

- 2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF VALDEZ STANDARD SPECIFICATIONS (CVSS) AND STANDARD DETAILS FOR STREETS, DRAINAGE, UTILITIES AND PARKS (APRIL 2003, AS AMENDED), AND THE SPECIFICATIONS.
- 3. THE LOCATION OF THE EXISTING FEATURES AND UTILITIES SHOWN IN THESE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES ENCOUNTERED AND RECORD THEIR LOCATION ON THE CONTRACT RECORD DRAWINGS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. CONTRACTOR SHALL ADJUST ALIGNMENT OR GRADE OF PROPOSED PIPING AS NECESSARY TO AVOID CONFLICTS WITH EXISTING UTILITIES.
- 4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION. THE PERMITS SHALL BE MAINTAINED ON THE PROJECT SITE.
- 5. ALL WORK IN CLOSE PROXIMITY TO EXISTING OVERHEAD TELEPHONE AND ELECTRIC UTILITIES SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL STATUTES, CODES AND GUIDELINES AND THE CLEARANCE REQUIREMENTS OF THE SERVING UTILITY.
- 6. LIMITS OF EXCAVATION SHOWN ON THE DRAWINGS ARE APPROXIMATE. ACTUAL LIMITS WILL BE DETERMINED BY THE ENGINEER BASED ON FIELD CONDITIONS.
- 7. ALL WORK SHALL BE PERFORMED WITHIN PUBLIC RIGHT-OF-WAY, PUBLIC USE EASEMENT, SLOPE EASEMENT, DRAINAGE EASEMENT, OR TEMPORARY CONSTRUCTION PERMIT AREA. ALL DISTURBED PROPERTY BEYOND THE SLOPE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION, UNLESS OTHERWISE NOTED.
- 8. ALL ORGANIC MATERIAL SHALL BE REMOVED FROM THE SUBGRADE TO A DEPTH TO BE DETERMINED BY THE ENGINEER. NO ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL SHALL BE UTILIZED FOR BACKFILL.
- 9. CONTRACTOR SHALL PROVIDE A RECORD DRAWING IN ACCORDANCE WITH THE REQUIREMENTS OF CVSS. THE CONTRACTOR SHALL SUBMIT RECORD SURVEY NOTES WITH THE RECORD DRAWINGS.
- 10. CONTRACTOR SHALL RESTORE DISTURBED PROPERTY TO PRE-CONSTRUCTION CONDITIONS, UNLESS OTHERWISE DIRECTED BY ENGINEER. PAYMENT FOR RESTORING DISTURBED PROPERTY SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE.
- 11. ALL WATER STATIONING IS PIPE STATIONING.
- 12. "BOP" IS DEFINED AS THE OUTSIDE BOTTOM OF PIPE. "INV" IS DEFINED AS THE INSIDE BOTTOM OF PIPE.
- 13. FURNISH AND INSTALL BOARD INSULATION (R-20) FOR BURIED UTILITIES BETWEEN THE STORM DRAIN IMPROVEMENTS AND THE WATER AND SEWER UTILITIES WHEN THE VERTICAL CLEARANCE IS LESS THAN THREE FEET. IF 18 INCHES OF VERTICAL SEPARATION BETWEEN WATER AND SEWER/STORM DRAIN MAINS CANNOT BE MAINTAINED THEN RELOCATION WILL BE REQUIRED.
- 14. WATER RESULTING FROM THE CONTRACTOR'S DEWATERING EFFORT MAY NOT BE PUMPED OR OTHERWISE DIVERTED INTO EXISTING STORM DRAINS UNLESS REQUIRED PERMITS INCLUDING, BUT NOT LIMITED TO, THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION ARE OBTAINED BY THE CONTRACTOR. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE ALLOWED TO DIVERT WATER FROM EXCAVATION ONTO ROADWAYS. THE CONTRACTOR SHALL PROVIDE DISPOSAL SITE FOR EXCESS WATER AND SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL PROVIDE COPIES OF PERMITS AND APPROVALS TO THE ENGINEER PRIOR TO BEGINNING DEWATERING.
- 15. ANY EXISTING SURVEY MONUMENTATION DISTURBED BY CONTRACTOR OPERATIONS SHALL BE REPLACED AT CONTRACTOR'S EXPENSE BY SURVEYOR LICENSED TO PRACTICE IN THE STATE OF ALASKA.
- 16. BOARD INSULATION FOR BURIED UTILITIES IS REQUIRED WHERE SEWER AND WATER MAINS HAVE LESS THAN 8 FEET OF COVER. BOARD INSULATION FOR BURIED UTILITIES SHALL BE RIGID BOARD, HIGH DENSITY EXTRUDED POLYSTYRENE, MINIMUM 60 PSI COMPRESSIVE STRENGTH, FOR UNDERGROUND INSTALLATIONS EQUIVALENT TO R-20 PER FOUR (4) INCH THICK INSULATION UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- 17. WATER TRENCH AND BEDDING SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.

WATER NOTES

- 1. ALL WATER MAINS AND FITTINGS SHALL BE DUCTILE IRON, CLASS 52.
- 2. MAXIMUM DEFLECTION OF PIPE PER JOINT SHALL NOT EXCEED 80% OF THE MANUFACTURER'S RECOMMENDED JOINT DEFLECTION (4 DEGREES).
- 3. ALL FITTINGS AND VALVES SHALL HAVE MECHANICAL JOINT CONNECTIONS UNLESS OTHERWISE SHOWN ON THE PLANS.
- 4. ALL MECHANICAL JOINTS SHALL BE RESTRAINED BY EBAA IRON MEGALUG, ROMAC INDUSTRIES ROMAGRIP, OR U.S. PIPE FIELD LOK GASKET.
- 5. INSTALL DUCTILE IRON LONG SOLID SLEEVE FITTING WITH RESTRAINED JOINTS WHERE CONNECTING DIP TO DIP OF THE SAME SIZE.
- 6. ALL WATER MAIN JOINTS SHALL BE RESTRAINED. U.S. PIPE FIELD LOK GASKET OR EQUAL.
- ALL DUCTILE IRON PIPE, CAST IRON PIPE, AND FITTINGS SHALL BE WRAPPED WITH ONE LAYER OF 8-MIL THICK POLYETHYLENE ENCASEMENT "BAGGIES" IN ACCORDANCE WITH "METHOD A" OF ANSI/AWWA A21.5/C105.
- MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL AND 18 INCHES VERTICAL SEPARATION BETWEEN WATER AND SEWER MAINS AND SERVICES. WHERE WATER AND SEWER MAINS CROSS, SEWER MAIN JOINTS SHALL BE AT LEAST 9 FEET FROM WATER JOINTS.
- 9. MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL AND 18 INCHES VERTICAL SEPARATION BETWEEN WATER MAINS AND STORM DRAINS. WHERE WATER AND STORM DRAINS CROSS, STORM DRAIN JOINTS SHALL BE AT LEAST 9 FEET FROM WATER JOINTS.

ENGINEERING GROUP, LLC

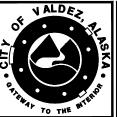
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REVISION				REVISION			
REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY





SCALE	
HOR. N/A VER. N/A	
DESIGNED BY CB	
DRAWN BY CB	
CHECKED BY PB	

ROJECT NO: CITY OF VALDEZ, ALASKA
VMS WATER MAIN RECONNECTION

TYPICAL NOTES

PROJECT NO. 20307.00

WATER GRID SEWER GRID

SHEET W2

TO THE STEEL APPROVED BY PB STATUS: FINAL DATE: JULY 2017