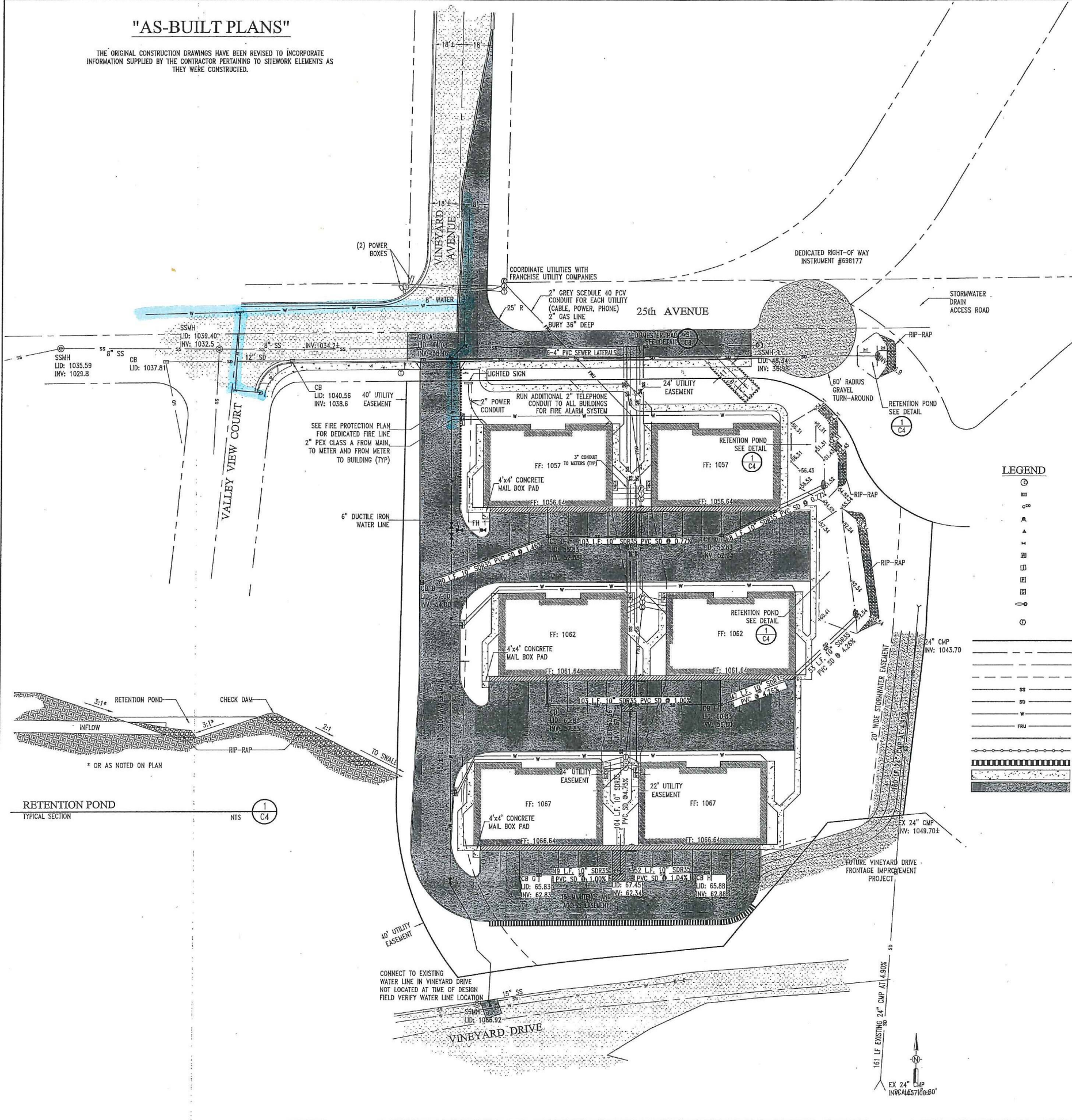


"AS-BUILT PLANS"

THE ORIGINAL CONSTRUCTION DRAWINGS HAVE BEEN REVISED TO INCORPORATE INFORMATION SUPPLIED BY THE CONTRACTOR PERTAINING TO SITWORK ELEMENTS AS THEY WERE CONSTRUCTED.

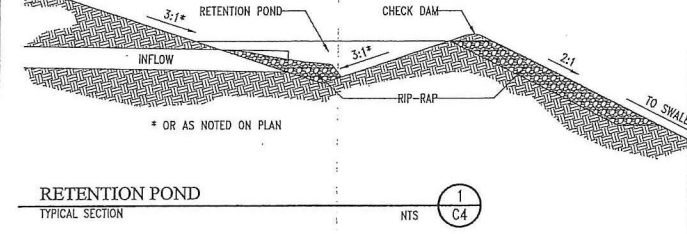


Know what's below.
Call before you dig.



LEGEND

	MANHOLE
	CATCH BASIN
	CLEAN OUT
	FIRE HYDRANT
	THRUST BLOCK
	WATER VALVE
	1-1/2" WATER METER
	IRRIGATION METER
	POWER METER
	GAS METER
	LIGHT POLE
	FRANCHISE UTILITY PEDESTAL
	CABLE, TELEPHONE, JUNCTION ENCLOSURE
	PROPERTY LINE
	RIGHT-OF-WAY
	CENTER LINE
	EASEMENT
	SANITARY SEWER LINE
	STORM DRAIN LINE
	WATER LINE
	FRANCHISE UTILITY TRENCH (POWER, GAS, TELEPHONE AND CABLE)
	CURB
	GUARD RAIL - SEE DETAIL
	RETAINING WALL
	CONCRETE PAVING
	ASPHALT PAVING



GENERAL NOTES FOR STORM WATER SYSTEMS

- ALL WORK SHALL CONFORM TO CURRENT "IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION" (ISPC) SPECIFICATIONS AND THE CITY OF LEWISTON STANDARDS AND SPECIFICATIONS. IN THE CASE OF CONFLICT, CITY STANDARDS SHALL PREVAIL. THE "LEWISTON STORMWATER POLICY AND DESIGN MANUAL" DEFINES THE POLICIES, MINIMUM STANDARDS, REQUIREMENTS, AND PROCEDURES FOR THE DESIGN, CONSTRUCTION, AND MAINTENANCE OF PRIVATE STORMWATER.
- ANY REPAIR, MAINTENANCE OR ALTERATION OF A PUBLIC STORM LINE OR DRAINAGE MUST BE APPROVED BY CITY ENGINEER.
- THE CONTRACTOR MUST SECURE APPROVAL FROM THE CITY ENGINEER PRIOR TO ADDING OR REMOVING FILL BACKFILL OVER PUBLIC STORM DRAIN.
- THE ENGINEERING INSPECTOR SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCING WORK ON STORM DRAINS.
- ALL PUBLIC STORM DRAIN LINES SHALL BE VIDEO-TAPED AND SUBMITTED TO THE PUBLIC WORKS DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO PAVING. CITY SHALL HAVE FORTY-EIGHT (48) HOURS FOR REVIEW.
- ALL MANHOLES AND CATCH BASINS SHALL BE INSPECTED TWICE BY THE ENGINEERING INSPECTOR - ONCE PRIOR TO BACKFILL AND THEN PRIOR TO ACCEPTANCE OF IMPROVEMENTS. CALL (208) 791-8453 OR 746-1316.
- CLOSED CONDUITS (OR PIPELINES) FOR STORMWATER CONVEYANCE IN THE CITY'S STORMWATER SYSTEM MUST BE A MINIMUM OF 12 INCH DIAMETER. THE PIPE MATERIAL MAY BE PLASTIC, STEEL, REINFORCED CONCRETE OR AN APPROVED MATERIAL, BUT MUST MEET CITY 605.02 SPECIFICATIONS.
- MINIMUM PIPE SLOPE SHALL BE 0.5% AND MINIMUM DESIGN VELOCITY WHEN FLOWING FULL SHALL BE NOT LESS THAN 2 FEET PER SECOND AND MAXIMUM VELOCITY SHOULD NOT BE MORE THAN 8 FEET PER SECOND.
- JUNCTIONS OF 3 OR MORE PIPES, CHANGES IN ALIGNMENT, SLOPE AND/OR CHANGES IN PIPE DIAMETER SHALL BE MADE ONLY AT CATCH BASINS OR MANHOLES.
- STEEP SLOPE INSTALLATION SHALL BE INSTALLED AS PER MANUFACTURERS.
- MANHOLE SHALL BE INSTALLED AT THE END OF EACH LINE, AT ALL CHANGE IN SIZE OR ALIGNMENT, AT DISTANCE NOT GREATER THAN 350 FEET OR AT CITY ENGINEER'S REQUIRED SPACING. ALL OTHER CHANGES IN SPACING MUST HAVE WRITTEN APPROVAL FROM PUBLIC WORKS DEPARTMENT.
- LOCATING WIRE SHALL BE INSTALLED WITH ALL PUBLIC STORM PIPE INSTALLATIONS.
- CATCH BASINS AND MANHOLES SHALL BE ACCESSIBLE TO VEHICLES AND EQUIPMENT FOR MAINTENANCE AND BE WITHIN RIGHT-OF-WAY OF A MINIMUM EASEMENT WIDTH OF 20 FEET. PROPOSED ACCESS ROUTE MUST BE APPROVED BY CITY ENGINEER. MAINTENANCE ACCESS ROUTES THAT DO NOT FOLLOW THE STRUCTURE MUST HAVE A MINIMUM 12' EASEMENT.

STORM & SANITARY SEWER

- THE CITY OF LEWISTON IS OPERATOR OF WATER AND SEWER FACILITIES SERVING THIS DEVELOPMENT.
- ALL TRENCH AND FOUNDATION EXCAVATIONS GREATER THAN FOUR FEET DEEP SHALL HAVE SLOPES OF 1.5:1 (HORIZONTAL TO VERTICAL) OR, BRACING OR SHORING SHALL BE PROVIDED IN ACCORDANCE WITH OSHA AND OTHER APPROPRIATE LOCAL CODES.
- ALL SATURATED, LOOSE, OR DISTURBED SOIL SHALL BE REMOVED FROM THE BOTTOM OF UTILITY TRENCHES PRIOR TO PLACEMENT OF PIPE BEDDING. PIPE BEDDING AND TRENCH BACKFILL SHALL BE PLACED IN ACCORDANCE WITH CITY OF LEWISTON STANDARDS.
- SEWER STUBS SHALL BE INSTALLED AT A MINIMUM SLOPE OF 1/4" PER FOOT, AND CONNECTED TO MAINS USING MANUFACTURED WYES.
- SANITARY SEWER STUBS SHALL BE TERMINATED BY PROVIDING AN ELBOW AND CAPPED RISER TO 12" MINIMUM ABOVE FINISHED GRADE. TERMINATE AT PROPERTY LINE. MATERIAL SHALL BE GREEN (SDR 35) PVC. WRAP "SEWER" LOCATE TAPE ON ENDS; TAPE FURNISHED BY CONTRACTOR.
- FOUNDATION DRAIN STUBS SHALL BE TERMINATED BY PROVIDING AN ELBOW & CAPPED RISER TO 12" MINIMUM ABOVE GRADE. TERMINATE AT PROPERTY LINE. MATERIAL SHALL BE WHITE PVC. WRAP "STORM SEWER" LOCATE TAPE ON ENDS; TAPE FURNISHED BY CONTRACTOR.
- ALL STORM AND SANITARY SEWER LINES SHALL HAVE 2.0' MINIMUM COVER.
- USE ECCENTRIC CONES EXCEPT WHEN SPECIFICALLY APPROVED BY THE ENGINEER. PLACE THE CONE ENTRY HOLE ABOVE THE OUTLET PIPE. FLAT TOPS ARE NOT ALLOWED WITHOUT APPROVAL OF THE ENGINEER.
- SANITARY SEWER PIPE (SS): ALL SS PIPE TO BE SDR 35, PVC (GREEN), UNLESS OTHERWISE NOTED.
- STORM SEWER PIPE (SD): ALL SD PIPE TO BE SDR 35, PVC (WHITE), UNLESS OTHERWISE NOTED.

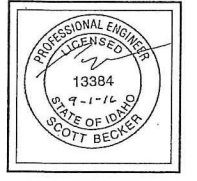
WATER

- ALL WORK TO BE PERFORMED IN ACCORDANCE WITH IDAPA AND ALL STATE CODES MUST BE FOLLOWED COUPLED WITH THE CITY OF LEWISTON WATER STANDARDS.
- BACKFLOW ASSEMBLIES ARE REQUIRED ON ALL IRRIGATION SYSTEMS AND OTHER IDENTIFIED HAZARDS. THE TYPE OF BACKFLOW ASSEMBLY REQUIRED WILL BE DETERMINED BY THE DEGREE OF HAZARD. BACKFLOW ASSEMBLIES SHALL BE INSTALLED AS PER STANDARDS OUTLINED IN THE IDAHO STATE PLUMBING CODE.
- ALL HYDRANTS SHALL BE THRUST BLOCKED OR RETAINED AND ALL FITTINGS SHALL BE THRUST BLOCKED.
- VALVES SHALL BE PLACED ON ALL BRANCHES OF TEES OR CROSSES. A VALVE IS REQUIRED AT A MINIMUM OF EVERY 1000' OF MAIN WATER LINE.
- THE WATER DIVISION WILL ONLY TAP FIRE LINE CONNECTIONS AND THE OWNER WILL FURNISH ALL MATERIALS AND LABOR INCLUDING THRUST BLOCKING. FIRE LINES THAT SUPPLY SYSTEMS WITH LESS THAN 20 SPINKLER HEADS WILL REQUIRE A BACKFLOW DETECTOR ASSEMBLY.
- ALL WATER SERVICES SHALL BE INSPECTED BY THE CITY PRIOR TO BACKFILLING TRENCHES.
- INSTALL "LOCATE" TAPE 18" ABOVE PIPE IN PVC WATER LINE TRENCH AND LOCATE WIRE TO MAIN. SEE DETAIL.
- HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL BE DONE IN ACCORDANCE WITH CITY OF LEWISTON STANDARDS. THE CONTRACTOR SHALL REQUEST PIPE TESTING AT LEAST 48 HOURS IN ADVANCE OF THE TIME ACTUAL TESTS SHALL BE PERFORMED.
- FIRE HYDRANTS SHALL BE PLACED WITH THE STEAMER PORT FACING THE STREET OR DRIVEWAY AS APPROPRIATE AND SHALL BE MAINTAINED CLEAR AND ACCESSIBLE FOR FIRE PROTECTION DURING CONSTRUCTION. NO OBSTRUCTIONS SHALL BE PLACED WITHIN THREE FEET OF THE FIRE HYDRANT.
- WATER PIPE: ALL WATER MAINS TO BE C 900 CLASS 150 PVC, UNLESS OTHERWISE NOTED.

SEPARATION OF WATER AND SEWER

- WATER AND SEWER (SANITARY OR STORM) MAINS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE NO LESS THAN TEN (10) FEET. IN ANY INSTANCE WHERE SUCH SEPARATION IS NOT ACHIEVABLE, THE FOLLOWING STANDARDS SHALL BE MET:
 - THE WATER AND SEWER MAINS SHALL BE SEPARATED BY AT LEAST SIX (6) HORIZONTAL FEET MEASURED BETWEEN THE OUTSIDE WALLS OF THE PIPES, AND THE SEWER MAIN SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS AT ALL SUCH POINTS; AND
 - THE WATER MAIN SHALL BE A MINIMUM OF EIGHTEEN (18) INCHES ABOVE THE SEWER MAIN.
- THE REQUIREMENTS FOR THE VERTICAL SEPARATION OF WATER AND SEWER MAINS ARE AS FOLLOWS:
 - AT ANY POINT WHERE THE SEWER AND WATER MAINS CROSS, THEY SHALL BE SEPARATED BY A VERTICAL DISTANCE OF NO LESS THAN EIGHTEEN (18) INCHES.
 - AT ANY POINT WHERE THE SEWER MAIN CROSSES ABOVE THE WATER MAIN THE SEWER MAIN SHALL BE SUPPORTED TO MAINTAIN LINE & GRADE.
 - AT ANY POINT WHERE THE SEWER AND WATER MAIN CROSS, THE CROSSING SHALL BE ARRANGED SO THAT THE WATER MAIN JOINTS WILL BE EQUAL DISTANCE AND AS FAR AS POSSIBLE FROM THE SEWER MAIN JOINTS.
 - IF THE WATER MAIN IS BELOW THE SEWER MAIN, THE SEWER MAIN SHALL BE CONSTRUCTED OF MATERIALS CONFORMING TO WATER MAIN STANDARDS AND PRESSURE TESTED TO 150 PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING IF THE EIGHTEEN (18) INCH VERTICAL SEPARATION CANNOT BE MAINTAINED.
 - IN LIEU OF CONSTRUCTING (OR RECONSTRUCTING) A NON-POTABLE WATER MAIN DUE TO LESS THAN EIGHTEEN (18) INCHES OF VERTICAL SEPARATION FROM A POTABLE WATER MAIN, EITHER THE NON-POTABLE MAIN OR THE POTABLE WATER MAIN MAY BE ENCASED WITH A SLEEVING MATERIAL ACCEPTABLE TO DEQ FOR A DISTANCE OF TEN (10) HORIZONTAL FEET ON BOTH SIDES OF THE CROSSING.

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