

ADDENDUM NO. 2

For, EAST FRONT STREET FLOOD MITIGATION

ITB #14-016

To All Bidders:

The following change is hereby made part of East Front Street Flood Mitigation, as fully as completely as if the same were set forth therein:

- Bid opening has been changed from July 15th to **2:30 pm on July 17th**.
- Delete Sheet C-11 and replace with Sheet C-11
- Delete Sheet C-12 and replace with Sheet C-12

Contractor Questions

1.) On the first set of plan pages (pages 11 and 12 in numeric order) have some type of error with small boxes in place of plan notes. There are no notes on these pages (Duval and Angela), the plans uploaded from Demandstar and the City website both have this same issue. Please revise these sheets to show the notes/details.

Response: Sheets 11 and 12 are attached.

2.) Please show a detail for the 18" Tideflex Check Valve and 24" Tideflex Check Valve.

Response: See attached brochure.

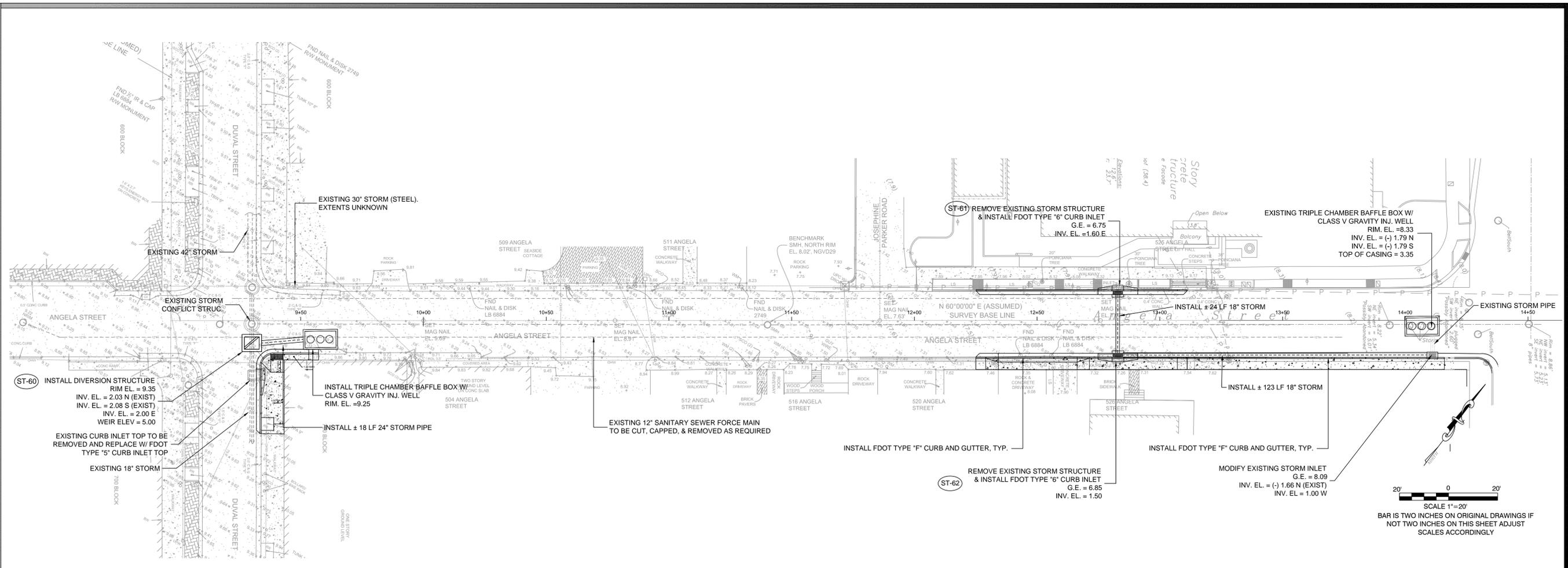
3.) There are certain areas on the plans that are scheduled for new sidewalk with granite curbing sections that are broken or damaged. For areas that have damaged granite curbing that cannot be re-installed effectively, will we have a supplementary supply of granite curbing to draw from?

Response: Yes, the City does have a supplementary supply of granite curbing available for the contractor.

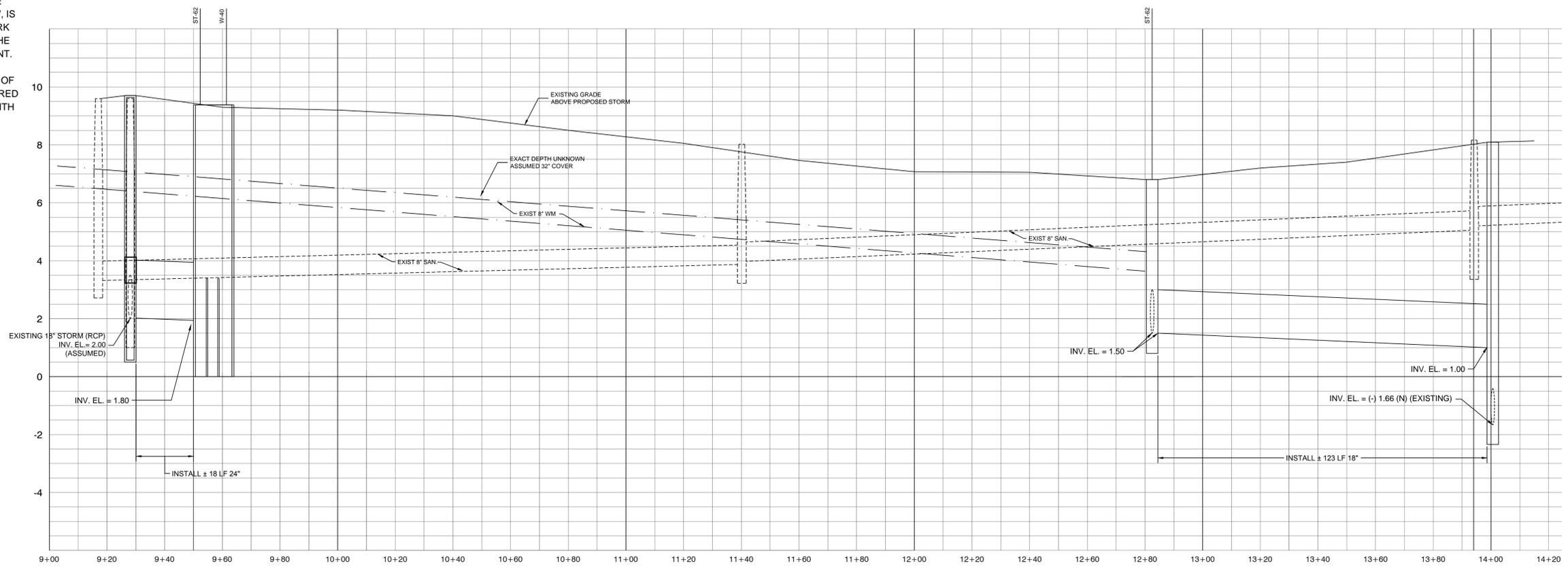
All Bidders shall acknowledge receipt and acceptance of this Addendum No.1 by acknowledging Addendum in their proposal or by submitting the addendum with the bid package. Bids submitted without the acknowledgement or without this Addendum may be considered non-responsive.

Signature

Name of Business



- GENERAL NOTES:**
- LIMITS OF RECONSTRUCTION OF SIDEWALK, WITH THE CITY OF KEY WEST ROW, IS APPROXIMATE. ALL WORK SHALL TERMINATE AT THE NEAREST CONTROL JOINT.
 - CONTRACTOR SHALL COORDINATE REMOVAL OF VEGETATION, AS REQUIRED FOR CONSTRUCTION, WITH THE CITY OF KEY WEST URBAN FORESTRY COORDINATOR.



PROFILE SCALE:
 SCALE HORIZONTAL: 1"=20'
 SCALE VERTICAL: 1"=2'

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING
 & DEVELOPMENT, INC.

ALLEN E. PEREZ, P.E.
 Florida P.E. NO. 51468
 April 22, 2014

ORIGINAL: SEPTEMBER 2012

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EAST FRONT ST. FLOOD MITIGATION PROJECT

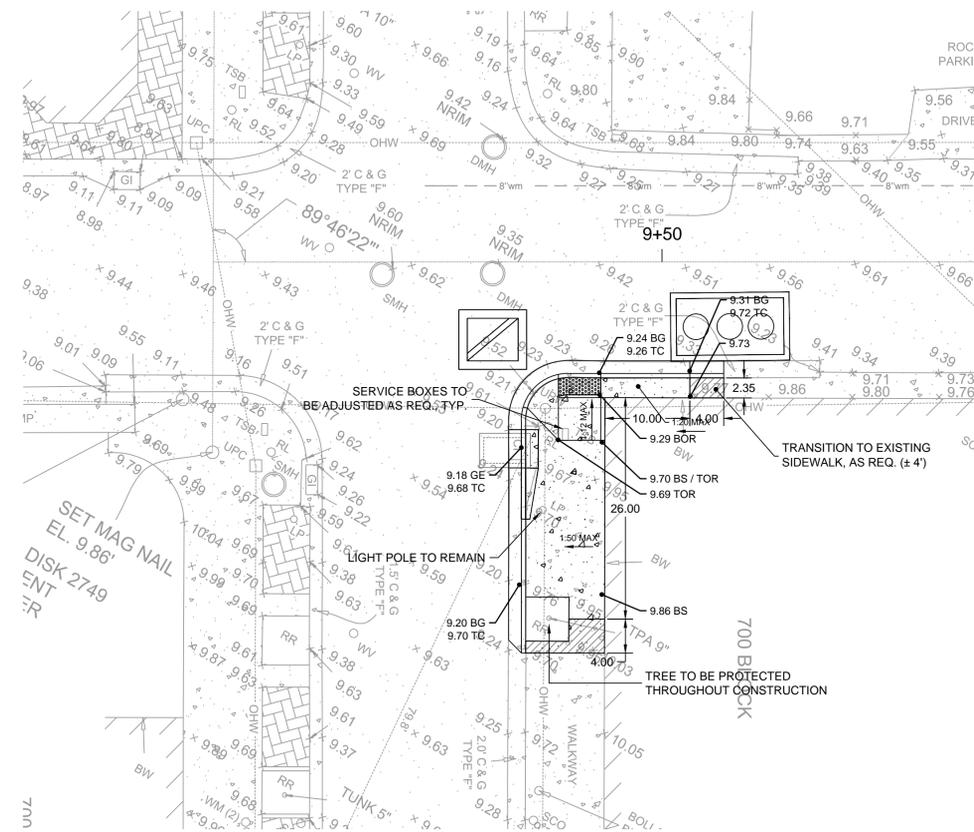
ANGELA STREET
 PLAN & PROFILE

CITY OF KEY WEST
 3121 FLAGLER AVE.
 KEY WEST, FL 33040

JOB NO.	121001
DRAWN	RTM
DESIGNED	AEP
CHECKED	AEP
QC	

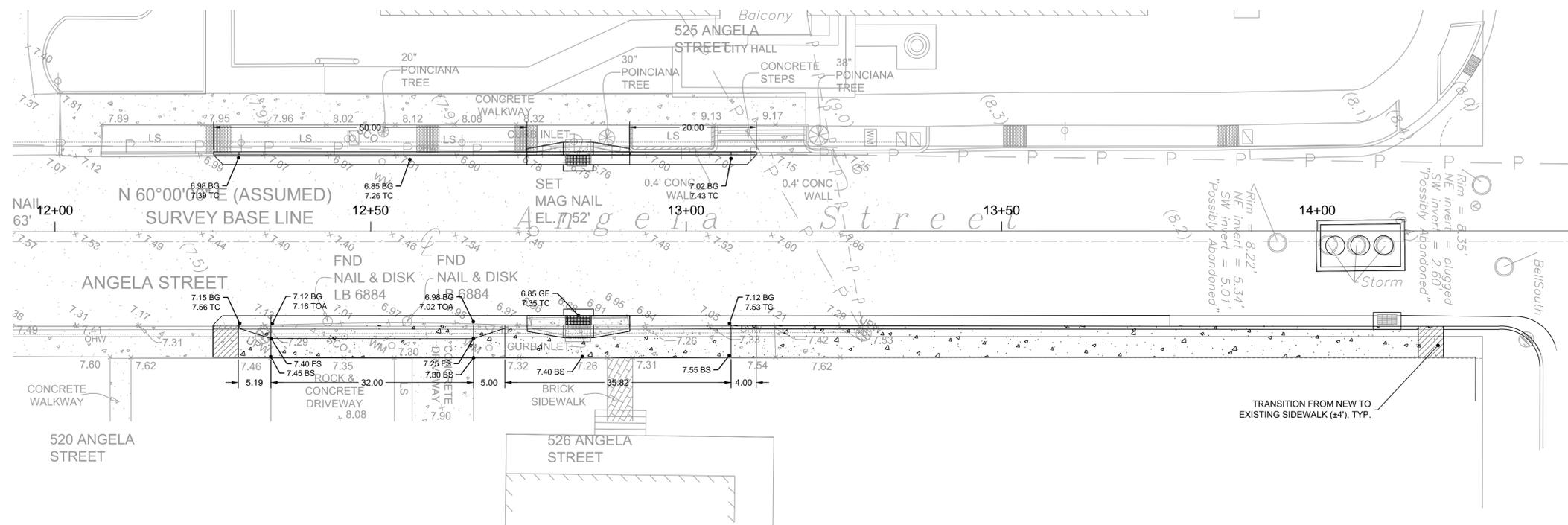
SHEET C-11

Key West Office
 1010 EAST KENNEDY DRIVE, SUITE 201
 KEY WEST, FLORIDA 33040
 TEL: (305) 295-9440 FAX: (305) 295-0243



ADA ENLARGED PLAN A - ANGELA ST. AND DUVAL ST.

SCALE : 1" = 10'

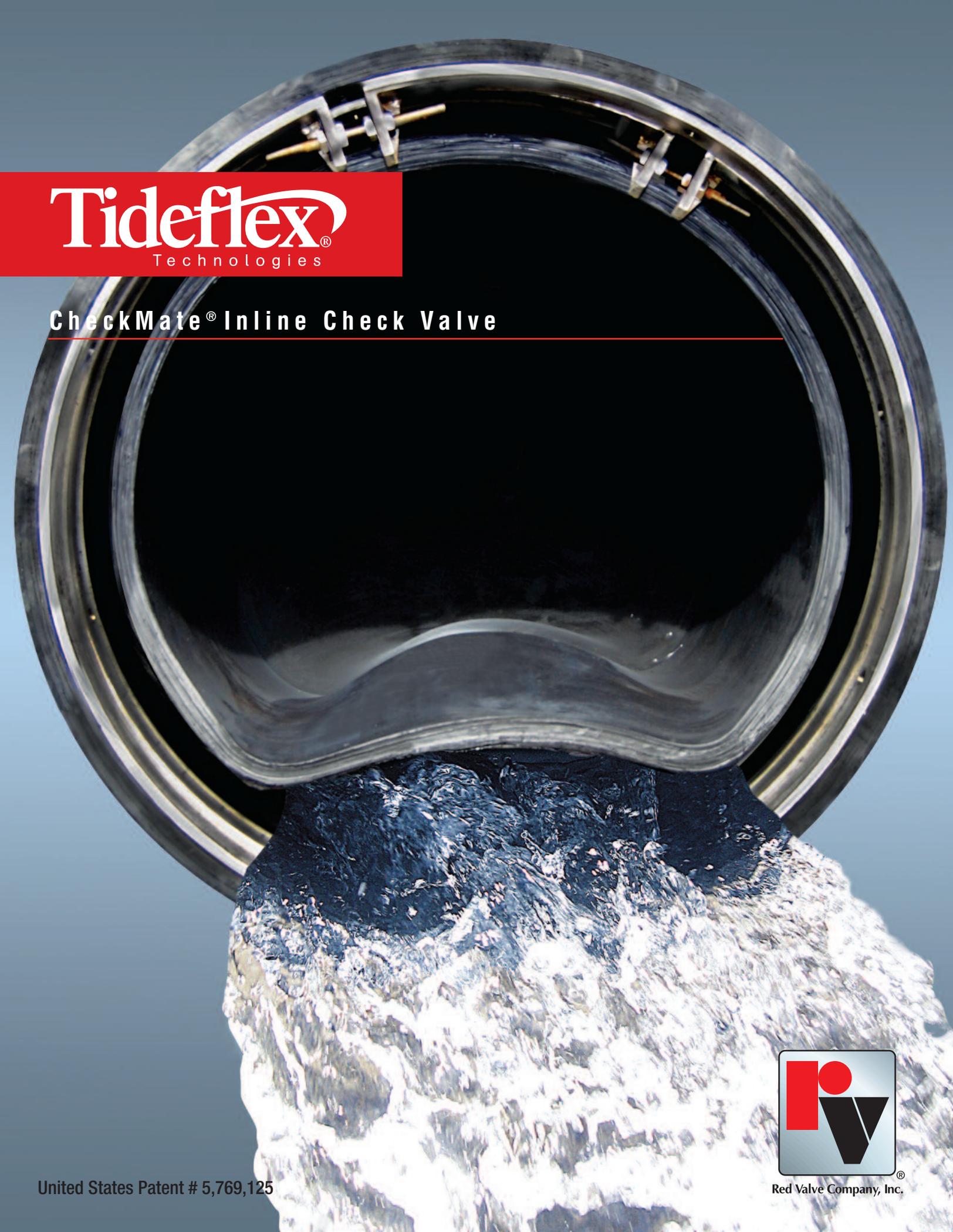


ADA ENLARGED PLAN B - ANGELA ST.

SCALE : 1" = 10'

REVISIONS:

1	
2	
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Tideflex[®]
Technologies

CheckMate[®] Inline Check Valve

United States Patent # 5,769,125



Red Valve Company, Inc.[®]

CheckMate®: Your Final Move to Eliminate Backflow!

CheckMate®: It's A Winning Move!

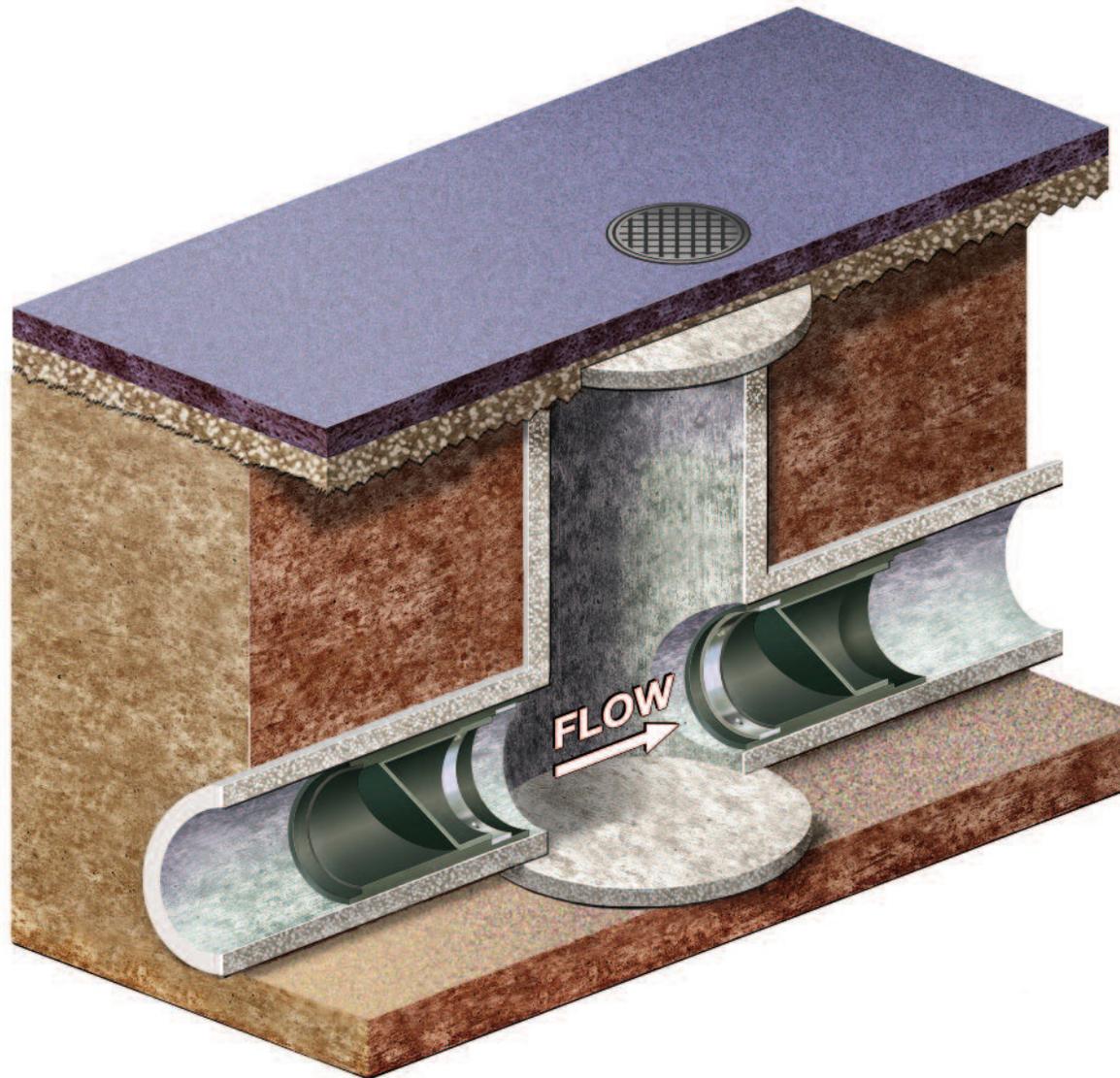
The Ideal CSO Application

Year after year, millions of dollars are spent in the United States when a CSO system allows receiving waters to enter into the sewage treatment plant. Tideflex® Technologies' patented CheckMate® Valve was developed for CSO and diversion chamber applications.

The CheckMate® is an inline check valve designed to be installed at the upstream or downstream side of a diversion chamber.

The entire valve is constructed of rubber, making it rust-free and resistant to grease and oils typically found in wastewater. Additionally, with seven elastomers to select from, the CheckMate® can be manufactured to resist chemicals found in industrial wastewater applications.

The CheckMate® Valve boasts extremely low headloss, and its inherent design makes it the

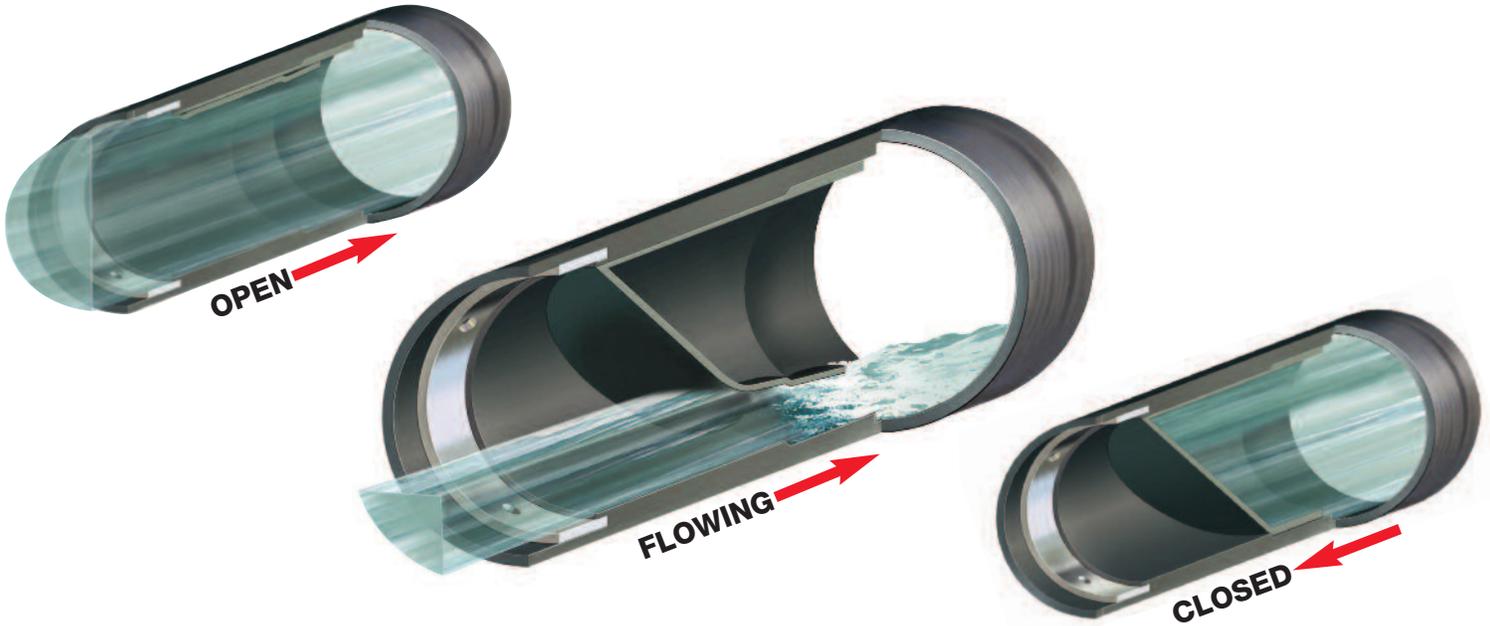


CheckMate® Engineered Features

- Extremely Low Headloss
- No Moving Mechanical Parts
- Operates on Differential Pressure
- 4" (100 mm) - 60" (1,500 mm) Size
- 100% Elastomer Durable Construction, Similar to Truck Tire
- Virtually No Maintenance, Except for Periodic Inspection
- 25-Year Life
- Self-draining
- Simple Installation
- Silent, Non-slamming
- Extensive Independent Hydraulic Testing
- Less than 1" of Head Pressure Opens the Valve, Eliminating Standing Water

CHECKMATE® VALVE

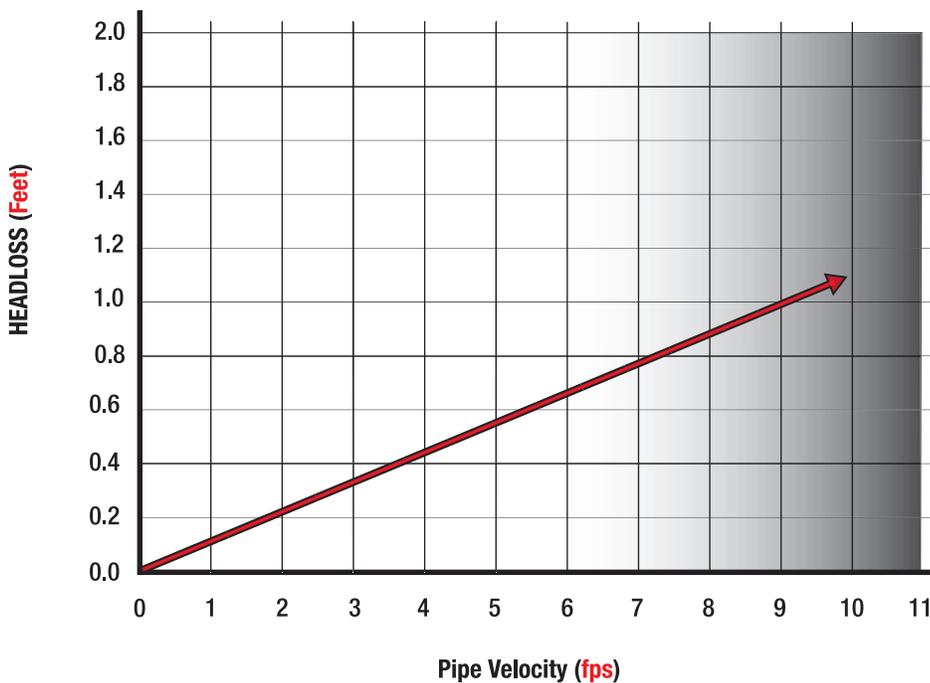
Designed for Inline Service



The CheckMate® Valve's unique design allows for near 100% flow, or a tight close to eliminate backflow problems completely.

The CheckMate® is easy to install. Simply insert the valve inside any size pipe and clamp from the upstream or downstream end. No modification to the pipe or structure is required to install the CheckMate®, resulting in large savings. Because the CheckMate® is recessed in the pipe, another benefit is environmental permitting for outfall may not be required as the valve does not extend out into the water body.

Tideflex CheckMate® Check Valve
Headloss vs. Pipe Velocity



**CheckMate®:
The Lowest Headloss
of Any Check Valve!**

A major advantage of the CheckMate® Inline Check Valve is its extremely low headloss. This is particularly beneficial in low-lying areas. CheckMate® Valves drain with very low head pressure and are sensitive enough to open with as little as 1" of water.

**Red Valve will provide headloss flowcharts for your specific application requirements.*

CheckMate® Applications: Simply Versatile!

Odor Control

Lightweight CheckMate® Inline Check Valves prevent sewer systems' offending odors from escaping, while still allowing water to discharge when needed. The CheckMate® Valve is designed to eliminate the backflow of unwanted methane and hydrogen sulfide gases that typically result in complaints about odor from the general public.



Drainage and Outfall Lines



CheckMate® Inline Check Valves have become a frequently specified solution for commercial and residential areas where complete, dependable backflow prevention is necessary. The CheckMate® Valve's maintenance-free, passive operation provides years of trouble-free service - even when the valve is partially buried.

Interceptor and Manhole Installations

CheckMate® Inline Check Valves are used for interceptor and manhole installations because they are ideal for preventing water from backflowing into a sewage treatment plant. The CheckMate® Valve's innovative inline design allows it to be installed without modifications to structures such as interceptors, manholes and vaults.



Stormwater Runoff



The CheckMate® Inline Check Valve is the valve of choice for both municipalities and commercial property owners in stormwater and general drainage applications. Because the CheckMate® Valve utilizes dissimilar elastomers and fabric in the hinge area, there are no mechanical parts to warp or corrode. It is maintenance-free!

CHECKMATE® VALVE

Designed for Inline Service



60" CheckMate®
Valve being shipped to Australia for inline application.



18" CheckMate®
Valve installed at county park in Seattle for parking lot drainage. This simple installation took a total of twenty minutes from start to finish.

Maintenance-Free, Totally Passive Operation

Flapgate valves are mechanical and have moving parts with inherent problems of corrosion, faulty function and wear. Replacing traditional flapgate valves with the CheckMate® Inline Check Valve eliminates these issues.

Like the Tideflex® Check Valve, the CheckMate® has a 100% fabric and elastomer unibody construction that eliminates corrosion problems. Because the CheckMate® is made with a unibody construction, there are no one-piece mechanical components to catch debris, corrode or fail. The result is savings - both in time and costs.

Testing

CheckMate® Inline Check Valves are tested using the same strenuous methods as the Tideflex® Check Valve. The CheckMate® Valve is proven to operate maintenance-free.

The valve can successfully withstand severe winter freezes, typhoons, hurricanes and flooding. The CheckMate® also minimizes damage to wetlands, beaches and residential areas, eliminates hydraulic surges to wastewater treatment plants and saves municipalities millions of dollars in maintenance and treatment costs.



CheckMate® Performance

Sample Specification

PART 1: GENERAL

1.01 SUBMITTALS

A. Submit product literature that includes information on the performance and operation of the valve, materials of construction, dimensions and weights, elastomer characteristics, headloss, flow data and pressure ratings.

B. Upon request, provide shop drawings that clearly identify the valve materials of construction and dimensions.

1.02 QUALITY ASSURANCE

A. Supplier shall have at least twelve (12) years experience in the design and manufacture of “CheckMate®” style elastomeric check valves.

B. Manufacturer shall have conducted independent hydraulic testing to determine headloss, jet velocity and vertical opening height characteristics on multiple sizes of CheckMate® valves ranging from 4" through 72". The testing must have been conducted for free discharge (discharge to atmosphere) and submerged conditions.

PART 2: PRODUCTS

2.01 “CHECKMATE®” ELASTOMERIC CHECK VALVES

A. Check Valves are to be all rubber and the flow operated check type with slip-in cuff or flange connection. The entire CheckMate® Valve shall be ply reinforced throughout the body, disc and bill, which is cured and vulcanized into a one-piece unibody construction. A separate valve body or pipe used as the housing is not acceptable. The valve shall be manufactured with no metal, mechanical hinges or fasteners, which would be used to secure the disc or bill to the valve housing. The port area of the disc shall contour down, which shall allow passage of flow in one direction while preventing reverse flow. The entire valve shall fit within the pipe I.D. Once installed, the CheckMate® Valve shall not protrude beyond the face of the structure or end of the pipe.

B. The downstream end of the valve must be circumferentially in contact with the pipe while in the closed positions.

C. Slip-in style CheckMate® Valves will be furnished with a set of stainless steel expansion clamps. The clamps, which will secure the valve in place, shall be installed inside the cuff portion of the valve, based on installation orientation, and shall expand outwards by means of a turnbuckle. Each clamp shall be pre-drilled allowing for the valve to be pinned and secured into position in accordance with the manufacturer’s installation instructions. Flange style CheckMate® Valves will be furnished with a stainless steel, ANSI 125/150 drilled, retaining ring unless specified otherwise.

D. Manufacturer must have flow test data from an accredited hydraulics laboratory to confirm pressure drop and hydraulic data. Company name, plant location, valve size patent number, and serial number shall be bonded to the check valve.

2.02 FUNCTION

A. When line pressure exceeds the backpressure, the line pressure forces the bill and disc of the valve open, allowing flow to pass. When the backpressure exceeds the line pressure, the bill and disc of the valve is forced closed, preventing backflow.

2.03 MANUFACTURER

A. All valves shall be of the slip-in or flanged CheckMate® as manufactured by Tideflex Technologies®, A Division of Red Valve Company, Carnegie, PA 15106. All valves shall be manufactured in the U.S.A.

PART 3: EXECUTION

3.01 INSTALLATION

A. Valve shall be installed in accordance with manufacturer’s written Installation and Operation Manual and approved submittals.

3.02 MANUFACTURER’S CUSTOMER SERVICE

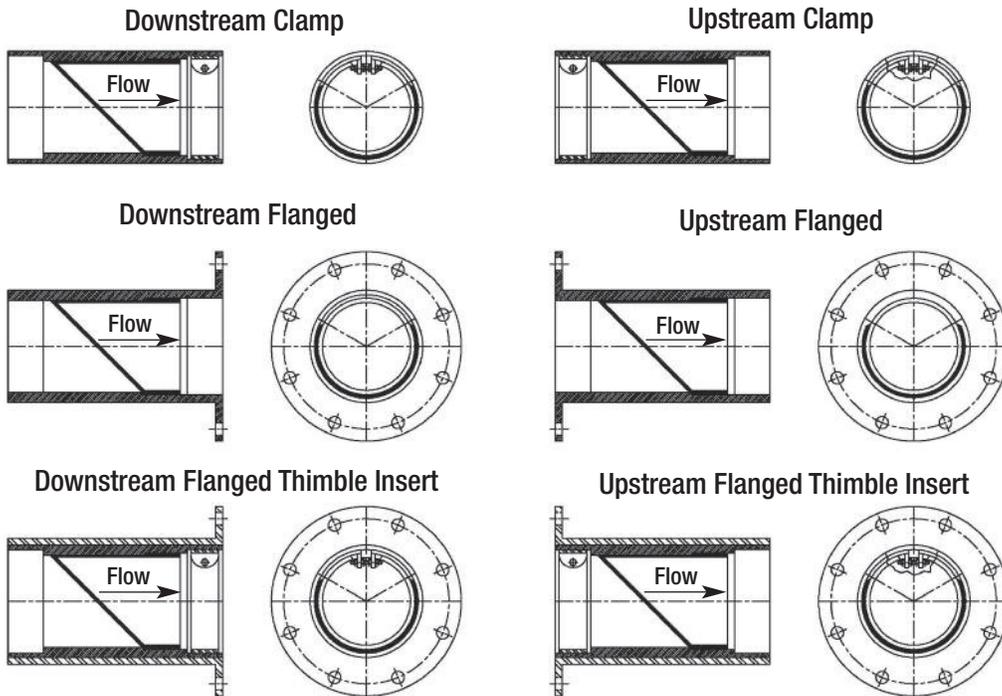
A. Manufacturer’s authorized representative shall be available for customer service during installation and start-up, and to train personnel in the operation, maintenance and troubleshooting of the valve.

B. If specified, the manufacturer shall also make customer service available directly from the factory in addition to authorized representatives for assistance during installation and start-up, and to train personnel in the operation, maintenance and troubleshooting of the valve.

CHECKMATE® VALVE

Designed for Inline Service

Mounting Styles and Configurations



Flange shape and bolt pattern can be customized.
Flangeless thimble inserts are available.

CHECKMATE® VALVE								
NOMINAL PIPE SIZE I.D.*		OVERALL LENGTH**		NUMBER OF CLAMPS	CUFF DEPTH		BACK PRESSURE RATING	
Inches	Millimeters	Inches	Millimeters		Inches	Millimeters	Feet	Meters
4	100	7.86	200	1	1.5	38	40	12
6	150	9	229	1	2	51	40	12
7	178	12.75	324	1	2	51	40	12
8	200	15.23	387	1	2	51	40	12
9	225	15.38	391	1	2	51	40	12
10	250	16.12	409	1	2	51	40	12
12	300	23	584	1	2	51	40	12
14	350	25.75	654	1	4	102	20	6
16	400	28.61	727	1	4	102	20	6
18	450	31	787	1	4	102	20	6
20	500	42.14	1070	2	8	203	20	6
24	600	47.5	1207	2	8	203	20	6
30	750	54.87	1394	2	8	203	20	6
36	900	62.25	1581	2	8	203	20	6
42	1050	70.62	1794	2	8	203	13	4
48	1200	79	2007	2	8	203	13	4
54	1350	86.37	2194	2	8	203	13	4
60	1500	102.5	2604	2	12	305	13	4
72	1829	119	3023	3	12	305	10	3

*Larger sizes available upon request.

**Shorter lengths available.

The best choice for the toughest applications.

In addition to the Checkmate® Inline Check Valve, Tideflex® Technologies offers a complete line of check valves.

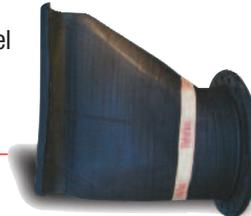
TF-1 CHECK VALVES

The Tideflex® TF-1 Curved Bill Check Valve is designed with enhanced sealing to improve headloss. The improved TF-1 design allows the valve to handle long-term water weight while maintaining structural integrity. The spine is at a greater vertical angle, making it able to withstand the cantilever effect when water is flowing through the valve. The TF-1 is constructed of rubber, making it immune to rust, corrosion and weathering.



SERIES 35-1 CHECK VALVES

The flat-bottom Series 35-1 features an integral rubber flange, allowing them to be mounted to flanged outfall pipes or directly to headwalls where the pipe is flush. The flange size drilling conforms to ANSI B16.10, Class 150#, or can be constructed with DIN, 2632 and other standards. The Series 35-1 Check Valve is furnished complete with steel or stainless steel backup rings for installation.



SERIES 39 CHECK VALVES

The Tideflex® Series 39 Inline Check Valve features a fabric-reinforced elastomer check sleeve housed in a cast iron body with ANSI 125/150 flanges, allowing for easy installation into any piping system. The valve's operation is silent, non-slamming and maintenance free. Sliding, rotating, swinging and plunging parts are completely eliminated. The body is equipped with flush ports and a clean-out port and can be epoxy coated.



Tideflex
Technologies

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www.tideflex.com

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