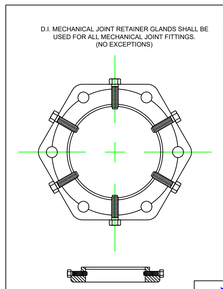
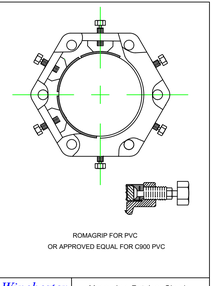
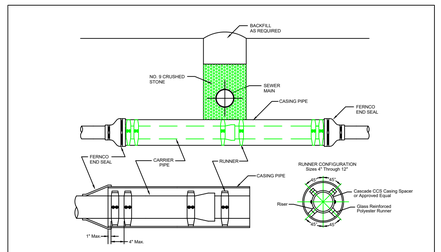
D.I. MECHANICAL JOINT RETAINER GLANDS SHALL BE USED FOR ALL MECHANICAL JOINT FITTINGS. (NO EXCEPTIONS)





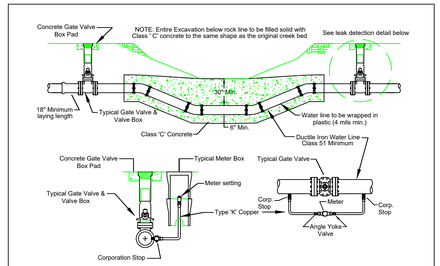
ROMAGRIP FOR PVC
OR APPROVED EQUAL FOR C900 PVC

Winchester Municipal Utilities	Mega - Lug Retainer Gland		
	Scale: 1" = 3"	Date: AUG. 2022	Dwg. No.: SDW - 13

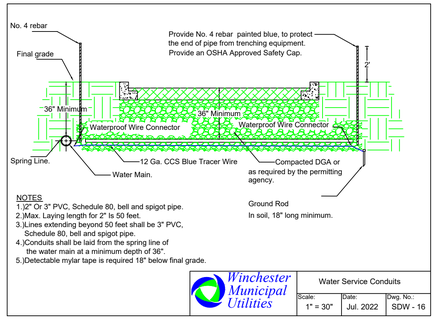


* SEE NOTES 2 & 10, SDW - 1

Winchester Municipal Utilities	Water Line Encasement Detail		
	Scale: 1" = 12"	Date: Sep. 2020	Dwg. No.: SDW - 14

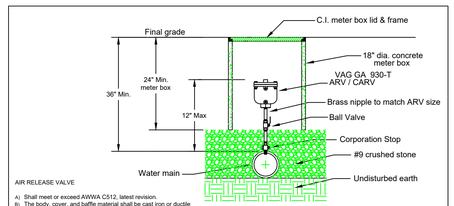


Winchester Municipal Utilities	Typical Creek Crossing		
	Scale: 1" = 30"	Date: Jan. 2004	Dwg. No.: SDW - 15



NOTES
1.)2" Or 3" PVC, Schedule 80, bell and spigot pipe.
2.)Max. Laying length for 2" is 50 feet.
3.)Lines extending beyond 50 feet shall be 3" PVC, Schedule 80, bell and spigot pipe.
4.)Conduits shall be laid from the spring line of the water main at a minimum depth of 36".
5.)Detectable mylar tape is required 18" below final grade.

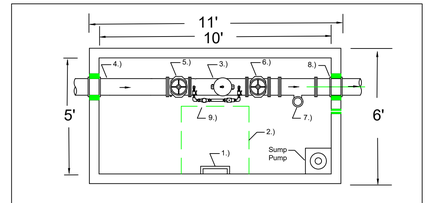
Winchester Municipal Utilities	Water Service Conduits		
	Scale: 1" = 30"	Date: Jul. 2022	Dwg. No.: SDW - 16



AIR RELEASE VALVE

A) Shall meet or exceed AWWA C512, latest revision.
B) The body, cover, and baffle material shall be cast iron or ductile iron conforming to ASTM A126 or A536.
C) The float and trim material shall be stainless steel.
D) The resilient seat material shall be chloramine resistant.
E) Air release shall automatically release small pockets of air from the pipeline while in operation and under pressure.
F) The valve shall have a 3/32" orifice for a minimum working pressure of 150 PSI.
G) The valve inlet and outlet shall be threaded.
H) Except where otherwise specified, interior ferrous surfaces, exclusive of stainless steel surfaces, of all valves shall be coated with two part thermosetting epoxy coating or fusion bonded epoxy coating. Flange faces of valves shall not be epoxy coated. Exterior surfaces shall be coated with primer. The epoxy shall be suitable for use with potable water.

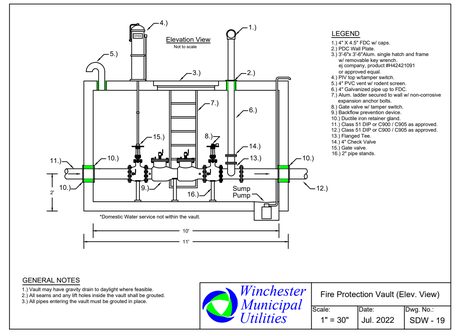
Winchester Municipal Utilities	Air Release Valve (ARV)		
	Scale: 1" = 12"	Date: June 2022	Dwg. No.: SDW - 17



LEGEND
1.) Alum. ladder secured to wall w/ non corrosive expansion anchor bolts.
2.) EJ 3'-6" x 3'-6" alum. single hatch & frame w/ removable key wrench w/fall protection.
Drill to accomodate Remote Meter Antenna.
3.) Backflow prevention device w/ detector meter.
4.) Class 51 DIP or C900 / C905 as approved water main.
5.) Gate valve(NRS) w/ tamper switch.
6.) Gate valve(NRS).
7.) 4" Galvanized pipe up to FDC.
8.) Ductile iron retainer gland.
9.) NECO T-10 E-Coder R900i Integrated RF Meter

PLAN VIEW
Not to Scale

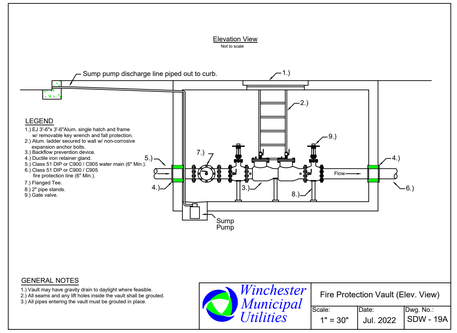
Winchester Municipal Utilities	Fire Protection Vault (Plan View)		
	Scale: 1" = 24"	Date: Jul. 2022	Dwg. No.: SDW - 18



LEGEND
1.) 4" X 4'-0" FOC w/ caps.
2.) 4" PDC Vent Pipe.
3.) 3'-6"x 3'-6"Alum. single hatch and frame w/ removable key wrench, ej company, product #HD2421091 or approved equal.
4.) 4" Flanged Check switch.
5.) 4" PVC vent w/ rodent screen.
6.) 4" Galvanized pipe up to FDC.
7.) Alum. ladder secured to wall w/ non-corrosive expansion anchor bolts.
8.) Gate valve w/ tamper switch.
9.) Backflow prevention device.
10.) Ductile iron retainer gland.
11.) Class 51 DIP or C900 / C905 as approved.
12.) Class 51 DIP or C900 / C905 as approved.
13.) Flanged Tee.
14.) 4" Check Valve
15.) Gate valve.
16.) 2" pipe stands.

GENERAL NOTES
1.) Vault may have gravity drain to daylight where feasible.
2.) All seams and any lift holes inside the vault shall be grouted.
3.) All pipes entering the vault must be grouted in place.

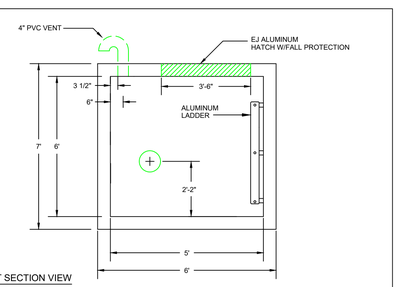
Winchester Municipal Utilities	Fire Protection Vault (Elev. View)		
	Scale: 1" = 30"	Date: Jul. 2022	Dwg. No.: SDW - 19



LEGEND
1.) EJ 3'-6"x 3'-6"Alum. single hatch and frame w/ removable key wrench and fall protection.
2.) Alum. ladder secured to wall w/ non-corrosive expansion anchor bolts.
3.) Backflow prevention device.
4.) Class 51 DIP or C900 / C905
5.) Class 51 DIP or C900 / C905 water main (6" Min.).
6.) Class 51 DIP or C900 / C905 fire protection line (6" Min.)
7.) Flanged Tee.
8.) 2" pipe stands.
9.) Gate valve.

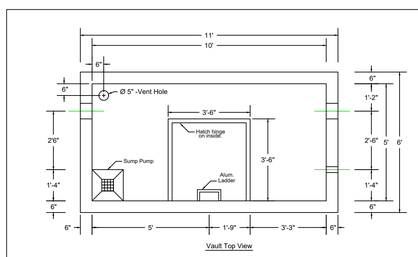
GENERAL NOTES
1.) Vault may have gravity drain to daylight where feasible.
2.) All seams and any lift holes inside the vault shall be grouted.
3.) All pipes entering the vault must be grouted in place.

Winchester Municipal Utilities	Fire Protection Vault (Elev. View)		
	Scale: 1" = 30"	Date: Jul. 2022	Dwg. No.: SDW - 19A



VAULT SECTION VIEW

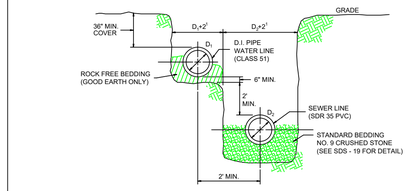
Winchester Municipal Utilities	Fire Protection Vault (Section View)		
	Scale: 1" = 24"	Date: July 2019	Dwg. No.: SDW - 20



Vault Top View

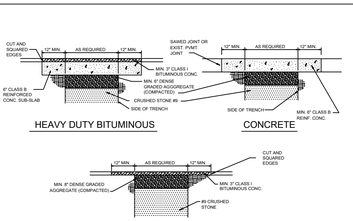
General Notes
1.) Vault may have gravity drain to day light where feasible.
2.) All seams and any lift holes inside the vault shall be grouted.
3.) All pipes entering the vault shall be grouted.
4.) The vault floor shall have 1" slope to drain.

Winchester Municipal Utilities	Fire Protection Vault (Top View)		
	Scale: 1" = 24"	Date: July 2019	Dwg. No.: SDW - 21



NOTE:
WATER LINES AND SEWER LINES LAID ON SAME ELEVATION MUST BE SEPERATED A MINIMUM DISTANCE OF 10'.

Winchester Municipal Utilities	Typical Section Through Trench		
	Scale: 1" = 18"	Date: Apr. 2021	Dwg. No.: SDW - 22



NOTE:

Pavement Restoration Requirements of State,County, and City Roadways and Streets will be as dictated by the conditions outlined within the issuing agency's permits.

Winchester Municipal Utilities	Pavement Replacement		
	Scale: 1" = 24"	Date: Sep. 2020	Dwg. No.: SDW - 23

Winchester Municipal Utilities

WATER DETAIL SHEETS 13 THRU 23

WINCHESTER MUNICIPAL UTILITIES

PLOTTED
Jul. 2022 by RLL

Scale: 1" = XX	Date: MM/YYYY
Drawn By: XXX	Checked By: XXX
Proj. Name: XXX	Proj. No.: XXX

SHEET
2 OF 3