

BOARD OF WATER COMMISSIONER'S AGENDA*
Conference Room, Harwich Water Department
196 Chatham Road, Harwich, MA
Executive Session 2:00 p.m.
Regular Session 2:30 p.m.
Monday, August 20, 2018

- I. CALL TO ORDER
- II. EXECUTIVE SESSION
 - A. 1. Pursuant to MGL c.30A, §21(3) to conduct strategy sessions with respect to collective bargaining if an open meeting may have a detrimental effect on the bargaining position of the public body and the Chair so declares – IAWA Union Contract
- III. PUBLIC COMMENTS/ANNOUNCEMENTS
- IV. CONSENT AGENDA
 - A. Minutes-
 - a. July 26, 2018
- V. ABATEMENTS
- VI. OLD/UNFINISHED BUSINESS
 - A. 2 Northern Ave
 - B. Prevailing Wage
 - C. Water Management Permit Act
- VII. NEW BUSINESS
 - A. Capital Plan
 - B. Service Tight Plan Billing
 - C. FY19 Water Works Supply- Bid Award
 - D. OSHA
 - E. Hurricanes
 - F. UCMR4
- VIII. SUPERINTENDENT'S REPORT
- IX. COMMISSIONER'S REPORT
- X. CORRESPONDENCE/ANY OTHER BUSINESS
- XI. NEXT MEETING; TBD
- XII. ADJOURNMENT

**Per the Attorney General's Office: The Board of Water Commissioners may hold an open session for topics not reasonably anticipated by the Chair 48 hours in advance of the meeting following "New Business."*

If you are deaf or hard of hearing or are a person with a disability who requires an accommodation, contact the Water Department Office at 508-432-0304 x.0 or by email at customerservice@harwichwater.com.

Authorized Posting Officer:

Tracey Alves

Tracey Alves, Board Secretary

Posted By: _____

Town Clerk

Date: _____

Harwich Water Department
BOARD OF WATER COMMISSIONERS
Thursday, July 26, 2018, 8:30 a.m.

Present: Chair Allin Thompson, Vice Chair Gary Carreiro, Clerk Judith Underwood, Superintendent Dan Pelletier, Comptroller Sandra Sieger, Sr. Billing Administrator Wellesley Marsh, Board Secretary Tracey Alves, George Rockwood

Chair Thompson called the meeting to order at 8:30 a.m.

Chair Thompson entertained a motion to approve the minutes from May 17, 2018, June 19, 2018 and July 11, 2018. Motion carried, all in favor; 3-0-0.

The Board reviewed an abatement request submitted by 6 Heather Road for water bill #283707. Clerk Underwood motioned to abate fifty percent of the cost billed for consumption. Motion carried, all in favor; 3-0-0.

The Board reviewed an abatement request submitted by 9 Bayview Road, Unit A, for water bill #278552. Clerk Underwood motioned to abate fifty percent of the cost billed for consumption. Motion carried, all in favor; 3-0-0.

The Board reviewed an abatement request submitted by 25 Trout Brook Road for water bill #282104. Vice Chair Carreiro motioned to deny the request for abatement. Motion carried, all in favor; 3-0-0.

The Board reviewed the FY18 4th Quarter Internal Adjustments in the amount of \$14,027.56. Vice Chair Carreiro motioned to approve the FY18 4th Quarter Internal Adjustments, motion carried; 3-0-0.

The Board reviewed the abatement for FY18 4th Quarter Water Department water usage. Vice Chair Carreiro motioned to approve the abatement for FY18 4th Quarter Water Department water usage, motion carried; 3-0-0.

The Board received an update on the status of the law suit with 2 Northern Ave.

Superintendent Pelletier notified the Board that T-Mobile will be terminating their Pleasant Lake Tank cellular equipment lease agreement.

Discussion took place regarding Channel 18 filming the Board of Water Commissioner meetings.

A report was given regarding the first quarterly billing projections vs. the actual amounts billed.

The Board received a FY18 budget update which reflected the Indirect charges from the Town.

The Board discussed the topic of independent legal services.

Superintendent Pelletier provided the Board with an update regarding prevailing wage.

The next Board meeting will be held on August 14, 2018 at 2:00 p.m.

The meeting adjourned at 9:56 a.m.

Allin P. Thompson, Chairman

Dan Pelletier, Superintendent

Gary Carreiro, Vice Chair

Tracey Alves, Board Secretary

Clerk, Judith Underwood

Capital Plan FY20-FY31

Fiscal Year	Project	Estimated Cost	Notes
FY20	New Source Exploration	\$250,000	
	Pleasant Lake Tank Fill Pipe	\$300,000	Undersized, currently under review
	T1 Generator	\$60,000	Generator installed in 2001, problematic, provides power to SCADA, 3 wells, & office
FY21	New Well Construction	\$500,000	Price dependent on location of source & water quality
FY22	Rt.28 Water main Replacement- Design & Engineering	\$100,000	
	Space Building @ 196 Chatham Rd	\$650,000	
	Station 8 Generator	\$45,000	
FY23	Rt.28 Water main Replacement- Construction	\$2,000,000	1.25 miles from lothrop to lower county - still need to review installation dates for all pipe
FY24	Pavement Management Plan	\$175,000	
	Pipe Discontinuity Upgrade	\$1,500,000	5900 LF of discontinuity
FY25	Paint Pleasant Lake Ave Tank	\$1,750,000	Full engineered coating inspection recommended in 2018 -(spot repair significant savings)
	Vehicle Replacement	\$75,000	
FY26	No Project		
FY27	No Project		
FY28	No Project		
FY29	No Project		
FY30	Vehicle Replacement	\$75,000	
FY31	Construct new tank @ Rt.39	\$4,500,000	Replace spider leg tank W/ larger hydropillar
	Low Estimate	\$11,285,000	
	High Estimate	\$12,650,000	

Harwich Water Department
METER REPLACEMENT PROGRAM SUMMARY

Updated 8/16/18

Meters >=15 yrs 3666
 Total Cost to Replace Meters >=15 yrs 1,517,009.56

METERS >= 30 YRS.			
SIZE	COUNT	FY19 COST	TOTAL
5/8"	681	399.89	272,325.09
3/4"	22	513.60	11,299.20
1"	9	675.70	6,081.30
1 1/2"	2	1,197.62	2,395.24
2"	1	3,335.11	<u>3,335.11</u>
TOTAL	715		295,435.94

METERS 25-29 YRS.			
SIZE	COUNT	FY19 COST	TOTAL
5/8"	1006	399.89	402,289.34
3/4"	22	513.60	11,299.20
1"	24	675.70	16,216.80
1 1/2"	4	1,197.62	4,790.48
2"	2	3,335.11	<u>6,670.22</u>
TOTAL	1058		441,266.04

METERS 20-24 YRS.			
SIZE	COUNT	FY19 COST	TOTAL
5/8"	917	399.89	366,699.13
3/4"	25	513.60	12,840.00
1"	15	675.70	10,135.50
1 1/2"	2	1,197.62	2,395.24
2"	1	3,335.11	<u>3,335.11</u>
TOTAL	960		395,404.98

METERS 15-19 YRS.			
SIZE	COUNT	FY19 COST	TOTAL
5/8"	874	399.89	349,503.86
3/4"	34	513.60	17,462.40
1"	23	675.70	15,541.10
1 1/2"	2	1,197.62	2,395.24
2"	0	3,335.11	<u>0.00</u>
TOTAL	933		384,902.60

REPLACEMENT SUMMARY >=15 YRS			
SIZE	COUNT	FY19 COST	TOTAL
5/8"	3478	399.89	1,390,817.42
3/4"	103	513.60	52,900.80
1"	71	675.70	47,974.70
1 1/2"	10	1,197.62	11,976.20
2"	4	3,335.11	<u>13,340.44</u>
TOTAL	3666		1,517,009.56

REPLACEMENT PERCENTAGES			
SIZE	REPL COUNT	TOTAL COUNT	% TO BE REPL
5/8"	6275	9134	68.70%
3/4"	184	357	51.54%
1"	133	245	54.29%
1 1/2"	18	80	22.50%
2"	7	47	14.89%
3"	0	2	0.00%
4"	0	3	0.00%
TOTAL	6617	9868	67.06%

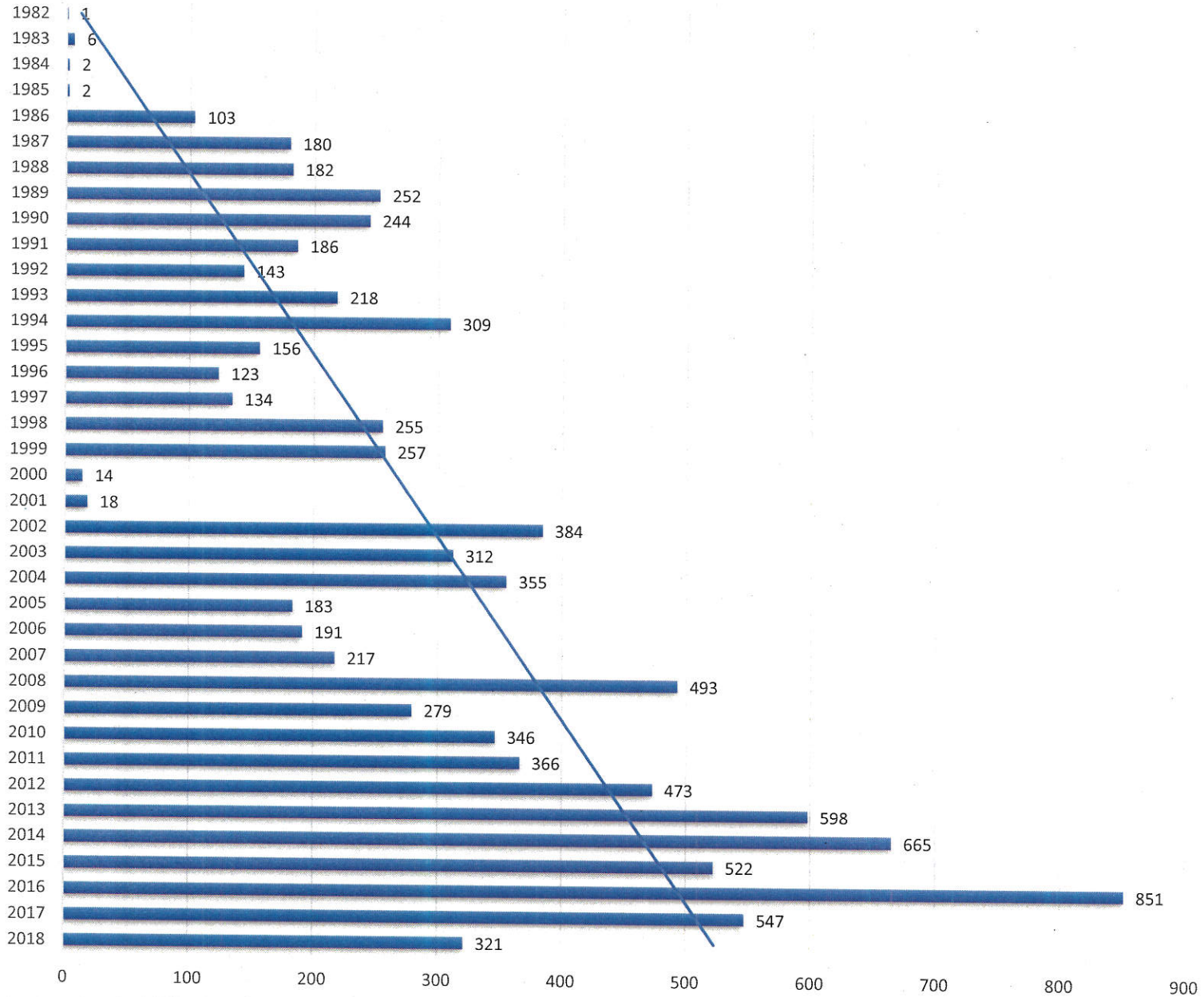
TECHNICIAN REQUIREMENT SCENARIO			
#OF TECHS	DAYS/YR	# PER DAY	# CHANGED
1	245	8	1960
2	245	16	3920

DAYS/YR = 5 days per week x 52 weeks less 15 holidays
 # PER DAY = 5 morning 3 afternoon, not incl. other work

Harwich Water Department
METER REPLACEMENT PROGRAM

081618

Meters Installed by Year





Estimate

Date: 8/1/2018
 Estimate# HDPW080118
 Customer ID:

To: Harwich Highway Department
 ATTN: Kyle Edson
 273 Queen Anne Road
 Harwich, MA 02645

BUDGETARY ESTIMATE

Salesperson: Paul G King
 508-918-2210

GBPC/BAPER Contract

Qty	Item #	Description	Unit Price	Line Total
		[Fleet] 2019 Ford Super Duty F-550 DRW (F4H) XL 4WD Reg Cab 145" WB 60" CA		\$ 34,378.00
	NI	Exteropr Color: Blue Jean Metallic		\$
	99T	Engine: 6.7L 4V OHV Power Stroke V8 Turbo Diesel B20 -inc: Diesel Exhaust Fluid (DEF) tank, intelligent oil-life monitor and manual push-button engine-exhaust braking, 220 Amp Extra Heavy-Duty Alternator, Dual 78-AH 750 CCA Batteries, 4.10 Axle Ratio	\$ 9,010.00	\$ 8,739.70
	44W	Transmission: TorqShift 6-Speed Automatic -inc: (6R140), SelectShift		\$
	67A	Dual Alternators (Total 332-Amps)		\$ -
	660A	Option Package: Order Code 650A		\$
		Gross Vehicle Weight Rating - 16,500 Lbs		\$
		Gross Combined Weight Rating - 28,000 Lbs		\$
	AS	Medium Earth Gray, HD Vinyl 40/20/40 Split Bench Seat -inc: center armrest, cupholder, storage and driver's side manual lumbar		\$
	THB	Tires: 225/70Rx19.5G BSW Traction -inc: 4 traction tires on the rear and 2 all-season tires on the front, Optional spare is 225/70Rx19.5G BSW all-season	\$ 190.00	\$ 184.30
	X41	4.10 Axle Ratio	INC.	INC.
	90L	Power Equipment Group -inc: Deletes passenger side lock cylinder, upgraded door-trim panel, Accessory Delay, Advanced Security Pack, SecuriLock Passive Anti-Theft System (PATS) and inclination/intrusion sensors, MyKey, owner controls feature, Remote Keyless Entry, Trailer Tow Mirrors w/Power Heated Glass, manual telescoping, heated convex spotter mirror and integrated clearance lamps/turn signals, Power Front Side Windows, 1-touch up/down driver/passenger window, Power Locks	\$ 915.00	\$ 887.55
	473	Snow Plow Prep Package	\$ 185.00	\$ 179.45
	52B	Trailer Brake Controller -inc: smart trailer tow connector, Verified to be compatible w/electronic actuated drum brakes only	\$ 270.00	\$ 261.90
	62R	Transmission Power Take-Off Provision -inc: mobile and stationary PTO modes	\$ 280.00	\$ 271.60
	512	Spare Tire, Wheel & Jack	\$ 350.00	\$ 339.50
	18B	Platform Running Boards	\$ 320.00	\$ 310.40

585	Radio: AM/FM Stereo/MP3 -inc: 4 speakers, SYNC Communications & Entertainment System, enhanced voice recognition w/911 Assist, 4.2" LCD center stack screen, AppLink, 1 smart-charging USB port and steering wheel audio controls	\$ 550.00	\$ 533.50
76C	Exterior Backup Alarm	\$ 140.00	\$ 135.80
	REMAINING STANDARD EQUIPMENT AS SHOWN IN CHROME DATA REPORT		\$ -
	9 Ft. Stainless 2 - 3 CuYd Dump Body with Electric		\$ 30,330.00
	Upgrade Dump to Central Hydraulic - Dump, Plow & Sander		\$ -
	1/2" Reinforced Plate w/ D-Rings and Light Plug - Combo		\$ -
	Fisher 9 Ft. HD2 Snow Plow Package		\$ -
	Two Code 3 Vibrant Amber LED Lights mounted on the Grill		\$ -
	Four Code 3 MR6 Amber LED Lights mounted on Dump Body - Two on the Cabshield Facing Forward and One Each on Sides of Cabshield		\$ -
	Pair of Code 3 HB4PAK Amber LED Lights mounted on rear of Dump Body		\$ -
			\$ -
	THIS IS A BUDGETARY ESTIMATE - DUE TO CURRENT UNSTABILITY OF STEEL/ALUMINUM, WE WOULD STRONGLY SUGGEST CONSIDERING ADDING 8 - 10% TO THE TOTAL DUE TO THESE UNCERTAIN FACTORS		\$ -
			\$ -

Special Instructions:

Custom or Special Orders are Non-Refundable

This Estimate is for Budgetary Purposes and is Not a Guarantee of Cost for Services.

Estimate is Based on Current Information From Client About the Project Requirments

Actual Cost May Change Once Project Elements are Finalized

Vehicle Subtotal

Upfit Subtotal

Grand Total

\$76,551.70

Thank You For Choosing The Colonial Way!



Colonial Municipal Group

Paul G King | 508-918-2210 | pking@buycmg.com

HARWICH DPW - BUDGETARY ESTIMATE

[Fleet] 2019 Ford Super Duty F-550 DRW (F5H) XL 4WD Reg Cab 145" WB 60" CA (13)





[Fleet] 2019 Ford Super Duty F-550 DRW (F5H) XL 4WD Reg Cab 145" WB 60" CA (13)

Selected Model and Options

MODEL

CODE	MODEL
F5H	2019 Ford Super Duty F-550 DRW XL 4WD Reg Cab 145" WB 60" CA

COLORS

CODE	DESCRIPTION
N1	Blue Jeans Metallic

ADDITIONAL EQUIPMENT - EXTERIOR

CODE	DESCRIPTION
18B	Platform Running Boards
512	Spare Tire, Wheel & Jack -inc: Excludes carrier, 6-Ton Hydraulic Jack
61J	6-Ton Hydraulic Jack

ADDITIONAL EQUIPMENT - MECHANICAL

CODE	DESCRIPTION
473	Snow Plow Prep Package -inc: pre-selected springs (see Order Guide Supplemental Reference for springs/FGAWR of specific vehicle configurations), Note 1: Restrictions apply; see Supplemental Reference or Body Builders Layout Book for details, Note 2: Also allows for the attachment of a winch
52B	Trailer Brake Controller -inc: smart trailer tow connector, Verified to be compatible w/electronic actuated drum brakes only
62R	Transmission Power Take-Off Provision -inc: transmission mounted live drive and stationary mode PTO
67A	Dual Alternators (Total 332-Amps)

ADDITIONAL EQUIPMENT - ENTERTAINMENT

CODE	DESCRIPTION
585	Radio: AM/FM Stereo/MP3 -inc: 4 speakers, SYNC Communications & Entertainment System, enhanced voice recognition w/911 Assist, 4.2" LCD center stack screen, AppLink, 1 smart-charging USB port and steering wheel audio controls

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[Fleet] 2019 Ford Super Duty F-550 DRW (F5H) XL 4WD Reg Cab 145" WB 60" CA (13)

ADDITIONAL EQUIPMENT - INTERIOR

CODE	DESCRIPTION
76C	Exterior Backup Alarm (Pre-Installed) -inc: Custom accessory

ADDITIONAL EQUIPMENT - PACKAGE

CODE	DESCRIPTION
90L	Power Equipment Group -inc: Deletes passenger side lock cylinder, upgraded door-trim panel, Accessory Delay, Advanced Security Pack, SecuriLock Passive Anti-Theft System (PATS) and inclination/intrusion sensors, MyKey, owner controls feature, Remote Keyless Entry, Trailer Tow Mirrors w/Power Heated Glass, manual telescoping, heated convex spotter mirror and integrated clearance lamps/turn signals, Power Front Side Windows, 1-touch up/down driver/passenger window, Power Locks

TRANSMISSION

CODE	DESCRIPTION
44W	Transmission: TorqShift 6-Speed Automatic -inc: (6R140), SelectShift

OPTION PACKAGE

CODE	DESCRIPTION
660A	Order Code 660A

ENGINE

CODE	DESCRIPTION
99T	Engine: 6.7L 4V OHV Power Stroke V8 Turbo Diesel B20 -inc: Diesel Exhaust Fluid (DEF) tank, Intelligent Oil-Life Monitor, manual push-button engine-exhaust braking and split-shaft calibration compatibility, 220 Amp Extra Heavy Duty Alternator, Dual 78-AH 750 CCA Batteries, 4.10 Axle Ratio

SEAT TYPE

CODE	DESCRIPTION
AS	Medium Earth Gray, HD Vinyl 40/20/40 Split Bench Seat -inc: center armrest, cupholder, storage and driver's side manual lumbar

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Colonial Municipal Group

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[Fleet] 2019 Ford Super Duty F-550 DRW (F5H) XL 4WD Reg Cab 145" WB 60"-CA (13)

PRIMARY PAINT

CODE	DESCRIPTION
N1	Blue Jeans Metallic

TIRES

CODE	DESCRIPTION
THB	Tires: 225/70Rx19.5G BSW Traction (THB) -inc: 4 traction tires on the rear and 2 all-season tires on the front, Optional spare is 225/70Rx19.5G BSW all-season

AXLE RATIO

CODE	DESCRIPTION
X41	4.10 Axle Ratio

Options Total

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[Fleet] 2019 Ford Super Duty F-550 DRW (F5H) XL 4WD Reg Cab 145" WB 60" CA (13)

Standard Equipment

Mechanical

Engine: 6.8L 3-Valve SOHC EFI NA V10 (STD)
Transmission: TorqShift 6-Speed Automatic (6R140) -inc: SelectShift (STD)
4.88 Axle Ratio (STD)
50-State Emissions System
Transmission w/Oil Cooler
Manual Transfer Case
Part-Time Four-Wheel Drive
78-Amp/Hr 750CCA Maintenance-Free Battery w/Run Down Protection
HD 240 Amp Alternator
Towing w/Harness and Trailer Sway Control
11040# Maximum Payload
GVWR: 18,000 lbs Payload Package
HD Shock Absorbers
Front And Rear Anti-Roll Bars
Firm Suspension
Hydraulic Power-Assist Steering
40 Gal. Fuel Tank
Single Stainless Steel Exhaust
Dual Rear Wheels
Manual Locking Hubs
Front Suspension w/Coil Springs
Leaf Rear Suspension w/Leaf Springs
4-Wheel Disc Brakes w/4-Wheel ABS, Front And Rear Vented Discs and Brake Assist
Upfitter Switches

Exterior

Wheels: 19.5" Argent Painted Steel -inc: manual locking hubs
Tires: 225/70Rx19.5G BSW AS (STD)
Clearcoat Paint
Black Front Bumper w/Black Rub Strip/Fascia Accent and 2 Tow Hooks
Black Fender Flares
Black Side Windows Trim and Black Front Windshield Trim

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[Fleet] 2019 Ford Super Duty F-550 DRW (F5H) XL 4WD Reg Cab 145" WB 60" CA (13)

Exterior

- Black Door Handles
- Black Manual Side Mirrors w/Manual Folding
- Manual Extendable Trailer Style Mirrors
- Fixed Rear Window
- Light Tinted Glass
- Variable Intermittent Wipers
- Aluminum Panels
- Front Splash Guards
- Black Grille
- Front License Plate Bracket
- Fully Automatic Aero-Composite Halogen Daytime Running Lights Preference Setting Headlamps w/Delay-Off
- Cab Clearance Lights

Entertainment

- Radio w/Seek-Scan
- Radio: AM/FM Stereo -inc: 4-speakers
- Fixed Antenna
- 1 LCD Monitor In The Front

Interior

- 4-Way Driver Seat -inc: Manual Recline and Fore/Aft Movement
- 4-Way Passenger Seat -inc: Manual Recline and Fore/Aft Movement
- Manual Tilt/Telescoping Steering Column
- Gauges -inc: Speedometer, Odometer, Oil Pressure, Engine Coolant Temp, Tachometer, Transmission Fluid Temp, Engine Hour Meter, Trip Odometer and Trip Computer
- Manual Air Conditioning
- Illuminated Locking Glove Box
- Interior Trim -inc: Chrome Interior Accents
- Full Cloth Headliner
- Urethane Gear Shift Knob
- HD Vinyl 40/20/40 Split Bench Seat -inc: center armrest, cupholder, storage and driver's side manual lumbar
- Day-Night Rearview Mirror
- Passenger Visor Vanity Mirror
- 2 12V DC Power Outlets

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[Fleet] 2019 Ford Super Duty F-550 DRW (F5H) XL 4WD Reg Cab 145" WB 60" CA (13)

Interior

- Front Map Lights
- Fade-To-Off Interior Lighting
- Full Vinyl/Rubber Floor Covering
- Underhood Lights
- Instrument Panel Bin and Covered Dashboard Storage
- Manual 1st Row Windows
- Systems Monitor
- Trip Computer
- Outside Temp Gauge
- Analog Display
- Manual Adjustable Front Head Restraints
- Air Filtration

Safety-Mechanical

- Driveline Traction Control

Safety-Exterior

- Side Impact Beams

Safety-Interior

- Dual Stage Driver And Passenger Seat-Mounted Side Airbags
- Dual Stage Driver And Passenger Front Airbags w/Passenger Off Switch
- Safety Canopy System Curtain 1st Row Airbags
- Outboard Front Lap And Shoulder Safety Belts -inc: Height Adjusters

WARRANTY

- Basic Years: 3
- Basic Miles/km: 36,000
- Drivetrain Years: 5
- Drivetrain Miles/km: 60,000
- Corrosion Years: 5
- Corrosion Miles/km: Unlimited
- Roadside Assistance Years: 5
- Roadside Assistance Miles/km: 60,000

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REQUEST FOR RESPONSE
Water Works Supplies

ID Number: HWD-19-WWS
File Name/Title: Water Works Supplies
Purchasing Department: Water Department, Town of Harwich
196 Chatham Road, Harwich MA 02645
Contact Person: Dan Pelletier, Superintendent
E: dpelletier@harwichwater.com
T: 508-432-0304 | F: 888-774-3557

DESCRIPTION OR PURPOSE OF PROCUREMENT

The purpose of this invitation to Bid is to identify a vendor with whom the Harwich Water Department ("Department") will negotiate to furnish water works supplies. This vendor must be capable of furnishing all materials in a timely manner.

ACQUISITION METHOD TO BE USED FOR CONTRACT(S)

Fee for Service Outright Purchase Term Lease Rental (not to exceed 6 months)

SINGLE OR MULTIPLE VENDORS FOR CONTRACT PERFORMANCE

Single Vendor Multiple Vendors

TOTAL ANTICIPATED DURATION OF CONTRACT(S)

Initial Contract Duration: Contract services up to 1 year, to terminate June 30th each year
Option to Renew: Option to renew up to 2 year(s), to commence on July 1st each year

TOTAL ANTICIPATED EXPENDITURES FOR TOTAL ANTICIPATED DURATION OF CONTRACT(S)

Estimated Value of Procurement: \$ 100,000 annually

- Contract(s) will have a Maximum Obligation Amount.
 Contract(s) will NOT have a Maximum Obligation Amount (Rate Contract)
 Compensation will be subject to Quotes by List of Qualified Vendors (Maximum Obligation or Rate Contract).

TERM OF CONTRACT

Initial contract duration will be 1 year with the option to renew the annual contract for up to 2 years pending outcome of performance measures. The contract term will end on June 30th of each year, extension will commence on July 1st of each year. The Department also reserves the right to negotiate with any individual of vendor for future contracts.

PAYMENT

After receiving proper invoice for services rendered the Department will make payment to the Vendor within forty-five (45) days of receiving the invoice.

SUBMISSION INSTRUCTIONS & DEADLINE

Proposals must be submitted in a sealed envelope clearly labeled "HWD-19-WWS", and sent to the Harwich Water Department, Attn: Dan Pelletier, 196 Chatham Road, Harwich, MA 02645.

Vendors shall include in their proposals: Completed Materials list with unit pricing, Bidder Reference Form, Non-collusion and Tax Compliance Form, and Bidder Form. Provide one original (signed in blue ink) proposal for Department use.

All proposals become the property of the Department. The Department reserves the right to reject any or all proposals and/or to select that proposal which is deemed to be in the best interest of the Department. The Department reserves the right to negotiate in determining the choice of the Vendor or Individual to do the work necessary.

DEADLINE FOR RESPONSES

Deadline Date/Time: August 2, 2018 at 9:00 a.m.

Will a Bidders Conference be offered: NO YES

Will Opportunity for Written Questions be offered? NO YES

Questions should be submitted by email to dpelletier@harwichwater.com no later than July 26, 2018 at 10:00 a.m. Responses to questions will posted on our website at <http://www.harwichwater.com/news-events/water-works-supplies-bid.html>.

EVALUATION OF PROPOSALS


The Department may award a contract based on initial proposals received without discussion of such proposals with Vendors. Accordingly, each initial proposal should be submitted with the most favorable price and service available.

NON-COLLUSION AND TAX COMPLIANCE

Persons submitting a bid to provide general water works supplies to the Harwich Water Department must submit a certification of non-collusion and tax compliance.


CERTIFICATION OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Name of Person Signing Bid: Matthew Gravina / 
Name of Business: Ferguson Waterworks

TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. c. 62C, §49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes.

Name of Person Signing Bid: Matthew Gravina / 
Name of Business: Ferguson Waterworks

BID AWARD

The contract will be awarded to the responsive and responsible bidder meeting the specifications. Bid will be awarded based on lowest grand total of sections 1-20. Vendors bidding on most sections will compete for bid. The Department reserves the right to purchase any amount of the listed materials in such quantity as required or determined through June 30, 2019.

- Quoted prices must only be for Domestic U.S. made and/or equivalent
- Quoted prices are to be 45 days net terms
- Quoted prices are to be FOB Harwich MA 02645
- Quoted prices are to remain firm through June 30, 2019
- Shop drawings must be included with all materials not meeting specification

THE UNDERSIGNED HEREBY CERTIFIES THAT SAID MATERIALS CAN BE FURNISHED IN A REASONABLE PROMPT MANNER AND IN SUCH QUANTITIES AS THE DEPARTMENT MAY REQUIRE.

BIDDER FORM

Vendor Information:

Firm Name: Ferguson Waterworks Date Submitted: Aug 2, 2018
Address: 351 Whites Path Phone: 508-430-1696
Yarmouth, Ma 02664 Fax: 508-430-2657
Email: matt.gravina@ferguson.com

THE BIDDER CERTIFIES UNDER THE PENALTIES OF PERJURY THAT THIS BID IS IN ALL RESPECTS BONA FIDE, FAIR AND MADE WITHOUT COLLUSION OR FRAUD WITH ANY OTHER PERSON.

Authorized Signature: 

HARWICH WATER DEPARTMENT USE ONLY

Bid Notes: _____

BID ACCEPTANCE – ALL SPECIFICATIONS AND REQUIREMENTS HAVE BEEN MET

Superintendent Bid Approval: _____ Date: _____

BIDS TO BE REVIEWED, TALLIED AND A RECOMMENDATION MADE TO THE BOARD OF WATER COMMISSIONERS FOR VOTE TO AWARD.

**SECRETARIAL CERTIFICATE
OF
AUTHORIZATION**

The undersigned Assistant Secretary of Ferguson Enterprises, Inc., a Virginia corporation (the "Corporation"), hereby certifies that: i) certain of the Corporation's facilities in North Harwich, Massachusetts are doing business as Ferguson Waterworks, and ii) Matthew Gravina is Branch Manager in North Harwich, Massachusetts and iii) that the resolutions adopted by the Corporation's Board of Directors effective July 31, 2017, duly authorize certain of the Corporation's officers, including the Assistant Secretary, to designate, and I hereby do so designate Matthew Gravina as an authorized representative of the Corporation to act for and on behalf of the Corporation to prepare and submit bids and proposals to the Corporation's customers, to enter into contracts, agreements or other documents, and to execute such documents and undertake all such acts as may be deemed in the best interest of the Corporation, including the execution of bonds and in doing so, to contractually bind the Corporation. Unless withdrawn sooner, this certification of authorization shall be effective until July 31, 2019.

Dated: July 17, 2018


FERGUSON ENTERPRISES, INC.

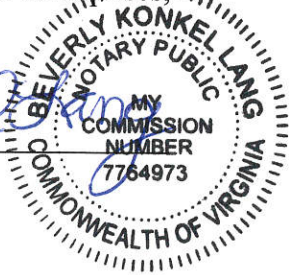


By: 
 David N. Meeker, Assistant Secretary

Commonwealth of Virginia)
)
 City of Newport News)

Sworn to subscribed and acknowledged before me this 17th day of July, 2018, by David N. Meeker, personally known to me, in his capacity as Assistant Secretary of Ferguson Enterprises, Inc., a Virginia corporation, on behalf of such corporation.


 Notary – Beverly Konkel Lang



My commission expires: September 30, 2022

AWARD OF CONTRACT

The contract will be awarded to the responsive and responsible bidder meeting the specifications.

Bids will be awarded based on the lowest grand total of sections 1-20. Vendors bidding on most sections will compete for bid. The Department reserves the right to purchase any amount of the listed materials in such quantity as required or determined through June 30, 2019.

BIDDER REFERENCE FORM

Bidder: Ferguson Waterworks
Bid Title: Waterworks Supplies

BIDDER MUST PROVIDE REFERENCES FOR: Any contracts performed within the past two (2) years of similar size and scope as this bid.

Reference 1: _____ Contact _____
 _____ Phone: _____
 _____ Fax: _____
Address: _____ Email: _____
Description and dates of supplies provided: _____

Reference 2: _____ Contact _____
 _____ Phone: _____
 _____ Fax: _____
Address: _____ Email: _____
Description and dates of supplies provided: _____

Reference 3: _____ Contact _____
 _____ Phone: _____
 _____ Fax: _____
Address: _____ Email: _____
Description and dates of supplies provided: _____

Attach additional sheets if necessary.

FERGUSON®
Waterworks – Sumner & Dunbar

Two Whitman Road
Canton, MA 02021
Phone: 781-828-1350
FAX: 781-828-8706

513 Depot Street
No. Harwich, MA 02645
Phone: 508-430-1696
FAX: 508-430-2657

One Wellington Road
Lincoln, RI 02865
Phone: 401-334-4398
FAX: 401-334-4460

Sandwich Water District 508-888-2775
P O Box 600
Sandwich, MA. 02563
Contact: DAN Mahoney

Centerville / Osterville Water 508-428-6691
1138 Main Street
P O Box 369
Osterville, MA 02655
Contact: Craig Crocker

Harwich Water Dept 508-432-0304
196 Chatham Road
Harwich, MA 02645
Contact Dan Pelletier

Orleans Water Dept 508-255-1200
19 School St
Orleans, MA 02653
Contact: Todd Bunzick

DOMESTIC U.S. MADE AND/OR EQUIVALENT ONLY AND ALL BRASS MUST BE LEAD-FREE

Item#	Size	Description	Style	Price
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Section 1 PIPE REPAIR CLAMPS - STAINLESS STEEL - QUICK CLAMP BY TPS				
1	3/4" x 6"	Quick Clamp	TPS 4106-0105-150	15.38
2	1" x 6"	Quick Clamp	TPS 4106-0132-150	16.75
3	1 1/2" x 6"	Quick Clamp	TPS 4106-0190-150	20.26
4	2" x 6"	Quick Clamp	TPS 4106-0238-150	26.57

Section 2 PIPE REPAIR CLAMPS - STAINLESS STEEL - EZ MAX PLUS BY TPS				
1	2" x 6"	EZ Max Plus	4006-0265-150	58.08
2	3" x 9"	EZ Max Plus	4009-0425-150 EXT	105.66
3	4" x 12"	EZ Max Plus	4012-0560-150 EXT	160.83
4	6" x 12"	EZ Max Plus	4012-0764-150 EXT	216.92
5	8" x 12"	EZ Max Plus	4012-0980-150 EXT	226.25
6	10" x 12"	EZ Max Plus	4012-1153-150 EXT	286.33
7	12" x 12"	EZ Max Plus	4012-1355-150 EXT	346.66

Section 3 HI MAX COUPLINGS SERIES 2000				
1	1.5"	TPS 2000	2000-0213-260	82.37
2	2"	TPS 2000	2000-0303-260	86.85
3	3"	TPS 2000	2000-0433-260	114.58
4	4"	TPS 2000	2000-0563-260	146.80
5	6"	TPS 2000	2000-0768-260	194.42
6	8"	TPS 2000	2000-0984-260	219.50
7	10"	TPS 2000	2000-1200-260	282.38
8	12"	TPS 2000	2000-1366-260	333.30
9	16"	TPS 2000	2000-1920-260	895.36

Section 4 OMNI CAST COUPLINGS SERIES 441 (SMITH-BLAIR)				
2	2"	441 SERIES	S44100000263900	17.62
3	3"	441 SERIES	S44100000396900	30.19
4	4"	441 SERIES	S44100000510900	40.16
5	6"	441 SERIES	S44100000722900	61.04
6	8"	441 SERIES	S44100000945900	79.83
7	10"	441 SERIES	S44100001160900	92.21
8	12"	441 SERIES	S44100001350900	115.14
9	16"	441 SERIES	S44100001780900	272.02

Section 5 PIPE IRON DUCTILE - DOMESTIC US MADE ONLY				
1	6"	Ductile Iron Pipe C-52	< Truck load, per ft	13.18 Ft
2	6"	Ductile Iron Pipe C-52	Truck load per ft	13.18 Ft
3	8"	Ductile Iron Pipe C-52	< Truck load per ft	18.59 Ft
4	8"	Ductile Iron Pipe C-52	Truck load per ft	18.59 Ft
5	10"	Ductile Iron Pipe C-52	< Truck load per ft	24.36 Ft
6	10"	Ductile Iron Pipe C-52	Truck load per ft	24.36 Ft
7	12"	Ductile Iron Pipe C-52	< Truck load per ft	30.67 Ft
8	12"	Ductile Iron Pipe C-52	Truck load per ft	30.67 Ft
9	16"	Ductile Iron Pipe C-52	< Truck load per ft	44.38 Ft
10	16"	Ductile Iron Pipe C-52	Truck load per ft	44.38 Ft

11	4"	Tyton Field Lock Gasket	46.84
12	6"	Tyton Field Lock Gasket	68.16
13	8"	Tyton Field Lock Gasket	93.68
14	10"	Tyton Field Lock Gasket	123.16
15	12"	Tyton Field Lock Gasket	137.89
16	16"	Tyton Field Lock Gasket	306.32

Section 6 MJ FITTINGS - LESS ACCESSORIES - DOMESTIC US MADE ONLY				
1	6" x 6"	Hydrant Tees	Less Accessories	166.05
2	8" x 6"	Hydrant Tees	Less Accessories	207.22
3	10" x 6"	Hydrant Tees	Less Accessories	325.95
4	10" x 8"	Hydrant Tees	Less Accessories	393.17
5	12" x 6"	Hydrant Tees	Less Accessories	378.07
6	12" x 8"	Hydrant Tees	Less Accessories	425.43
7	16" x 6"	Hydrant Tees	Less Accessories	675.87
8	16" x 8"	Hydrant Tees	Less Accessories	1164.43
9	6" x 6"	Tees	Less Accessories	144.10
10	8" x 6"	Tees	Less Accessories	180.46
11	8" x 8"	Tees	Less Accessories	214.77
12	10" x 6"	Tees	Less Accessories	281.33
13	10" x 8"	Tees	Less Accessories	330.73
14	10" x 10"	Tees	Less Accessories	375.33
15	12" x 12"	Tees	Less Accessories	473.46
16	12" x 10"	Tees	Less Accessories	452.18
17	12" x 8"	Tees	Less Accessories	358.86
18	12" x 6"	Tees	Less Accessories	339.66
19	16" x 16"	Tees	Less Accessories	1268.04
20	16" x 12"	Tees	Less Accessories	1005.24
21	16" x 10"	Tees	Less Accessories	922.21
22	16" x 8"	Tees	Less Accessories	839.87
23	16" x 6"	Tees	Less Accessories	774.69
24	8" x 6"	Reducers	Less Accessories	96.06
25	10" x 6"	Reducers	Less Accessories	104.30
26	10" x 8"	Reducers	Less Accessories	113.90
27	12" x 6"	Reducers	Less Accessories	183.20
28	12" x 8"	Reducers	Less Accessories	187.32
29	12" x 10"	Reducers	Less Accessories	179.09
30	16" x 12"	Reducers	Less Accessories	428.88
31	16" x 10"	Reducers	Less Accessories	445.32
32	16" x 8"	Reducers	Less Accessories	461.11
33	16" x 6"	Reducers	Less Accessories	478.26
34	6" x 12"	Solid Sleeve Long	Less Accessories	87.15
35	8" x 12"	Solid Sleeve Long	Less Accessories	113.90
36	10" x 12"	Solid Sleeve Long	Less Accessories	170.86
37	12" x 12"	Solid Sleeve Long	Less Accessories	230.55
38	16" x 12"	Solid Sleeve Long	Less Accessories	579.82
39	6"	Cap	Less Accessories	39.80
40	8"	Cap	Less Accessories	62.45
41	10"	Cap	Less Accessories	91.27
42	12"	Cap	Less Accessories	116.65
43	16"	Cap	Less Accessories	322.50

44	6" x 2"	Tap Cap	Less Accessories	63.82
45	8" x 2"	Tap Cap	Less Accessories	86.46
46	10" x 2"	Tap Cap	Less Accessories	115.96
47	12" x 2"	Tap Cap	Less Accessories	140.66
48	16" x 2"	Tap Cap	Less Accessories	371.90
49	6"	45's	Less Accessories	82.34
50	8"	45's	Less Accessories	116.65
51	10"	45's	Less Accessories	168.12
52	12"	45's	Less Accessories	292.31
53	16"	45's	Less Accessories	645.69
54	6"	22-1/2	Less Accessories	74.84
55	8"	22-1/2	Less Accessories	113.90
56	10"	22-1/2	Less Accessories	163.31
57	12"	22-1/2	Less Accessories	247.70
58	16"	22-1/2	Less Accessories	619.62
59	6"	11-1/2	Less Accessories	76.85
60	8"	11-1/2	Less Accessories	104.30
61	10"	11-1/2	Less Accessories	170.17
62	12"	11-1/2	Less Accessories	234.67
63	16"	11-1/2	Less Accessories	619.61

Section 7 MEGA LUG – DUCTILE W/ BOLTS AND GASKETS - DOMESTIC US MADE ONLY				
1	6"	Mega Lug Series 1100	1106DEC	31.83
2	8"	Mega Lug Series 1100	1108DEC	41.51
3	10"	Mega Lug Series 1100	1110DEC	60.82
4	12"	Mega Lug Series 1100	1112DEC	84.70
5	16"	Mega Lug Series 1100	1116DEC	151.33

Section 8 RS VALVES - MJ VALVE LESS ACCESSORIES - MUELLER OR US VALVE				
1	6"	MJ Valve Less Accessories	A-USPO-23	469.09
2	8"	MJ Valve Less Accessories	A-USPO-23	747.10
3	10"	MJ Valve Less Accessories	A-USPO-23	1164.88
4	12"	MJ Valve Less Accessories	A-USPO-23	1473.99
5	16"	MJ Valve Less Accessories	A-USPO-23	5222.58
6	16"	MS Butter Fly Valve	B-3211-20	2175.26
7	6"	MJ Tapping Valve	T-USPO-19	655.07
8	8"	MJ Tapping Valve	T-USPO-19	972.32
9	10"	MJ Tapping Valve	T-USPO-19	1466.32
10	12"	MJ Tapping Valve	T-USPO-19	2214.92

Section 9 STAINLESS STEEL TAPPING SLEEVE & VALVE AWWA C - MUELLER OR US VALVE				
1	6" x 6"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	965.45
2	8" x 6"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	967.96
3	8" x 8"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	1366.97
4	10" x 6"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	991.67
5	10" x 8"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	1370.67
6	10" x 10"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	2141.96
7	12" x 6"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	1016.26
8	12" x 8"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	1402.84
9	12" x 10"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	2171.28
10	12" x 12"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	2982.30

11	16" x 6"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	1356.72
12	16" x 8"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	1703.82
13	16" x 10"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	2482.54
14	16" x 12"	SS Tapping Sleeve & Valve	Mueller #H-304 and Valve	3290.79

Section 10 HYDRANTS - MUELLER OR US VALVE				
1	5'-1/4" x 4'6"	A-423 or Sentinel 250 A-453		1760.30
2	5'-1/4" x 5'0"	A-423 or Sentinel 250 A-453		1800.27
3	5'-1/4" x 5'6"	A-423 or Sentinel 250 A-453		1840.19
4	5'-1/4" x 6"	Hydrant Extension		335.00
5	5'-1/4" x 12"	Hydrant Extension		394.17
6	5'-1/4" x 18"	Hydrant Extension		446.25
7	5'-1/4"	Safety Flange Kit		146.75
8	5'	Bury Freeze-less Yard Hydrant		59.66

Section 11 ROADWAY / GATE BOXES - NORTH AMERICAN MADE				
1	5'-1/4"	Gate Box Complete		106.31
2	5'-1/4" x 26"	Gate Box Top		48.18
3	5'-1/4" x 36"	Gate Box Bottom		47.83
4	5'-1/4" x 1"	Gate Box Riser		20.28
5	5'-1/4" x 1-1/2"	Gate Box Riser		22.41
6	5'-1/4" x 2"	Gate Box Riser		23.48
7	5'-1/4" x 3"	Gate Box Riser		25.60
8	5'-1/4" x 4"	Gate Box Riser		27.66
9	5'-1/4" x 6"	Gate Box Riser		29.68
10	4'-1/4" x 12"	Road Way Box	w/lid & riser	119.30

Section 12 MUELLER BRASS - STANDARDIZED - MUELLER ONLY				
1	1"	Corp Stops, Comp	Mueller #B-25008	52.34
2	1-1/2"	Corp Stops, Comp (CTS)	Mueller #B-25008	118.11
3	2"	Corp Stops, Comp	Mueller #B-25008	195.33
4	1"	Curb Stops	Mueller #B-25209	84.69
5	1-1/2"	Curb Stops	Mueller #B-25209	192.78
6	2"	Curb Stops	Mueller #B-25209	288.03
7	1"	Curb Stops FIPxFIP	Mueller #B-20283	67.98
8	1-1/2"	Curb Stops FIPxFIP	Mueller #B-20283	140.23
9	2"	Curb Stops FIPxFIP	Mueller #B-20283	205.20
10	1"	Male Adapters	Mueller #H-15428	14.88
11	1-1/2"	Male Adapters	Mueller #H-15428	41.16
12	2"	Male Adapters	Mueller #H-15428	59.97
13	1"	Female Adapters	Mueller #H-15451	19.31
14	1-1/2"	Female Adapters	Mueller #H-15451	52.64
15	2"	Female Adapters	Mueller #H-15451	62.72
16	1"	IPS Comp FIP Coupling	Mueller #H-15454	21.24
17	1"	IPS Comp MIP Coupling	Mueller #H-15454	24.25
18	3/4"	IPS Comp FIP Coupling	Mueller #H-15454	15.55
19	3/4"	IPS Comp MIP Coupling	Mueller #H-15429	15.46
20	1"	CTS x 1" IPS Comp Coupling	Mueller #H-15409	43.32
21	1"	CTS x 3/4" IPS Comp Coupling	Mueller #H-15409	40.59
22	1-1/2"	IPS PE x FIP PJ STRT Coupling	Mueller #H-15454	48.49
23	1-1/2"	IPS PE x MIP PJ STRT Coupling	Mueller #H-15429	54.34

24	2"	IPS PE x FIP PJ STRT Coupling	Mueller #H-15454K	78.28
25	2"	IPS PE x MIP PJ STRT Coupling	Mueller #H-15429	86.33
26	1" x 3/4"	CTS Comp x FIP Coupling	Mueller #H-15451	15.62
27	1" x 3/4"	CTS Comp x MIP Coupling	Mueller #H-15428	13.03
28	3/4"	Union	Mueller #H-15403	15.37
29	1"	Union	Mueller #H-15403	16.77
30	1-1/2"	Union	Mueller #H-15403	59.13
31	1-3/4"	Union	Mueller #H-15403	.01
32	2"	Union	Mueller #H-15403	79.85
33	5/8" x 3/4" x 3/4"	Straight Meter Coupling	Mueller #H-10896	7.65
34	5/8" x 3/4" x 3/4"	Bent Meter Coupling	Mueller #H-10896	11.76
35	5/8" x 3/4" x 1"	Angle Meter Valve w/Handle	Mueller #B-24258-01	82.24
36	1"	Plastic Inserts	1" Plastic Inserts	.46
37	1-1/2"	SS Inserts	Mueller #H-506139	3.21
38	2"	SS Inserts	Mueller #H-506141	5.59

Section 13 SERVICE SADDLES FOR AC MAINS - MUELLER ONLY				
1	6" x 1"	Service Saddle	DR2S0659CC100	51.63
2	6" x 1-1/2"	Service Saddle	DR2S0659CC150	56.07
3	6" x 2"	Service Saddle	DR2S0659CC200	61.88
4	8" x 1"	Service Saddle	DR2S0854CC100	61.00
5	8" x 1-1/2"	Service Saddle	DR2S0854CC150	66.02
6	8" x 2"	Service Saddle	DR2S0854CC200	72.02

Section 14 SERVICE SADDLES FOR DUCTILE MAINS - MUELLER ONLY				
1	2" x 1"	Service Saddle	DRZS-0235CC100	46.78
2	6" x 1-1/2"	Service Saddle	DRZA-0659-150	35.19
3	6" x 2"	Service Saddle	DRZA-0659-200	35.66
4	8" x 1-1/2"	Service Saddle	DRZA-0854CC150	39.41
5	8" x 2"	Service Saddle	DRZA-0854CC200	39.40
6	10" x 1-1/2"	Service Saddle	DRZA-1064CC150	51.96
7	10" x 2"	Service Saddle	DRZA-1064CC200	51.96
8	12" x 1-1/2"	Service Saddle	DRZA-1262CC150	61.07
9	12" x 2"	Service Saddle	DRZA-1262CC200	62.31
10	16" x 1-1/2"	Service Saddle	DRZA-1740CC150	103.67
11	16" x 2"	Service Saddle	DRZA-1740CC200	107.62

Section 15 SERVICE BOXES - NORTH AMERICAN				
1	5.5' - 6.5'	Erie Plug Service Box		28.58
2	5.5' - 6.5'	Erie Plug Service Box	w/large base	42.28
3	30"	Stainless Steel Rod, Erie Box		14.31
4	36"	Stainless Steel Rod, Erie Box	large service	15.24
5	3"	Erie Extension		16.71
6	6"	Erie Extension		17.38
7	9"	Erie Extension		17.38
8	12"	Erie Extension		19.01
9	18"	Erie Extension		19.63

Section 16 METER PITS - MUELLER				
1A	5/8" x 3/4"	EZ Set Meter Pit 18"X18"	203IS1818LLBL	163.60
1B	18" x 4"	4" Insulation Pad	790153	29.98

1C	18"	Center Lock Lid	780069	60.02
2A	1"	EZ Set Meter Pit 18"X18"	303IS1818LLBL	195.50
2B	18" x 4"	4" Insulation Pad	790153	29.98
2C	18"	Center Lock Lid	780069	60.02
3A	5/8" x 3/4"	Thermal Coil Meter Pit 18"X48"	203CS1848LLBL	556.09
3B	18" x 4"	4" Insulation Pad	790153	29.98
3C	18"	Center Lock Lid	780069	60.02
4A	5/8" x 3/4"	Thermal Coil Meter Pit 18"X60"	203CS1860LLBL	556.09
4B	18" x 4"	4" Insulation Pad	790153	29.98
4C	18"	Center Lock Lid	780069	60.02
5A	1"	Thermal Coil Meter Pit 18"X48"	330CS1848LLBL	588.53
5B	18" x 4"	4" Insulation Pad	790153	29.98
5C	18"	Center Lock Lid	780069	60.02
6A	1"	Thermal Coil Meter Pit 18"X60"	330CS1860LLBL	588.53
6B	18" x 4"	4" Insulation Pad	790153	29.98
6C	18"	Center Lock Lid	780069	60.02

Section 17 POLY PIPE - ENDO POLY PE-3408/PE-4710				
1	1"	Poly Tubing 100',200',300'	BLACK 200 PSI CTS	1.33 ft
2	1-1/2"	Poly Tubing 100',300'	BLACK 200 PSI CTS	1.68 ft
3	2"	Poly Tubing 100',200',300',500'	BLACK 200 PSI CTS	1.13 ft
4	12GA	Tracing Wire	500' ROLLS	92.00 ea

Section 18 THREADED LEAD-FREE BRASS NIPPLES - DOMESTIC OR EQUIVALENT				
1	3/4" x CLOSE	Brass Nipple		1.80
2	3/4" x 2"	Brass Nipple		2.26
3	3/4" x 3"	Brass Nipple		3.02
4	3/4" x 4"	Brass Nipple		3.30
5	3/4" x 6"	Brass Nipple		4.90
6	3/4" x 12"	Brass Nipple		10.50
7	1" x CLOSE	Brass Nipple		2.50
8	1" x 3"	Brass Nipple		3.96
9	1" x 4"	Brass Nipple		5.28
10	1" x 5"	Brass Nipple		7.01
11	1" x 6"	Brass Nipple		8.35
12	1" x 8"	Brass Nipple		13.25
13	1" x 12"	Brass Nipple		16.53
14	1-1/2" x CLOSE	Brass Nipple		4.45
15	1-1/2" x 3"	Brass Nipple		7.09
16	1-1/2" x 4"	Brass Nipple		9.00
17	1-1/2" x 5"	Brass Nipple		10.00
18	1-1/2" x 6"	Brass Nipple		12.75
19	1-1/2" x 8"	Brass Nipple		12.75
20	1-1/2" x 12"	Brass Nipple		23.40
21	2" x CLOSE	Brass Nipple		7.10
22	2" x 3"	Brass Nipple		8.60
23	2" x 4"	Brass Nipple		11.05
24	2" x 5"	Brass Nipple		14.20
25	2" x 6"	Brass Nipple		16.70
26	2" x 8"	Brass Nipple		23.35
27	2" x 12"	Brass Nipple		32.15

Section 19	THREADED LEAD-FREE BRASS FITTINGS - DOMESTIC OR EQUIVALENT		
1	3/4"	Brass 90's Street	6.99
2	3/4"	Brass 90	9.02
3	1"	Brass 90'S	11.25
4	1-1/2"	Brass 90'S	10.31
5	1-3/4"	Brass 90's	22.51
6	2"	Brass 90'S	36.32
7	1"	Brass 90'S Street	15.58
8	1-1/2"	Brass 90'S Street	35.30
9	2"	Brass 90'S Street	52.75
10	1"	Brass Tee	15.18
11	1-1/2"	Brass Tee	32.75
12	2"	Brass Tee	50.19
13	1-1/2" x 1"	Brass Tee	63.00
14	2" x 1"	Brass Tee	29.41
15	2" x 1-1/2"	Brass Tee	66.33
16	1"	Brass Couplings	13.15
17	1-1/2"	Brass Couplings	22.51
18	2"	Brass Couplings	37.20
19	1-1/2" x 1"	Brass Couplings	29.78
20	2" x 1"	Brass Couplings	52.11
21	2" x 1-1/2"	Brass Couplings	48.24
22	2" x 1"	Brass Bushings	18.95
23	2" x 1-1/2"	Brass Bushings	18.95
24	1-1/2" x 1"	Brass Bushings	15.36
25	1" x 3/4"	Brass Bushings	6.34
26	1"	Brass Cap	7.85
27	1-1/2"	Brass Cap	18.17
28	2"	Brass Cap	31.14
29	1"	Solid Brass Plug	7.80
30	1-1/2"	Solid Brass Plug	12.12
31	2"	Solid Brass Plug	19.88
32	1"	Galv. Clamp Style Male Adapter	14.61
33	1-1/2"	Galv. Clamp Style Male Adapter	21.15
34	2"	Galv. Clamp Style Male Adapter	23.26
35	1" x 3/4"	Ford Service Fitting	10.00

Section 20	BALL VALVES 600WOG - DOMESTIC OR EQUIVALENT		
1	3/4"	IPS Ball Valves	25.74
2	1"	IPS Ball Valves	26.76
3	1-1/2"	IPS Ball Valves	65.01
4	1-3/4"	IPS Ball Valves	.01
5	2"	IPS Ball Valves	111.70



OSHA Safety for Public Sector

Highlights of Updated Law M.G.L. c149 §6 ½

March 9, 2018

On March 9, 2018 Governor Baker signed a bill that amends M.G.L. chapter 149 §6 ½. The law was updated to clarify employee safety requirements in public sector workplaces, and is enforced by the Department of Labor Standards (DLS).

Highlights:

- Clarifies that the definition of public sector workplace includes counties, municipalities, all state agencies, quasi-public independent entities, courts, bureaus, commissions, divisions or authorities of the commonwealth, political subdivisions, and public colleges and universities.
- Clarifies that public sector employers are required to provide methods to reduce work-related injury and illness, which meet the minimum requirements provided under OSHA.

Why the Law Was Updated

- The original law, M.G.L. chapter 149 §6 ½ did not contain the phrasing for OSHA compliance because it was written before 1970, when OSHA was enacted.

How Safety Requirements are Enforced

- DLS conducts safety and health inspections of public sector workplaces. Federal OSHA inspectors will not inspect public sector employers. The updated law clarifies the public sector employer's obligations and does not change current DLS procedures.

How Workplaces are Selected for Inspection

DLS prioritizes inspections in the following order. DLS makes an appointment for all inspections, with the exception of "Imminent" inspections.

- **Imminent Hazard:** DLS inspectors stop at active trenches, aerial lift operations, and roofing to ensure safety equipment and procedures are used.
- **Accident Investigation:** DLS inspects workplaces in response to a worker injury. Examples of recent inspections include amputation, electric shock, fall from ladder, broken leg, crushed hand, trench collapse, and flash fire.
- **Voluntary:** An employer can request a voluntary safety and health audit.
- **Complaint:** DLS responds to complaints about workplace safety conditions. Examples of complaints include ladder handling, lack of respirators, and facility maintenance.
- **Planned Programmed Inspection:** DLS conducts a representative number of inspections in workplaces expected to contain machinery or other hazards. Examples of recent inspections include wastewater treatment plants, drinking water plants, highway departments, municipal electric power, school kitchens, and crossing guard locations.

Frequent Discussions:

1. **The amended law does not replace OSHA.** OSHA continues to have jurisdiction for private sector employers.
2. **Massachusetts requirements are as strict as OSHA.** No stricter or more lenient.
3. **The effective date is February 1, 2019.** However, the original Mass General Laws are still in effect. DLS will continue to conduct safety and health inspections in the interim, and will conduct outreach to familiarize employers with their responsibilities.
4. **Massachusetts may pursue becoming an OSHA State Plan State.** An OSHA State Plan is a program that is approved, partially funded, and audited by OSHA. In order to become an official State Plan, DLS must submit an application to federal OSHA. There are currently five states that have a State Plan which covers public sector workplaces only, and use federal OSHA for private sector: Connecticut; Illinois; Maine; New Jersey; and New York. Whether or not Massachusetts is an OSHA State Plan does not affect the authority of DLS to enforce workplace standards at least as stringent as OSHA.
5. **Public sector employers may get fined.** DLS has the authority to issue fines. The enforcement approach used by DLS is to issue an order for corrective action to employers for a first offense. When corrective actions are completed within the timeframe specified, a fine is not issued.
6. **When to notify DLS about an injury -** Contact DLS within 24 hours if an accident causes a death, amputation, loss of an eye, loss of consciousness, or inpatient hospitalization at 508-616-0461 or safepublicworkplace@state.ma.us. For these and all other injuries, continue to follow your current workers' compensation procedures and file First Reports with the Department of Industrial Accidents.
7. **When to keep an OSHA 300 Log -** Complete an OSHA 300 Log if you receive a letter from the Bureau of Labor Statistics requesting a copy of your log. Complete an OSHA 300 Log if requested by a DLS inspector. Do not enter your logs on the osha.gov website. More details to follow in 2019.
8. **Training requirements are job specific.** Safety training depends on the tasks and equipment handled by employees, such as aerial lifts, trenches, ladders, or chainsaws. For a summary, see the DLS website at www.mass.gov/dols/wshp and <https://www.osha.gov/Publications/osha2254.pdf>.
9. **OSHA 10 training is not required.** OSHA 10 training is not required of all employees under updated MGL c149 §6 ½. However, there is a public bidding law that requires OSHA 10 training on publicly bid construction projects over \$10,000. Provide this training if that law applies to your workers.
10. **Requirements for a private contractor performing work on public property are the same as before.** Private sector employers are required to comply with OSHA standards. An enforcement inspection can be conducted by federal OSHA inspectors.
11. **DLS provides tools to help prepare for compliance.** Self-audit checklists are available for public workplaces. See www.mass.gov/dols/wshp

The Fourth Unregulated Contaminant Monitoring Rule (UCMR 4)

General Information

What is the Unregulated Contaminant Monitoring Rule?

The 1996 amendments to the Safe Drinking Water Act (SDWA) require that once every five years, the U.S. Environmental Protection Agency (EPA) issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The Unregulated Contaminant Monitoring Rule (UCMR) provides EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. This national survey is one of the primary sources of information on occurrence and levels of exposure that the Agency uses to develop regulatory decisions for contaminants in the public drinking water supply.

The "Revisions to the Unregulated Contaminant Monitoring Rule (UCMR 4) for Public Water Systems and Announcement of Public Meeting" was published in the *Federal Register* on December 20, 2016 (81 FR 92666). UCMR 4 monitoring will occur from 2018-2020 and includes monitoring for a total of 30 chemical contaminants: 10 cyanotoxins (nine cyanotoxins and one cyanotoxin group) and 20 additional contaminants (two metals, eight pesticides plus one pesticide manufacturing byproduct, three brominated haloacetic acid [HAA] disinfection byproducts groups, three alcohols, and three semivolatile organic chemicals [SVOCs]).

What contaminants are systems monitoring for under UCMR 4?

Under UCMR 4, PWSs will conduct sampling for Assessment Monitoring ("List 1") contaminants as shown in the table below. For additional information on these contaminants, please review the contaminant-specific [UCMR 4 Fact Sheets](#).

10 Cyanotoxins (Nine Cyanotoxins and One Cyanotoxin Group)

total microcystins	microcystin-LA	microcystin-RR	microcystin-LF	microcystin-YR
microcystin-LR	microcystin-LY	nodularin	cylindrospermopsin	anatoxin-a

20 Additional Contaminants

germanium	manganese	alpha-hexachlorocyclohexane	profenofos	chlorpyrifos
tebuconazole	dimethipin	total permethrin (cis- & trans-)	ethoprop	tribufos
oxyfluorfen	HAA5 ¹	HAA6Br ¹	HAA9 ¹	1-butanol
2-propen-1-ol	2-methoxyethanol	butylated hydroxyanisole	o-toluidine	quinoline

1. HAA5 (dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, trichloroacetic acid); HAA6Br (bromochloroacetic acid, bromodichloroacetic acid, dibromoacetic acid, chlorodibromoacetic acid, monobromoacetic acid, tribromoacetic acid); HAA9 (bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, tribromoacetic acid, and trichloroacetic acid).

Which water systems will participate in UCMR 4?

Approximately 6,000 PWSs will participate in UCMR 4. All community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) serving more than 10,000 people (i.e., large systems) are required to monitor:

- All large surface water (SW) and ground water under the direct influence of surface water (GWUDI) systems will monitor for cyanotoxins and the 20 additional contaminants.
- All large ground water systems will monitor for the 20 additional contaminants.

Of the CWSs and NTNCWSs serving 10,000 or fewer people (i.e., small systems):

- A nationally representative set of 800 randomly selected SW and GWUDI small systems will monitor for cyanotoxins.
- A different set of 800 randomly selected small systems will monitor for the 20 additional contaminants.

Note that any PWS that is not subject to HAA5 monitoring under the D/DBPRs (40 CFR 141.Subparts L and V) is not required to monitor for the UCMR 4 HAAs or associated indicators (total organic carbon (TOC) and bromide). Also, transient non-community water systems (TNCWSs) are not required to monitor under UCMR 4.

Where will samples be collected?

UCMR 4 samples will be collected at entry points to the distribution system (EPTDS) for all contaminant groups except for the HAAs, which will be taken in the distribution system. Sampling for the HAA indicators (TOC and bromide) will take place at a single source water influent for each treatment plant.

What does UCMR 4 participation involve?

All large systems and only small systems notified by their state or EPA, will collect samples and have them analyzed for UCMR 4 contaminants. As with previous UCMRs, large PWSs pay for their own testing. EPA pays for the analytical costs for the selected small systems.

All laboratories conducting analyses for UCMR 4 contaminants must receive [EPA UCMR approval](#) to perform those analyses.

How did EPA select the UCMR 4 contaminants?

The Contaminant Candidate List (CCL) was the primary source of priority contaminants considered for UCMR 4. The CCL is a list of contaminants that are not currently addressed by national primary drinking water regulations, are known or anticipated to occur at public water systems and may warrant regulation. The EPA selected the UCMR 4 contaminants using a stepwise prioritization process. The first step identified contaminants that were not monitored under UCMR 2 or UCMR 3; may have significant occurrence nationally; and have a completed, validated drinking water method. The next step focused on contaminants associated with one or more of the following considerations: an available health assessment to facilitate regulatory determinations; high public concern; critical health endpoints (e.g., likely or suggestive carcinogen); active use (e.g., pesticides); and/or an occurrence data gap. During the final step, EPA considered workgroup and stakeholder input; looked at cost-effectiveness of analytical methods (i.e., can a single method address multiple contaminants of interest); considered implementation factors (e.g., laboratory capacity); and further evaluated health, occurrence and persistence/mobility data to identify the list of 30 UCMR 4 contaminants.

What are the public health benefits of the UCMR program?

The UCMR program provides the EPA and other interested parties with nationally representative data on the occurrence of particular contaminants in drinking water, the number of people potentially being exposed and an estimate of the levels of that exposure. In accordance with SDWA, EPA will consider the occurrence data from UCMR 4 and other sources, along with the peer reviewed health effects assessments, to support a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation.

Where can consumers find UCMR results?

CWSs are required to address their UCMR monitoring results in their annual Consumer Confidence Report (CCR) whenever unregulated contaminants are detected. CCRs are delivered to all billing customers each year by July 1. (The CCR Rule does not apply to non-community water systems). To obtain a copy of your CCR, you should contact your water supplier or you may find information for how to obtain a copy of the CCR in your water bill. Additional information about the CCR including details on reporting requirements can be found on the [CCR Homepage](#).

All PWSs are required to report their data to EPA as outlined in the UCMR. The analytical results from UCMR 4 (and previous UCMRs) are stored in the [National Contaminant Occurrence Database \(NCOD\)](#) for drinking water. For a summary of the NCOD results, tips for querying NCOD and health effects information (including reference concentrations), please refer to the UCMR 4 Data Summary document.

How can I learn more?

General information is available on the [UCMR](#) web page or by calling [the Safe Drinking Water Hotline](#) at 1-800-426-4791.

Monitoring Requirement: AM1

Facility ID: 90001 Facility Name: T-1 Facility Type: TP Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEA1	SEA2	SEA3	SEA4
90001A	Bruce Cahoon Water Treatment Plant	EP	Sep 2018	Mar 2019		

Facility ID: 90002 Facility Name: T-2 Facility Type: TP Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEA1	SEA2	SEA3	SEA4
90002	Entry Point to Dist. System	EP	Sep 2018	Mar 2019		

Facility ID: 90003 Facility Name: T-3 Facility Type: TP Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEA1	SEA2	SEA3	SEA4
90003	Entry Point to Dist. System	EP	Sep 2018	Mar 2019		

Facility ID: 90004 Facility Name: Station 10 Facility Type: TP Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEA1	SEA2	SEA3	SEA4
90004A	Well 10 Filter Plant	EP	Sep 2018	Mar 2019		

Facility ID: 90005 Facility Name: Station 11 Facility Type: TP Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEA1	SEA2	SEA3	SEA4
90005	Entry Point to Dist. System	EP	Sep 2018	Mar 2019		

Monitoring Requirement: AM2

Facility ID: 90006 Facility Name: Distribution System Facility Type: DS Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEH1	SEH2	SEH3	SEH4
10021	518 Depot Street(Summer & Dunbar)	DS	Sep 2018	Mar 2019		
10023	351 Pleasant Lave Ave (Harwich Voc. Tech. Sch.)	DS	Sep 2018	Mar 2019		
10024	1484 Orleans-Harwich Rd (East Harwich Post Office)	DS	Sep 2018	Mar 2019		
10025	732 Main Street (Town Hall)	DS	Sep 2018	Mar 2019		

Facility ID: 90007 Facility Name: T-1 Blended Raw Water Facility Type: IN Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEH1	SEH2	SEH3	SEH4
90007	T-1 Blended Raw Water	SR	Sep 2018	Mar 2019		

Facility ID: 90008 Facility Name: T-2 Blended Raw Water Facility Type: IN Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEH1	SEH2	SEH3	SEH4
90008	T-2 Blended Raw Water	SR	Sep 2018	Mar 2019		

Facility ID: 90009 Facility Name: T-3 Blended Raw Water Facility Type: IN Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEH1	SEH2	SEH3	SEH4
90009	T-3 Blended Raw Water	SR	Sep 2018	Mar 2019		

Facility ID: 90010 Facility Name: T-10 Raw Water Facility Type: IN Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEH1	SEH2	SEH3	SEH4
90010	T-10 Raw Water	SR	Sep 2018	Mar 2019		

Facility ID: 90011 Facility Name: T-11 Raw Water Facility Type: IN Water Type: GW

Sample Point ID	Sample Point Name	Sample Point Type	SEH1	SEH2	SEH3	SEH4
90011	T-11 Raw Water	SR	Sep 2018	Mar 2019		

Month/Year July 2018

PWS No. 4126000

Monthly Pumpage Report

Harwich Water Department

Date	T1							T2			T3		T10	T11
	Main 1	Main 2	Main 3	Well 1	Well 2	Well 3	Well 4	Well 5	Well 6	Well 7	Well 8	Well 9	Pump 10	Pump 11
1	206,108	205,964	148,709	364,328	227,084	287,464	448,546	455,556	473,631	455,653	447,508	458,421	497,136	468,551
2	214,389	215,232	155,437	383,642	243,435	312,636	470,474	474,053	490,769	475,022	440,697	454,269	519,452	461,574
3	187,579	187,794	135,467	333,176	209,343	266,865	408,920	415,211	432,230	415,736	419,111	429,409	488,936	441,128
4	235,161	235,281	170,155	419,208	262,453	334,911	514,337	521,784	542,054	522,219	473,607	487,082	569,480	494,482
5	185,337	185,513	134,019	328,233	204,258	259,059	405,273	410,393	427,987	410,921	392,725	401,613	447,653	412,857
6	188,720	188,718	136,575	334,692	209,224	265,840	411,392	417,191	432,171	417,818	397,250	406,115	502,557	415,007
7	181,251	181,282	130,930	322,863	203,265	258,932	395,834	401,340	417,500	402,131	384,018	392,169	438,677	403,012
8	207,601	207,518	149,849	367,997	230,464	292,589	452,237	458,104	475,448	459,102	451,202	461,065	501,411	470,437
9	219,206	219,442	158,842	389,148	245,273	313,904	478,760	485,935	505,400	488,994	471,278	483,146	533,026	493,018
10	182,483	183,676	132,751	324,497	202,563	257,645	399,686	404,937	417,699	408,074	392,972	399,921	444,454	411,300
11	204,586	204,821	147,992	362,967	229,531	293,350	447,966	451,168	471,943	453,483	408,347	420,882	494,289	427,710
12	182,721	183,274	132,417	321,600	200,561	254,015	397,910	405,111	424,176	408,176	388,996	398,151	469,136	409,155
13	222,515	222,904	161,053	396,112	249,419	318,809	487,462	487,435	509,511	492,737	469,641	482,378	535,295	489,783
14	207,114	207,755	149,912	368,892	230,979	294,521	452,991	456,272	475,809	459,381	454,450	463,853	500,995	477,435
15	199,944	200,576	145,081	356,428	222,219	282,190	437,897	443,563	461,261	444,502	428,342	438,141	484,691	448,796
16	230,168	230,850	166,831	406,707	254,747	324,099	504,290	509,569	531,475	510,719	465,358	477,907	556,877	485,450
17	172,333	172,899	124,939	301,092	188,563	238,315	377,481	380,596	396,341	382,688	368,092	376,710	417,669	387,286
18	208,763	209,279	151,083	364,329	227,290	286,600	457,116	460,705	480,341	462,530	437,764	448,265	504,326	456,833
19	199,471	199,760	144,373	350,967	218,411	276,533	434,905	438,672	455,086	441,478	428,668	437,401	481,540	450,340
20	232,082	232,588	167,809	413,555	260,205	332,191	508,391	509,892	533,617	513,743	482,289	494,462	560,033	502,933
21	193,304	193,916	139,935	342,970	215,031	273,473	423,632	422,321	443,696	428,946	415,384	425,495	467,797	436,740
22	174,670	175,291	126,833	307,758	191,350	241,429	382,344	384,312	401,283	388,783	373,110	380,189	424,131	390,880
23	195,449	195,698	141,675	345,627	215,466	272,926	427,178	432,006	448,297	433,557	404,171	413,061	473,130	421,232
24	201,302	202,113	145,968	355,353	221,964	281,005	439,523	446,928	457,454	448,352	427,511	434,277	496,843	447,424
25	195,918	196,315	141,989	346,998	219,757	280,276	429,793	432,829	448,551	434,067	413,629	425,507	473,469	433,316
26	142,718	142,773	103,130	251,113	155,375	195,814	309,255	314,668	324,639	315,301	322,805	326,686	344,035	337,595
27	171,214	172,124	124,235	305,624	192,661	245,239	376,625	380,235	393,387	381,625	341,436	350,017	415,903	357,793
28	175,856	176,610	127,429	309,285	181,918	245,158	384,362	391,338	400,340	391,344	400,001	405,934	426,975	419,771
29	180,712	181,119	130,978	320,890	199,981	253,160	395,979	400,772	416,489	401,134	371,395	379,948	437,669	390,009
30	222,342	222,684	161,258	392,933	245,852	311,612	487,877	492,443	513,341	493,004	454,038	465,604	537,656	474,147
31	182,126	182,080	131,453	315,754	197,323	248,409	396,746	402,689	419,630	402,877	396,672	404,496	439,445	415,176
Pumps :	6,103,143	6,115,848	4,419,109	10,804,739	6,755,964	8,598,966	13,345,183	13,488,026	14,021,556	13,544,097	12,922,467	13,222,574	14,884,686	13,531,170
MIN :	142,718	142,773	103,130	251,113	155,375	195,814	309,255	314,668	324,639	315,301	322,805	326,686	344,035	337,595
MAX :	235,161	235,281	170,155	419,208	262,453	334,911	514,337	521,784	542,054	522,219	482,289	494,462	569,480	502,933
STATIONS :	56,142,952							41,053,680			26,145,041		14,884,686	13,531,170
TOTAL:	151,757,529													

Date July 2018
 PWS No. 4126000

Monthly Weather Report
Harwich Water Department

Day	Snow Fall (in.) (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Temperature AVG (°F)	Weather Comments	Operator
1		0.00	86	69	77		
2		0.00	78	67	72		
3		0.00	81	67	74		
4		0.00	85	73	79		
5		0.00	85	72	78		
6		0.07	76	69	73		
7		0.00	77	58	67		
8		0.00	74	53	64		
9		0.00	76	55	65		
10		0.00	81	68	74		
11		0.00	76	63	70		
12		0.00	80	60	70		
13		0.00	76	57	66		
14		0.00	76	58	67		
15		0.03	75	63	69		
16		0.00	80	68	74		
17		0.00	79	72	75		
18		0.01	80	63	71		
19		0.00	80	60	70		
20		0.00	76	57	66		
21		0.00	72	55	64		
22		0.18	72	65	68		
23		0.00	75	66	70		
24		0.00	77	66	71		
25		0.00	78	67	73		
26		0.33	78	69	73		
27		0.00	79	73	76		
28		0.13	78	72	75		
29		0.00	81	69	75		
30		0.00	81	64	72		
31		0.00	79	69	74		
Total		0.75					
Average		0.02	78.2	64.8			
Max		0.33	85.5	73.5			
Min		0.0	71.6	53.4			

Date July

2017

Monthly Weather Report

PWS No.

4126000

Harwich Water Department

Day	Snow Fall (in.) (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Weather Comments	Operator
1		0.00	77	69		
2		0.00	82	70		
3		0.00	89	68		
4		0.00	85	62		
5		0.00	82	61		
6		0.00	72	57		
7		1.38	68	65		
8		0.01	78	61		
9		0.00	81	66		
10		0.00	81	64		
11		0.13	77	66		
12		0.00	78	72		
13		0.04	79	63		
14		0.02	68	63		
15		0.00	72	63		
16		0.00	81	65		
17		0.00	75	65		
18		0.00	79	65		
19		0.00	81	72		
20		0.00	87	68		
21		0.00	89	73		
22		0.00	84	70		
23		0.00	73	62		
24		0.16	66	62		
25		0.01	65	58		
26		0.00	75	57		
27		0.00	72	60		
28		0.00	81	68		
29		0.00	69	64		
30		0.00	79	58		
31		0.00	77	54		
Total		1.75				
Average			77.5	64.2		
Max		1.38	89.0	72.5		
Min		0.0	65.3	53.6		