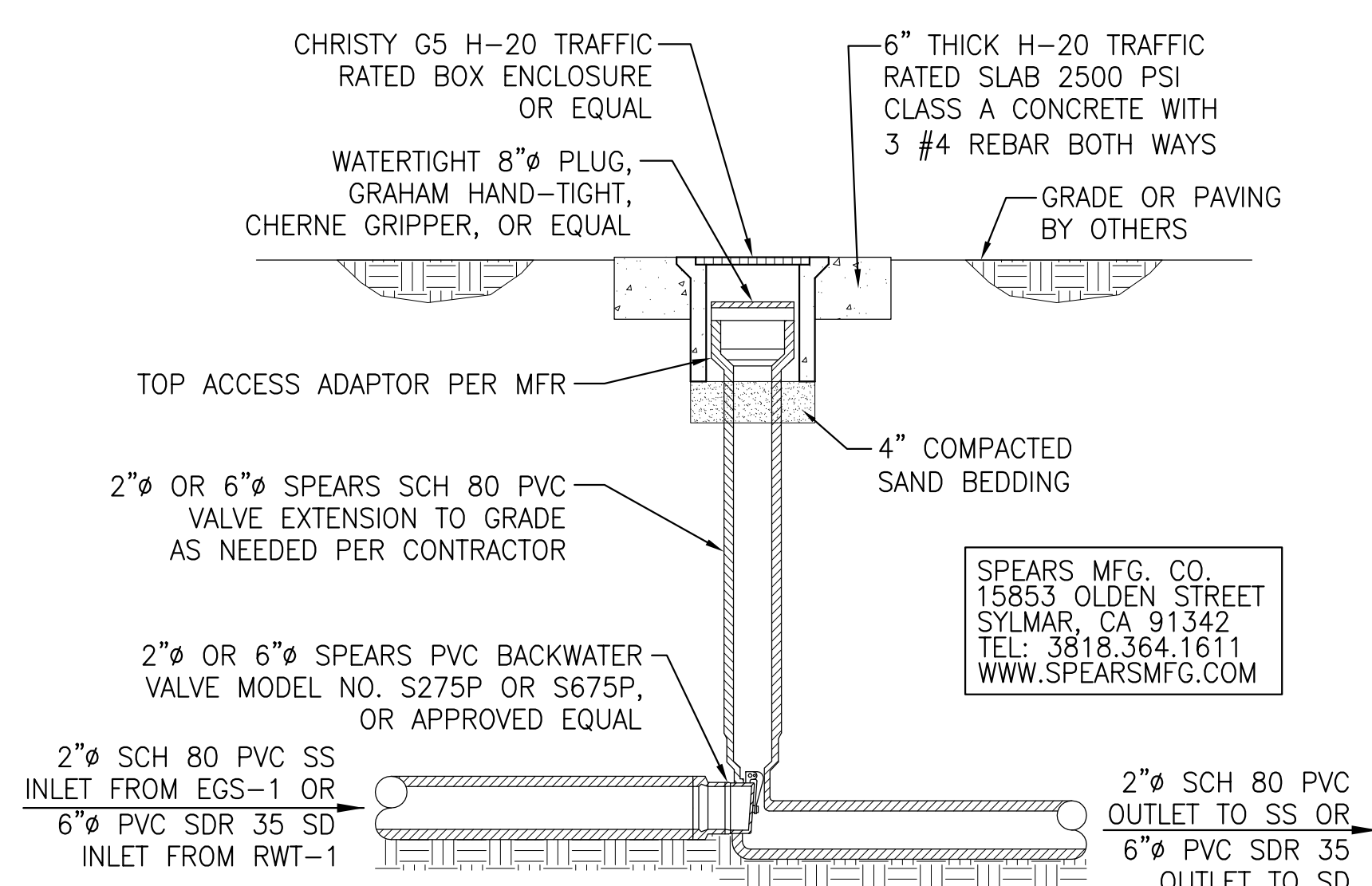
J.R. SMITH MFG. CO.  
P.O. BOX 32377  
MONTGOMERY, AL 36109  
TEL: 334.227.8520  
FAX: 334.272.7396  
WWW.JRSMITH.COM

FRANKLIN FUELING SYSTEMS  
(EBW, INC.)  
3760 MARSH ROAD  
MADISON, WI 53718  
TEL: 562.480.0167

- NOTES:**
- CONTRACTOR SHALL FOLLOW VORTEX FILTER MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT J.R. SMITH MFG. CO. OR FRANKLIN FUELING SYSTEMS (EBW, INC.).
  - IF VORTEX FILTER IS LOCATED IN NON TRAFFIC AREA, CONTRACTOR MAY SUBSTITUTE ALTERNATIVE NON-TRAFFIC RATED INSTALLATION WITH ENGINEER APPROVED EQUAL.

**4 VF-1: VORTEX RAIN WATER FILTER 1 DETAIL**

SCALE: N.T.S.



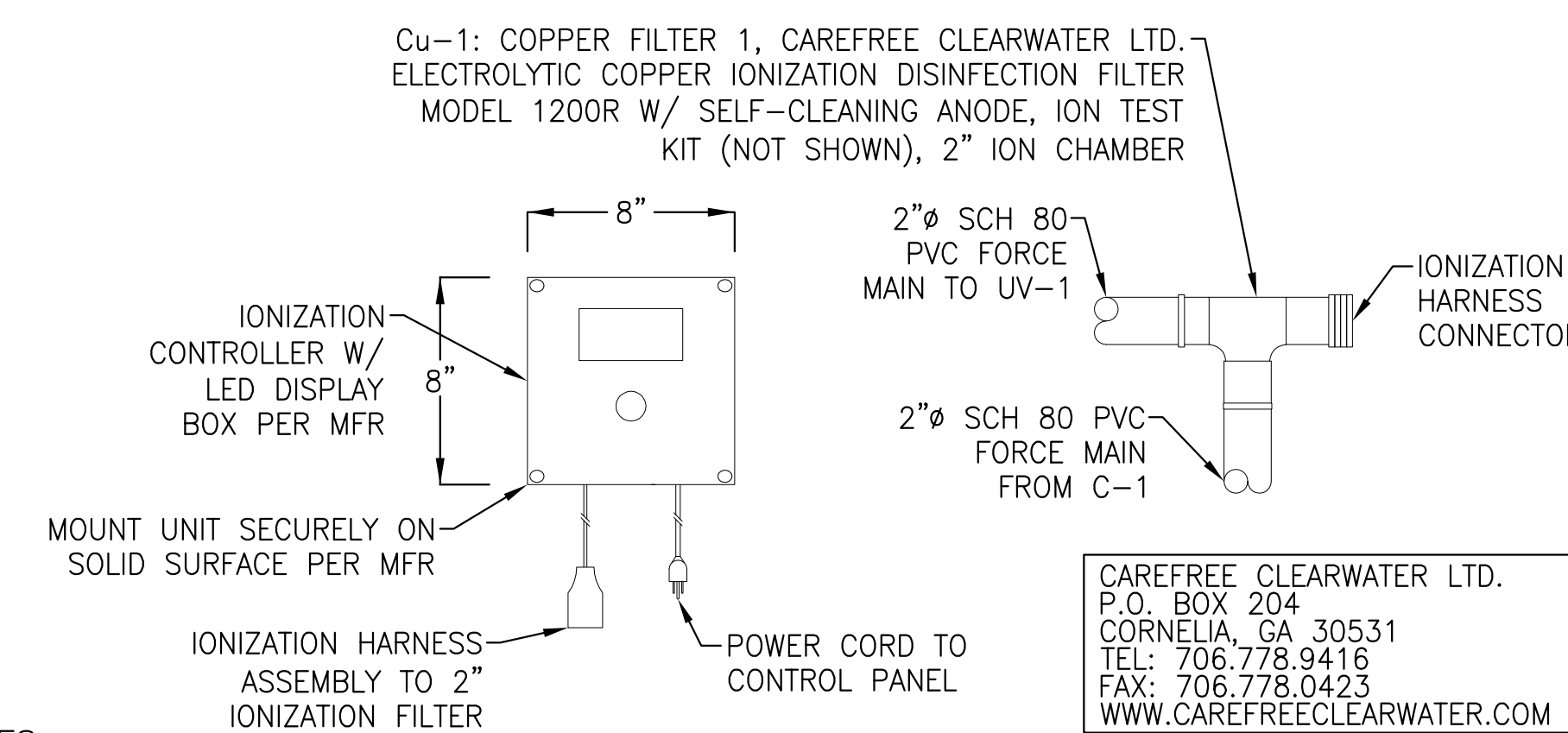
SPEARS MFG. CO.  
15853 OLDEN STREET  
SYLMAR, CA 91342  
TEL: 3818.364.1611  
WWW.SPEARSMFG.COM

- NOTES:**
- CONTRACTOR SHALL FOLLOW BACKWATER MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT SPEARS MFG. CO.
  - BACKWATER VALVES OFFER PROTECTION AGAINST BACKWATER SURGES. BACKFLOW IS PREVENTED WHEN VALVE IS NOT OBSTRUCTED BY DEBRIS OR SLUDGE. USE FOR GRAVITY FLOW ONLY, NOT FOR PRESSURIZED APPLICATIONS.
  - IF BACKWATER VALVES ARE LOCATED IN NON TRAFFIC AREA, CONTRACTOR MAY SUBSTITUTE ALTERNATIVE NON-TRAFFIC RATED INSTALLATION WITH ENGINEER APPROVED EQUAL.

**5 BWV: BACKWATER VALVE DETAIL**

SCALE: N.T.S.

**PROPRIETARY MANUFACTURER NOTES:**  
ALL PROPRIETARY SPECIFICATIONS ARE "OR EQUAL" SUBJECT TO WRITTEN APPROVAL OF SUBMITTAL BY ENGINEER.

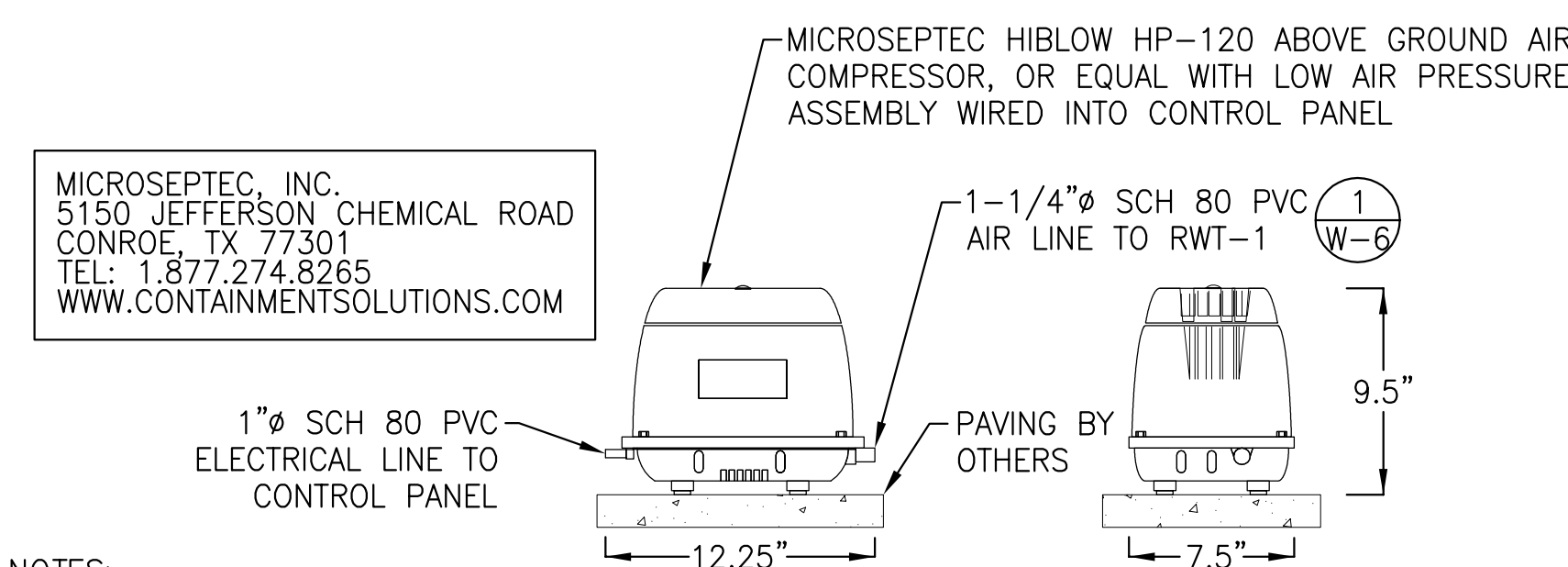


CAREFREE CLEARWATER LTD.  
P.O. BOX 204  
CORNELIA, GA 30531  
TEL: 706.778.9416  
FAX: 706.778.0423  
WWW.CAREFREECLEARWATER.COM

- NOTES:**
- CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT CAREFREE CLEARWATER LTD. OR WATER RECYCLING SYSTEMS.
  - IONIZER UNIT IS PROVIDED NEMA 4X AND UL 508-4X RATED WATERPROOF ENCLOSURE, GASKET SEALED CLEAR ACRYLIC VIEW COVER, TAMPER PROOF.
  - IONIZER UNIT REQUIRES PERIODIC OXIDIZING AND MAINTAINING NORMAL WATER BALANCE PER MANUFACTURER RECOMMENDATIONS.
  - Cu-1 UNIT IS PROVIDED AS PART OF THE PACKAGE FOR THE WATER RECYCLING RAIN WATER HARVESTING SYSTEM.

**6 Cu-1: COPPER FILTER 1 DETAIL**

SCALE: N.T.S.



- NOTES:**
- CONTRACTOR SHALL FOLLOW AIR COMPRESSOR MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT MICROSEPTEC.
  - CONTRACTOR TO LOCATE IN SHADED AREA AWAY OUT OF DIRECT SUNLIGHT OR PROVIDE SHADE COVER. COMPRESSORS SHOULD BE LOCATED IN A WELL-VENTILATED SHADY PLACE. AN INDOOR LOCATION LIKE A SHED OR GARAGE IS IDEAL.
  - COMPRESSORS MUST BE ELEVATED OFF THE GROUND SO THAT SURFACE WATER CANNOT ENTER THE ELECTRICAL TERMINALS WITHIN THE COMPRESSOR.
  - COMPRESSORS SHOULD BE LOCATED AS CLOSE TO THE TANK AS POSSIBLE. DO NOT EXCEED 50' DISTANCE FROM TANK.
  - 1" SCH 80 PVC PIPE IS REQUIRED FOR PLUMBING THE COMPRESSOR(S) TO THE CISTERN; ONE PIPE PER COMPRESSOR. THE PIPE MUST FALL TOWARD THE TANK WITH NO LOW POINTS. COMPRESSORS MUST BE LOCATED AT THE SAME ELEVATION OR HIGHER THAN TOP OF CISTERN.

**7 MICROSEPTEC AIR COMPRESSOR DETAIL**

SCALE: N.T.S.



411 N. HARBOR BLVD., STE. 304  
SAN PEDRO, CA 90731  
Phone: (310) 241-6566  
Fax: (310) 241-6566

CONSULTANT  
City of Santa Monica  
Architecture Services

1437 4TH STREET, SUITE 300  
SANTA MONICA, CA 90401  
TEL: (310) 458-2205  
FAX: (310) 389-1541  
architecture@simgov.net

DATE: \_\_\_\_\_ 20\_\_

SUBMITTED BY:

DATE: \_\_\_\_\_ 20\_\_

APPROVED BY: Miriam Muller  
Architecture Services Manager

CITY OF SANTA MONICA  
DEPARTMENT OF PUBLIC WORKS

REVIEWED BY: DATE: \_\_\_\_\_ 20\_\_

REVIEWED BY: DATE: \_\_\_\_\_ 20\_\_

REVIEWED BY: DATE: \_\_\_\_\_ 20\_\_

CITY CLIENT

NO.	DATE	BY	DESCRIPTION

ISSUE

PRELIMINARY-NOT FOR CONSTRUCTION

DATE: 06/12/2012  
DRAWING NO: 6693

SHEET TITLE

RAIN WATER HARVESTING SYSTEM DETAILS

SHEET NO.