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NWIRP CALVERTON
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LETTER REGARDING BACKFLOW PREVENTION PLAN FOR WATER LINE EXTENSION TO
PECONIC RIVER SPORTSMANS CLUB

8/5/2011
TETRA TECH



NOR-01186

August 5, 2011

Superintendent Gary Pendzick
Riverhead Water District
1035 Pulaski Street
Riverhead, New York 11910

Reference: CLEAN Contract No. N62470-08-D-1001
Contract Task Order WE08

Subject: Backflow Prevention Plan
Water Line Extension to PRSC
389 River Road, Manorville, NY
Tax Map ID 0600-14200

Dear Supt. Pendzick:

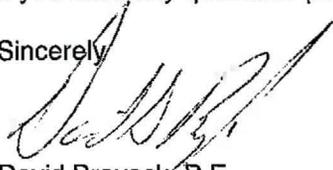
We have been authorized to prepare design documents for the installation of a backflow prevention device on the existing domestic water services at the above referenced facility. Enclosed for your review and approval, please find the following items:

1. Four (4) copies of DOH Form 347
2. Four (4) copies of the backflow submission plans.
3. One (1) copy of Manufacturers literature of the selected device
4. Check No. 1465241 for \$75.00 to cover appropriate review fees

The project is being implemented to provide a new potable water supply to the Peconic River Sportsmans Club, in which existing water supplies have been impacted by volatile organic compound-contaminated groundwater that originated on the former Grumman Plant. In compliance with the requirements of the Riverhead Water District, a reduced pressure detector assembly (RPZ) device is proposed for the domestic water service. The installation will consist of a 2-inch Wilkins Model 375 XL device installed within a bermed exterior vault near the northern edge of the property adjacent to River Road. The water meter is to be installed in a below grade exterior vault. The anticipated peak domestic water usage for the site is 15 gpm. The head loss through the devices at this peak flow rate is approximately 13 psi.

Upon completion of your review, we ask that you forward the necessary documents to the Suffolk County Department of Health Services for their review and subsequent approval.

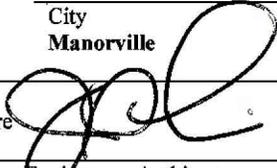
If you have any questions please contact Ms. Lora Fly, NAVFAC Mid-LANT, at (757) 341-2012

Sincerely,

David Brayack, P.E.
Project Manager

Application for Approval of Backflow Prevention Devices

PRINT OR TYPE ALL ENTRIES EXCEPT SIGNATURES
Please complete items 1 through 12a + Block and Lot Numbers

Block # 0600	Lot # 14200	FOR DEPARTMENT USE ONLY Log No.
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1. Name of Facility Peconic River Sportsmans Club		2. City, Village, Town Riverhead		3. County Suffolk	
4. Location of Facility ^{street} 389 River Road		city Manorville	state NY	zip 11949-1405	
4a. Phone Numbers 631-872-8610		Contact Person Paul Schumann			
5. Approx. Location of Device(s) River Road, 800 feet west of Connecticut Ave			6. Mfg. Model # 375 XL	Size of Devices 2 inch	
# of Fire Services 0	# of Domestic Services 3	# of Combined Services 0	Total # of Services 3	Total # of Buildings 3	
7. Name of Owner Mr. Jeff Schneider		Title President	Phone Number 631- 433-8969		8. Nature of works <input checked="" type="checkbox"/> Initial Device Installation <input type="checkbox"/> Replace Existing Device
Full Mailing ^{street} Address Peconic River Sportsmans Club 389 River Road			8a. <input checked="" type="checkbox"/> New Service <input type="checkbox"/> Existing Service		8b. <input type="checkbox"/> New Building <input checked="" type="checkbox"/> Existing Building <input type="checkbox"/> Major Renovation
City Manorville		state NY	zip 11949		
Owner's Signature 			Date 8/4/11		
9. Name of Design Engineer or Architect David D. Brayack			10. NYS License # 080336 <input checked="" type="checkbox"/> PE <input type="checkbox"/> RA <input type="checkbox"/> Other		
		street Address : Tetra Tech NUS Suite 309, 5700 Lake Wright Dr.		10a. Telephone Number(s) 757-461-3824	
		city Norfolk		state VA	zip 23502
Original ink signature and seal required on call copies			signature 		Date 7-22-11

11. Water System Pressure (psi) at Point of Connection Max <u>100</u> Avg <u>90</u> Min <u>60</u>	12. Estimate Installation Cost \$200,000	12a. Estimate Design Cost \$30,000
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13. Degree of Hazard <input type="checkbox"/> Hazardous <input type="checkbox"/> Aesthetically Objectionable	List of processes or reasons that lead to degree of hazard checked: None
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14. Public water supply name Riverhead Water District		Name of supplier's designated representative	
Mailing address street 1035 Pulaski Street		Title	
city Riverhead	state NY	Zip 11910	
Telephone No. ()		Signature* _____	m d y / / Date

Note: All applications must be accompanied by plans, specifications and an engineer's report describing the project in detail. The project must first be submitted to the water supplier, who will forward it to the local public health engineer. This form must be prepared in quadruplicate with four copies of all plans, specifications and descriptive literature.

SPECIFICATION SUBMITTAL SHEET



Certified to NSF/ANSI 61-G

FEATURES

- Sizes: 1/2" 3/4" 1" 1-1/4" 1-1/2" 2"
 Maximum working water pressure 175 PSI
 Maximum working water temperature 180°F
 Hydrostatic test pressure 350 PSI
 End connections Threaded FNPT ANSI B1.20.1

OPTIONS

- (Suffixes can be combined)
 - with full port QT ball valves (standard)
 S - with Model SXL lead-free bronze "Y" type strainer
 FT - with integral male 45° flare SAE test fitting
 AG - with air gap
 SAG - with Model SXL lead-free bronze "Y" strainer and air gap
 BOF - with Blow out/Flush fitting

ACCESSORIES

- Repair kits
 Thermal expansion tank (Mdl. XT)
 Soft seated check valve (Mdl. 40XL)
 Shock arrester (Model 1250XL)
 QT-SET Quick Test Fitting Set
 Test Cock Lock (Model TCL24)
 Blow out / Flush fitting (RK34-375BOF (1/2" or 3/4"), RK1-375BOF or RK114-350-375BOF))

APPLICATION

Ideal for use where lead-free* valves are required. Designed for installation on potable water lines to protect against both backsiphonage and backpressure of contaminated water into the potable water supply. Assembly shall provide protection where a potential health hazard exists.

STANDARDS COMPLIANCE

- ASSE® Listed 1013
- IAPMO® Listed
- CSA® Certified B64.4
- AWWA compliant C511
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
- NSF® Listed-Standard 61, Annex G (3/4" - 2")

LEAD PLUMBING LAW COMPLIANCE

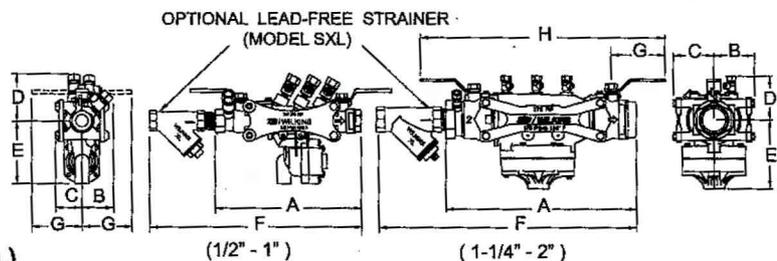
(CA H&S Code §116875, VSA §2470h)

*(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

- Lead Plumbing Law Certified by IAPMO R&T
- Annex G Certified by NSF International (3/4" - 2")

MATERIALS

- | | |
|-------------|--|
| Housing | Reinforced Nylon, FDA approved |
| Fasteners | Stainless Steel, 300 Series |
| Elastomers | Silicone (FDA Approved)
Buna Nitrile (FDA Approved) |
| Internals | Delrin, Nylon, NSF Listed |
| Springs | Stainless steel, 300 series |
| Ball Valves | Cast Bronze, ASTM B 584 |
| Struts | Forged Brass, ASTM B 124 |

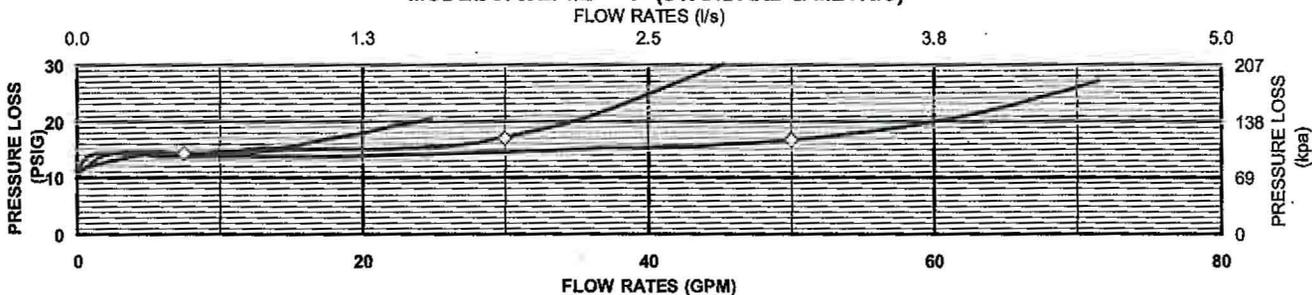


DIMENSIONS & WEIGHTS (do not include pkg.)

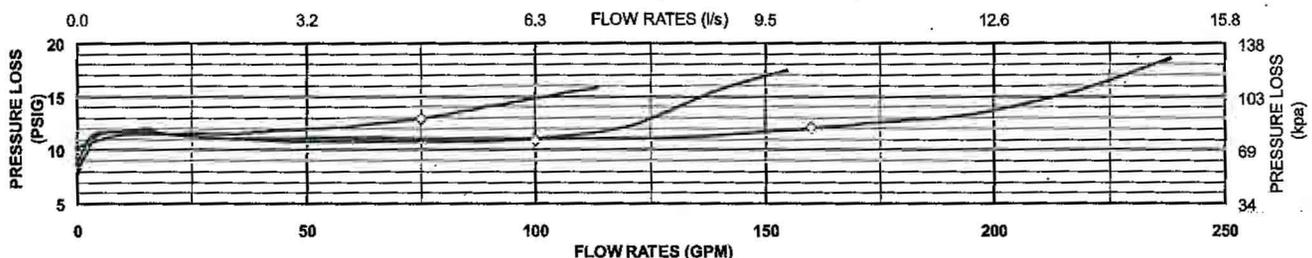
MODEL 375XL SIZE	DIMENSIONS (approximate)																		WITH BALL VALVES	
	A		B		C		D		E		F		G		H		lbs.	kg		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm				
1/2	20	8 7/8	225	1 15/16	49	1 5/8	41	2 15/16	75	3 7/8	98	12 1/4	311	3	76	12 1/4	311	5.7	2.6	
3/4	20	8 7/8	225	1 15/16	49	1 5/8	41	2 15/16	75	3 7/8	98	12 5/8	321	3	76	12 1/4	311	5.7	2.6	
1	25	11 3/16	284	2 1/4	57	2 1/4	57	3 7/16	87	4	102	14 9/16	370	4	102	15 1/4	387	9.7	4.4	
1-1/4	32	14 7/8	378	3 3/8	86	3 3/8	86	3 3/4	95	5 3/4	146	20 1/2	521	3 3/4	95	18 1/2	470	20.5	9.3	
1-1/2	40	15 1/4	387	3 3/8	86	3 3/8	86	3 3/4	95	5 3/4	146	22	559	4 1/2	114	20 1/4	514	21.5	9.8	
2	50	16	406	3 3/8	86	3 3/8	86	3 3/4	95	5 3/4	146	24	610	4 3/4	120.7	20 3/4	527	23.5	10.7	

FLOW CHARACTERISTICS

MODEL 375XL 1/2" - 1" (STANDARD & METRIC)



MODEL 375XL 1-1/4" - 2" (STANDARD & METRIC)

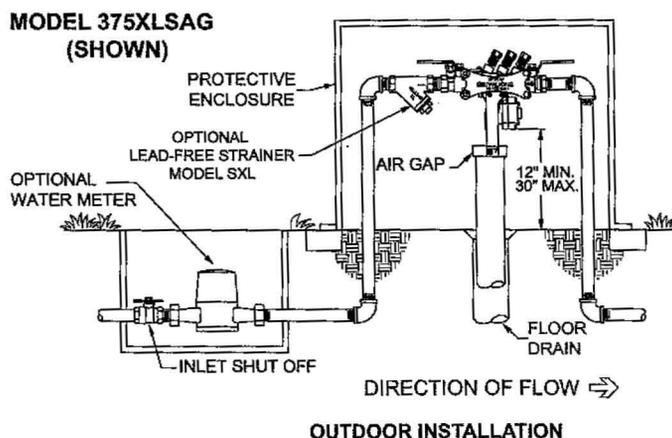
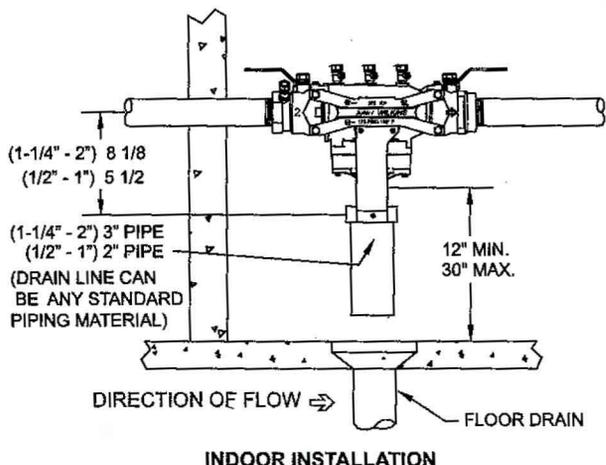


◇ Rated Flow (Established by approval agencies)

TYPICAL INSTALLATION

Local codes shall govern installation requirements. To be installed in accordance with the manufacturers' instructions and the latest edition of the Uniform Plumbing Code. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

Capacity thru Schedule 40 Pipe				
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec
3/8"	3	4	6	9
1/2"	5	7	9	14
3/4"	8	12	17	25
1"	13	20	27	40
1 1/4"	23	35	47	70
1 1/2"	32	48	63	95
2"	52	78	105	167



SPECIFICATIONS

The Reduced Pressure Principle Backflow Preventer shall be ANSI 3rd party certified to comply with states' lead plumbing law 0.25% maximum weighted average lead content requirement, shall be ASSE® Listed 1013, rated to 180°F, and supplied with full port ball valves. The main body shall be Nylon and the seat disc elastomers shall be silicone. If installed indoors, the installation shall be supplied with an air gap adapter. The Reduced Pressure Principle Backflow Preventer shall be a WILKINS Model 375XL.