

GENERAL

TRACER WIRE SHALL BE INSTALLED WITH ALL BURIED MAIN AND SERVICE PIPELINES IN THE WATER AND WASTEWATER SYSTEM. ALL TRACER WIRE SHALL HAVE HDPE INSULATION INTENDED FOR DIRECT BURY, COLOR CODED PER AMERICAN PUBLIC WORKS ASSOCIATION (APWA) STANDARD FOR THE SPECIFIC UTILITY BEING MARKED. WIRE INSULATION FOR POTABLE WATER WILL BE COLORED BLUE AND WIRE INSULATION FOR WASTEWATER WILL BE COLORED GREEN. WIRE INSULATION FOR THE LEAD FROM THE GROUNDING ANODE WILL BE COLORED RED.

OPEN TRENCH - TRACER WIRE SHALL BE #12 AWG COPPER CLAD STEEL, OR SOLID COPPER, HIGH STRENGTH WITH MINIMUM 300 LB. BREAK LOAD, WITH MINIMUM 30 MIL HDPE INSULATION THICKNESS. APPROVED MANUFACTURER: COPPERHEAD INDUSTRIES, PRO LINE SAFETY PRODUCTS, OR APPROVED EQUAL.

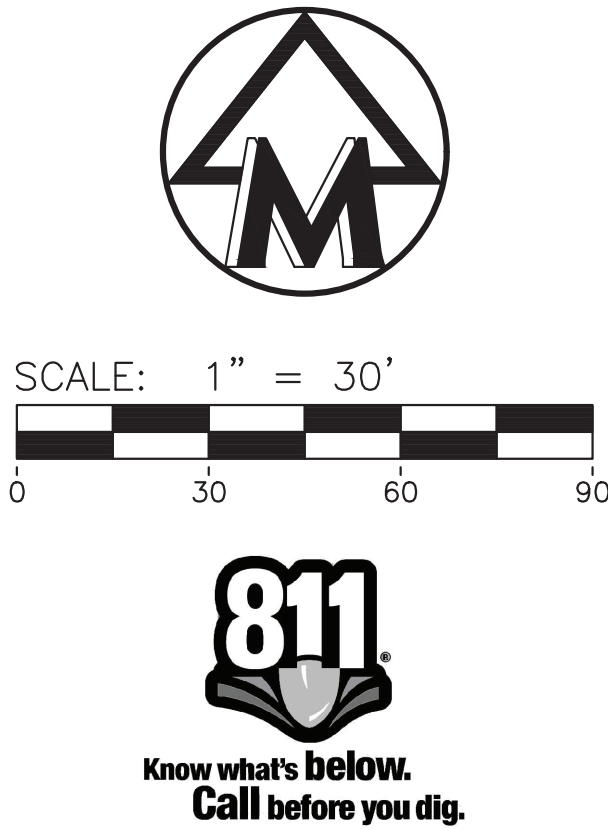
ALL MAINLINE TRACER WIRE MUST BE INTERCONNECTED IN INTERSECTIONS, AT MAINLINE TEES AND MAINLINE CROSSES. AT TEES, THE THREE WIRES SHALL BE JOINED USING A SINGLE 3-WAY LOCKABLE CONNECTOR. AT CROSSES, THE FOUR WIRES SHALL BE JOINED USING A 4-WAY CONNECTOR. USE OF TWO 3-WAY CONNECTORS WITH A SHORT JUMPER WIRE BETWEEN THEM IS AN ACCEPTABLE ALTERNATIVE. DIRECT BURY WIRE CONNECTORS -- SHALL INCLUDE 3-WAY LOCKABLE CONNECTORS AND MAINLINE TO LATERAL LUG CONNECTORS SPECIFICALLY MANUFACTURED FOR USE IN UNDERGROUND TRACER WIRE INSTALLATION. CONNECTORS SHALL BE DIELECTRIC SILICONE FILLED TO SEAL OUT MOISTURE AND CORROSION, AND SHALL BE INSTALLED IN A MANNER SO AS TO PREVENT ANY UNINSULATED WIRE EXPOSURE. NO LOCKING FRICTION FIT, TWIST ON OR TAPED CONNECTORS ARE PROHIBITED. APPROVED MANUFACTURERS: BURNDY SPLIT BOLD CONNECTOR, COPPER TO COPPER, SQUARE HEAD WITH KING INNOVATION SPLIT BOLT AQUA HOUSING 6910S OR COPPERHEAD INDUSTRIES SNAKEBITE CONNECTOR, OR APPROVED EQUIVALENTS.

ALL TRACER WIRE TERMINATION POINTS AT WATER SERVICE CURB STOPS AND SEWER SERVICE CLEANOUTS MUST UTILIZE AN APPROVED TRACER WIRE ACCESS BOX (ABOVE GROUND ACCESS BOX OR GRADE LEVEL/IN-GROUND ACCESS BOX AS APPLICABLE), SPECIFICALLY MANUFACTURED FOR THIS PURPOSE AS SPECIFIED BELOW FOR THE TYPE OF PIPELINE. ALL GRADE LEVEL/IN-GROUND ACCESS BOXES SHALL BE APPROPRIATELY IDENTIFIED WITH "SEWER" OR "WATER" CAST INTO THE CAP AND BE COLOR CODED. A MINIMUM OF TWO (2) FEET OF SERVICE LOOP WIRE IS REQUIRED IN ALL TRACER WIRE ACCESS BOXES. AFTER THE MINIMUM FINAL ELEVATION, ALL TRACER WIRE ACCESS BOXES MUST INCLUDE A MANUALLY INTERRUPTIBLE CONDUCTIVE/CONNECTIVE LINK BETWEEN THE TERMINAL(S) FOR THE TRACER WIRE CONNECTION AND THE TERMINAL FOR THE GROUNDING ANODE WIRE CONNECTION. GROUNDING ANODE WIRE SHALL BE CONNECTED TO THE IDENTIFIED (OR BOTTOM) TERMINAL ON ALL ACCESS BOXES.

TRACER WIRE MUST BE PROPERLY GROUNDED AT ALL DEAD ENDS/STUBS AND AT ALL CONNECTION POINTS TO EXISTING SYSTEMS WITHOUT TRACER WIRE. GROUNDING OF TRACER WIRE SHALL BE ACHIEVED BY USE OF A DRIVE-IN MAGNESIUM GROUNDING ANODE ROD WITH A MINIMUM OF 20 FEET OF #12 RED HDPE INSULATED COPPER CLAD STEEL OR SOLID COPPER WIRE CONNECTED TO ANODE (MINIMUM 1 LB.) SPECIFICALLY MANUFACTURED FOR THIS PURPOSE, AND BURIED AT THE SAME ELEVATION AS THE UTILITY. WHEN GROUNDING THE TRACER WIRE AT DEAD ENDS/STUBS, THE GROUNDING ANODE SHALL BE INSTALLED IN A DIRECTION 180 DEGREES OPPOSITE OF THE TRACER WIRE, AT THE MAXIMUM POSSIBLE DISTANCE. WHERE THE ANODE WIRE WILL BE CONNECTED TO A TRACER WIRE ACCESS BOX, A MINIMUM OF TWO (2) FEET OF SERVICE LOOP IS REQUIRED AFTER MEETING FINAL ELEVATION.

AT ALL WATER AND WASTEWATER MAINLINE DEAD-ENDS, AND AT WATER SERVICE LINE CURB STOPS AND WASTEWATER SERVICE LINE CLEANOUTS CLOSEST TO THE PROPERTY BEING SERVED, TRACER WIRE SHALL GO TO GROUND USING AN APPROVED CONNECTION TO A DRIVE-IN MAGNESIUM GROUNDING ANODE ROD, BURIED AT THE SAME DEPTH AS THE SERVICE. (SEE GROUNDING) IF NO MAINLINE TRACER WIRE EXISTS AT A CONNECTION POINT, MAINLINE TRACER WIRE SHALL NOT BE CONNECTED TO EXISTING CONDUCTIVE PIPES. TREAT AS A MAINLINE DEAD END, GROUND USING AN APPROVED WATERPROOF CONNECTION TO A GROUNDING ANODE BURIED AT THE SAME DEPTH AS THE MAIN. ALL SERVICE LATERAL TRACER WIRE SHALL BE A SINGLE WIRE, CONNECTED TO THE MAINLINE TRACER WIRE USING A MAINLINE TO LATERAL LUG CONNECTOR, INSTALLED WITHOUT CUTTING/SPlicing THE MAINLINE TRACER WIRE. IN OCCURRENCES WHERE AN EXISTING TRACER WIRE IS ENCOUNTERED ON AN EXISTING UTILITY THAT IS BEING EXTENDED OR TIED INTO, THE NEW TRACER WIRE AND EXISTING TRACER WIRE SHALL BE CONNECTED USING APPROVED SPLICE CONNECTORS.

A MAINLINE TRACER WIRE MUST BE INSTALLED, WITH ALL SERVICE LATERAL TRACER WIRE PROPERLY CONNECTED TO THE MAINLINE TRACER WIRE, TO ENSURE FULL TRACING/LOCATING CAPABILITIES FROM A SINGLE CONNECTION POINT. TRACER WIRE ON ALL SEWER SERVICE LATERALS MUST TERMINATE AT AN APPROVED TRACER WIRE ACCESS BOX COLOR CODED GREEN AND LOCATED DIRECTLY ADJACENT TO THE SEWER SERVICE CLEANOUT CLOSEST TO THE STRUCTURE BEING SERVED. A GROUNDING ANODE SHALL BE INSTALLED BENEATH THE CLEANOUT AT THE DEPTH OF THE SERVICE. ACCESS BOX APPROVED MANUFACTURER: COPPERHEAD INDUSTRIES SNAKE-PIT OR APPROVED EQUAL.



	EXIST. UTILITY POLE
	EXIST. OVERHEAD UTILITY LINE
	EXIST. WATER VALVE
	EXIST. HYDRANT
	PROP. WATER MAIN
	PROP. HYDRANT
	PROP. GATE VALVE IN BOX
	EXIST. STORM SEWER
	EXIST. CATCH BASIN OR INLET
	PROP. STORM SEWER
	PROP. CATCH BASIN OR INLET
	PROP. UNDERGROUND STORM SEWER STORAGE
	EXIST. SANITARY SEWER
	PROP. SANITARY SEWER
	SIGN
	POST
	EXIST. GAS VALVE
	WELL
	FENCE
	PROP. ELEC. TRANSFORMER
	PROP. ELECTRIC LINE
	PROP. GAS LINE

1. All materials, workmanship, and construction shall meet or exceed the standards and specifications set forth in the Eagle River Water and Sanitation District Rules and Regulations. Where there is conflict between these Plans and the Rules and Regulations or any applicable Standards, the more stringent Standard shall apply. All Work shall be inspected and approved by the ERWSD Construction Inspector.
2. Contractor shall schedule a mandatory pre-construction meeting at the construction site a minimum of three (3) business days after the plans have been submitted. Participants shall include, but are not limited to: the Applicant; Applicant's contractor, excavator and engineer; and the District representative. Construction may begin once the meeting has concluded and the District Inspector has signed off.
3. The Contractor shall have one (1) signed copy of the approved Plans, one (1) copy of the appropriate criteria and specifications, and a copy of any permits and extension agreements needed for the job onsite at all times.
4. Provide a complete Bill of Materials for all proposed water and wastewater infrastructure
5. The Contractor shall be responsible for all aspects of safety including, but not limited to, excavation, trenching, shoring, traffic control, and security.
6. If during the construction process conditions are encountered which could indicate a situation that is not identified in the Plans or specifications, the Contractor shall contact the ERWSD Construction Inspector immediately
7. Submit traffic control plans as approved by the appropriate governing agency
8. The Contractor is responsible for providing all labor and materials necessary for the completion of the intended improvements shown on these drawings or as designated to be provided, installed, or constructed unless specifically noted otherwise.
9. The Contractor shall be responsible for recording As-Built information on a set of record drawings kept on the construction site and available to the ERWSD Construction Inspector at all times. All as-built information shall be field surveyed under the direct care and supervision of a licensed Professional Land Surveyor.
10. The contractor shall obtain locates prior to any excavation
11. The contractor is responsible for any damage to any utility facilities as a result of their actions. The contractor shall make the required repairs immediately to the satisfaction of the affected utility.
12. Eagle River Water and Sanitation District does not guarantee the accuracy of the locations of existing pipelines, manholes, hydrants, valves and service lines. If field conditions are found to be different than shown on the plans, the contractor shall notify the inspector and design engineer immediately.
13. All trenching and backfill shall be in accordance with Appendix E of the ERWSD Rules and Regulations.

JOB No. <b>20067</b>		DATE: 5/25/23	SHEET 15 OF 29
REVISIONS:		REV. DATE	
		CAAD:	
		ENG: RCW	
		PM: KEB	
		TECH:	
		/20067011	

# MIDTOWN VILLAGE PUD

## OVERALL UTILITY PLAN

# 15

CLIENT	
10TH MOUNTAIN BUILDERS	
1632 MAIN STREET	
MINTURN, CO 81645	
JEFFREY D. ARMISTEAD	
970-471-0618	

**M I D W E S T E R N**

**C O N S U L T I N G**

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