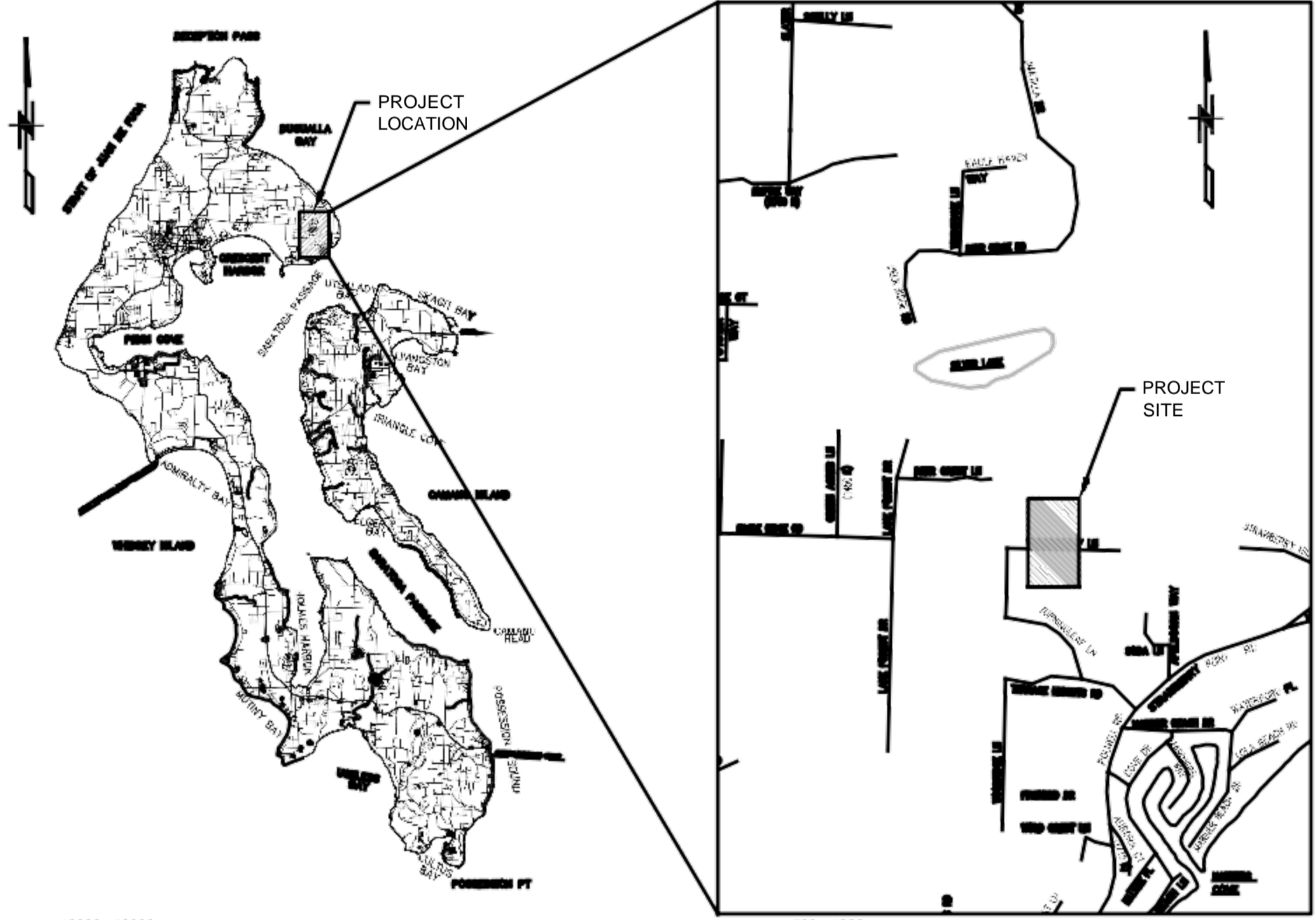


ARDUINNE RESIDENCE WATER LINE EXTENSION SILVER LAKE WATER SYSTEM ISLAND COUNTY, WA



10000 0 10000 20000
SCALE IN FEET
ISLAND COUNTY
SCALE AS SHOWN

500 0 500 1000
SCALE IN FEET
VICINITY MAP
SCALE AS SHOWN

PROJECT INFORMATION:

APPLICANT:
VICTORIA ARDUINNE
1385 EAGLE RIDGE RD
OAK HARBOR, WA 98277

CIVIL ENGINEER:
DAVIDO CONSULTING GROUP, INC.
ROBERT L BENNION, P.E.
P.O. BOX 1132
FREELAND, WA 98249
PH: 360.331.4131

OPERATOR:
WATER & WASTEWATER SERVICES
KELLY WYNN
14263 CALHOUN RD
MOUNT VERNON, WA 98273
PH: 360.466.4443x201

SHEET INDEX	
Sheet Number	Sheet Title
C01	COVER SHEET
C02	NOTES
C03	SITE PLAN
C04	DETAILS
C05	DETAILS

CAD FILE NUMBER: P:\CLIENTS\WATER\SILVER LAKE WATER SYSTEM\PROJECTS\DEVELOPER EXTENSIONS\ARDUINNE\DWG\DRAWINGS\SILVER LAKE - DE ARDUINNE.DWG
 LAST MODIFIED BY: ROBERT BENNION - SAVE DATE: 5/25/2021 9:15 AM - SHEET SET: ### - ORIGINAL SHEET SIZE: ...
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PROJECT:
SILVER LAKE WATER SYSTEM
WATER & WASTEWATER SERVICES, INC.
14263 CALHOUN RD, MT VERNON, WA
PROJECT:
SILVER LAKE - DEVELOPER EXTENSION
TURNINGLEAF LN, OAK HARBOR, WA 98227

DESIGNED BY:	RLB
DRAWN BY:	SD/RLB
CHECKED BY:	RLB
SCALE:	SCALE
DATE:	REV. SHEET
5/25/2021	A 1 OF 5

SHEET NUMBER
C01

WATER NOTES:

WATER MAINS, VALVES, FITTINGS, HYDRANTS, SERVICES, AND ALL OTHER COMPONENTS SHALL BE INSTALLED AND PRESSURE TESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE AND MUNICIPAL CONSTRUCTION, WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, SECTION 7-09.

THE CONTRACTOR SHALL GIVE WATER & WASTEWATER SERVICES (360-466-4443) A MINIMUM OF 72 HOURS NOTICE OF ANY PLANNED CONNECTION TO AN EXISTING PIPELINE. THIS INCLUDES LIVE TAPS. NOTICE IS REQUIRED SO ANY DISRUPTIONS TO EXISTING SERVICES CAN BE SCHEDULED. THE CONTRACTOR SHALL NOTIFY CUSTOMERS INVOLVED OR AFFECTED OF THE WATER SERVICE INTERRUPTION 24 HOURS IN ADVANCE OF THE INTERRUPTION. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO SCHEDULE WATER MAIN CONSTRUCTION WITH A MINIMUM INTERRUPTION OF WATER SERVICE.

IN CERTAIN SITUATIONS, THE WATER COMPANY MAY DICTATE SCHEDULING OF WATER MAIN SHUTDOWNS SO AS NOT TO IMPOSE UNNECESSARY SHUTDOWNS DURING SPECIFIC PERIODS TO EXISTING CUSTOMERS.

ALL WATER MAINS SHALL BE PVC SCH 80 (2" OR LESS), PVC C900, OR DI CLASS 52 PIPE AS SPECIFIED ON THE PLANS. HIGH DENSITY POLYETHYLENE (HDPE) PIPE SDR 9 MAY BE USED IN PLACE OF PVC SPECIFIED ON PLANS. HDPE PIPE SHALL BE BLACK PE 4710, MADE OF NEW RESINS, AND MEETING THE REQUIREMENTS OF ASTM D3350 CELL CLASSIFICATION OF PE445574C/E, TYPE II, GRADE PE47, AS WELL AS: ASTM F714, AWWA C901, AND AWWA C906. PROVISIONS FOR PIPE EXPANSION MUST BE ACCOUNTED FOR WHEN INSTALLING HDPE PIPING.

WATER MAIN FITTINGS SHALL DUCTILE IRON. DUCTILE IRON FITTINGS SHALL MEET THE REQUIREMENTS OF AWWA C153 AND JOINTS SHALL MEET THE REQUIREMENTS OF AWWA C111. DUCTILE IRON FITTINGS SHALL BE CEMENT MORTAR LINED, MEETING THE REQUIREMENTS OF AWWA C104. GASKETS FOR FLAT FACED OR RAISED FACED FLANGES SHALL BE 1/8-INCH THICK NEOPRENE HAVING A DUROMETER OF 60 PLUS OR MINUS 5 OR 1/16-CLOTH INSERTED. DUCTILE IRON PIPE SHALL BE INSTALLED WITH POLYETHYLENE SHEATHING FOR CORROSION PROTECTION. THE TYPE, MATERIAL, AND IDENTIFICATION MARK FOR BOLTS AND NUTS SHALL BE PROVIDED. BOLTS, NUTS, AND WASHERS USED FOR SECURING FITTINGS SHALL BE OF SIMILAR MATERIALS. STEEL BOLTS SHALL MEET THE REQUIREMENTS OF ASTM A307 OR ASTM F568 FOR CARBON STEEL OR ASTM F593 OR ASTM F738 FOR STAINLESS STEEL. NUTS SHALL MEET THE REQUIREMENTS OF ASTM A563 OR ASTM A563 FOR CARBON STEEL OR ASTM F594 OR ASTM F836 FOR STAINLESS STEEL. IRON BOLTS AND NUTS SHALL MEET THE REQUIREMENTS OF ASTM A536, GRADE 65-45-12.

ALL NON-METALLIC PIPE AND SERVICES SHALL BE INSTALLED WITH CONTINUOUS TRACER TAPE INSTALLED 12 TO 18 INCHES UNDER THE FINAL GROUND SURFACE. NO BREAKS OR SPLICES WILL BE ALLOWED. A CONTINUOUS LOOP SHALL BE PLACED FROM THE MAIN LINE TO THE METER BOX AND BACK TO THE MAIN LINE. THE MARKER SHALL BE PLASTIC NON-BIODEGRADABLE, METAL CORE OR BACKING WHICH CAN BE DETECTED BY A STANDARD METAL DETECTOR. TAPE SHALL BE TERRA TAPE "D" OR APPROVED EQUAL. IN ADDITION TO TRACER TAPE, INSTALL 14 GAUGE COATED COPPER WIRE, TAPED TO THE TOP OF PIPE, BROUGHT UP AND TIED OFF AT VALVE BODY.

THE MINIMUM COVER FOR ALL WATER MAINS FROM TOP OF PIPE TO FINISH GRADE SHALL BE 36 INCHES UNLESS OTHERWISE APPROVED BY THE ENGINEER.

ALL VALVES AND FITTINGS SHALL BE DUCTILE IRON WITH ANSI FLANGES OR MECHANICAL JOINT ENDS. ALL EXISTING VALVES SHALL BE OPERATED BY WATER COMPANY PERSONNEL. VALVE BOXES SHALL BE INSTALLED ON ALL BURIED VALVES. THE BOX SHALL BE OF CAST IRON, TWO-PIECE SLIP TYPE, 5-1/4 INCH SHAFT, WITH A BASE CORRESPONDING TO THE SIZE OF THE VALVE. THE COVER SHALL HAVE THE WORD "WATER" CAST IN IT. THE VALVE BOX SHALL BE TYLER UNION 6855 SERIES OR EQUAL APPROVED BY THE WATER COMPANY. THE COVER SHALL BE A TYLER UNION STANDARD DROP LID 145325 OREQUAL APPROVED BY THE WATER COMPANY.

GATE VALVES, 6 INCH TO 12 INCH. THE DESIGN, MATERIALS AND WORKMANSHIP OF ALL GATE VALVES SHALL CONFORM TO, OR EXCEED THE REQUIREMENTS OF AWWA C515 LATEST REVISION. GATES VALVES SHALL BE RESILIENT SEAT NON-RISING STEM (NRS) WITH TWO INTERNAL O-RING STEM SEALS. GATE VALVES SHALL BE MUELLER A-2361. GATE VALVES SHALL BE USED ON ALL 6 TO 12 INCH LINES.

VALVE BOX. ALL VALVES SHALL HAVE A STANDARD CAST IRON WATER VALVE BOX SET TO GRADE. IF VALVES ARE NOT SET IN PAVED AREA, A 3 FOOT BY 3 FOOT BY 4 INCH CONCRETE OR ASPHALT PAD SHALL BE SET AROUND EACH VALVE BOX AT FINISHED GRADE. IN AREAS WHERE VALVE BOX FALLS IN ROAD SHOULDER, THE DITCH AND SHOULDER SHALL BE GRADED BEFORE PLACING ASPHALT OR CONCRETE PAD.

VALVE MARKER POST. VALVE MARKER POSTS SHALL BE 4 INCH X 4 INCH REINFORCED CONCRETE OR SCHEDULE 40 STEEL POSTS 5 FEET LONG, WITH 2 FOOT MINIMUM BURY, STAMPED WITH "W" AND DISTANCE TO VALVE. POST SHALL BE PAINTED WITH 1 BASE COAT AND 2 COATS BLUE OIL BASE ENAMEL.

EROSION AND SEDIMENTATION CONTROL (ESC) NOTES:

1. THE CONTRACTOR SHALL MEET ISLAND COUNTY STANDARDS AND REQUIREMENTS BY USING APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) FOR EROSION AND SEDIMENTATION CONTROL.
2. EROSION ON- AND OFF-SITE. DURING AND AFTER CONSTRUCTION, THE CONTRACTOR SHALL MINIMIZE EROSION AND SEDIMENTATION ON-SITE AND SHALL PROTECT PROPERTIES AND WATER COURSES DOWNSTREAM FROM THE SITE FROM EROSION DUE TO INCREASES IN THE VELOCITY AND PEAK FLOW RATE OF STORM WATER RUNOFF FROM THE SITE.
3. TRANSPORT OF SEDIMENT. THE CONTRACTOR SHALL PREVENT THE TRANSPORT OF SEDIMENT FROM THE SITE THROUGH MEASURES SUCH AS MULCHING, MATTING, COVERING, SILT FENCES, SEDIMENT TRAPS, SETTLING PONDS AND PROTECTIVE BERMS USING THE FOLLOWING BMPs: FILTER FENCE, STRAW BALE BARRIER, BRUSH BARRIER, GRAVEL FILTER BERM, SEDIMENT TRAP, TEMPORARY SEDIMENT POND, PRESERVING NATURAL VEGETATION, AND/OR BUFFER ZONES. TRANSPORT OF SEDIMENT ONTO PAVED SURFACES SHALL BE MINIMIZED, AND IF SEDIMENT IS TRANSPORTED ONTO A PAVED SURFACE, THE PAVED SURFACE SHALL BE CLEANED AT THE END OF EACH DAY IN ACCORDANCE WITH BMPs IN THE DRAINAGE MANUAL, OR APPROVED BY THE DIRECTOR.
4. STABILIZING EXPOSED SOIL. THE CONTRACTOR SHALL PREVENT ON-SITE EROSION BY STABILIZING ALL SOILS THAT ARE TEMPORARILY EXPOSED AND NOT BEING ACTIVELY WORKED, THROUGH SUCH METHODS AS THE INSTALLATION OF SEEDING, MULCHING, MATTING AND COVERING. CONTRACTOR SHALL APPLY ONE OR MORE OF THE FOLLOWING TEMPORARY ESC BMPs: TEMP SEEDING, MULCHING AND MATTING, CLEAR PLASTIC COVERING, AND/OR DUST CONTROL.
5. DENUDED AREAS SHALL BE STABILIZED AND SOIL STOCKPILES AS ESTABLISHED IN THE DRAINAGE MANUAL.
6. STORM DRAIN INLETS SHALL BE PROTECTED USING BMP STORM DRAIN INLET PROTECTION. THE RECOMMENDED INLET PROTECTION ALTERNATIVES ARE TRIANGULAR SILT DIKES; BIOLOGS; EXERTS (FOSS ENVIRONMENTAL); DANDY BAGS; AND, STRAW WATTLES.
7. NO MORE THAN THREE HUNDRED (300) FEET OF TRENCH MAY REMAIN OPEN AT ONE TIME. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES, UNLESS INCONSISTENT WITH SAFETY OR SITE CONSTRAINTS.
8. DISCHARGE FROM DEWATERING DEVICES. WATER FROM A DEWATERING DEVICE SHALL DISCHARGE INTO A SEDIMENT-RETENTION BMP.
9. MAINTENANCE AND REPAIR OF EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR SHALL MAINTAIN AND REPAIR AS NECESSARY ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL BMPs TO ASSURE THEIR CONTINUED PERFORMANCE.
10. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION.

UNANTICIPATED DISCOVERY PLAN:

1. IF EARTH DISTURBING ACTIVITIES DURING PROJECT CONSTRUCTION UNCOVER CULTURAL MATERIALS (I.E. STRUCTURAL REMAINS, HISTORIC ARTIFACTS, OR PREHISTORIC ARTIFACTS), ALL WORK SHALL CEASE AND THE WASHINGTON STATE ARCHAEOLOGIST AT THE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION (DAHPI), THE INTERESTED TRIBES (SWINOMISH AND TULIP TRIBES) AND THE RURAL DEVELOPMENT STATE ENVIRONMENTAL COORDINATOR (RD SEC) SHALL BE NOTIFIED IMMEDIATELY.
2. IF HUMAN REMAINS ARE UNCOVERED, ALL WORK SHALL CEASE IMMEDIATELY IN ACCORDANCE WITH THE NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT OF 1990 (NAGPRA) AND WASHINGTON STATE STATUTES RCW 27.44. THE AREA AROUND THE DISCOVERY SHALL BE SECURED AND THE ISLAND COUNTY ENFORCEMENT AGENCY AND THE RD SEC SHALL BE NOTIFIED IMMEDIATELY. THE RD SEC SHALL NOTIFY THE STATE ARCHEOLOGIST AT DAHP WITHOUT DELAY.

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE WATER COMPANY A MINIMUM OF 24 HOURS PRIOR TO STARTING ANY WORK.
2. THE CONTRACTOR SHALL NOTIFY THE UNDERGROUND UTILITY LOCATE CENTER AT 1-800-424-5555 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL PROTECT IN PLACE, ALL UTILITIES, STRUCTURES AND FEATURES, WHETHER OR NOT SHOWN ON THESE PLANS. ANY DAMAGE TO EXISTING UTILITIES OR FEATURES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
4. LOCATIONS OF EXISTING FEATURES AND UTILITIES AS SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION. ACTUAL LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS AND SEQUENCE OF CONSTRUCTION.
6. ALL WORK SHALL CONFORM TO CURRENT APPROVED STANDARD PLANS AND WSDOT/APWA STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
7. THE CONTRACTOR SHALL BE REQUIRED TO KEEP ACCURATE AS-BUILT DRAWINGS AND DELIVER THIS INFORMATION TO THE WATER COMPANY FOR PREPARATION OF AS-BUILT DRAWINGS.
8. WATER MAINS TO SHALL BE PROPERLY DISINFECTED, FLUSHED, AND HAVE A SATISFACTORY BACTERIOLOGICAL TEST RESULTS FOR A WATER SAMPLE COLLECTED FROM THE PIPE.
9. UTILITY SERVICE INTERRUPTIONS SHALL NOT EXCEED TWO HOURS.
10. 24 HOUR NOTICE SHALL BE PROVIDED TO ALL PROPERTY OWNERS/OCCUPANTS OF ANY UTILITY SERVICE OR ACCESS INTERRUPTIONS.
11. ONE LANE TRAFFIC MUST BE MAINTAINED AT ALL TIMES ON COUNTY ROADS. ROAD CLOSURES WILL NOT BE ALLOWED UNLESS EXPRESSLY AUTHORIZED AND APPROVED BY ISLAND COUNTY.
12. PROPER SIGNAGE AND FLAGGERS ARE REQUIRED PER THE MUTCD. FLAGGERS SHALL HAVE CURRENT CARDS INDICATING THAT THEY ARE QUALIFIED TO PERFORM THE REQUIRED TRAFFIC CONTROL.
13. ACCESS TO PRIVATE PROPERTY SHALL BE RESTORED DAILY.
14. STREETS SHALL BE SWEEP DAILY OR AS NEEDED.

CAD FILE NUMBER: P:\CLIENTS\WATERS\SILVER LAKE WATER SYSTEM\PROJECTS\DEVELOPER EXTENSIONS\RD\UNDRUNNE\DWG\DRAWINGS\SILVER LAKE - DE ARDUINNE.DWG
LAST MODIFIED BY: RLB - SAVE DATE: 5/25/2021 9:15 AM - SHEET SET: ### - ORIGINAL SHEET SIZE: ...
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(UNDERGROUND UTILITIES LOCATIONS ARE APPROX.)



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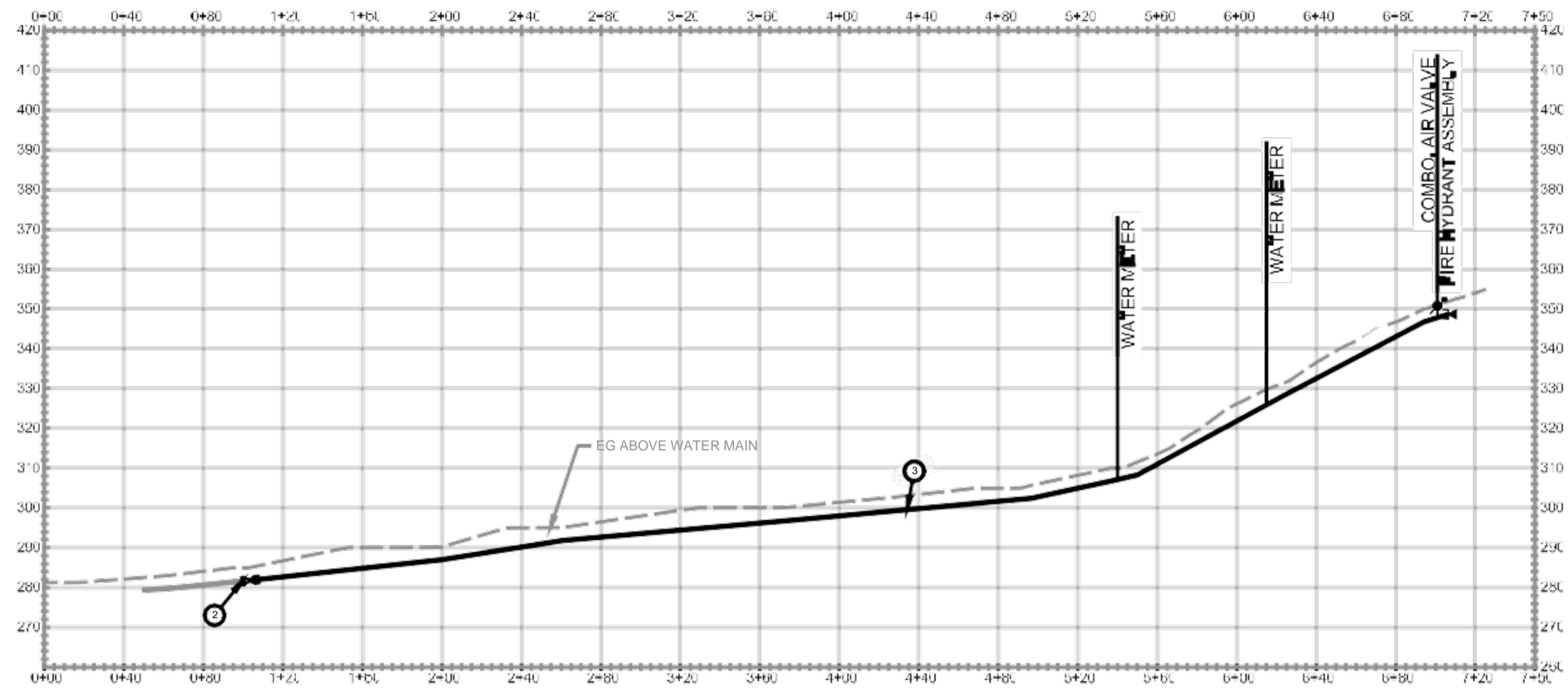
OWNER: SILVER LAKE WATER SYSTEM
WATER & WASTEWATER SERVICES, INC.

PROJECT: SILVER LAKE - DEVELOPER EXTENSION
TURNINGLEAF LN, OAK HARBOR, WA 98227
GENERAL NOTES & LEGEND

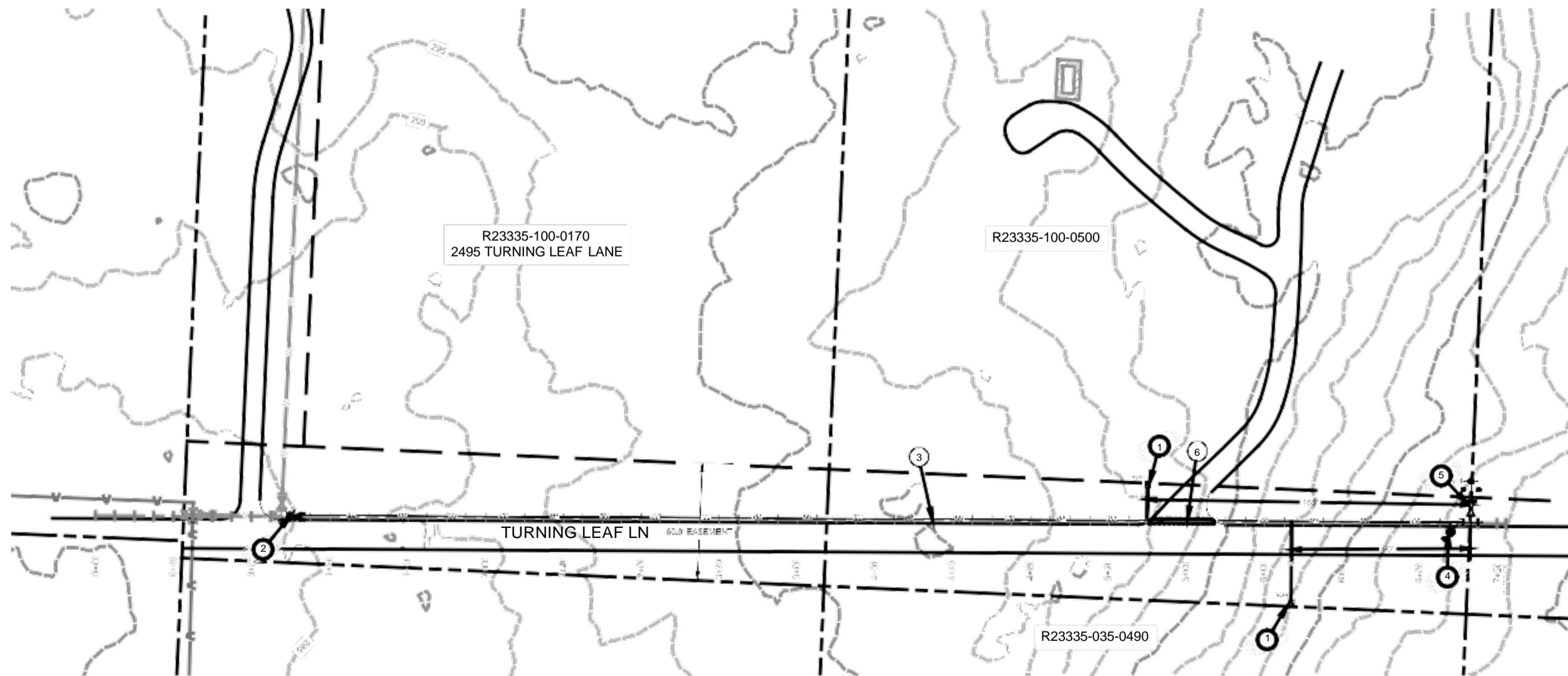
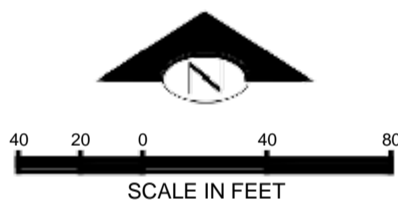
PROJ. MANAGER: RLB
DESIGNED BY: RLB
DRAWN BY: SD/RLB
CHECKED BY: RLB

SCALE: SCALE
DATE: 5/25/2021 REV. A SHEET 2 OF 5

SHEET NUMBER
C02



TURNING LEAF LN WATERMAIN PROFILE
SCALE: H.1"=40'; V.1"=20'



TURNING LEAF LN WATERMAIN PLAN
SCALE: H.1"=40'

KEY NOTES		
KEY	DESCRIPTION	DETAIL/SHEET
1	NEW SINGLE 1" SERVICE CONNECTION WITH 3/4" METER METER	H/C05
2	CONNECT TO EX 6" TEE REMOVE EXISTING CAP (1) 6" GATE VALVE (FLXMJ) CONCRETE THRUST BLOCK	C/C03 G/C05
3	598 LF 6" PVC C900	A/C04
4	(1) COMBINATION AIR RELEASE/VACUUM VALVE	F/C04
5	(1) 6" TEE (MJXFL) (1) FIRE HYDRANT ASSEMBLY (1) 6" CAP CONCRETE THRUST BLOCKS	B/C04 D/C04
6	9 SY DRIVEWAY REPAIR. MATCH EX SURFACE	A/C04

GENERAL NOTES:

1. THE WATER LINES ARE SHOW SCHEMATICALLY AND LENGTHS ARE APPROXIMATE. ALL LENGTHS MUST BE VERIFIED BY THE CONTRACTOR.
2. DUE TO THE INCONSISTENCY OF THE GIS DATA FOR THE GROUND SURFACE THE AIR RELEASE VALVE AND BLOW-OFF VALVES ARE SHOWN AT THE ANTICIPATED LOCATIONS. CONTRACTOR IS TO PROVIDE AIR RELEASE VALVES PER DETAIL F/C04 AT REGIONAL HIGH POINTS AND BLOW-OFFS PER DETAIL I/C05 AT REGIONAL LOW POINTS.
3. UNDERGROUND UTILITES ARE NOT SHOWN. OBTAIN A UTILITY LOCATE AND ADJUST WATERLINE LAYOUT AS NEEDED TO AVOID UTILITIES.

REV.	DATE	BY	REV. S. CR.

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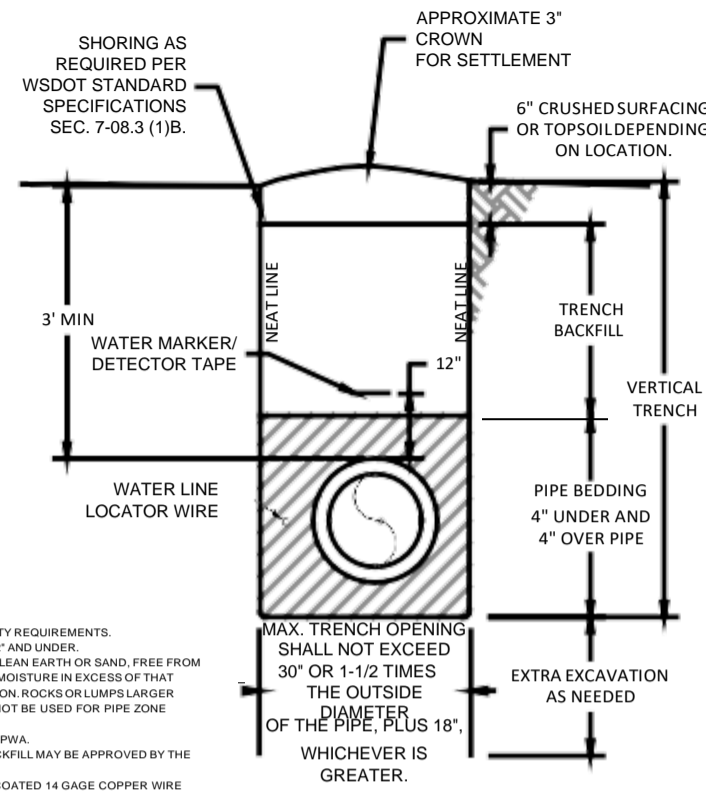
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SILVER LAKE WATER SYSTEM
WATER & WASTEWATER SERVICES, INC.
14263 CALHOUN RD., MT VERNON, WA
SILVER LAKE - DEVELOPER EXTENSION
TURNINGLEAF LN, OAK HARBOR, WA 98227
SITE PLAN & PROFILE

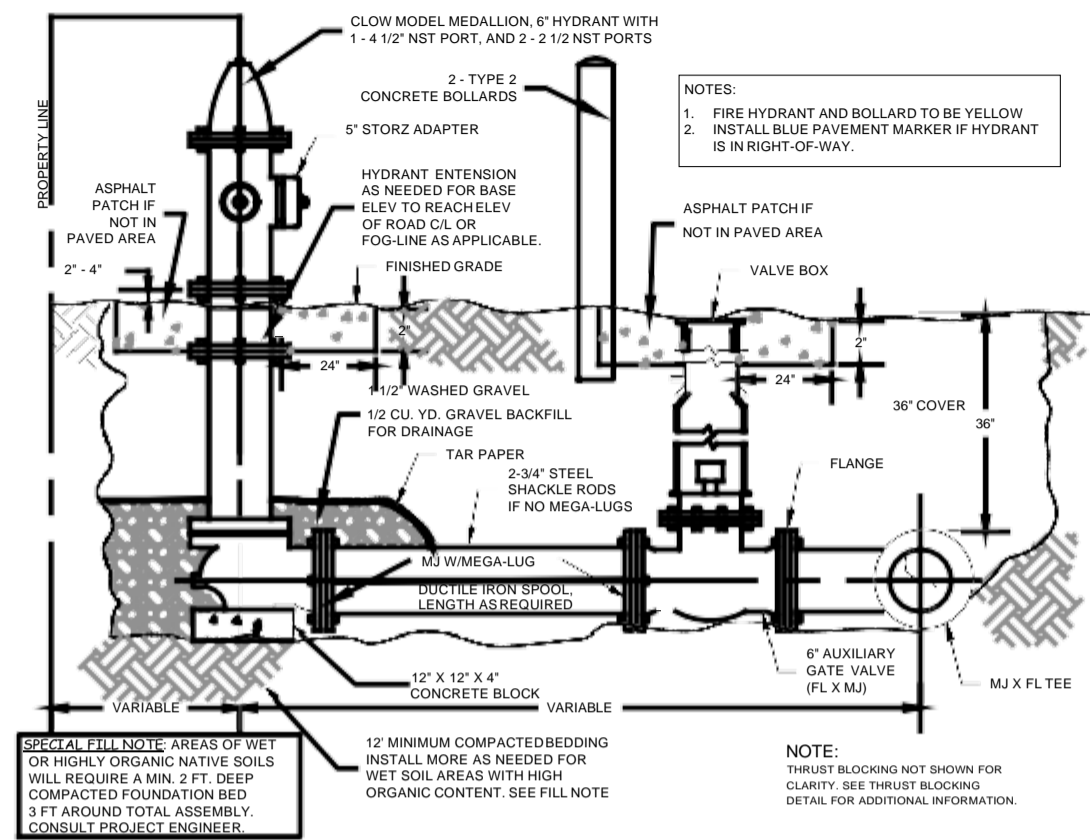
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DATE:	REV. SHEET
5/25/2021	A 3
	OF 5

SHEET NUMBER
C03

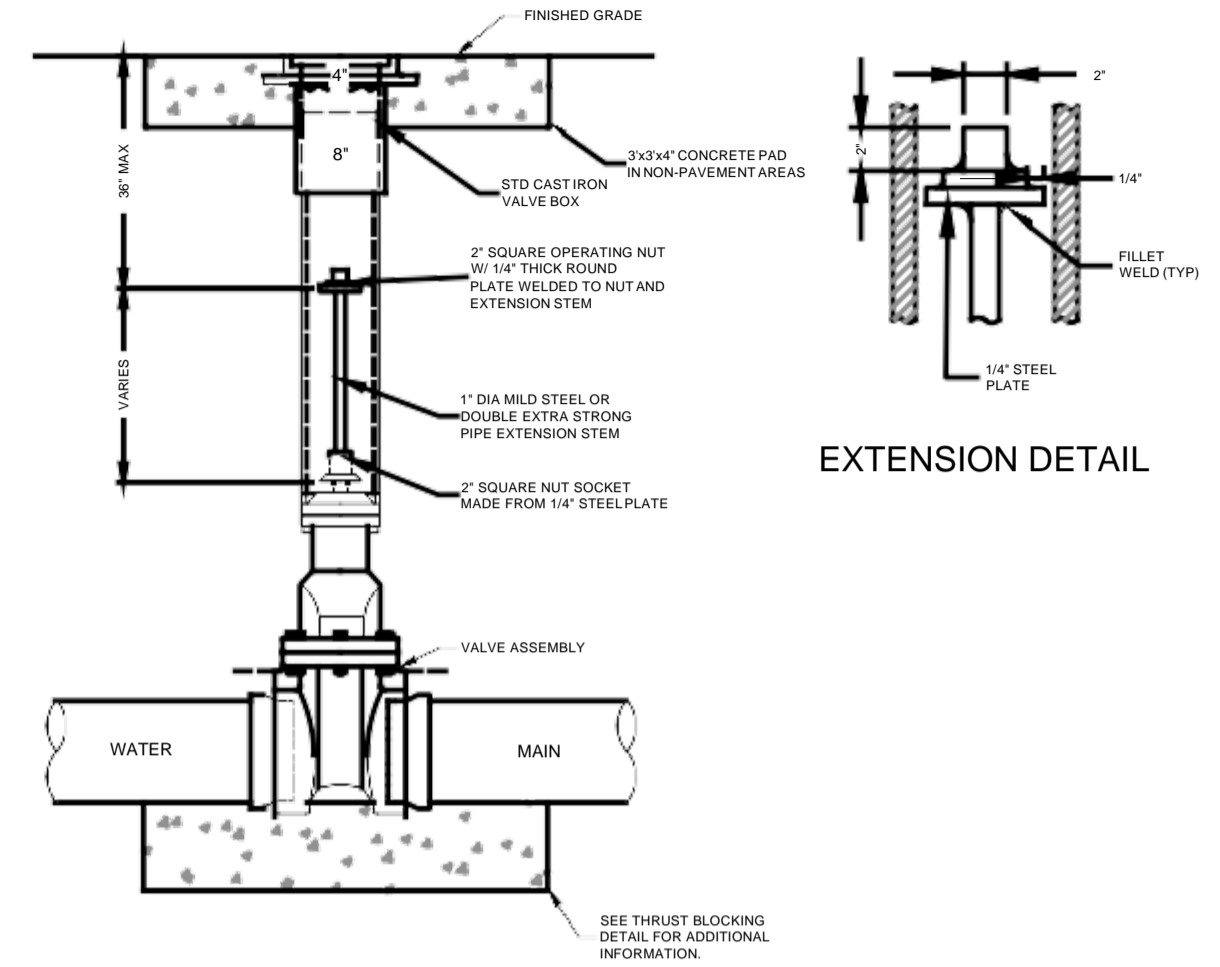
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TYPICAL TRENCH NON-PAVEMENT DETAIL (A) C03
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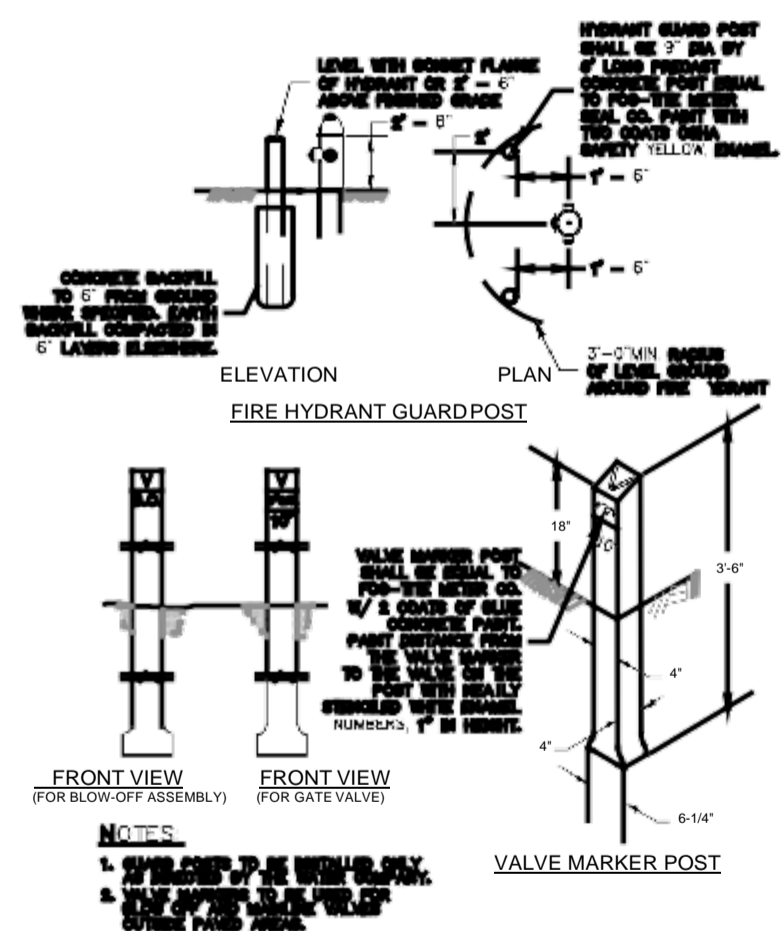


FIRE HYDRANT ASSEMBLY DETAIL (B) C03
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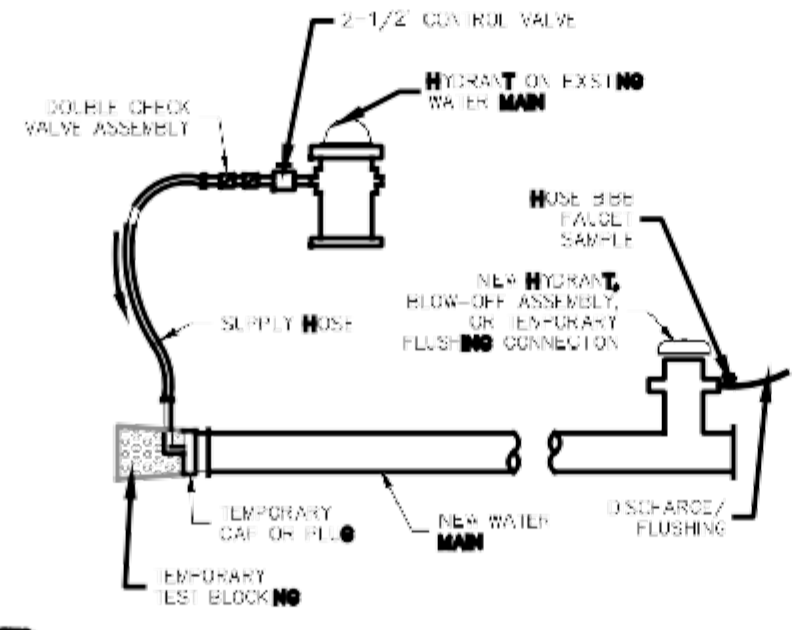


WATER VALVE EXTENSION DETAIL (C) C03
NOT TO SCALE

EXTENSION DETAIL

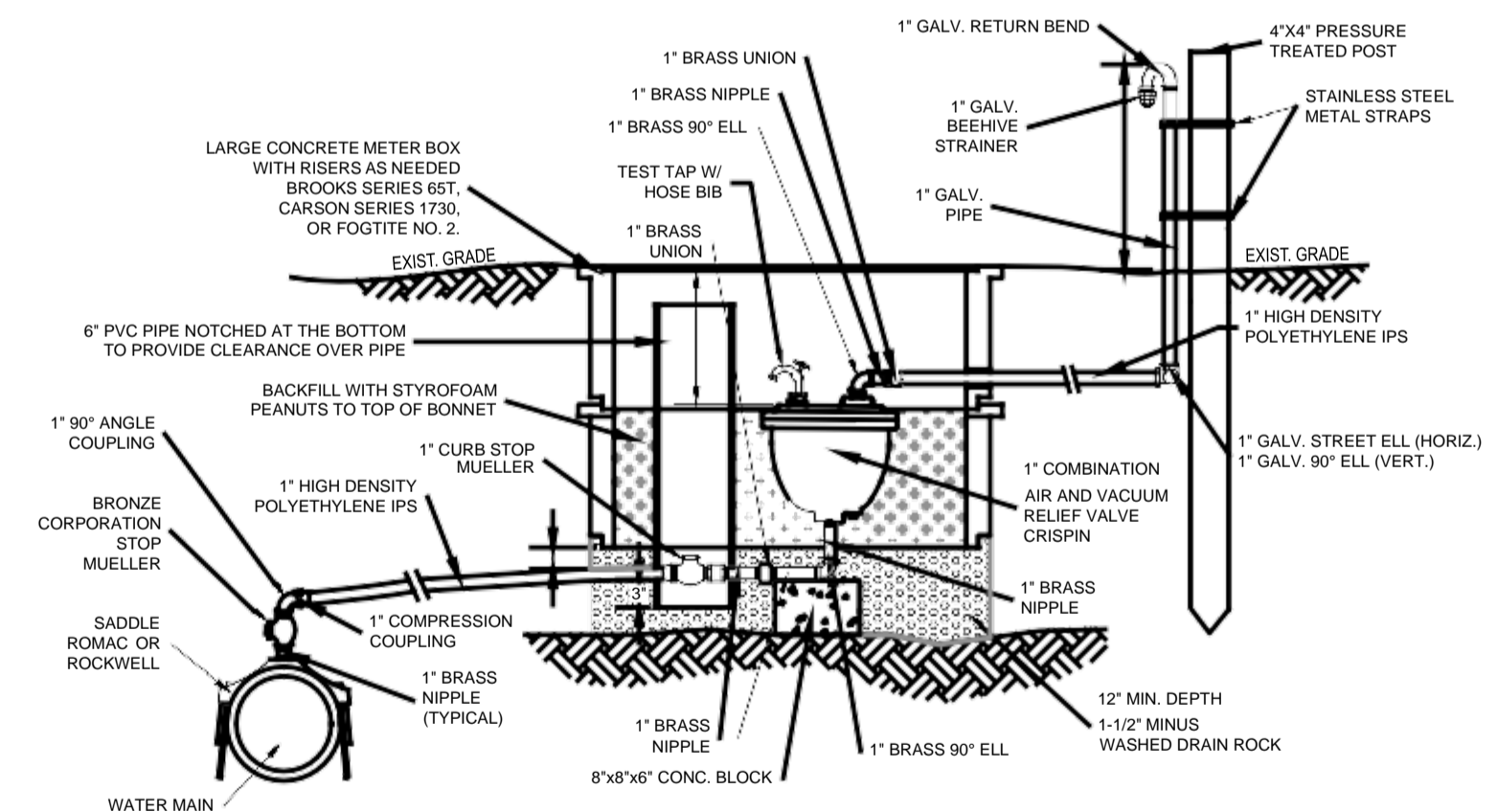


HYDRANT PROTECTION VALVE MARKER DETAIL (D) C03
NOT TO SCALE



- NOTES:**
- 1 THE FILLING OF MAINS SHALL BE DONE ONLY UNDER THE SUPERVISION OF THE WATER COMPANY
 - 2 AN APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED BETWEEN THE EXISTING AND NEW WATER LINES DURING DISINFECTION AND FLUSHING OF NEW WATERMAIN.
 - 3 THE BACKFLOW PREVENTION ASSEMBLY AND SUPPLY HOSE MUST BE DISCONNECTED DURING HYDROSTATIC PRESSURE TESTING OF THE NEW MAIN.
 - 4 THE NEW WATERMAIN SHALL BE CONNECTED TO THE EXISTING SYSTEM ONLY AFTER NEW MAIN IS FLUSHED, DISINFECTED AND SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE OBTAINED.
 - 5 THE INTERIORS OF ALL PIPES AND FITTINGS TO BE USED IN FINAL CONNECTION MUST BE SWABBED OR SPRAYED WITH A 5% AVAILABLE CHLORINE SOLUTION.

MAIN FILLING DETAIL (E) C03
NOT TO SCALE



- NOTES:**
- 1 AIR-N-VAC UNIT AND BOX SHALL BE INSTALLED IN A NON-TRAFFIC AREA.
 - 2 SADDLE FOR AIR-N-VAC UNIT SHALL BE INSTALLED AT THE HIGH POINT OF THE LINE. IF HIGH POINT FALLS IN LOCATION WHERE ASSEMBLY CANNOT BE INSTALLED, INSTALL WATER MAIN TO CREATE A HIGH POINT WHERE AIR-N-VAC CAN BE LOCATED.
 - 3 ALL PIPE AND FITTINGS SHALL BE MINIMUM PRESSURE CLASS 200 PSI, IPS SIZE. ALL FITTINGS BETWEEN MAIN AND AIR-N-VAC SHALL BE BRASS AND ALL FITTINGS ON THE AIR-N-VAC DISCHARGE SHALL BE GALVANIZED.
 - 4 CONCRETE METER BOX PENETRATIONS SHALL BE GROUTED.
 - 5 AIR-N-VAC RISER SHALL BE PAINTED AS DIRECTED BY THE ENGINEER.

AIR RELEASE VALVE DETAIL (F) C03
NOT TO SCALE

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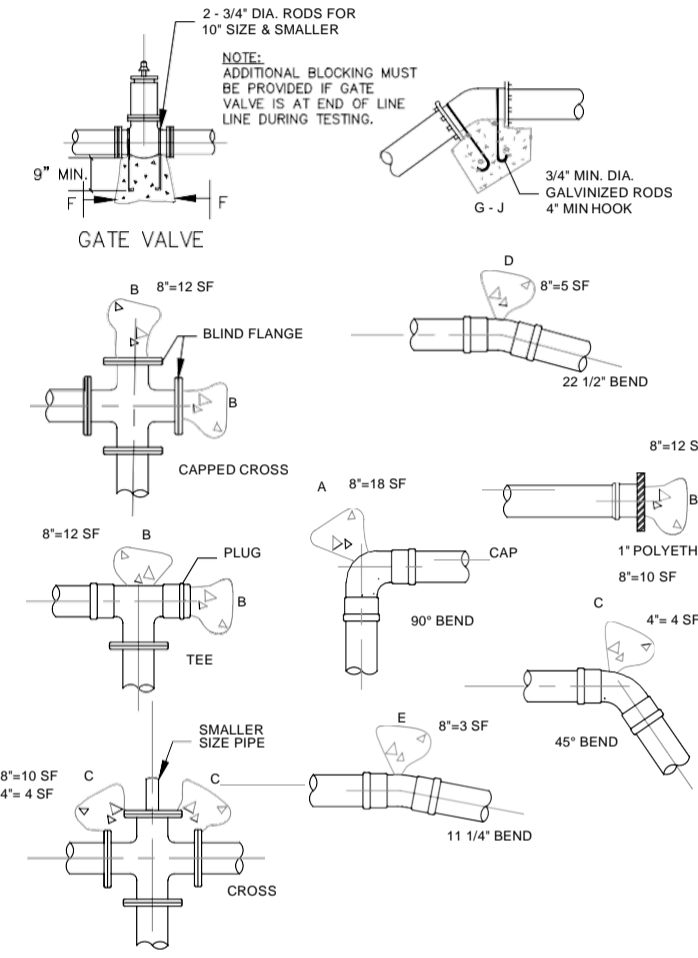


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SILVER LAKE WATER SYSTEM
WATER & WASTEWATER SERVICES, INC.
14263 CALHOUN RD, MT VERNON, WA
SILVER LAKE - DEVELOPER EXTENSION
TURNINGLEAF LN, OAK HARBOR, WA 98227
DETAILS

PROJECT:	SCALE:
DESIGNED BY: RLB	SCALE: 4 OF 5
DRAWN BY: SD/RLB	DATE: 5/25/2021
CHECKED BY: RLB	REV: A
SHEET NUMBER:	C04

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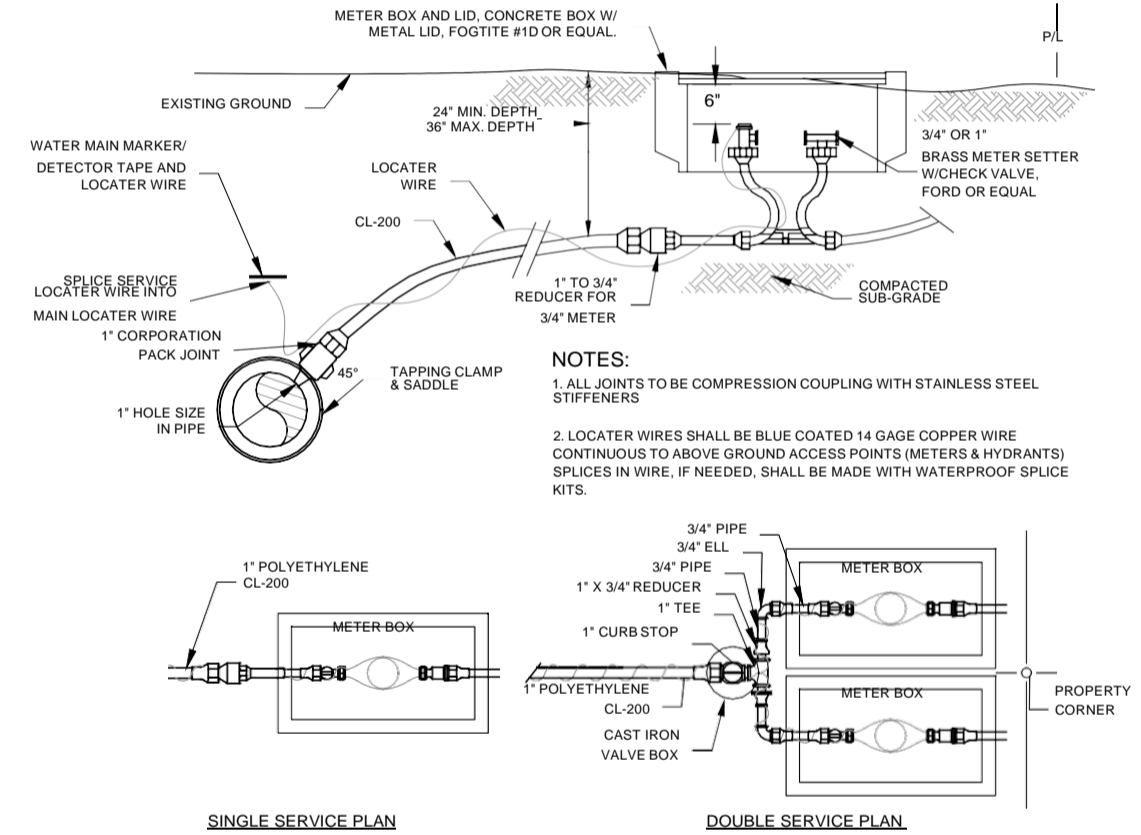


NOTES:
 SEE THRUST BLOCK TABLE, DETAIL
 PROVIDE POLYETHYLENE SHEETING TO COVER BOLTS
 AND JOINTS FOR DISMANTLING.
 2000 PSI CONCRETE
 THRUST BLOCK - TABLE

PIPE SIZE	MIN. BEARING AREA AGAINST UNDISTURBED SOIL SQUARE FEET (SF)						VERTICAL THRUST BLOCKING			
	A - 90° (SF)	B - TEE (SF)	C - 45° (SF)	D - 22.5° (SF)	E - 11.25° (SF)	F - GV (SF)	G - 90° (CY)	H - 45° (CY)	I - 22.5° (CY)	J - 11.25° (CY)
4"	4	4	4	4	4	-	-	-	-	-
6"	10	7	6	3	2	-	2	-	-	-
8"	18	12	10	5	3	3	4	2	-	-
10"	24	22	14	8	5	4	6	3	-	-

- NOTES:
- BEARING AREA OF CONG. THRUST-BLOCK BASED ON 250 PSI PRESSURE AND SAFE SOIL BEARING LOAD OF 1,000 POUNDS PER SQUARE FOOT.
 - AREAS MUST BE ADJUSTED FOR OTHER PIPE SIZES, PRESSURES AND SOIL CONDITIONS.
 - CONCRETE BLOCKING SHALL BE CAST IN PLACE AND HAVE A MINIMUM OF 36 SQ. INCHES BEARING AGAINST THE FITTING.
 - BLOCK SHALL BEAR AGAINST FITTINGS ONLY AND SHALL BE CLEAR OF JOINTS TO PERMIT TAKING UP OR DISMANTLING OF JOINT.
 - CONTRACTORS SHALL INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATION PRESSURE UNDER ALL CONDITIONS OF SERVICE. TEST AT 250 PSI AT LOWEST POINT.

WATER MAIN THRUST BLOCKING DETAIL
 NOT TO SCALE



WATER METER DETAIL
 NOT TO SCALE

No.	DATE	BY	REVISION

P.O. Box 1132
 Freeland, WA 98249
 P: 360.331.4131
 F: 360.331.5131
 www.dcgengr.com



CALL 811
 2 BUSINESS DAYS
 BEFORE YOU DIG



BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES & ALL OTHER EX FEATURES & CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN & OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

OWNER: SILVER LAKE WATER SYSTEM
 WATER & WASTEWATER SERVICES, INC.
 PROJECT: SILVER LAKE - DEVELOPER EXTENSION
 TURNINGLEAF LN, OAK HARBOR, WA 98227
DETAILS

PROJ. MANAGER:	RLB
DESIGNED BY:	RLB
DRAWN BY:	SD/RLB
CHECKED BY:	RLB
SCALE:	SCALE
DATE:	REV. SHEET
5/25/2021	A 4
	OF 5

SHEET NUMBER
C05