# BOARD OF WATER COMMISSIONER'S AGENDA\* Conference Room, Harwich Water Department 196 Chatham Road, Harwich, MA

Thursday, September 6, 2018, 2:00 p.m.

I.

**CALL TO ORDER** 

	II.	PUBLIC COMMENTS/ANNOUNCEMENTS
	III.	CONSENT AGENDA  A. Minutes- a. July 26, 2018 – amended b. August 20, 2018
	IV.	<u>ABATEMENTS</u>
	V.	OLD/UNFINISHED BUSINESS  A. Capital Plan B. Legal Services C. Prevailing Wage D. Water Management Act Permit
	VI.	NEW BUSINESS  A. Lead & Copper Sampling  B. Irrigation Meters
	VII.	SUPERINTENDENT'S REPORT
	VIII.	COMMISSIONER'S REPORT
	IX.	CORRESPONDENCE/ANY OTHER BUSINESS
	X.	NEXT MEETING; TBD
	XI.	ADJOURNMENT
rec If y	isonably ou are a	torney General's Office: The Board of Water Commissioners may hold an open session for topics not anticipated by the Chair 48 hours in advance of the meeting following "New Business." leaf or hard of hearing or are a person with a disability who requires an accommodation, contact the artment Office at 508-432-0304 x.0 or by email at customerservice@harwichwater.com.
	Autho	rigod Posting Officery
	Tracey	rized Posting Officer:  Posted By:  Town Clerk
		Alves, Board Secretary 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. Vice Chair Carreiro moved to approve the motion with a second by Clerk Underwood; 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. Vice Chair Carreiro seconded the motion, all in favor; 3-0-0.

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

The Board reviewed the FY18 4<sup>th</sup> Quarter Internal Adjustments in the amount of \$14,027.56. Vice Chair Carreiro motioned to approve the FY18 4<sup>th</sup> Quarter Internal Adjustments. Clerk Underwood seconded the motion, all in favor; 3-0-0.

The Board reviewed the abatement for FY18 4<sup>th</sup> Quarter Water Department water usage. Vice Chair Carreiro motioned to approve the abatement for FY18 4<sup>th</sup> Quarter Water Department water usage. Clerk Underwood seconded the motion, all in favor; 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 and were provided with an updated budget report which reflected the Indirect charges from the Town (see attached).

The Board discussed the topic of independent legal services.

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

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	

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

Estimated Surplus (or Deficit)

# Water Enterprise Fund FY18 4TH QUARTER BUDGET REPORT

RESERVE FUND (FY17)	Retained Earnings Cert	ification 10/23/17	2,312,182.00	
	FY18 Budget	YTD Actual	Available	%Ехр
13204501 <b>SALARY &amp; WAGES</b>	1,231,067.00	1,178,350.24	52,716.76	95.7%
Total Salary & Wages	1,231,067.00	1,178,350.24	52,716.76	
13204502 <b>EXPENSES</b>				
Operations & Maintenance	1,374,434.00	1,295,905.05	78,528.95	94.3%
Indirects (incl. OPEB \$50K)	700,178.00	50,000.00	650,178.00	
OFUS-Indirects		650,178.00	(650,178.00)	
Debt	820,915.00	768,427.30	52,487.70	
Total Expenses	2,895,527.00	2,764,510.35	131,016.65	
		9,441.59		
13204504 <b>REVENUE</b>				
Total Revenue	4,576,650.00	4,252,381.96	324,268.04	92.9%
w	2			
SUMMARY	FY18 Budget	YTD Actual		
Budget Expenses	4,126,594.00	3,942,860.59		
Budget Revenues	4,576,650.00	4,252,381.96		

450,056.00

309,521.37

132045A	* ARTICLES	FY18 Budget	YTD Actual	Available
¥	616021 ATM 16 #21 New Excavator	4,548.00		4,548.00
	616022 ATM 16 #22 Lothrop Water Tank	36,192.00	26,704.91	9,487.09
	616023 ATM 16 #23 SCADA System	231,099.00	231,098.59	0.41
	617010 ATM 17 #10 Facility Maintenance	33,930.00	32,256.24	1,673.76
	617023 ATM 17 #23 Vehicles	107,856.00	107,855.50	0.50
	Total Articles from Receipts or Reserve	413,625,00	397 915 24	15 709 76

1340	00 ACCOUNTS RECEIVABLE	Due Date	Billed	Uncollected	%Col.	
	Misc Service and Prior FY Billing	various	various	34,593.92		
	FY17 Spring Billing	04/23/17	1,333,196.83	9,705.91	99.3%	
	FY18 Fall Billing	10/15/17	2,307,230.70	34,966.06	98.5%	
	FY18 Spring Billing	04/22/18	1,234,669.00	65,931.03	94.7%	
	FY18 Q4 Billing	08/12/18	546,876.36	380,488.83	30.4%	
	Total Accounts Receivable as of 06/30/18	**	_	525,685.75		
	FY19 YTD Receipts			(147,790.00)	57.4%	
	Total Accounts Receivable as of 07/24/18			377,895.75		

	Capital Plan	FY20-FY31	
Fiscal Year	Project	Estimated Cost	Notes
FY20  FY21  Nev  Rt.2  Eng FY22  Spa Stat  FY23  Rt.2  FY24  Pipe  FY25  Veh FY26  No I FY27  No I FY28  No I FY29  No I FY30  Veh	New Source Exploration	\$250,000	
EV60	Pleasant Lake Tank Fill Pipe	\$300,000	Undersized, currently under review
FY2U	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
	Rt.28 Water main Replacement- Design & Engineering	\$100,000	
FY22	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
EV24	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		
FY20  FY21  FY21  FY22  FY22  FY23  FY24  FY24  FY25  Ve  FY26  No  FY27  No  FY28  No  FY29  No  FY30  Ve	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	

# **Steve Hicks**

From:

Kyle Edson < kedson@town.harwich.ma.us>

Sent:

Thursday, August 30, 2018 10:57 AM

To:

Steve Hicks

Subject:

Truck 9

**Attachments:** 

20180827\_140546.jpg; 20180827\_140633.jpg; 20180827\_140649.jpg; 20180827\_

140818.jpg

# Good Morning Steve,

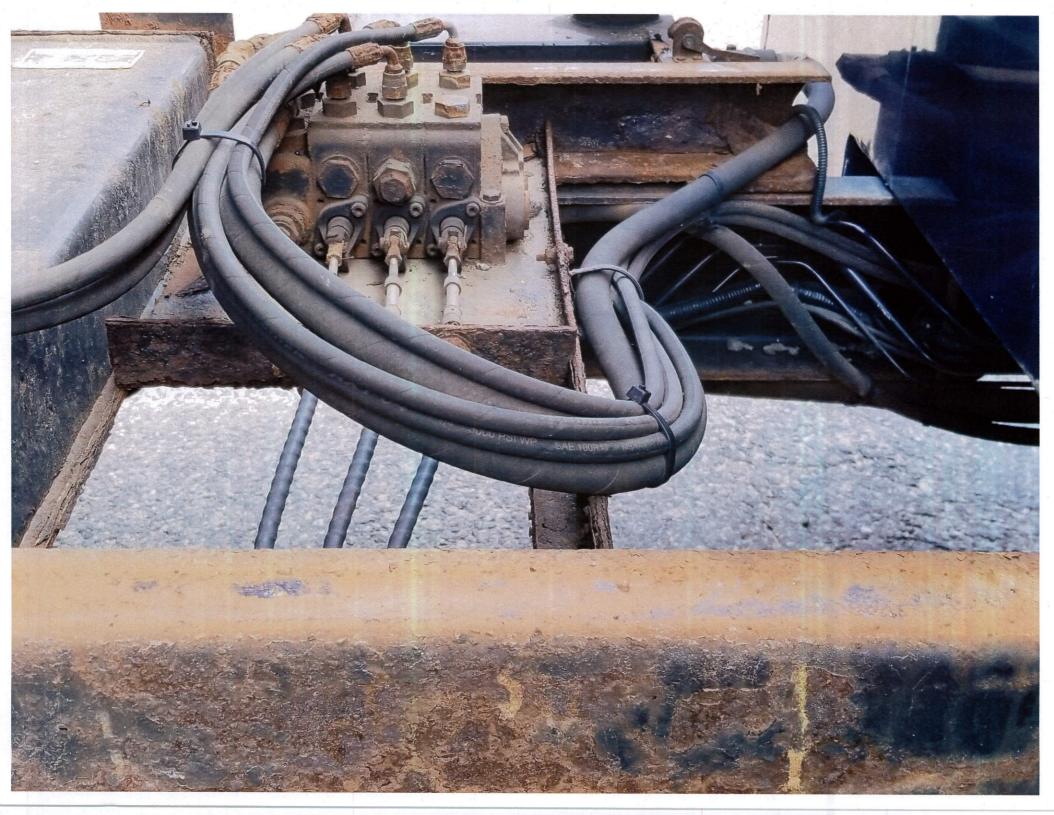
We had Truck 9 in the shop recently for some minor repairs. We checked it over while it was in for repairs and noticed some issues with the truck.

- The dump body has holes in the floor that will get larger with use.
- The tailgate on the dump body does not fit correctly.
- The subframe for the dump body is rotting.
- The oil pan is rusty/flaking, will need replacement. Cab off procedure.
- Frame and body rust/rot is progressing rapidly.
- Seat and seat belt attaching points are rotting.

# Replacement is recommended.

All future trucks will be undercoated before they are put it service.

Kyle Edson
Town of Harwich
Highway Department
Vehicle Maintenance Manager
273 Queen Ann Road
Harwich MA 02645
kedson@town.harwich.ma.us
508-430-7572
508-430-7598 (fax)
508-237-8471 (cell)































# **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/BAPERN Contract

***************************************		GBPC/BAPERN Contract			
Qty	Item#	Description	Unit Price	Line	Total
	13 E	[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		\$	TO THE THE PERSON OF THE PERSO
	67A	Dual Alternators (Total 332-Amps)		\$	
	660A	Option Package: Order Code 650A	1	\$	
Qty		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

4				Page 2 of
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	\$ 550,1	00 \$	533.50
76C	Exterior Backup Alarm	\$ 140.0	00 \$	135.80
	REMAINING STANDARD EQUIPMENT AS SHOWN IN CHROMI DATA REPORT	Ē	\$	
	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		\$	e i
	Pair of Code 3 HB4PAK Amber LED Lights mounted on rear of Dump Body		\$	<del>,</del>
with any one of the first of th			\$	
	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		\$	-
and the second s			\$	-
cial Instructions:	Custom or Special Orders are Non-Refundable	Vehicle Subtotal	Western Territories	
	This Estimate is for Budgetary Purposes and is Not a Guarantee of Cost for Services.	Upfit Subtotal		
	Estimate is Based on Current Information From Client About the Project Requirments	Grand Total	\$76,551.	70

Actual Cost May Change Once Project Elements are Finalized

Thank You For Choosing The Colonial Way!

**Grand Total** 

# HARWICH DPW - BUDGETARY ESTIMATE

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





# Colonial Municipal Group

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

[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



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

[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: TorgShift 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



# CHROMEDATA Colonial Municipal Group

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

[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** 



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

[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



# CHROMEDATA Colonial Municipal Group

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

[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



# CHROMEDATA 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)

### 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







Main Office 80 Southbridge Rd (Rt. 20) PO Box 578 North Oxford, MA 01537 (800) 922-8295 fax (508) 987-3578

## Quote # 8902

Monday, August 20, 2018 Prepared for HARWICH WATER DEPT ( # 3766) DAN PELLETIER 196 CHATHAM RD HARWICH, MA 02645

Quote # 8902 Prepared by Stan Warren mobile # : 508-989-5728 Stan Warren@SchmidtEquipment.com

Cust #	Purchase Order	Year	Make	Model	Hours	Serial Number
3766		2008	Deere	35D		FF035DX260166

Qty	Description	Price Each	Ext. Price
	Replacement parts: House bearing, Excavator boom to bucket all pins and bushings.	\$5,570.00	\$5,570.00
Labor	Shop Labor: Replace house bearing, Excavator boom to bucket all pins and bushings.	9	\$6,240.00
		Parts	\$5,570.00
anor		Labor	\$6,240.00
		Trucking	\$0.00
description have		Freight	\$0.00
	·	Est Sales Tax	\$0.00
		Total	\$11,810.00

## Specs

 Preliminary estimate, prior to machine inspection. Additional parts, supplies, and labor may be needed once work has commenced.

### **Terms & Conditions**

- Estimate is valid for 30 days. Any miscellaneous parts and labor needed to complete job will be additional.
- A Deposit is required. Payment terms must be arranged prior to ordering parts or performing service work.
- This estimate is based on what was observed by our representative in the field. In the event that we begin this job and find broken, cracked and / or worn components that could not be seen without removal of components and/or panels, we reserve the right to re-estimate any additional parts and labor. If we feel additional parts or labor are needed, the job will be held for visual inspection by the owner. The job will not resume until an agreement is made.
- For Preventative Agreements: JDLink transmits machine hours to allow Dealer to monitor maintenance requirements. The customer is responsible to communicate machine hours to dealer.
- You may be able to charge this purchase on a John Deere PowerPlan charge account. Ask your Sales Rep for details.

Price shown excludes sales tax.	
Customer signature	Date

Schmidt Equipment is grateful for the opportunity to earn your business.

YPE CO	PWS DE IDENTIFIER	R PWS NAME	TEXT LOCATION NAM	SAMPLE COLLECTION F START DATE		ANALYSIS LAB NAME	ANALYTE NAME	ANALYTE MEASUREMENT	MDL MEASUREMENT		ANALYSIS	LAB APPROVAL
.CR	4126000	HARWICH WATER DEPARTMENT	10 Cranhaven Circle	8/1/2018	06:45:00	BARNSTABLE COUNTY HEALTH & ENV DEPT		VALUE (MG/L)	VALUE	IDENTIFIER	START DATE	DATE
CR	4126000	HARWICH WATER DEPARTMENT	10 Cranhaven Circle	8/1/2018	06:45:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.27	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	11 Fairways Dr.	8/1/2018	10:15:00	BARNSTABLE COUNTY HEALTH & ENV DEPT		ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	11 Fairways Dr.	8/1/2018	10:15:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.096	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	13 Indigo Lane	8/1/2018	06:42:00		LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	13 Indigo Lane	8/1/2018	06:42:00	BARNSTABLE COUNTY HEALTH & ENVIOEPT	LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	14 Bog Lane	8/1/2018	07:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.19 .	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	14 Bog Lane	8/1/2018	07:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.025	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	16 Indigo Lane	8/1/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	16 Indigo Lane	8/1/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	18 Wilmas Way	8/8/2018	07:33:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.018	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	18 Wilmas Way	8/8/2018	07:33:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	181 Headwaters Dr.		THE RESERVE AND ADDRESS OF THE PARTY OF THE	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.074	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	181 Headwaters Dr.	8/8/2018 8/8/2018	06:03:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	Name and Address of the Owner, where the Party of the Owner, where the Party of the Owner, where the Owner, which is the Owner, which is the Owner, where the Owner, which is	06:03:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.29	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	19 Fairways Dr 19 Fairways Dr	8/8/2018	06:05:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.32	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	The second secon	8/8/2018	06:05:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	19 Wilmas Way	8/8/2018	07:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.11	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	19 Wilmas Way	8/8/2018	07:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	0.0047	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000		2 Cranhaven Circle	8/8/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	2 Cranhaven Circle	8/8/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.13	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	200 Headwaters Dr	8/8/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.27	0.0010	EPA 200.8	8/14/2018	8/23/2018
R		HARWICH WATER DEPARTMENT	200 Headwaters Dr	8/8/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
	4126000 4126000	HARWICH WATER DEPARTMENT	269 Depot Rd.	8/1/2018	07:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.50	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	NAME AND ADDRESS OF THE OWNER, WHEN PERSON NAMED AND ADDRESS OF TH	HARWICH WATER DEPARTMENT	269 Depot Rd.	8/1/2018	07:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	0.0017	0.0010	EPA 200.8	8/7/2018	8/9/2018
	4126000	HARWICH WATER DEPARTMENT	27 Nons Rd	8/8/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	
R	4126000	HARWICH WATER DEPARTMENT	27 Nons Rd	8/8/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.21	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	27 Wilmas Way	8/8/2018	06:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8		8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	27 Wilmas Way	8/8/2018	06:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.086	0.0010	EPA 200.8	8/14/2018 8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	3 Fairways Dr.	8/1/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010		-	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	3 Fairways Dr.	8/1/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENVIDEPT	COPPER	0.073	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	31 Blueberry Lane	8/1/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.035	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	31 Blueberry Lane	8/1/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	310 Depot Rd.	8/1/2018	09:10:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND		EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	310 Depot Rd.	8/1/2018	09:10:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.21	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	33 Nons Rd.	8/1/2018	08:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	33 Nons Rd.	8/1/2018	08:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	Control of the Contro	0.0010	EPA 200.8	8/7/2018	8/9/2018
R:	4126000	HARWICH WATER DEPARTMENT	35 Fairways Dr.	8/8/2018	07:45:00	BARNSTABLE COUNTY HEALTH & ENV DEPT		0.061	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	35 Fairways Dr.	8/8/2018	07:45:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.055	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	36 Fairways Dr	8/1/2018	03:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	36 Fairways Dr	8/1/2018	03:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.13	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	4 Indigo Lane	8/1/2018	06:00:00		LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	4 Indigo Lane	8/1/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
3	4126000	HARWICH WATER DEPARTMENT	40 Widah Dr.	8/8/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.21	0.0010	EPA 200.8	8/7/2018	8/9/2018
R	4126000	HARWICH WATER DEPARTMENT	40 Widah Dr.	8/8/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.087	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	42 Wilmas Way	8/8/2018	The state of the s	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	42 Wilmas Way	8/8/2018	05:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	48 Bog Lane	THE RESERVE THE PERSON NAMED IN	05:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.067	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	48 Bog Lane	8/3/2018	08:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.11	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT		8/3/2018	08:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	0.0023	0.0010	EPA 200.8	8/14/2018	8/23/2018
R	4126000	HARWICH WATER DEPARTMENT	50 Wilmas Way	8/8/2018	05:28:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.084	0.0010	EPA 200.8	8/14/2018	8/23/2018
			50 Wilmas Way	8/8/2018	05:28:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	0.0013	0.0010	EPA 200.8	8/14/2018	8/23/2018

LCR LCR	4126000 4126000	HARWICH WATER DEPARTMENT HARWICH WATER DEPARTMENT	51 Widah Dr. 51 Widah Dr.	8/8/2018	07:40:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.031	0.0010	EPA 200.8	8/14/2018	8/02/0248
LCR	4126000	HARWICH WATER DEPARTMENT	56 Wilmas Way	8/8/2018	07:40:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018 8/23/2018
_CR	4126000	HARWICH WATER DEPARTMENT	56 Wilmas Way	8/8/2018	06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.031	0.0010	EPA 200.8	8/14/2018	8/23/2018
_CR	4126000	HARWICH WATER DEPARTMENT	57 Widah Dr.	8/8/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
CR	4126000	HARWICH WATER DEPARTMENT	57 Widah Dr.	8/8/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.0018	0.0010 0.0010	EPA 200.8	8/14/2018	8/23/2018
CR	4126000	HARWICH WATER DEPARTMENT HARWICH WATER DEPARTMENT	60 Widah Dr.	8/8/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.080	0.0010	EPA 200.8	8/14/2018	8/23/2018
CR	4126000	HARWICH WATER DEPARTMENT	60 Widah Dr. 61 Widah Dr.	8/8/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	0.0010	0.0010	EPA 200.8	8/14/2018 8/14/2018	8/23/2018 8/23/2018
CR	4126000	HARWICH WATER DEPARTMENT	61 Widah Dr.	8/8/2018 8/8/2018	06:00:00 06:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.045	0.0010	EPA 200.8	8/14/2018	8/23/2018
CR	4126000	HARWICH WATER DEPARTMENT	73 Azalea Dr.	8/1/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/14/2018	8/23/2018
CR	4126000	HARWICH WATER DEPARTMENT	73 Azalea Dr.	8/1/2018	07:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.16	0.0010	EPA 200.8	8/7/2018	8/9/2018
CR CR	4126000	HARWICH WATER DEPARTMENT	77 Azalea Dr.	8/1/2018	07:45:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	0.0011	0.0010	EPA 200.8	8/7/2018	8/9/2018
CR	4126000	HARWICH WATER DEPARTMENT	77 Azalea Dr.	8/1/2018	07:45:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.0012	0.0010	EPA 200.8	8/7/2018	8/9/2018
CR	4126000	HARWICH WATER DEPARTMENT HARWICH WATER DEPARTMENT	8 Putting Green Lane	8/1/2018	04:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.30	0.0010	EPA 200.8	8/7/2018	8/9/2018
CR	4126000	HARWICH WATER DEPARTMENT	8 Putting Green Lane	8/1/2018	04:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8 EPA 200.8	8/7/2018	8/9/2018
ĊŖ	4126000	HARWICH WATER DEPARTMENT	95 Church St. 95 Church St.	8/1/2018 8/1/2018	09:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	0.0010	EPA 200.8	8/7/2018	8/9/2018
CR	4126000	HARWICH WATER DEPARTMENT	Monomoy HS Bathroom		09:00:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.036	0.0010	EPA 200.8	8/7/2018	8/9/2018 8/9/2018
CR	4126000	HARWICH WATER DEPARTMENT	Monomoy HS Bathroom		09:30:00 09:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT BARNSTABLE COUNTY HEALTH & ENV DEPT	LEAD	ND	-0.0010	EPA 200.8	8/14/2018	8/23/2018
CR	4126000	HARWICH WATER DEPARTMENT	Monomoy HS Kitchen	8/7/2018	09:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	0.48	0.0010	EPA 200.8	8/14/2018	8/23/2018
CR	4126000	HARWICH WATER DEPARTMENT	Monomoy HS Kitchen	8/7/2018	09:30:00	BARNSTABLE COUNTY HEALTH & ENV DEPT	COPPER	ND 0.37	0.0010	EPA 200.8	8/14/2018	8/23/2018
						THE THIRD CITY DEFT	COLLEK	0.37	0.0010	EPA 200.8	8/14/2018	8/23/2018

# Harwich Water Department METER REPLACEMENT PROGRAM SUMMARY

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	3,335.11
TOTAL	715		295,435.94

	5-29 YRS.	METERS 2	
ТОТА	FY19 COST	COUNT	SIZE
402,289.3	399.89	1006	5/8"
11,299.20	513.60	22	3/4"
16,216.80	675.70	24	1"
4,790.48	1,197.62	4	1 1/2"
6,670.22	3,335.11	2	2"
441,266.04		1058	TOTAL

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

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

REPLA	CEMENT SU	MMARY >=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	13,340.44
TOTAL	3666		1,517,009.56
			100

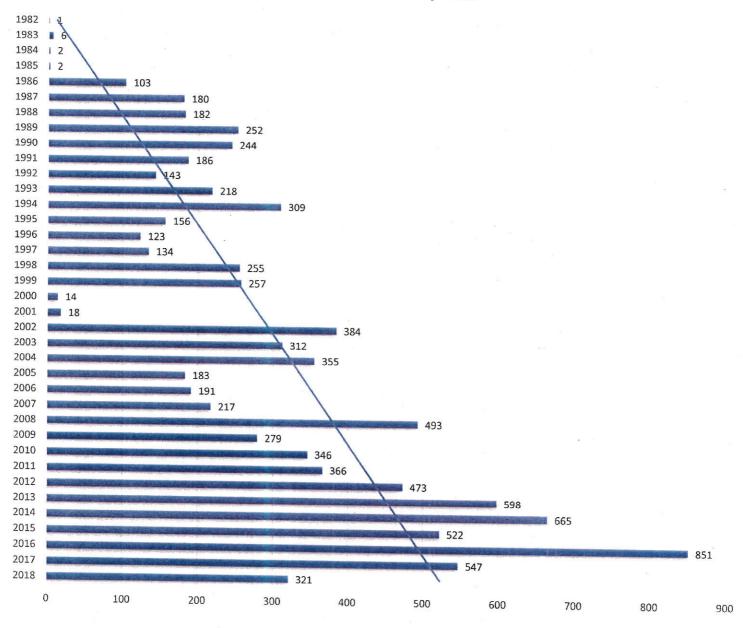
	REPLACEMEN	T PERCENTAGE	S
SIZE	REPL COUNT	OTAL COUNT	% TO BE REPL
5/8"	6275	9134	68.70%
3/4"	184	357	51.54%
1"	133	245	54.29%
1 1/2"	18	. 80	22.50%
2"	7	47	14.89%
3"	0	2	0.00%
4"	0	3	0.00%
TOTAL	6617	9868	67.06%

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

# Meters Installed by Year



Month/Year

PWS No.

August 4126000 2018

Monthly Pumpage Report Harwich Water Department

T1 T2 ТЗ T10 T11 Date 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 1 209,270 209,975 151,709 370,303 232,524 296,055 459,481 463,545 483,243 465,307 430,405 441.642 507,409 450,880 2 178,968 179,213 129,588 317,355 199,131 252,836 392,296 396,774 413,088 397,346 378,671 386,272 433,406 398.202 3 229,357 229,961 166,255 405,051 254,299 323,812 502,698 509,051 529,635 509,073 484,334 495,511 555,088 506,873 4 177,171 177,540 128,269 311,452 194,793 246,920 387,823 392,694 408,857 393,568 374.851 382.781 429,076 392,448 5 170,150 169,738 123,166 292,906 182,522 229,233 369,621 377,909 391,949 377,429 381,421 385,944 412,152 399,317 195,490 6 196,359 142,001 341,981 215,227 271,916 429,627 436,425 454,787 437,635 395,444 406,264 473,867 414,393 7 184,845 185,022 133,997 321,009 200,975 253,225 405,174 410,168 427,624 410,565 399,497 408,450 444,513 420,161 8 221,112 206,770 160,032 384,492 240,594 303,338 484,256 489,311 512,017 489,405 458,113 468,954 533,617 477.918 9 165,139 119,393 294,202 187,180 234,933 360,996 366,411 382,871 366,758 356,731 349,626 405.983 356,964 10 187,450 206,770 135,271 334,100 214,129 276,011 409,462 414,713 433,962 415,111 401,087 408,264 453,651 422,124 11 167,135 8 120,628 297,928 190,791 245,412 365,365 370,180 386,853 370,788 348,628 355,163 404,220 362,932 12 183,224 0 132,152 325,532 206,956 264.899 398.950 404,556 424,033 404,651 393,963 400,595 441,525 412,189 13 201,856 0 146,038 360,132 229,411 294,618 442,419 447,300 467,593 448,724 419,315 429,932 489,047 439,327 162,142 14 0 117,220 288,400 182,639 232,945 354,489 358,612 375,548 358,881 352,338 359,906 391,429 371,167 15 191,077 11 138,244 341,232 214,482 273,880 418.491 422,677 444,348 423,279 395,274 404,074 461,220 413,791 16 169,897 122,561 301,215 188,662 239,920 369,040 376,094 395,013 376,163 367,744 372,909 409,936 383,329 17 208,957 0 151,389 375,441 240,326 310,277 459,321 464,503 485,753 464.981 431,147 441,943 569,109 451,570 18 161,403 0 116,105 286,723 183,638 235,608 351,388 356,302 373,603 355,913 359,937 366,978 388,332 377,139 19 159,750 0 116,392 287,769 182,116 232,649 351,706 356,719 374,527 357,913 319,762 324,779 292,733 334,552 20 166,725 8 120,419 297,057 189,089 242,619 364,916 368,916 385,590 369,161 366,492 374,421 184,590 385,698 21 166,490 51,160 120,745 293,800 184,386 233,403 363,683 320,916 334,855 321,725 292,059 295,911 351,006 303,902 22 161,090 161,312 116,518 278,418 175,099 219,758 352,496 355,934 369,359 356,577 339,807 347,060 389,023 356,566 23 133,464 133,255 96,224 232,080 143,543 179.969 289,444 294,182 306,956 295,200 310,721 314,861 391,117 324,596 24 191,485 192,438 138,932 340,351 214,072 272,248 420,809 422,682 443,664 426,828 377,361 386,089 465,227 395.529 25 178,581 178,339 128,820 312,251 195,914 247,489 388,818 387,476 411,520 394,760 384,972 391,682 430,556 402,913 26 173,467 174,230 126,250 305,641 190,847 241,064 381,171 377,370 403,555 387,327 361,370 368,482 422,103 380,383 27 205,817 205,834 148,894 355,954 225,312 285,194 450,641 451,278 473,434 456,163 433,424 443,413 496,983 451.785 28 166,295 166,664 120,423 286,273 179,594 225,602 364,163 366,032 384,473 369,599 370,957 377.909 402,769 390,412 29 207,857 207,784 355,480 150,848 224,201 281,099 455,456 459,416 481,221 461,860 421,113 430,961 503,870 439,179 30 167,472 166,689 120,792 292,596 182,146 229,588 363,937 367,153 384,384 368,850 369,653 375,817 402,491 387,232 31 192,794 193,431 139,957 342,353 215,034 273,329 423,465 421,144 446,043 429,390 390.850 399,553 468,019 409,751 **Pumps** 5,635,931 3,592,514 4,079,230 9,929,473 6,259,632 7,949,846 12,331,602 12,406,439 12,990,359 12,460,927 11,860,336 12,103,251 13,404,067 12,413,222 MIN 133,464 96.224 232,080 143,543 179,969 289,444 294,182 306,956 295,200 292,059 295,911 184,590 303,902 MAX 229,357 229,961 166,255 405,051 254,299 323,812 502,698 509,051 529,635 509,073 484,334 495,511 569,109 506,873 STATIONS 49,778,227 37,857,724 23,963,587 13,404,067 12,413,222 TOTAL: 137,416,827

Month/Year August PWS No.

2017

4126000

# Monthly Pumpage Report Harwich Water Department

				T1	The second second		nation by		T2		Т	T3	T10	T11
Date	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
8/1/2017	112,731	135,240	0	347,117	217,975	ENVIOLENCE DE LE SENTE DE LE CONTROL DE LE C	447,396	The state of the s			429,380	454,671	582,545	448,683
8/2/2017	122,287	146,454	0	378,031	236,206	334,233	483,337	416,273			467,461	494,411	629,963	492,513
8/3/2017	111,612	133,388	0	345,691	215,416	304,735	438,329				419,035		573,955	439,502
8/4/2017	43,929	50,757	0	419,067	250,629	357,769	485,267	419,156			467,922	494,987	650,194	492,382
8/5/2017	. 0	0	0	392,756	235,937	336,109	458,969			468,108	439,381	464,781	609,387	459,994
8/6/2017	0	0	0	407,268	246,196	350,213	482,189				461,901	464,034	631,892	484,430
8/7/2017	0	0	0	404,069	244,534	347,749	480,327	416,255			463,737	408,450	635,709	488,452
8/8/2017	24,911	30,967	0	248,834	156,537	220,058	321,050			314,715	304,178	323,456	415,901	312,879
8/9/2017	94,761	115,111	0	291,003	185,370	260,054	385,947	327,372			369,164	391,555	507,792	383,741
8/10/2017	82,387	51,740	0	324,426	199,961	282,622	401,243	339,597	377,443	403,490	383,347	406,672	521,110	397,612
8/11/2017	121,677	0	0	381,574	229,907	327,178	449,002	382,282			431,198	456,452	591,587	450,938
8/12/2017	97,554	0	0	305,032	185,451	263,157	365,676			368,856	349,067	370,274	491,373	362,985
8/13/2017	89,803	0	0	280,839	171,054	242,827	338,527	289,036	319,469	342,158	322,856	342,764	454,636	335,146
8/14/2017	97,344	0	0	303,928	185,228	262,642	366,270	336,378		400,224	350,533	371,494	484,236	366,213
8/15/2017	88,385	0	0	275,450	169,238	239,543	338,032	288,055	318,687	341,234	322,436	342,353	444,508	335,745
8/16/2017	99,766	0	0	313,932	192,233	272,313	382,674	329,388	362,609	390,362	367,056	388,887	500,472	384,103
8/17/2017	101,219	0	0	314,504	194,420	274,841	391,496	335,140	370,766	398,057	374,862	397,741	540,687	390,869
8/18/2017	105,722	0	0	330,358	200,592	284,859	395,007	340,925	375,908	405,326	379,471	401,665	531,572	397,850
8/19/2017	79,672	0	0	249,349	151,087	214,118	297,085	252,440	279,392	297,642	282,878	300,259	397,936	293,769
8/20/2017	88,105	0	0	276,354	167,690	237,522	329,312	281,510	310,827	332,873	314,513	333,685	440,035	327,128
8/21/2017	104,664	0	0	328,220	198,334	281,717	388,336	334,724	369,285	397,524	372,793	395,063	511,807	390,795
8/22/2017	105,870	0	0	330,350	202,067	286,511	401,748	342,166	378,174	404,632	385,047	408,214	518,187	401,730
8/23/2017	101,033	0	. 0	318,357	194,508	276,311	386,348	329,196	363,092	389,281	370,372	392,506	545,671	386,743
8/24/2017	73,069	0	0	315,475	191,101	271,168	374,356	320,902	353,929	380,455	357,855	379,571	502.053	372,735
8/25/2017	111,531	0	0	349,883	210,696	300,360	410,496	352,377	388,494	417,967	394,115	417,205	547,561	412,730
8/26/2017	116,230	0	0	364,507	219,283	312,024	426,383	369,584	69,535	439,245	407,159	431,274	555,553	424,589
8/27/2017	111,747	0	0	350,005	210,768	300,117	410,176	357,567	0	426,031	392,599	416,350	530,469	410,256
8/28/2017	122,898	0	0	389,053	234,089	333,762	455,605	399,394	0	475,914	437,376	462,798	589,872	458,549
8/29/2017	104,182	0	0	325,464	197,953	281,513	390,333	339,798	0	404,294	372,702	395,336	518,298	388,611
8/30/2017	53,581	0	0	258,895	157,631	223,634	310,523	270,013	0	320,491	296,155	314,159	406,638	308,076
8/31/2017	30,837	35,825	0	237,724	146,134	206,504	290,894	252,075	0	297,909	276,887	294,086	381,319	286,616
Pumps :	2,597,507	699,482	0	10,157,515	Manager and the state of the st	8,793,906	12,282,333	10,563,234	9,545,852	12,542,592	11,763,436			12,286,364
MIN:	0	0	0	237,724	146,134	206,504	290,894	252,075	0	297,642	276,887	294,086	381,319	286,616
MAX:	122,898	146,454	0	419,067	250,629	357,769	485,267	419,156	462,834	499,997	467,922	494,987	650,194	492,513
STATIONS :				40,728,968					32,651,678		24,12	1,878		12,286,364
TOTAL:							126,03	31,806						100 March 100 Ma

Date PWS No. August

2018 **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	<u>76</u>	69	72		
2		0.00	<u>85</u>	75	80		
3		0.00	84	76	80		
4		<u>0.27</u>	<u>82</u>	74	78		
5		<u>0.10</u>	<u>82</u>	70	76		
6		<u>0.00</u>	<u>85</u>	72	78		
7		0.00	87	<u>75</u>	81		
8		0.00	86	76	81		
9		0.32	80	<u>74</u> ·	77		
10		0.00	<u>84</u>	70	77		
11		<u>0.00</u>	<u>72</u>	<u>67</u>	70		
12		<u>0.00</u>	<u>75</u>	<u>67</u>	71		
13		<u>0.00</u>	<u>77</u>	<u>69</u>	73		
14		<u>0.03</u>	<u>81</u>	<u>68</u>	75		
15		<u>0.15</u>	80	72	76		
16		<u>0.00</u>	87	70	79		
17		<u>0.00</u>	<u>83</u>	69	76	6	
18		<u>0.14</u>	<u>84</u>	70	77		
19		<u>0.03</u>	<u>70</u>	67	68		
20		<u>0.09</u>	<u>71</u>	<u>66</u>	69		
21		0.00	<u>71</u>	66	69		
22		<u>0.01</u>	<u>77</u>	<u>65</u>	71		
23		<u>0.00</u>	<u>75</u>	63	69		
24		<u>0.00</u>	77	58	67		
25		<u>0.00</u>	<u>75</u>	<u>61</u>	68		
26		<u>0.00</u>	<u>77</u>	60	68	*	
27		<u>0.00</u>	<u>85</u>	71	78		
28		<u>0.00</u>	<u>86</u>	72	79	2019	
29		0.00	<u>88</u>	<u>73</u>	81		
30		<u>0.00</u>	<u>88</u>	72	80		
31		0.00	<u>75</u>	<u>61</u>	68		
Total	5	1.14					
verage		0.04	80.2	69.0			
Max		0.32	88.1	76.1			
Min		0.0	70.1	57.9			

Date

August

PWS No.

2017

4126000

# Monthly Weather Report Harwich Water Department

Day	Snow Fall (in.) (Gallons)	Rain Fall (in.)	Temperature High (°F)	Temperature Low (°F)	Weather Comments	Operator
1		0.00	<u>84</u>	<u>67</u>	-	
2		0.00	<u>80</u>	<u>69</u>		
3		0.00	<u>78</u>	<u>67</u>		
4		0.00	76	67		
5		0.00	73	66		
6		0.00	78	63		
7		0.03	77	58		
8		0.45	70	61		
9		0.00	80	59		
10		0.00	79	62		
11		0.00	77	60		
12		<u>0.59</u>	<u>70</u>	64		
13		<u>0.10</u>	<u>79</u>	67		
14		<u>0.00</u>	<u>78</u>	<u>59</u>		
15		<u>0.06</u>	<u>80</u>	67		
16		<u>0.00</u>	<u>81</u>	<u>65</u>		
17		<u>0.00</u>	<u>79</u>	<u>60</u>		
18		<u>0.61</u>	<u>72</u>	<u>66</u>		
19		<u>4.39</u>	<u>78</u>	<u>70</u>		
20		<u>0.00</u>	<u>83</u>	<u>65</u>		
21		0.00	<u>81</u>	<u>61</u>		
22		0.00	<u>80</u>	<u>70</u>		
23		0.00	<u>80</u>	<u>64</u>		
24		0.00	<u>80</u>	<u>60</u>		
25		0.00	77	<u>60</u>		
26		0.00	<u>75</u>	<u>56</u>		
27		0.00	<u>75</u>	<u>54</u>		
28		0.00	<u>73</u>	<u>54</u>		
29		0.10	<u>68</u>	<u>54</u>		
30		1.00	<u>67</u>	<u>55</u>		
31		0.00	78	55		
Total		7.33			·	
Average			77.0	62.1		
Max		4.39	84.3	70.4	COLUMN 1990 - DEPARTMENT SEATON SECTION 1990 - TENNO 1990 - 11 1997 - 11 1997 - 11 1997 - 11 1997 - 11 1997 -	
Min		0.0	67.2	53.9	2	