

GENERAL WATER NOTES - SAN JUAN WATER DISTRICT (REV 10/12)

1. **LICENSING** - CONTRACTOR INSTALLING WATER SYSTEM MUST BE APPROVED BY SJWD AND SHALL POSSESS, AND MAINTAIN, A STATE OF CALIFORNIA CLASS A OR C34 CONTRACTOR'S LICENSE FOR THE PROJECT DURATION.
2. **APPROVALS** - SAN JUAN WATER DISTRICT (SJWD) APPROVAL SIGNATURES ON THE CONSTRUCTION PLANS/DRAWINGS ARE VALID FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SIGNATURE. PLANS SHALL BE SUBJECT TO REVIEW AND RE-APPROVAL THEREAFTER.
3. **PRE-WORK SITE CONDITIONS** - CONTRACTOR IS ADVISED TO PHOTOGRAPH AND/OR VIDEO THE JOB SITE AREA TO DOCUMENT EXISTING CONDITIONS PRIOR TO BEGINNING WORK TO MINIMIZE UNDUE CLAIMS.
4. **RESTORATION** - CONTRACTOR IS RESPONSIBLE TO PROTECT EXISTING PROPERTY AND FACILITIES. CONTRACTOR SHALL RETURN ALL AFFECTED PROPERTY TO ORIGINAL OR BETTER CONDITION, INCLUDING BELOW-GRADE FACILITIES AND TRAFFIC MARKINGS. ALL CLAIMS SHALL BE BORNE AND RESOLVED BY CONTRACTOR OR SJWD MAY CHOOSE TO ADDRESS SAID CLAIM AND MAY DEDUCT ANY ASSOCIATED COSTS FROM FINAL PAYMENT OR RETENTION. A COPY OF ANY CLAIMS DOCUMENTATION SUBMITTED TO CONTRACTOR SHALL IMMEDIATELY BE PROVIDED TO SJWD.
5. **SAFETY** - CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY CURRENTLY APPLICABLE SAFETY LAW OF ANY JURISDICTIONAL AGENCY. CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING, SLOPING AND BRACING. CONTRACTOR IS ALSO RESPONSIBLE FOR PROJECT SITE SAFETY AND FOR PUBLIC SAFETY INCLUDING TRAFFIC CONTROL, 24 HOURS/DAY FOR ALL DAYS FROM THE NOTICE TO PROCEED THROUGH THE NOTICE OF FINAL COMPLETION.
6. **PERMITTING** - CONTRACTOR IS RESPONSIBLE TO VERIFY ACQUISITION OF, AND COMPLIANCE WITH, APPLICABLE PERMITS, INCLUDING BUT NOT NECESSARILY LIMITED TO NPDES AND ENCROACHMENT PERMITS.

7. **SJWD STANDARDS** – MATERIALS AND INSTALLATION SHALL, AT A MINIMUM, BE IN CONFORMANCE WITH THE CURRENT SJWD STANDARDS IN EFFECT AT THE TIME OF BID. CONTRACTOR SHALL HAVE THE APPLICABLE SJWD STANDARD DETAILS AND SPECIFICATIONS ONSITE AND READILY AVAILABLE FOR CONTRACTOR’S USE AND FOR INSPECTION BY THE SJWD ENGINEERING OR CONSTRUCTION INSPECTOR UPON REQUEST.
8. **MATERIALS** - ALL MATERIALS SHALL BE NEW, AND MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH CURRENT SJWD STANDARD DETAILS AND SPECIFICATIONS IN EFFECT AT TIME OF CONSTRUCTION. UNLESS OTHERWISE APPROVED BY SJWD IN WRITING, ONLY DOMESTIC (USA) SOURCED AND SJWD APPROVED MATERIALS, INCLUDING DUCTILE IRON PIPE AND FITTINGS, WILL BE ACCEPTED. SJWD SHALL HAVE THE RIGHT OF FINAL DECISION ON ALL MATERIALS INCLUDING, BUT NOT LIMITED TO, BACKFILL, PIPE, FITTINGS AND VALVES, THAT WILL BE USED FOR PLACEMENT OF ALL WATER FACILITIES INCLUDING WATER MAIN. SJWD TO PRE-APPROVE ALL SUBSTITUTIONS.
9. **SUBMITTALS AND SUBSTITUTIONS** - PROVIDE MATERIALS AND OTHER SUBMITTALS TO SJWD FOR APPROVAL PRIOR TO BEGINNING WORK. ANY REQUEST FOR A SUBSTITUTION MUST BE SUBMITTED IN WRITING AND WITH DOCUMENTATION OF EQUALVANCY.
10. **PRE-CONSTRUCTION MEETING** - A PRE-CONSTRUCTION MEETING IS REQUIRED (TYPICALLY ONSITE) WITH SJWD AND THE CONTRACTOR (AND THE COUNTY INSPECTOR WHEN APPLICABLE) PRIOR TO COMMENCING WORK. CONTRACTOR’S FOREMAN IS REQUIRED TO ATTEND ANY PRE-CONSTRUCTION MEETING OR ANY WALK-THROUGH MEETING. THE FOREMAN, OR SJWD APPROVED ALTERNATE, IS REQUIRED TO BE ONSITE DURING ALL PHASES OF THE WORK. CONTRACTOR SHALL NOT REPLACE FOREMAN WITHOUT PRIOR WRITTEN APPROVAL OF SJWD.
11. **USA** - UNDERGROUND SERVICE ALERT (USA) SHALL BE NOTIFIED 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. CALL USA AT 1-800-227-2600. SJWD’S USA CREW IS ONLY RESPONSIBLE FOR MARKING THOSE WATER

FACILITIES OWNED BY SJWD AND SHALL NOT BE RESPONSIBLE FOR MARKING OTHER FACILITIES INCLUDING THOSE NEWLY INSTALLED BUT NOT ACCEPTED BY OR CONVEYED TO SJWD. THE OWNER OF NEW DEVELOPMENT IS RESPONSIBLE FOR MARKING SAID NEW FACILITIES.

12. **LOCATING AND POTHOLING** - CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING FACILITIES AND FOR POTHOLING ALL WATER LINE CONNECTION POINTS TO CONFIRM SIZE, DEPTH, AND MATERIAL TYPE OF EXISTING FACILITIES. INFORMATION ON THE TYPES, LOCATIONS, SIZES AND DEPTHS OF EXISTING OR PLANNED UNDERGROUND OR ABOVE GROUND UTILITIES, STRUCTURES, ROADS, PIPELINES, HARD ROCK, STRATA, TOPOGRAPHY, ETC., AS PROVIDED BY SJWD WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. A REASONABLE EFFORT HAS BEEN MADE TO PROVIDE ACCURATE INFORMATION HOWEVER; SJWD CANNOT ASSUME RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF SAID INFORMATION. CONTRACTOR SHALL BRING INACCURACIES AND CONFLICTS TO THE ATTENTION OF SJWD FOR RESOLUTION PRIOR TO BEGINNING OR CONTINUING WORK.
13. **NOTIFICATIONS** - CONTRACTOR SHALL NOTIFY SJWD 48 HOURS (MINIMUM) PRIOR TO BEGINNING CONSTRUCTION; 48 HOURS (MINIMUM) PRIOR TO SCHEDULING ANY MEETING; AND 24 HOURS (MINIMUM) PRIOR TO AN INSPECTION. CONTRACTOR SHALL NOTIFY SJWD 48 HOURS (MINIMUM) FOR WATER SYSTEM SHUT-OFF OR WATER MAIN SHUTDOWN REQUESTS THAT DO NOT AFFECT WATER SERVICES OR CUSTOMERS, AND 72-HOURS (MINIMUM) FOR SHUT-OFF/SHUTDOWN REQUESTS THAT WILL AFFECT WATER SUPPLY OR AFFECT CUSTOMER WATER SERVICE.
14. **SHUTOFFS** – SHUTOFF AND/OR SHUT-DOWN TIME SHALL NOT EXCEED FOUR (4) HOURS WITHOUT PRIOR SJWD APPROVAL.
15. **TIE-INS** - ALL TIE-INS TO EXISTING WATER LINES SHALL BE MADE BY SJWD APPROVED LICENSED CONTRACTOR UNDER SJWD PERSONNEL SUPERVISION, UNLESS OTHERWISE APPROVED BY SJWD IN WRITING OR NOTED ON THE

PLAN. TIE-INS AND SHUTDOWNS ARE LIMITED TO WEDNESDAYS AND/OR THURSDAYS UNLESS OTHERWISE APPROVED BY SJWD.

16. **SURVEYING** - THE CONTRACTOR (OR DEVELOPER'S ENGINEER IN THE CASE OF DEVELOPER-FUNDED PROJECTS) IS RESPONSIBLE FOR ALL REQUIRED STAKING, SHOWING THE LOCATION AND GRADES FOR INSTALLING ALL WATER SYSTEM FACILITIES. STAKES SHALL SHOW STATIONING. SURVEY INFORMATION SHALL BE SHOWN ON THE AS-BUILT DRAWINGS.
17. **PROTECTION OF MONUMENTS** - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL SURVEY MONUMENTS AND STAKING WHETHER EXISTING OR DISCOVERED DURING CONSTRUCTION. ANY MONUMENTS DAMAGED BY CONTRACTOR SHALL BE PROPERLY RESTORED AT CONTRACTOR'S EXPENSE.
18. **INSPECTION** - ALL WATER FACILITIES TO BE OWNED BY SJWD, INCLUDING MAINS, FITTINGS, VALVES, AND SERVICES, SHALL BE INSPECTED AND APPROVED BY SJWD PRIOR TO BACKFILLING AND PRIOR TO ACTIVATION.
19. **MATERIALS TESTING** - SJWD SHALL SECURE THE SERVICES OF A STATE CERTIFIED, INDEPENDENT MATERIALS TESTING SERVICE TO PROVIDE MATERIALS TESTING, INCLUDING BUT NOT NECESSARILY LIMITED TO, COMPACTION TESTING OF BACKFILL MATERIAL. COMPACTION TESTING TO SHOW COMPLIANCE SHALL BE TAKEN AT A MINIMUM INTERVAL OF 50-LF OR AT THE MINIMUM JURISDICTIONAL CITY OR COUNTY REQUIREMENTS, WHICHEVER IS MORE STRICT. COSTS FOR MATERIALS TESTING SHALL BE BORNE BY SJWD FOR SJWD-FUNDED PROJECTS. COSTS FOR MATERIALS TESTING SHALL BE BORNE BY THE DEVELOPER FOR DEVELOPER-FUNDED PROJECTS AND WILL BE CHARGED TO THE PROJECT BY SJWD AND BILLED TO THE DEVELOPER. UNLESS OTHERWISE APPROVED, CONTRACTOR SHALL BE RESPONSIBLE TO PAY FOR RE-TESTING IF REQUIRED FOR FAILURE TO MEET SPECIFICATIONS.
20. **NSF CERTIFICATION** - ALL MATERIALS IN CONTACT WITH POTABLE WATER MUST BE NSF CERTIFIED FOR SUCH APPLICATION. CONTRACTOR SHALL PROVIDE CERTIFICATIONS WITH SUBMITTAL(S).

21. **HEAVY METALS** - GALVANIZED PIPE AND FITTINGS, AND MATERIALS CONTAINING CONCENTRATIONS OF HEAVY METALS, INCLUDING CADMIUM, ZINC, AND LEAD, WHICH MAY BE RELEASED INTO SOLUTION, SHALL NOT BE USED WHERE IN CONTACT WITH POTABLE WATER. NSF CERTIFICATION MAY BE REQUESTED BY SJWD PRIOR TO ACCEPTANCE OF ANY MATERIAL.
22. **DISTRIBUTION MAINS** - UNLESS OTHERWISE NOTED ON THE PLANS, WATER MAINS 12-INCHES IN NOMINAL DIAMETER OR SMALLER SHALL BE EITHER:
 - I. POLYVINYL CHLORIDE (PVC), CLASS 150 (DR 18) MINIMUM, CONFORMING TO THE REQUIREMENTS OF AWWA STANDARD C900, THE OUTSIDE DIAMETER MATCHING THE DIMENSIONS OF DUCTILE IRON PIPE. AN UPCLASS TO CLASS 200 (DR 14) MAY BE REQUIRED AS SHOWN ON THE DRAWINGS, OR IN PROXIMITY TO OR CROSSING OF HAZARDS.
 - II. DUCTILE IRON PIPE, PRESSURE CLASS 350, CONFORMING TO THE REQUIREMENTS OF AWWA STANDARD C150, CEMENT MORTAR LINED PER AWWA STANDARD C104, BITUMINOUS COATED PER AWWA STANDARD C151, AND POLYETHYLENE ENCASED PER AWWA STANDARD C105. PRESSURE CLASS 300 OR LOWER MAY BE ALLOWED UPON WRITTEN DISTRICT PRE-APPROVAL. IN SOME CASES ADDITIONAL CORROSION PROTECTION MEASURES MAY BE REQUIRED BY SJWD.
23. **TRANSMISSION MAINS** - WATER MAINS LARGER THAN 12-INCHES SHALL BE EITHER:
 - I. DUCTILE IRON PIPE, WITH CLASS, THICKNESS, COATING, LINING, ENCASEMENT AND OTHER REQUIREMENTS TO BE PRE-APPROVED BY SJWD PRIOR TO BEGINNING WORK.
 - II. STEEL PIPE, AWWA C200, WITH THICKNESS, LINING, COATING, AND OTHER APPURTENANCES AND OTHER REQUIREMENTS TO BE PRE-APPROVED BY SJWD PRIOR TO BEGINNING WORK.
 - III. OTHER MATERIALS MAY OR MAY NOT BE ALLOWED ON A CASE-BY-CASE BASIS WITH PRIOR PRE-APPROVAL OF SJWD.
24. **VALVES** - ALL VALVES SHALL BE FLANGED TO CROSSES AND TEES UNLESS OTHERWISE DIRECTED BY SJWD'S ENGINEER. UNLESS OTHERWISE NOTED

ON THE PLANS OR DIRECTED BY SJWD, INSTALL SJWD APPROVED GATE VALVES (AWWA C509) ON PIPELINE 10-INCHES AND SMALLER, AND INSTALL SJWD APPROVED BUTTERFLY VALVES (AWWA C504) ON PIPELINES EQUAL TO OR LARGER THAN 12-INCH DIAMETER.

25. **FITTINGS** – UNLESS OTHERWISE APPROVED BY SJWD’S ENGINEER, ALL FITTINGS FOR DUCTILE IRON AND C900 PIPELINES SHALL BE DIP, PRESSURE CLASS MATCHING THE PIPELINE, AWWA C110/C115. BURIED FITTINGS SHALL BE CEMENT MORTAR LINED PER AWWA C104, AND BITUMINOUS COATED PER AWWA C151. COMPACT STYLE FITTINGS CONFORMING TO AWWA C153 MAY BE ALLOWED WITH SJWD PRE-APPROVAL.
26. **HYDRANTS** - ALL PUBLIC FIRE HYDRANTS (TO BE CONVEYED TO SJWD) SHALL BE AWWA APPROVED WET BARREL, CLOW 960 OR DISTRICT APPROVED EQUIVALENT, AND SHALL BE INSTALLED WITH BREAK-OFF CHECK VALVES. BREAK-OFF BOLTS SHALL NOT BE ALLOWED. PUBLIC FIRE HYDRANTS SHALL BE FURNISHED WITH TWO LAYERS OF FACTORY-APPLIED WHITE COATING. PRIVATE FIRE HYDRANTS SHALL BE PAINTED YELLOW. COATINGS SHALL BE POLYURETHANE EPOXY, OR EPOXY BASE COAT WITH ACRYLIC TOPCOAT. FIRE HYDRANT LOCATION SHALL BE APPROVED BY SJWD. FIRE HYDRANTS SHALL BE INSTALLED WITH THE BASE FLANGE A MINIMUM OF 8-INCHES ABOVE FINISHED GRADE.
27. **AIR/VACUUM VALVES** - UNLESS OTHERWISE INDICATED ON THE PLANS, AIR AND/OR VACUUM RELEASE VALVES TO BE APCO #143-C OR SJWD APPROVED EQUAL. INSTALL PER SJWD CURRENT DETAIL AT TIME OF CONSTRUCTION.
28. **ENCASEMENT** - ALL VALVES AND FITTINGS SHALL BE POLYETHYLENE ENCASED PER AWWA STANDARD C105.
29. **FASTENERS** – UNLESS OTHERWISE SHOWN OR SPECIFIED OR APPROVED BY SJWD’S ENGINEER, ALL FASTENERS (BOLTS, SCREWS, WASHERS, NUTS, ETC.) SHALL BE ASTM A307/A563 GRADE A CARBON STEEL AND SHALL BE XYLAN COATED (TRIPAC 2000 BLUE COATING SYSTEM) OR SJWD APPROVED EQUAL.
30. **THRUST BLOCKING** - THRUST BLOCKS, OR IN SOME CASES APPROVED MECHANICAL RESTRAINT, SHALL BE INSTALLED WHERE PIPE DEFLECTIONS

EXCEED 4 DEGREES PER COUPLING/FITTING OR WHERE SPECIFIED BY MANUFACTURER. UNLESS OTHERWISE PRE-APPROVED BY SJWD'S ENGINEER, THRUST BLOCKS SHALL BE PROVIDED AT JOINTS/FITTINGS AND LOCATIONS IN ADDITION TO LOCATIONS WHERE MECHANICAL RESTRAINTS ARE PROVIDED, OR WHERE DIRECTED BY SJWD.

31. **STORM AND SANITARY SEWER PROXIMITY** - WATER MAINS SHALL BE LAID IN SEPARATE TRENCHES AS FAR AS POSSIBLE FROM NEARBY SANITARY SEWER AND STORM DRAIN LINES. A MINIMUM OF C-900 CLASS 200 PVC OR CLASS 50 DUCTILE IRON PIPE TYPICALLY MUST BE USED WHEN IN CLOSE PROXIMITY TO SANITARY SEWER LINES OR CROSSINGS, AND IN SOME CASES WHEN ADJACENT TO OTHER UTILITIES THAT MAY THREATEN POTABLE WATER SUPPLY. THE MATERIAL CLASS AND/OR PRESSURE RATING OF ANY UPCLASS OF PIPING MATERIALS SHALL BE PRE-APPROVED BY SJWD. PLACEMENT OF WATER LINES NEAR SOURCES OF POTENTIAL CONTAMINATION OR HYDROCARBON RELATED FACILITIES SHALL RECEIVE SPECIAL APPROVAL CONSIDERATION. CONTRACTOR TO IMMEDIATELY INFORM SJWD WHEN INSUFFICIENT SEPARATION CONDITIONS OCCUR (LESS THAN 10-FT HORIZONTAL OR 1-FT VERTICAL). WATER FACILITIES SHALL CROSS ABOVE OTHER FACILITIES WHENEVER POSSIBLE. IF WATER FACILITIES MUST CROSS BELOW OTHER FACILITIES THEN AN UPCLASS IN MATERIALS AND A SJWD-APPROVED CONTROLLED DENSITY BACKFILL MATERIAL SHALL BE USED AS DIRECTED BY SJWD'S ENGINEER.
32. **COVER** - TOP OF WATER DISTRIBUTION MAINS (TYPICALLY 12-INCH DIAMETER OR SMALLER) SHALL HAVE A MINIMUM OF 36-INCHES OF COVER IN RIGHT-OF-WAY (ASPHALT SURFACED ROADS) AND 48-INCHES OF COVER IN NON RIGHT-OF-WAY AREAS (CROSS-COUNTRY OR OPEN LAND) UNLESS OTHERWISE SHOWN ON THE APPROVED DRAWINGS OR DIRECTED BY SJWD. TRANSMISSION MAINS (TYPICALLY LARGER THAN 12-INCHES) SHALL HAVE A MINIMUM OF 48-INCHES OF COVER (FINAL COVER DEPTH TO BE APPROVED BY SJWD).

33. **BACKFILL** - ALL TRENCHES IN EXISTING OR PROPOSED STREETS AND PAVED AREAS SUCH AS PARKING LOTS, DRIVEWAYS, ETC., SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF SJWD. BACKFILL ABOVE THE BEDDING AND INITIAL PIPE ZONE SHALL ALSO COMPLY WITH MINIMUM REQUIREMENTS OF THE JURISDICTIONAL COUNTY OR CITY IN WHICH THE WORK IS BEING DONE, INCLUDING ANY ENCROACHMENT PERMIT CONDITIONS.
34. **HYDROSTATIC TESTING** - CONTRACTOR SHALL PROVIDE A PASSING HYDROSTATIC TEST, IN ACCORDANCE WITH AWWA STANDARDS AND/OR USING A METHOD AS APPROVED BY SJWD, TO BE WITNESSED BY AN AUTHORIZED SJWD REPRESENTATIVE PRIOR TO SJWD ACCEPTANCE.
35. **BACTERIOLOGICAL TESTING** – CONTRACTOR SHALL PROVIDE AN SJWD APPROVED MEANS (LOCATIONS AND APPROPRIATE MATERIALS) FOR BACTERIOLOGICAL TESTING. SJWD SHALL COLLECT AND PAY FOR SAMPLES FOR BACTERIOLOGICAL TESTING PRIOR TO ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH FAILURE TO PASS SAID TESTING.
36. **DISINFECTION** - ALL NEW WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS, BY AN SJWD APPROVED INJECTION METHOD ONLY (NOT USING TABLETS) USING EQUIPMENT SPECIFIED FOR CHLORINE INJECTION (NOT HYDROSTATIC TEST PUMPS), SUITABLE TO MAINTAIN A 50 PPM TO 100 PPM CONSTANT FEED CONCENTRATION.
37. **SERVICE TESTING** - SADDLES AND SERVICES (FROM MAIN TO METER) SHALL BE INSTALLED PRIOR TO HYDROSTATIC PRESSURE TESTING AND BACTERIOLOGICAL TESTING. SERVICES SHALL BE SET TO FINAL GRADE AND FLUSHED PRIOR TO TESTING.
38. **SERVICE LOCATION MARKING** - THE LOCATION OF WATER SERVICE LINES SHALL BE PERMANENTLY INDICATED BY EMBEDDING THE LETTER "W" IN THE CURB DIRECTLY ABOVE THE SERVICE LINE. CONTRACTOR SHALL BE RESPONSIBLE TO MARK ANY CURB WHICH IS Poured AFTER THE INSTALLATION OF THE SERVICE LINES. WHERE CONCRETE CURB DOES NOT

EXIST, OR WAS NOT POURED WITH PROJECT, A THERMALLY TRANSFERRED "W" UNIMARK CURB MARKER (OR SJWD APPROVED EQUIVALENT) SHALL BE PLACED ON THE FACE OF EXISTING CURB OR ON AN AC DIKE OR AT THE NEAREST EDGE OF PAVEMENT AS DIRECTED BY SJWD.

39. **SERVICES** – WATER SERVICE LINE/PIPING (FROM THE MAIN TO THE METER) FROM 1-INCH TO 2-INCH DIAMETERS, SHALL BE HDPE, CONFORMING TO AWWA C901, AND A 1,600-PSI HDB PER ASTM D 2837. 1-INCH LINE SHALL HAVE A NOMINAL IPS (IRON PIPE SIZE) OUTSIDE DIAMETER (OD), AND 1.5- TO 2-INCH LINE SHALL HAVE A NOMINAL CTS (COPPER TUBE SIZE) OD. UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR DIRECTED BY SJWD THE MINIMUM STANDARD RESIDENTIAL SERVICE LINE SIZE SHALL BE 1.5-INCH.
40. **BACKFLOW PROTECTION** - BACKFLOW PREVENTION DEVICES, WHEN REQUIRED, SHALL BE INSTALLED BY CONTRACTOR AND TESTED AND CERTIFIED BY SJWD OR OTHER SJWD APPROVED CERTIFIED BACKFLOW TESTER PRIOR TO WATER SERVICE ACTIVATION. THE TYPE OF BACKFLOW PREVENTION DEVICE SHALL BE APPROVED BY SJWD. SINGLE CHECK DETECTOR CHECK TYPE BACKFLOW DEVICES SHALL NOT BE ALLOWED. NO TEES OR CROSS CONNECTIONS SHALL BE ALLOWED BETWEEN THE WATER METER AND A BACKFLOW PREVENTION DEVICE. THE BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE WATER METER OR POINT OF SERVICE CONNECTION (TYPICALLY WITHIN 18-INCHES) AND THE WATER LINE BETWEEN MAY BE REQUIRED TO BE ENCASED IN CONCRETE PER THE DIRECTION OF THE SJWD REPRESENTATIVE.
41. **DISCHARGES** – ALL DISCHARGES SHALL BE IN ACCORDANCE WITH PERMIT CONDITIONS. DISINFECTION OF WATER SYSTEM FACILITIES SHALL BE IN ACCORDANCE WITH SJWD AND COUNTY AND/OR STATE REQUIREMENTS, INCLUDING NPDES. DISCHARGED DISINFECTION WATER SHALL BE DECHLORINATED TO A MINIMUM ACCEPTABLE CHLORINE CONCENTRATION AND TURBIDITY LEVEL PRIOR TO RELEASE. CONTRACTOR SHALL OBTAIN AND COMPLY WITH THE NECESSARY PERMITS, AND SHALL PROVIDE THE NECESSARY DOCUMENTATION ENSURING COMPLIANCE WHERE

APPLICABLE. CONTRACTOR SHALL SUBMIT A SUMMARY REPORT INDICATING PRE- AND POST-DISCHARGE WATER QUALITY, AND DISCHARGED VOLUMES TO SJWD, INCLUDING COPIES OF ANY LABORATORY OR OTHER TESTING AND FIELD REPORTS.

42. **SALVAGE AND DISPOSAL** - UNLESS OTHERWISE DIRECTED BY SJWD OR NOTED IN THE CONTRACT DOCUMENTS, CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL SALVAGE PIPE, AS WELL AS ANY FITTINGS OR OTHER RELATED MATERIALS GENERATED FROM ANY TIE-IN OR CONNECTION TO SJWD WATERLINES. BRASS AND COPPER, AND METERS, SHALL TYPICALLY BE RETURNED TO SJWD. HANDLING AND DISPOSAL MUST BE IN ACCORDANCE WITH REGULATORY REQUIREMENTS. A COPY OF ANY CHAIN OF CUSTODY AND/OR PERMITTING DOCUMENTATION ASSOCIATED WITH ANY HAZARDOUS MATERIALS DISPOSAL SHALL BE PROVIDED TO SJWD.
43. **TREES AND LANDSCAPING** - PLANTING OF TREES AND SHRUBS WITHIN THE P.U.E AND/OR EASEMENTS WHERE A WATER MAIN AND/OR SERVICES OR OTHER WATER FACILITIES ARE PROPOSED OR EXISTING SHALL BE AVOIDED. UNDER NO CIRCUMSTANCES SHALL A TREE OR SHRUB BE PLANTED WITHIN 5-FT OF THE OUTSIDE WALL OF A WATER LINE TRENCH. ALL ABOVE-GRADE WATER FACILITIES MUST REMAIN ACCESSIBLE. ALL SHRUBS AND/OR TREES THAT ARE TO BE PLANTED WITHIN A P.U.E. SHALL BE CENTER TAPPING ROOT ORNAMENTAL TYPE. SJWD RESERVES THE RIGHT TO REMOVE TREES AND SHRUBS THAT MAY IMPACT, OR HAVE IMPACTED, WATER FACILITIES.
44. **RECORD DRAWINGS** - AS-BUILT (RECORD) DRAWINGS OF THE INSTALLED WATER SYSTEM ARE REQUIRED FROM THE CONTRACTOR (OR DEVELOPER) WHO INSTALLED THE WATER SYSTEM IMPROVEMENTS. THE AS-BUILT DRAWINGS MUST BE SUBMITTED TO, AND APPROVED BY, SJWD WITHIN 30-DAYS OF COMPLETION OF CONSTRUCTION. RETENTIONS OR REMAINING FEES (OR DEVELOPMENT DEPOSITS) SHALL BE HELD UNTIL AS-BUILT APPROVAL BY SJWD.

45. **WARRANTY** - WARRANTY OF NEW WATER FACILITIES TO BE CONVEYED TO SJWD SHALL BE FOR A MINIMUM PERIOD OF ONE (1) YEAR FROM DATE OF CONVEYANCE (OR FINAL ACCEPTANCE).