

LOCUS MAP NOT TO SCALE



PROPOSED CLEAN OUT (TYP.)

PROPOSED ENVIRONMENTAL ONE PUMP

OF EXISTING SEWER

PROPOSED AREA TO BE LANDSCAPED -WITH TREES AND SHRUBS (SEE PREVIOUSLY APPROVED PLAN FROM APPLE ASSOCIATES FOR DETAILS)

VERTICAL GRANITE CURB

Antest Andrew Mercen Cameron Mercen Antest Anner Cameron Contenents Invironmental Consultants Contenents Invironmental Consultants Contenents Invironmental Consultants Contenents Invironmental Consultants Contenents Invironmental Consultants Contenents Massachuserts 01923 Programment Consultants Programment Consultants								
R E V I S I O N S SURVEY BY: MCG	DESCRIPTION DATE DATE DATE DV: SC		CHECKED BY: JM	APPROVED BY: JM	CCALE. AS NOTED		DATE: APRIL 14, 2020	
SITE PI AN	NO.		~ SALISBURT~, MASSACHUSETIS	~211 BEACH ROAD~	(ASSESSOR'S MAP 28, LOT 42)		~COBALI DEVELOPMENI~	
		SITE PLAN	:		DRAWING NO.			

*NOTE: PLAN BASED ON DESIGN BY APPLE ASSOCIATES, INC. PLAN DATED: 01-13-2009

- APPROXIMATE LOCATION OF EXISTING 12" D.I. WATER MAIN. CONTRACTOR TO VERIFY IN FIELD PRIOR TO ANY CONSTRUCTION OF THE PROPOSED WATER MAIN.

TO REMAIN

- APPROXIMATE LOCATION OF EXISTING FORCE MAIN

GAS GATE VALVE

— PROPOSED OVER HEAD

ELECTRIC

- EXISTING

DRAWING; 011





DIA.	TEES & PLUGS	90° BENDS	45° BENDS	22 1/2 BENDS	11 1/4° BENDS
6"	4'-0"	6'-0"	3'-0"	3'-0"	3'-0"
8"	4'-0"	6-0"	3'-0"	3'-0"	3'-0"
12"	9'-0"	12'-0"	7'-0"	7'-0"	7'-0"

NOTE: ALL TEES, PLUGS AND BENDS SHALL BE BLOCKED AGAINST FIRM EARTH WITH CLASS C CONCRETE

STANDARD THRUST BLOCKING NOT TO SCALE

THRUST BLOCKS ARE TO BE INSTALLED AT ALL BENDS, TEES, PLUGS, AND HYDRANTS.





SEWER NOTES:

- 10' ON EACH SIDE.
- NOTED.
- ALONG THE PIPE.
- FREEZING.

WATER NOTES:

- ANY UNDERGROUND ROCK FORMATION.

- LINE INTO THE BUILDING.

- INSTALLATION TO COORDINATE AN AS-BUILT SURVEY.

GENERAL UTILITY NOTES:

1. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER PIPES AND WATER PIPES. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER PIPE, THE WATER PIPE SHALL BE SLEEVED FOR A DISTANCE OF AT LEAST

2. ALL GRAVITY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35 UNLESS OTHERWISE

3. WHERE SANITARY SEWERS CROSS WATER SERVICES, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER PIPE. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER PIPE SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHENEVER IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER PIPE AND THE SEWER PIPE SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS

4. SANITARY SEWER LINES WITH LESS THAN 4 FEET OF COVER SHALL BE INSULATED TO PREVENT

1. (1) WATER LINES WILL HAVE AT LEAST FIVE (5) FEET OF COVER.

2. THERE MUST BE AT LEAST SIX (6) INCHES OF CLEARANCE BETWEEN A NEW WATER LINE AND

3. A HYDRANT FLOW TEST AND HYDRAULIC ANALYSIS NEEDS TO BE PERFORMED. THE SYSTEM SHALL BE DESIGNED TO MAINTAIN A MINIMUM OF TWENTY (20) PSI AT ALL POINTS UNDER ALL FLOW CONDITIONS. THIS HYDRAULIC ANALYSIS MUST CONFIRM THAT ADEQUATE CAPACITY EXISTS IN THE EXISTING LINE TO WHICH THE CONNECTION IS BEING MADE. THIS ANALYSIS MUST ALSO CONFIRM THAT SIZING IS ADEQUATE FOR FIRE FLOW REQUIREMENTS, BASED ON INSURANCE SERVICES OFFICE (ISO) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS THE RESULTS SHALL BE SUBMITTED TO THE CIVIL ENGINEER.

4. INSTALLATION IN CLAY/SILT SOILS: ALL WATER MAIN COMPONENTS SHALL MEET AWWA STANDARDS. "ALL DUCTILE IRON PIPE SHALL BE COATED WITH A LAYER OF ARC-SPRAYED ZINC PER ISO 8179. THE MASS OF THE ZINC APPLIED SHALL BE 200 G/M^2. A FINISHING TOPCOAT SHALL BE APPLIED TO THE ZINC. INTERIOR LINING FOR POTABLE WATER MAIN SHALL HAVE AN INTERIOR PROTECTIVE LINING OF CEMENT-MORTAR IN ACCORDANCE WITH ANSI/AWWA A21.4/C104."WATER AND FIRE PROTECTION MAINS FOUR (4) INCH AND GREATER SHALL BE CLASS 52 DUCTILE IRON CEMENT LINED PIPE AND ZINC COATED. WHERE SOIL CONDITIONS ARE DETERMINED BY THE DEPARTMENT TO BE CORROSIVE, POLY WRAP WILL BE INSTALLED AS ADDITIONAL MEANS OF PROTECTION. "POLYETHYLENE ENCASEMENT: POLYETHYLENE ENCASEMENT SHALL BE POLYETHYLENE CONSISTING OF THREE LAYERS OF CO-EXTRUDED LINEAR LOW DENSITY POLYETHYLENE (LLDPE), FUSED INTO A SINGLE THICKNESS OF NOT LESS THAN 8 (EIGHT) MILS."

5. ALL MECHANICAL JOINT COMPONENTS WILL BE INSTALLED USING RETAINING GLANDS, SUCH AS, GRIP RING, MEGA LUG OR STAR GRIP. METAL WEDGES MUST BE USED AT ALL BELL JOINTS TO ENSURE CONTINUITY FOR TRACING. ALL FITTINGS (TEES. BENDS. SOLID SLEEVE ETC.) WILL BE ZINC COATED AS WELL FOR PROTECTION"PER ISO 8179-2, ZINC RICH PAINT SHALL HAVE A ZINC CONTENT OF AT LEAST 85% BY WEIGHT AND SHALL BE FINISHED WITH AN EXTERIOR BITUMINOUS COATING.". A MINIMUM 307SS (STAINLESS STEEL) "T" BOLTS WILL BE USED TO CONNECT ANY APPURTENANCE THAT REQUIRES THE USE OF "T" BOLTS FOR ASSEMBLY.

6. THE SERVICE CONNECTIONS SHALL BE PERPENDICULAR TO THE MAIN AND FOLLOW A STRAIGHT

7. INSTALLATION IN CLAY/SILT SOILS: GATE VALVES WILL BE DUCTILE IRON EPOXY COATED (AWWA C550), WITH O-RING SEALS, URETHANE COATED WEDGE, STAINLESS STEEL NUTS AND BOLTS, AND ANTI-ROTATION SEATS TO PREVENT T-BOLTS FROM TURNING. VALVES WILL BE OPEN RIGHT USING A TWO (2) INCH OPERATING NUT WITH AN ARROW CAST IN THE METAL.

8. WATER VALVES WILL BE INSTALLED WITHIN THE ROAD RIGHT-OF-WAY (NOT ON PRIVATE PROPERTY) SO THE WATER DEPARTMENT CAN ACCESS THE VALVES.

9. ALL WATER VALVE BOX COVERS SHALL BE LABELED 'WATER'.

10. NEW WATER MAINS SHALL BE CHLORINATED FOLLOWING INSTALLATION. CHLORINATION WILL MEET AWWA STANDARDS (ANSI/ AWWA C651 - 05). BACTERIA SAMPLES WILL BE TAKEN BY THE CONTRACTOR AND TESTED BY AN APPROVED LAB, WHICH WILL SEND RESULTS DIRECTLY TO THE NEWBURYPORT WATER TREATMENT PLANT VIA CERTIFIED MAIL. RESULTS OF BACTERIA TESTING MUST BE RECEIVED BY THE NEWBURYPORT WATER TREATMENT PLANT WITHIN FIVE (5) DAYS OR RE-SAMPLING MUST BE DONE. IF THE BACTERIA TEST COMES BACK POSITIVE, THE WATER MAIN WILL BE FLUSHED AND RE-CHLORINATED PRIOR TO RE-SAMPLING.

11. AS- BUILT PLANS (HARD COPIES AND DIGITAL) ARE REQUIRED PRIOR TO PLACING A NEW WATER SYSTEM IN SERVICE. AS- BUILT PLANS (CORNER TIES) AND PAYMENTS ARE DUE PRIOR TO TURNING A WATER SERVICE ON. CONTACT THE SURVEYOR AT LEAST 72 HOURS PRIOR TO

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.

