

EDWARDSVILLE WATER AUTHORITY
Water Main Installation Rules for Contractors
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Revised 09/24/2024

ALL FITTINGS ARE REQUIRED TO BE DOMESTIC ONLY

- 1) **Prior to issuing a Contract**, 1 set of finished plans is required to be reviewed by EWA Utility Manager & Engineer. EWA requests our mains to be run at the back of the easements, no mains should be run parallel between sidewalk and curb nor under sidewalks.
- 2) All water lines installed will be SDR21 PVC (200 PSI) unless otherwise stated. All areas with extreme high pressure or rock conditions may require Yelomine, HDPE Fusion, C900 or Ductile Iron pipe at the discretion of Edwardsville Water Authority.
- 3) The following Hydrants only, are accepted by Edwardsville Water Authority:
(Kennedy_K81 only) (Muller_A423 only) (M & H)
(Eclipse_No2) ***No hydrants will be less than 3" throat. ***
- 4) All required Brass Saddles or Fittings will be (((LEAD FREE))) & manufactured by:
Ford ***Mueller*** ***Romac for 12" or bigger***
- 5) All Fittings 2' or larger will be Ductile Iron with **grip rings** or **mega lugs**. No PVC glue joints or slip on gasket fittings will be allowed. All Valves will have posi caps installed.
- 6) All hydrant installations will be as follows; --1st__a hydrant (from list above) --2nd--12" or 18" swivel adaptor (no substitute) --3rd__Gate valve (same size as hydrant) --4th__foster adaptor _or_ some form of locking it to the main. Hydrant & Valve will have minim 4" thick block under & hydrant to have blocks on sides and back to prevent kicking or side movement. Last must have 8" of rock (3/4" to 1" in size **dust free**) one foot deep above base of hydrant for hydrant drain.
- 7) Any mains and service lines of any size under blacktop, concrete, gullies, creeks, Etc... are to have casing pipe (PVC or Steel) Must always use casing spacers (or) pipe bells must be lockable.
- 8) ___All installed pipes will have **36 inches of cover from the top of pipe**.
___All meters are to be moved to the new installed main. (Unless EWA says different)
- 9) **All water lines will have trace wire taped to top of pipe and warning tape installed 2 feet above the main.**
- 10) All new lines will be pressure tested at the completion of construction. The pressure requirements will be the LOWEST PSI reading on the pipe. ((No pipe or fittings less than 200 psi will be allowed, that means 200 psi is minimum test pressure.)) The contractor is responsible for getting the pressure test completed. The pressure will be held for 2 hours at which time, will be pumped back up to 200 psi to account for gallons lost by AWWA standards. You must be able to give exact gallons if after 2 hours main requires pumping back up. **All pipe and fitting will be tested.**
*****1 psi can fail AWWA'S standards depending on size of pipe and length.*****

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11) Bedding Pipe

A) If the pipe is installed in rock areas, (EWA inspector decides this) the pipe will be bedded with clean, dust free rock NOT larger than $\frac{3}{4}$ ", clean media or Sand, Edwardsville Water. may allow screened topsoil based on its condition.

b) **Must maintain a minimum of 8" bedded space around all sides of pipe.**

12) Subdivision crossover's has 2 options to choose from see opt. A or B both are acceptable to EWC.

A). In All Subdivisions, all crossover will consist of a MJ Tee, and a 2 inch MJ Gate Valve, 2 inch SDR 21 PVC pipe with a valve & hydrant at end. **cased with 4 inch PVC or Steel Casing.** Tracer wire is to be taped to the 2" pipe and is to be connected to the main & ran outside of hydrants valve box to daylight.

B). **Optional Set Up** -- Saddle main with, 1" Corporation Stop, 1" CTS tubing, inside 2" casing across road stopping three-foot past curb on both sides, install 1" x $\frac{3}{4}$ " x $\frac{3}{4}$ " Y with $\frac{3}{4}$ " **BLUE** CTS tubing and a $\frac{3}{4}$ PJ x $\frac{3}{4}$ MIPT with a female cap at both ends and stopping where meter should be set (24" deep). (*You are responsible for flushing each of these set ups out.*) MAX TWO METERS PER 1 inch CROSSOVER & 1 meter per meter pit. Must have permanent marker pole at the end of the cap throughout entire project up to the day meter is set. Must have adjustable height valve box over corp-stop at main. Tracer wire is to be taped to the $\frac{3}{4}$ " & 1" tubing and is to be connected to the main's tracer wire. Must leave 1 foot of tracer wire rolled up at the cap for future meter set.

13) **Contractor will be responsible for chlorinating the new line.** If line fails bacteria sample due to lack of chlorine, contractor will be responsible for injecting chlorine in the main until it passes.

14) Contractor will be responsible for de-chlorinating the water during the flushing process.

15) All new lines will be **filled and flushed** by Edwardsville Water Authority employees. At no time will any water be flushed without EWA's hydrant meter. (*for water loss control*)

16) Edwardsville Water Authority will take the Bacteria Samples as per State requirements.

17) Edwardsville Water Authority will inspect all aspects of water main installation. The contractors will notify EWA two (2) weeks prior to starting any construction. *Any main or crossover that been covered up before inspection, will be **uncovered at contractors' expense** for inspection.*

18) When a water line project is finished, **(1) set of Clean as Built Plans by installer and a (Bill of Sale) of the total cost of the project will be submitted to Edwardsville Water Authority. Office before the project is considered completed and before meters can be sold.**

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Materials, Manufacturers and Current Suppliers for

****** "Meter Sets" ******

___ Saddle (ex 8 inch x $\frac{3}{4}$ inch PVC) – Ford Meter Box or Mueller or Romac
(Current Suppliers Utility Supply and HD Supply)

___ $\frac{3}{4}$ Inch Corporation Stop – Ford Meter Box or Mueller
(Current Suppliers HD Supply and Waller's Meter)

___ PE Tubing – ADS (Advanced Drainage Systems)
(Current Supplier HD Supply)

___ Setter (Straight or PRV) – Ford Meter Box
(Current Supplier Waller's Meter)

___ Water Meter – Badger – Orion Radio Read
(Current Supplier – Waller's Meter)

___ 20 inch x 24 inch Meter Pit (Crock) – Fratco
(Current Suppliers HD Supply, Utility Supply, EJP)

___ Lid and Ring – Tyler with Large Nut (with hole for transponder)
(Current Supplier Utility Supply)

___ $\frac{3}{4}$ Inch Adaptors – Mueller
(Current Supplier HD Supply and Waller's Meter)

___ Tracer Wire – Regency Wire or Agave Wire
(Current Supplier HD Supply)

___ $\frac{3}{4}$ inch PRV - Honeywell
(Current Supplier Waller's Meter)