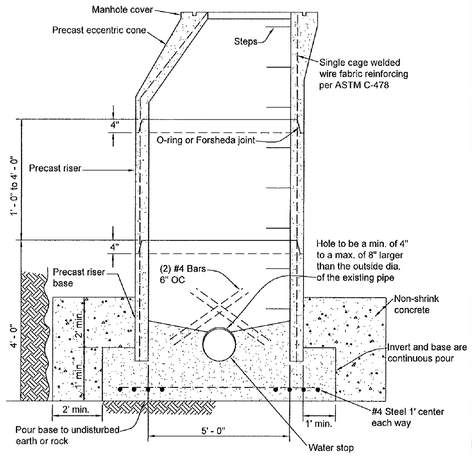
The Town of Leesburg in Virginia

DESIGN AND CONSTRUCTION STANDARD

ARTICLE 4-130.5A(3)f



NOTES:

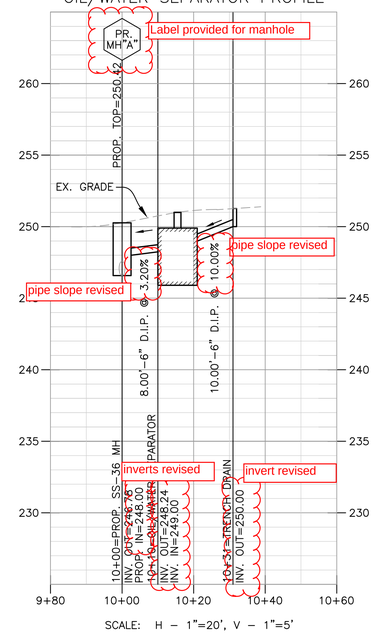
A. Test manhole prior to cutting off existing sewer main.
B. Non-shrink concrete to be poured around base and 2' above the base and against undisturbed earth.
C. Manhole detail for reference only. Refer to details SS-7, SS-8, etc.
D. Precast riser must be prefabricated.
E. Doghouse manhole will be permitted on a case by case basis and as approved by the Director.

Not To Scale

REVISIONS NO.	DATE			DOGHOUSE MANHOLE	DRAWING SS-36
1					PAGE 64b

note added for clarification

TRENCH OUTFALL #2 OIL/WATER SEPARATOR PROFILE



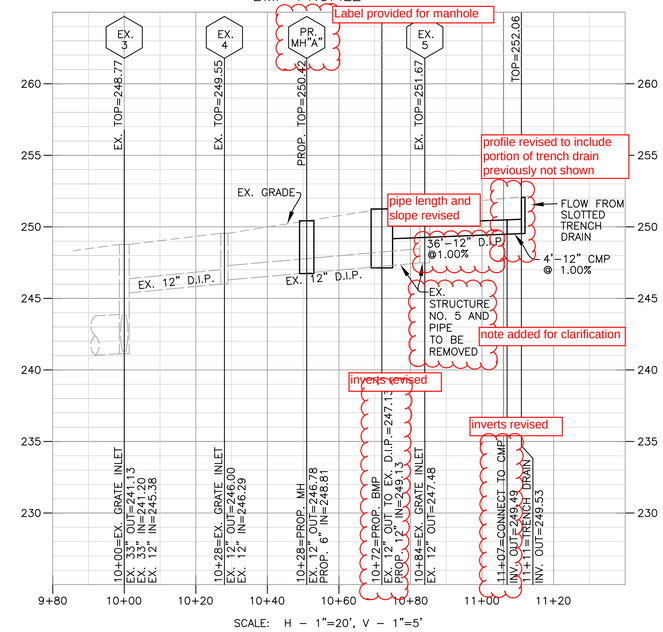
SCALE: H – 1"=20', V – 1"=5'

NOTE: SEE TRENCH DRAIN DETAILS SHEET C012

note added for clarification

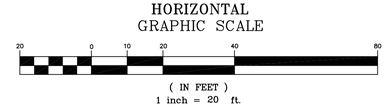
note added for clarification

TRENCH OUTFALL #1 BMP PROFILE



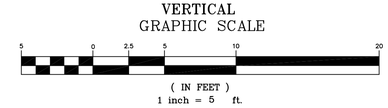
SCALE: H – 1"=20', V – 1"=5'

HORIZONTAL GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

VERTICAL GRAPHIC SCALE



(IN FEET)
1 inch = 5 ft.

note added for clarification

The Model S3 hydrant is designed for use anywhere potable water is required.

Unlike conventional hydrants which drain the water into the ground, the Model S3 employs a reservoir below frost line to contain the water. The hydrant is completely sealed to prevent surface and ground water from entering reservoir or service line. The valve, with it's unique venturi design, removes the stored water along with the water being used.

The Model S3 is equipped with a diverter spout, which allows the hydrant to be operated independently from the backflow preventer. When the hydrant is to be used with a hose, the diverter sleeve is pulled down during flow and water is automatically diverted to the backflow preventer hose connection. The diverter will work with or without a hose attached to the backflow preventer and will automatically release any time the hydrant is shut off.

An important feature of the S3 is easy maintenance. The entire working portion of the hydrant can be removed from the reservoir without any excavation.

SPECIFICATIONS:
HOSE CONNECTION BACKFLOW PREVENTER (BFP)

- NIDEL® Model 37HF
- ASSE 1052
- Field Testable (see instruction sheet)
- Two Check Valves

OPTIONAL: ASSE 1057 listed - Consists of NIDEL® Model 34HF Single Check Vacuum Breaker
Order example: S3-Bury Depth-SC

PATENT - U.S. Patent number 5246028 (Additional Patents Pending)

FEMALE INLET - 1" N.P.T.

MIN PRESSURE - 20 psi

MAX PRESSURE - 100 psi

MAX TEMPERATURE - 120° F

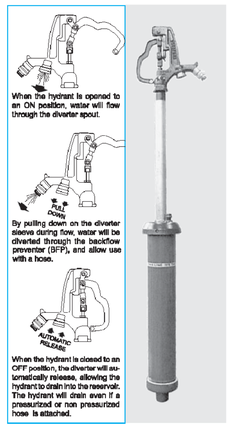
FLOW RATES (GPM)

PSI	DIVERTER	BFP
20	4.5	1.5
30	5.5	3.0
40	6.5	4.0
50	7.0	5.0
60	8.0	6.0
70	8.5	7.0
80	9.0	7.5
90	9.5	8.0
100	10.0	8.5

WOODFORD

Backflow Protected Automatic Draining Freezeless

Sanitary Yard Hydrant
Model S3



When the hydrant is opened to an ON position, water will flow through the diverter spout.

By pulling down on the diverter sleeve during flow, water will be diverted through the backflow preventer (BFP), and allow use with a hose.

When the hydrant is closed to an OFF position, the diverter will automatically release, allowing the hydrant to drain into the reservoir. The hydrant will drain even if a pressurized or non pressurized hose is attached.

NOTICE

FOR WINTER USE: The hydrant must be operated at full flow, through the diverter, for a minimum of 30 seconds before and after each use to drain the hydrant and prevent freezing.

When ordering, specify bury depth.

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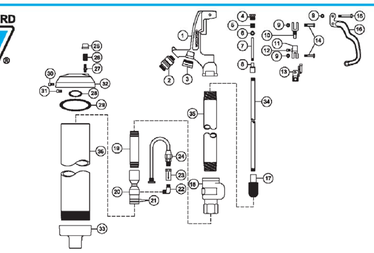
Rev. 06/09 Form No. S3.108

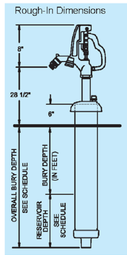
WOODFORD



MODEL S3 PARTS LIST

ITEM	PART #	DESCRIPTION
	15219	S3 Head Assembly (Includes Items 1-18)
1	10449	Head
2	37HF-BR	37HF Backflow Preventer
3	15220	Diverter Assembly
4	10100	Packing Nut
5	10101	Packing
6	10102	Packing Support Washer
7	10104	Brass Rod Stem
8	10011	Reducing Coupling
9	10206	Hex Nut
10	10444	Upper Link
11	15211	Lower Link (with set screw 10019)
12	10010	Set Screw
13	15241	Cam and Clevis Assembly (blue)
14	10020	Link Bolt
15	10021	Lever Bolt
16	10443	Lever
17	10106	Plunger
18	10017	Valve Body (1" NPT Inlet)
19		**1" EXTENSION PIPE (Bury Depth & Length)**
	10411	1' Bury (5 5/8" Long)
	10412	2' Bury (7" Long)
	10413	3' Bury (8 3/8" Long)
	10414	4' Bury (9 ¾" Long)
	10415	5' Bury (11 1/8" Long)
	10416	6' Bury (12 ½" Long)
	10417	7' Bury (13 7/8" Long)
20	15189	Venturi Assembly
21	10321	Valve Body O-Ring (2 Required)
22	10432	Brass Stopper
23	10408	Check Valve
24	15216	Siphon Tube Assembly
25	10446	Vent Cap
26	10445	3/8" Pipe Nipple
27	15136	Snifter Valve
28	10406	Hydrant O-Ring
29	10410	Reservoir O-Ring
30	10409	Reservoir Clamp Screw
31	10404	Hydrant Clamp Screw
32	15218	Casing Cover w/Warning Label
33	10401	Inlet Casting
	RK-T1	Repair Kit (Includes Items 4-7 & 17)
	RK-SHL	Repair Kit (Includes Items 9-15)
34		**OPERATING PIPE (Bury Depth & Length)**
	10023	1' Bury (35 ½" Long)
	10024	2' Bury (47 ½" Long)
	10025	3' Bury (59 ½" Long)
	10026	4' Bury (71 ½" Long)
	10027	5' Bury (83 ½" Long)
	10028	6' Bury (95 ½" Long)
	10029	7' Bury (107 ½" Long)
35		**1 ½" PIPE CASING (Bury Depth & Length)**
	10055	1' Bury (35 ½" Long)
	10056	2' Bury (47 ½" Long)
	10057	3' Bury (59 ½" Long)
	10058	4' Bury (71 ½" Long)
	10059	5' Bury (83 ½" Long)
	10060	6' Bury (95 ½" Long)
	10061	7' Bury (107 ½" Long)
36		**RESERVOIR PIPE (Bury Depth & Length)**
	10421	1' Bury (28" Long)
	10422	2' Bury (39 ½" Long)
	10423	3' Bury (52 ¾" Long)
	10424	4' Bury (66" Long)
	10425	5' Bury (79 ½" Long)
	10426	6' Bury (92 ¾" Long)
	10427	7' Bury (106 ½" Long)
	15231	Warning Label Kit

Rough-In Dimensions



Bury Depth	1'	2'	3'	4' *	5' *	6' *	7' *
Reservoir Depth	10 1/2"	11 7/8"	13 1/4"	14 5/8"	16"	17 3/8"	18 3/4"
Overall Bury Depth	22 1/2"	35 7/8"	49 1/4"	62 5/8"	76"	88 3/8"	102 3/4"
Weight (lbs)	36	42	48	54	59	65	71

* Must ship by truck line due to length.

For more information contact

WOODFORD MANUFACTURING COMPANY

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To view our complete product line visit: ***www.woodfordmfg.com*** *or email:* ***sales@woodfordmfg.com***
A Division Of WCM Industries, Inc.

sanitary yard hydrant detail added

SANITARY YARD HYDRANT DETAIL

TOWN OF LEESBURG, VIRGINIA

25 WEST MARKET STREET, P.O. BOX 88, LEESBURG, VA 20178

CENTRAL WAREHOUSE & MAINTENANCE FACILITY

FUEL ISLAND UPGRADE

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NO.	BY	REVISIONS	DATE

DWG. TITLE

UTILITY PROFILES & DETAILS

COMMONWEALTH OF VIRGINIA
THOMAS M. HEIL
LICENSE NO. 044111
PROFESSIONAL ENGINEER

DATE	04/29/11
SCALE	H: 1" = 20' / V: 1" = 5'
DWN. KAB	CHK. WSS
PROJ. No.	
DWG. No.	C011

M:\projects\2009\09680_Leesburg\Task 03_Maintenance Facility\CADD\Current Sheets\Fuel Island\11-UTILITY PROFILES.dwg May 24, 2011 – 11:47am RKK_SITE.CTB Plot Scale 1=1 Plot By: abonsall Tab: Layout1