

Waterbury Village Water and Sewer Commissioners
September 25, 2017
4:30 pm, 28 N Main Street – Steele Community Room
Minutes

Present: P. H. Flanders, C. Parks, R. Finucane Commissioners; B. Woodruff PWD, W. Shepeluk Municipal Manager by phone, Alec Tuscany Engineer, Karen King – secretary

Public: Don Einhorn, John Pitrowiski, George Pierce, Alyssa Johnson

Flanders called meeting to order at 4:30pm

Modifications to the Agenda: None

Public: Don Einhorn requested an updated on the sewer line testing in the development known as Waterbury Commons. B. Woodruff stated very little action has taken place since the last meeting. The Village has not received permission to perform mandrel testing from the developer. D. Einhorn asked if the sewer lines in the development have been flushed this year, B. Woodruff stated the Village has not flushed the lines.

Consider Water line connection for Ivy Ventures Route 100: Per the request from the Village to define the obligations to maintain the infrastructure Trudell Consulting has added notation on its documentation outlining that the Town of Waterbury is not responsible for the infrastructure of the water service. This needs to be changed to the Village of Waterbury.

A discussion followed with the Commissioners considering if it is whether to upgrade the proposed single service water line from the corner of Howard Avenue approximately 1,800' S on Route 100 to an 8" line in order to offer water service for future expansion projects based beyond 2934 Waterbury Stowe Road also known as "Sunflower Foods" or "Sheffield Group". The Commissioners have requested A. Tuscany, B. Woodruff, to present cost estimates for upgrading the line to consider at the next meeting

Applicant G. Pierce & Engineer J. Pitrowiski indicated a willingness to contribute funds to the upgrade if it goes forward.

Consider Water line connection for Henry Parro Route 2: Commissioners are concerned about the placement of the water line given their knowledge of the landscape of the lot; this seems to be a non-issue. Proposed use is low with only a 6-8 employee retail store, meeting space and firing range being proposed. H. Parro has not yet requested water service for the lot. A. Tuscany looking into who owns the water line from the hydrant near the entrance of SunCommon towards 720 US Route 2 currently owned by Jonathon Griffin.

BOD capacity study: A. Tuscany updated the Commissioners on this study. The addition of the CoMag system allows the Village to adequately treat wastewater at the design flow of 0.510 MGD with the current strong influent BOD concentration of 319 mg/l. Commissioners have requested A. Tuscany reach

out to Paul Olander, former State of Vermont engineer and consult him before sumitting the documentation to the state for further permitting.

Main Street Reconstruction Water/Sewer Lines: B. Woodruff updated the Commissioners on the Main Street reconstruction project. Stantec Engineers have asked to clarify the Village stance on roof drains, sprinkler service lines and floor drains. **C. Parks made a motion to allow B. Woodruff PWD to determine locations of Village paid sprinkler stubs for future expansion to be reimbursed if/when customers choose to hook up new service. R. Finucane seconded the motion, a vote was held, and passed unanimously.**

R. Finucane made a motion to have roof drains removed from the sanitary system. C. Parks seconded the motion, a vote was held, and passed unanimously.

The Commissioners agreed by consensus to allow existing floor drains to empty into the sanitary lines.

B. Woodruff requested the Commissioners adopt standards detailing the manufacturer and models of hydrants, manhole covers and necessary accessories used throughout the Village (see attached). These include: Kennedy Guardian K-81D Fire Hydrants; F series full weight ductile iron resilient wedge AWWA C509 valves; McDonald Model 4701 BQ with CC thread stops; McDonald Model 6100Q curb stops; Erie Style curb box and Lebaron 2006A1 manhole covers. **R. Finucane made a motion to amend the sewer and water ordinances to adopt the attached standards. C. Parks seconded the motion, a vote was held, and passed unanimously.**

Tuition Reimbursement: W. Shepeluk spoke to the Commissioners regarding the request of a staff member to be reimbursed for tuition relating to furthering his education in an advanced degree in Civil Engineering. W. Shepeluk stated the Village has a personal policy that allows for reimbursement. **C. Parks made a motion to pay the tuition as recommended by the Manager of M. Hunt, Water Department employee, for the following courses: Calculus 1 (\$69); Calculus 2 (\$69); Physics (\$69) and Chemistry 1 (\$59) R. Finucane seconded the motion, a vote was held, and passed unanimously.**

Update of technical standards of Water & Sewer line design: A. Tuscany stated the current standard is the 10-State-Standard for both water and wastewater and State of Vermont ANR design standards. A. Tuscany and B. Woodruff will draft an update to that standard in writing for the Commissioners to consider at the next meeting.

Update of sewer feasibility study: A. Tuscany has a meeting scheduled with S. Lotspeich, Community Planner, to investigate where the needs for expansion exist based on zoning and planning regulations. A. Tuscany hopes to have more information by November.

Monthly Reports: Commissioners would like to see the system water loss calculation for each billing quarter reported in the monthly reports. They would like to see the calculations for past quarters updated

Minutes: R. Finucane moved to approve the minutes from the June 26th, 2017, C. Parks seconded the motion, a vote was held, and passed unanimously.

There being no further business, **C. Parks made a motion to adjourn, R. Finucane seconded the motion, a vote was held, meeting was unanimously adjourned at 6:30pm.**

The next regular meeting is tentatively scheduled for Monday October 23rd, 2017 at the Waterbury Municipal Center.

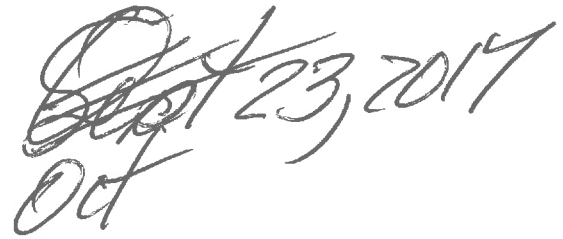
Respectfully submitted,

Karen King, Secretary

Approved:

A handwritten signature in cursive script, appearing to read "Ronald Parks".

Date:

A handwritten date in cursive script, reading "Oct 23, 2017".

Waterbury Village Water and Sewer Commissioners

Monday Sept 25, 2017 4:30 pm
28 North Main Street - Steele Community Room
Waterbury

- | | |
|---------|--|
| 4:30 pm | Opening |
| 4:30 pm | Consider any modifications to the Agenda |
| 4:31 pm | Public |
| 4:35 pm | Consider Ivy Ventures on Rt 100 connection request |
| 4:55 pm | Consider H Parro connection request Rt 2 |
| 5:05 pm | Consider BOD capacity study Next steps |
| 5:25 pm | Consider options on Main Street water line reconstruction |
| 5:35 pm | Discuss tuition reimbursement for staff |
| 5:50 pm | Staff recommendation for update of technical standards for water and sewer line design, materials and construction standards |
| 6:00 pm | Status of feasibility study for future sewer expansion areas |
| 6:10 pm | Update on water system loss calculations |
| 6:20 pm | Department Reports |
| 6:35 pm | Minutes |
| 6:40 pm | Adjourn |

To: Elected Boards
From: W. Shepeluk, Manager
Date: August 18, 2017

Re: Manager's Report- July & August 2017

As a result of the boards' evaluation of my work that was completed in December 2016, I have been asked to submit a report detailing tasks worked on and accomplished each month. This is the seventh of such reports.

I will be on vacation August 19-September 2nd, returning to work on September 5th. I have reported here for the month of July and August 1-18.

Budgets & Annual Meeting Preparation & Manager's Monthly Report

Review of revenues, expenses and budget priorities is an on-going task. **For several months the town's cash flow needs required borrowing in anticipation of taxes. As recommended by staff and approved by the trustees and select board, the village lent the money to the town from its UDAG Fund. Interest is being charged, but the payment of interest by the town benefits the village rather than the town paying interest to a bank. The first installment of taxes was due on August 11th and for the time being the town has fully repaid the village the \$432,000 that was borrowed. The town paid the village's UDAG Fund \$1,126.73 in interest. The town will pay school taxes collected and owed to the school district in the amount of \$4,901,585 the week of August 28th. After that payment is made, it may be necessary for the town to borrow again from the village in anticipation of taxes.**

I did not keep a diligent record of my time worked during several weeks in July, but I spent about 7 hours documenting my time and then writing the Manager's Monthly Report for the month of June.

Board Meetings-June: I spent about 18 hours preparing for meetings and attending meetings of elected boards in July and 9 hours or so for meetings held between August 1st and August 14th. The select board met on July 3rd to set the town's tax rates and have held several "Necessity and Compensation" hearings for the Main Street project were held in July and August, as well.

- **Select Board**
July 3,10,17,31, August 7, 14
- **Trustees**
July 26
- **Library Commissioners**
No meeting
- **Water-Sewer Commissioners**
No meeting
- **Cemetery Commissioners**
July 18, August 1st

Met with individual department heads periodically through the month.

Financial & Contract Management

Continuing management of town/village investment portfolios.

Coordinated with Barb Farr on local transportation projects. Some highlights:

- Continued working with Barb Farr and AOT concerning Main Street Project. The select board held several “compensation hearings” in July and August related to the Main St reconstruction project.

Legal Issues

Spent about 4 hours in July on direct legal issues concerning town and village. (Not including Main Street Necessity).

- Continued discussions with town’s attorney, community planner and zoning administrator mainly concerning the Grange Hall. **A draft settlement is now circulating and all parties are hopeful that an agreement can be finalized soon—there has been additional negotiating between the town and the property owners. Hopeful this will be finalized in late August or early September**
- **North Hill Cell Tower –Hearing Officer has recommend denial of Certificate of Public Good. Expectation is that Verizon will seek oral arguments before Public Service Commission and will continue pursuit of a CoPG**
- **The town is involved in an appeal of a zoning permit issued to Grayson for a subdivision on Sweet Farm Road. This case is before the Environmental Court. Mediation, the first option toward reaching resolution, was conducted. No settlement could be reached. Expect the case will go to court on October 19 and 20. The line items for legal services in the town’s general government department and in the Planning Zoning Department is significantly overspent, as I reported last month. Costs will definitely go higher as cost for trials are significant.**
- **The village voted on June 20th to amend its charter, effectively dissolving its general government authority on June 30, 2018. I continue to work with lawyers address issue related to that.**
- **The village has filed an appeal with the Vermont Supreme Court seeking to overturn a ruling made by Judge Teachout at Washington Superior Court in the Hubacz v. Village of Waterbury (police officer termination) case. The case is set for review of record and oral argument some time in October.**

VLCT/VTCMA/ICMA—Municipal Advocacy, Education/Professional Development Opportunities

- VLCT—Quality of Life Policy Committee meeting to develop policies pertaining to land use & environmental issues for inclusion in VLCT 2018 Legislative Policy and Goals. Noon-3:00
- VLCT- Board Meeting: July 27th Noon-3:30
- VERB Trust,-August 3rd 9:30-12:30

Grants Administration/AUDIT— Barb Farr, Steve Lotspeich and Alec Tuscany have been involved with the close out of the CDBG-DR pump station flood proofing grant, requisitioning for funds from the Colbyville bike-ped study grant. Many staff, including me, have been working with Bill Yacavoni, CPA, on the town and village 2016 audits.

Economic & Community Development

- Met Alysa Johnson, RW Economic Development Director, to discuss local revolving loan funds and a strategy to market the availability of these funds for economic development & housing projects.
- Review agendas, minutes of WADC meetings. Attended WADC meeting on August 2nd

Infrastructure

- Activity is ramping up concerning the Main Street Reconstruction process. Staff discussions about this take place at least weekly. Meetings with VTRANS concerning “necessity and “compensation” are occurring more frequently Planning for:
 - Paving—completed work scheduled for Metayer Court, Lakeview Terrace, Sunset Drive and a significant leveling project on Guptil Rd.
 - Butler Street neighborhood-late August reclaim & September paving
 - Sidewalks-N. main Street-delayed by rain, scheduled for September

Staffing

I have been informed of two pending terminations of employment, not related to the Police Department

- LeeAnne Viens, Bookkeeper, will retire in January 2018 after more than 35 years with the town and village.
- Deb Fowler will be resigning her position as Recreation Director, for family reasons. Her departure date, at present, is spring 2018. She and her family will be returning to Canada, their homeland, a few years earlier than they had anticipated.

I am disappointed about this news in both instances

Day to Day Work

General administrative duties necessary to manage the town and village governments.

- Time Card Administration: 1 hour each week

- Meetings with Police Chief-generally once per week. Met 4 times in July-working towards dissolution of the PD. Joby has been retrieving equipment issued to part-time officers, selling items allowed to be sold and transferring equipment purchased with state grant funds to other police agencies. On August 17th:

The Waterbury Police Department transferred the following equipment purchased with grant money to the Northfield Police Department:

2 All Traffic Solutions Shield 12" portable speed signs.

Sign #1 SN: 12993110228. Manufactured in August of 2013.
Sign #2 SN: 129920140168. Manufactured in May of 2014.

1 Laser Technology INC UltraLyte 100 Laser Speed Gun SN# UX006527. Manufactured in 2002.
Folding Reflective Traffic Barriers.

2 sets of operational Stinger Spikes.

2 sets of Stinger Spikes without any tire deflation spikes installed, used for training.

Paul White, Law Enforcement Liaison for the VT Governor's Highway Safety Program got a copy of this info. The serial numbered items will be reassigned to Northfield PD.

- Weekly (or more often, as often as necessary) discussions with PWD or municipal engineer, or both, for updates on projects: Review spring work schedules for hwy, water, sewer depts. Discussed schedules for paving and sidewalk repair.
- Various interactions with staff to answer questions, seek information, solve problems, review and process purchase orders, general oversight of department budgets
- Meet with the public seeking information or services
- E-mail-phone correspondence.
- Communications: Spent about 22 hours on e-mail, phone and US Mail etc. in July and Attempting 15 so far in August..

Manager Work Plan

The items below remain goals. I work on them all from time to time. However, items of less importance, but needing more immediate attention stifle attempts to get to these more important items.

- **Final Review and Adoption of a Personnel Policy**-Working with VLCT to incorporate most recent amendments to labor laws and workplace regulations into the policy. Paid leave for part-time staff-- even for those whose weekly hours are relatively few, must be incorporated into the policy. **Given the village's charter amendment, I recommend holding off changes until January of 2018.**
- **Strategic Planning**- Now that most flood recovery efforts have been completed, the new municipal center, the roundabout and the WWTP upgrade are all finished, and before the Main Street Project gears up, this coming year would be a good time to make some decisions about how much tax effort the community can afford and then what services the town/village should provide for its residents and visitors. **Given resignations listed above, we need to talk about filling those positions—finance director discussion that I raised in my answers to boards' questions during my evaluation last fall should be revisited.**

- **Financial Reviews**-Continue review of investment policies and preparation of amendments to insure investment and distribution policies are in keeping with needs of the community going forward.

End of Report

Public Works Report

Waterbury, Vermont
Autumn 2017

Water Update...

- Oversight of Crossroads water line installation
- Meet with Barb Parker over water concerns
- Locating of old water infrastructure on Main St.
- Water/ Sewer utility locations Main St. Project meetings
- Micro Hydro meeting with potential contractors and engineers
- Meet with engineers for Rte 2 Water
- Discussions with engineers for Unilever on water line change over
- Meet with engineers on possible water for Waterbury Playhouse Site again

Sewer Update

- Discussions on sewer issues Main Street
- Meet with engineers and review Main Street
- Meet with property owner S. Main about future sewer connection
- Arnot correspondence and a new public information request
- Need to discuss Parker Ct. with Manager and Commissioners

Other works...

Micro Hydro: Moving along slowly. A permit has been issued by the DEC and the hope is to have the electrical and mechanical out to bid next week. The turbine is near completion. One small hiccup is the lead engineer Jeff M. has been on an unexpected medical leave.

Main Street: I have been spending many hours confirming current conditions and reviewing plans of the Main Street water and sewer. Future discussions with commissioners will need to address potential new sprinkler lines in ROW and water/ sewer requests for single manufacturer of materials for Main St. project.

Coming down the pipe...

- Main Street sump pumps and floor drains
- Reservoir Ashford Lane Water Line
- Non-revenue water
- Water and Sewer ordinance work.
- Water line extensions

MONTHLY Report August 2017

Items of Interest

Watershed Management / Brushhogging

Pool Shut Down

Main Street Valve Locating

Waterbury Center Valve Locating

Begin Hydrant Flushing

End Summer Help

Yard Hydrant Installation and Repair

Sanitary Survey Follow-up

Chemical Deliveries

CL2

Fluoride

Maintenance

Regular

Scheduled Monthly Analyzer Maintenance

Water Sources Used

All Surface Sources

Sweet Field Wells

Well 1

Flow Data

High Day
8/10/17

Low Day
8/18/17

Average Day

Peak
8/16/17

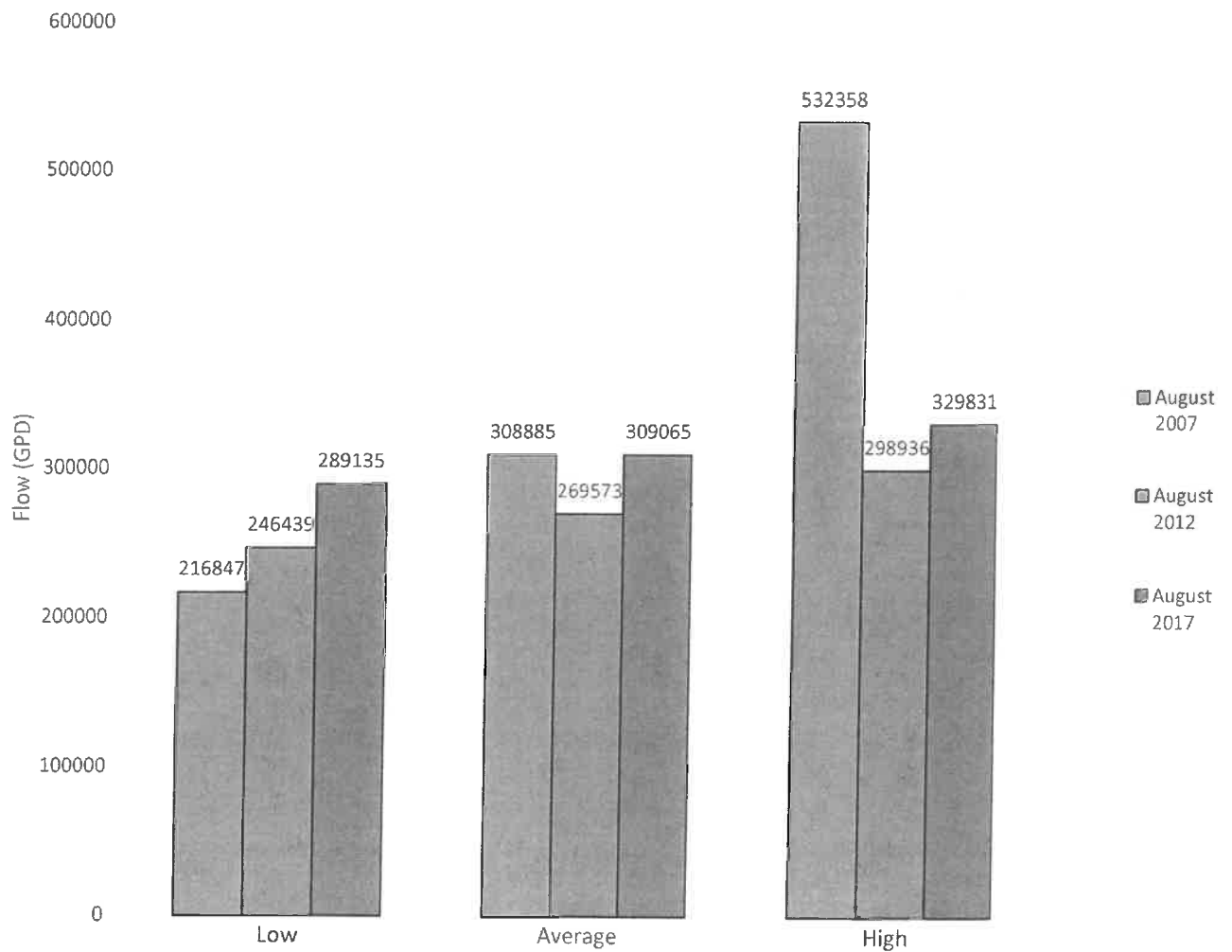
329831 gal

289135 gal

309065 gal

493 GPM

Low, Average and High Flow (GPD) for August 2007, 2012 and 2017



Notes:

- Data collected from electronic records dating back to 2007

Summary:

Early in August, we located and marked all valve boxes on Metayer Court, Sunset Drive and Lakeview Terrace in preparation for paving at those locations. Also in the first week of the month we tied up the last couple of meter rereads.

We performed some maintenance in the Waterworks, including brush hogging all regular areas (Sweet's Well Field, doghouse, Tyler + Merriam access roads, shooting range, field across from Tyler road, center road, well heads, well 1, etc). Additionally, we cleared downed trees on the access road from the Sweet Wells to the trail behind the plant and checked on bridge and main trail status.

We located the valves in the Bank Hill and Park Row intersections. Both were paved over, and we worked early in the morning to avoid morning traffic. We uncovered both valves and removed the covers with some difficulty. Both are now accessible and prepared for the upcoming Main Street project.

There were several yard hydrant projects in August. We installed a new hydrant to replace the existing spigot in the Maple Street cemetery and repaired a leak on the yard hydrant behind the municipal building in the garden. The leak was due to failure of the rubber stopper at the bottom of the hydrant.

We completed most of the items which came out of the Sanitary Survey at the end of July this month as well. These were repairing conduit at the well 1 wellhead with an electrician and repairing a wellhead in Sweet's Field which had been dislocated due to frost heaving. These repairs have been approved by the state. The last remaining item to close out from the Sanitary Survey is the clearwell cover at the plant. The plan for that has been submitted for approval and is on track to be completed by the end of 2017.

Our summer helper, Adam Lamson, finished up in the last half of August. We were able to achieve a lot this summer and kept him very busy.

August also marked the end of the pool season in town. As usual, we shut down drained and cleaned the filter, pumps, chlorine pumping and all other facilities in the filter building. All went smoothly, including replacing the ball valve on the chlorine tank. With that valve replacement, we have now replaced the valves on both chlorine tanks, and they are in good working order going into next season.

Additionally, we began hydrant flushing at Crossett Brook in Duxbury. This will continue throughout the late summer as per usual.

Finally, as has been the case for several months now, cross training between the Water and Wastewater Departments continued in August, with Matt working some days training at the Wastewater Department.

Wastewater Progress Report

September 2017

• Process:

- CoMag process continues to meet permit limits and running very well.
- Flow totals for July:
 - Influent: 5.48 MG, average 0.178 MGD
 - Effluent: 5.19 MG; process ran 15 days/month; avg. 0.346 MGD
 - Rain: 5.48 inches
- Plan to level out field and plant soy beans before September has been suspended. Will do next year. This year's rye grass has done well.
- Aeration rebuilding project and cable pole installation in progress.
- Damaged Bob Cat front glass door loading Sta-Mat. No injuries but will file accident report for insurance. Woody to follow.

• Collection System:

- Installed new man hole between Grenier's/Coffee Roaster sheds and Main St. This will enable improved maintenance on a damaged 6 inch trunk line.
- Crossroad project. Repaired damage 6 inch pipe at Man Hole 256 at BJ access road entrance. Kingsbury had to repair a damage line they hit between man hole 255 and 254
- Butler Intervale paving went well with sewer structures and catch basins.
- Preparing to install man hole structure at Parker Ct. if approved. Waterbury will do the work with a hired excavator and operator.
- Could the Sewer Commissioners establish a completion date for the updated Sewer Ordinance? This was put in electronic format nine years ago for this purpose but has yet to be done.
- Set bollards for MPS bypass hydrant

• Personnel

- Pete K away for 5 weeks to tend to family matters after death of Father. Brandon trained at monthly reports, weekly invoices, time cards and process. He's been given. Substantial work list.
- Pete injured back loading concrete bags into truck. File workers comp claim (AARRRGH!!!)
- Matt Hunts cross training at WWTP is going well. He works with us most Monday's. Brandon doing some cross training at WTP and will increase in the winter months.
- Anders Budaj extended one more month. Has learned pump stations and is doing well with process and plant shut down. Would like to hire him as a part time permanent working 16 hours/wk. Helpful to Brandon during Pete's time away.

• 2017 Projects:

- Organic Capacity Study, Phase II – completed. Awaiting Sewer Commissioners to decide whether or not to submit request to State to increase BOD capacity from 170 lbs./day
- Sludge removal to Casella Coventry– completed
- MPS Flood Door Refurbishing – completed
- 2017 Collection system flushing, pump station cleaning, and TV work – completed
- CoMag coagulation injection point and fish screen installation – completed
- Lagoon Aerator, pontoon, cable upgrade – motors, connectors and pontoons on site
- Bay one enclosure project – in progress; awaiting to see if funds available to complete insulation
- Man-hole repairs – in progress

MONTHLY ALLOCATION REPORT FOR COMMISSIONERS

Applications received and processed in September:

Application received 9/11 from: Paul Ballyk 3537 Waterbury Stowe Road Waterbury Center.
Converting a 2 bedroom apartment with commercial space into 2 x 1 bedroom apartments with commercial space; no changes to the necessary water allocation were needed.

Received an application on 9/12 from Trudell Consulting on behalf of George Pierce – Mr. Pierce is proposing a commercial renovation of 2931 & 2933 Waterbury Stowe Road - the former Hooker's Furniture as well as the front barn and buildings located in the back of the property. Engineers have calculated a flow design of 1,270 gpd (94 employees). I have been advised not to invoice Mr. Pierce for this yet until such time he and the Village (point person: Bill Woodruff) come to an agreement that the Village will not be responsible for the infrastructure of their service line. When billed the total for the allocation should be:

1,270 x \$3.75 = \$4,762.50

4 x meters = \$640.00

Total estimated invoice \$5,402.50

Additional notes

Water / Sewer invoices were due last week, Wednesday 9/20 – there were minimal inquiries related to the sewer rate increase. I estimate 5 or fewer people asked me about it at all. The credit card payments are actively available with minimal folks opting to use that service.

Previous Shut Off notices/payment agreements:

16 payment agreements offered

4 did not sign and return payment agreement

6 payments have been received – 5 in full, one partial to the agreed upon amount

6 signed payment agreements that have NOT made their Sept 20th payment

I would like guidance from the board and Bill regarding how to proceed with the folks that didn't sign payment agreements at all or have not honored the signed agreement.

Thanks Karen

9-25-17

The Village of Waterbury has standardized on the use of the following water fire hydrant, valve and service connections.

Fire Hydrant to be Kennedy Guardian K-81D (see Attachment 1)

Valves to be F series Full Weight Ductile Iron Resilient Wedge AWWA C509

Water Service Connections

Corporation stop shall be McDonald Model 4701 BQ with CC threads

Curb Stop shall be McDonald Model 6100Q

Curb box shall be Erie Style

For sewer manhole frames and covers the Village of Waterbury has standardized on the use of the Lebaron cover 2006A1 (see Attachment 2)



GUARDIAN K-81D HYDRANT AWWA/ULFM KENNEDY VALVE



Division of McWane, Inc.

ATTACHMENT 1

K8103 DIRT SHIELD
Cast Iron ASTM A126, Class B
Chamfered component deflects moisture and dust exposure.
Affords protection against freezing conditions ensuring operational efficiency.

K8104 STEM LOCK NUT "O" RING*
Viton, ASTM D2000

K8105 STEM LOCK NUT
ASTM B884 C83600/C84400
min. yield strength 14 ksi
Non-corrosible bronze nut secures stem nut for operating threads. Hold-down nut provides additional weather protection with venting attachment to hydrant cap and large O-ring seat.

K8107 HYDRANT CAP / BONNET
Cast Iron ASTM A126, Class B
Single unit design contains factory applied grease. Design also allows the choice of oil lubrication. Two O-ring seals at penetration point of operating stem prevent lubricant to escape and excludes water entry of chamber when hydrant is pressurized.

K8109 HYDRANT CAP O-RING*
Buna N, ASTM D2000

K8112 BRONZE STEM SLEEVE "O" RING
Buna N, ASTM D2000
Seal between brass ferrule and stem.

K8114 UPPER STEM
Cold Rolled Steel ASTM A108 C1018
High strength steel stem with permanently installed, machined flange, brass sleeve (ferrule) that penetrates the Cap / Bonnet, providing smooth, non-combible bearing surface for the double O-ring seals.

K8115 UPPER BARREL / NOZZLE SECTION
Cast Iron ASTM A126, Class B
Molded from ductile cast iron and available with either two hose and one pumper nozzle or two hose nozzles (Special configurations available).

Above ground hydrant assembly may be rotated 360° on the standpipe flange for desired alignment to the curb. Simply loosen the flange bolts, rotate and retighten.

K8122R COUPLING PINS (2)
Stainless Steel, 302 NO
Updated pin design uses spring loaded pin. No need for clevis pins, nuts, or other securing device. No tools required.

K8118 BOLTS & NUTS (8)
Steel, (Zinc Plated) ASTM A307/AE Grade 2

K8120 O-RING
Buna N, ASTM D2000
O-ring seal provides ease of repair and 360° nozzle positions.

K8124 LOWER BARREL
Ductile Iron ANSI/AWWA C151/A21.51

K8136 DRAIN VALVE*
Aluminum Bronze ASTM B896 C85400/C86500
Includes pressure activated rubber facing that provides positive closure of bypass backflow drain ports during operation. After operation, the drain valve automatically drains all water from the barrel of the hydrant preventing cold weather freeze up. Drain ports are purged during first three operating turns on opening and again on closing.

K8137 DRAIN VALVE FACING WITH INSERT
Buna N, Stainless Steel ASTM D2000, ASTM A278 (304)
Unique pressure activated drain valve assures positive shut off. The higher the pressure, the tighter the seal. Automatically compensates for wear due to usage. Does not rely on interference fit.

K8127 SEAT RING INSERT / RETAINER RING
Bronze ASTM B584 C83600
Permanently affixed to elbow with O-ring seal. Provides bronze to bronze interface for easy seat removal.

K8129 DRAIN TUBE
Bronze ASTM B135 C33000

K8133 DRAIN VALVE PIN
Stainless Steel, 410/416

K8134 ELBOW
Ductile Iron ASTM A53, Grade 70, 50 lb
Fusion bonded epoxy coating inside and out. Meets AWWA C550 standards, 5' 1/4" & 4' 1/2" Mechanical Joint and Flange elbows available in 6" & 4" connections, 5' 1/4" Tyson Joint / push-on available in 6" only.

AWWA and ULFM
500 lb. test pressure
250 lb. working pressure

The Guardian K-81D Hydrant meets or exceeds all the latest provisions of AWWA C502, and UL 246-FM 1510 specifications (options are limited on ULFM models).

NO. OF TURNS TO OPEN: 15 1/2

* Recommended Spare Parts

K8101 ALEMITE FITTING
Stainless Steel ASTM A276 (304)
Pre-greased fitting provides convenient access to lubricate operating threads for corrosion protection.

K8102 OPERATING STEM NUT*
Bronze ASTM B584 C83600/C84400
min. yield strength 14 ksi

K8148 ALLEN HEAD SET SCREW
Stainless Steel ASTM A276 (304)
Drives and tapped hole in hold down nut with stainless steel set screw. Secures hold down nut to hydrant cap.

K8106 THRUST WASHER*
Nylatron GS MIL LP-410
Anti-chatter bearing at thrust collar reduces operating torque for smoother open / close cycles

K8108 CAP BOLTS & NUTS (8)
Steel (Zinc Plated) ASTM A307/AE Grade 2

K8110 STEM FERRULE
Brass ASTM B135 C26000

K8111 HYDRANT CAP "O" RINGS (2)
Buna N, ASTM D2000

K8144 HOSE / PUMPER NOZZLE CAP
Cast Iron ASTM A126, Class B

K8143 HOSE / PUMPER NOZZLE CAP GASKET
Neoprene, ASTM D2000

K8141 HOSE / PUMPER NOZZLE RETAINING* SCREW
Stainless Steel ASTM A276 (304)

K8140 HOSE NOZZLE
K8142 PUMPER / STEAMER NOZZLE
Bronze, ASTM B584 C83600
Tamper resistant quarter turn hose and steamer nozzles. Designed for ease of maintenance and field replacement.

K8145 HOSE / PUMPER NOZZLE "O" RING*
Buna N, ASTM D2000

K8139 NOZZLE CAP CHAIN
Steel, ASTM A108

K8138 "S" HOOK
Steel, ASTM A108

K8118 STEM BREAK COUPLING
Cast Iron ASTM A126, Class B

Designed to break from collision without damage to main valve or lower rod. Bottom half of coupling is designed to accept short disassembly wrench.

K8119 BREAKING RING / TRAFFIC FLANGE (2 HALVES)
Cast Iron ASTM A126, Class B

Full 360° adjustment. Breaking ring on top for ease of replacement. Upon vehicular impact, safety flange ring fractures to allow above ground hydrant assembly to separate cleanly from standpipe without damage to internal parts or loss of water. Repair is easily accomplished with economical field repair kit.

K8123 LOWER STEM
Cold Rolled Steel ASTM A106 C1018

K8135 ELBOW BOLTS AND NUTS (6)
1/8" Stainless Steel, ASTM F593/CF534

K8125 ELBOW "O" RING*
Buna N, ASTM D2000

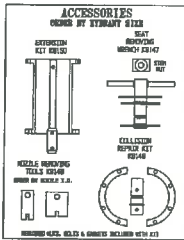
K8126A SEAT RING UPPER "O" RING*
Buna N, ASTM D2000

K8126 SEAT RING*
Bronze ASTM B584 C83600

K8130 SEAT RING LOWER "O" RING
Buna N, ASTM D2000

K8131 MAIN VALVE*
EPDM with Steel Insert ASTM D2000
Available in 4' 1/2" and 5' 1/4".

K8132 BOTTOM PLATE
Cast Iron ASTM A126, Class B
Single component cast iron valve bellong plate compresses rubber seat against drain valve and securely attaches valve assembly to lower stem. Bottom plate is coated with same fusion bonded epoxy as applied on elbow and meets AWWA C550 coating.



KENNEDY



**KENNEDY
ELMIRA, NY
A W W A
K81-A**

MARKING
FRONT HALF UPPER
OF MAIN ONLY
HYDRANTS



20 11
LIFE EXPECT.
OF HYDRANT

5' 1/2"
SIZE

**KENNEDY
ELMIRA, NY
A W W A
250 CWP**

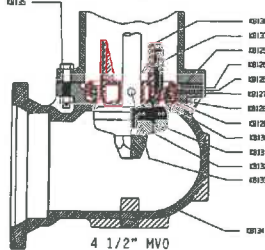
MARKING
BACK HALF ALL UPERS



NOTE: DRAWING SHOWS 5' 1/4" MAIN VALVE OPENING.
MINOR PART DIFFERENCES OF 4' 1/2" MAIN VALVE OPENING.

KENNEDY VALVE

A DIVISION OF MCWANE, INC.
1021 East Water Street
Elmira, New York 14901
607.734.2211
www.kennedyvalve.com
2011



30" OPENING

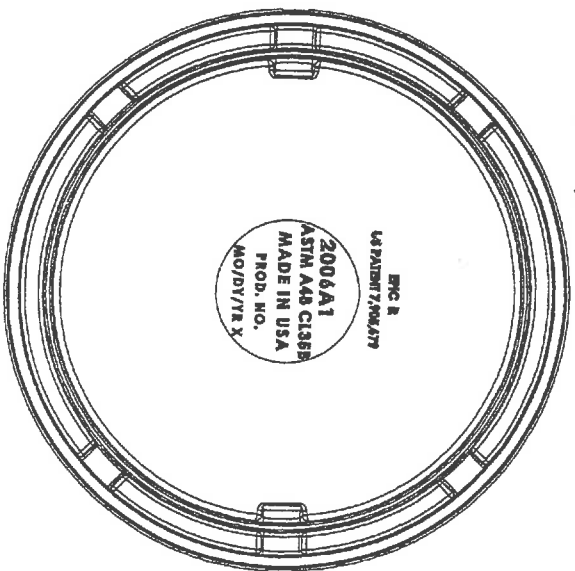
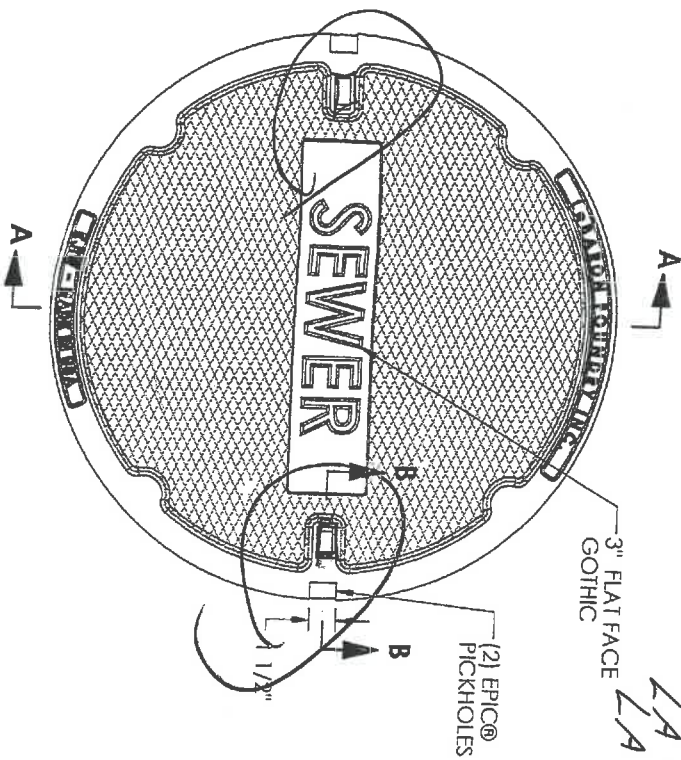
COVER = L3ZC22

2006A1 Cover FRAME = L43Z4 (4")
L43Z6 (6")
L43Z8 (8")

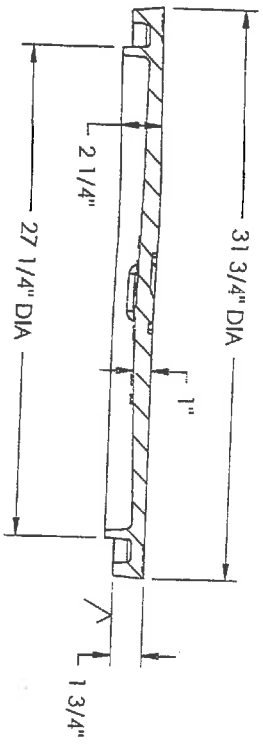
EAST JORDAN FOUNDRY
LEBANON



ej



BOTTOM VIEW



SECTION A-A



SECTION B-B

- ~~Product Number: 90200628~~
- ~~Design Features:~~
 - Materials: Gray Iron (D.L.51B)
 - Design Load: Heavy Duty
 - Open Area: n/a
 - Coating: Indipped
 - Designates: Machined Surface
 - Weight: 198 lbs

- Certification**
- ASTM A48
- HS-20 LOAD RATING
- Country of Origin: USA

6/26/17

CI Frame + Cover registered by Watsburg
- Review equals to avoid RIF.

Drawing Revision
2/11/2010 Designer: JJJ
7/26/2012 Revised By: SDC

Disclaimer
Weights (listed), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

CONFIDENTIAL: This drawing is the property of EJ Group, Inc. and embodies confidential information, registered marks, patents, trade secret information, and/or know-how that is the property of EJ Group, Inc. All rights reserved.

Contact
800 626 4653
ejco.com

ATTACHMENT 2

- Safety
- History of
installing
where historical

Bill Woodruff

From: William Shepeluk <wshepeluk@waterburyvt.com>
Sent: Monday, September 25, 2017 12:39 PM
To: 'Bill Woodruff'; 'Skip Flanders'
Subject: FW: Masters Program Information

Bill and Skip.

I'll probably participate in today's meeting by phone. I think this will be the worst day for my cold so probably better if I stay away. I had this info in my notes and shared some of it with Skip last week. I called Matt this morning and asked him to e-mail this info to me so the commissioners could see it as I won't be able to bring my notes.

My feeling is we should **reimburse** Matt for all these pre-requisite courses. I think the policy requires a B grade or better. It will likely take well into next year anyway before he finishes them at all. Once he passes these and prepares to enroll in the Master's program, we can revisit how we might compensate him for that. I think that would be the time to consider some type of agreement to stay with the Utility District for a period of time should we pay for some of those classes. I do not envision that we will pay or reimburse him for an entire Master's Degree, but there will be considerable expense however we end up helping. Having him make a commitment to stay for some period seems to make sense.

Bill

William A. Shepeluk
Waterbury Municipal Manager
(802) 244-7033



From: Matt Hunt [mailto:mhunt@waterburyvt.com]
Sent: Monday, September 25, 2017 12:18 PM
To: 'William Shepeluk' <wshepeluk@waterburyvt.com>
Subject: Masters Program Information

Hi Bill,

Per our conversation earlier, the summary of where I'm currently at with the Civil Engineering Master's program at Norwich is as follows:

I've been conditionally accepted into the program, meaning I need to complete five prerequisite courses before I can begin the actual Masters Program. 4 of the 5 prereqs are offered via StraighterLine, which is Norwich's suggested avenue to completing them. They're pretty inexpensive, and take roughly 1 month to complete per class, with ~15-20hrs per week of classwork.

The five prerequisites are:

Calculus 1 (\$69, StraighterLine)

Calculus 2 (\$69, StraighterLine)

Physics (\$69, StraighterLine)
Chemistry 1 (\$59, StraighterLine)
Chemistry 2 (\$1500, Thomas Edison State University, online)

I plan to begin taking the classes in the order they are listed above in the very near future, likely in November.

Once those are finished, I will be able to begin the Masters Program itself. It's offered twice a year, spring and fall. Tentatively, I'd like to aim to begin that Fall of 2018.

Program overview: <https://online.norwich.edu/degree-programs/masters/master-civil-engineering/overview>

Please let me know if there's any further info I can provide before your meeting with the Commissioners today. Once I leave for the ultrasound, I won't see this email account until tomorrow morning, and will have on/off cell availability, but will certainly return a call or send more info as soon as possible, between appointments etc.

Thanks very much!

Matt Hunt
Plant Operator
Waterbury Water Department
Waterbury, VT
(802) 244-6357

