Notes For All Services - 50 thru 300:

1. When the standard vault dimensions are not applicable, such as when additional space is required for special pipe, fittings, additional meters, etc. Wichita Water & Sewer shall design a vault with the required dimensions.

2. The vault shall be poured concrete, cement blocks (voids to be completely filled with 2500 P.S.I. concrete), or approved precast structure (such as Clutter Standard vaults).

3. Vault location to be determined by Wichita Water & Sewer prior to construction and approved by Department's field supervisor prior to installation. A final inspection will be required for acceptance. Vault location standards include: not to be located where subjected to vehicular loads, not to be located in any right-of-way or utility easement, and must be located on the property being served.

4. The manhole ring and lid shall be Neenah R-6034 Frame with Type "C" Solid Lid and Drop Down Handle or US Foundry APS-30x30 (Aluminum).

5. The meter reading lid and ring (where applicable) shall be the current standard 250 Wichita Water & Sewer pattern. The lid and opening shall be located directly above water meter register.

6. For all services larger than 50 the contractor shall provide an outlet flange connection as shown 300 mm from the inside wall. Inlet and outlet wall sleeves shall be provided and installed by the contractor and shall be in alignment with one another. The inlet and outlet pipe shall be ductile iron pipe, cement lined, Class 150 per Wichita Water & Sewer Department Spec. #14533 and shall be continuous through vault wall and joint no less than 600 mm from the exterior wall of vault. Flanges of inlet and outlet pipes shall be in proper alignment and bolt pattern shall be rotated in such a way that valves and other fittings shall be in their proper vertical alignment when installed.

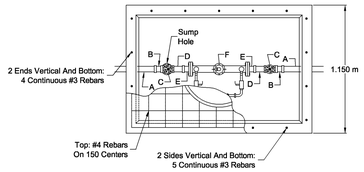
7. For all services larger than 100 the contractor shall install a mega lug, restrained joint, or approved equal on the exterior walls of the vault, which shall be manufactured of ductile iron conforming to ASTM A 536-80, heat treated to a minimum hardness of 370 BHN and have a working pressure of at least 250 P.S.I. For all 75 and 100 services the contractor shall install a vault clamp on the exterior walls of the vault.

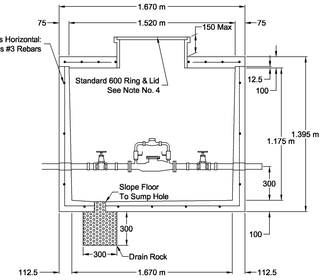
8. For all services larger than 150 the contractor shall install access steps at 400 centers and 150 from the inside wall. Approved material shall be Clay & Bailey No. 2102, aluminum steps or Copolymer Polypropylene Plastic PS2-PF. Optional contact is Wichita Concrete Pipe Co.

9. The "Confined Space Warning" sign shall be fastened to the top of all vaults. If necessary for lanscaping or site considerations, the sign may be fastened to the vault lid if it does not impede access to the handle. Acceptable materials: Aluminum 73415HH, Plastic 73439HH, or S.A. Vinyl 73463HH.

10. All meters, primary meters, by-pass meters, etc. shall be a cubic foot meter (i.e. Sensus, Badger, or current Department model). Gallon meters shall not be accepted.

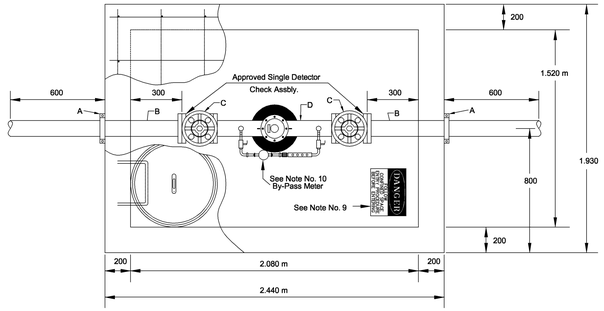
11. Additional Notes For Fire Services:
    - A. A post indicator valve (PIV) is an option for the outlet valve and may be requested by the architect or owner. The PIV is not required by City of Wichita ordinance.
    - B. When Siamese connections are required by the Wichita Fire Department, refer to City Code Section 15.01.090, Section 103.1.1 amended 1994 Uniform Fire Code. Contact Wichita Fire Department, Fire Prevention at 316.268.4441 for additional information.
    - C. The backflow preventer device shall not be installed in the vault and must be located in the building.
    - D. The property owner is responsible for completing an "Application for Private Fire Protection" prior to final acceptance of the project.





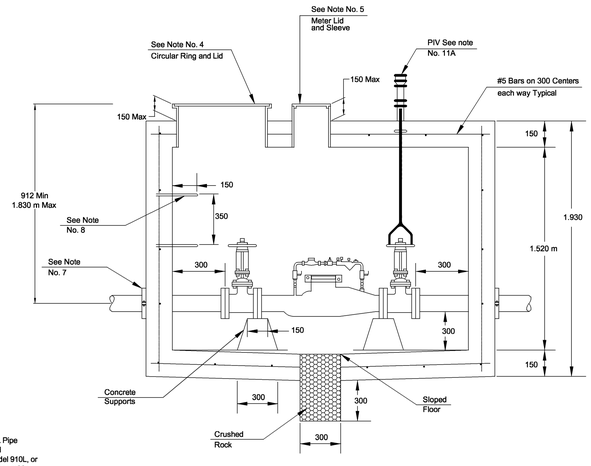
A - 50 PVC or Copper
B - 50 F PVC to M Iron or 2" F Copper to M Iron
C - 50 Bronze IPT Gate Valve, Wheel Operated
D - 50 x 100 or 50 x 150 Brass Nipple
E - Lok-Pak Meter Couplings
F - 50 Febco Model 406 Detector Check or approved equal with metered bypass assembly

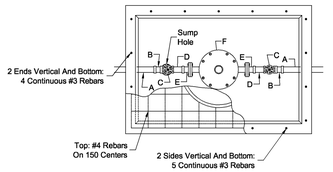
50 Fire Service

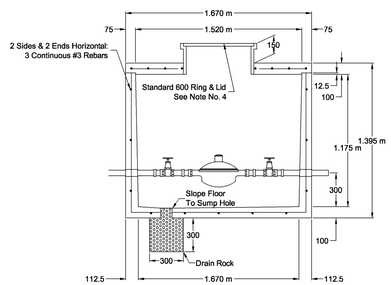


A - Mega Lug (See Note 7)
B - Min. 1.100 m Piece of FL x PE DICL Pipe
C - Flange Gate Valve, Wheel Operated
D - Ames Model 1000DCV, Wilkins Model 910L, or approved equal with metered by-pass assembly

100 thru 200 fire service



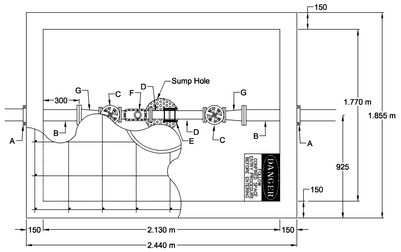


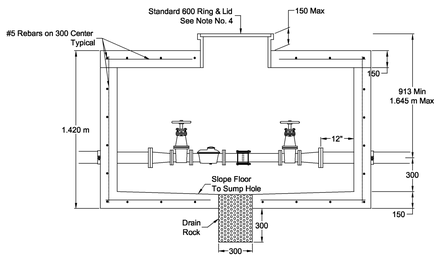


A - 50 PVC or Copper (to be extended completely through vault to ensure proper alignment)*
B - 50 F PVC to M Iron or 50 F Copper to M Iron**
C - 50 Bronze IPT Gate Valve, Wheel Operated**
D - 50 x 100 or 50 x 150 Brass Nipple**
E - Lok-Pak Meter Couplings**
F - 50 Meter**

* = Contractor Installed
** = Installed By Wichita Water & Sewer

50 DS

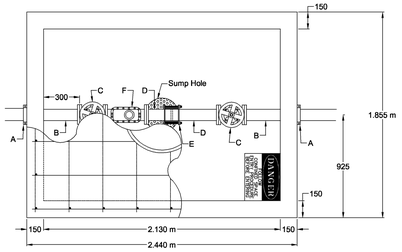


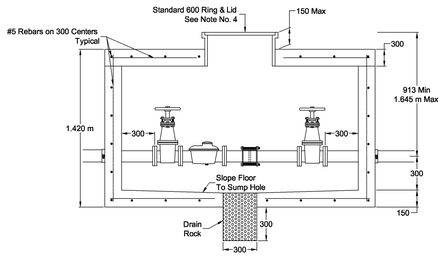


A - 100 Vault Clamp*
B - Min. 900 Piece of 100 FL x PE DICL Pipe*
C - 75 Flange Gate Valve, Wheel Operated**
D - 75 FL x PE Pipe**
E - 75 Flax Coupling**
F - 75 Meter**
G - 75 x 100 FL Reducer**

* = Contractor Installed
** = Installed By Wichita Water & Sewer

75 DS





A - 100 Vault Clamp*
B - Min. 900 Piece of 100 FL x PE DICL Pipe*
C - 100 Flange Gate Valve, Wheel Operated**
D - 100 FL x PE Pipe**
E - 100 Flex Coupling**
F - 100 Meter**

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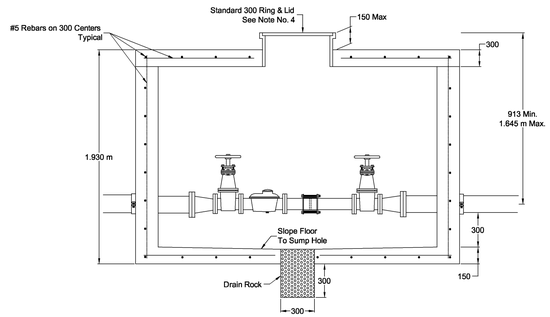
100 DS



A - 150 Mega Lug (See Note 7)*
B - Min. 900 Piece of 150 FL x PE DICL Pipe*
C - 100 Flange Gate Valve, Wheel Operated**
D - 100 FL x PE Pipe**
E - 100 Flex Coupling**
F - 100 Meter**
G - 150 x 100 Flange Reducer**

* = Contractor Installed
** = Installed By Wichita Water & Sewer

150 DS w/ 100

THE CITY OF WICHITA
WATER & SEWER DEPT.
CITY HALL – EIGHTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4422
(316) 268-4514 FAX

STANDARD VAULT DETAILS AND METER ASSEMBLIES 25 mm to 300 mm

D. R. WARREN – DIRECTOR

PROJECT NUMBER 54-87 K-8258-01
INDEX CODE 7
DATE 2002
SHEET 146 OF 556

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