

DWG: C:\Projects\Projects\0102-1744_LDDV\Design\PPW (Water)\121744_WRO2.dwg
 DATE: Feb 11, 2016 2:09pm
 USER: mchotham
 121744_CD_FUR
 121744_CD_XBASE
 121744_CD_TBLK02
 121744_CD_PBASE_GASOLINE
 BRETT LAURITSEN_PELKS

Series 1000DCV, 1005DCV, 1010DCV

Detector Check Valves

Sizes: 4" - 10" (100 - 250mm)

Features

- Fabricated steel body provides a much lighter weight unit than cast steel or ductile iron
- Approved for mounting in horizontal or vertical positions
- Prevents backflow from fire prevention systems
- Used to isolate fire systems from public main during pump-out fire system
- Ames-Guard™ epoxy coating is rust resistant and impervious to most chemicals

Available Models

- 1000DCV - 4" (100-250mm) 125# flanged end connections
- 1005DCV - 4" (100-150mm) 125# flanged x grooved end connections
- 1010DCV - 4" (100-150mm) grooved x grooved end connections

- with bypass spooly suffix:
 - CFM - cubic feet per minute meter
 - GPM - gallons per minute meter
 - LM - without meter
- Standard units are less bypass

Materials

- Body: fabricated steel
- Knuckle Joint Assembly: stainless steel linkage
- Seat: Bronze ASTM B88-42

Pressure - Temperature

- Maximum Working Pressure: 175psi (12.06 bar)
- Temperature Range: 33°F - 110°F (0°C - 43°C)

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

Ames product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Technical Service. Ames reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications to Ames products previously fabricated.

Series 1000DCV Detector Check Valves detect any leakage or unauthorized use of water from fire or automatic sprinkler systems. The valve also isolates water from the public water mainline. During times of minimal water flow, the valve clapper remains closed so that the water flows through a bypass meter (optional). When fire flow is required, the water demand will open the clapper to allow full water flow.

Specifications

A Detector Check Valve shall be installed on fire protection or automatic sprinkler systems when connected to the potable water supply. The valve body shall be formed, welded units, in heavy steel. The valve shall be hydrostatically tested in excess of 700psi (48 bar). Valve construction shall eliminate any possibility of defects such as sand pits and blow holes which may occur in casting. All linkage parts shall be stainless steel. The removable clapper seat ring should be bronze. Each valve shall be individually tested before shipping. Valves shall be fusion bonded epoxy coated in accordance with AWWA C550. Valve shall be an Ames Fire & Waterworks Series 1000DCV.

ES-A-1000DCV-L

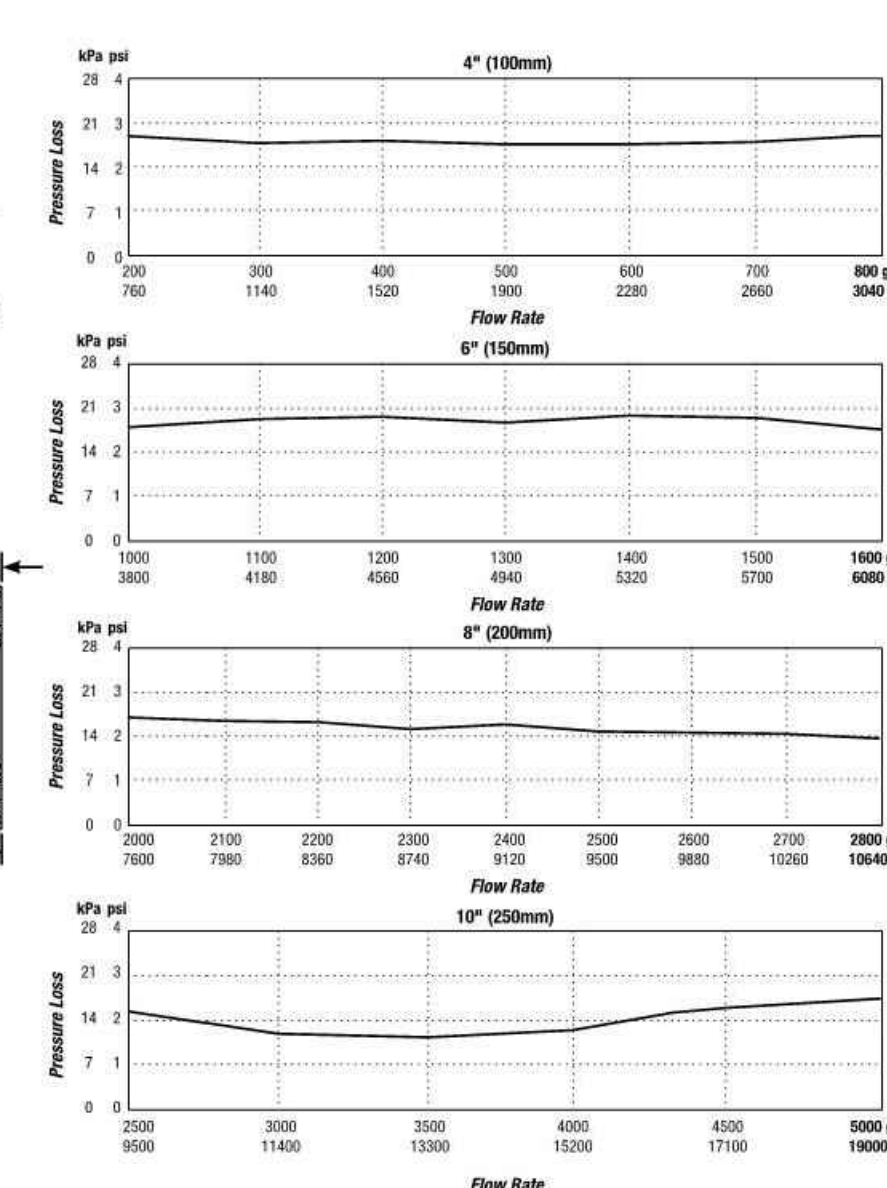
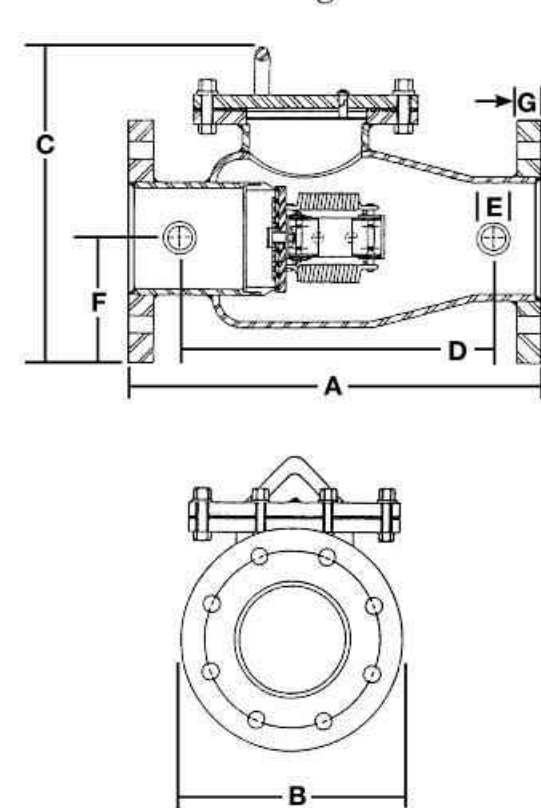


Approvals



Flange bolt pattern and hole diameter in accordance with ANSI B16.5 Class 125/AWWA C207 Class D
Body nameplate provides nominal size, direction of flow, PSI rating, year of manufacture and approval marks

Dimensions - Weights



IMPORTANT: Inquire with governing authorities for local installation requirements.

Size (DN)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Weight
in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	lb. kg
4 100	16 1/2	419	9	229	12 1/2	318	12 1/2	308	1 1/2	25	4 1/2	114	1/4	16	60	27											60
6 150	22 1/2	559	11	279	15 1/2	384	17	432	1 1/2	25	5 1/2	140	1/4	17	66	74											74
8 200	28 1/2	695	13 1/2	343	17 1/2	450	21	523	2	25	6 1/2	171	1/4	17	154	70											70
10 250	36	914	16	406	21	533	26	711	2	25	8	203	1/4	17	179	81											81

Consult factory for 1005DCV and 1010DCV dimensions.

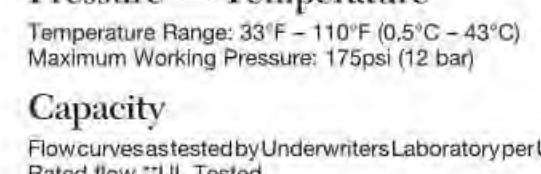
Ames Fire & Waterworks logo

Ames Water Technologies Company

USA: Backflow - Sacramento, CA • Tel: (916) 629-0123 • Fax: (916) 629-9533
 Control Valves - Houston, TX • Tel: (713) 943-0960 • Fax: (713) 943-9445
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ES-A-3000SS



Series 3000SS

Double Check Detector Assemblies

Sizes: 2 1/2" - 12" (65 - 300mm)

Features

- Cam-Check Assembly valve provides low head loss
- Short bay length is ideally suited for retrofit installations
- Stainless Steel body is half the weight of competitive designs reducing installation and shipping cost
- Stainless steel construction provides long term corrosion protection and maximum strength
- Single top access cover with two-bolt grooved style coupling for ease of maintenance
- No special tools required for servicing
- Compact construction allows for smaller vaults and enclosures
- Furnished with 1/2" x 1/2" bronze meter (open or closed)
- Detects underground leaks and unauthorized water use
- Maybe installed horizontal or vertical "flow up" position

Available Models

- LD - less shutoff valves
 - OSY - UL-FM outside stem and yoke resilient seated gate valves
 - OSY Fnd - flanged inlet gate connection and grooved outlet gate connection
 - OSY Gf - grooved inlet gate connection and flanged outlet gate connection
 - OSY GdG - grooved inlet gate connection and grooved outlet gate connection
 - CFM - cubic feet per minute meter
 - GPM - gallons per minute meter
- Post indicator plate and operating nut available - consult factory

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

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Specifications

A Double Check Detector Assembly shall be installed on fire protection systems when connected to a potable water supply. Degree of hazard present to determine by the local authority having jurisdiction. The main valve body shall be manufactured from 300 Series stainless steel to provide corrosion resistance. 100% lead free through the waterway. The double check detector assembly consists of two independently operating spring loaded check valves, two UL-FM OSY resilient seated gate valves, and a bypass assembly. The bypass assembly consists of a meter (cubic ft. or gallons), a double check including shutoff valves and required test cocks. Each check valve shall be internally loaded and provide positive fire tight closure against reverse flow. Cam-check includes stainless steel cam arm and spring, rubber faced disc and anepacbackseat. The resilient bronze or iron parts used within the cam-check valve assembly. The check valves seats shall be molded thermoplastic construction. The use of seal screws as a retention method is prohibited. All internal parts shall be accessible through a single cover on the valve assembly. The valve cover shall be held in place through the use of a single grooved style two-bolt coupling. The bypass line shall be hydrostatically tested to accurately measure flow. The bypass line shall consist of a meter, a small diameter double check assembly with test cocks and isolation valves. The bypass line double check valve shall have two independently operating module popped check valves, and top mounted test cocks. The assembly shall be an Ames 3000SS.

Materials

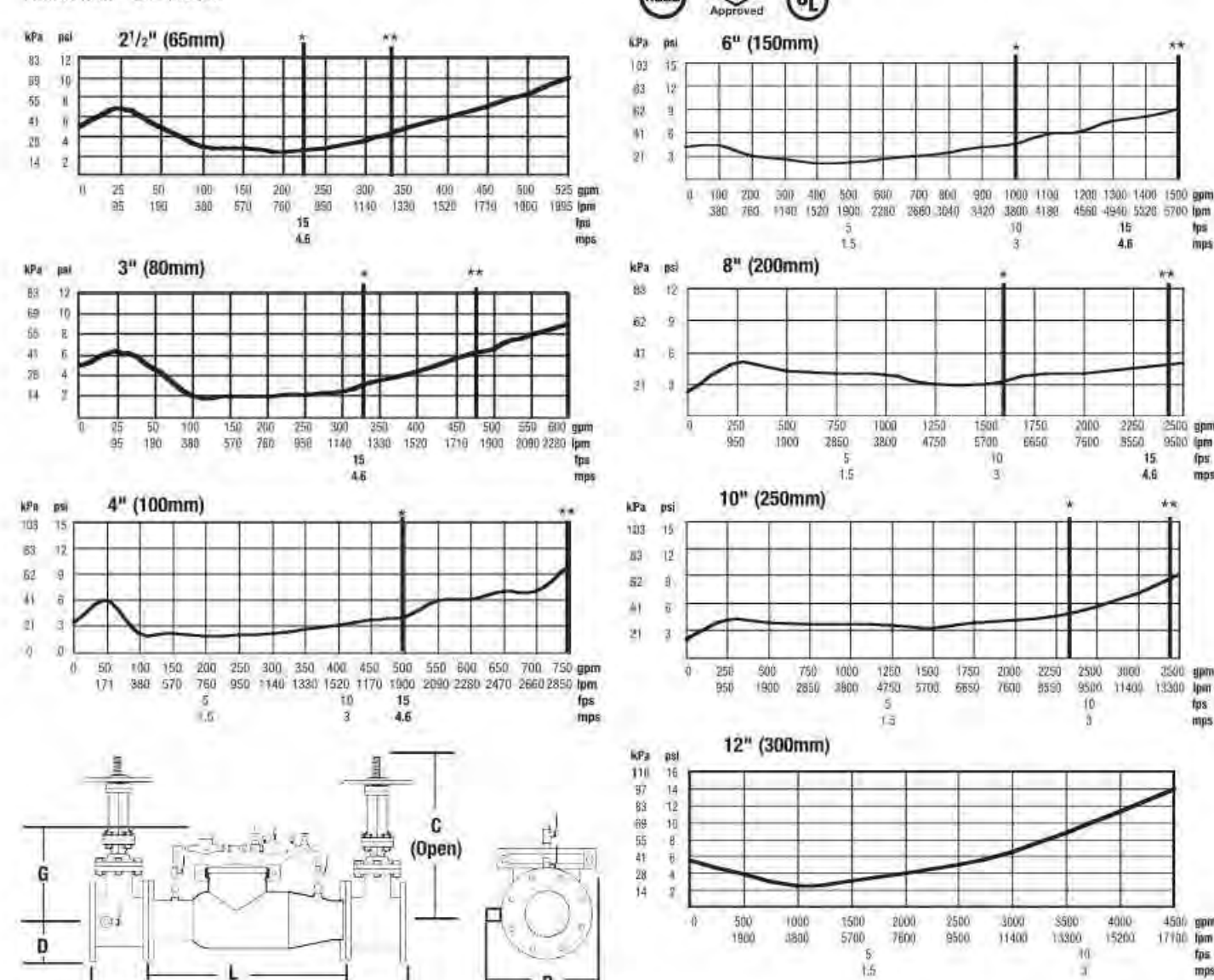
All internal metal parts: 300 Series stainless steel. Main valve body: 300 Series stainless steel. Check assembly: Nylon® Range dimension in accordance with AWWA Class D. Nylon® is a registered trademark of General Electric Company.

Pressure - Temperature

Temperature Range: 33°F - 110°F (0.5°C - 43°C)
 Maximum Working Pressure: 175psi (12 bar)

Capacity

Flow curves as tested by Underwriters Laboratory per UL1469, 1996.
 Rated flow "UL Tested"



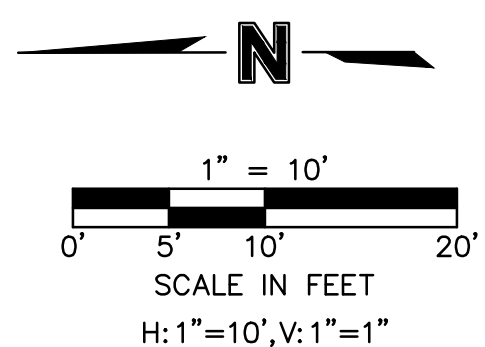
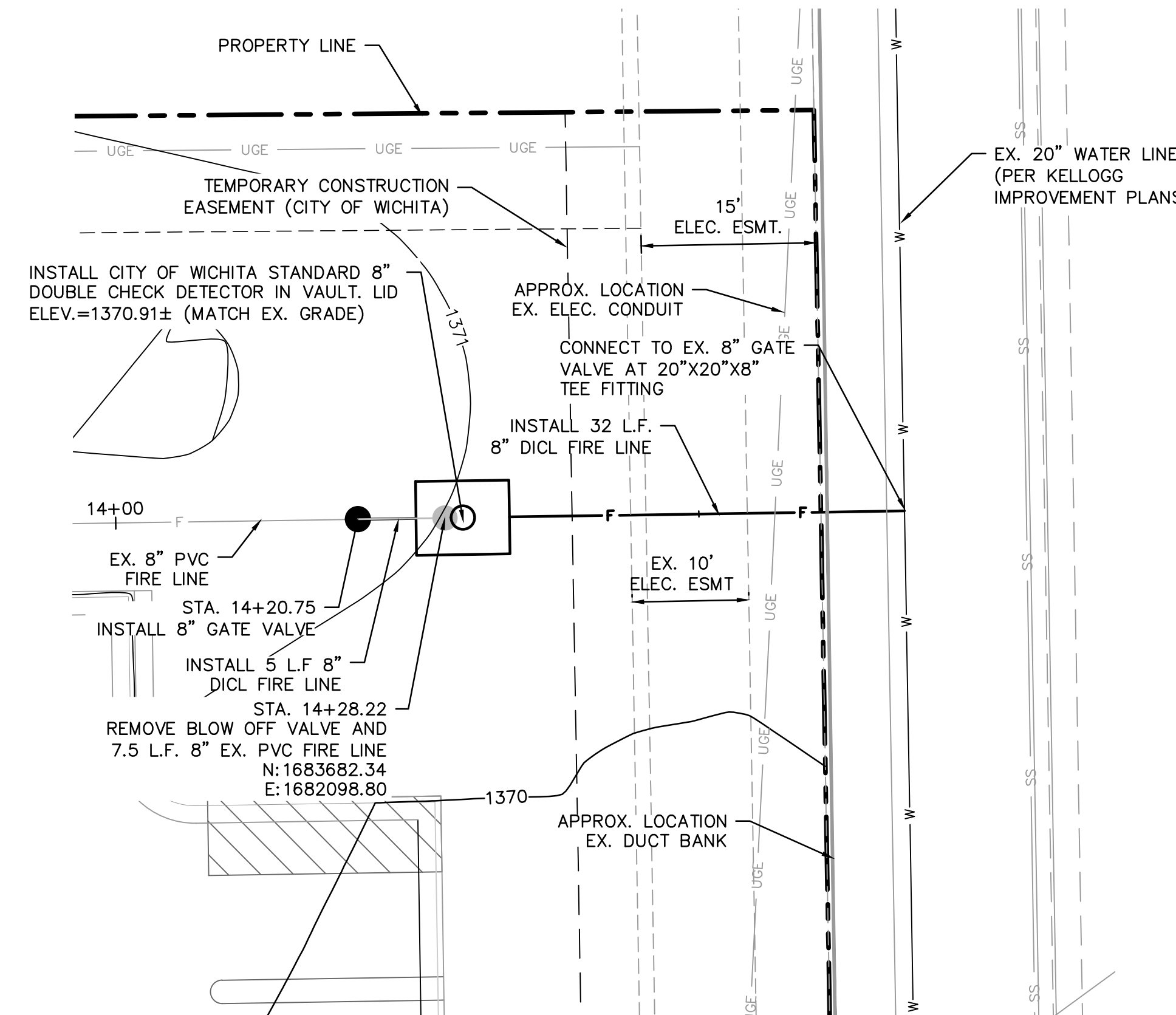
SIZE (DN)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	NET WEIGHT
in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	lb. kg
2 1/2 65	37	96.5	18 1/2	476	37 1/2	99	10	250	22	559	17 1/2	318	1/4	16	70	68	31										68
3 80	38	96.5	18 1/2	476	37 1/2	99	10	250	22	559	17 1/2	318	1/4	16	70	68	31										68
4 100	40	101.6	19	476	37 1/2	99	10	250	22	559	17 1/2	318	1/4	16	70	68	31										68
6 150	48 1/2	122	20 1/2	476	37 1/2	99	10	250	22	559	17 1/2	318	1/4	16	70	68	31										68
8 200	52 1/2	133	21 1/2	476	37 1/2	99	10	250	22	559	17 1/2	318	1/4	16	70	68	31										68
10 250	55 1/2	141.6	22 1/2	476	37 1/2	99	10	250	22	559	17 1/2	318	1/4	16	70	68	31										68
12 300	57 1/2	146.1	23 1/2	476	37 1/2	99	10	250	22	559	17 1/2	318	1/4	16	70	68	31										68

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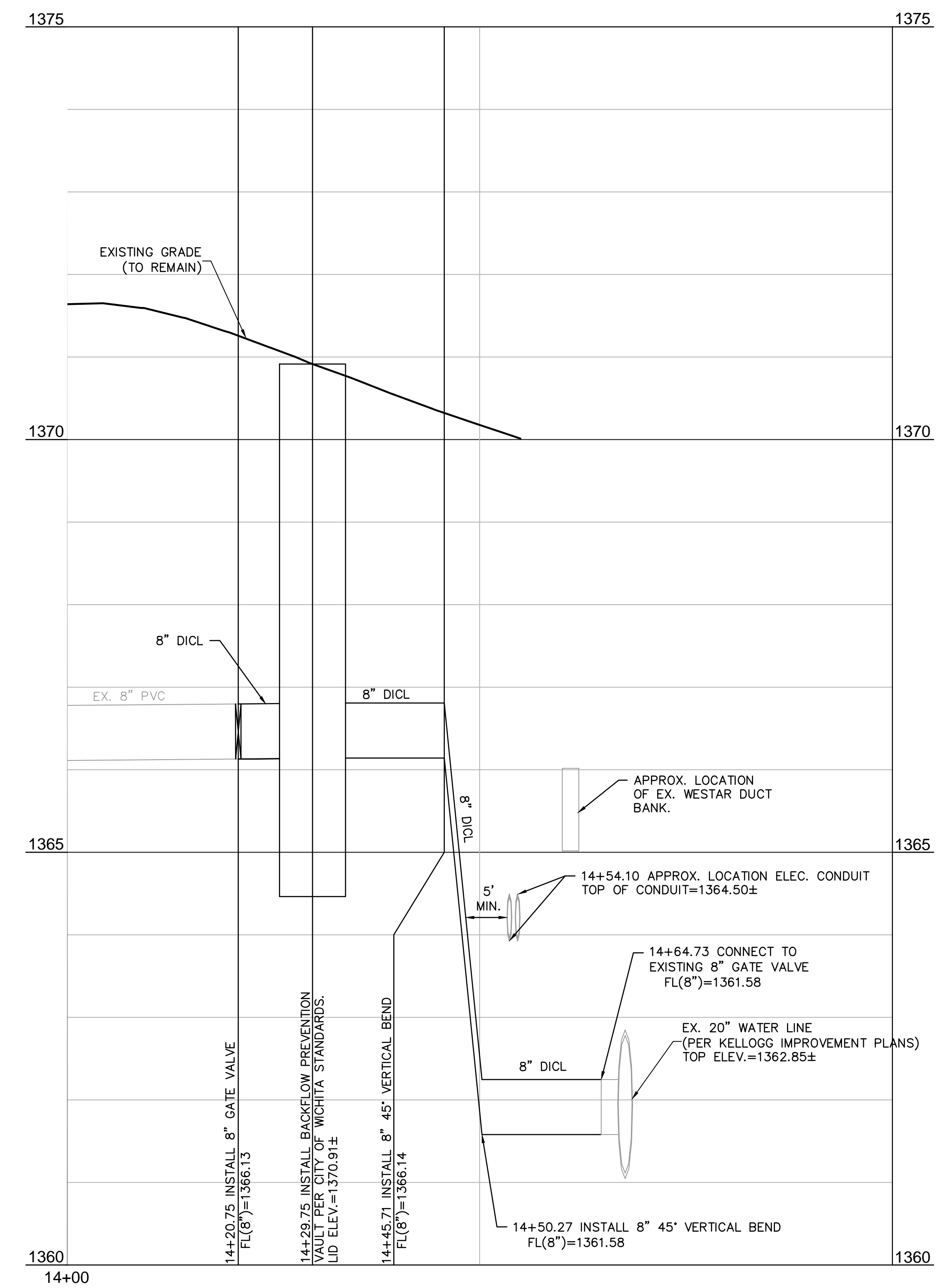
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FIRE LOOP CONNECTION



- #### NOTES
- CONTRACTOR TO VERIFY LOCATION OF EXISTING BLOW-OFF VALVE AND WESTAR EQUIPMENT PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF CONFLICTS.
 - EXISTING COSTCO FIRE LINE LOOP EXTENSION TO BE COMPLETED WITHOUT SERVICE DISRUPTION TO COSTCO.
 - CONTRACTOR TO REPLACE ALL TURF AND LANDSCAPE TO ORIGINAL CONDITION AFTER COMPLETING WORK.

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 Oklahoma City, OK 73118
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 FAX: 405.242.6801
 www.molssonassociates.com

COSTCO WHOLESALE
 WICHITA, KANSAS

BRETT LAURITSEN
 PROFESSIONAL ENGINEER
 KANSAS
 2-12-16

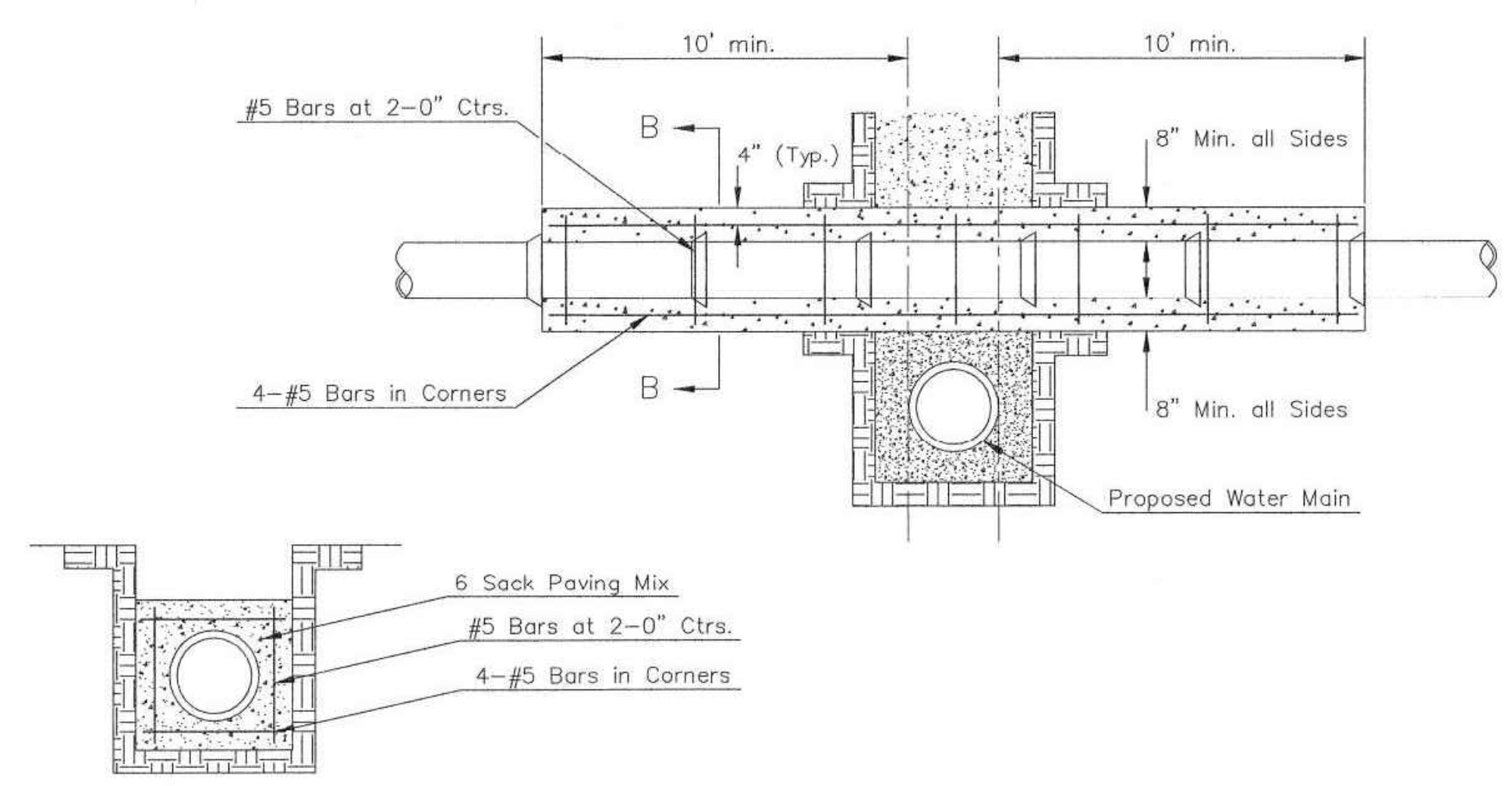
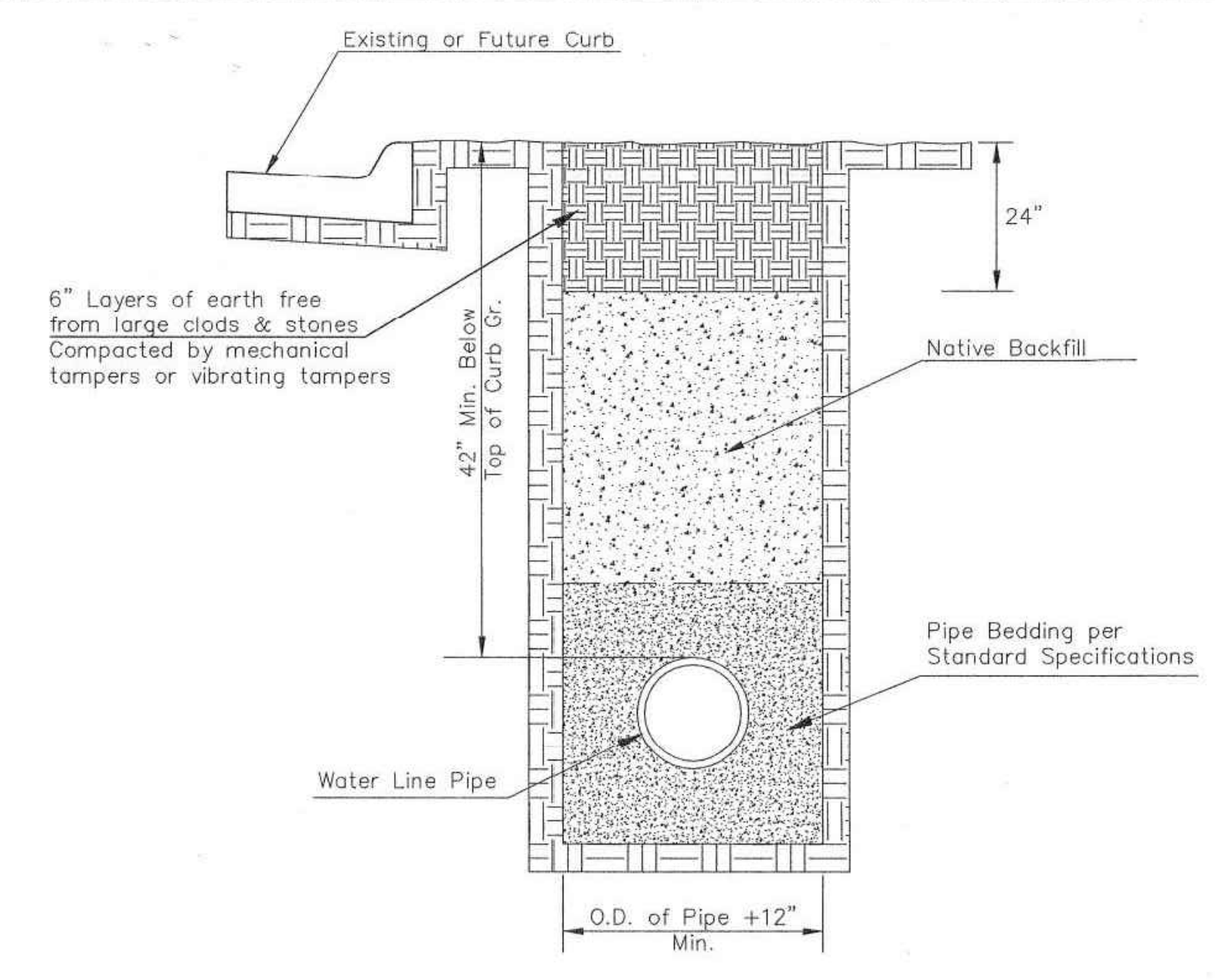
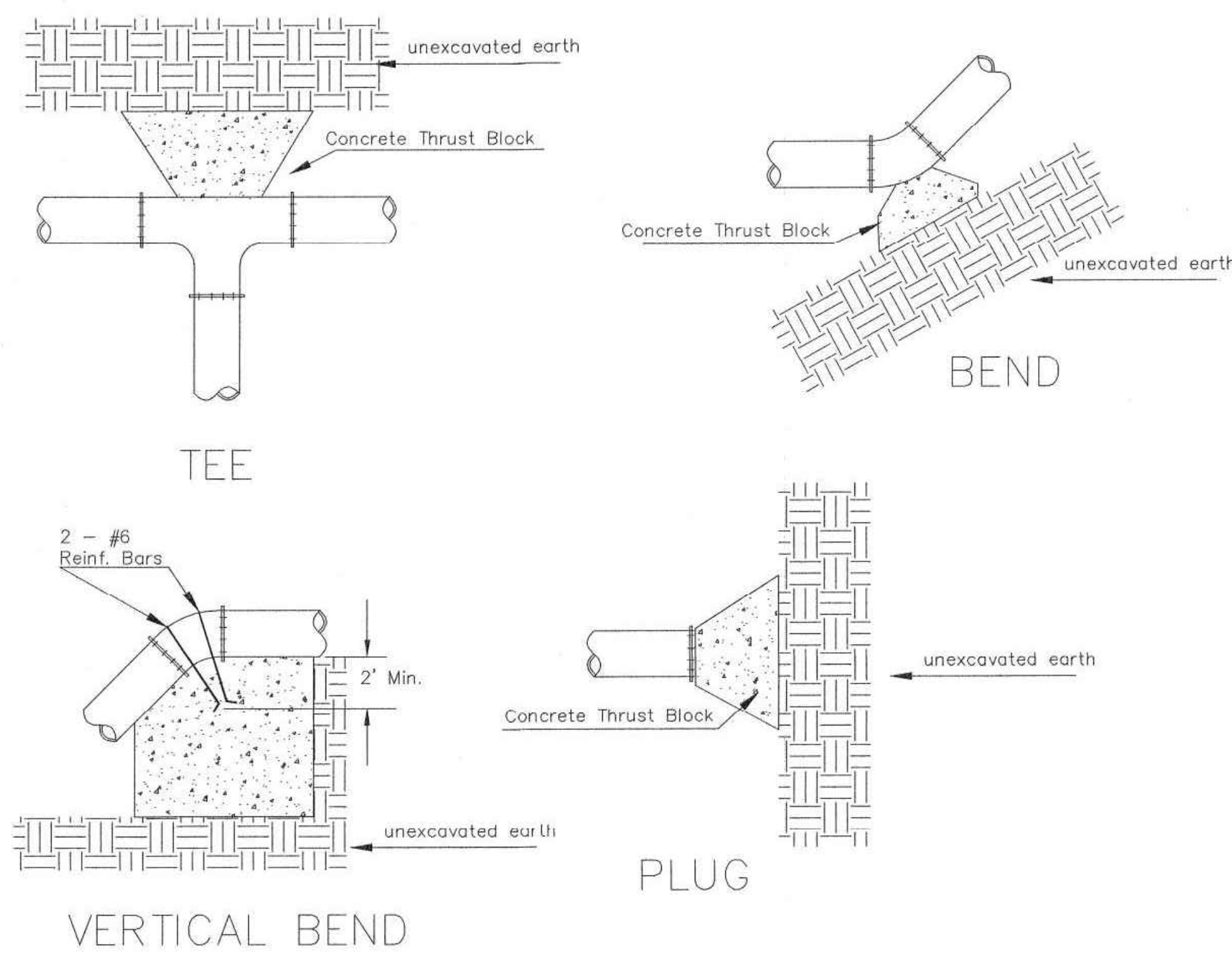
REV. NO.	DATE	DESCRIPTION
1	02-12-16	CITY COMMENTS

REVISIONS
 ISSUE FOR BID
 CITY COMMENTS
 REVISIONS

FIRE LOOP CONNECTION PLAN AND PROFILE
 COSTCO WHOLESALE FIRE LOOP EXTENSION
 EAST KELLOGG AVENUE & WEBB RD
 WICHITA, KANSAS

SHEET
 PPW2

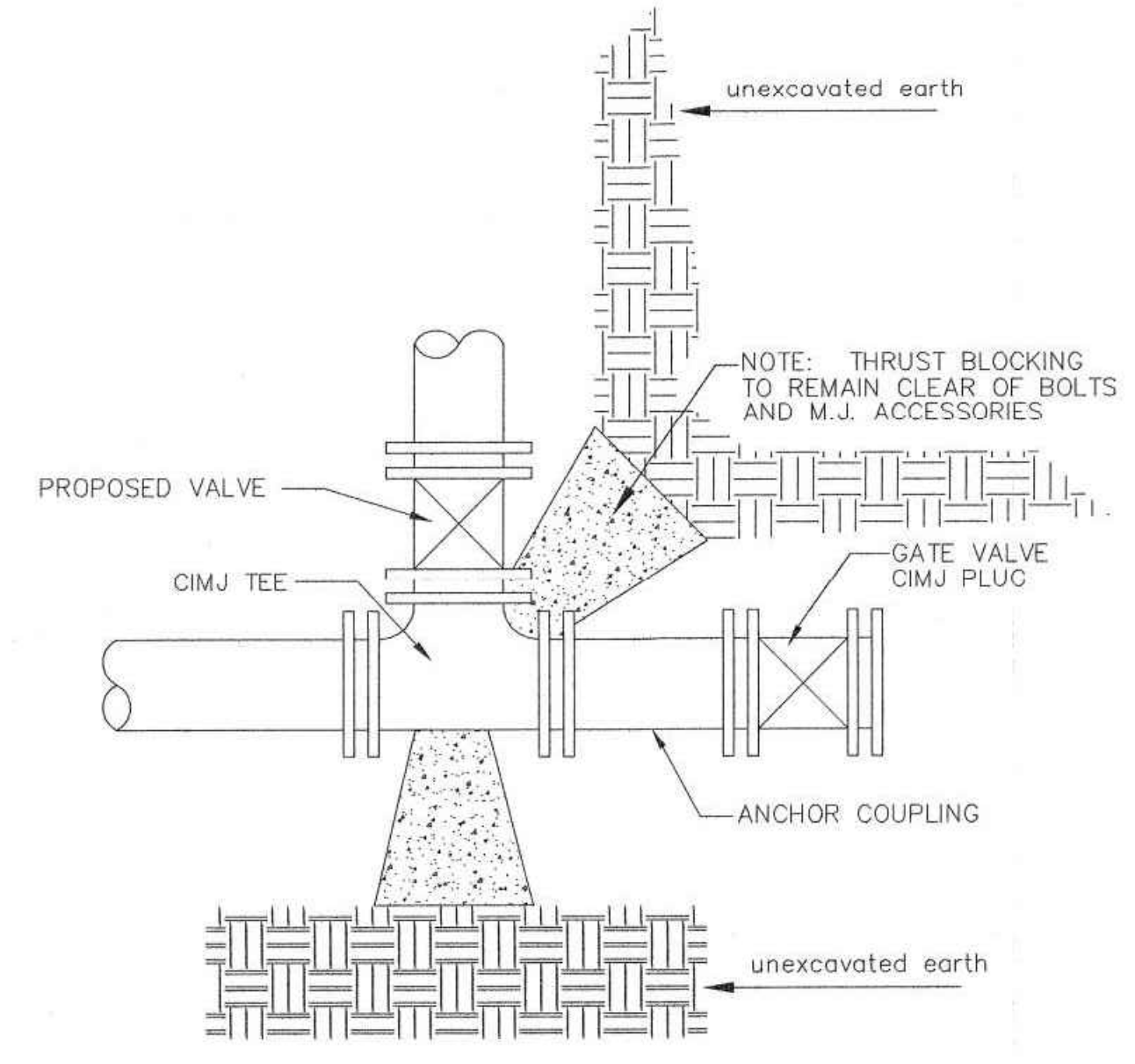
drawn by: MTC
 checked by: BHS
 approved by: BHS
 QA/QC by: BHS
 project no.: 012-1744
 drawing no.:
 date: 01-29-16



Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.

PIPE SIZE	THRUST AT FITTINGS IN TONS--AT 150#/IN ² P				
	PLUG	90°	45°	22 1/2°	TEE
6"	2.8	3.95	2.15	1.09	.55 2.8
8"	4.9	6.95	3.75	1.90	.96 4.9
12"	11.4	16.1	8.75	4.45	2.25 11.4
16"	20.15	28.5	15.4	7.85	3.95 20.15
20"	31.15	44.0	23.85	12.15	6.10 31.15
24"	44.55	63.0	34.1	17.4	8.75 44.55

TYPICAL THRUST BLOCKS

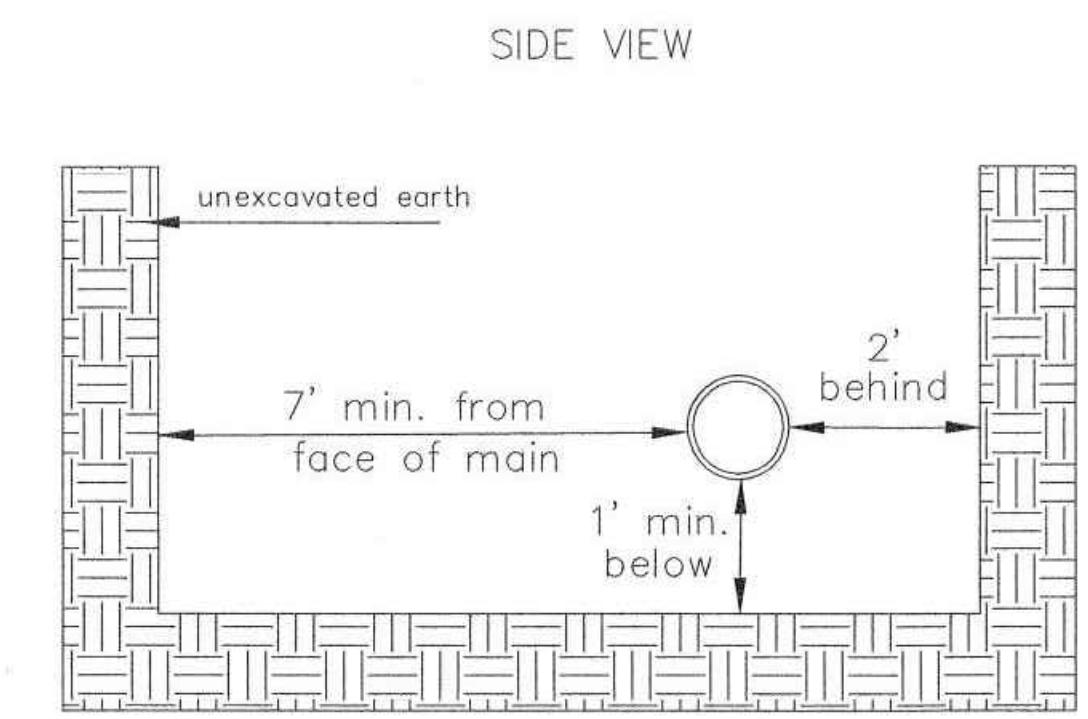


KEY BLOCK DETAIL

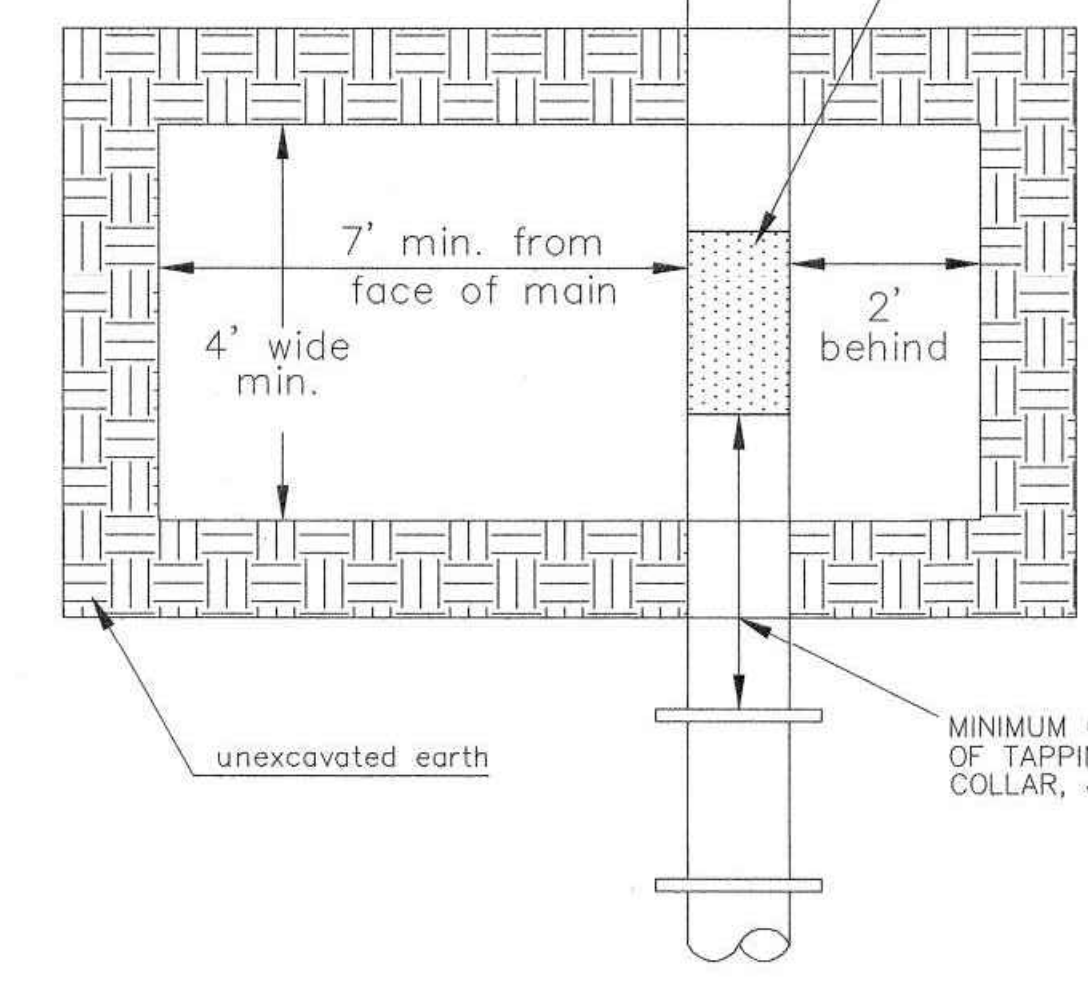
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

Note: When shoring is required it is to be per The City of Wichita Standard Specifications.

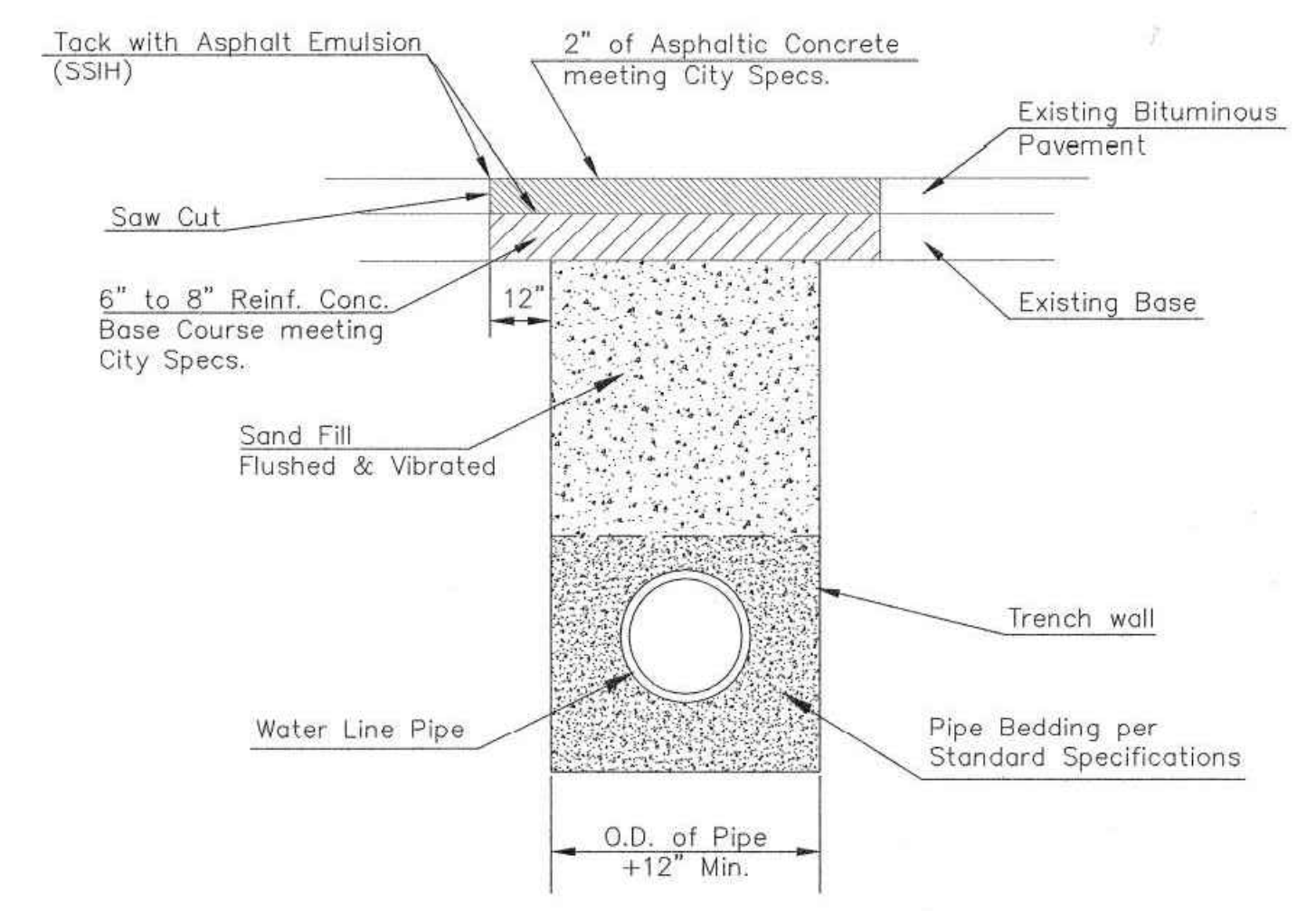


TOP VIEW



EXCAVATION FOR WET TAP

PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



* PLANS GOVERN UNLESS OTHERWISE NOTED ON PLANS



CITY OF WICHITA
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

MISCELLANEOUS WATER DETAILS
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
435 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

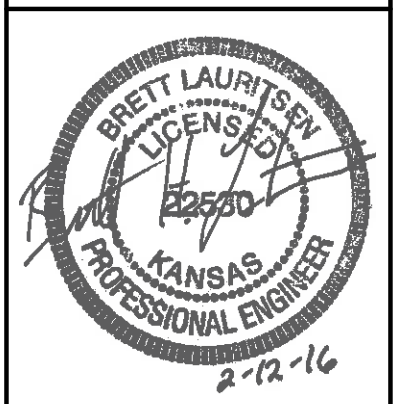
SHEET

WL-104

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