Standards
for
Taps, Services, Meters, and Backflow Prevention

January 1, 2008

Tammi L. Clements - Director, Department of Water

City of Dayton
One Stop Shop Reviews
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Dayton, Ohio 45402
Phone: 937-333-6804
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CITY OF DAYTON
DEPARTMENT OF WATER
WATER SERVICE INSTALLATION COSTS

The following is the schedule of prices to be charged by the Department of Water, Division of Water Distribution, City of Dayton, Ohio for WATER SERVICE taps, water service excavation, laying of pipe, backfilling and restoration of the surfaces in streets and alleys on and after January 1, 2008.

SCHEDULE OF PRICES - Water Services Excavation, Backfill and Restoration of Surfaces.
Prices are for 2" services and smaller.

Class 1 - Concrete Pavement	$ 190 per L.F.
Class 2 - Brick Pavement on Concrete Base	$ 290 per L.F.
Class 3 - Asphalt on Concrete Base	$ 200 per L.F.
Class 4 - Asphalt on Brick Base	$ 315 per L.F.
Class 5 - Asphalt on Stone or Gravel Base	$ 140 per L.F.
Class 6 - Gravel Roadway (plain or oiled)	$ 120 per L.F.
Class 7 - Concrete Sidewalks and Driveways	$ 160 per L.F.
Class 8 - Sodded Areas	$ 110 per L.F.
Class 9 - Grass or Unimproved Areas	$ 60 per L.F.

* Contractor to call Civil Engineering at 333-3839 to obtain street classification.

SCHEDULE OF PRICES - Taps and Water Service Installations

SIZE	TAP ONLY C.I. & D.I. (1)	TAP ONLY CONCRETE	WATER SERVICE INSTALLATION (2)	COST OF K-COPPER PIPE PER L.F.
1"	$ 180	$ 900	$ 220	Market Price (3)
Split			$ 180	
1 ½"	$ 250	$ 960	$ 450	Market Price (3)
2"	$ 290	$ 1000	$ 665	Market Price (3)

1 - Includes corporation stop and saddles for cast and ductile iron pipes
2 - Includes curb stop and box materials and labor to install pipe
3 - As determined by Dayton Water Distributions actual costs

A trip charge of $100 will be made for a broken appointment when a Water Distribution crew arrives at a site to perform scheduled work and the contractor has not prepared the site for the work.

1 ½" and 2" services, 30 feet to 40 feet in length, Contractor will be charged for a full 40 foot piece of K-copper and offered the unused portion.

Taps outside the City Limits, add 10%.

Within the City Limits, in existing public right-of-ways, the City of Dayton will make all taps and install all water services. In such situations, the Contractor is permitted to perform excavation, backfill, and restoration work in Class 6, 7, 8, and 9 trench classes.

TAPS 4" AND LARGER, charges shall be made at the prevailing rates for labor, material, equipment material handling, fringe benefits and indirect costs. Call 333-3742 for large tap estimates.

In new plat streets, private streets, and easements, Master Plumbers or Pipe Laying Contractors shall do all the piping work and furnish all the material (except corporation stops and saddles) to install 1", 1 ½", and 2" water services.

Allow 6 weeks for obtaining saddles or tap sleeves for concrete taps.

Water and sewer services installed simultaneously in any class of street where rock is encountered, the water service will be installed on a shelf adjacent to the sewer and the price per lineal foot corresponding to the type of surface will be reduced 50 percent.

Water service installed by pulling or hole hogging, the work will be charged a flat rate of $2580 plus any street cut permit charges. The feasibility of no-dig installations is dependent upon the soil conditions and the presence of conflicting utilities.

Rock excavation will be charged at the rate of $340.00 per cubic yard in addition to the preceding charges.

MINIMUM CHARGES - The minimum charge for any water service installation will be of a total of five (5) lineal feet for Class 1 through 5 and a total of ten (10) lineal feet for Class 6 through 9. When the restoration includes work from each of these two groups, both minimums shall apply separately.

PERMITS - These prices do not include the cost for water service permits. The work will not start until the permit(s) has been secured and the construction water and applicable assessment fees are paid. Contact Building Services (333-3883) to determine the cost of the permit.

STREET CUT PERMIT FEES - The contractor must pay for any street cut permits and surcharges. The Water Department obtains and initially pays for any street cut permits required within the City of Dayton street right-of-way. The base charge for this permit is established by Public Works and is subject to annual adjustments. Currently the base price is $153.60. Additional surcharges will be made for street cuts in recently paved streets.

Ordinarily, permits will not be issued to open Class 1 through 5 pavements or surfaces before three calendar years after the year of construction has expired. If approval is granted and a permit is issued to open such pavement classes before the restricted period passes, an additional charge will be made for such openings. Also, at the discretion of the Director of Public Works, it may be required to pave a full lane width.

The surcharge for transverse pavement openings (being at more than a 45 degree angle to the centerline or curb or longitudinal joint lines of a street) shall be $700.00 if within the calendar year of construction and the first succeeding calendar year: $500.00 if within the second succeeding calendar year: $400.00 if within the third succeeding calendar year of construction.

The surcharge for longitudinal pavement openings (being up to a 45 degree angle to the centerline or curb or longitudinal joint lines of a street) shall be $700.00 for each 100 feet or part thereof if performed within the calendar year of construction and the first succeeding calendar year: $500.00 if performed within the second succeeding calendar year: and $400.00 if performed within the third succeeding calendar year of construction. All surcharges are in addition to the base permit charge and shall be paid when the Street Cut Permit is issued and are subject to change.

SPECIAL NOTICE TO ALL CONTRACTORS

48 HOURS NOTICE is required for all large tap estimates due to utility verification.

48 HOURS NOTICE is required for all water line locating.

Contact Water Engineering (333-3725) and/or Water Distribution (333-4905) for course of action for any situation not covered in the standards.

SEWER SERVICE INSTALLATION COSTS

The following is the schedule of prices to be charged by the Water Department, Division of Sewer Maintenance, City of Dayton, Ohio for Sanitary and Storm Sewer service taps, sewer service excavation, laying of pipe, backfilling and restoration of the surfaces in streets and alleys on and after July 1, 2007. Call 333-4915 for help in determining these charges.

SCHEDULE OF PRICES - Twelve (12) inch services and smaller.

Trench Depth In Feet	*Class 1* Concrete Pavement Cost Per L.F.	*Class 2* Brick On Concrete Base Cost Per L.F.	*Class 3* Asphalt on Concrete Base Cost Per L.F.	*Class 4* Asphalt on Brick Base Cost Per L.F.	*Class 5* Asphalt on Stone or Gravel Base Cost Per L.F.
0 - 8	$ 270	$ 372	$ 237	$ 372	$ 202
8 - 16	$ 337	$ 465	$ 296	$ 465	$ 252

Trench Depth In Feet	*Class 6* Gravel Roadway Plain or Oiled Cost Per L.F.	*Class 7* Concrete Sidewalks or Driveways Cost Per L.F.	*Class 8* Sodded Areas Cost per L.F.	*Class 9* Grass or Unimproved Areas Cost Per L.F.
0 - 8	$ 193	$ 200	$ 210	$ 190
8 - 16	$ 243	$ 200	$ 210	$ 190

Trenches deeper than 16' will be estimated on a per service basis. These prices are for installing new service laterals from the main line sewer in the street to the property line. All cost include labor, equipment, and materials. Cost schedule also includes street, sidewalk, curb, and sod restoration.

Services located in the area deemed the "central business district" will be charged actual cost per service for installation. Please contact the Division of Sewer Maintenance for an estimated charge before work has started.

Services larger than twelve (12) inches shall be charged at the prevailing rates for labor, material, equipment, material handling, fringe benefits and indirect costs. Repair work shall be charged actual cost at the prevailing rates.

Rock excavation will be charged at $340 per cubic yard in addition to the preceding charges.

Street Cut Permit Fees
In addition to the above charges, there will be a charge for street cuts based upon the prevailing costs as established by the Department of Public Works. (See paragraph in Water Service Costs)

Minimum Charges for any sewer service installation will be for a total of five (5) lineal feet for Class 1 through 5 and a total of ten (10) lineal feet for Class 6 through 9. When restoration includes work from each of these two groups, both minimums shall apply separately.

Permits
These prices do not include the cost for plumbing permits. Work will not start until the plumber has secured the permit, and the Division of Sewer Maintenance has received a copy of the permit.

NOTE: Plumbers can do sewer service work in Class 6,7,8,9 surfaces with proper permits and prior approval from the Division of Sewer Maintenance.

Tammi L. Clements, Director
Department of Water

PROCEDURES
FOR WATER SERVICE TAPS

General

The City of Dayton makes all service taps within the City of Dayton and in any areas outside of the City that are not within master meter areas. Prices for taps through 2" are contained herein. Prices for 4" and larger taps are estimated on an individual basis by Water Engineering, located at 320 West Monument Street, on the second floor, Phone 333-3742. Estimates include material, labor, equipment, overhead, and applicable surcharges for work outside of the City limits. 48-hour notice is required on large tap estimates to allow for verification of other utilities in the project zone.

Allow 6 weeks lead time for saddle purchase when tapping concrete water mains.

When mains or customers are located outside of the Dayton City Limits, plan approval and permits must be obtained from both Agencies with the local approval and permit required prior to obtaining Dayton approval and permit. Dayton permits are not required in areas served by Montgomery County's distribution system.

Plan Reviews

Drawings for water services can be submitted to Water Engineering plan review personnel at the City's One Stop Shop on the second floor at 371 West 2nd Street. [Phone (937) 333-6804 or fax (937) 333-6809]

IMPORTANT

Appropriate permits are required from the agency having inspection jurisdiction from the main and/or property/easement line to the meter and/or foundation in addition to tap/service permits required. Property line/easement line location is the responsibility of the Plumber/Excavator to determine prior to tapping.

City Taps

- Plan approved - to include metering and backflow prevention concept.
- Permit(s) obtained, fees paid, etc... (Includes meter, construction water, assessments, etc.)
- Work order written if 4" or larger tap.
- Tap location marked on site by contractor with Water Distribution. (see General comments above about property line location).
- Tap made - service installed to property line by Water Distribution with curb stop and curb box included.
- In easements, new plats, or areas of Class 6,7,8, and 9 surfaces - Water Distribution performs tap only, Plumber/Excavator installs services.
- City bills Permit Holder for work performed by the City.

Montgomery County Taps - Includes area under Northridge Agreement, parts of Kettering, Englewood, Vandalia south of I-70 and Riverside. Includes Clayton south of I-70 except Crestway Road. Excludes Shiloh, Northridge, and Drexel Master Metered Areas, and the Greater Moraine system.

- Plans approved by County and when appropriate the local Fire Department.
- Permit(s) obtained and fees paid to County Sanitary Department. City tapping fees are collected by the county and forwarded to the City.
- Work Order written if 4" or larger tap. Call 333-3742 for an estimate of costs.
- Tap location marked on site by Contractor with County Inspector.
- Tap made - Plumber/Excavator does all excavation and restoration and installs all material except corporation stops and saddle for taps up to 2" or tapping sleeve and valve on 4" or larger taps. City provides only corporation stops, saddles, and tapping sleeves and valves, the contractor provides all piping materials and curb stops.

Trotwood

Trotwood is a split jurisdiction with the older portion being served directly through an agreement with the City of Dayton and the newer portion being served under an agreement with Montgomery County. For the older portion, the tapping procedure is as follows:

- Plans approved by Trotwood first and when appropriate the local Fire Department and then the Dayton second. The contractor must inform the Trotwood of any substantive changes to the plans required to satisfy Dayton requirements.
- Permit(s) obtained and fees paid to Trotwood, then Permit(s) obtained from City of Dayton - fees paid, etc…
- Work Order written if 4" or larger tap.
- Tap made - Plumber/Excavator does all excavation and restoration and installs all material except corporation stops and saddle for taps up to 2" or tapping sleeve and valve and first length of pipe on 4" or larger taps. City provides only corporation stops, saddles, and tapping sleeves and valves, the contractor provides all piping materials and curb stops.
- City bills Permit Holder for work performed by the City.

In the newer portion of Trotwood, the procedures are the same as Montgomery County.

Brookville

Same as old Trotwood except Brookville permit required instead of Trotwood permit. Plumber/Excavator furnishes all material on 4" and larger taps. Valves should open left or counter-clockwise.

Clayton – Along Crestway and north of I-70

Same as old Trotwood except a Clayton permit is required instead of a Trotwood permit and Clayton issues the Dayton permit.

Greene County

Same as old Trotwood except Greene County permit required instead of Trotwood permit.

PERMITS
(In areas metered by the City of Dayton)

Water Service Permits (From water main to meter, fireline, backflow preventer or hydrant).
Except in areas metered by Montgomery County, all service taps, installations, pick-ups, or the splitting of an existing service requires a Dayton water service permit in addition to a permit from the appropriate local agency having jurisdiction over the water distribution system. Dayton permits are obtained from the Division of Building Inspections, Department of Building Services, and are issued only to licensed Plumbers/Excavators. Homeowners may obtain permits for certain work "on premises." The Building Inspections office is located at 371 W. 2nd Street on the second floor (937-333-3892)

Relocated Meter Permit
Requires City of Dayton permit

Repair Permits
Policy varies - See Inspections for clarification.

Plumbing Permits
All work, whether new or repair, on piping after the meter, including backflow prevention and well disconnects is considered plumbing and requires a Plumbing Permit from the agency having jurisdiction.

Fire Hydrant Use Permits
Fire hydrant Permits may be obtained from the City of Dayton, Water Engineering at 320 West Monument Street (333-3725) and/or the local utility responsible for its operation and maintenance (Policy for use varies).

PERMIT EXAMPLES

LOCATION	TAP TO PROPERTY LINE	SERVICE (New, Pickup)	PLUMBING
Dayton (includes airport)	Dayton	Dayton	Dayton
Montgomery County	Montgomery County San.	Montgomery County San.	Montgomery County
Kettering *	Montgomery County San.	Montgomery County San.	Kettering
Riverside	Montgomery County San.	Montgomery County San.	Montgomery County
Trotwood (old)	Trotwood Dayton	Trotwood Dayton	Montgomery County
Trotwood (new)	Montgomery County San.	Montgomery County San.	Montgomery County
Brookville *	Brookville and Dayton	Brookville and Dayton	Montgomery County
Clayton	Clayton and Dayton	Clayton and Dayton	Montgomery County
Englewood *	Montgomery County San.	Montgomery County San.	Montgomery County
Greene County	Greene County San. Dayton	Greene County San. Dayton	Greene County

* Installation or repair from property line to foundation inspected by Village or City indicated regardless of meter location. (Permits required)

NOTE: Taps and New Services done at same time, to the meter, require one service permit only. Subsequent separate activities require a service permit for each activity, i.e.: Combination Services.

INSPECTIONS

Phone Numbers

City of Dayton:

Water Engineering:	Chief Field Engineer	333-3739
	Senior Engineer	333-3736
Receptionist		333-3725
Water Distribution Dispatch		333-4905
Water Meter Shop		333-4902
Fire Department		333-4522
Plumbing Inspection		333-3883

Montgomery Co. Sanitary Engineer	781-2500
Montgomery Co. Plumbing Inspection	225-4421
Brookville	833-4866
Clayton	836-3500
Englewood	836-5106
Kettering	296-2441
Trotwood	837-7771

Dayton	Water Engineering	Water Distribution	Dayton Plumbing Inspection
All taps and services to property line (including curb stop)		X	X
New, pickups, 1" & 1½" services curb stop to meter (5/8", ¾" & 1" meters)		X	X
New, pickups, 1½" and larger services to meter/fire backflow preventer or hydrant	X		X
Picked up services and repairs after meter			X
Repairs on services before meter - 5/8" to 1" meters			X
- Over 1" meters	X		X
Service Replacement, main to curb stop		X	
Service Replacement, after curb stop			X
Meter Pit (New) - 5/8" to 1" meter		X	X
- Over 1" meter	X		X
Meter Pit (Relocate & Repair) - 5/8" to 1" meters			X
- Over 1" meters	X		X
Plumbing (after meter)			X
Backflow Preventer	X		X

INSPECTIONS
(Continued)

Outside of Dayton City Limits (in areas metered by Dayton)	Water Engineering	Water Distribution	Local Water Jurisdiction	Local. Plumbing Inspection	Dayton Plumbing Inspection
All taps, 1", and services to property line (including curb stop)		X	X		X
New, pickups, 1" & 1 ½" services curb stop to meter (5/8", ¾" & 1" meters)		X			X
New, pickups, 1 1/2" meter and larger services main to meter/fire backflow preventer or hydrant	X		X		X
Picked up services and repairs after meter				X	X
Repairs on services before meter - 5/8" to 1"meters			X		X
- Over 1" meters	X		X		X
Service Replacement, main to curb stop			X		X
Service Replacement - after curb stop			X		X
Meter Pit (New) - 5/8" to 1" meters		X	X		X
- Over 1" meters	X		X		X
Meter Pit (Relocate & Repair) - 5/8" to 1" meters			X		X
- Over 1" meters	X		X		X
Plumbing (after meter)				X	
Backflow Preventer (at meter)	X		X		
Backflow Preventer (in building, not at meter)				X	
Properties with wells	X		X	X	

Montgomery County Sanitary Engineering

In areas metered by the Montgomery County Sanitary Engineer's office, consult their office to determine inspection responsibilities. Neither Dayton Water Engineering nor Dayton Water Distribution performs inspections in these areas.

TESTING FOR LEAKAGE/PRESSURE AND PURITY

General

All new, picked up or repaired services shall be tested for leakage and purity as outlined in the City of Dayton Department of Water "Rules and Regulations Governing Plumbers and Excavators".

Pressure/Leakage Test

New services for fire and/or domestic use shall be tested. During the test no leakage shall be allowed on exposed joints. Test specifications for domestic services are as follows:

TYPE OF SERVICE	MAIN TO PROPERTY LINE	PL TO BUILDING
K-copper (domestic)	Line Pressure	150 psi. or 1.5 times the working pressure, whichever is greater.
Ductile Iron (domestic)	Tested to tap valve at 150 psi. or 1.5 times the working pressure, whichever is greater	
Ductile Iron (fireline before double-check valve)	Same as Ductile Iron (domestic)	
Fire line after Double-check Valve	Tested at 200 psi. if subject to pressurization by Fire Department pumps.	

The duration of the pressure/leakage test shall be as required to ascertain a leak-free service as deemed necessary by the inspecting agency.

For fire service testing, the testing requirements of the current edition of NFPA #24 shall apply. Following satisfactory completion of the hydrostatic test, the line must be flushed also in accordance with NFPA #24. The Contractor shall provide the Fire Department with a completed "Contractor's Material and Test Certificate for Underground Piping."

Disinfection

Purity tests are required on all underground piping installed in rigid lengths. New copper pipe from a sealed coil shall be thoroughly flushed prior to use for either fire or domestic use. The required test may be performed by the Department of Water as part of service work done by the City. Two consecutive purity tests, 24 hours apart, shall be taken at the metering location or fire line double-check valve or hydrant as appropriate, in accordance with Ohio EPA directives and AWWA procedure. Purity tests beyond the purveyor's jurisdiction shall be required as needed by Plumbing Inspection of the local jurisdiction. Chlorine dosages shall meet or exceed applicable AWWA standards.

For purposes of filling the new pipe or collecting purity samples, a service or mainline valve may be temporarily opened only while under the continuous supervision of a representative of the local water purveyor. **UNATTENDED GARDEN HOSE FLUSHES ARE PROHIBITED**.

WATER SERVICES - GENERAL NOTES

1. Meter pits are generally mandatory for all domestic/irrigation meters. Meter installations may be allowed inside of buildings only when there is no location outside of the building for a pit on the customer's property. Contact Water Engineering for approval of such situations.

2. Restrained joints
   - Acceptable – Retainer glands and field lock gaskets
   - Not acceptable – Restraining rods

3. Deduct meter piping arrangements are prohibited.

4. Before new water service taps are made in new plats, property corners must be staked.

5. 4" and Larger water services, the piping material must be ductile iron pipe through the meter pit. After the meter pit, the piping material may be as accepted by local and national plumbing and fire codes. Any transitions to other materials should occur a minimum of 3 feet on the customer's side of the meter pit.

6. 1" through 2" water services, Type K-copper pipe must be used through the meter. After the meter, the piping material must meet the State plumbing code. When the pipe materials change, the transition should occur a minimum of 3 feet on the customer side of the meter pit for 1½" and 2" services. For the 1" and smaller meters, the transition can be accomplished at the shutoff valve on the customer side of the meter yoke. A restrained type of pack joint such as the Ford "Grip" Joint or equal should be used.

7. Curb stops are to be located at the Right-of-way/Property line or water easement line (typically adjacent to the back of the sidewalk). Curb stops should not be located to the far side of other utility easements.

8. When a new containment backflow prevention device is being installed on an existing service, the meter-spread piping must be brought up to current standards.

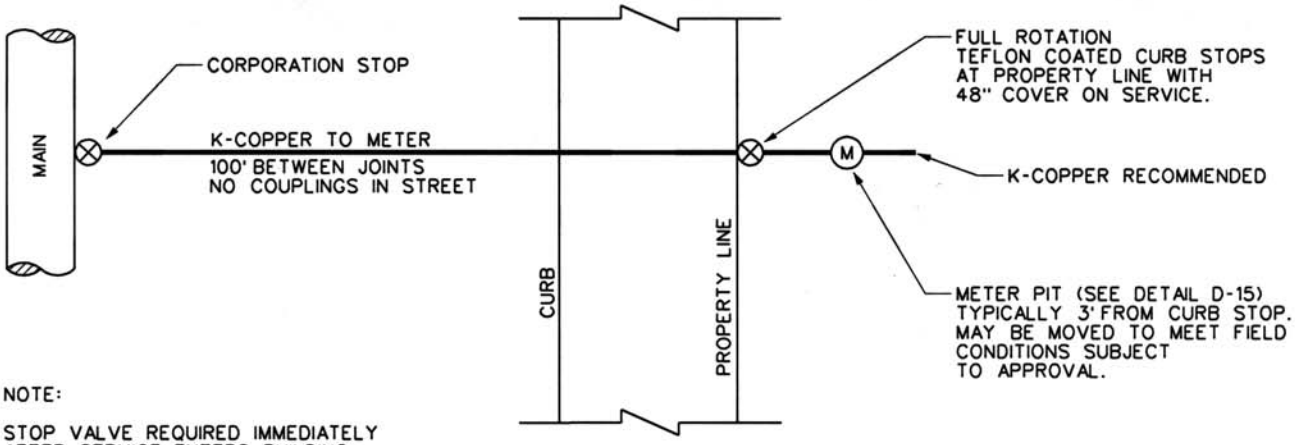
9. Two concepts are acceptable for combination services with the meter located in a pit. One configuration would include the domestic metering and the fire line double detector check both in a large vault. All of the clearance criteria and material specifications from the following large pit details apply. In addition note the following:

   - An outlet tee must be provided for the domestic branch. Tapping of the pipe is not permitted within the pit.
   - When a 1" or smaller domestic or irrigation meter is proposed, that meter must be installed in a Ford Box adjacent to the large pit. No curb stop is required.

The second acceptable concept would be to install an underground tee in the combined service piping, install a pit only on the domestic and irrigation water meters, and continue the fire line into the building where the double-detector check would be located. In such configurations, sufficient valving must be provided to avoid depressurizing the service after the initial pressure and purity and pressure tests are performed. When different contractors are installing the domestic and fire legs of the combined service, an isolation valve and plug must be installed on the opposite leg of the service at the location of the tee before pressure and purity tests can be performed.

D-1

1" SERVICE (5/8" , 3/4" or 1 " Meter)



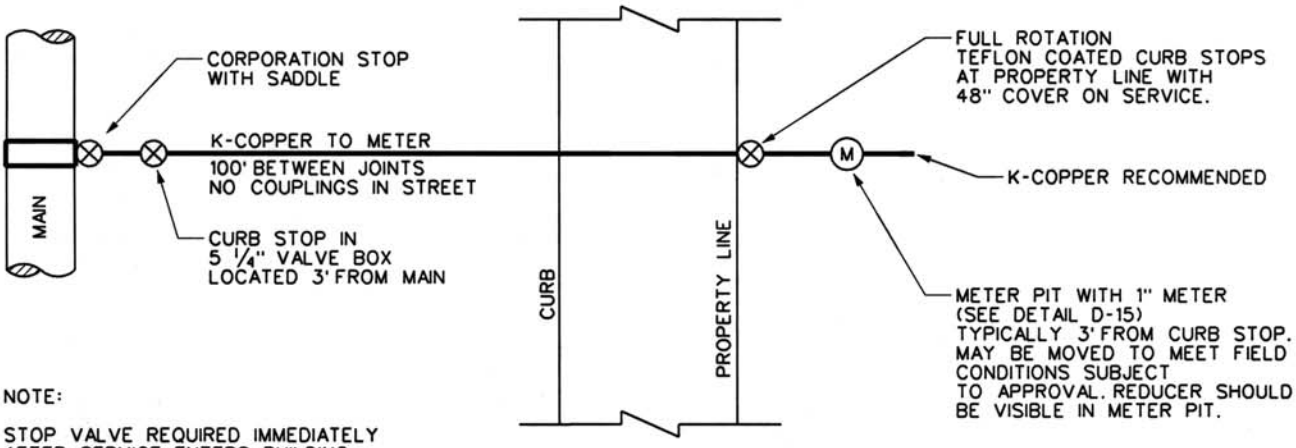
NOTE:

STOP VALVE REQUIRED IMMEDIATELY
AFTER SERVICE ENTERS BUILDING.

ALL JOINTS FLARED

D-2

1 1/2" SERVICE (1" Meter)



NOTE:

STOP VALVE REQUIRED IMMEDIATELY
AFTER SERVICE ENTERS BUILDING.

ALL JOINTS FLARED

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY
SITUATION NOT COVERED IN STANDARDS

NO.	DATE	REVISIONS
1	2/07	CURB STOP
2	3/07	NOTES

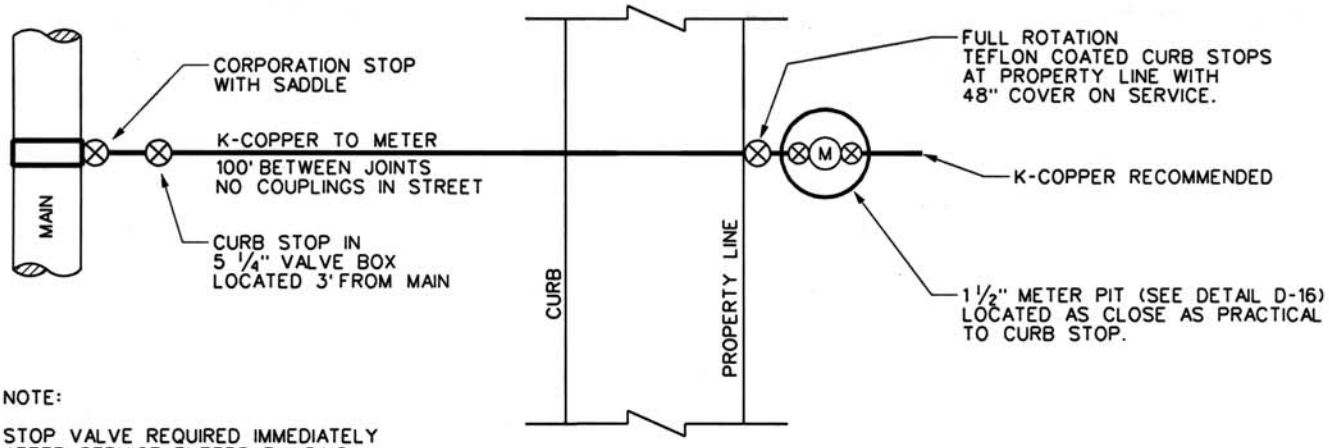
TYPICAL SERVICE INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

D-3

1 1/2" SERVICE (1 1/2" Meter)



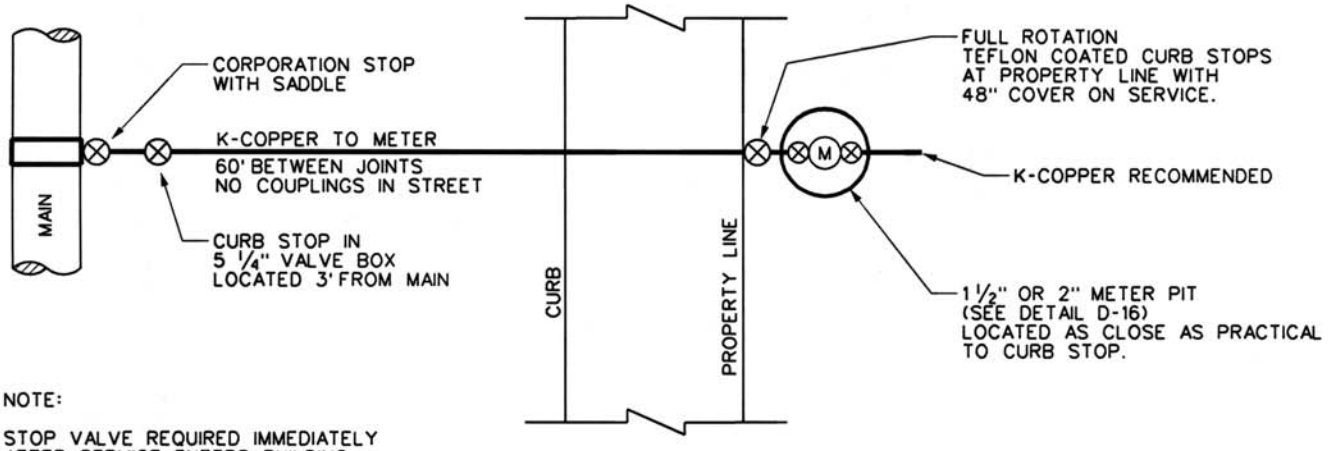
NOTE:

STOP VALVE REQUIRED IMMEDIATELY
AFTER SERVICE ENTERS BUILDING.

ALL JOINTS FLARED

D-4

2" SERVICE (1 1/2" or 2" Meter)



NOTE:

STOP VALVE REQUIRED IMMEDIATELY
AFTER SERVICE ENTERS BUILDING.

ALL JOINTS FLARED

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY
SITUATION NOT COVERED IN STANDARDS

NO.	DATE	REVISIONS
1	2/07	CURB STOP
2	3/07	NOTES

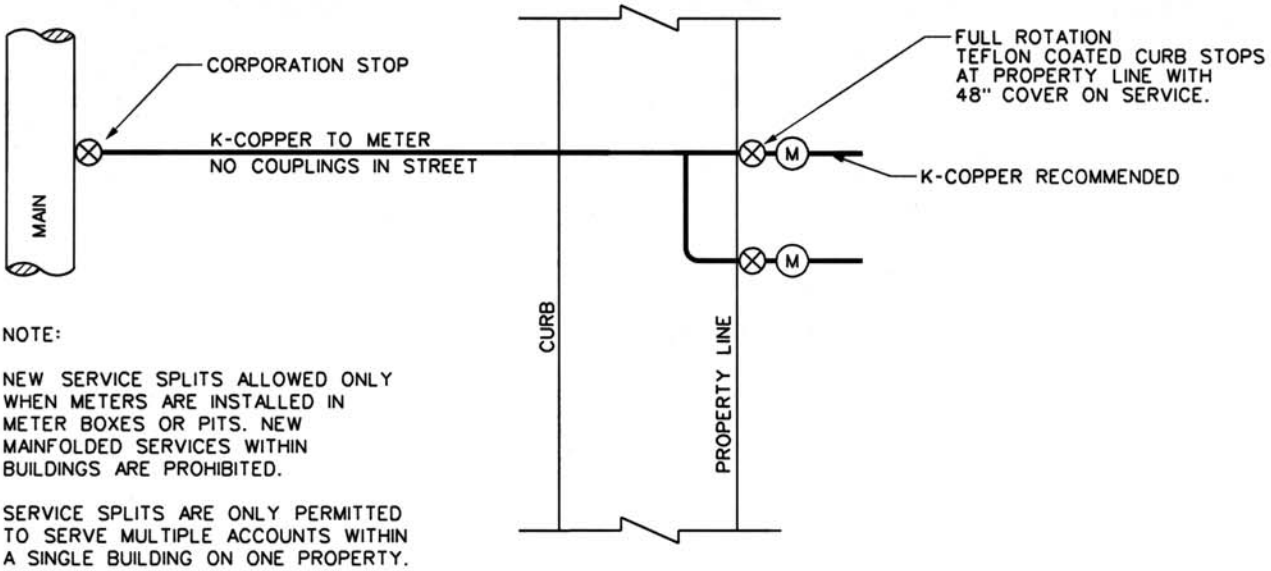
TYPICAL SERVICE INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

D-5

SPLIT SERVICE

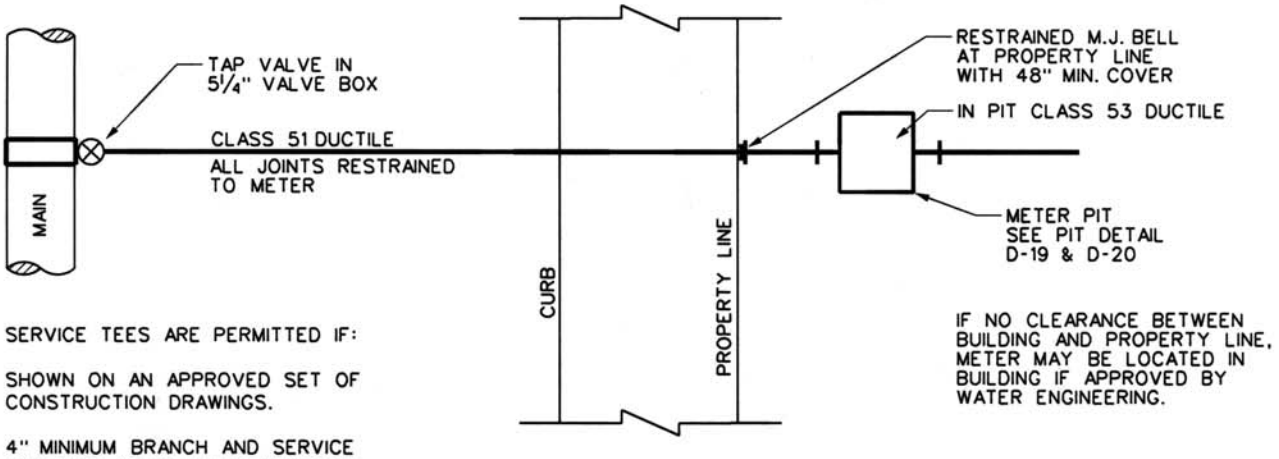


NOTE:

1. NEW SERVICE SPLITS ALLOWED ONLY WHEN METERS ARE INSTALLED IN METER BOXES OR PITS. NEW MAINFOLDED SERVICES WITHIN BUILDINGS ARE PROHIBITED.
2. SERVICE SPLITS ARE ONLY PERMITTED TO SERVE MULTIPLE ACCOUNTS WITHIN A SINGLE BUILDING ON ONE PROPERTY.
3. ALL JOINTS FLARED
4. CURB STOP SHOULD BE INSTALLED ON PERPENDICULAR LINE FROM MAIN

D-6

4" AND LARGER SERVICE (Domestic)



SERVICE TEES ARE PERMITTED IF:

1. SHOWN ON AN APPROVED SET OF CONSTRUCTION DRAWINGS.
2. 4" MINIMUM BRANCH AND SERVICE LINE WITH GATE VALVE WITHIN 3' OF THE MAIN.
3. STUB IN PERMITS MUST BE OBTAINED FOR EACH SERVICE STUBBED INTO PROPERTY LINE OR EASEMENT LINE.

IF NO CLEARANCE BETWEEN BUILDING AND PROPERTY LINE, METER MAY BE LOCATED IN BUILDING IF APPROVED BY WATER ENGINEERING.

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY SITUATION NOT COVERED IN STANDARDS

NO.	DATE	REVISIONS
1	2/07	CS, MP,
2	3/07	NOTES

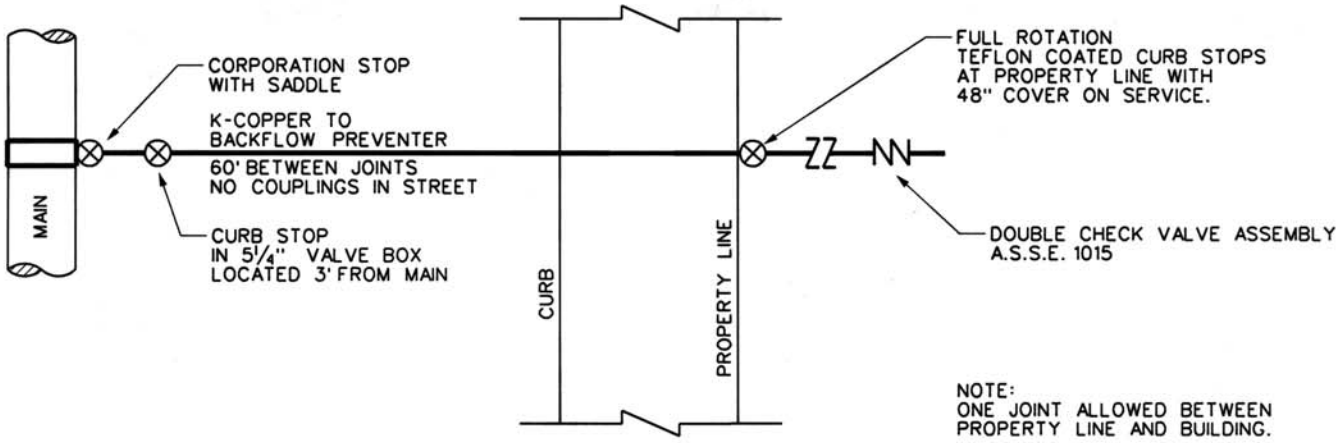
TYPICAL SERVICE INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

D-7

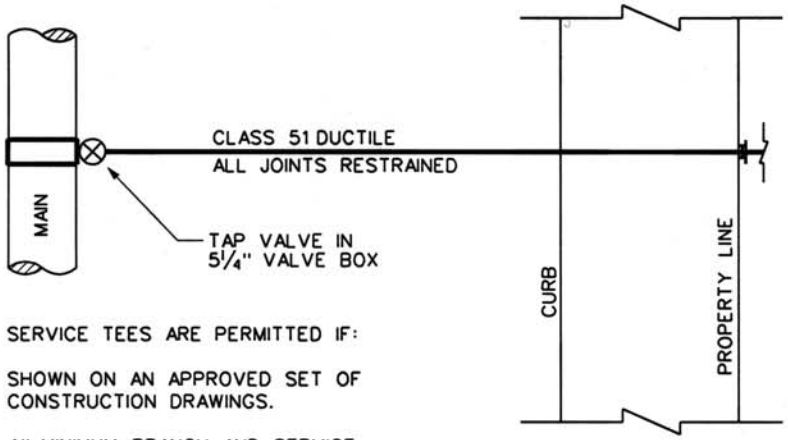
2" FIRE LINE (Detector Meter Not Required)



NOTE:
ONE JOINT ALLOWED BETWEEN
PROPERTY LINE AND BUILDING.

D-8

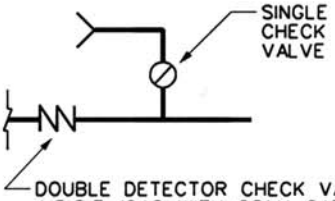
4" AND LARGER FIRE LINE



SERVICE TEES ARE PERMITTED IF:

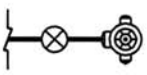
1. SHOWN ON AN APPROVED SET OF CONSTRUCTION DRAWINGS.
2. 4" MINIMUM BRANCH AND SERVICE LINE WITH GATE VALVE WITHIN 3' OF THE MAIN.
3. STUB IN PERMITS MUST BE OBTAINED FOR EACH SERVICE STUBBED INTO PROPERTY LINE OR EASEMENT LINE.

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY
SITUATION NOT COVERED IN STANDARDS



DOUBLE DETECTOR CHECK VALVE
A.S.S.E. 1048, WITH OS&Y GATE
VALVES IN PIT OR BUILDING PER
FIRE DEPARTMENT.

METER TO READ IN CUBIC FEET



PRIVATE FIRE HYDRANT
(MIN. 6" SERVICE)

WALL/POST INDICATOR VALVES
MAY BE ADDED ON PREMISES
AT FIRE DEPARTMENT REQUEST.

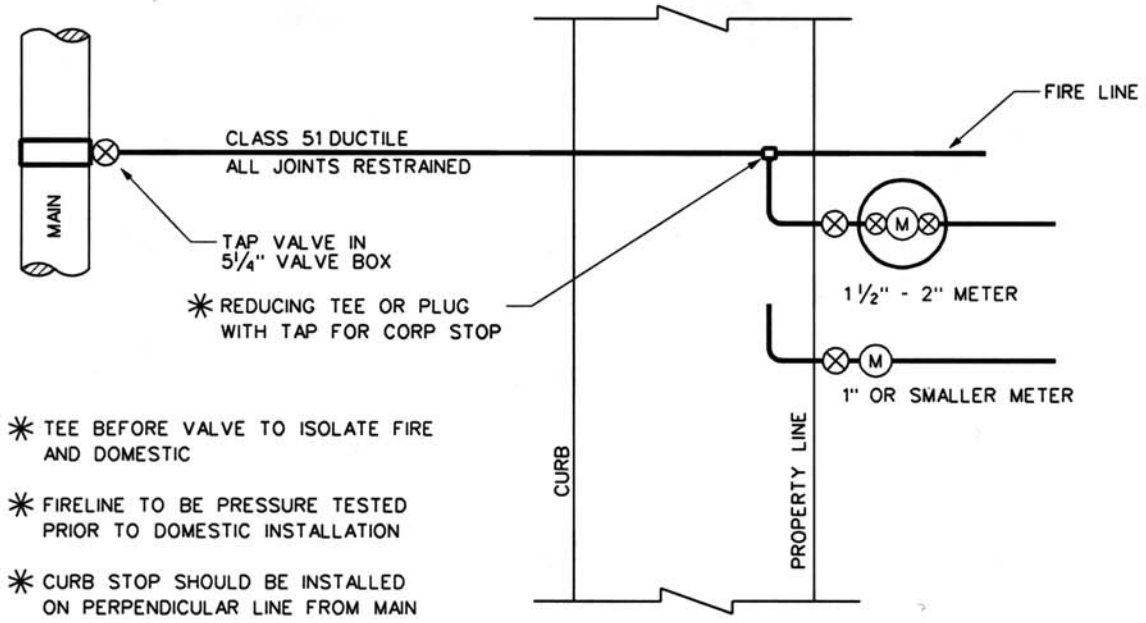
NO.	DATE	REVISIONS
1	2/07	CURB STOP
2	3/07	NOTES

TYPICAL SERVICE INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

4" AND LARGER COMBINATION SERVICE FIRE LINE WITH BACKFLOW INSIDE BUILDING



✳ TEE BEFORE VALVE TO ISOLATE FIRE AND DOMESTIC

✳ FIRELINE TO BE PRESSURE TESTED PRIOR TO DOMESTIC INSTALLATION

✳ CURB STOP SHOULD BE INSTALLED ON PERPENDICULAR LINE FROM MAIN

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY SITUATION NOT COVERED IN STANDARDS

NO.	DATE	REVISIONS
1	3/07	NOTES

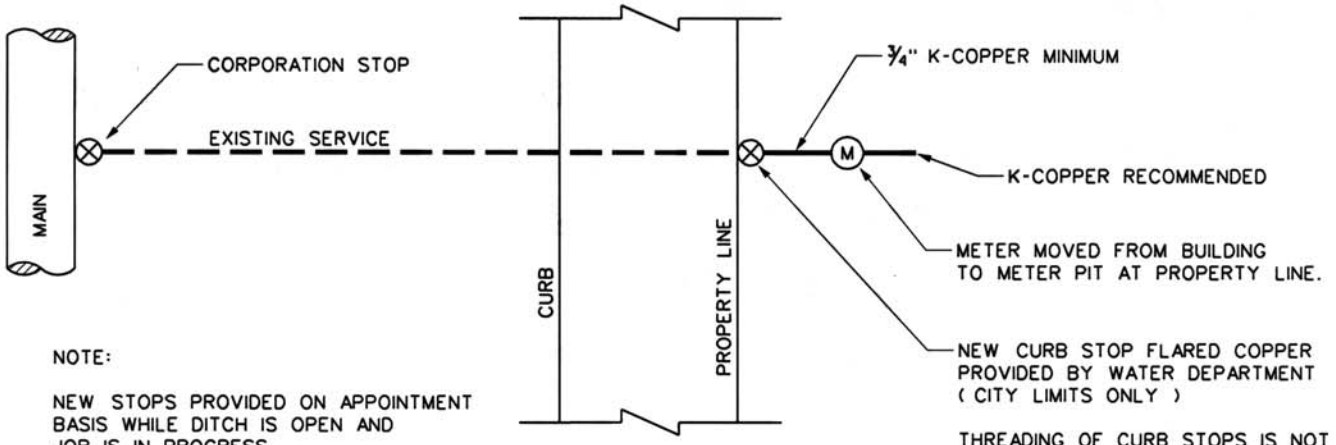
TYPICAL SERVICE INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 02-2007 BY: JBS

D-10

3/4" OR 1" SINGLE SERVICE REPLACEMENT ON PROPERTY

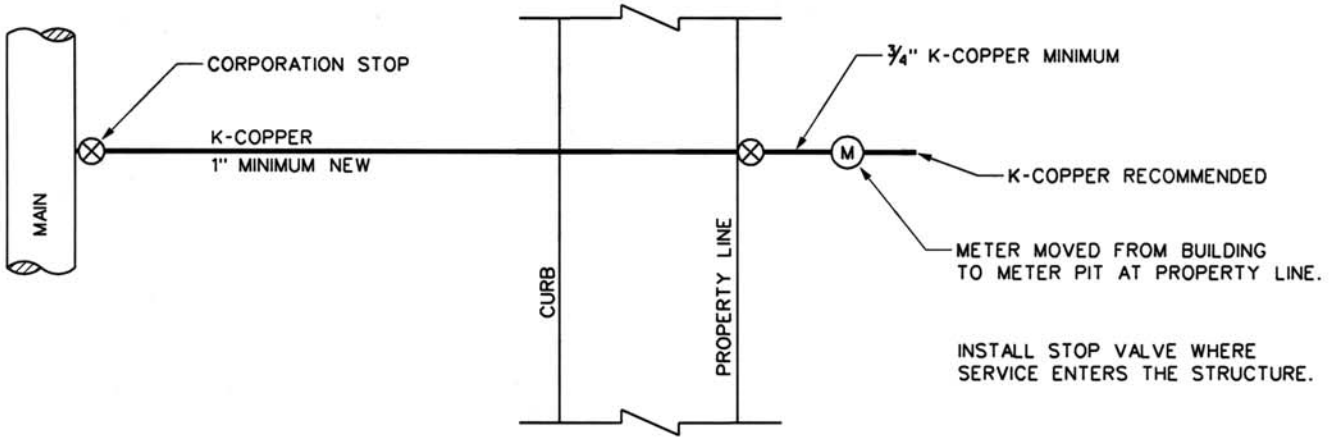


NOTE:

NEW STOPS PROVIDED ON APPOINTMENT BASIS WHILE DITCH IS OPEN AND JOB IS IN PROGRESS.

D-11

3/4" OR 1" SINGLE SERVICE REPLACEMENT FROM MAIN TO BUILDING



GENERAL NOTE:
CONTACT WATER ENGINEERING FOR SERVICE REPLACEMENT ON 1 1/2" OR LARGER.

NO.	DATE	REVISIONS

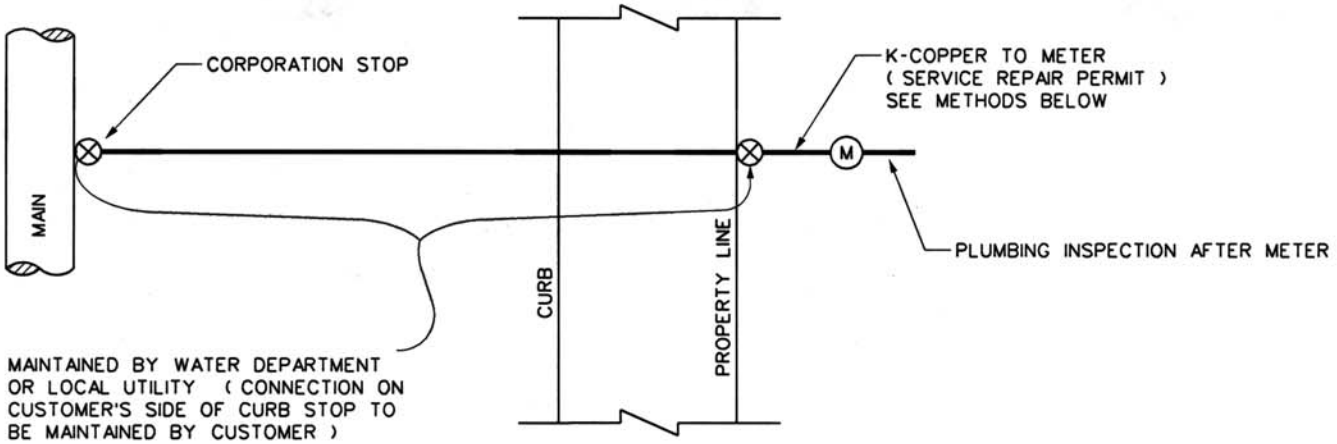
TYPICAL SERVICE REPLACEMENT

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

D-12

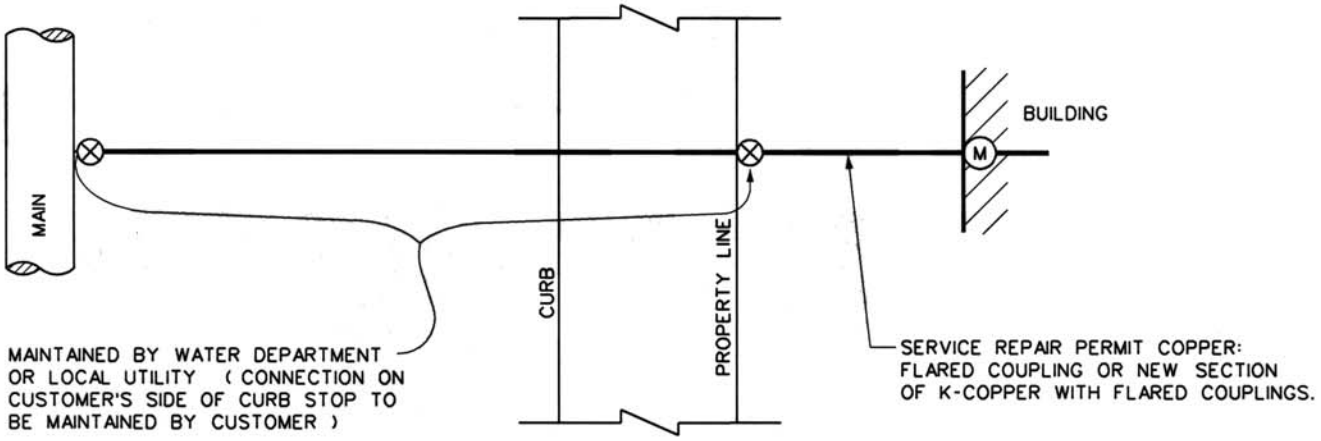
1/2" TO 1 1/2" SERVICE REPAIR



D-13

NOTE: REPAIR ALLOWED ON COPPER ONLY

REPAIR OF GALVANIZED OR LEAD IS NOT PERMITTED AND
REQUIRE A SERVICE REPLACEMENT, WITH METER PIT INSTALLATION.



GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY
SITUATION NOT COVERED IN STANDARDS

NO.	DATE	REVISIONS
1	2/07	CURB STOPS

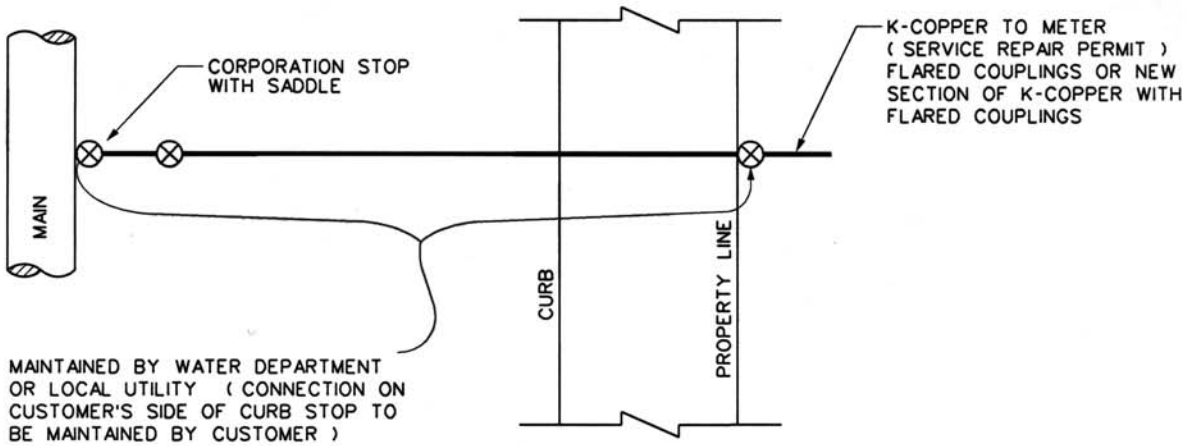
TYPICAL SERVICE REPAIR

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

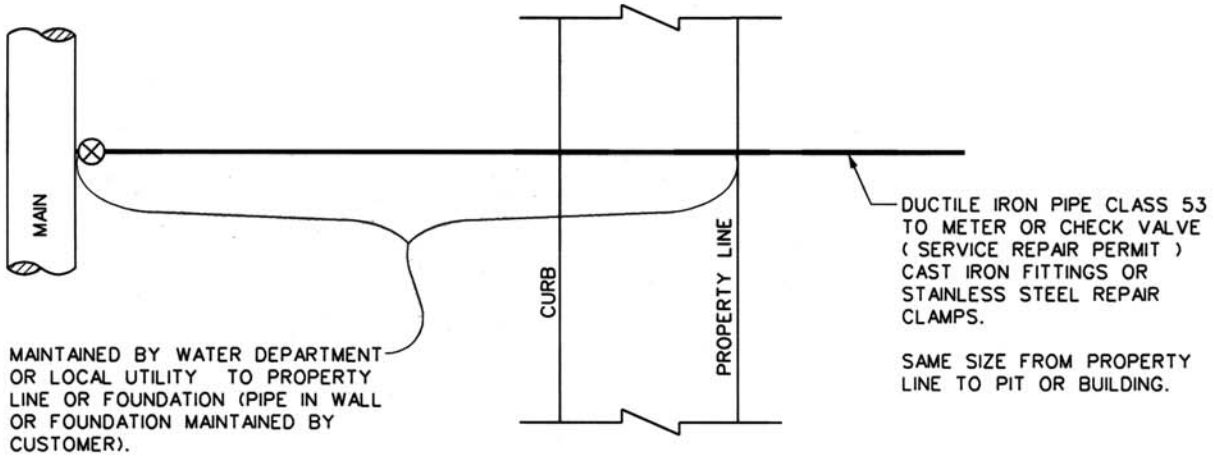
D-14

2" SERVICE REPAIR



D-15

3" AND LARGER SERVICE REPAIR



GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY
SITUATION NOT COVERED IN STANDARDS

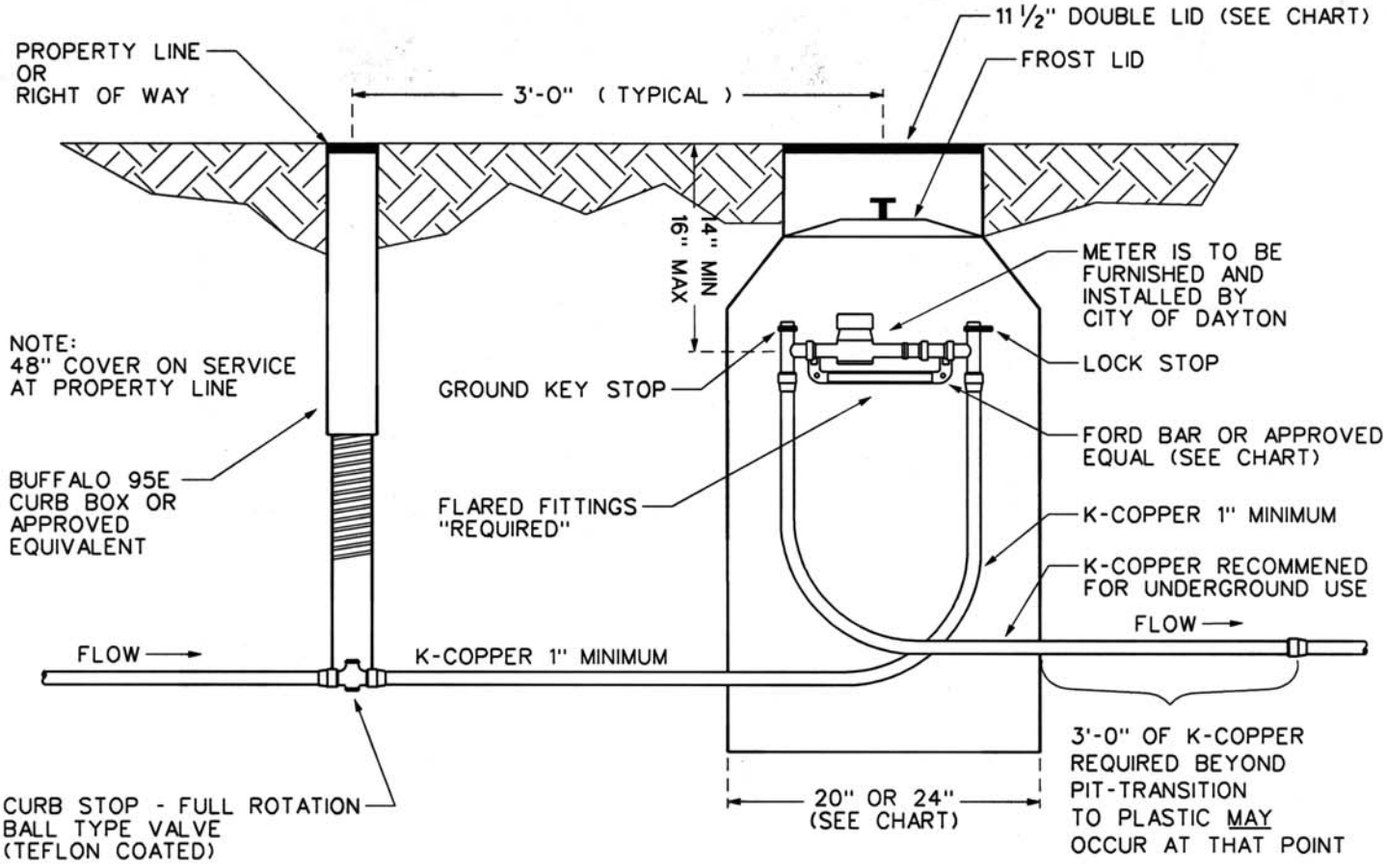
NO.	DATE	REVISIONS
1	2/07	CURB STOP

TYPICAL SERVICE REPAIR

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

5/8", 3/4" AND 1" WATER METER STANDARD INSTALLATION



NOTE:

1. TILE MADE OF CONCRETE OR VITRIFIED CLAY. ALTERNATE HIGH DENSITY POLYETHELENE METER BOXES, SUCH AS MS 20x30 OR MS 24x30 AS MANUFACTURED BY MID STATES PLASTICS OR APPROVED EQUAL, MAY BE USED FOR INSTALLATIONS NOT SUBJECTED TO MOTOR VEHICLE LOADS.
2. IF A 1½" SERVICE IS USED, THEN THE 1½" TO 1" REDUCTION MUST BE AT THE YOKE.
3. DUAL METER CONFIGURATIONS- 2@5/8" METERS MAY BE INSTALLED IN A 24" PIT
4. METER PIT LID MUST BE @ FINAL GRADE BEFORE METER SET
5. METER PITS TO BE LOCATED OUTSIDE SIDEWALKS & DRIVEWAYS

FORD CATALOG YOKE NUMBER	SERVICE PIPE SIZE	METER SIZE	EQUIVALENT METER SPREAD	TILE SIZE	TOP SECTION	LID
517 (501 BAR)	1"	5/8"	11 1/2"	20"	W3	W3-T
517 (501 BAR)	1"	5/8" x 2	11 1/2"	24"	W3	W3-TT
519 (503 BAR)	1"	3/4"	13 1/2"	20"	W3	W3-T
520 (504 BAR)	1" or 1 1/2"	1"	15 1/2"	24"	W3 & •2 RING	W3-T

✳ NOTE: NO 502 BARS ✳

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY SITUATION NOT COVERED IN STANDARDS

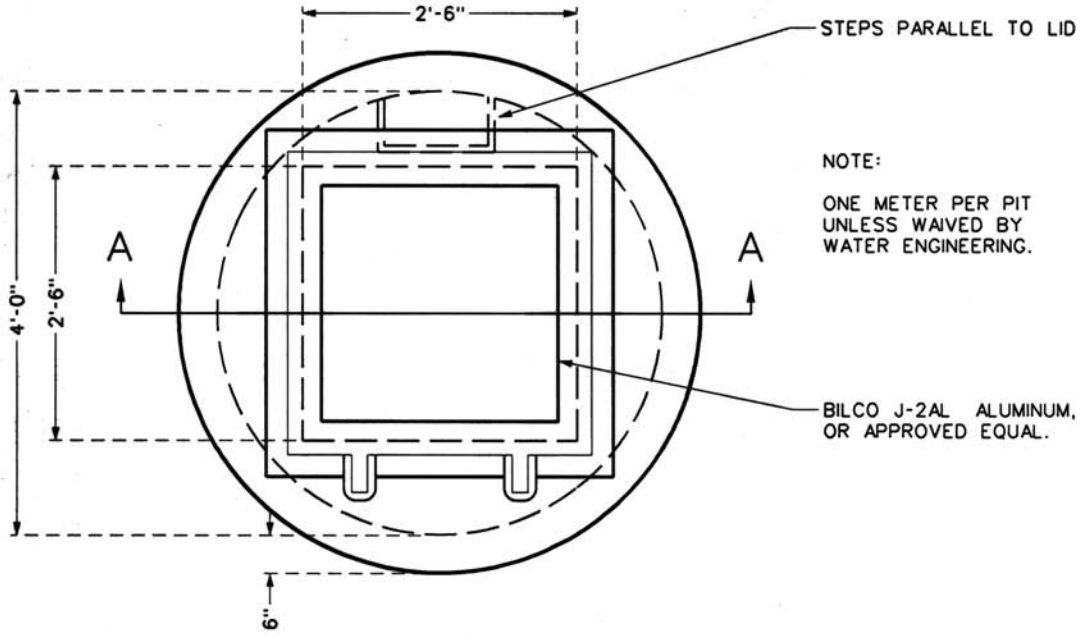
NO.	DATE	REVISIONS
1	3/07	NOTES

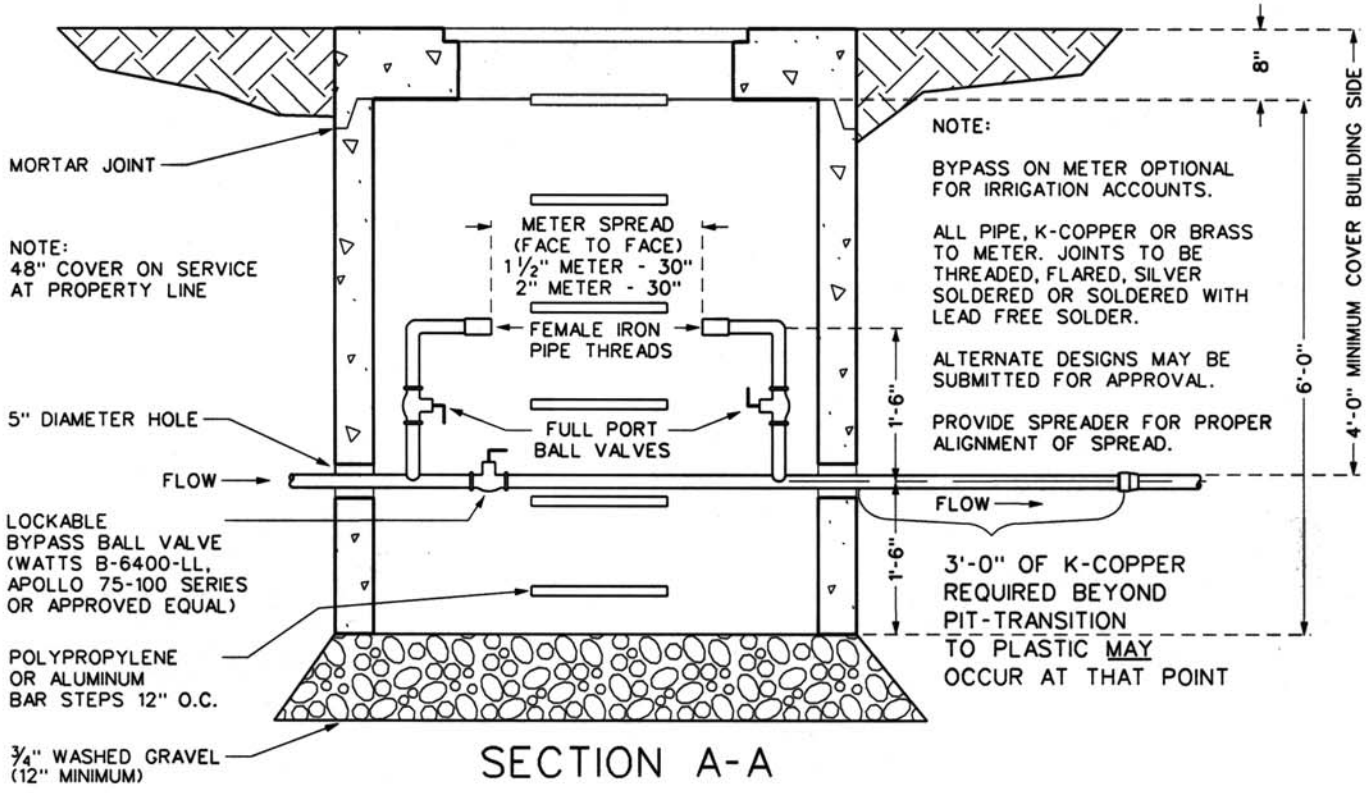
WATER METER INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

1 1/2" AND 2" WATER METER PIT STANDARD INSTALLATION (FOR OFF ROAD USE ONLY)





SECTION A-A

NO.	DATE	REVISIONS
1	12/00	1AL TO 2AL
2	12/00	1 1/2" Spread
3	3/07	BALL VALVE

WATER METER PIT INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY SITUATION NOT COVERED IN STANDARDS

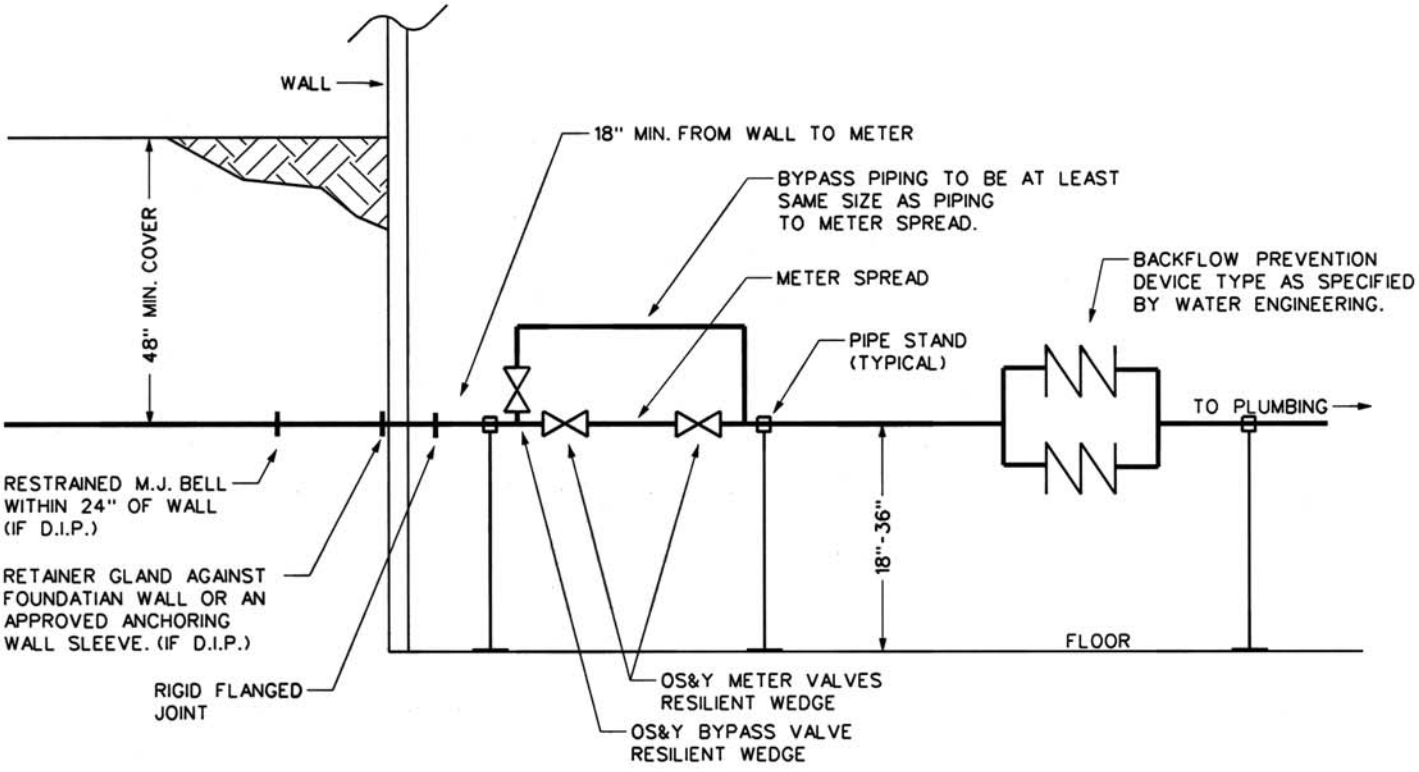
LARGE METER LAYOUT IN BUILDING

1 ½" & 2" SERVICES:

COPPER PIPING THROUGH BACKFLOW DEVICE IS RECOMMENDED.

4" AND GREATER SERVICES:

PIPING SHALL BE D.I.P. CLASS 53 TO RIGID FLANG, FROM RIGID FLANGE THROUGH METER VALVES & BYPASS TO BE DUCTILE, COPPER OR BRASS.



NOTE:

1. FULL PORT BALL VALVES IN LIEU OF OS&Y VALVES MAY BE INSTALLED FOR 1 ½" & 2" METERS.
2. BYPASS MANDATORY FOR ALL METERS. BYPASS VALVE MUST BE LOCKABLE.
3. DUAL INSTALLATION FOR BACKFLOW PREVENTION DEVICES IS OPTIONAL FOR IRRIGATION SERVICES.
4. ALTERNATE DESIGNS MAY BE SUBMITTED TO WATER ENGINEERING FOR APPROVAL.
5. PROVIDE SPREADER FOR PROPER ALIGNMENT ON INSTALLATION OF METER SPREAD.
6. NO FLANGE ADAPTERS BEFORE INITIAL SHUT-OFF VALVE(S).
7. PROVIDE ½" CONDUIT WITH PULL STRING TO OUTSIDE OF BUILDING FOR REMOTE READ WIRING
8. FLOOR DRAIN IS REQUIRED IN ROOM WHERE METER AND BACKFLOW DEVICES ARE LOCATED.

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY SITUATION NOT COVERED IN STANDARDS

METER SPREAD (FACE TO FACE)

1 ½"	30"	F.I.P.
2"	30"	F.I.P.
3"	46"	FLANGED
4"	56"	FLANGED
6"	60"	FLANGED

8" & LARGER TO BE REVIEWED BY DISTRIBUTION/ENGINEERING

NO.	DATE	REVISIONS
1	3/01	1½" Spread
2	3/07	18" NOTE

METER LAYOUT IN BUILDING

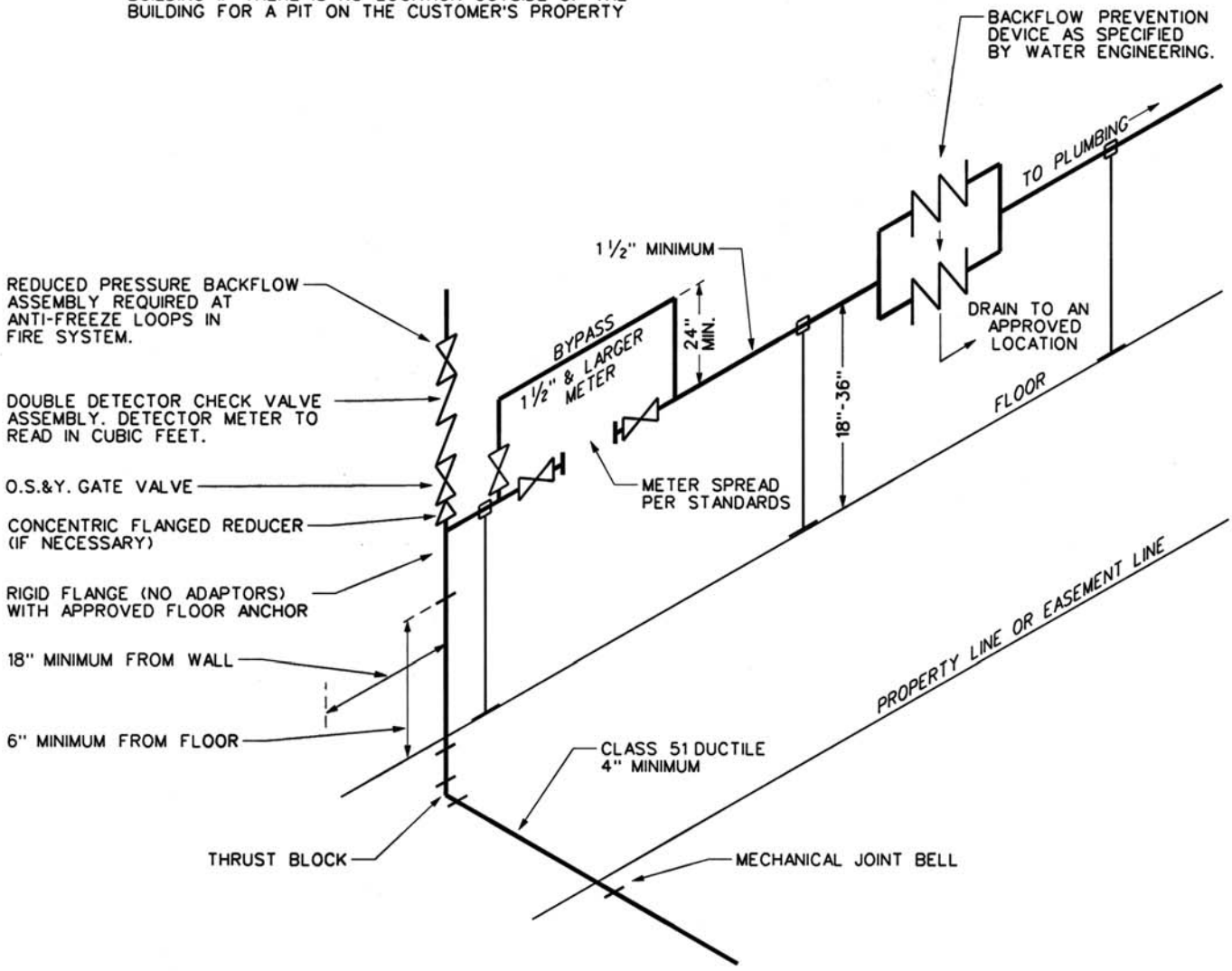
STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

COMBINATION FIRE & DOMESTIC METER LAYOUT IN BUILDING

NOTE:

COMBINATION SERVICE ONLY PERMITTED INSIDE BUILDING IF THERE IS NO LOCATION OUTSIDE OF THE BUILDING FOR A PIT ON THE CUSTOMER'S PROPERTY



NOTE:

1. ALL UNDERGROUND JOINTS MUST BE RESTRAINED.
2. INSIDE PIPING SHALL BE D.I.P. CLASS 53 TO RIGID FLANGE. FROM RIGID FLANGE THROUGH METER VALVES AND BYPASS TO BE D.I.P. ,K-COPPER OR BRASS.
3. ALTERNATE DESIGN MAY BE SUBMITTED TO WATER ENGINEERING FOR APPROVAL.
4. FLOOR DRAIN IS REQUIRED IN ROOM WHERE METER & BACKFLOW PREVENTER ARE LOCATED
5. PROVIDE SPREADER FOR PROPER ALIGNMENT ON INSTALLATION OF METER SPREAD.
6. ADJACENT WALL CLEARANCE - 18" MINIMUM
7. PROVIDE ½" CONDUIT WITH PULL STRING TO OUTSIDE OF BUILDING FOR REMOTE READ WIRING

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY SITUATION NOT COVERED IN STANDARDS

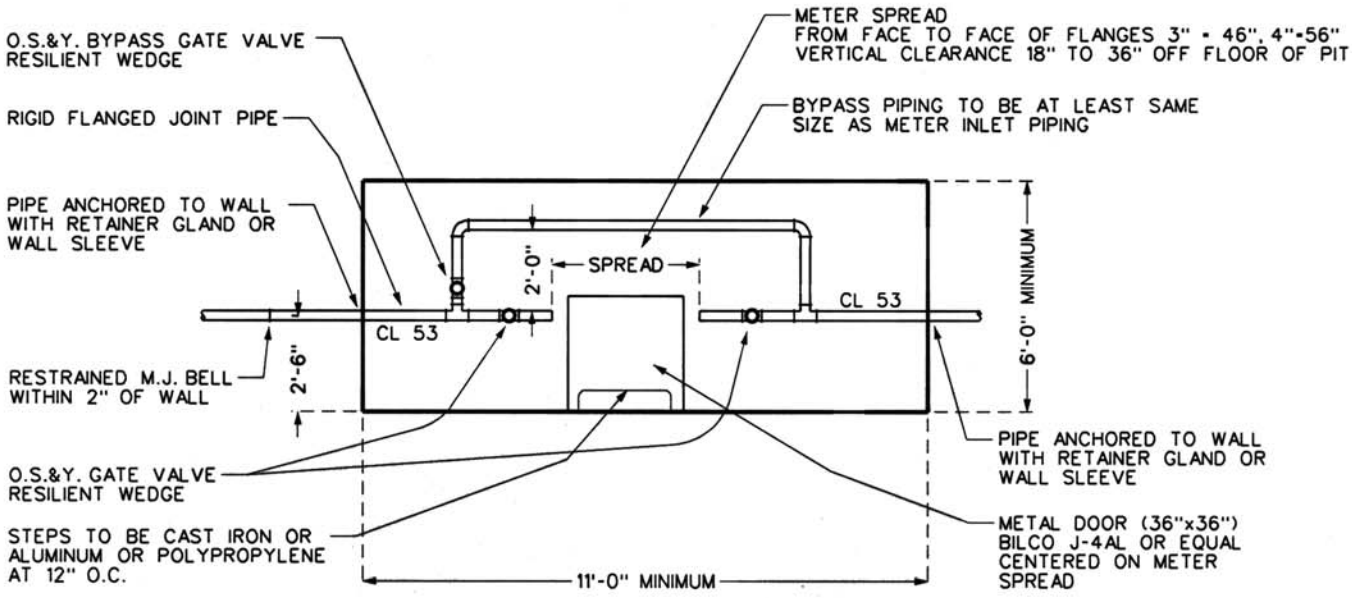
NO.	DATE	REVISIONS

METER LAYOUT IN BUILDING

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

3" & 4" METER PIT INSTALLATION
(FOR OFF ROAD USE ONLY)



NOTE:

1. DIMENSIONS SHOWN ARE INSIDE MEASUREMENTS OF PIT.
2. ALL PIPE SHALL BE CLASS 53 DUCTILE WITH FLANGED ENDS. (COPPER & BRASS MAY BE ACCEPTABLE. SUBMIT FOR APPROVAL.)
3. ALL VALVES SHALL BE FLANGED END, HANDWHEEL OPERATED, O.S.&Y. GATE VALVES, RESILENT WEDGE.
4. PIT SHALL HAVE AN INSIDE HEIGHT OF 6' MINIMUM, FROM TOP OF GRAVEL OR FLOOR.
5. PROVIDE SPREADER FOR PROPER ALIGNMENT ON INSTALLATION OF METER SPREAD.
6. WALLS TO BE FORMED IN-PLACE OR PRECAST CONCRETE.
7. TOP SLAB TO BE DESIGNED BY REGISTERED ENGINEER OR ARCHITECT AND APPROVED BY WATER ENGINEERING.
8. 12" MINIMUM ¾" WASHED GRAVEL IN BOTTOM OF PIT OR CONCRETE SLAB WITH SUMP HOLE.
9. PIPING AND METER SHALL BE SUPPORTED AS APPROVED BY THE ENGINEER, AND WATER DISTRIBUTION.
10. ALTERNATE DESIGN MAY BE SUBMITTED FOR APPROVAL.
11. CLEARANCE MUST BE PROVIDED FOR COMBINATION SERVICES IN PIT INSTALLATIONS. SUBMIT FOR APPROVAL.

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY SITUATION NOT COVERED IN STANDARDS

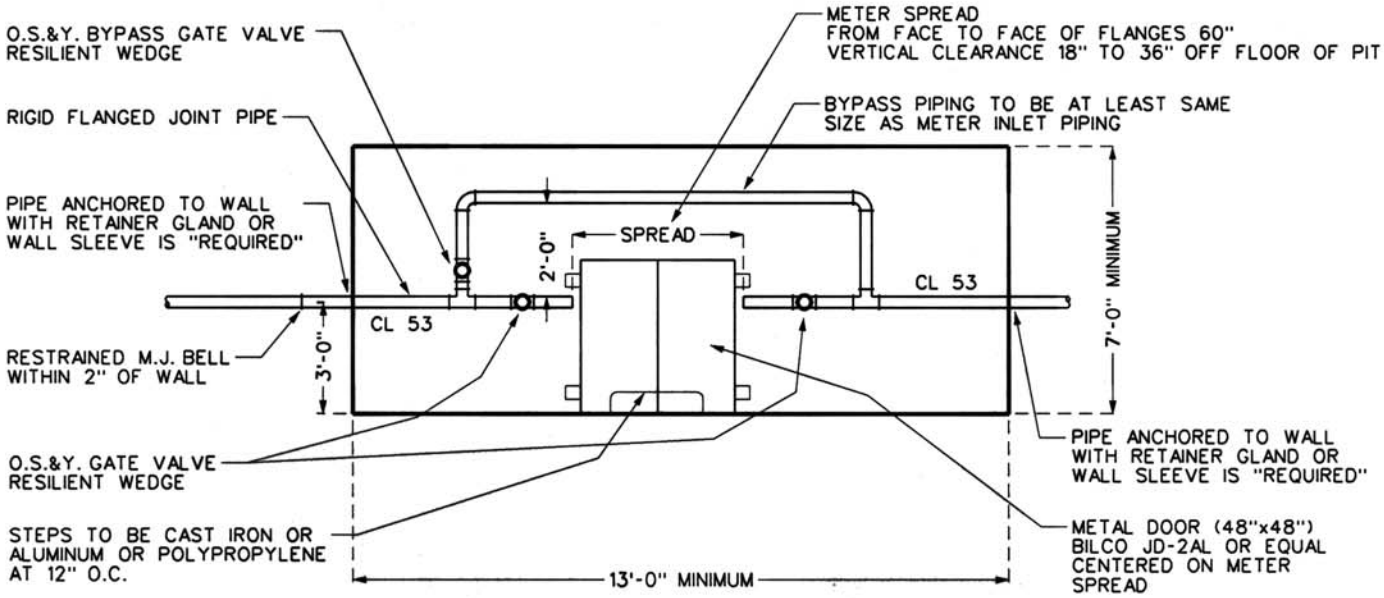
NO.	DATE	REVISIONS
1	3/07	NOTES

METER LAYOUT INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

6" & LARGER METER PIT INSTALLATION
(FOR OFF ROAD USE ONLY)



NOTE:

1. DIMENSIONS SHOWN ARE INSIDE MEASUREMENTS OF PIT.
2. ALL PIPE SHALL BE CLASS 53 DUCTILE WITH FLANGED ENDS.
3. ALL VALVES SHALL BE FLANGED END, HANDWHEEL OPERATED, O.S.&Y. GATE VALVES, RESILENT WEDGE.
4. PIT SHALL HAVE AN INSIDE HEIGHT OF 6' MINIMUM, FROM TOP OF GRAVEL OR FLOOR.
5. PROVIDE SPREADER FOR PROPER ALIGNMENT ON INSTALLATION OF METER SPREAD.
6. WALLS TO BE FORMED IN-PLACE OR PRECAST CONCRETE.
7. TOP SLAB TO BE DESIGNED BY REGISTERED ENGINEER OR ARCHITECT AND APPROVED BY WATER ENGINEERING.
8. 12" MINIMUM ¾" WASHED GRAVEL IN BOTTOM OF PIT OR CONCRETE SLAB WITH SUMP HOLE.
9. PIPING AND METER SHALL BE SUPPORTED AS APPROVED BY THE ENGINEER, AND WATER DISTRIBUTION.
10. ALTERNATE DESIGN MAY BE SUBMITTED FOR APPROVAL.
11. CLEARANCE MUST BE PROVIDED FOR COMBINATION SEVICES IN PIT INSTALLATIONS. SUBMIT FOR APPROVAL

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY
SITUATION NOT COVERED IN STANDARDS

NO.	DATE	REVISIONS
1	3/07	NOTES

METER LAYOUT INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

D-22

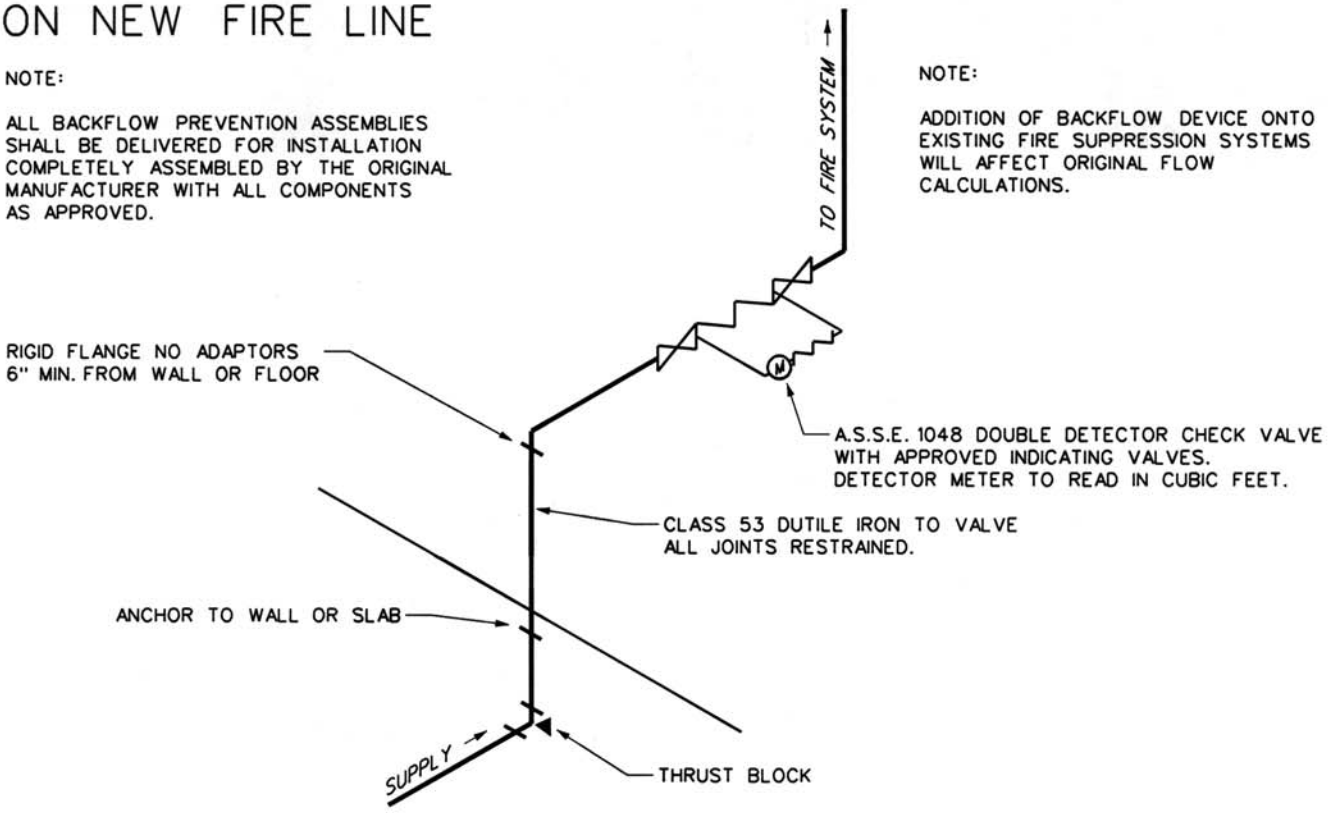
DOUBLE DETECTOR CHECK VALVE ON NEW FIRE LINE

NOTE:

ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE DELIVERED FOR INSTALLATION COMPLETELY ASSEMBLED BY THE ORIGINAL MANUFACTURER WITH ALL COMPONENTS AS APPROVED.

NOTE:

ADDITION OF BACKFLOW DEVICE ONTO EXISTING FIRE SUPPRESSION SYSTEMS WILL AFFECT ORIGINAL FLOW CALCULATIONS.



D-23

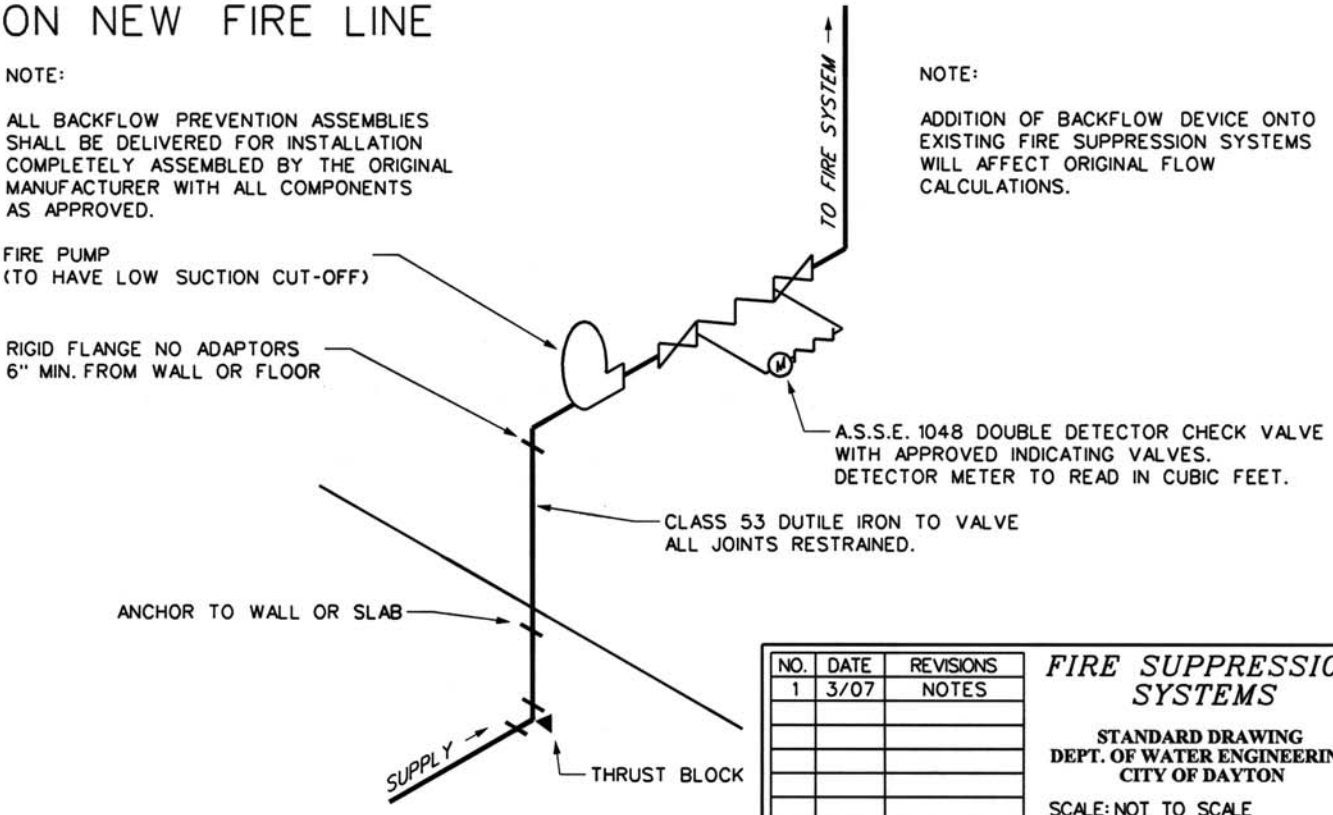
DOUBLE DETECTOR CHECK VALVE WITH FIRE PUMP ON NEW FIRE LINE

NOTE:

ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE DELIVERED FOR INSTALLATION COMPLETELY ASSEMBLED BY THE ORIGINAL MANUFACTURER WITH ALL COMPONENTS AS APPROVED.

NOTE:

ADDITION OF BACKFLOW DEVICE ONTO EXISTING FIRE SUPPRESSION SYSTEMS WILL AFFECT ORIGINAL FLOW CALCULATIONS.



NO.	DATE	REVISIONS
1	3/07	NOTES

FIRE SUPPRESSION SYSTEMS

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

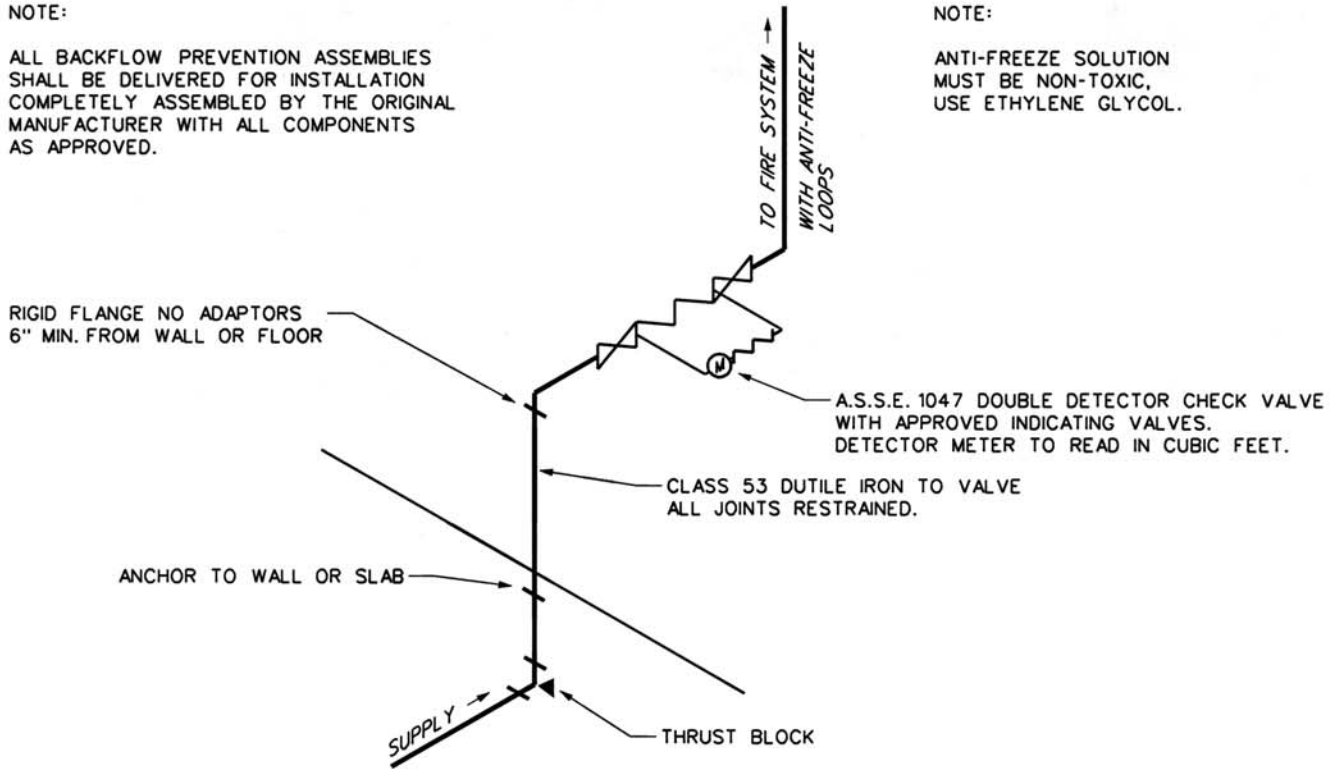
REDUCED PRESSURE DETECTOR ASSEMBLY (R.P.D.A.) WITH ANTI-FREEZE LOOPS

NOTE:

ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE DELIVERED FOR INSTALLATION COMPLETELY ASSEMBLED BY THE ORIGINAL MANUFACTURER WITH ALL COMPONENTS AS APPROVED.

NOTE:

ANTI-FREEZE SOLUTION MUST BE NON-TOXIC, USE ETHYLENE GLYCOL.



NOTE:

ADDITION OF BACKFLOW DEVICE ONTO EXISTING FIRE SUPPRESSION SYSTEMS WILL AFFECT ORIGINAL FLOW CALCULATIONS.

GENERAL NOTE:
CONTACT WATER ENGINEERING FOR ANY SITUATION NOT COVERED IN STANDARDS

NO.	DATE	REVISIONS
1	3/07	DETECTOR
		NOTES

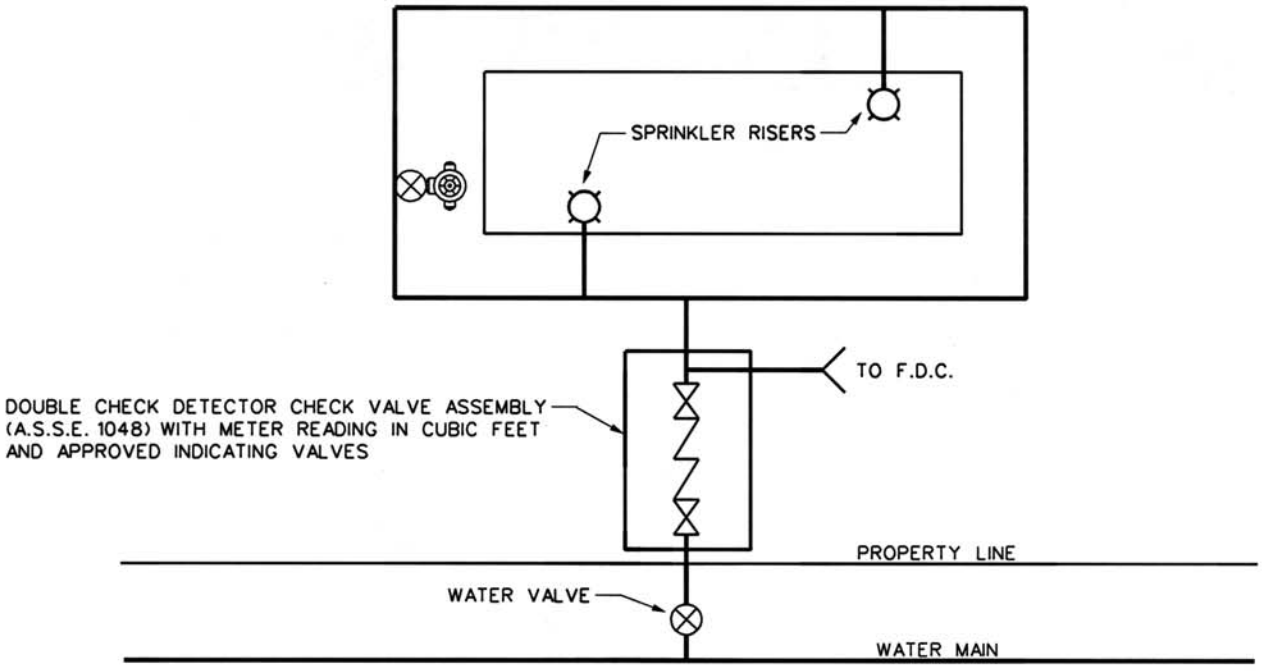
FIRE SUPPRESSION SYSTEM

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

D-25

YARD MAIN SYSTEM ARRANGEMENT

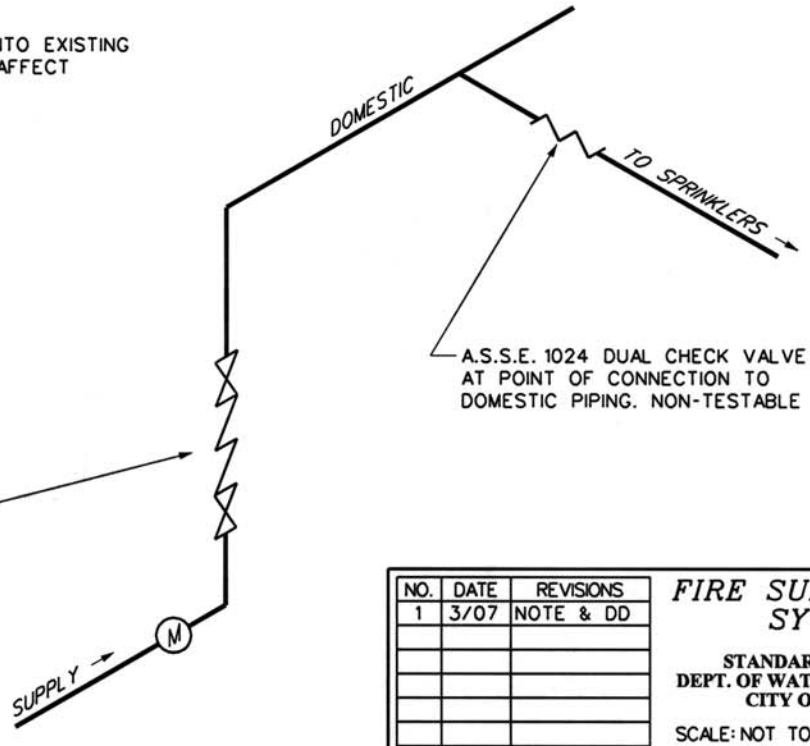


D-26

LIMITED AREA SPRINKLER SYSTEM

NOTE:

ADDITION OF BACKFLOW DEVICE ONTO EXISTING FIRE SUPPRESSION SYSTEMS WILL AFFECT ORIGINAL FLOW CALCULATIONS.



NO.	DATE	REVISIONS
1	3/07	NOTE & DD

FIRE SUPPRESSION SYTEMS

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

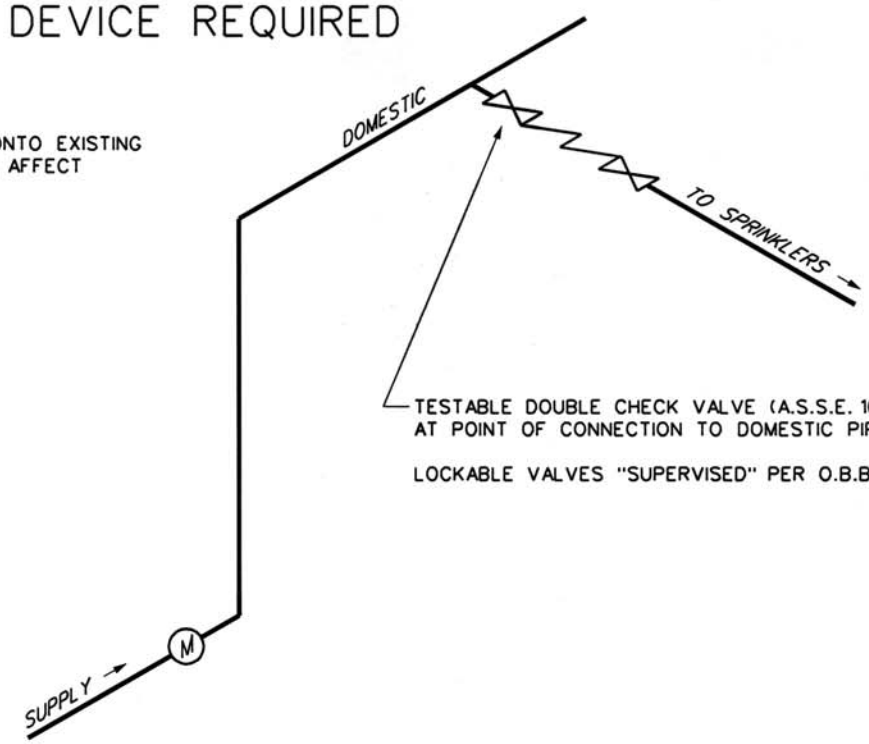
SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

D-27

LIMITED AREA SPRIKLER SYSTEM FROM EXISTING DOMESTIC WITH NO BACKFLOW DEVICE REQUIRED

NOTE:

ADDITION OF BACKFLOW DEVICE ONTO EXISTING FIRE SUPPRESSION SYSTEMS WILL AFFECT ORIGINAL FLOW CALCULATIONS.

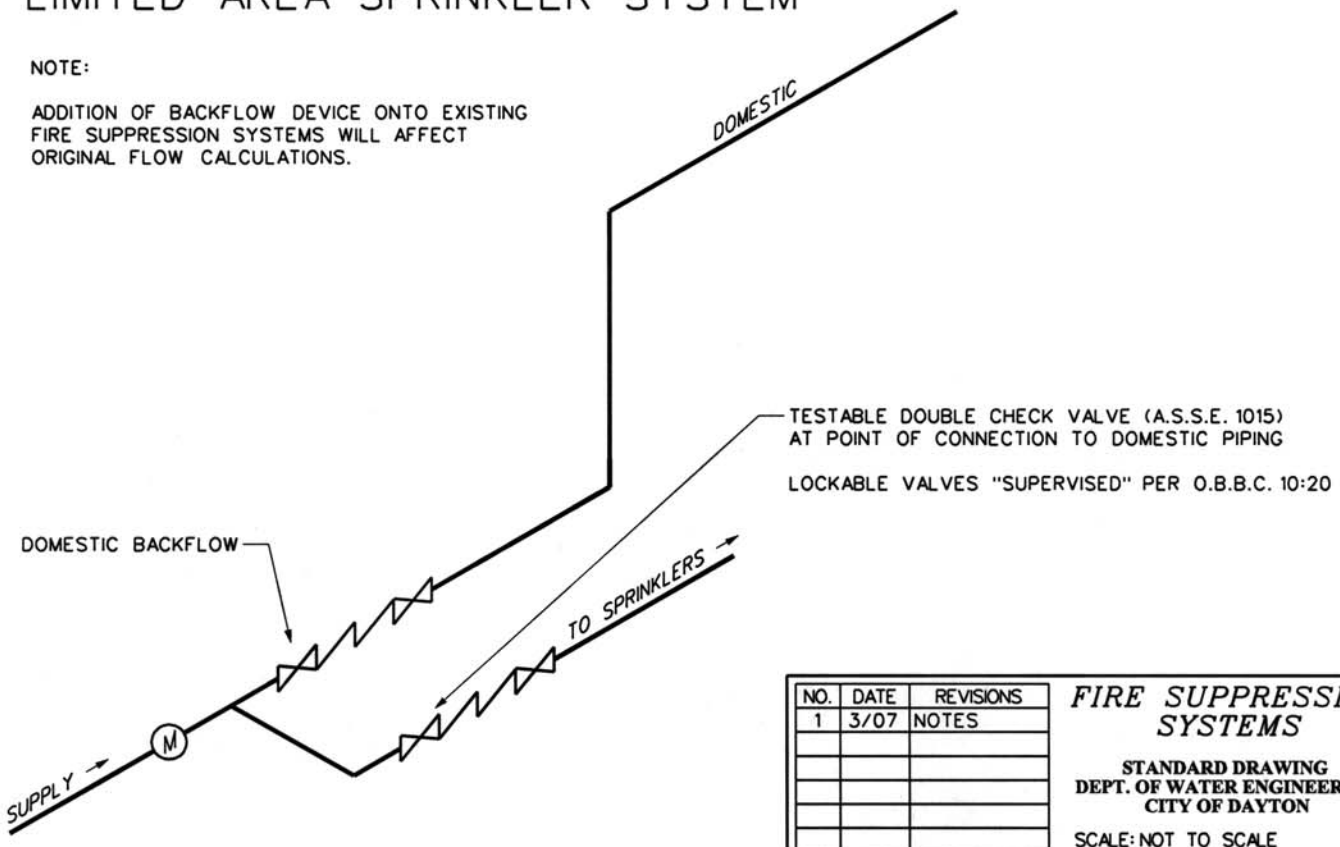


D-28

LIMITED AREA SPRINKLER SYSTEM

NOTE:

ADDITION OF BACKFLOW DEVICE ONTO EXISTING FIRE SUPPRESSION SYSTEMS WILL AFFECT ORIGINAL FLOW CALCULATIONS.



NO.	DATE	REVISIONS
1	3/07	NOTES

FIRE SUPPRESSION SYSTEMS

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

CITY OF DAYTON REQUIREMENTS FOR INSTALLING METERS AND BACKFLOW PREVENTERS FOR IRRIGATION

1. MAKE A DRAWING OF THE PROPOSED IRRIGATION SYSTEM. THIS NEEDS TO BE SUBMITTED TO THE WATER ENGINEERING DIVISION FOR APPROVAL BEFORE WORK BEGINS. FOR COUNTY INSTALLATIONS OUTSIDE CITY LIMITS BOARD OF HEALTH PLUMBING INSPECTION MUST APPROVE FIRST.

2. FOLLOW THE CITY OF DAYTON "STANDARDS FOR TAPS, SERVICES AND METERS". ALL WORK MUST BE DONE IN ACCORDANCE WITH THIS STANDARD

3. GET NECESSARY PERMITS BEFORE WORKS BEGINS:

	IN DAYTON	OUTSIDE DAYTON
WATER SERVICE PERMIT	DAYTON	DAYTON
METER SET FEE	DAYTON	DAYTON
PLUMBING PERMIT	DAYTON	COUNTY COMBINED HEALTH DISTRICT

4. RETURN COMPLETED FORMS AFTER THE BACKFLOW PREVENTERS HAVE BEEN TESTED, PLEASE FILL OUT COMPLETELY WITH THE FOLLOWING:

   OWNER/LESSEE'S NAME,
   ADDRESS (WHERE THE BACKFLOW PREVENTER WAS INSTALLED)
   LOCATION OF THE BACKFLOW PREVENTER
   SIZE, MAKE, MODEL AND SERIAL NUMBER OF THE BACKFLOW PREVENTER

   PLEASE RETURN THE COMPLETED FORMS TO:

   CITY OF DAYTON
   DEPARTMENT OF WATER
   320 W. MONUMENT AVE.
   DAYTON, OHIO 45402

   ATTN: WATER ENGINEERING
   CUSTOMER RELATIONS

   RE: BACKFLOW

5. CONTACT WATER ENGINEERING AFTER THE WORK HAS BEEN COMPLETED. BACKFLOW PREVENTERS HAVE TO BE INSPECTED BY WATER ENGINEERING.

NO.	DATE	REVISIONS
1	3/07	NOTES

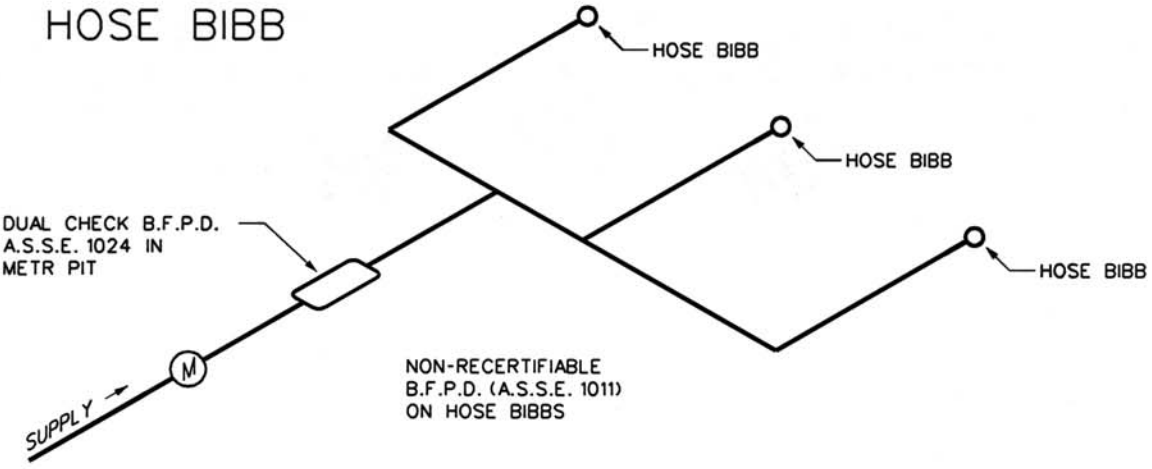
IRRIGATION BACKFLOW

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

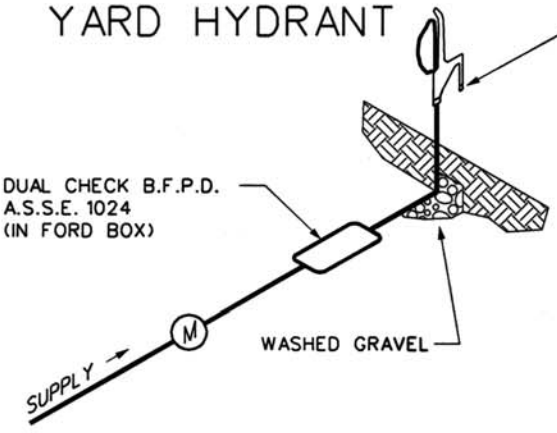
D-30

HOSE BIBB



D-31

YARD HYDRANT



NOTE:

1. A DRAWING OF EACH PROPOSED IRRIGATION SYSTEM MUST BE APPROVED BY WATER ENGINEERING PRIOR TO CONSTRUCTION.
2. ✳ IF IRRIGATION SYSTEM IS NONE OF THESE SHOWN, USE A REDUCED PRESSURE BACKFLOW PREVENTER, (A.S.S.E. 1013), AFTER THE WATER METER. ✳

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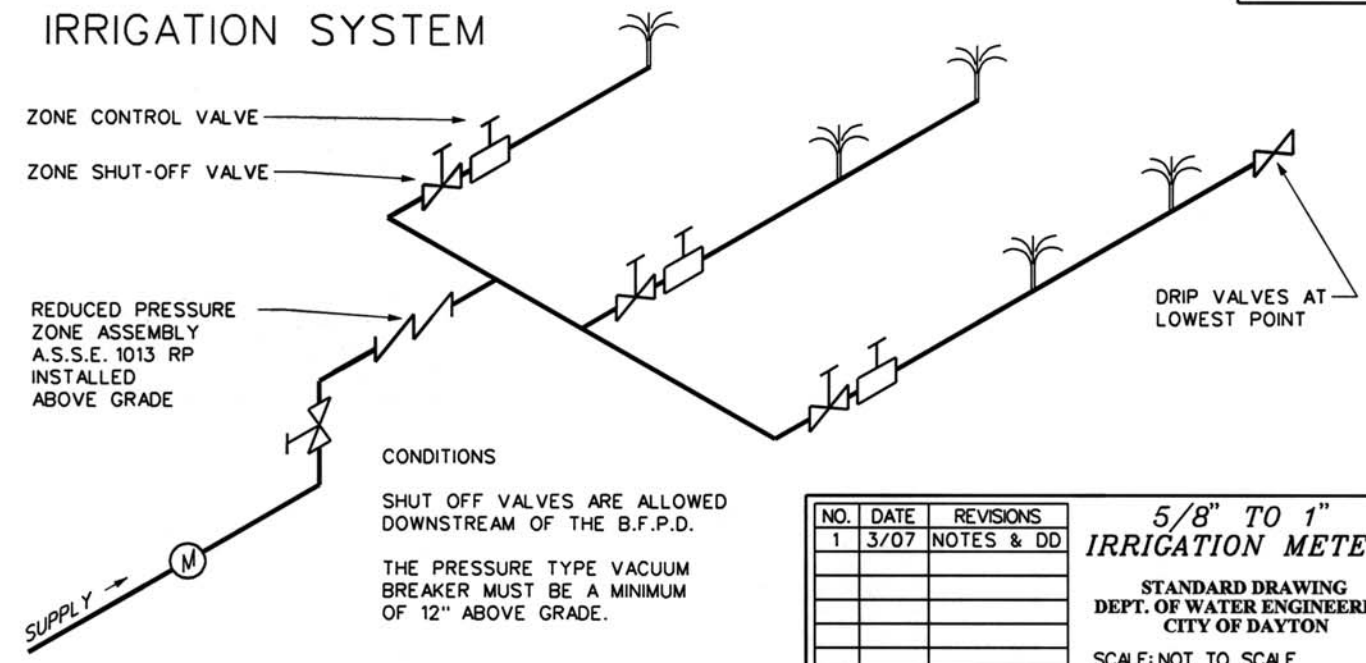
IRRIGATION SYSTEM



CONDITIONS

SHUT OFF VALVES ARE ALLOWED DOWNSTREAM OF THE B.F.P.D.

THE PRESSURE TYPE VACUUM BREAKER MUST BE A MINIMUM OF 12" ABOVE GRADE.

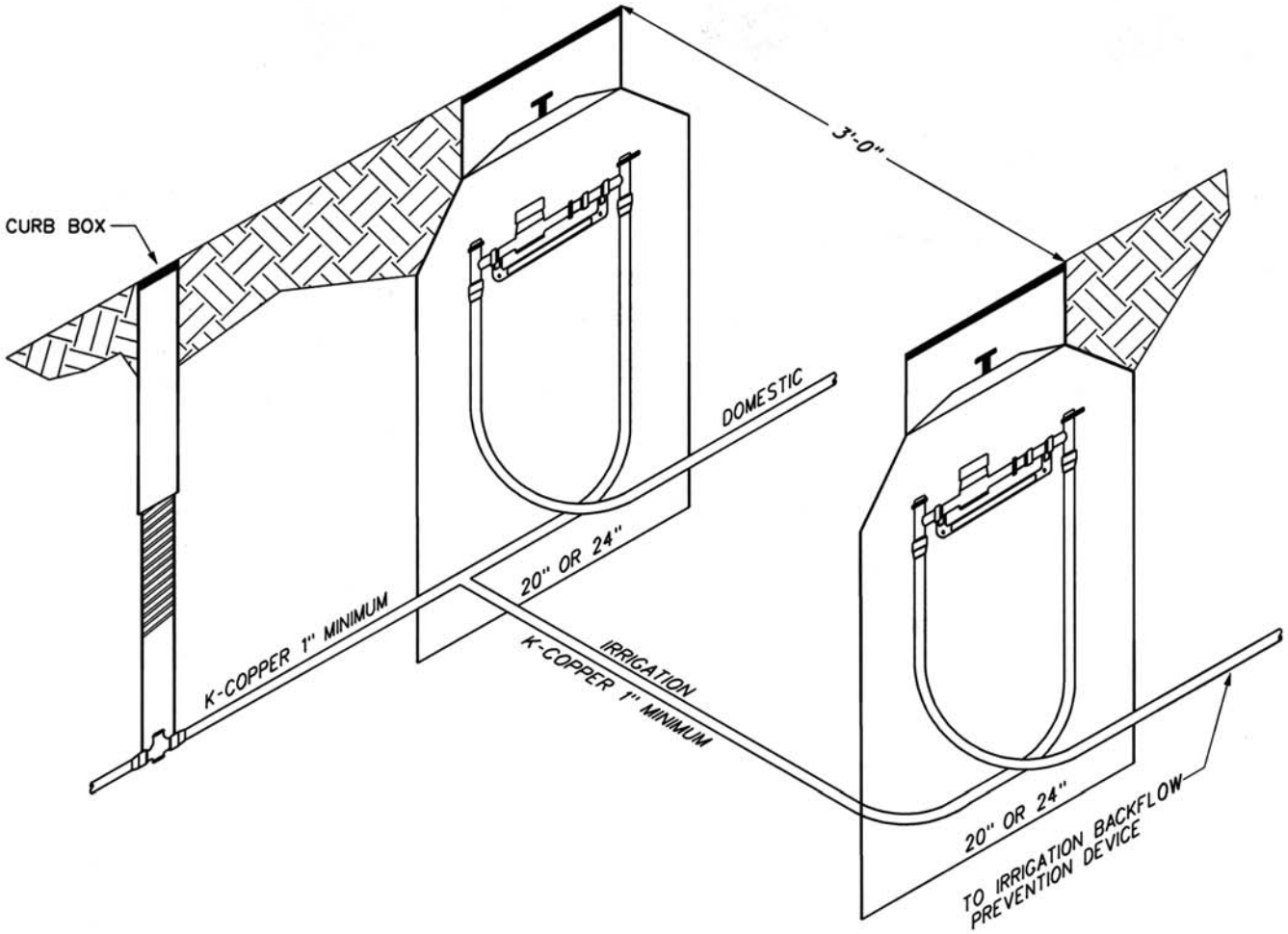
NO.	DATE	REVISIONS
1	3/07	NOTES & DD

5/8" TO 1"
IRRIGATION METERS

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS

5/8"- 1" IRRIGATION METER STANDARD INSTALLATION



NOTES:

1. SEE "STANDARDS FOR TAPS, SERVICES AND METERS" FOR TYPICAL NOTES.
2. BACKFLOW PREVENTION DEVICE REQUIRED - CONTACT WATER ENGINEERING FOR APPROVED DEVICE.
3. ABSOLUTELY NO "DEDUCT" METER INSTALLATION.
4. ALTERNATE DESIGNS MUST BE SUBMITTED FOR APPROVAL.
5. TOP OF PIT TO BE INSTALLED AT FINISHED GRADE.
6. NO OUTLETS ARE ALLOWED BETWEEN THE METER AND THE BACKFLOW PREVENTER OR HOSE BIBB VACUUM BREAKER WITH THE EXCEPTION OF ONE SCREW-IN PLUG FOR WINTERIZING/DRAINAGE PURPOSES.
7. THE UNDERGROUND WATER SERVICE SHALL BE K-COPPER UP TO THE METER. ALL JOINTS MUST BE FLARED TYPE JOINTS.
8. THE INSTALLATION IS SUBJECT TO INSPECTION BY BOTH PLUMBING INSPECTION AND WATER DEPARTMENT PERSONNEL.
9. TWO 5/8" METERS MAY BE INSTALLED IN ONE 24" PIT.

NO.	DATE	REVISIONS
1	11/00	GRAPHICS
2	3/07	1" LOCATION

IRRIGATION METER INSTALLATION

STANDARD DRAWING
DEPT. OF WATER ENGINEERING
CITY OF DAYTON

SCALE: NOT TO SCALE
DRAWN: 07-1999 BY: JBS