



TOWN OF HENNIKER, NEW HAMPSHIRE
SELECTMEN AGENDA

**Tuesday, December 1, 2020
6:15 PM**

Henniker Community Center
57 Main St.
Henniker, NH 03242

6:15 p.m.

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. ANNOUNCEMENTS

IV. CORRESPONDENCE

Item 1: Thank note from Heidi Aucoin

V. PUBLIC COMMENT #1 – (For any comment by any Henniker resident on a topic. Request time limit, up to 3 minutes)

VI. CONSENT AGENDA

Item 2: Consent Agenda December 1, 2020

- a) Deputy Health Officer Nomination Form – Joseph R. Devine Jr.
- b) Committee Appointments: Heidi Aucoin – Records Committee and Budget Committee
- c) Tax Lien Abatements: Map/Lot: 1-318-P101A, 1-588-A, 1-589-A, 1-655, 1-318-P71, 1-318-PW16, 1-119-A43A, 1-619-107, 1-318-P82C, 1-318-P68, 1-318-P74, 1-619-034, 1-318-PW17, 1-318-PW11, 1-619-088, 1-619-079, 1-619-063
- d) Deed Waiver List dated 12/1/2020
- e) Eversource/PSNH Abatement: Map/Lot 1-000-AA

VII. NEW BUSINESS

Item 3: Joshua Finet/Super Scoops Parking Request

Item 4: Tax Lien Abatements & Waivers

Item 5: Planning Consultant Contract

Item 6: Police Department Cruiser Purchase

Item 7: Wastewater Warrant Bond Presented by Underwood Engineering

Item 8: Town Hall Remodel**VIII. OLD BUSINESS****Item 9:** Changes to Personnel Policy: Second Reading**IX. OTHER BUSINESS/CORRESPONDENCE****Item 10:** Acceptance of Board of Selectmen & Budget Advisory Committee Meeting Minutes
November 14, 2020**Item 11:** Acceptance of Board of Selectmen Non-public Minutes November 17, 2020**Item 12:** Acceptance of Board of Selectmen Meeting Minutes November 17, 2020**Item 13:** Town Administrator Report**Item 14:** Selectmen Reports**X. PUBLIC COMMENT #2** (For any comment by any Henniker resident
on a topic. Request time limit, up to 3 minutes)**XI. NON-PUBLIC****Item 15:** Non-public RSA 91-A:3, 11 (a), (c), (d), (e)**XII. ADJOURNMENT****XIII. UPCOMING DATES**

December 2, 2020 - Conservation Commission

December 3, 2020 - Capital Improvement Committee

December 4, 2020 - Building Department Working Group

December 9, 2020 - Planning Board

December 15, 2020 - Select Board Meeting

December 24 & 25, 2020 -Town Offices Closed

Visitor Orientation to the Town Selectman's Meeting

Welcome to this evening's Selectmen's meeting. Please note that the purpose of the meeting is for the Selectmen to accomplish its work within a qualitative timeframe. Meetings are open to the public, but public participation is limited. If you wish to be heard by the board, please note the "Public Comment" at the beginning and end of the meeting to speak to items on a meeting agenda and/or matters pertaining to the business of the Selectmen. In addition, public hearings may be scheduled for public comment on specific matters. Speakers must be residents of the Town of Henniker, property owners in the town of Henniker, and/or designated representatives of recognized civic organizations or businesses located in the Town of Henniker. When they are at the podium, speakers first need to recite their name and address for the record. Visitors should address their comments to the board and not to any individual member. Each speaker shall be provided a single opportunity for comment, limited to three (3) minutes. Public forum shall be limited to fifteen (15) minutes. Visitors should not expect a response to their comments or questions since the Board may not have discussed or taken a position on a matter. Public Comment is not a two-way dialogue between speaker(s), Selectmen, and/or the Town Administrator. The Chair will preserve strict order and decorum at all Board of Selectmen meetings. Outbursts from the public are not permitted.

Notice posted on: November 25, 2020
Next Routine Meeting: December 15, 2020

Items for the next agenda, with completed backup, must be in the Selectmen's Office no later than 12:00 noon December 10, 2020.

From: Heidi Aucoin <aucoinnh@gmail.com>
Sent: Thursday, November 19, 2020 6:58 AM
To: Joe Devine <josephdevine.henniker@tds.net>
Subject: Thank you and Volunteer

Good Morning Joe,

Thank you for your community idea of the Christmas. Lights Contest. As I mentioned I think this is a great way to promote community spirit during this time of distancing. I also love the idea of dressing up the Town Hall. Let me know if you would like me to work on a wreath. I do. Understand if you already have a plan or person in place for this.

I have attached two volunteer forms. One for budget committee and another for records committee. Please let me know your thoughts or if you need any further information.

I am also excited to hear that we are making progress with adding modules to clerk works. This will ease things for the public with online access and payment methods.

Have a great day and stay warm!

Heidi



TOWN OF HENNIKER, NEW HAMPSHIRE
BOARD OF SELECTMEN
CONSENT AGENDA

**Tuesday, December 1, 2020
6:15 pm**

Consent Agenda

- a) Deputy Health Officer Nomination Form – Joseph R. Devine Jr.
- b) Committee Appointments: Heidi Aucoin Records Committee and Budget Committee
- c) Tax Lien Abatements: Map/Lot: 1-318-P101A, 1-588-A, 1-589-A, 1-655, 1-318-P71, 1-318-PW16, 1-119-A43A, 1-619-107, 1-318-P82C, 1-318-P68, 1-318-P74, 1-619-034, 1-318-PW17, 1-318-PW11, 1-619-088, 1-619-079, 1-619-063
- d) Deed Waiver List dated 12/1/2020
- e) Eversource/PSNH Abatement: Map/Lot 1-000-AA

Board of Selectmen Approval:

*Please note that the Consent Agenda is subject to change until 4:30 pm the day of a scheduled Selectmen's Meeting.



Town Hall
18 Depot Hill Road
Henniker, NH 03242

Tel: (603) 428-3221
Fax: (603) 428-4366

Incorporated November 10, 1768
“Only Henniker on Earth”

TOWN OF HENNIKER, NEW HAMPSHIRE

STAFF REPORT

DATE: November 23, 2020
TITLE: Josh Finet/Super Scoops Parking Request
INITIATED BY: Josh Finet
PREPARED BY: Joseph Devine, Town Administrator
PRESENTED BY: Josh Finet

AGENDA DESCRIPTION:

Mr. Finet has requested to come before the board to speak about the 2 hour limit parking in front of Super Scoops.

Legal Authority: N/A

Financial Details: N/A

Town Administrator Comment: N/A

Suggested Action/Recommendation:

Suggested Motion:

From: [Joshua Finet](#)
To: Jean_secretary@henniker.org
Cc: [Jennifer Lopez](#)
Subject: Re Parking Enforcement & Solutions
Date: Tuesday, October 13, 2020 10:47:13 AM

Joshua R Finet
C/O Bolado Group Inc
dba/ SuperScoops
58A,B,C Main St
Henniker NH 03242

To Whom it may concern,

We are pleased at the response we have gotten from the entire Henniker Community as we launched this season after lengthy (mostly covid or unavoidable logistical) delays. I want to thank the Town Admin for their continued and consummate professionalism.

I am sure we all have the towns best interest in mind, and this shows, and with this in mind we are seeking from the town help in the solution to a necessary adjustment to Commerce on Main St.

Parking limits are something that keep our businesses accessible by passers by, lately there is a complete lack of accessibility with that regard, We are hoping the town will, effective immediately, remind those parking on Main St of the time limits, and that extended parking options do exist in dedicated lots.

This helps us enormously with customer convenience in stopping by for a quick in and out experience.

Additionally to this end we would like to request from the town, a single 15 Min Spot parking out directly in front of 58 Main St. To allow exclusively for patrons to continuously have access to ensure a single spot remains accessible to maintain continuity of commerce on Main St.

Restaurant Businesses especially are disproportionately affected by this pandemic and the " take out " culture has completely exposed this necessity.

Allocating Single Spot parking options in front of the local restaurant businesses whom request this allocation would in fact be good for business, and good for the town as a whole.

I am willing to speak this request at Town Hall if necessary to put on the agenda.

Lastly, SuperScoops, Is a community building and family friendly environment, we

love to see people gather and we expect to grow in that theme.

We would like to offer our contribution of an additional Picnic Bench, And Trash Barrel paid for and Sponsored by Bolado Group & SuperScoops to ensure we continue to do our part in keeping Henniker beautiful, idyllic and safe, this is what also played a part in us installing scone lights and security cameras on the Main St Entrance, to keep Main St tastefully lit and safe for our patrons and the entire town.

Please Consider and address these parking concerns as they will have immediate impact in our ability to have a productive slow season as we are a year round business.

Many Thanks,
Respectfully

Joshua R Finet &
Jennifer C Lopez de Finet

Sent from my T-Mobile 4G LTE Device



Town Hall
18 Depot Hill Road
Henniker, NH 03242

Tel: (603) 428-3221
Fax: (603) 428-4366

Incorporated November 10, 1768
“Only Henniker on Earth”

TOWN OF HENNIKER, NEW HAMPSHIRE

STAFF REPORT

DATE: November 20, 2020
TITLE: Town Clerk Update – Abatements and Waivers
INITIATED BY: Joseph Devine, Town Administrator
PREPARED BY: Joseph Devine, Town Administrator
PRESENTED BY: Kim Johnson, Town Clerk/Tax Collector

AGENDA DESCRIPTION:

I have asked Town Clerk/Tax Collector Kim Johnson to come in and give an update to the Select Board on the tax abatements and waivers. Each year, the Tax Collector must present deeds to the Select Board for properties which have outstanding balances dating back three or more years. This process is prescribed in RSA 80:77. In 2020, a property is eligible for tax-deeding if it has an unpaid balance on the 2017 lien. The Board does have the right to enter non-public per RSA 91-A:3 II a, c, d, or e Personnel/Reputation/Legal/Land to discuss these in more detail.

Legal Authority: N/A

Financial Details: N/A

Town Administrator Comment: N/A

Suggested Action/Recommendation:

Suggested Motion:

Motion to authorize a deed waiver / abatements for the following properties as “in its judgement acceptance and the ownership of the real estate would subject the municipality to undesirable obligation or liability risks” (per RSA 80:76: II-a):



Town Hall
18 Depot Hill Road
Henniker, NH 03242

Tel: (603) 428-3221
Fax: (603) 428-4366

Incorporated November 10, 1768
"Only Henniker on Earth"

TOWN OF HENNIKER, NEW HAMPSHIRE

STAFF REPORT

DATE: November 20, 2020
TITLE: Planning Consultant Contract
INITIATED BY: Joseph Devine, Town Administrator
PREPARED BY: Joseph Devine, Town Administrator
PRESENTED BY: Joseph Devine, Town Administrator

AGENDA DESCRIPTION:

Fougere Planning Consultant has submitted an updated contract agreement. Currently they provide planning services for the Planning Board, Zoning Board of Adjustments, Economic Development, Historic District Commission, and Conversation Commission. This new contract does have an increase in his hourly rate, but Mark has never requested an increase in his rate since he started working with the Town of Henniker. The new rates are \$85 an hour and \$95 an hour for review of development plans on behalf of the applicant.

Legal Authority: N/A

Financial Details: \$85 - \$95 an hour depending on what type of work is being completed.

Town Administrator Comment: Our planning consultant has always worked within our budget and doesn't bill us for all calls and emails he receives. I feel this increase is justified and the Town should approve this.

Suggested Action/Recommendation:

Suggested Motion:

Motion to authorize the Town Administrator to sign the 2021 Planning Consultant Contract.

Contract Agreement - Town of Henniker and Planning Consultant

This agreement represents the Contract to be signed by the Town of Henniker Selectmen and Planning Consultant Mark J. Fougere (Fougere Planning and Development, Inc.) The purpose of this agreement is to clarify the cost and scope of services to be provided to the Town between the dates of December 31, 2020 and December 31, 2021.

General Description: The planning consultant provides assistance as directed and prioritized by the Board of Selectmen, subject to consultation with the Planning Board and the Zoning Board of Adjustment in accordance with the job description. (Appendix 1)

Administration: The planning consultant will report directly to the Town Administrator.

Specific Provisions: The planning consultant conducts regular weekly office hours depending upon the needs of the land use boards. The specific office hours and the length of time services are to be provided will be determined by mutual agreement. In addition, the planning consultant will attend the regular meetings and work sessions of the Planning Board and the Zoning Board of Adjustment and other meetings as deemed necessary by the Chair of each respective board and will attend meetings of other boards as necessary, subject to the direction of the Board of Selectmen. The planning consultant will also provide support to the Historic District Commission and Conservation Commission. When the planning consultant's personal vacation time and sick time occur on the dates of weekly office hours or meetings, the planning consultant will undertake efforts to ensure that the process continues to run smoothly during an absence. If, while acting in good faith for the Town of Henniker as the Town's Planning Consultant, a legal challenge or lawsuit is brought forth by an applicant against the Town in which Fougere Planning and Development, Inc. and/or Mark J. Fougere is named, the Town shall indemnify and hold harmless the said consultant in said legal matter.

Compensation: The cost for the above-mentioned services should not exceed the budget allocated for the length of this contract. The rate of \$85.00 per hour is the agreed rate for the period of this agreement. The number of hours spent by the planning consultant in any given month shall not exceed the budget appropriation, unless authorized by the Town Administrator.

The above-mentioned dollar amount and hour limitation does not include review of development plans on behalf of the applicant, which shall be charged at a rate of \$95.00 per hour for the period of this agreement. This fee is paid from an escrow account paid by the applicant in advance of the consultation for Planning Board services only.

The Town Administrator agrees to pay the planning consultant upon presentation of bi-monthly invoices. The planning consultant must carry professional liability insurance and is responsible for the cost.

This Contract may be terminated upon 30 days written notice by either party.

Kris Blomback, Selectman, Chair

date

Mark J. Fougere October 29, 2020

Mark J. Fougere, AICP

date

Appendix 1**Description of Services**

- Holding office hours in the Town Office and attendance at appropriate land use committee, board or commission meetings as mutually identified. (i.e. other special occasions such as budget and selectmen's and special public hearings as deemed necessary); Office space will be provided in the general meeting room at the Town Hall. Additional office space is available when necessary, in the private selectmen's office. This desk is located behind the land use coordinator.
- Preparation of staff reviews of subdivision, site plan, lot line adjustment, and voluntary merger applications to ensure comprehensiveness, and noting potential problem areas, missing components, and other required documentation;
- Preparation, review and report of all Zoning Board applications prior to their review before the Zoning Board;
- Coordination with and follow-up contact with applicants, surveyors, engineers and developers;
- Explanation of Planning Board regulations, rules, procedures and decisions to the public, applicants/agents and abutters;
- Explanation of the Zoning Ordinance and the procedures on applying to the Zoning Board to the public, applicants/agents, and abutters;
- Preparation of agendas and coordination of Planning Board and Zoning Board activities;
- Act as delegate of the Planning Board, Zoning Board and all Historic District Commission, Economic Development Committee and Conservation Commission to assist with administrative duties as needed;
- Undertaking any necessary research and writing on projects or procedures;
- Assist the Planning Board in updating the Site Plan Review and Subdivision Regulations, Rules and Procedures application forms and fee schedules;
- Assistance with Zoning Ordinance updates as requested by the Planning Board; and Zoning Board.
- Undertake other related assignments as deemed appropriate by the Land Use Boards, Board of Selectmen and Town Administrator.
- All invoices will be itemized with time kept by project/task.



Town Hall
18 Depot Hill Road
Henniker, NH 03242

Tel: (603) 428-3221
Fax: (603) 428-4366

Incorporated November 10, 1768
"Only Henniker on Earth"

TOWN OF HENNIKER, NEW HAMPSHIRE

STAFF REPORT

DATE: November 20, 2020
TITLE: Police Cruiser
INITIATED BY: Chief Matt French, Henniker Police
PREPARED BY: Joseph Devine, Town Administrator
PRESENTED BY: Joseph Devine, Town Administrator

AGENDA DESCRIPTION:

The Henniker Police Department is looking to use excess funds to purchase another 2021 cruiser. The cost of the cruiser from Grappone is \$33,495 and this is from the state bid prices. The cost to set up the cruiser \$16,159.20. We are looking to transfer funds from the wage line to the automobile line to pay for this purchase. With purchasing this vehicle, we will be removing the vehicle included in the 2021 budget.

Legal Authority: N/A

Financial Details: \$49,654.20 for complete set up of cruiser.

Town Administrator Comment: This is a good way to help our 2021 budget. I feel the Board should move forward with it.

Suggested Action/Recommendation:

Suggested Motion:

Motion to authorize the Town Administrator to move forward with purchased a new 2021 Police Cruiser and remove it from the 2021 Operating Budget.

Prepared for: Matthew French

Henniker Police Department

Prepared by: Jeff Harsin

11/20/2020

Grappone Ford | 530 Route 3A Bow New Hampshire | 033043104



2021 Police Interceptor Utility AWD Base (K8A)

Price Level: 120

Matthew French, Henniker Police Department

340 Western Ave.

Henniker, NH 0

Office: 603-428-3213

Email: mfrench@hennikerpd.com

Re: Vehicle Proposal 11/20/2020

Hi Chief French,

Quote for 2021 Ford Explorer Interceptor. I used the same specs as the new cruiser you have on order now. I have attached a vehicle profile for you to review, let me know if you have any questions. Thank you.

Quote Price: \$33,495

Sincerely

Jeff Harsin

Fleet Mgr

603-226-8010

jharsin@grappone.com

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.



Prepared by: Jeff Harsin

11/20/2020

Grappone Ford | 530 Route 3A Bow New Hampshire | 033043104

2021 Police Interceptor Utility AWD Base (K8A)

Price Level: 120

As Configured Vehicle

Code	Description	MSRP
Base Vehicle		
K8A	Base Vehicle Price (K8A)	\$40,630.00
Packages		
500A	Order Code 500A <i>Includes:</i> - 3.73 Axle Ratio - GVWR: 6,840 lbs (3,103 kgs) - Tires: 255/60R18 AS BSW - Wheels: 18" x 8" 5-Spoke Painted Black Steel - Includes polished stainless steel hub cover and center caps. - Unique HD Cloth Front Bucket Seats w/Vinyl Rear - Includes reduced bolsters, driver 6-way power track (fore/aft, up/down, tilt with manual recline, 2-way manual lumbar), passenger 2-way manual track (fore/aft, with manual recline) and built-in steel intrusion plates in both driver/passenger seatbacks. - Radio: AM/FM/MP3 Capable - Includes clock, 4-speakers, Bluetooth interface with hands-free voice command support (compatible with most Bluetooth connected mobile devices), 1 USB port and 4.2" color LCD screen center stack smart display.	N/C
Powertrain		
99B	Engine: 3.3L V6 Direct-Injection (FFV) <i>(136-MPH top speed). Note: Deletes regenerative braking and lithium-ion battery pack; adds 250-Amp alternator, replaces H7 AGM battery (800 CCA/80-amp) with H7 SLI battery (730 CCA/80-amp) and replaces 19-gallon tank with 21.4-gallon.</i>	-\$3,530.00
44U	Transmission: 10-Speed Automatic (44U)	N/C
STDAX	3.73 Axle Ratio	Included
STDGV	GVWR: 6,840 lbs (3,103 kgs)	Included
Wheels & Tires		
STDTR	Tires: 255/60R18 AS BSW	Included
STDWL	Wheels: 18" x 8" 5-Spoke Painted Black Steel <i>Includes polished stainless steel hub cover and center caps.</i>	Included
Seats & Seat Trim		
9	Unique HD Cloth Front Bucket Seats w/Vinyl Rear <i>Includes reduced bolsters, driver 6-way power track (fore/aft, up/down, tilt with manual recline, 2-way manual lumbar), passenger 2-way manual track (fore/aft, with manual recline) and built-in steel intrusion plates in both driver/passenger seatbacks.</i>	Included

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.



Prepared by: Jeff Harsin

11/20/2020

Grappone Ford | 530 Route 3A Bow New Hampshire | 033043104

2021 Police Interceptor Utility AWD Base (K8A)

Price Level: 120

As Configured Vehicle (cont'd)

Code	Description	MSRP
Other Options		
PAINT	Monotone Paint Application	STD
119WB	119" Wheelbase	STD
STDRD	Radio: AM/FM/MP3 Capable <i>Includes clock, 4-speakers, Bluetooth interface with hands-free voice command support (compatible with most Bluetooth connected mobile devices), 1 USB port and 4.2" color LCD screen center stack smart display.</i>	Included
43D	Dark Car Feature <i>Courtesy lamps disabled when any door is opened.</i>	\$25.00
17T	Switchable Red/White Lighting in Cargo Area <i>Deletes 3rd row overhead map light.</i>	\$50.00
51R	Driver Only LED Spot Lamp (Unity)	\$395.00
68G	Rear-Door Controls Inoperable <i>Locks, handles and windows. Note: Can manually remove window or door disable plate with special tool. Note: Locks/windows operable from driver's door switches.</i>	\$75.00
59B	Keyed Alike - 1284x	\$50.00
85R	Rear Console Plate <i>Contours through 2nd row; channel for wiring.</i>	\$45.00
549	Heated Sideview Mirrors	\$60.00
76R	Reverse Sensing System	\$275.00
60R	Noise Suppression Bonds (Ground Straps)	\$100.00
Emissions		
425	50 State Emission System Flexible Fuel Vehicle (FFV) system is standard equipment for vehicles equipped with the 3.3L V6 Direct-Injection engine.	STD
Interior Colors		
96_01	Charcoal Black	N/C
Primary Colors		

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.



Prepared by: Jeff Harsin

11/20/2020

Grappone Ford | 530 Route 3A Bow New Hampshire | 033043104

2021 Police Interceptor Utility AWD Base (K8A)

Price Level: 120

As Configured Vehicle (cont'd)

Code	Description	MSRP
JS_01	Iconic Silver Metallic	N/C
SUBTOTAL		\$38,175.00
Destination Charge		\$1,245.00
TOTAL		\$39,420.00

Quote Price \$ 33,495

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.



Ossipee Mountain Electronics, Inc.

Quote **QTE012090**
Date **10/15/2019**
Page **1 of 2**

Bill To
Henniker Police Dept 340 Western Avenue Henniker, NH 03242

Ship To
Henniker Police Department 340 Western Avenue Henniker, NH 03242

Customer No.	Salesperson	Shipping Method	Payment Terms
HEN560	Brian Vastine	Northfield Install	Net 30

Item	Quantity	Item Number	Description	Unit Price	Ext Price
1	1.00	IB2EEEE	Lightbar, 54", Liberty II, BLU/WHT Corners	4,290.30	4,290.30
2	4.00	IBDLE	LED DUO Linear Assy, Flasher (1) Long B/W	0.00	0.00
3	2.00	IBDSE	LED DUO Linear Assy, Flasher (1) Short B/W	0.00	0.00
4	6.00	IBDLM	LED DUO Linear Assy, Flasher (1) Long B/A	0.00	0.00
5	2.00	IBDSM	LED DUO Linear Assy, Flasher (1) Short B/A	0.00	0.00
6	1.00	ITL3	Takedown Lights, 3 SuperLED Long, Pair	0.00	0.00
7	1.00	IA3	LED Super LED Alley Lights, Pair	0.00	0.00
8	1.00	MKEZ105	Hook Kit, 20 PI-Utility, 54"-56"	0.00	0.00
9	4.00	VTX609B	LED, VERTEX Lighthouse, Mtg. 1" Hole, BLUE	79.10	316.40
10	2.00	VTX609R	LED, VERTEX Lighthouse, Mtg 1" Hole, RED	79.10	158.20
11	2.00	I2E	LED, ION DUO, Univ Mnt, Blk Hsing, BLUE/WHT	114.10	228.20
12	2.00	LINSV2B	V-Ser LED, Combo Warn/Puddle, Under Srvc Mnt, BLU	171.50	343.00
13	1.00	LSVBKT50	Mount, Under Mirror, LINSV2, 2020 PIU, Pair	18.20	18.20
14	2.00	IONBB	ION Super LED, BLUE/BLUE Black Housing	98.00	196.00
15	2.00	IONK1B	Mounting Bracket, Swivel, ION - BLACK	23.80	47.60
16	2.00	I3SMJC	ION Trio, LED, Surface Mnt, Red/Blue/White	135.10	270.20
17	1.00	IONBKT1	Bracket, License Plate, for 2 ION Series Lights	23.80	23.80
18	2.00	TLIB	ION, T-Series, Linear, Surface Mount, BLUE	94.50	189.00
19	2.00	60CREGCS	Light, Compartment, w/Switches, RED/WHITE	142.80	285.60
20	1.00	CCSRN5	Siren, Carbide, Amp Only w/CANport OBDII Interface	1,194.20	1,194.20
21	1.00	CC5K1	Install Kit, Carbide/Control, 16PIU/PIS/F150/CHGR	0.00	0.00
22	1.00	CANCTL7	SirenCntrlHead,Remote,4PosSld/21Bttns,Mic N/Cw/A	0.00	0.00
23	1.00	SA315P	Speaker, Siren, Whelen Nylon Composite, 123dB	229.60	229.60
24	1.00	SAK1	Bracket, Siren Speaker, Universal SA315P	28.70	28.70
25	1.00	NX5700HBF	Mobile, P25 VHF, 110Watt, 136-174MHz, RF Deck Or	1,442.00	1,442.00
26	1.00	6AFMIG	Control Head Kit, Full Ftr, Single Dck/Hd, Remote	680.40	680.40
27	1.00	L-5029	Package Single Deck, Single Head, Remote	52.50	52.50
28	1.00	PROGRAMMING	Programming - (1) NX-5700H mobile	95.00	95.00
29	1.00	QK0635ITU20	Prisoner SeatRepl,w/12VS,MeshCag,CtrOutBlt,20+PIU	1,111.80	1,111.80
30	1.00	PK0355ITU20TM	Partition,PolyCoat,w/HorizSlid,RecPnl,TM,20+PIU	747.15	747.15
31	1.00	WK0514ITU20	Window Bars, Steel, Vertical, 20+ PIU	188.30	188.30
32	1.00	BK0534ITU20	Push Bumper,PB400 2020+ Ford PIU,Aluminum	279.30	279.30
33	1.00	SC-920-5-XLH	Gun Rack, Univ Rail Mtg, SC-6 XL, Hinge, HC Key	234.75	234.75

Quoted By: _____ Accepted By: _____ Date: _____

*** Continued ***

15,859.20
0.00
300.00
16,159.20



Ossipee Mountain Electronics, Inc.

Quote

QTE012090

Date

10/15/2019

Page

2 of 2

Bill To

Henniker Police Dept
340 Western Avenue
Henniker, NH 03242

Ship To

Henniker Police Department
340 Western Avenue
Henniker, NH 03242

Customer No.

Salesperson

Shipping Method

Payment Terms

HEN560

Brian Vastine

Northfield Install

Net 30

Item	Quantity	Item Number	Description	Unit Price	Ext Price
34	1.00	C-VS-1400-INUT-1	Console, Angled Low Profile, 14" 20+ Ford PIU C-EB30-KCH-1P KCH-20R C-EB40-CCS-1P CANCTL7	261.75	261.75
35	1.00	C-CB-2	Combination Box w/Hinged Armrest	160.90	160.90
36	1.00	C-CUP2-I-A15	Cup Holder, Dual, Internal, 5.5" Angled 15 Degrees	38.65	38.65
37	1.00	MMSU-1	Clip, Magnetic Mic Hangup System, Single	34.95	34.95
38	1.00	T52217-BK	Seat Cover, Tiger Tough, Ford 20+ PIU Drivers, BLACK	182.00	182.00
39	1.00	BB132R	Antenna, HD 132-512MHz, 1/4Wave, Black, Flex Spr	56.05	56.05
40	1.00	MB8	3/4" Antenna Mount, RG58 Cable, No Conn	15.30	15.30
41	1.00	CPL259-01	Crimp On PL259 RG58 (RFU-505)75476	5.25	5.25
42	1.00	EM-M20007	Antenna, LTE PolyPro, Multi Band, 698-960/1710-251	48.60	48.60
43	1.00	RFE6050-C	FME Female Crimp Conn RG58	5.10	5.10
44	1.00	R1	Solenoid, 12V, 65 A Continuous, S.P.S.T (24059-BP)	63.20	63.20
45	1.00	C-PS-1	Switch Plate, 1.5" w/2 Horizontal Switch Cutouts	18.40	18.40
46	1.00	C-SW-1	Switch, SPST, Black Paddle, w/Red Pilot Lt.	18.40	18.40
47	1.00	C-SW-B	Switch, Blank Cover	5.45	5.45
48	1.00	MISC-	Wire, wire ties, fuses, fuse holders, loom, etc.	195.00	195.00
49	1.00	LABOR	LABOR Install new and existing equipment into a new 2020 Ford PI Utility.	2,100.00	2,100.00
Quoted By: _____ Accepted By: _____ Date: _____				Subtotal	15,859.20
PRICE QUOTE GOOD FOR 30 DAYS DELIVERY: 30 DAYS ARO TERMS: NET 30 DAYS FOB				Additional Discount	0.00
				Freight	300.00
				Total	16,159.20



Town Hall
18 Depot Hill Road
Henniker, NH 03242

Tel: (603) 428-3221
Fax: (603) 428-4366

Incorporated November 10, 1768
“Only Henniker on Earth”

TOWN OF HENNIKER, NEW HAMPSHIRE

STAFF REPORT

DATE: November 23, 2020
TITLE: Wastewater Warrant Bond
INITIATED BY: Ken Levesque, Wastewater Superintendent
PREPARED BY: Joseph Devine, Town Administrator
PRESENTED BY: Underwood Engineers

AGENDA DESCRIPTION:

In 2019 the Town of Henniker engaged Underwood Engineers to develop an asset management program for its sanitary sewer collection and treatment plant. The original plan was to include the first round of recommendation improvements on the 2020 Warrant. Due to Covid-19 we did not proceed with these improvements. We are looking to move forward with the approximately \$3.2 million in improvements and have it placed on the 2021 warrant.

Underwood is coming to discuss the improvements again with the Board to make sure there are no questions.

Legal Authority: N/A

Financial Details: N/A

Town Administrator Comment: N/A

Suggested Action/Recommendation:

Suggested Motion:

No formal action required. The project is presented to inform the Select Board and the public and accommodate questions and concerns.

Wastewater System Asset Management Program Henniker, New Hampshire

September 20, 2019



Table of Contents

1. Introduction	3
2. Asset Inventory and Condition Assessment	4
3. Level of Service	8
3.1. General Operations	8
3.2. Inspection and Routine Maintenance Goals	8
3.3. Data Collection and Follow-up	8
3.4. Capital Planning and Funding	8
4. Critical Assets and Priority Projects	9
5. Minimum Life Cycle Cost (Practices)	11
6. Long-Term Funding Plan (Budget)	12
7. Implementation and Communication	17
8. Conclusions and Recommendations	20

Tables

Table 1. Summary of Wastewater System Replacement Cost	4
Table 2. Sanitary Sewer Pipe by Type and Material	6
Table 3. Gravity Main Inspection Grading System	6
Table 4. Significant Defects Found Within the Last Three Years of Inspections	6
Table 5. Overall Performance Score	9
Table 6. Impact of Malfunction	10
Table 7. Typical Gravity Main Repair Costs	11
Table 8. Estimated Replacement Cost – Next Ten Years	12
Table 9. Estimated Replacement Cost – Next One Hundred Years	12
Table 10. Estimated Replacement Costs by Criticality – Next Ten Years	14
Table 11. Estimated Replacement Costs by Risk Score	14



Figures

Figure 1. Summary of Wastewater System Replacement Cost	5
Figure 2. Criticality Matrix	10
Figure 4. Replacement Costs – Next 100 Years	13
Figure 5. Planning and Budgeting Flow Chart	17
Figure 6. Data Processing Flow Chart	18
Figure 7. Communication Flow Chart	19

Appendices

A. Data Collection Forms and Reports

B. Level of Service Statement (LOS)

C. Attribute Tables and Summaries

- C-1. Vertical Asset Data Table (WWTF and Pumping Stations)
- C-2. Horizontal Asset Summary Tables
- C-3. Estimated System Replacement Cost
- C-4. Ten-Year Summary Tables
- C-5. One Hundred-Year Summary Tables
- C-6. Inspection Results Summary

D. Instruction Sheets

E. Full-size Maps

- E-1. Sanitary Sewer Map Overview
- E-2. Sanitary Sewer Map by Pipe Diameter
- E-3. Sanitary Sewer Map by Pipe Material
- E-4. Sanitary Sewer Map by Age
- E-5. Sanitary Sewer Map by Overall Condition
- E-6. Sanitary Sewer Map by Impact of Malfunction



1. Introduction

The Town of Henniker engaged Underwood Engineers to develop an asset management program (AMP) for its sanitary sewer collection and treatment system. The project has been funded by a \$30,000 CWSRF loan, including \$30,000 in principal forgiveness upon completion.

The framework of this AMP includes the following core components.

- Asset Inventory and Condition Assessment
 - What sewer assets is the Town responsible for maintaining?
 - Which are able to serve their purpose? Which are not?
 - What is their condition?
- Level of Service (LOS)
 - What are the Town's goals in operating and maintaining the system?
 - Goals should be specific, measurable, attainable, realistic, timely (SMART)
- Criticality
 - Prioritize assets by their overall condition score versus their impact of malfunction.
- Minimum Life Cycle Cost (Practices)
 - Estimate costs needed to properly inspect and repair assets in order to maintain the desired LOS.
- Long-Term Funding Strategy (Budget)
 - Schedule estimated replacement/refurbishment costs out over the life of the assets.
- Implementation and Communication Plan
 - Data collection
 - Planning tools
 - Management reporting
- Recommendations and next Steps



2. Asset Inventory and Condition Assessment

The Town's sewer system, including the two (2) pumping stations and the wastewater treatment facility (WWTF) serves approximately 300 customers. Most of the system was built in the mid-1970's. However, there have been collection system extensions built to serve new development and upgrades to the pumping stations and wastewater treatment facility. A list of historical highlights is shown below.

- 1975 – Wastewater Treatment Facility was constructed, as well as the two pumping stations (Ramsdell Road Pumping Station and West Henniker Pumping Station), and much of the gravity collection system.
- 1988-1990 – Septage receiving and sludge handling upgrades at WWTF.
- 1994 – A building was constructed over the West Henniker Pumping Station for enhanced accessibility and operator safety.
- 2006 – Improvements to the WWTF aeration system, including new blowers and a new building; and a new distribution box for the settling tanks.
- 2014 – A new WWTF UV disinfection unit, and other improvements to the effluent handling system.
- 2017 – Major repairs to Ramsdell Road Pumping Station damaged by flood.

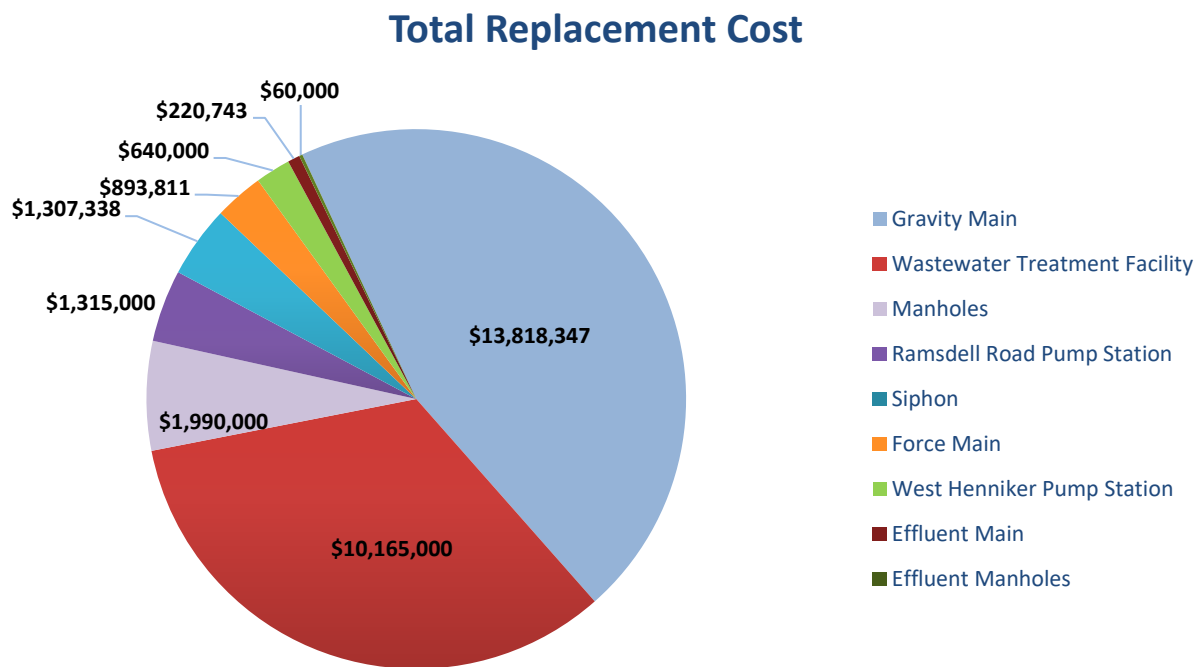
The replacement cost of the Town's combined wastewater assets is over \$30 million. That investment is summarized below.

Table 1. Summary of Wastewater System Replacement Cost

Asset Category	Estimated Replacement Cost
Gravity Main	\$13,818,347
Wastewater Treatment Facility	\$10,165,000
Manholes	\$1,990,000
Ramsdell Road Pump Station	\$1,315,000
Siphon	\$1,307,338
Force Main	\$893,811
West Henniker Pump Station	\$640,000
Effluent Main	\$220,743
Effluent Manholes	\$60,000
Grand Total	\$30,410,239



Figure 1. Summary of Wastewater System Replacement Cost



The Town conducts closed-circuit televised inspection (CCTV) of approximately one-third of its gravity mains each year. Therefore, there is ample and recent information regarding the condition of the collection system. The three-year inspection schedule allows for scheduling of repairs and maintenance of damaged or trouble-prone areas.

The Town has a paper map of the sewer collection area, which was prepared some time ago. This map, along with available record drawings served as the basis of a new GIS-based collection system map. The service area can be divided into two collection basins as shown on the map provided in Appendix E, Basin 1 and Basin 2. Basin 1, which includes the Ramsdell Road Pumping Station, collects wastewater from the entire service area, including that which is transmitted to the interceptor along Western Avenue via a force main from the West Henniker Pumping Station. It also includes an area south of the Contoocook River where wastewater is routed to the pumping station via two siphons. Basin 2 is served by the West Henniker Pumping Station, which accepts flow from an area starting just west of Juniper Ridge Road and ending Old Hillsboro Road.

The Town owns 199 sanitary sewer manholes including six (6) effluent manholes and one (1) siphon inlet chamber. Town-owned sewer piping is summarized in **Table 2**.

Table 2. Sanitary Sewer Pipe by Type and Material

Material	Gravity Main	Force Main	Siphon	Grand Total
AC	36,497			36,497
CI	10	2,750	872	3,632
DI	407			407
PVC	1,618			1,618
VC	310			310
Unknown	638			638
Grand Total	39,480	2,750	872	43,102

As mentioned above, the Town's entire gravity system, with the exception of the siphons, has been inspected within the past three years (2016-2018). The system is in good condition overall. However, some repairs are needed. The inspections were performed by various contractors, who video recorded the inspections and provided detailed reports including database tables. Fortunately, they all use a similar grading system. A general description of the grading system is provided in **Table 3** below.

Table 3. Gravity Main Inspection Grading System

Defect Grade	General Description
5 – Severe; repair within one year	Severe structural defects (hole or void), blockage > 30%, infiltration gusher
4 – Significant; attention needed within two years	Multiple fractures, blockage between 20%-30%, infiltration runner
3 – Fair; moderate; monitor and repair when needed	Multiple cracks, blockages <20%, infiltration weeper or signs of previous leakage
2 - Good; no deterioration observed	Ductile iron or asbestos cement pipe in good condition
1 - Excellent; minor defects	PVC pipe in good condition

Defects Grade 3 or greater observed during the last three years of inspections are listed in **Table 4** below. A complete list of defects is included in **Appendix C**, and a map of defects is provided in **Appendix E**.

Table 4. Significant Defects Found Within the Last Three Years of Inspections

Asset ID	Defect Description
Grade 5 – Severe; repair within one year	
106-105	Hole, at 12 o'clock, within 8 inches of joint
135-Siphon Inlet Chamber	Infiltration Gusher Joint
46-44	Infiltration Gusher, at 6 o'clock, within 8 inches of joint
58-57	Broken Pipe Void Visible
59-58	Hole Soil Visible
M5-M4	Broken Pipe Void Visible



Asset ID	Defect Description
Grade 4 -Significant; attention needed within two years	
106-105	Broken, at 03 o'clock, within 8 inches of joint
18-17	Infiltration Runner, at 05 o'clock, within 8 inches of joint
35-34	Broken, at 11 o'clock, within 8 inches of joint
36-35	Broken, at 01 o'clock, within 8 inches of joint
47-46	Infiltration Runner, at 03 o'clock, within 8 inches of joint
48-47	Broken, at 02 o'clock, within 8 inches of joint
73A-73	Roots Ball Joint
85-84	Broken, at 07 o'clock, within 8 inches of joint
G2-G1	Fracture Multiple
Grade 3 -Fair, moderate; monitor and repair when needed	
112-111	Infiltration Dripper, at 12 o'clock, within 8 inches of joint
122-121	Tap Factory Made Defective
132-131	Roots Medium Joint
M4-M2	Fracture Longitudinal

Several refurbishments and upgrades have been completed at the wastewater treatment facility and pumping stations over the years. A walkthrough of these facilities indicated that most assets are in serviceable condition overall, despite being aged. One item of immediate concern is the sludge dewatering equipment. The belt filter press was bought used in 1988. While it is still operational, it has exceeded its estimated useful life, parts are no longer available, and it requires excessive staff time in order to keep it in service. The grit handling equipment is another item of concern. Key components of the grit handling system are original from 1975 and have exceeded their estimated useful life. A third item of concern is the lack of mechanical screening. Only a coarse manual bar rack currently exists, which is not adequate to properly protect downstream equipment.

The aeration basins, diffusers, and blowers were upgraded in 2006. While the facilities are relatively new, short-lived components such as the variable frequency drives (VFDs) for the blowers, are nearing the end of their estimated useful lives.

The settling tanks have not yet exceeded their useful life, and the drives have been replaced as needed. The sludge tanks are original and have not exceeded their estimated useful life. The diffusers have been replaced by Wastewater Department staff within the last five (5) years. The UV disinfection unit was replaced in 2014.

The plant standby generator was replaced in 2011 and the plant boiler was also replaced in 2011.

The Ramsdell Road Pumping Station was flooded in 2017 due to a broken water service. Repairs cost nearly \$270,000. Fortunately, the cost was covered by insurance. The three pumps, which transmit all wastewater collected within the service area to the wastewater treatment facility, were all rebuilt. New VFD's were provided. All electrical equipment and controls were replaced.

The West Henniker Pumping Station was originally built in 1975. In 1994 the exposed wet well and dry well structures were enclosed. The generator and transfer switch were replaced in 2012.



3. Level of Service

The Level of Service (LOS) provides specific goals for the operation, maintenance and performance of sewer and wastewater system assets. The first step in formulating the LOS was to review problems identified during the Asset Inventory and Condition Assessment process.

3.1. General Operations

Overall the operation of the wastewater treatment and collection system is organized and well-documented. The Town's three Wastewater Department employees include an experienced superintendent and two operators. Staffing appears to be adequate. Facilities are well-maintained.

3.2. Inspection and Routine Maintenance Goals

The Town has an established inspection and maintenance system which should continue to be implemented. Aside from daily tasks, operators have a list of monthly, seasonal, and annual tasks to be completed. As mentioned in **Section 2**, one-third of the collection system is video inspected each year.

As part of this asset management effort, the results of those inspections were mapped and exported into tabular format to assist the Town in planning and budgeting for necessary repairs going forward.

3.3. Data Collection and Follow-up

The Town currently has an effective paper-based data collection system. The forms currently used by the Town are provided in **Appendix A**. These can be adapted for later use in a computerized system as the Town expands its asset management program.

3.4. Capital Planning and Funding

The Town has been paying down long-term debt on improvements at the wastewater treatment facility, including the new UV disinfection system installed in 2014 and the upgrades to the aeration system completed in 2006. However, additional upgrades to the sludge handling system and grit handling equipment will be required in the near term as well.

A Level of Service Matrix is provided in **Appendix B**.



4. Critical Assets and Priority Projects

In order to allocate scarce financial and physical resources in the most efficient way, it is necessary to systematically prioritize projects. For the purposes of this AMP, assets will be ranked by their criticality. Criticality is defined as Overall Performance versus Impact of Malfunction.

Overall Performance is evaluated based on numerous factors including functionality, capacity, condition, or remaining useful life. In general, if information on the condition of the Town's wastewater assets was available, that was used to assign an Overall Performance score. Otherwise, the score was based on remaining useful life.

Table 5. Overall Performance Score

Overall Performance	
1. Very Low Risk	Asset is extremely reliable, condition of asset is excellent. Remaining useful life is greater than 50 years.
2. Low Risk	Failures unlikely, condition of asset is very good. Remaining useful life is between 30 and 50 years.
3. Moderate Risk	Failure of asset is possible, moderate defects present. Remaining useful life is between 10 and 30 years.
4. High Risk	Asset sometimes fails to meet performance requirements, significant defects noted. Remaining useful life is between 0 and 10 years.
5. Very High Risk	Asset is likely to fail or has failed to meet performance requirements, serious defects noted. Asset has exceeded its remaining useful life.

Impact of Malfunction was assigned with the following points in mind.

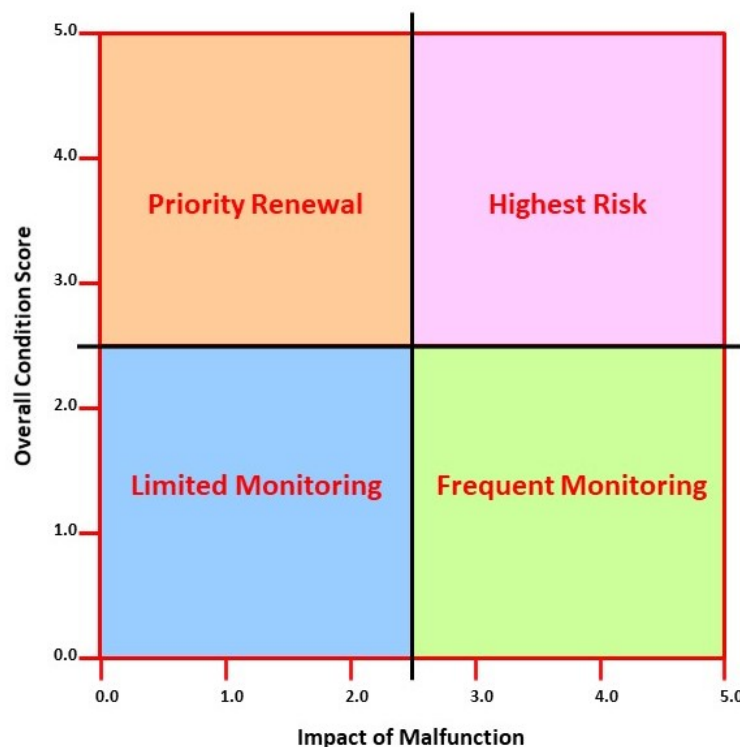
- The siphons and collection facilities within close proximity to the Contoocook River were considered to have a high Impact of Malfunction due to the potential effect on a surface water body.
- Facilities which serve a high number of customers were assigned a higher impact score. The 10-inch interceptor along Western Avenue was also considered to have a high impact because of the potential to affect a large number of customers, and because of its depth, emergency repairs could be difficult and expensive.
- Facilities lacking redundancy, such as the belt filter press, were assigned a higher Impact of Malfunction score.

Impact of Malfunction scoring is detailed in **Table 6** below.

Table 6. Impact of Malfunction

Impact of Malfunction	
1. Very Low Impact	Unlikely to affect a surface water or large number of customers.
2. Low Impact	Unlikely to affect a surface water, may impact a moderate number of customers.
3. Moderate Impact	Unlikely to affect a surface water. May impact a moderate number of customers or significant customers (school, hospital, business district).
4. High Impact	Likely to affect a surface water or a moderate to large number of customers.
5. Major Impact	Very likely to affect a surface water or a large number of customers.

The criticality of an asset can be thought of as a matrix as shown below. See **Figure 2** for a visual representation.

Figure 2. Criticality Matrix

Horizontal sanitary sewer collection system assets are mapped by overall performance (i.e. remaining useful life, condition), impact of malfunction and criticality in **Appendix E**. The same information for all vertical assets (pumping stations, wastewater treatment facility) are provided in **Appendix C**.

5. Minimum Life Cycle Cost (Practices)

The Town currently has a well-organized, paper-based maintenance and inspection program in place. Staff fills out daily check lists for the wastewater treatment facility and the two pumping stations. There is also an annual task schedule organized by month. See **Appendix A**.

The wastewater department is adequately staffed and has a sufficient operating budget. However, significant capital investments will need to be made in the near future. The sludge handling system and grit handling system will require the most immediate upgrades.

It should be noted that there are additional expenses associated with a failure of the sludge handling equipment. If the sludge handling equipment were to fail, it will take six months to one year to replace it. During that time, the Town will need to hire an outside contractor to process and dewater the sludge, which will cost an estimated \$600 per dry ton. The Town produced 210 dry tons in 2018. If that number is typical, the Town will pay between \$63,000 and \$126,000 for onsite sludge dewatering. This is above and beyond what the Town will have to pay to replace the belt filter press, which is estimated to cost approximately \$1,000,000.

The wastewater treatment facility is one of the largest users of energy in the Town; and aeration is typically the most energy-intensive process. The aeration system was upgraded in 2005, and the blowers were outfitted with variable frequency drives to maximize efficiency. The next system due for renewal is the sludge dewatering equipment. Sludge handling typically constitutes 10% of energy use at a wastewater treatment facility.

Recent inspections of the Town's gravity mains have found that although some maintenance and repairs are needed, the system is in good condition overall. While there are some significant defects, they have been caught in a timely manner and can be fixed cost-effectively. Typical repair costs are provided in the table below.

Table 7. Typical Gravity Main Repair Costs

Repair Description	Unit Cost
Root Removal	\$500/EA
Mainline Point Repair for Actively Leaking Pipe	\$2,000/EA
Mainline Point Repair for Other Mainline Defects	\$2,000/EA
CIPP Line Pipe from MH to MH	\$150/LF
Excavation Repair (min. 20 feet)	\$350/LF
Lateral/Break- In Rehab	\$2,500/EA

6. Long-Term Funding Plan (Budget)

Total wastewater system replacement costs have been scheduled out each year for the next ten years in **Table 8**. Because pipes and concrete structures are such long-lived assets, system-wide replacement costs have also been scheduled out each decade for the next one-hundred years in **Table 9** and **Figure 4**.

Cost estimates are in 2019 dollars and are based on full replacement cost, including engineering and design. Please note cost may be lower if refurbishment is feasible versus complete replacement. The largest imminent replacement cost is the belt filter press. Based on these order-of-magnitude estimates, the costs of asset renewals are expected to approach \$3.6 million over the next ten years.

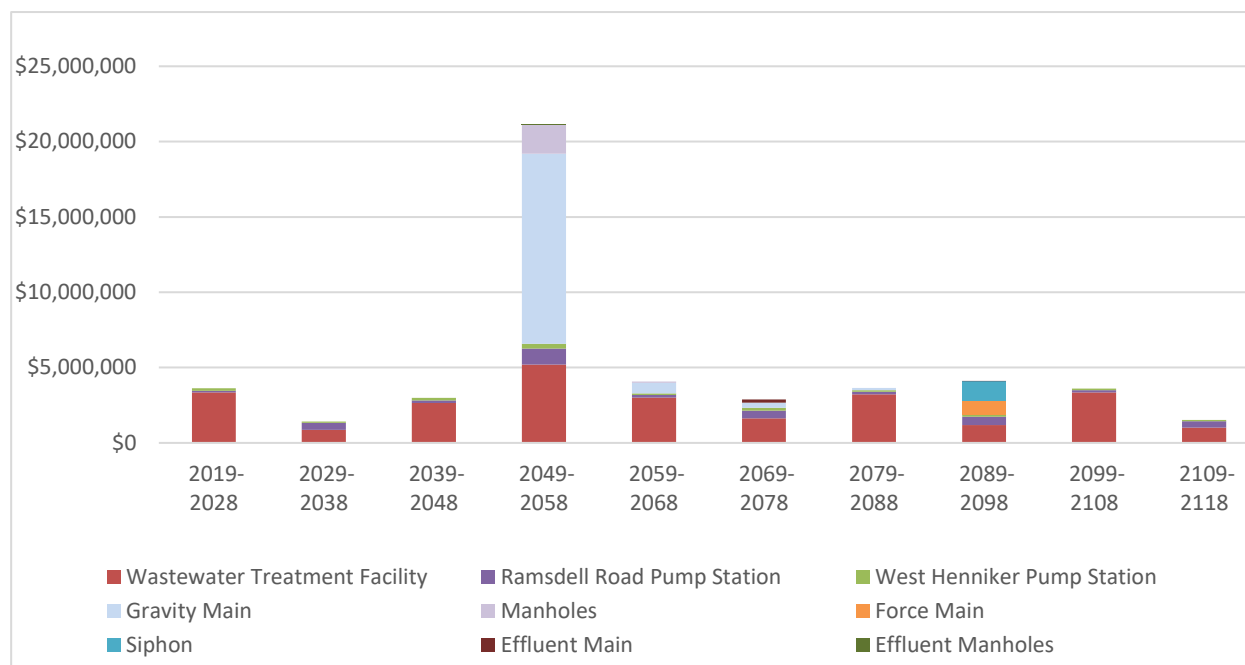
Table 8. Estimated Replacement Cost Next Ten Years

Year	Wastewater Treatment Facility	Ramsdell Road Pump Station	West Henniker Pump Station	Grand Total
2019	\$1,975,000	\$50,000	\$90,000	\$2,115,000
2020	\$-	\$-	\$-	\$-
2021	\$270,000	\$7,500	\$-	\$277,500
2022	\$200,000	\$-	\$-	\$200,000
2023	\$-	\$7,500	\$-	\$7,500
2024	\$195,000	\$-	\$25,000	\$220,000
2025	\$125,000	\$25,000	\$50,000	\$200,000
2026	\$445,000	\$7,500	\$-	\$452,500
2027	\$-	\$-	\$-	\$-
2028	\$145,000	\$7,500	\$-	\$152,500
2019-2028	\$3,355,000	\$105,000	\$165,000	\$3,625,000

Table 9. Estimated Replacement Cost Next One Hundred Years

Decade	Estimated Replacement Cost
2019-2028	\$3,625,000
2029-2038	\$1,425,000
2039-2048	\$2,985,000
2049-2058	\$21,171,742
2059-2068	\$4,073,647
2069-2078	\$2,883,724
2079-2088	\$3,642,579
2089-2098	\$4,103,547
2099-2108	\$3,600,000
2109-2118	\$1,530,000
2019-2118	\$49,040,239



Figure 3. Replacement Costs – Next 100 Years

Full replacement costs for existing assets is estimated to be approximately \$487,000 per year over the next 100 years. The largest chunk of that is nearly \$14 million for full replacement of the gravity mains. If the Town continues its program of ongoing inspections and repairs, it is unlikely that the gravity mains will require full replacement at the same time. Under these circumstances, the more likely scenario is that linings and repairs will be completed as needed, which will extend the useful life of the pipe. A structural CIPP liner is expected to extend pipe life by 20 to 50 years, and costs one-half to one-third the cost of a full replacement.

According to data from the Town, a typical monthly wastewater bill for a single-family home is approximately \$480 per year. The Town's median household income is \$69,609 per year, according to the 2017 American Community Survey available at the Census Bureau. This means that the affordability ratio is approximately 0.69%. The Town should consider the impact of its rates on its ability to obtain SRF loans and possible loan forgiveness.

Going forward, the Town will have to decide which projects to prioritize in order to schedule capital spending and ensure that financial resources are available without having to impose large rate increases.

Replacements were prioritized as discussed in **Section 4**. **Table 10** lists the asset renewals due in the next ten years by criticality. **Table 11** orders them by risk score. The WWTF belt filter press and the degritting classifier are the two highest priority items.

Table 10. Estimated Replacement Costs by Criticality – Next Ten Years

Year	Highest Risk	Priority Renewal	Frequent Monitoring	Limited Monitoring	Grand Total
2019	\$1,575,000	\$540,000	\$-	\$-	\$2,115,000
2020	\$-	\$-	\$-	\$-	\$-
2021	\$270,000	\$7,500	\$-	\$-	\$277,500
2022	\$200,000	\$-	\$-	\$-	\$200,000
2023	\$7,500	\$-	\$-	\$-	\$7,500
2024	\$30,000	\$190,000	\$-	\$-	\$220,000
2025	\$100,000	\$100,000	\$-	\$-	\$200,000
2026	\$265,000	\$187,500	\$-	\$-	\$452,500
2027	\$-	\$-	\$-	\$-	\$-
2028	\$27,500	\$125,000	\$-	\$-	\$152,500
2019-2028	\$2,475,000	\$1,150,000	\$-	\$-	\$3,625,000

Table 11. Estimated Replacement Costs by Risk Score

Risk Score/Asset Category/Subcomponent	2019-2028
25	
Wastewater Treatment Facility	
Belt Filter Press	\$1,000,000
20	
Wastewater Treatment Facility	
Degritting classifier	\$75,000
Ramsdell Road Pump Station	
Process valves	\$25,000
Make-up air unit - wetwell	\$25,000
16	
Wastewater Treatment Facility	
Aeration tank submersible mixer #2	\$15,000
Aeration tank submersible mixer #1	\$15,000
Ramsdell Road Pump Station	
Process piping	\$25,000
West Henniker Pump Station	
Pump #2	\$30,000
Pump #1	\$30,000
15	
Wastewater Treatment Facility	
HVAC unit and ducts	\$100,000
Pad mounted transformer	\$50,000
Corrugated Metal Building - HVAC	\$50,000
Yard piping - valves	\$50,000
Corrugated Metal Building - Controls	\$25,000



Risk Score/Asset Category/Subcomponent	2019-2028
Return activated sludge pump #2	\$20,000
Belt Filter Press feed pump	\$20,000
Grit pump #1	\$20,000
Grit pump #2	\$20,000
NaOH feed pump #1	\$5,000
West Henniker Pump Station	
Heater & Vents	\$30,000
12	
Wastewater Treatment Facility	
Secondary settling tanks - metal troughs and weirs	\$200,000
Secondary settling tank fiberglass cover #1	\$100,000
Secondary settling tank fiberglass cover #2	\$100,000
Probes/sensors/controls	\$50,000
Sludge blower unit #1	\$40,000
Sludge blower unit #2	\$40,000
Blower VFD #3	\$30,000
Blower VFD #2	\$30,000
Blower VFD #1	\$30,000
Blower Building - HVAC	\$25,000
Operations building piping/plumbing	\$25,000
Frac tank	\$20,000
Effluent flow metering system	\$20,000
Return activated sludge VFD #2	\$20,000
Return activated sludge VFD #1	\$20,000
NaOH feed pump #2	\$5,000
Ramsdell Road Pump Station	
Comminutor (Muffin Monster)	\$15,000
West Henniker Pump Station	
Process piping	\$50,000
Pump station - wood truss, asphalt shingles	\$25,000
10	
Wastewater Treatment Facility	
Operations building electrical	\$300,000
Site lighting	\$75,000
Graphics panel/PLC/alarms/controls	\$50,000
Secondary setting tanks - scum drives	\$50,000
Exhaust fan #4	\$7,500
Exhaust fan #3	\$7,500
Exhaust fan #5	\$7,500
Exhaust fan #2	\$7,500
Exhaust fan #6	\$7,500
Exhaust fan #1	\$7,500



Risk Score/Asset Category/Subcomponent	2019-2028
8	
Wastewater Treatment Facility	
Septage acceptance plant	\$150,000
Operations building process piping	\$100,000
Sludge conveyor to roll-off	\$75,000
Aeration blower #2	\$60,000
Aeration blower #3	\$60,000
Aeration blower #1	\$60,000
Corrugated Metal Building - Electrical	\$50,000
Septage receiving mixer #2	\$20,000
Septage receiving mixer #1	\$20,000
Ramsdell Road Pump Station	
Comminutor (Muffin Monster)	\$15,000
5	
Wastewater Treatment Facility	
Septage receiving plunger pump	\$20,000
Grand Total	\$3,625,000

In addition to routine inspections and repairs, the Town will need to begin planning for ongoing asset renewals. A review of the Town's annual reports over the past five (5) years indicates the ending fund balance for the Wastewater Department has been trending slightly upward. However, under the current rate structure, the total current capital need is only 13.7% funded. A rate analysis completed by the Town in April 2019 indicates fully funding capital needs would increase the base charge by \$20/per year; and would increase the revenue from overage charges by \$153,000. On a per gallon basis, this is an increase of two cents.

Capital needs will only increase in the coming years unless necessary replacements and refurbishments are completed in a timely manner. Assuming, no replacements or refurbishments occur in the next five (5) years, the total capital need will increase to \$4,335,000 in today's dollars.

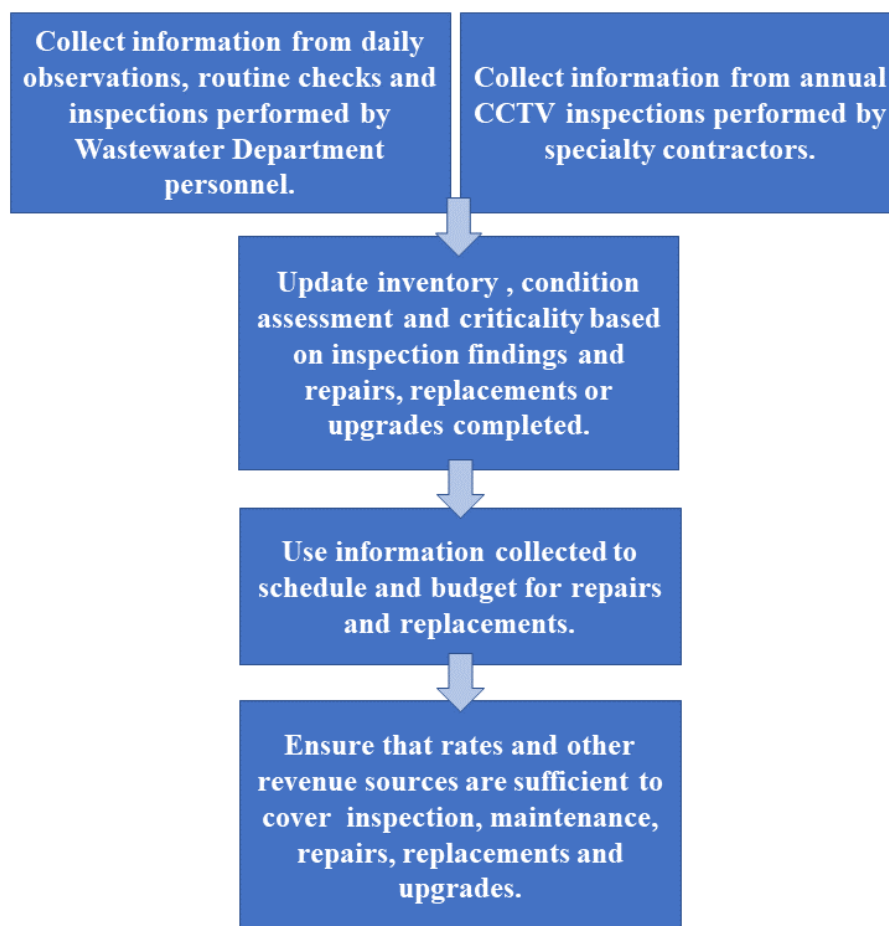


7. Implementation and Communication

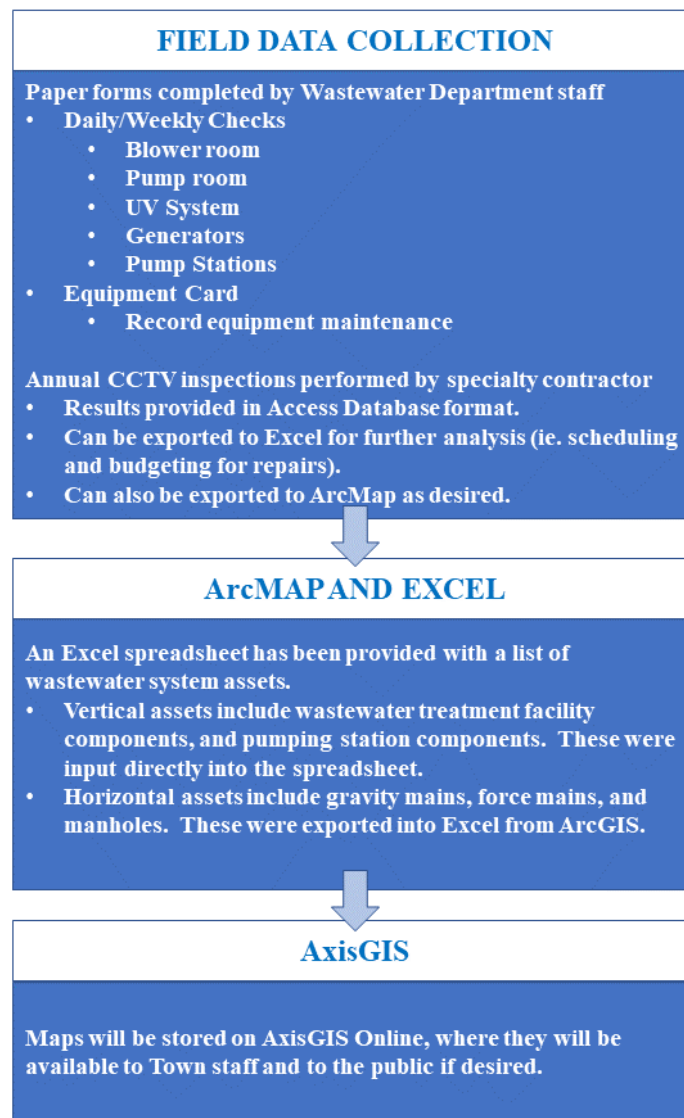
The Town already has a well-functioning paper-based data collection system for its wastewater treatment and collection system. As part of this current asset management effort, some of those existing forms have been converted to an electronic format. However, the Town does not currently have the infrastructure to deploy those forms. As the Town continues to build its asset management program, that infrastructure can be better developed.

The Town does have the ability to post its sanitary sewer system maps online. Those maps can be made viewable to staff and to the public. An information flow chart has been provided in **Figure 5**, which illustrates how the asset management effort can be incorporated into the budgeting and planning process.

Figure 4. Planning and Budgeting Flow Chart

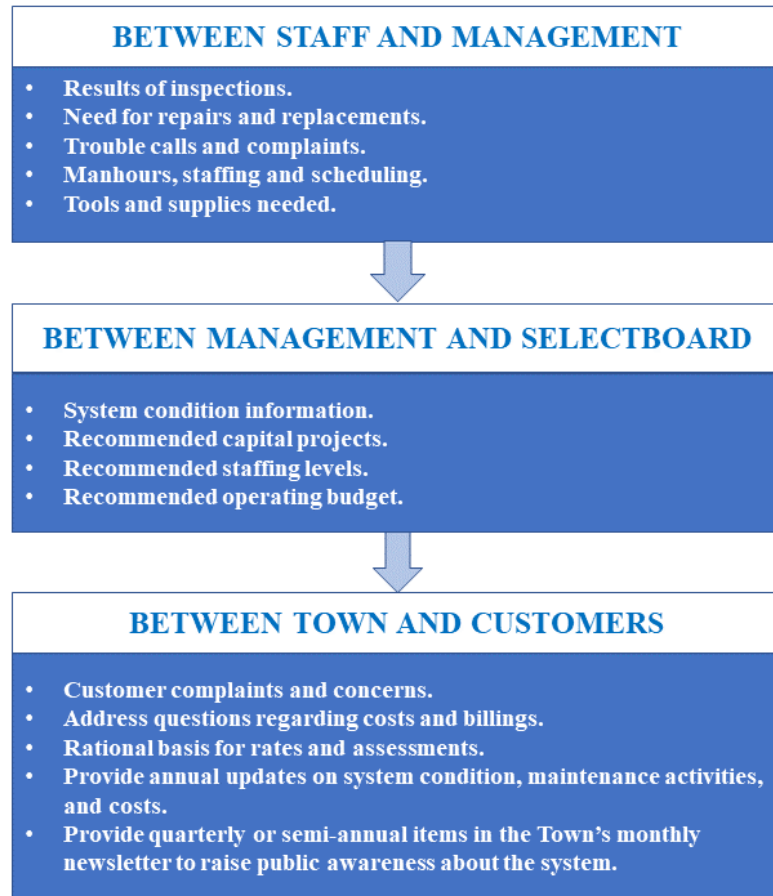


The information assembled can be used as the basis for a staffing plan, operating budget and capital budget. It can also be used to generate reports, which can be used to educate and inform the Select Board and the public. A data processing flow chart has been provided in **Figure 6**.

Figure 5. Data Processing Flow Chart

As information is being collected, it needs to be shared between Wastewater Department staff, Town management, the Select Board, and the public. Staff keeps tabs on the condition of the system. They know best what needs to be repaired or replaced, what capital projects are required, what services are needed, and what staffing levels are appropriate. The Town Administrator and Select Board are responsible to the public when it comes to providing oversight and securing the financial resources needed to maintain the system, which has an estimated replacement value of over \$30 million.

Billing time is typically the only time that customers are reminded of the valuable service they receive. The Wastewater Department contributes information for the annual report, but it might also be helpful to provide quarterly reminders about the sewer system in the Town's newsletters.

Figure 6. Communication Flow Chart

8. Conclusions and Recommendations

Horizontal Assets

Short-term repairs needed in the collection system are summarized in **Table 4**. Due to the young age of the collection system, there are no complete dig and replace pipeline projects anticipated for several decades.

Vertical Assets

Due to the shorter life span of vertical assets (WWTF and pump stations), there are immediate funding needs; approximately \$3.7M over the next 10 years. These are enumerated in **Table 10**.

The Town has a good paper-based data collection system in place. As part of this asset management effort, maps will be provided to the Town in GIS format. The maps can then be made available to Town staff to view on the Town's AxisGIS system. This will also allow staff to access information associated with each horizontal asset, such as installation date, material, diameter, etc.

Information on all horizontal and vertical assets has been combined into one Microsoft Excel-based spreadsheet for the purposes of financial planning and forecasting going forward. That spreadsheet has been provided to the Town and is available for reference and future editing.

In addition, the results of the CCTV inspections performed on the gravity mains over the past three years have been mapped and exported into GIS files and a spreadsheet usable by the Town. As replacements and repairs are completed, the installation date and/or remaining useful life in the inventory GIS file should be updated and exported to the financial planning spreadsheet.

As the Town expands its asset management program, it can continue to develop and refine its data collection, analysis and sharing processes. It is recommended that the Town build in-house GIS data processing capability. While the paper-based data collection system currently in use for the wastewater system is effective for the time being, the Town should incorporate electronic data collection forms and GIS capability into the system at some point in the future.

The tools provided as part of this current asset management effort can be used to do the following:

1. Refine and update criticality.
2. Refine and update replacement costs.
3. Refine and update Level of Service Matrix

Finally, financial planning is a key goal of Asset Management. Based on the analyses conducted during preparation of this Program. If the Town wishes to perform the majority of future replacement/refurbishment of the wastewater system without incurring long-term bonds/loans, annual contributions to Capital Reserves should be set at \$365,000 and adjusted over time based on inflation and the longevity of collection system refurbishment.



APPENDIX A

Data Collection Forms

HENNIKER, NH WWTF - BLOWER BUILDING DAILY CHECKLIST

DATE: _____ START _____ END _____

	SUN	MON	TUE	WED	TH	FRI	SAT
LEAD BLOWER NO. 1 / 2 / 3							
HAND							
OFF							
AUTO							
SPEED (Hz)							
MOTOR AMPS							
INLET FILTER READING							
DISCHARGE PRESSURE							
OIL LEVEL 1							
OIL LEVEL 2							
ELAPSED TIME METER							
LAG BLOWER NO. 1 / 2 / 3							
HAND							
OFF							
AUTO							
SPEED (Hz)							
MOTOR AMPS							
INLET FILTER READING							
DISCHARGE PRESSURE							
OIL LEVEL 1							
OIL LEVEL 2							
ELAPSED TIME METER							
DISSOLVED OXYGEN ANALYZER							
TANK 1 / 2 PROBE READING							
PREV. DAY AVG DO							
PREV. DAY MIN DO							
PREV. DAY MAX DO							
HVAC STATUS							
HEATING SYSTEM							
ON							
OFF							
VENTILATION SYSTEM							
ON							
OFF							
BLOWER BLDG TEMP							
OTHER							
TANK 1 / 2 SELECTOR MIXER							
ON							
OFF							
TIME OF DAY SHEET FILLED IN							

GENERAL COMMENTS:

Month _____

UV Disinfection

Date	Bank	Intensity	Lamp Hrs.	Remarks
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

Press Operations Log

Month		Polyblend		Feed Pump	Comments
Date	Hours	Speed	Stroke	Speed	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

[illegible]

Ramsdell Road Pump Station

Date	Pump #1	Pump #2	Pump #3	Seq.	Time	Month	Year
						H2O Meter	Remarks
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

West Henniker Pump Station

Month

Year

Date	Pump #1	Pump #2	Compressors #1 #2		Wet Well	Time	Remarks
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

[illegible]

SPARE PARTS

[illegible]

PREVENTIVE MAINTENANCE RECORD (SIDE 3)

[illegible]

REPAIR RECORD (SIDE 2)

DATE:	DESCRIPTION OF REPAIR:
-------	------------------------

PARTS REPAIRED OR REPLACED		COST	BY WHOM	MANHOURS	COST	REMARKS
TOTAL COST:		PARTS TOTAL	LABOR TOTAL			DOWNTIME:

DATE:	DESCRIPTION OF REPAIR:
-------	------------------------

PARTS REPAIRED OR REPLACED		COST	BY WHOM	MANHOURS	COST	REMARKS
TOTAL COST:		PARTS TOTAL		LABOR TOTAL		DOWNTIME:

DATE:	DESCRIPTION OF REPAIR:
-------	------------------------

PARTS REPAIRED OR REPLACED		COST	BY WHOM	MANHOURS	COST	REMARKS
TOTAL COST:		PARTS TOTAL	LABOR TOTAL			DOWNTIME:

DATE:	DESCRIPTION OF REPAIR:
-------	------------------------

PARTS REPAIRED OR REPLACED		COST	BY WHOM	MANHOURS	COST	REMARKS
TOTAL COST:	PARTS TOTAL		LABOR TOTAL			DOWNTIME:

APPENDIX B**Level of
Service Matrix**

APPENDIX B: LEVEL OF SERVICE MATRIX

Goal	Actions	Numerical Target and Timeframe
Collect comprehensive condition information on the horizontal sewer collection system assets (pipes and structures).	The Town has inspected one-third of its gravity mains each year for the last three years. That data has been organized and assembled into a usable format as part of the asset management effort.	Budgeting and scheduling of needed repairs identified in first round of inspections to be completed by December 2020.
Alternate inspections and repairs to optimize staff time and effort.	Since the Town inspects one-third of its system at a time, it is not necessary to conduct inspections every year. Non-urgent repairs can be scheduled for off-years.	Planning next round of inspections to be completed by December 2020.
Review inspection schedule based on findings from initial round of inspections.	Gravity mains which were found to have significant blockages due to roots or accumulated grease (ie. >20%) should be inspected on a more frequently (once per year). Others can remain on the Town's current schedule or be inspected less frequently.	Determine inspection schedule once per year.
Collect, review and summarize data regarding condition and performance of vertical assets (pumping station components, wastewater treatment facility components)	Record information from daily/weekly rounds. Review on a weekly basis to schedule repairs and servicing needs. Keep on file to support annual or as-needed funding and staffing requests.	Weekly.
Keep the Selectboard and Public informed about the needs of the wastewater treatment and collection system.	Combine information collected throughout the year into a management report.	Quarterly or as needed for Town Manager and Select Board. Annually or quarterly for the general public.
Use Asset Management Program as the basis for ongoing long-term financial planning.	Routinely re-evaluate the true cost of providing wastewater service, including comprehensive operating costs and funding capital needs.	Annually. The initial true cost of service is currently \$836,500 - \$570,500 for operating costs and \$365,000 for ongoing capital needs.
Transition to a computer-based asset management system.	Research the hiring of an employee with knowledge of GIS software. This would be helpful in ensuring that the asset management program is continually revised and updated. Such skills would also be useful in managing other Town-owned assets – such as roads and drainage facilities.	A starting level salary for a GIS Technician is typically around \$45,000.

Appendix C
Inventory and
Financial Planning
Spreadsheets

Year 1 = Cells outlined in red are spreadsheet formulas =

2019 Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE								
Asset Description	Basin/Category	Subcomponent/Asset ID	Estimated	Replacement	Useful Life	End Useful	Remaining Useful	
			Year Installed	Cost		Life	Life	Replacement Year
Wastewater Treatment Facility	Grit Handling/Headworks	Influent Channel - Concrete	1975	\$ 50,000	75	2050	31	2050
Wastewater Treatment Facility	Grit Handling/Headworks	Influent Sampler	2019	\$ 7,500	15	2034	15	2034
Wastewater Treatment Facility	Grit Handling/Headworks	Metals - stop gates/grating/rails/stairs	1999	\$ 25,000	40	2039	20	2039
Wastewater Treatment Facility	Grit Handling/Headworks	Degritting classifier	1975	\$ 75,000	20	1995	-24	2019
Wastewater Treatment Facility	Grit Handling/Headworks	Grit chamber - concrete	1975	\$ 50,000	75	2050	31	2050
Wastewater Treatment Facility	Grit Handling/Headworks	Grit chamber collector and drive unit	2017	\$ 75,000	20	2037	18	2037
Wastewater Treatment Facility	Grit Handling/Headworks	Grit pump #1	1975	\$ 20,000	20	1995	-24	2019
Wastewater Treatment Facility	Grit Handling/Headworks	Grit pump #2	1975	\$ 20,000	20	1995	-24	2019
Wastewater Treatment Facility	Grit Handling/Headworks	Standby grit channel & bypass - concrete	1975	\$ 50,000	75	2050	31	2050
Wastewater Treatment Facility	Grit Handling/Headworks	NaOH feed pump #1	2004	\$ 5,000	15	2019	0	2019
Wastewater Treatment Facility	Grit Handling/Headworks	NaOH feed pump #2	2009	\$ 5,000	15	2024	5	2024
Wastewater Treatment Facility	Aeration	Aeration Tank floor and perimeter walls - concrete	1975	\$ 2,000,000	75	2050	31	2050
Wastewater Treatment Facility	Aeration	Aeration Tank interior walls - concrete	2006	\$ 500,000	75	2081	62	2081
Wastewater Treatment Facility	Aeration	Metals - railings/grating	2006	\$ 50,000	40	2046	27	2046
Wastewater Treatment Facility	Aeration	Aeration tank submersible mixer #1	2006	\$ 15,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Aeration tank submersible mixer #2	2006	\$ 15,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Blower Building - concrete foundation	2006	\$ 50,000	100	2106	87	2106
Wastewater Treatment Facility	Aeration	Blower Building - concrete block walls	2006	\$ 50,000	100	2106	87	2106
Wastewater Treatment Facility	Aeration	Blower Building - wood truss/ashpalt shingle roof	2006	\$ 25,000	30	2036	17	2036
Wastewater Treatment Facility	Aeration	Blower Building - electrical	2006	\$ 50,000	40	2046	27	2046
Wastewater Treatment Facility	Aeration	Blower Building - HVAC	2006	\$ 25,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Blower Building - process piping	2006	\$ 25,000	50	2056	37	2056
Wastewater Treatment Facility	Aeration	Probes/sensors/controls	2006	\$ 50,000	15	2021	2	2021
Wastewater Treatment Facility	Aeration	Blower VFD #1	2006	\$ 30,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Blower VFD #2	2006	\$ 30,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Blower VFD #3	2006	\$ 30,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Aeration blower #1	2006	\$ 60,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Aeration blower #2	2006	\$ 60,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Aeration blower #3	2006	\$ 60,000	20	2026	7	2026
Wastewater Treatment Facility	Aeration	Hoist	2006	\$ 5,000	40	2046	27	2046
Wastewater Treatment Facility	Settling Tanks	Distribution box with gates	2006	\$ 50,000	75	2081	62	2081
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank collector arm #1	2013	\$ 50,000	30	2043	24	2043
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank collector arm #2	2013	\$ 50,000	30	2043	24	2043
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank drive unit #1	2013	\$ 50,000	20	2033	14	2033
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank drive unit #2	2013	\$ 50,000	20	2033	14	2033
Wastewater Treatment Facility	Settling Tanks	Secondary settling tanks - metal troughs and weirs	1991	\$ 200,000	30	2021	2	2021
Wastewater Treatment Facility	Settling Tanks	Secondary setting tanks - scum drives	1991	\$ 50,000	20	2011	-8	2019
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank fiberglass cover #1	1982	\$ 100,000	40	2022	3	2022
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank fiberglass cover #2	1982	\$ 100,000	40	2022	3	2022
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank #1 concrete	1975	\$ 500,000	75	2050	31	2050
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank #2 concrete	1975	\$ 500,000	75	2050	31	2050
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building	1988	\$ 200,000	60	2048	29	2048
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Electrical	1988	\$ 50,000	40	2028	9	2028
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - HVAC	1988	\$ 50,000	20	2008	-11	2019
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Controls	1988	\$ 25,000	15	2003	-16	2019
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Process Piping	1988	\$ 25,000	50	2038	19	2038
Wastewater Treatment Facility	Sludge Handling	Return activated sludge pump #1	2014	\$ 20,000	20	2034	15	2034
Wastewater Treatment Facility	Sludge Handling	Return activated sludge pump #2	1993	\$ 20,000	20	2013	-6	2019
Wastewater Treatment Facility	Sludge Handling	Return activated sludge VFD #1	2006	\$ 20,000	20	2026	7	2026
Wastewater Treatment Facility	Sludge Handling	Return activated sludge VFD #2	2006	\$ 20,000	20	2026	7	2026

Year 1 = Cells outlined in red are spreadsheet formulas =
2019 Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE										
Asset Description	Basin/Category	Subcomponent/Asset ID	Impact of Malfunction	Overall Performance Score	Condition Score	Risk Score = Impact x Performance	Criticality	Quantity	Diameter	Material
Wastewater Treatment Facility	Grit Handling/Headworks	Influent Channel - Concrete	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Grit Handling/Headworks	Influent Sampler	3	1	1	3	Frequent Monitoring			
Wastewater Treatment Facility	Grit Handling/Headworks	Metals - stop gates/grating/rails/stairs	3	2	2	6	Frequent Monitoring			
Wastewater Treatment Facility	Grit Handling/Headworks	Degritting classifier	4	5		20	Highest Risk			
Wastewater Treatment Facility	Grit Handling/Headworks	Grit chamber - concrete	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Grit Handling/Headworks	Grit chamber collector and drive unit	3	3		9	Highest Risk			
Wastewater Treatment Facility	Grit Handling/Headworks	Grit pump #1	3	5		15	Highest Risk			
Wastewater Treatment Facility	Grit Handling/Headworks	Grit pump #2	3	5		15	Highest Risk			
Wastewater Treatment Facility	Grit Handling/Headworks	Standby grit channel & bypass - concrete	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Grit Handling/Headworks	NaOH feed pump #1	3	5		15	Highest Risk			
Wastewater Treatment Facility	Grit Handling/Headworks	NaOH feed pump #2	3	4		12	Highest Risk			
Wastewater Treatment Facility	Aeration	Aeration Tank floor and perimeter walls - concrete	4	2		8	Frequent Monitoring			
Wastewater Treatment Facility	Aeration	Aeration Tank interior walls - concrete	4	1		4	Frequent Monitoring			
Wastewater Treatment Facility	Aeration	Metals - railings/grating	4	2		8	Frequent Monitoring			
Wastewater Treatment Facility	Aeration	Aeration tank submersible mixer #1	4	4		16	Highest Risk			
Wastewater Treatment Facility	Aeration	Aeration tank submersible mixer #2	4	4		16	Highest Risk			
Wastewater Treatment Facility	Aeration	Blower Building - concrete foundation	4	1		4	Frequent Monitoring			
Wastewater Treatment Facility	Aeration	Blower Building - concrete block walls	4	1		4	Frequent Monitoring			
Wastewater Treatment Facility	Aeration	Blower Building - wood truss/ashpalt shingle roof	3	3		9	Highest Risk			
Wastewater Treatment Facility	Aeration	Blower Building - electrical	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Aeration	Blower Building - HVAC	3	4		12	Highest Risk			
Wastewater Treatment Facility	Aeration	Blower Building - process piping	1	2		2	Limited Monitoring			
Wastewater Treatment Facility	Aeration	Probes/sensors/controls	3	4		12	Highest Risk			
Wastewater Treatment Facility	Aeration	Blower VFD #1	3	4		12	Highest Risk			
Wastewater Treatment Facility	Aeration	Blower VFD #2	3	4		12	Highest Risk			
Wastewater Treatment Facility	Aeration	Blower VFD #3	3	4		12	Highest Risk			
Wastewater Treatment Facility	Aeration	Aeration blower #1	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Aeration	Aeration blower #2	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Aeration	Aeration blower #3	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Aeration	Hoist	2	2		4	Limited Monitoring			
Wastewater Treatment Facility	Settling Tanks	Distribution box with gates	3	1		3	Frequent Monitoring			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank collector arm #1	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank collector arm #2	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank drive unit #1	3	3		9	Highest Risk			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank drive unit #2	3	3		9	Highest Risk			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tanks - metal troughs and weirs	3	4		12	Highest Risk			
Wastewater Treatment Facility	Settling Tanks	Secondary setting tanks - scum drives	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank fiberglass cover #1	3	4		12	Highest Risk			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank fiberglass cover #2	3	4		12	Highest Risk			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank #1 concrete	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank #2 concrete	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Electrical	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - HVAC	3	5		15	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Controls	3	5		15	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Process Piping	3	3		9	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Return activated sludge pump #1	3	3		9	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Return activated sludge pump #2	3	5		15	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Return activated sludge VFD #1	3	4		12	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Return activated sludge VFD #2	3	4		12	Highest Risk			

Year 1 = Cells outlined in red are spreadsheet formulas =
2019 Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE			COST OF CRITICAL ASSET REPLACEMENTS - FIRST TEN YEARS									
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Asset Description	Basin/Category	Subcomponent/Asset ID	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Wastewater Treatment Facility	Grit Handling/Headworks	Influent Channel - Concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	Influent Sampler	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	Metals - stop gates/grating/rails/stairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	Degritting classifier	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	Grit chamber - concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	Grit chamber collector and drive unit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	Grit pump #1	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	Grit pump #2	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	Standby grit channel & bypass - concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	NaOH feed pump #1	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Grit Handling/Headworks	NaOH feed pump #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Aeration Tank floor and perimeter walls - concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Aeration Tank interior walls - concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Metals - railings/grating	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Aeration tank submersible mixer #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Aeration tank submersible mixer #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower Building - concrete foundation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower Building - concrete block walls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower Building - wood truss/ashpalt shingle roof	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower Building - electrical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower Building - HVAC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower Building - process piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Probes/sensors/controls	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower VFD #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower VFD #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Blower VFD #3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Aeration blower #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Aeration blower #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Aeration blower #3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,000	\$ -	\$ -
Wastewater Treatment Facility	Aeration	Hoist	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Distribution box with gates	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank collector arm #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank collector arm #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank drive unit #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank drive unit #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tanks - metal troughs and weirs	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary setting tanks - scum drives	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank fiberglass cover #1	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank fiberglass cover #2	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank #1 concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank #2 concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Electrical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - HVAC	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Controls	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Process Piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Return activated sludge pump #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Return activated sludge pump #2	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Return activated sludge VFD #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Return activated sludge VFD #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ -

Year 1 =	Cells outlined in red are spreadsheet formulas =	2019	2029	2039	2049	2059	2069	2079	2089	2099	2109
2019	Cells outlined in blue are imported from ArcMap =	2028	2038	2048	2058	2068	2078	2088	2098	2108	2118

HENNIKER WASTEWATER DATA TABLE			COST OF ASSET REPLACEMENTS - NEXT 100 YEARS											
			0 to 10	10 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	90 to 100	0 to 100	
Asset Description	Basin/Category	Subcomponent/Asset ID	2019-2028	2029-2038	2039-2048	2049-2058	2059-2068	2069-2078	2079-2088	2089-2098	2099-2108	2109-2118	2019-2118	
Wastewater Treatment Facility	Grit Handling/Headworks	Influent Channel - Concrete	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Grit Handling/Headworks	Influent Sampler	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ 7,500	\$ -	\$ 7,500	\$ 7,500	\$ -	\$ 7,500	\$ 45,000	
Wastewater Treatment Facility	Grit Handling/Headworks	Metals - stop gates/grating/rails/stairs	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Grit Handling/Headworks	Degritting classifier	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 375,000	
Wastewater Treatment Facility	Grit Handling/Headworks	Grit chamber - concrete	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Grit Handling/Headworks	Grit chamber collector and drive unit	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ 375,000	
Wastewater Treatment Facility	Grit Handling/Headworks	Grit pump #1	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	
Wastewater Treatment Facility	Grit Handling/Headworks	Grit pump #2	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	
Wastewater Treatment Facility	Grit Handling/Headworks	Standby grit channel & bypass - concrete	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Grit Handling/Headworks	NaOH feed pump #1	\$ 5,000	\$ 5,000	\$ -	\$ 5,000	\$ 5,000	\$ -	\$ 5,000	\$ 5,000	\$ -	\$ 5,000	\$ 35,000	
Wastewater Treatment Facility	Grit Handling/Headworks	NaOH feed pump #2	\$ 5,000	\$ -	\$ 5,000	\$ 5,000	\$ -	\$ 5,000	\$ 5,000	\$ -	\$ 5,000	\$ 5,000	\$ 35,000	
Wastewater Treatment Facility	Aeration	Aeration Tank floor and perimeter walls - concrete	\$ -	\$ -	\$ -	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000	
Wastewater Treatment Facility	Aeration	Aeration Tank interior walls - concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ 500,000	
Wastewater Treatment Facility	Aeration	Metals - railings/grating	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 100,000	
Wastewater Treatment Facility	Aeration	Aeration tank submersible mixer #1	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 75,000	
Wastewater Treatment Facility	Aeration	Aeration tank submersible mixer #2	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 75,000	
Wastewater Treatment Facility	Aeration	Blower Building - concrete foundation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000	
Wastewater Treatment Facility	Aeration	Blower Building - concrete block walls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000	
Wastewater Treatment Facility	Aeration	Blower Building - wood truss/ashpalt shingle roof	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ 75,000	
Wastewater Treatment Facility	Aeration	Blower Building - electrical	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 100,000	
Wastewater Treatment Facility	Aeration	Blower Building - HVAC	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 125,000	
Wastewater Treatment Facility	Aeration	Blower Building - process piping	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ 50,000	
Wastewater Treatment Facility	Aeration	Probes/sensors/controls	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ 350,000	
Wastewater Treatment Facility	Aeration	Blower VFD #1	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 150,000	
Wastewater Treatment Facility	Aeration	Blower VFD #2	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 150,000	
Wastewater Treatment Facility	Aeration	Blower VFD #3	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 150,000	
Wastewater Treatment Facility	Aeration	Aeration blower #1	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 300,000	
Wastewater Treatment Facility	Aeration	Aeration blower #2	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 300,000	
Wastewater Treatment Facility	Aeration	Aeration blower #3	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -	\$ 300,000	
Wastewater Treatment Facility	Aeration	Hoist	\$ -	\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ 10,000	
Wastewater Treatment Facility	Settling Tanks	Distribution box with gates	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank collector arm #1	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ 150,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank collector arm #2	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ 150,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank drive unit #1	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ 250,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank drive unit #2	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ 250,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tanks - metal troughs and weirs	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ 200,000	\$ 800,000	
Wastewater Treatment Facility	Settling Tanks	Secondary setting tanks - scum drives	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 250,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank fiberglass cover #1	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 300,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank fiberglass cover #2	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 300,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank #1 concrete	\$ -	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	
Wastewater Treatment Facility	Settling Tanks	Secondary settling tank #2 concrete	\$ -	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ 400,000	
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Electrical	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ 150,000	
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - HVAC	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 250,000	
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Controls	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ 175,000	
Wastewater Treatment Facility	Sludge Handling	Corrugated Metal Building - Process Piping	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Sludge Handling	Return activated sludge pump #1	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ 100,000	
Wastewater Treatment Facility	Sludge Handling	Return activated sludge pump #2	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	
Wastewater Treatment Facility	Sludge Handling	Return activated sludge VFD #1	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	
Wastewater Treatment Facility	Sludge Handling	Return activated sludge VFD #2	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	

Year 1 = Cells outlined in red are spreadsheet formulas =
2019 Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE								
Asset Description	Basin/Category	Subcomponent/Asset ID	Estimated Year Installed	Replacement Cost	Useful Life	End Useful Life	Remaining Useful Life	Replacement Year
Wastewater Treatment Facility	Sludge Handling	Belt Filter Press	1988	\$ 1,000,000	20	2008	-11	2019
Wastewater Treatment Facility	Sludge Handling	Frac tank	1988	\$ 20,000	40	2028	9	2028
Wastewater Treatment Facility	Sludge Handling	Belt Filter Press feed pump	1988	\$ 20,000	20	2008	-11	2019
Wastewater Treatment Facility	Sludge Handling	Metals - grating/rails/stairs	1998	\$ 25,000	40	2038	19	2038
Wastewater Treatment Facility	Sludge Handling	Scum tank	1975	\$ 50,000	75	2050	31	2050
Wastewater Treatment Facility	Sludge Handling	Sludge blower unit #1	2006	\$ 40,000	20	2026	7	2026
Wastewater Treatment Facility	Sludge Handling	Sludge blower unit #2	2006	\$ 40,000	20	2026	7	2026
Wastewater Treatment Facility	Sludge Handling	SS Sludge diffusers	2017	\$ 100,000	30	2047	28	2047
Wastewater Treatment Facility	Sludge Handling	Sludge holding tank #1 concrete	1975	\$ 250,000	75	2050	31	2050
Wastewater Treatment Facility	Sludge Handling	Sludge holding tank #2 concrete	1975	\$ 250,000	75	2050	31	2050
Wastewater Treatment Facility	Sludge Handling	Sludge conveyor to roll-off	1988	\$ 75,000	40	2028	9	2028
Wastewater Treatment Facility	Effluent Handling	Effluent flow metering system	2006	\$ 20,000	15	2021	2	2021
Wastewater Treatment Facility	Effluent Handling	Effluent sampler	2019	\$ 7,500	15	2034	15	2034
Wastewater Treatment Facility	Effluent Handling	Metals - stop gate/grating	2014	\$ 25,000	40	2054	35	2054
Wastewater Treatment Facility	Effluent Handling	Outfall channel concrete	1975	\$ 50,000	75	2050	31	2050
Wastewater Treatment Facility	Effluent Handling	UV disinfection system	2014	\$ 350,000	20	2034	15	2034
Wastewater Treatment Facility	Operations Building	Operations building foundation concrete	1975	\$ 200,000	100	2075	56	2075
Wastewater Treatment Facility	Operations Building	Operations building CMU walls	1975	\$ 200,000	100	2075	56	2075
Wastewater Treatment Facility	Operations Building	Operations building concrete plank roof structure	1975	\$ 100,000	75	2050	31	2050
Wastewater Treatment Facility	Operations Building	Operations building membrane roof	2015	\$ 75,000	40	2055	36	2055
Wastewater Treatment Facility	Operations Building	Operations building windows	2014	\$ 50,000	40	2054	35	2054
Wastewater Treatment Facility	Operations Building	HVAC unit and ducts	1975	\$ 100,000	20	1995	-24	2019
Wastewater Treatment Facility	Operations Building	Exhaust fan #1	1975	\$ 7,500	20	1995	-24	2019
Wastewater Treatment Facility	Operations Building	Exhaust fan #2	1975	\$ 7,500	20	1995	-24	2019
Wastewater Treatment Facility	Operations Building	Exhaust fan #3	1975	\$ 7,500	20	1995	-24	2019
Wastewater Treatment Facility	Operations Building	Exhaust fan #4	1975	\$ 7,500	20	1995	-24	2019
Wastewater Treatment Facility	Operations Building	Exhaust fan #5	1975	\$ 7,500	20	1995	-24	2019
Wastewater Treatment Facility	Operations Building	Exhaust fan #6	1975	\$ 7,500	20	1995	-24	2019
Wastewater Treatment Facility	Operations Building	Water heater boiler	2011	\$ 50,000	20	2031	12	2031
Wastewater Treatment Facility	Operations Building	500 gal oil fuel storage tank	1995	\$ 20,000	40	2035	16	2035
Wastewater Treatment Facility	Operations Building	Operations building electrical	1975	\$ 300,000	40	2015	-4	2019
Wastewater Treatment Facility	Operations Building	Operations building process piping	1975	\$ 100,000	50	2025	6	2025
Wastewater Treatment Facility	Operations Building	Operations building piping/plumbing	1975	\$ 25,000	50	2025	6	2025
Wastewater Treatment Facility	Plant Wide	Graphics panel/PLC/alarms/controls	2004	\$ 50,000	15	2019	0	2019
Wastewater Treatment Facility	Plant Wide	Yard piping	1975	\$ 200,000	100	2075	56	2075
Wastewater Treatment Facility	Plant Wide	Yard piping - valves	1975	\$ 50,000	25	2000	-19	2019
Wastewater Treatment Facility	Site Electrical	Site lighting	1975	\$ 75,000	40	2015	-4	2019
Wastewater Treatment Facility	Septage Receiving	Septage acceptance plant	2004	\$ 150,000	20	2024	5	2024
Wastewater Treatment Facility	Septage Receiving	Septage receiving mixer #1	2004	\$ 20,000	20	2024	5	2024
Wastewater Treatment Facility	Septage Receiving	Septage receiving mixer #2	2004	\$ 20,000	20	2024	5	2024
Wastewater Treatment Facility	Septage Receiving	Septage receiving plunger pump	1995	\$ 20,000	20	2015	-4	2019
Wastewater Treatment Facility	Septage Receiving	7500 gal Septage receiving tank #1 concrete	2004	\$ 50,000	75	2079	60	2079
Wastewater Treatment Facility	Septage Receiving	7500 gal Septage receiving tank #2 concrete	2004	\$ 50,000	75	2079	60	2079
Wastewater Treatment Facility	Site Electrical	Pad mounted transformer	1975	\$ 50,000	40	2015	-4	2019
Wastewater Treatment Facility	Standby Power	Standby generator & ATS	2011	\$ 200,000	40	2051	32	2051

Year 1 = Cells outlined in red are spreadsheet formulas =
2019 Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE										
Asset Description			Impact of Malfunction	Overall Performance Score	Condition Score	Risk Score = Impact x Performance	Criticality	Quantity	Diameter	Material
Wastewater Treatment Facility	Sludge Handling	Belt Filter Press	5	5	5	25	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Frac tank	3	4		12	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Belt Filter Press feed pump	3	5		15	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Metals - grating/rails/stairs	2	3		6	Priority Renewal			
Wastewater Treatment Facility	Sludge Handling	Scum tank	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Sludge Handling	Sludge blower unit #1	3	4		12	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	Sludge blower unit #2	3	4		12	Highest Risk			
Wastewater Treatment Facility	Sludge Handling	SS Sludge diffusers	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Sludge Handling	Sludge holding tank #1 concrete	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Sludge Handling	Sludge holding tank #2 concrete	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Sludge Handling	Sludge conveyor to roll-off	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Effluent Handling	Effluent flow metering system	3	4		12	Highest Risk			
Wastewater Treatment Facility	Effluent Handling	Effluent sampler	3	3		9	Highest Risk			
Wastewater Treatment Facility	Effluent Handling	Metals - stop gate/grating	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Effluent Handling	Outfall channel concrete	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Effluent Handling	UV disinfection system	3	3		9	Highest Risk			
Wastewater Treatment Facility	Operations Building	Operations building foundation concrete	3	1		3	Frequent Monitoring			
Wastewater Treatment Facility	Operations Building	Operations building CMU walls	3	1		3	Frequent Monitoring			
Wastewater Treatment Facility	Operations Building	Operations building concrete plank roof structure	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Operations Building	Operations building membrane roof	3	2		6	Frequent Monitoring			
Wastewater Treatment Facility	Operations Building	Operations building windows	2	2		4	Limited Monitoring			
Wastewater Treatment Facility	Operations Building	HVAC unit and ducts	3	5		15	Highest Risk			
Wastewater Treatment Facility	Operations Building	Exhaust fan #1	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Operations Building	Exhaust fan #2	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Operations Building	Exhaust fan #3	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Operations Building	Exhaust fan #4	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Operations Building	Exhaust fan #5	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Operations Building	Exhaust fan #6	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Operations Building	Water heater boiler	3	3		9	Highest Risk			
Wastewater Treatment Facility	Operations Building	500 gal oil fuel storage tank	4	3		12	Highest Risk			
Wastewater Treatment Facility	Operations Building	Operations building electrical	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Operations Building	Operations building process piping	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Operations Building	Operations building piping/plumbing	3	4		12	Highest Risk			
Wastewater Treatment Facility	Plant Wide	Graphics panel/PLC/alarms/controls	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Plant Wide	Yard piping	2	1		2	Limited Monitoring			
Wastewater Treatment Facility	Plant Wide	Yard piping - valves	3	5		15	Highest Risk			
Wastewater Treatment Facility	Site Electrical	Site lighting	2	5		10	Priority Renewal			
Wastewater Treatment Facility	Septage Receiving	Septage acceptance plant	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Septage Receiving	Septage receiving mixer #1	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Septage Receiving	Septage receiving mixer #2	2	4		8	Priority Renewal			
Wastewater Treatment Facility	Septage Receiving	Septage receiving plunger pump	1	5		5	Priority Renewal			
Wastewater Treatment Facility	Septage Receiving	7500 gal Septage receiving tank #1 concrete	1	1		1	Limited Monitoring			
Wastewater Treatment Facility	Septage Receiving	7500 gal Septage receiving tank #2 concrete	1	1		1	Limited Monitoring			
Wastewater Treatment Facility	Site Electrical	Pad mounted transformer	3	5		15	Highest Risk			
Wastewater Treatment Facility	Standby Power	Standby generator & ATS	5	2		10	Frequent Monitoring			

Year 1 = Cells outlined in red are spreadsheet formulas =
2019 Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE			COST OF CRITICAL ASSET REPLACEMENTS - FIRST TEN YEARS									
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Asset Description	Basin/Category	Subcomponent/Asset ID	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Wastewater Treatment Facility	Sludge Handling	Belt Filter Press	#####	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Frac tank	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000
Wastewater Treatment Facility	Sludge Handling	Belt Filter Press feed pump	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Metals - grating/rails/stairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Scum tank	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Sludge blower unit #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,000	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Sludge blower unit #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,000	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	SS Sludge diffusers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Sludge holding tank #1 concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Sludge holding tank #2 concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Sludge Handling	Sludge conveyor to roll-off	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000
Wastewater Treatment Facility	Effluent Handling	Effluent flow metering system	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Effluent Handling	Effluent sampler	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Effluent Handling	Metals - stop gate/grating	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Effluent Handling	Outfall channel concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Effluent Handling	UV disinfection system	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Operations building foundation concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Operations building CMU walls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Operations building concrete plank roof structure	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Operations building membrane roof	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Operations building windows	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	HVAC unit and ducts	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Exhaust fan #1	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Exhaust fan #2	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Exhaust fan #3	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Exhaust fan #4	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Exhaust fan #5	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Exhaust fan #6	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Water heater boiler	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	500 gal oil fuel storage tank	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Operations building electrical	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Operations building process piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Operations Building	Operations building piping/plumbing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Plant Wide	Graphics panel/PLC/alarms/controls	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Plant Wide	Yard piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Plant Wide	Yard piping - valves	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Site Electrical	Site lighting	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Septage Receiving	Septage acceptance plant	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Septage Receiving	Septage receiving mixer #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Septage Receiving	Septage receiving mixer #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Septage Receiving	Septage receiving plunger pump	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Septage Receiving	7500 gal Septage receiving tank #1 concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Septage Receiving	7500 gal Septage receiving tank #2 concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Site Electrical	Pad mounted transformer	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Treatment Facility	Standby Power	Standby generator & ATS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Year 1 =	Cells outlined in red are spreadsheet formulas =	2019	2029	2039	2049	2059	2069	2079	2089	2099	2109
2019	Cells outlined in blue are imported from ArcMap =	2028	2038	2048	2058	2068	2078	2088	2098	2108	2118

HENNIKER WASTEWATER DATA TABLE			COST OF ASSET REPLACEMENTS - NEXT 100 YEARS											
			0 to 10	10 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	90 to 100	0 to 100	
Asset Description	Basin/Category	Subcomponent/Asset ID	2019-2028	2029-2038	2039-2048	2049-2058	2059-2068	2069-2078	2079-2088	2089-2098	2099-2108	2109-2118	2019-2118	
Wastewater Treatment Facility	Sludge Handling	Belt Filter Press	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -	\$ 5,000,000	
Wastewater Treatment Facility	Sludge Handling	Frac tank	\$ 20,000	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ 60,000	
Wastewater Treatment Facility	Sludge Handling	Belt Filter Press feed pump	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	
Wastewater Treatment Facility	Sludge Handling	Metals - grating/rails/stairs	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000	\$ 75,000	
Wastewater Treatment Facility	Sludge Handling	Scum tank	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Sludge Handling	Sludge blower unit #1	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 200,000	
Wastewater Treatment Facility	Sludge Handling	Sludge blower unit #2	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 40,000	\$ -	\$ 200,000	
Wastewater Treatment Facility	Sludge Handling	SS Sludge diffusers	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ -	\$ 300,000	
Wastewater Treatment Facility	Sludge Handling	Sludge holding tank #1 concrete	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	
Wastewater Treatment Facility	Sludge Handling	Sludge holding tank #2 concrete	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	
Wastewater Treatment Facility	Sludge Handling	Sludge conveyor to roll-off	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ 225,000	
Wastewater Treatment Facility	Effluent Handling	Effluent flow metering system	\$ 20,000	\$ 20,000	\$ -	\$ 20,000	\$ 20,000	\$ -	\$ 20,000	\$ 20,000	\$ -	\$ 20,000	\$ 140,000	
Wastewater Treatment Facility	Effluent Handling	Effluent sampler	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ 7,500	\$ -	\$ 7,500	\$ 7,500	\$ -	\$ 7,500	\$ 45,000	
Wastewater Treatment Facility	Effluent Handling	Metals - stop gate/grating	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Effluent Handling	Outfall channel concrete	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Effluent Handling	UV disinfection system	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ -	\$ 350,000	\$ 1,750,000	
Wastewater Treatment Facility	Operations Building	Operations building foundation concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000	
Wastewater Treatment Facility	Operations Building	Operations building CMU walls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000	
Wastewater Treatment Facility	Operations Building	Operations building concrete plank roof structure	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	
Wastewater Treatment Facility	Operations Building	Operations building membrane roof	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ 150,000	
Wastewater Treatment Facility	Operations Building	Operations building windows	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ 100,000	
Wastewater Treatment Facility	Operations Building	HVAC unit and ducts	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ 500,000	
Wastewater Treatment Facility	Operations Building	Exhaust fan #1	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 37,500	
Wastewater Treatment Facility	Operations Building	Exhaust fan #2	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 37,500	
Wastewater Treatment Facility	Operations Building	Exhaust fan #3	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 37,500	
Wastewater Treatment Facility	Operations Building	Exhaust fan #4	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 37,500	
Wastewater Treatment Facility	Operations Building	Exhaust fan #5	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 37,500	
Wastewater Treatment Facility	Operations Building	Exhaust fan #6	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ 37,500	
Wastewater Treatment Facility	Operations Building	Water heater boiler	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ 250,000	
Wastewater Treatment Facility	Operations Building	500 gal oil fuel storage tank	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ -	\$ -	\$ 20,000	\$ 60,000	
Wastewater Treatment Facility	Operations Building	Operations building electrical	\$ 300,000	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ 300,000	\$ -	\$ 900,000	
Wastewater Treatment Facility	Operations Building	Operations building process piping	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000	
Wastewater Treatment Facility	Operations Building	Operations building piping/plumbing	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Plant Wide	Graphics panel/PLC/alarms/controls	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ 350,000	
Wastewater Treatment Facility	Plant Wide	Yard piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000	
Wastewater Treatment Facility	Plant Wide	Yard piping - valves	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ 200,000	
Wastewater Treatment Facility	Site Electrical	Site lighting	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ 225,000	
Wastewater Treatment Facility	Septage Receiving	Septage acceptance plant	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ 750,000	
Wastewater Treatment Facility	Septage Receiving	Septage receiving mixer #1	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	
Wastewater Treatment Facility	Septage Receiving	Septage receiving mixer #2	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	
Wastewater Treatment Facility	Septage Receiving	Septage receiving plunger pump	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 20,000	\$ -	\$ 100,000	
Wastewater Treatment Facility	Septage Receiving	7500 gal Septage receiving tank #1 concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Septage Receiving	7500 gal Septage receiving tank #2 concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	
Wastewater Treatment Facility	Site Electrical	Pad mounted transformer	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ 150,000	
Wastewater Treatment Facility	Standby Power	Standby generator & ATS	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ -	\$ 400,000	

Year 1 =

Cells outlined in red are spreadsheet formulas =

2019

Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE								
			Estimated	Replacement		End Useful	Remaining Useful	
Asset Description	Basin/Category	Subcomponent/Asset ID	Year Installed	Cost	Useful Life	Life	Life	Replacement Year
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Pump station building -concrete	1975	\$ 500,000	75	2050	31	2050
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Concrete plank roof structure	1975	\$ 75,000	75	2050	31	2050
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Membrane roof	1995	\$ 25,000	40	2035	16	2035
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Metals - railings/grating	1999	\$ 50,000	40	2039	20	2039
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Alarm system	2017	\$ 10,000	15	2032	13	2032
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Rooftop exhaust fan - wetwell	2013	\$ 25,000	20	2033	14	2033
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Make-up air unit - wetwell	1994	\$ 25,000	20	2014	-5	2019
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Rooftop exhaust fan - pump room/control room	2019	\$ 25,000	20	2039	20	2039
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Electrical	2017	\$ 100,000	40	2057	38	2057
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Comminutor (Muffin Monster)	2016	\$ 7,500	5	2021	2	2021
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	2017	\$ 75,000	20	2037	18	2037
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	2017	\$ 75,000	20	2037	18	2037
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	2017	\$ 75,000	20	2037	18	2037
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #1	2017	\$ 30,000	20	2037	18	2037
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #2	2017	\$ 30,000	20	2037	18	2037
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #3	2017	\$ 30,000	20	2037	18	2037
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Process piping	1975	\$ 25,000	50	2025	6	2025
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Process valves	1975	\$ 25,000	15	1990	-29	2019
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Yard piping	1975	\$ 50,000	100	2075	56	2075
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Probes/sensors/controls	2017	\$ 50,000	15	2032	13	2032
West Henniker Pump Station	West Henniker Pump Station	Pump station - wood frame walls	1994	\$ 50,000	50	2044	25	2044
West Henniker Pump Station	West Henniker Pump Station	Pump station - wood truss, asphalt shingles	1994	\$ 25,000	30	2024	5	2024
West Henniker Pump Station	West Henniker Pump Station	Wetwell	1975	\$ 100,000	75	2050	31	2050
West Henniker Pump Station	West Henniker Pump Station	Drywell	1975	\$ 100,000	75	2050	31	2050
West Henniker Pump Station	West Henniker Pump Station	Electrical	1994	\$ 75,000	40	2034	15	2034
West Henniker Pump Station	West Henniker Pump Station	Heater & Vents	1994	\$ 30,000	20	2014	-5	2019
West Henniker Pump Station	West Henniker Pump Station	Generator unit & ATS	2012	\$ 75,000	40	2052	33	2052
West Henniker Pump Station	West Henniker Pump Station	275 gal diesel tank	2012	\$ 10,000	40	2052	33	2052
West Henniker Pump Station	West Henniker Pump Station	Pump #1	1975	\$ 30,000	20	1995	-24	2019
West Henniker Pump Station	West Henniker Pump Station	Pump #2	1975	\$ 30,000	20	1995	-24	2019
Ramsdell Road Pump Station	West Henniker Pump Station	Comminutor (Muffin Monster)	2018	\$ 7,500	5	2023	4	2023
West Henniker Pump Station	West Henniker Pump Station	Alarm system	2018	\$ 15,000	15	2033	14	2033
West Henniker Pump Station	West Henniker Pump Station	Process piping	1975	\$ 50,000	50	2025	6	2025
West Henniker Pump Station	West Henniker Pump Station	Yard piping	1975	\$ 50,000	100	2075	56	2075

Year 1 =
2019

Cells outlined in red are spreadsheet formulas =
Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE										
Asset Description	Basin/Category	Subcomponent/Asset ID	Impact of Malfunction	Overall Performance Score	Condition Score	Risk Score = Impact x Performance	Criticality	Quantity	Diameter	Material
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Pump station building -concrete	4	2	2	8	Frequent Monitoring			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Concrete plank roof structure	4	2		8	Frequent Monitoring			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Membrane roof	2	3		6	Priority Renewal			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Metals - railings/grating	3	2		6	Frequent Monitoring			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Alarm system	3	3		9	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Rooftop exhaust fan - wetwell	4	3		12	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Make-up air unit - wetwell	4	5		20	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Rooftop exhaust fan - pump room/control room	2	3		6	Priority Renewal			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Electrical	5	2		10	Frequent Monitoring			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Comminutor (Muffin Monster)	2	4		8	Priority Renewal			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	3	3		9	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	3	3		9	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	3	3		9	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #1	3	3		9	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #2	3	3		9	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #3	3	3		9	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Process piping	4	4		16	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Process valves	4	5		20	Highest Risk			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Yard piping	3	1		3	Frequent Monitoring			
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Probes/sensors/controls	3	3		9	Highest Risk			
West Henniker Pump Station	West Henniker Pump Station	Pump station - wood frame walls	3	2		6	Frequent Monitoring			
West Henniker Pump Station	West Henniker Pump Station	Pump station - wood truss, asphalt shingles	3	4		12	Highest Risk			
West Henniker Pump Station	West Henniker Pump Station	Wetwell	5	2		10	Frequent Monitoring			
West Henniker Pump Station	West Henniker Pump Station	Drywell	5	2		10	Frequent Monitoring			
West Henniker Pump Station	West Henniker Pump Station	Electrical	5	3	3	15	Highest Risk			
West Henniker Pump Station	West Henniker Pump Station	Heater & Vents	3	5		15	Highest Risk			
West Henniker Pump Station	West Henniker Pump Station	Generator unit & ATS	5	2		10	Frequent Monitoring			
West Henniker Pump Station	West Henniker Pump Station	275 gal diesel tank	4	2		8	Frequent Monitoring			
West Henniker Pump Station	West Henniker Pump Station	Pump #1	4	4	4	16	Highest Risk			
West Henniker Pump Station	West Henniker Pump Station	Pump #2	4	4	4	16	Highest Risk			
Ramsdell Road Pump Station	West Henniker Pump Station	Comminutor (Muffin Monster)	3	4		12	Highest Risk			
West Henniker Pump Station	West Henniker Pump Station	Alarm system	4	3		12	Highest Risk			
West Henniker Pump Station	West Henniker Pump Station	Process piping	3	4		12	Highest Risk			
West Henniker Pump Station	West Henniker Pump Station	Yard piping	3	1		3	Frequent Monitoring			

Year 1 = Cells outlined in red are spreadsheet formulas =
2019 Cells outlined in blue are imported from ArcMap =

HENNIKER WASTEWATER DATA TABLE			COST OF CRITICAL ASSET REPLACEMENTS - FIRST TEN YEARS									
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Asset Description	Basin/Category	Subcomponent/Asset ID	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Pump station building -concrete	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Concrete plank roof structure	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Membrane roof	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Metals - railings/grating	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Alarm system	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Rooftop exhaust fan - wetwell	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Make-up air unit - wetwell	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Rooftop exhaust fan - pump room/control room	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Electrical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Comminutor (Muffin Monster)	\$ -	\$ -	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ 7,500	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Process piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Process valves	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Yard piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Probes/sensors/controls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Pump station - wood frame walls	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Pump station - wood truss, asphalt shingles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Wetwell	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Drywell	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Electrical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Heater & Vents	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Generator unit & ATS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	275 gal diesel tank	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Pump #1	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Pump #2	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ramsdell Road Pump Station	West Henniker Pump Station	Comminutor (Muffin Monster)	\$ -	\$ -	\$ -	\$ -	\$ 7,500	\$ -	\$ -	\$ -	\$ -	\$ 7,500
West Henniker Pump Station	West Henniker Pump Station	Alarm system	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Process piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -
West Henniker Pump Station	West Henniker Pump Station	Yard piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Year 1 =	Cells outlined in red are spreadsheet formulas =	2019	2029	2039	2049	2059	2069	2079	2089	2099	2109
2019	Cells outlined in blue are imported from ArcMap =	2028	2038	2048	2058	2068	2078	2088	2098	2108	2118

HENNIKER WASTEWATER DATA TABLE			COST OF ASSET REPLACEMENTS - NEXT 100 YEARS										
			0 to 10	10 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	90 to 100	0 to 100
Asset Description	Basin/Category	Subcomponent/Asset ID	2019-2028	2029-2038	2039-2048	2049-2058	2059-2068	2069-2078	2079-2088	2089-2098	2099-2108	2109-2118	2019-2118
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Pump station building -concrete	\$ -	\$ -	\$ -	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Concrete plank roof structure	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Membrane roof	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000	\$ 75,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Metals - railings/grating	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 100,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Alarm system	\$ -	\$ 10,000	\$ 10,000	\$ -	\$ 10,000	\$ 10,000	\$ -	\$ 10,000	\$ 10,000	\$ -	\$ 60,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Rooftop exhaust fan - wetwell	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ 125,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Make-up air unit - wetwell	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 125,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Rooftop exhaust fan - pump room/control room	\$ -	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 100,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Electrical	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 200,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Comminutor (Muffin Monster)	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 150,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ 375,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ 375,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	700 GPM influent pump #1	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ 375,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #1	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ 150,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #2	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ 150,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	VFD #3	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ 150,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Process piping	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Process valves	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ 175,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Yard piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
Ramsdell Road Pump Station	Ramsdell Road Pump Station	Probes/sensors/controls	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ 300,000
West Henniker Pump Station	West Henniker Pump Station	Pump station - wood frame walls	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ 100,000
West Henniker Pump Station	West Henniker Pump Station	Pump station - wood truss, asphalt shingles	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ 100,000
West Henniker Pump Station	West Henniker Pump Station	Wetwell	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
West Henniker Pump Station	West Henniker Pump Station	Drywell	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
West Henniker Pump Station	West Henniker Pump Station	Electrical	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ 225,000
West Henniker Pump Station	West Henniker Pump Station	Heater & Vents	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 150,000
West Henniker Pump Station	West Henniker Pump Station	Generator unit & ATS	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ 150,000
West Henniker Pump Station	West Henniker Pump Station	275 gal diesel tank	\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ 20,000
West Henniker Pump Station	West Henniker Pump Station	Pump #1	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 150,000
West Henniker Pump Station	West Henniker Pump Station	Pump #2	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ 150,000
Ramsdell Road Pump Station	West Henniker Pump Station	Comminutor (Muffin Monster)	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 150,000
West Henniker Pump Station	West Henniker Pump Station	Alarm system	\$ -	\$ 15,000	\$ 15,000	\$ -	\$ 15,000	\$ 15,000	\$ -	\$ 15,000	\$ 15,000	\$ -	\$ 90,000
West Henniker Pump Station	West Henniker Pump Station	Process piping	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
West Henniker Pump Station	West Henniker Pump Station	Yard piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000

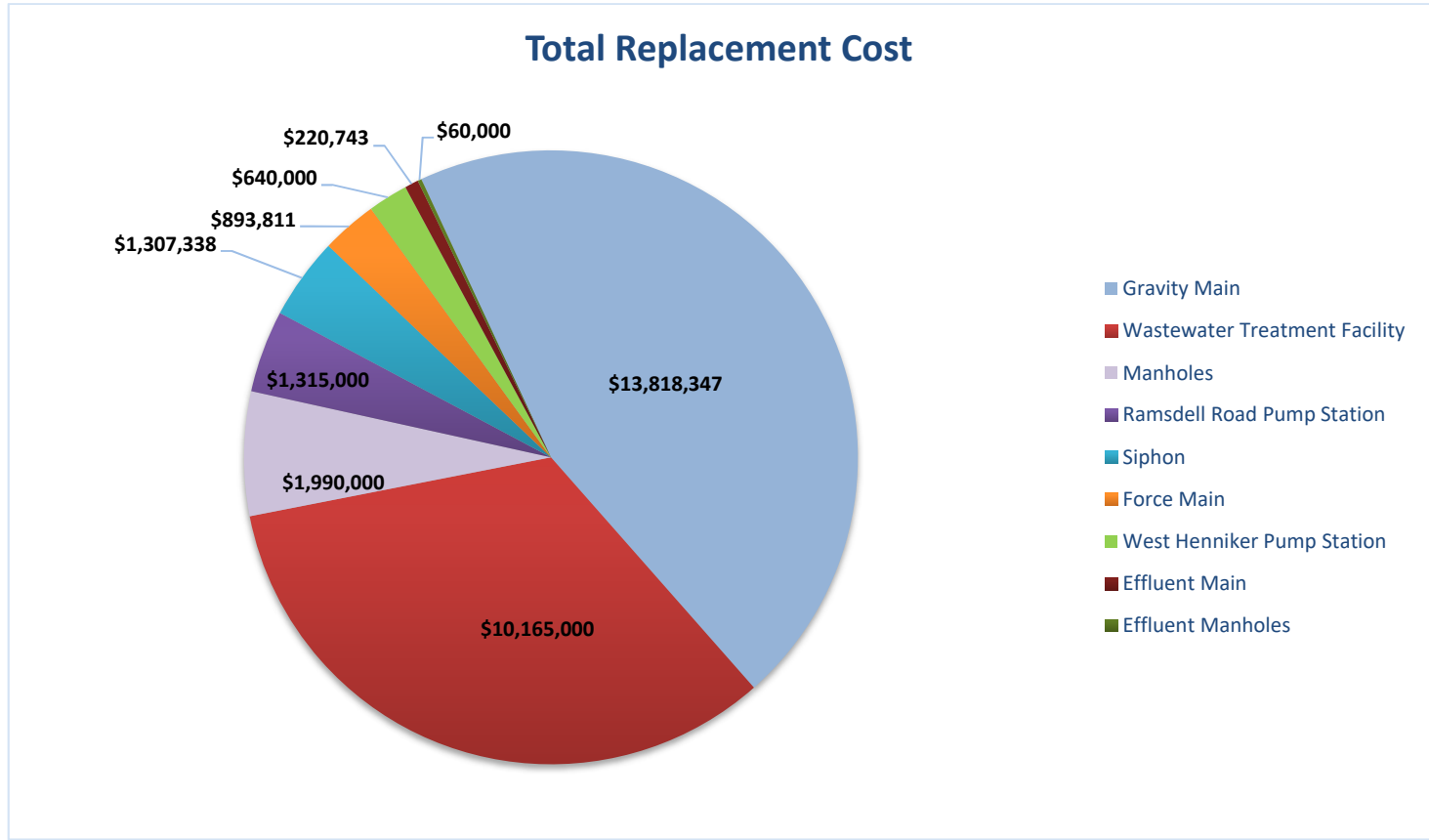
HORIZONTAL ASSETS - QUANTITIES	
Row Labels	Sum of Quantity
Manhole	199
Siphon	872
Force Main	2,750
Gravity Main	39,481
Effluent Main	631
Effluent Manhole	6

HORIZONTAL ASSETS - ESTIMATED YEAR OF INSTALLATION						
Sum of Quantity	Column Labels					
Row Labels	Manhole	Siphon	Force Main	Gravity Main	Effluent Main	Effluent Manhole
1975	175	872	2,750	34,009	631	6
1978	12			3,447		
1980	4			665		
1985	6			899		
1986	2			461		

PIPE QUANTITIES - BY DIAMETER	
Row Labels	Sum of Quantity
Force Main	2,750
6	2,500
10	250
Gravity Main	39,481
	393
Unknown	825
8	34,206
10	1,759
12	2,298
Siphon	872
6	432
8	439
Grand Total	43,103

PIPE QUANTITIES - BY TYPE AND MATERIAL				
Sum of Quantity	Column Labels			
Row Labels	Gravity Main	Force M Siphon	Grand Total	
AC	36,497		36,497	
CI	10	2,750	872	3,632
DI	407		407	
PVC	1,618		1,618	
VC	310		310	
Unknown	638		638	
Grand Total	39,481	2,750	872	43,103

ESTIMATED REPLACEMENT VALUE OF ASSETS - 2019 DOLLARS	
Row Labels	Sum of Replacement Cost
Gravity Main	\$13,818,347
Wastewater Treatment Facility	\$10,165,000
Manholes	\$1,990,000
Ramsdell Road Pump Station	\$1,315,000
Siphon	\$1,307,338
Force Main	\$893,811
West Henniker Pump Station	\$640,000
Effluent Main	\$220,743
Effluent Manholes	\$60,000
Grand Total	\$30,410,239



ESTIMATED CAPITAL NEEDS OVER THE NEXT TEN YEARS

Values	Column Labels			
	Wastewater Treatment Facility	Ramsdell Road Pump Station	West Henniker Pump Station	Grand Total
Sum of 2019	\$ 1,975,000	\$ 50,000	\$ 90,000	\$2,115,000
Sum of 2020	\$ -	\$ -	\$ -	\$ -
Sum of 2021	\$ 270,000	\$ 7,500	\$ -	\$ 277,500
Sum of 2022	\$ 200,000	\$ -	\$ -	\$ 200,000
Sum of 2023	\$ -	\$ 7,500	\$ -	\$ 7,500
Sum of 2024	\$ 195,000	\$ -	\$ 25,000	\$ 220,000
Sum of 2025	\$ 125,000	\$ 25,000	\$ 50,000	\$ 200,000
Sum of 2026	\$ 445,000	\$ 7,500	\$ -	\$ 452,500
Sum of 2027	\$ -	\$ -	\$ -	\$ -
Sum of 2028	\$ 145,000	\$ 7,500	\$ -	\$ 152,500
Sum of 2019-2028	\$ 3,355,000	\$ 105,000	\$ 165,000	\$3,625,000
				\$ 362,500

Values	Column Labels				
	Highest Risk	Priority Renewa	Frequent Monit	Limited Mon	Grand Total
Sum of 2019	\$ 1,575,000	\$ 540,000	\$ -	\$ -	\$2,115,000
Sum of 2020	\$ -	\$ -	\$ -	\$ -	\$ -
Sum of 2021	\$ 270,000	\$ 7,500	\$ -	\$ -	\$ 277,500
Sum of 2022	\$ 200,000	\$ -	\$ -	\$ -	\$ 200,000
Sum of 2023	\$ 7,500	\$ -	\$ -	\$ -	\$ 7,500
Sum of 2024	\$ 30,000	\$ 190,000	\$ -	\$ -	\$ 220,000
Sum of 2025	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ 200,000
Sum of 2026	\$ 265,000	\$ 187,500	\$ -	\$ -	\$ 452,500
Sum of 2027	\$ -	\$ -	\$ -	\$ -	\$ -
Sum of 2028	\$ 27,500	\$ 125,000	\$ -	\$ -	\$ 152,500
Sum of 2019-2028	\$ 2,475,000	\$ 1,150,000	\$ -	\$ -	\$3,625,000

Criticality 2019-2028	(All) (Multiple Items)
Row Labels	
Sum of 2019-2028	
25	
Wastewater Treatment Facility	
Belt Filter Press	\$ 1,000,000
20	
Wastewater Treatment Facility	
Degritting classifier	\$ 75,000
Ramsdell Road Pump Station	
Process valves	\$ 25,000
Make-up air unit - wetwell	\$ 25,000
16	
Wastewater Treatment Facility	
Aeration tank submersible mixer #2	\$ 15,000
Aeration tank submersible mixer #1	\$ 15,000
Ramsdell Road Pump Station	
Process piping	\$ 25,000
West Henniker Pump Station	
Pump #2	\$ 30,000
Pump #1	\$ 30,000
15	
Wastewater Treatment Facility	
HVAC unit and ducts	\$ 100,000
Pad mounted transformer	\$ 50,000
Corrugated Metal Building - HVAC	\$ 50,000
Yard piping - valves	\$ 50,000
Corrugated Metal Building - Controls	\$ 25,000
Return activated sludge pump #2	\$ 20,000
Belt Filter Press feed pump	\$ 20,000
Grit pump #1	\$ 20,000
Grit pump #2	\$ 20,000
NaOH feed pump #1	\$ 5,000
West Henniker Pump Station	
Heater & Vents	\$ 30,000
12	
Wastewater Treatment Facility	

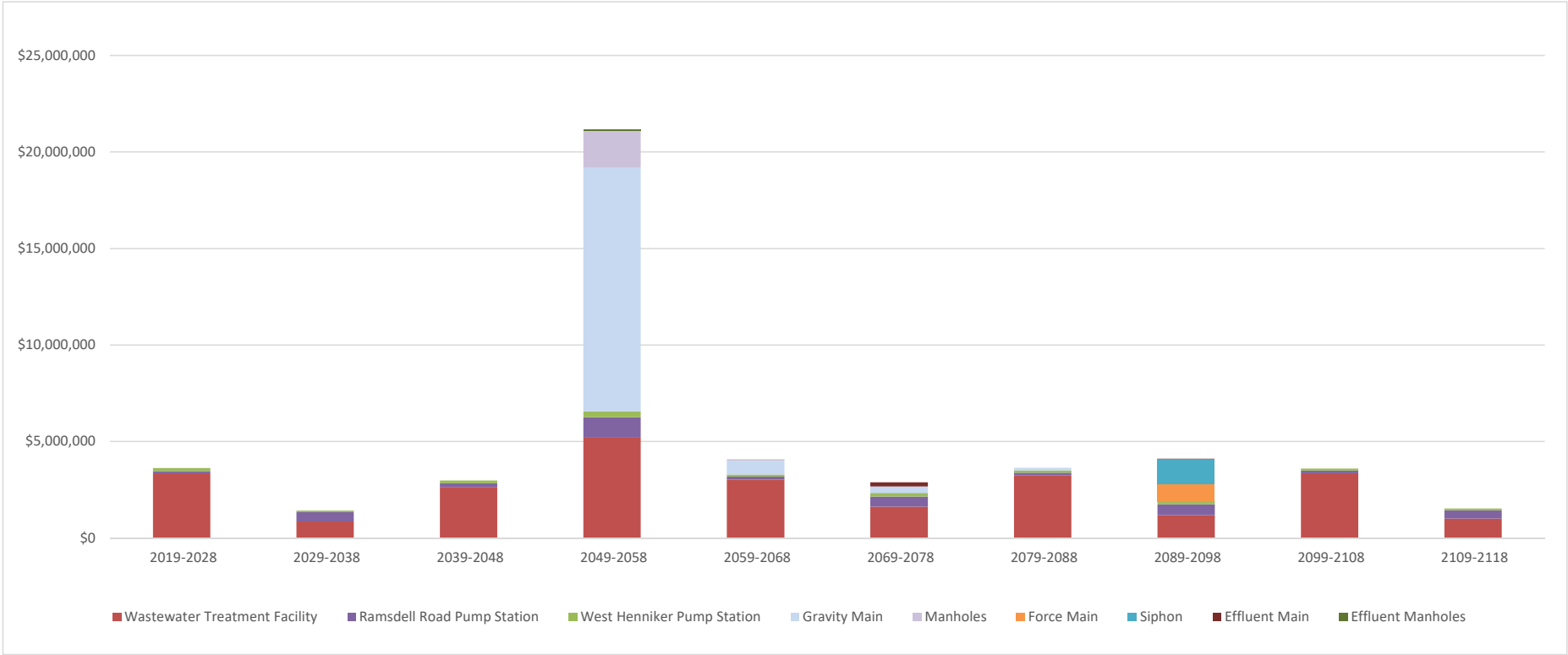
Secondary settling tanks - metal troughs and weirs	\$	200,000
Secondary settling tank fiberglass cover #1	\$	100,000
Secondary settling tank fiberglass cover #2	\$	100,000
Probes/sensors/controls	\$	50,000
Sludge blower unit #1	\$	40,000
Sludge blower unit #2	\$	40,000
Blower VFD #3	\$	30,000
Blower VFD #2	\$	30,000
Blower VFD #1	\$	30,000
Blower Building - HVAC	\$	25,000
Operations building piping/plumbing	\$	25,000
Frac tank	\$	20,000
Effluent flow metering system	\$	20,000
Return activated sludge VFD #2	\$	20,000
Return activated sludge VFD #1	\$	20,000
NaOH feed pump #2	\$	5,000
Ramsdell Road Pump Station		
Comminutor (Muffin Monster)	\$	15,000
West Henniker Pump Station		
Process piping	\$	50,000
Pump station - wood truss, asphalt shingles	\$	25,000
10		
Wastewater Treatment Facility		
Operations building electrical	\$	300,000
Site lighting	\$	75,000
Graphics panel/PLC/alarms/controls	\$	50,000
Secondary setting tanks - scum drives	\$	50,000
Exhaust fan #4	\$	7,500
Exhaust fan #3	\$	7,500
Exhaust fan #5	\$	7,500
Exhaust fan #2	\$	7,500
Exhaust fan #6	\$	7,500
Exhaust fan #1	\$	7,500
8		
Wastewater Treatment Facility		
Septage acceptance plant	\$	150,000
Operations building process piping	\$	100,000
Sludge conveyor to roll-off	\$	75,000
Aeration blower #2	\$	60,000
Aeration blower #3	\$	60,000
Aeration blower #1	\$	60,000
Corrugated Metal Building - Electrical	\$	50,000
Septage receiving mixer #2	\$	20,000
Septage receiving mixer #1	\$	20,000
Ramsdell Road Pump Station		
Comminutor (Muffin Monster)	\$	15,000
5		
Wastewater Treatment Facility		
Septage receiving plunger pump	\$	20,000
Grand Total	\$	3,625,000

Values		
Sum of 2019	\$	2,115,000
Sum of 2020	\$	-
Sum of 2021	\$	277,500
Sum of 2022	\$	200,000
Sum of 2023	\$	7,500
Sum of 2024	\$	220,000
Sum of 2025	\$	200,000
Sum of 2026	\$	452,500
Sum of 2027	\$	-
Sum of 2028	\$	152,500

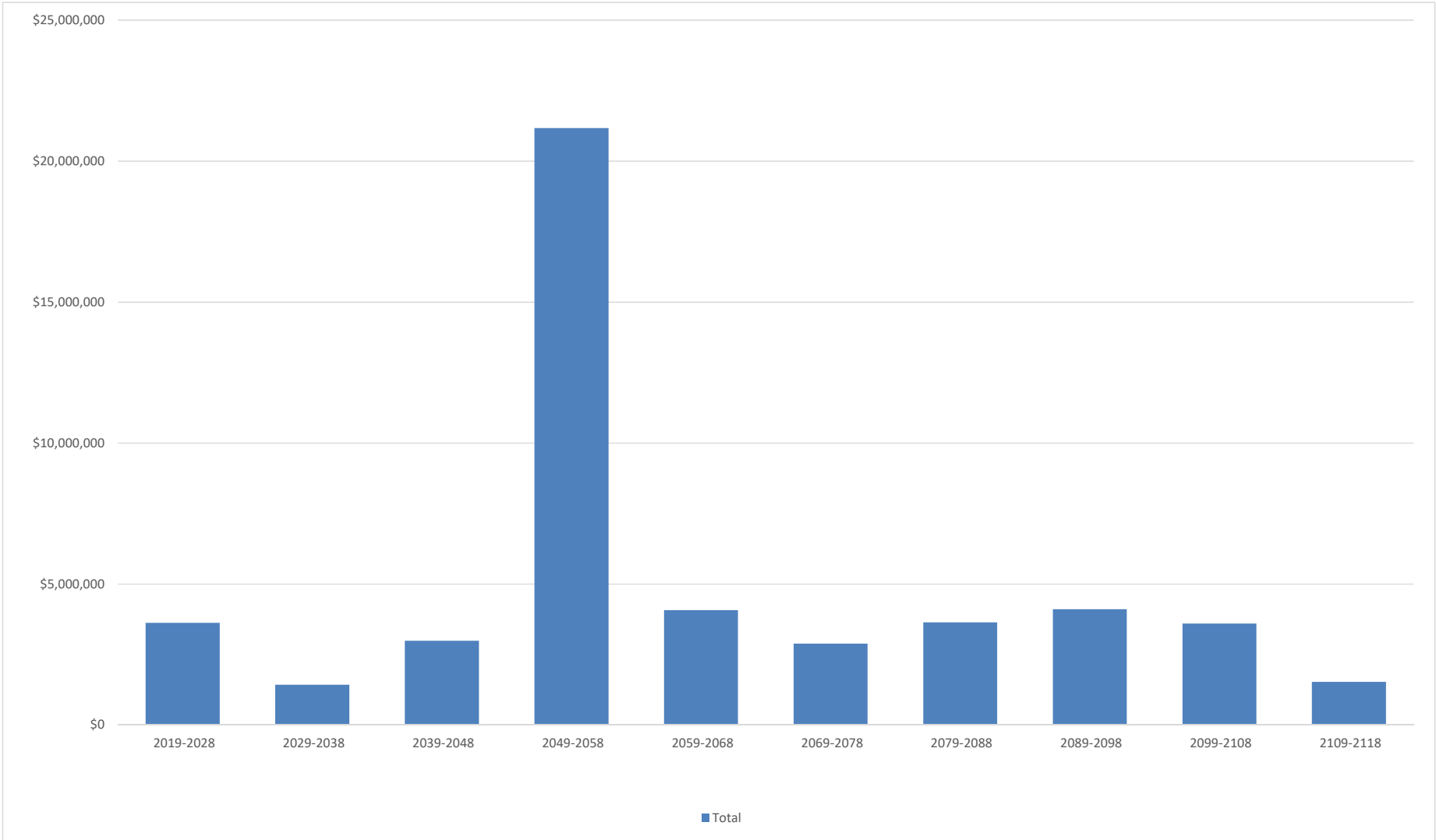


Column Labels										
	Wastewater Treatment	Ramsdell Road Pump	West Henniker Pump							
Values	Facility	Station	Station	Gravity Main	Manholes	Force Main	Siphon	Effluent Main	Effluent Manholes	Grand Total
2019-2028	\$3,355,000	\$105,000	\$165,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,625,000
2029-2038	\$855,000	\$480,000	\$90,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,425,000
2039-2048	\$2,640,000	\$190,000	\$155,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,985,000
2049-2058	\$5,190,000	\$1,070,000	\$310,000	\$12,631,742	\$1,910,000	\$0	\$0	\$0	\$60,000	\$21,171,742
2059-2068	\$3,015,000	\$165,000	\$105,000	\$708,647	\$80,000	\$0	\$0	\$0	\$0	\$4,073,647
2069-2078	\$1,620,000	\$530,000	\$190,000	\$331,731	\$0	\$0	\$0	\$211,993	\$0	\$2,883,724
2079-2088	\$3,230,000	\$155,000	\$115,000	\$142,579	\$0	\$0	\$0	\$0	\$0	\$3,642,579
2089-2098	\$1,185,000	\$555,000	\$150,000	\$3,649	\$0	\$893,811	\$1,307,338	\$8,750	\$0	\$4,103,547
2099-2108	\$3,355,000	\$140,000	\$105,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,600,000
2109-2118	\$1,010,000	\$420,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,530,000
	\$25,455,000	\$3,810,000	\$1,485,000	\$13,818,347	\$1,990,000	\$893,811	\$1,307,338	\$220,743	\$60,000	\$49,040,239

\$490,402.39

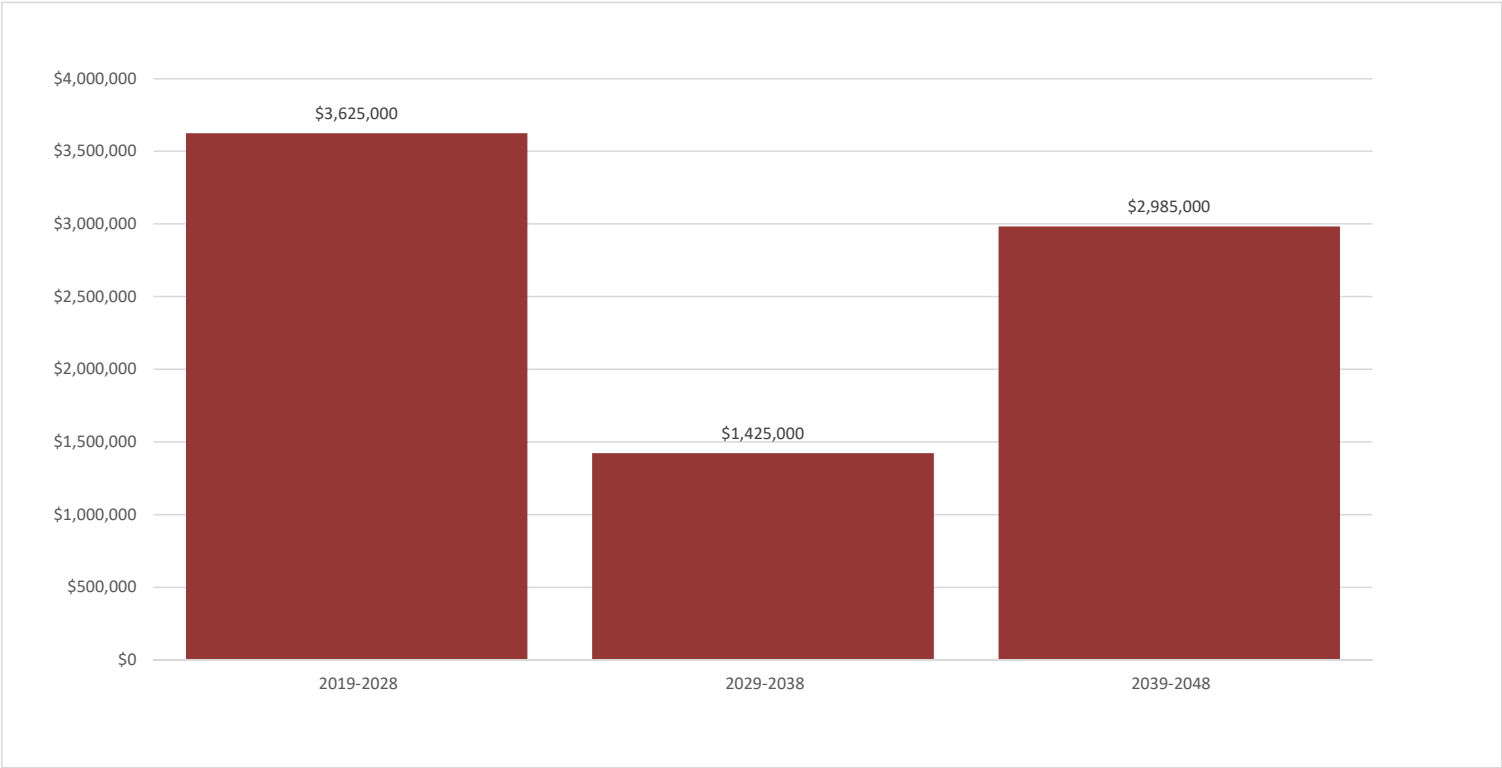


Values	
2019-2028	\$3,625,000
2029-2038	\$1,425,000
2039-2048	\$2,985,000
2049-2058	\$21,171,742
2059-2068	\$4,073,647
2069-2078	\$2,883,724
2079-2088	\$3,642,579
2089-2098	\$4,103,547
2099-2108	\$3,600,000
2109-2118	\$1,530,000



Column Labels					
Values	Highest Risk	Priority Renewal	Frequent Monitoring	Limited Monitoring	Grand Total
2019-2028	\$2,475,000	\$1,150,000	\$0	\$0	\$3,625,000
2029-2038	\$1,302,500	\$115,000	\$7,500	\$0	\$1,425,000
2039-2048	\$1,830,000	\$525,000	\$625,000	\$5,000	\$2,985,000
2049-2058	\$1,493,755	\$567,025	\$9,150,587	\$9,960,375	\$21,171,742
2059-2068	\$2,202,500	\$1,075,000	\$7,500	\$788,647	\$4,073,647
2069-2078	\$1,275,000	\$165,000	\$911,993	\$531,731	\$2,883,724
2079-2088	\$2,087,500	\$575,000	\$732,500	\$247,579	\$3,642,579
2089-2098	\$1,232,500	\$65,000	\$2,756,047	\$50,000	\$4,103,547
2099-2108	\$2,050,000	\$1,025,000	\$500,000	\$25,000	\$3,600,000
2109-2118	\$1,407,500	\$115,000	\$7,500	\$0	\$1,530,000
2019-2118	\$17,356,255	\$5,377,025	\$14,698,628	\$11,608,331	\$49,040,239

Values	
2019-2028	\$3,625,000
2029-2038	\$1,425,000
2039-2048	\$2,985,000
	\$8,035,000
	\$267,833



Row Labels	Sum of 2049-2058
Wastewater T	\$5,190,000
Ramsdell Road	\$1,070,000
West Hennike	\$310,000
Gravity Main	\$12,631,742
Manholes	\$1,910,000
Effluent Manr	\$60,000
Grand Total	\$21,171,742

Appendix D

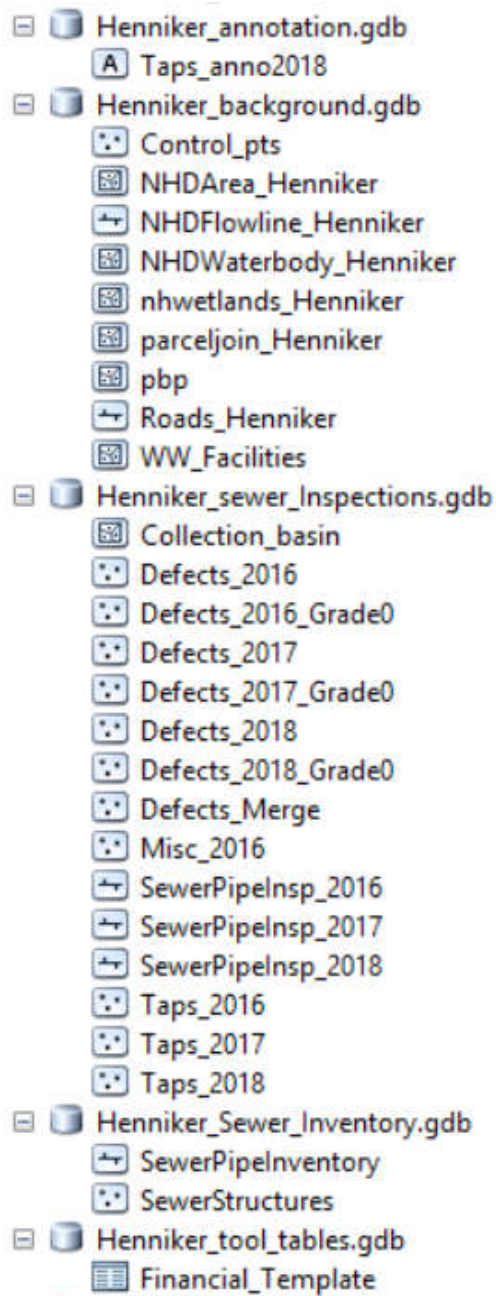
**Asset
Management Program
Instruction Sheets**

ArcMAP FILES

File Geodatabases:

The following “Henniker_Wastewater_System” File Geodatabase containing the Town’s Wastewater System inventory information has been provided as listed in Figure D-1 below.

Figure D- 1. List of Feature Classes stored in Henniker_Wastewater_System File Geodatabases



The main file is the “Henniker_Sewer_Inventory” geodatabase. This file contains the bulk of the information on the Town’s Wastewater system pipes and structures, such as estimated age, material, remaining useful life, etc.

The “Henniker_Sewer_Inspections” geodatabase includes data from the CCTV inspections performed over the past three years. The defect spreadsheet in Appendix C was exported into Excel from the “Defects_Merge” file, which contains all the defects found in the three years of inspections.

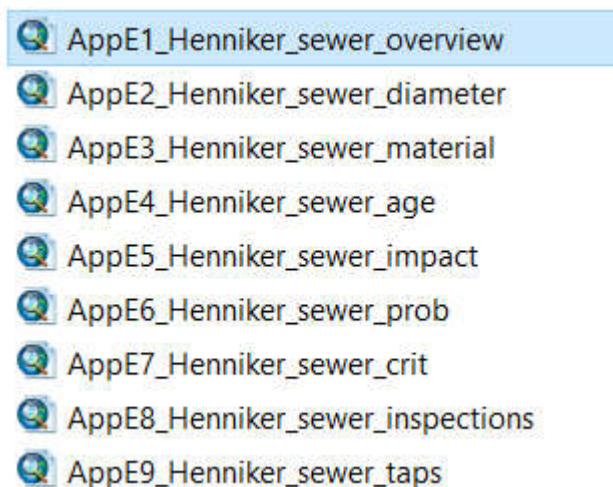
Several “background” files have been provided as well, including such items as town boundaries, water bodies, roads and parcels. These are stored in the “Henniker_Background” file geodatabase.

The “Henniker_annotation” geodatabase includes labels for each of the taps mapped in Appendix E9.

Map (mxd) files and Layer files:





















The data is displayed in .mxd files, several of which have been prepared for the Town. The various maps (or .mxd files) display the data in various ways. Paper versions have been provided in Appendix E, and are listed below.

Figure D- 2. List of Map Files



Each of the maps has different symbology. For instance, Map E2 displays the Wastewater system by pipe diameter and Map E4 displays the Wastewater system by the year installed. Layer files enable the user to quickly change the parameters shown on the map. The layer files provided are listed in Figure D-4 below.

Figure D- 3. List of Layer Files

-  Defect_grade
-  NHDFlowline_Henniker
-  NHDWaterbody_Henniker
-  nhwetlands_Henniker
-  parceljoin_Henniker
-  pbp
-  Roads_Henniker
-  SewerFacilities
-  SewerPipe_crit
-  SewerPipe_diameter
-  SewerPipe_prob
-  SewerPipes_age
-  SewerPipes_background
-  SewerPipes_impact
-  SewerPipes_material
-  SewerPipes_overview
-  SewerPipes_type
-  SewerStructures
-  Taps
-  Taps_2018

Tools:

Various tools have been provided to allow the Town to easily update and export data from the “Henniker_Sewer_Inventory” geodatabase. Field names, descriptions and types for each of the two feature classes are provided in Tables D-1 and D-2 below. Tools and their input screens are included in the pages that follow.

Table D- 1. Wastewater Pipe Feature Class Fields

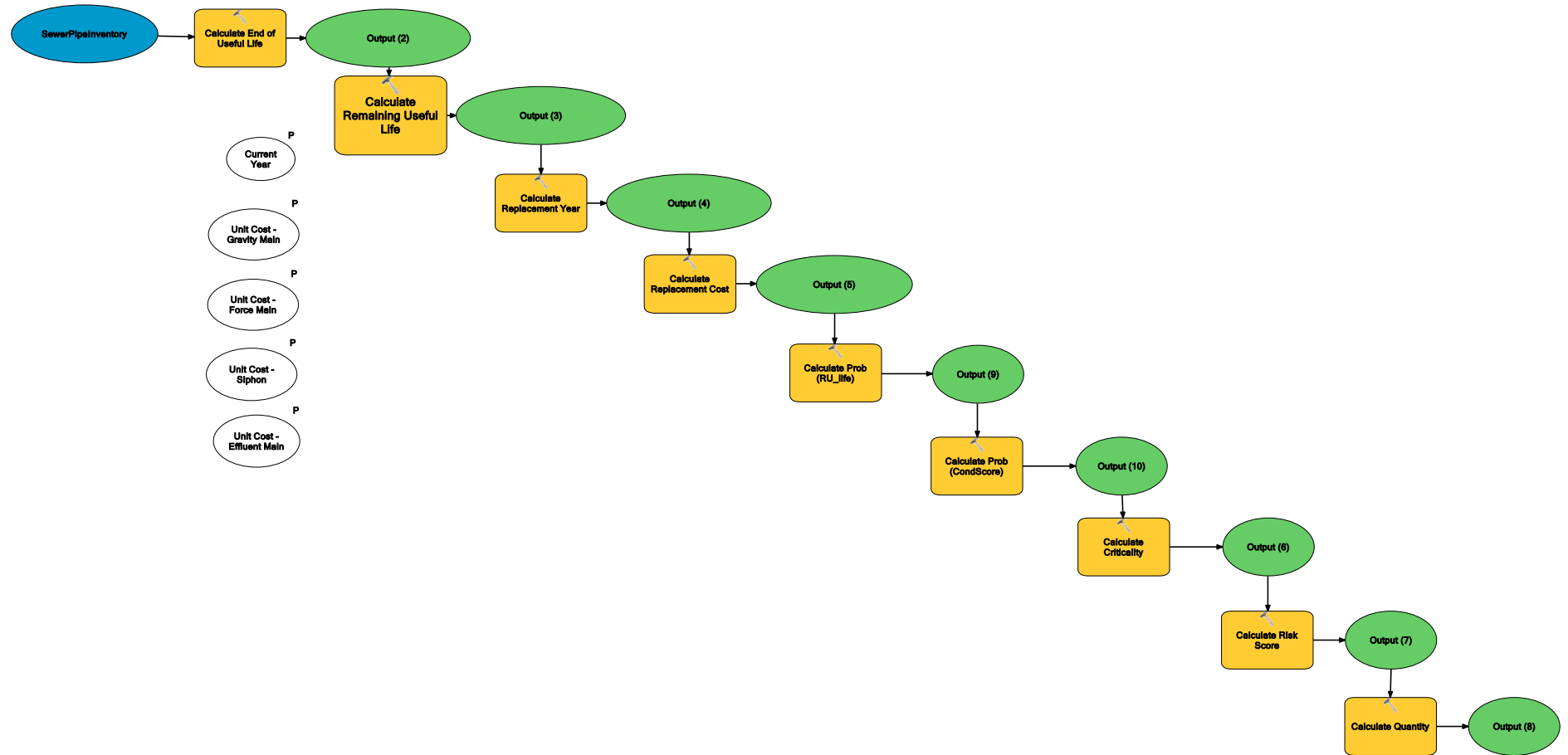
Name	Alias	Type	Length	Description	Formula
OBJECTID	OBJECTID	OID	4	assigned by ArcMap	
SHAPE	SHAPE	Geometry	0	assigned by ArcMap	
Type	Type	String	50	Asset type (ie. gravity main, force main, etc.)	
Year_in	Year_In	Integer	4	Estimated based on record drawings	
US_MH	US_MH	String	50	Upstream manhole	
DS_MH	DS_MH	String	50	Downstream manhole	
AssetID	AssetID	String	50	USMH-DSMH	
Year_txt	Year_txt	String	20	Year installed if known, otherwise "Unknown"	
Material	Material	String	50	From record drawings, inspections, or "Unknown"	
Rec_Dwg	Rec_Dwg	String	50	Information source if available	
U_life	U_life	SmallInteger	2	Estimated based on material according to industry sources (ie. "Buried No Longer")	
EU_life	EU_life	SmallInteger	2	computed using 00_Calculate_Pipe_Fields tool	Year_In + U_life
RU_life	RU_life	SmallInteger	2	computed using 00_Calculate_Pipe_Fields tool	Current Year - EU_life
Prob	Overall Performance Score	Double	8	computed using 00_Calculate_Pipe_Fields tool	If "Cond_score" is available then, "Cond_score", otherwise based on remaining useful life
Impact	Impact of Malfunction	Double	8	assigned by user	
Risk_Score	Risk Score	Double	8	computed using 00_Calculate_Pipe_Fields tool	Impact*Prob
Crit	Criticality	String	50	computed using 00_Calculate_Pipe_Fields tool	If-Then statement based on Impact and Prob fields
Basin	Basin	String	50	sewer basin (Ramsdell Road or West Henniker)	

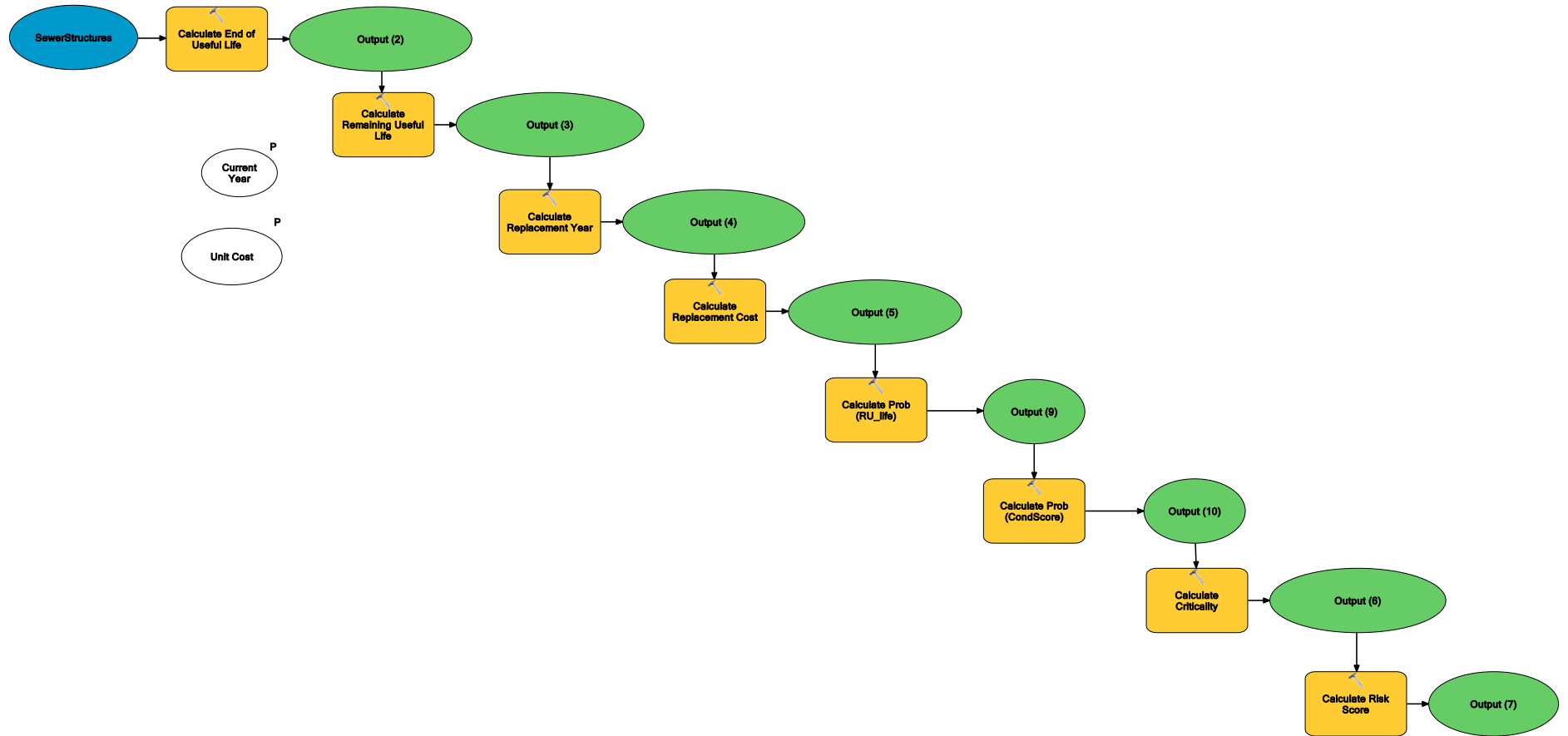
Name	Alias	Type	Length	Description	Formula
Repl_year	Repl_year	Integer	4	computed using 00_Calculate_Pipe_Fields tool	If EU_life > Current Year Then EU_life; otherwise Current Year
Repl_Cost	Repl_Cost	Double	8	computed using 00_Calculate_Pipe_Fields tool	SHAPE_Length x Unit Cost (Unit Cost input by user based on type of pipe)
Dia	Dia	String	50	From record drawings, inspections, or "Unknown"	
Road	Road	String	50	Based on location of pipe	
Quantity	Quantity	Double	8	computed using 00_Calculate_Pipe_Fields tool (used in export to Financial Planning Spreadsheet)	Equals SHAPE_Length
CondScore	Condition Score	Double	8	assigned by user; over-rides Overall Performance Score, which is computed based on Remaining Useful Life	
SHAPE_Length	SHAPE_Length	Double	8	automatically computed by ArcMap	

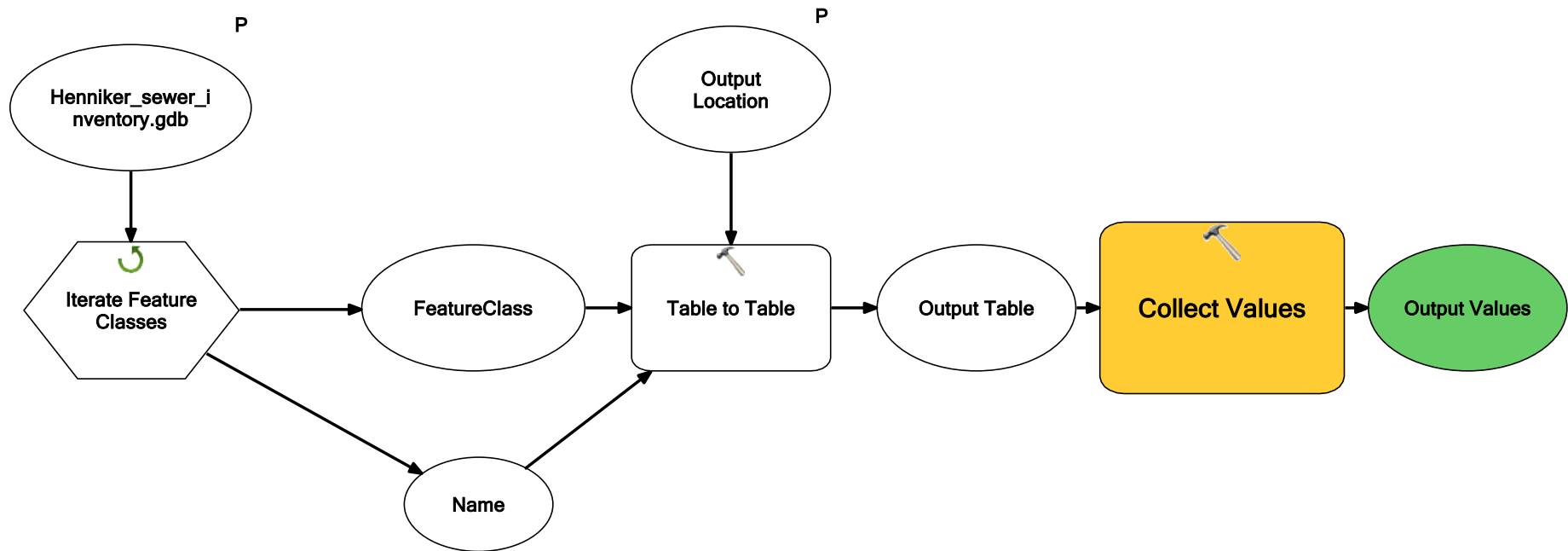
Table D- 2. Wastewater Structure Feature Class Fields

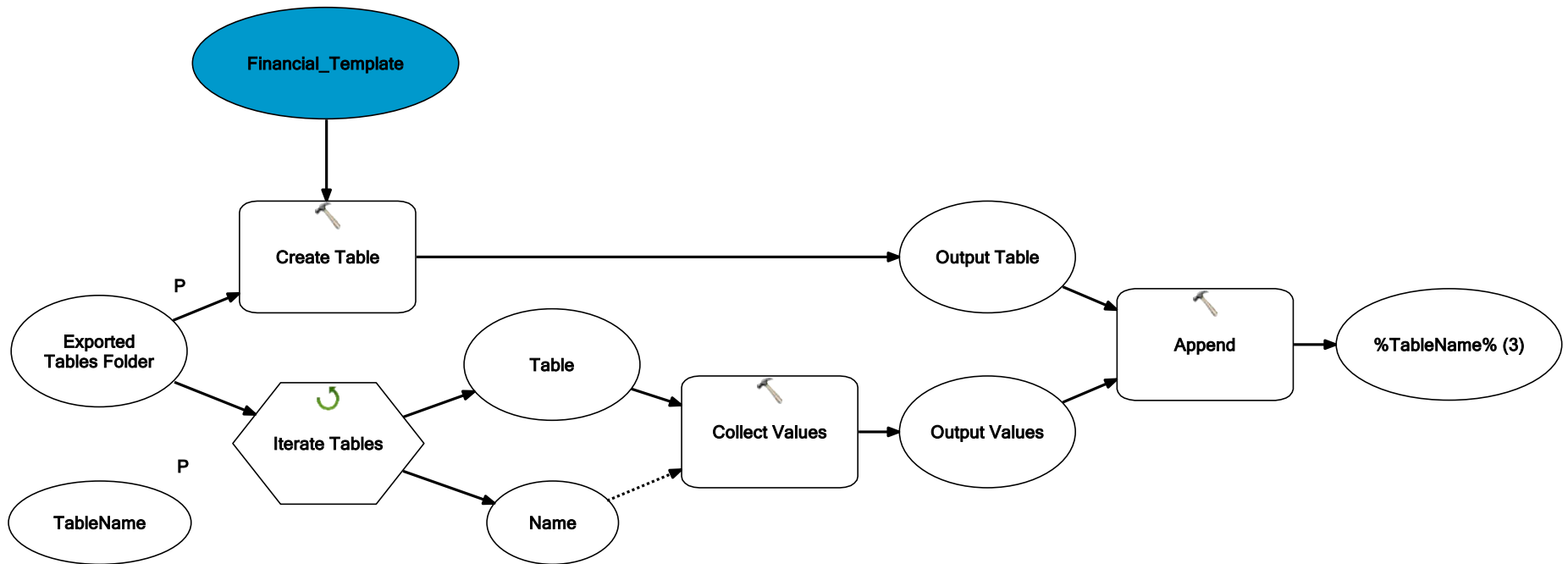
Name	Alias	Type	Length	Description	Formula
OBJECTID	OBJECTID	OID	4	assigned by ArcMap	
SHAPE	SHAPE	Geometry	0	assigned by ArcMap	
AssetID	AssetID	String	50	manhole number per paper map used by Town	
Year_in	Year_In	Integer	4	Estimated based on record drawings	
Type	Asset_Type	String	50	Asset type (ie. manhole)	
Basin	Basin	String	50	sewer basin (Ramsdell Road or West Henniker)	
Year_txt	Year_txt	String	50	Year installed if known, otherwise "Unknown"	
Quantity	Quantity	Double	8	Defaults to 1, used in export to Financial Planning Spreadsheet	
Material	Material	String	50	from record drawings if available, typically "precast"	

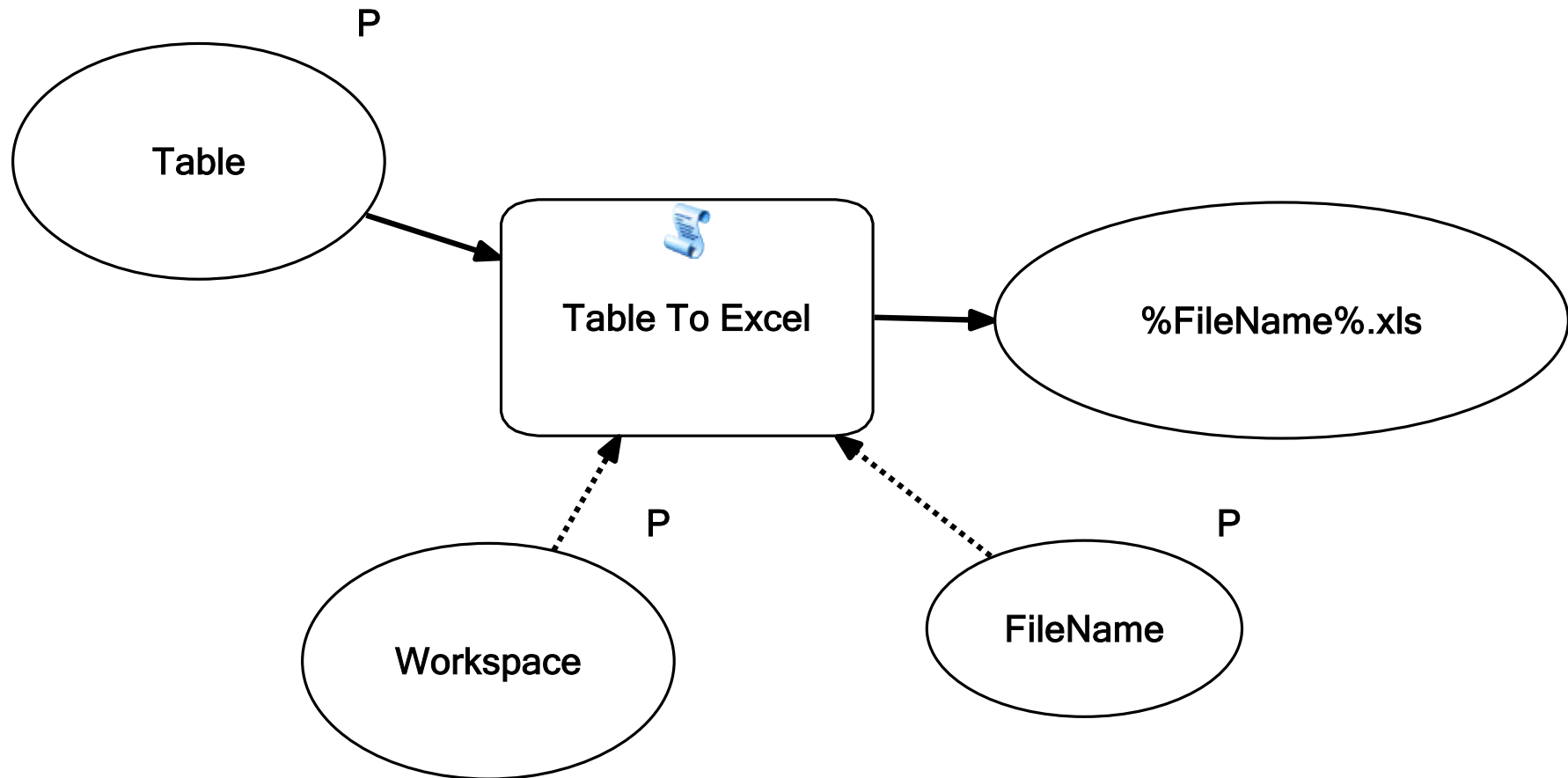
Name	Alias	Type	Length	Description	Formula
U_life	U_life	Integer	4	estimated to be 75 years	
EU_life	EU_life	Integer	4	computed using 00_Calculate_Pipe_Fields tool	Year_In + U_life
RU_life	RU_life	Integer	4	computed using 00_Calculate_Pipe_Fields tool	Current Year - EU_life
Repl_year	Repl_year	Integer	4	computed using 00_Calculate_Pipe_Fields tool	If EU_life > Current Year Then EU_life; otherwise Current Year
Repl_Cost	Repl_Cost	Integer	4	computed using 00_Calculate_Pipe_Fields tool	SHAPE_Length x Unit Cost (Unit Cost input by user based on type of pipe)
Risk_Score	Risk_Score	Double	8	computed using 00_Calculate_Pipe_Fields tool	Impact*Prob
Crit	Crit	String	50	computed using 00_Calculate_Pipe_Fields tool	If-Then statement based on Impact and Prob fields
Prob	Overall Performance Score	Double	8	computed using 00_Calculate_Pipe_Fields tool	If "Cond_score" is available then, "Cond_score", otherwise based on remaining useful life
Impact	Impact of Malfunction	Double	8	assigned by user	
Dia	Dia	String	50	input if available	
Road	Road	String	50	Based on location of structure	
CondScore	Condition Score	Double	8	assigned by user; over-rides Overall Performance Score, which is computed based on Remaining Useful Life	

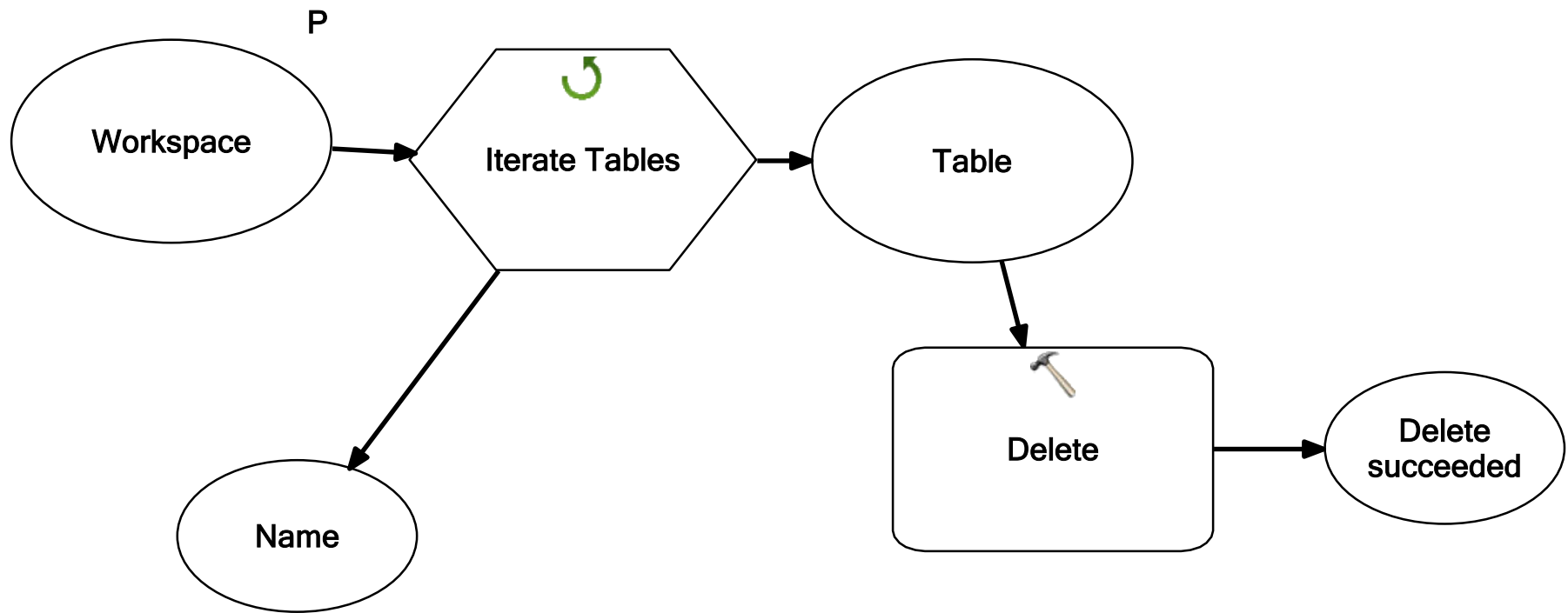












FINANCIAL PLANNING AND INVENTORY SPREADSHEET

The Financial Planning and Inventory Spreadsheet has been provided to assist the Town with long-term planning. An explanation of the spreadsheet and how it works has been provided below.

Asset Data Table: This tab contains information on the vertical asset subcomponents (ie. pumps, treatment facilities, building components, etc.) and each horizontal asset component (ie. Wastewater mains, hydrants, and valves).

The first 16 columns are the same as the feature class fields listed in Tables D-1 and D-2 above.

Replacement Schedule: These 20 columns are normally hidden. Formulas in these cells schedule out the year replacements are due, up to 20 replacements. This assumes that no assets with a useful life of less than 5 years will be included. If the Town wants to schedule out assets with useful lives less than five years, the spreadsheet can be modified to accommodate that.

Estimated Cost of Replacements Over Ten Years - formula computes the estimated cost of replacements each year for the next ten years. Note that the years in the headings are automatically recalculated when cell "A2" (Year 1) is revised.

Estimated Cost of Replacements Over One-hundred Years - formula computes the estimated cost of replacements each year for the one hundred years. Note that the ten-year time frames in the headings are automatically recalculated when cell "A2" (Year 1) is revised.

Inventory Summaries: This tab includes Pivot Tables which summarize various aspects of the wastewater collection system. For instance, pipe length by material and age.

Replacement Value: This tab totals up the estimated replacement cost for the entire system using a pivot table and chart.

Ten-Year Look Ahead: This tab contains the following pivot tables, which detail replacement costs for the next ten years.

- A summary of estimated replacement costs over the next ten years by year.
- A summary of estimated replacement costs over the next ten years by criticality.
- A list of all assets described due for replacement in the next ten years by Risk Score in descending order.

If the "Data Table" is modified, then this summary table can be updated simply by clicking the "Analyze" tab at the top of the spreadsheet and then clicking "Refresh". If records are added to the "Data Table", then choose "Change Data Source" to make sure all records are included.

One Hundred-Year Look Ahead: This tab includes a table and a bar chart which summarize replacement costs for the next hundred years by decade.

ASSET DATA TABLE FORMULA SUMMARY

Columns G through I, K, M and N contain formulas to compute such parameters as “Remaining Useful Life” for vertical assets. These same parameters are computed for horizontal assets using Tools in ArcGIS.

Column G: End of Useful Life

Equal to Year Installed + Useful Life

Column H: Remaining Useful Life

Equal to End of Useful Life – Current Year (Cell A2)

Column I: Replacement Year

Equal to End of Useful Life unless End of Useful Life is less than the Current Year in Cell A2. If that is the case, then Replacement Year is equal to Current Year.

Column K: Overall Performance Score

If there is no Condition Score (Column J) then Overall Performance Score is computed based on Remaining Useful Life as shown in Table D-3.

If there is a Condition Score, then Probability of Failure equals the Condition Score.

Table D- 3. Probability of Failure (Condition) Score Based on Remaining Useful Life

Condition Score	General Description
5.0	Remaining Useful Life ≤ 0
4.0	Remaining Useful Life > 0 and ≤ 10
3.0	Remaining Useful Life > 10 and ≤ 20
2.0	Remaining Useful Life > 20 and ≤ 50
1.0	Remaining Useful Life > 50

Column L: Condition Score

The Condition Score of an asset is assigned by Town staff and overrides its Remaining Useful Life in determining its Probability of Failure. For instance, if an asset has ten years of remaining useful life, but is in poor condition and is non-functional, it's Overall Performance Score will be 5, not 3.

Column M: Risk Score

Probability of Failure x Impact of Failure

Column N: Criticality

If Probability of Failure and Impact of Failure are both ≥ 2.5 , then “Highest Risk”.

If Probability of Failure ≥ 2.5 and Impact of Failure < 2.5 , then “Priority Renewal”

If Probability of Failure < 2.5 and Impact of Failure ≥ 2.5 , then “Frequent Monitoring”

If Probability of Failure and Impact of Failure < 2.5 , then “Limited Monitoring”

Column R: First replacement

If End of Useful Life is less than the Current Year, then first replacement is scheduled to occur in the current year. Otherwise, First Replacement = End of Useful Life.

Column S-AK: Subsequent replacements

If the prior replacement is "0", then "0". If the prior replacement + Current Useful Life falls outside the 100-year time frame, then "0".

If neither of these is true (ie. the next replacement falls between Year 1 and Year 100), then the replacement is scheduled for the prior replacement + Current Useful Life.

Column AL - AU: Schedule out replacement cost for the next ten years -

Compare the year in the header row to the scheduled replacements for a given asset. If there's a match then multiply by the replacement cost.

Column AV - BE: Schedule out replacement cost for the next hundred years -

Compare the year in the upper header row (ie. beginning of ten-year period) and the lower header row (ie. the end of the ten-year period) to the scheduled replacements for a given asset. If there's a match then multiply by the replacement cost.

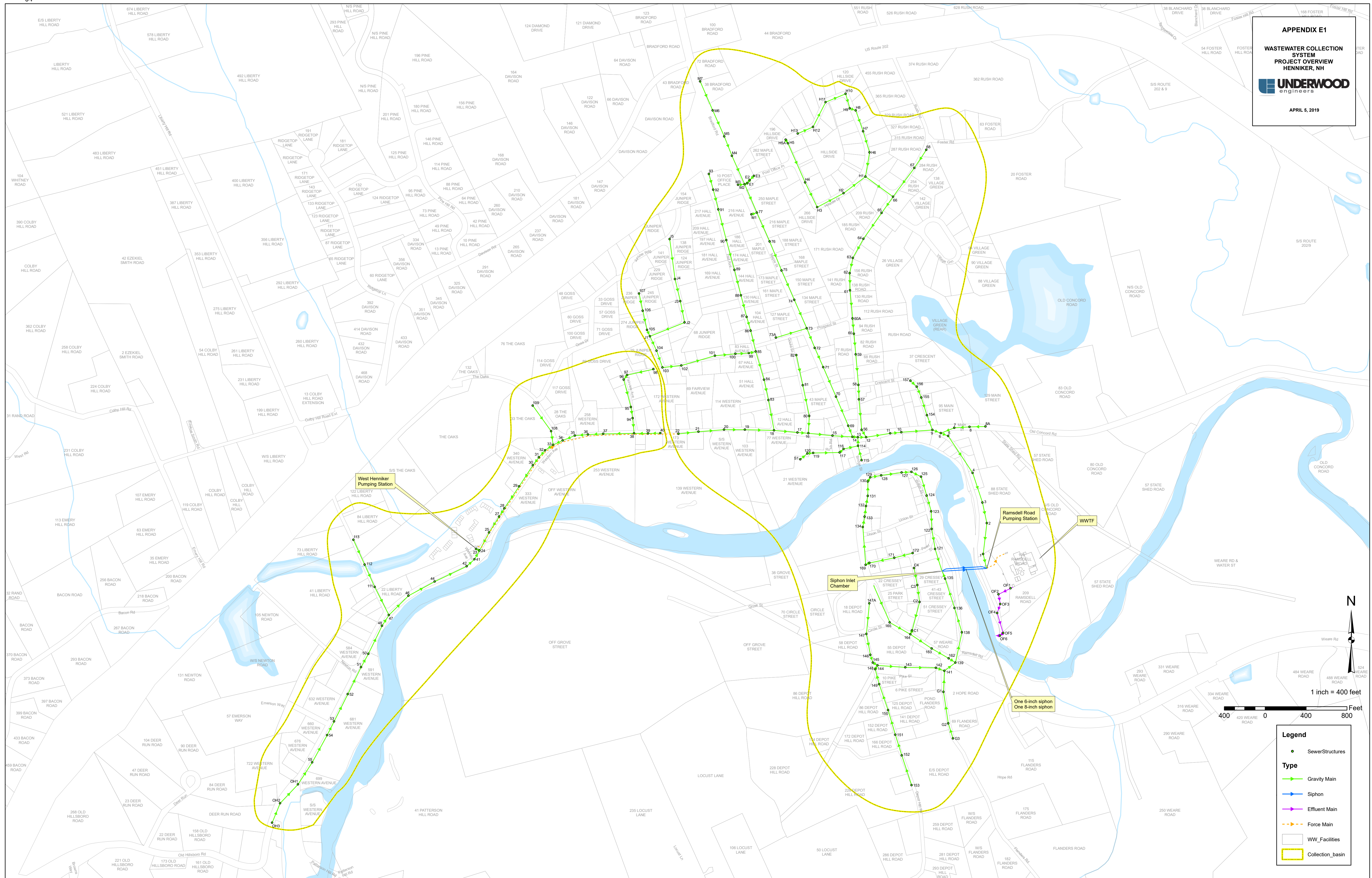
Column BF: Sum Columns AR through BA to determine replacement costs for the next 100 years.

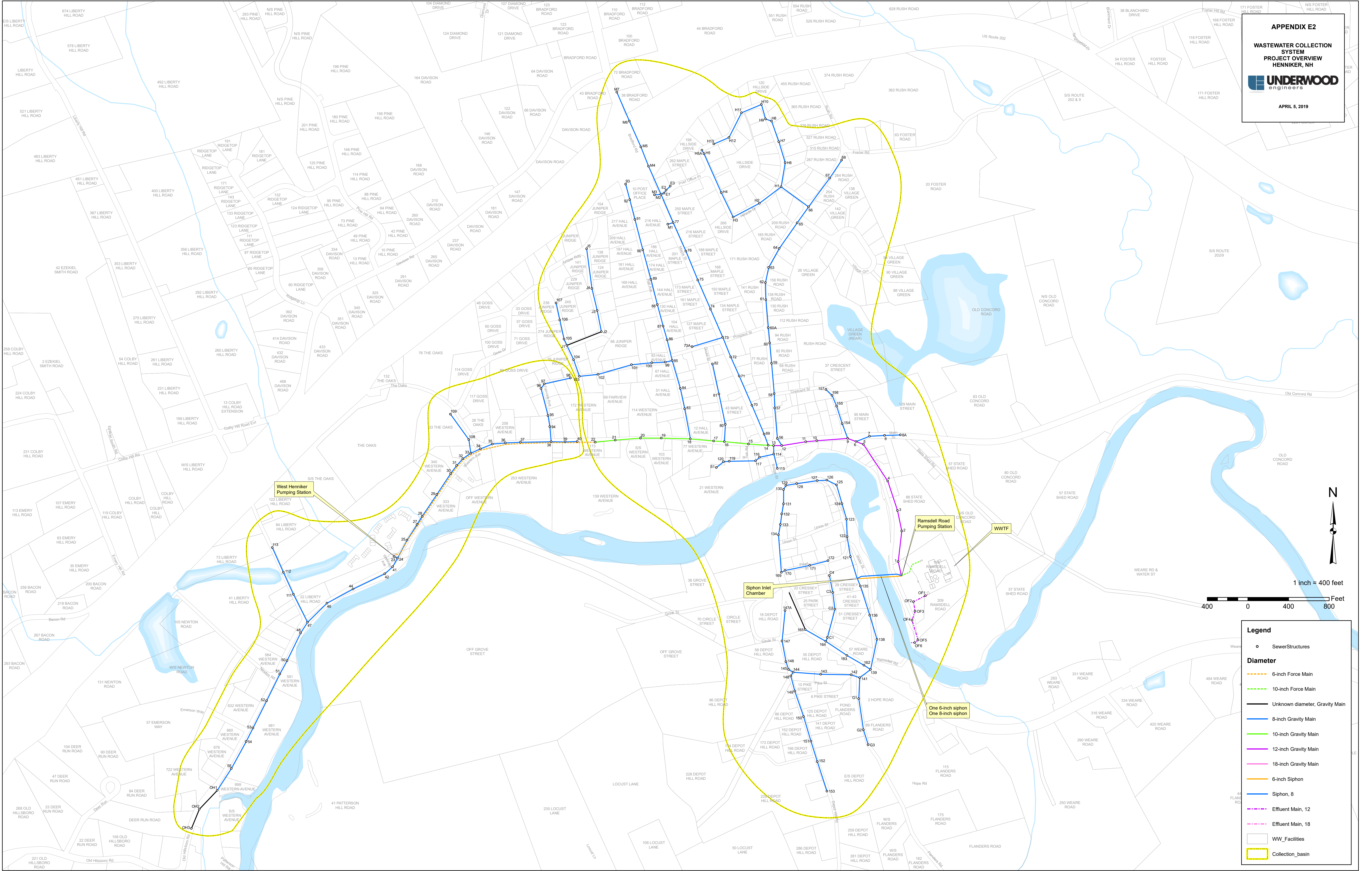
Appendix E
Wastewater
System Maps

APPENDIX E1

WASTEWATER COLLECTION
SYSTEM
PROJECT OVERVIEW
HENNIKER, NH

APRIL 5, 2019






Legend

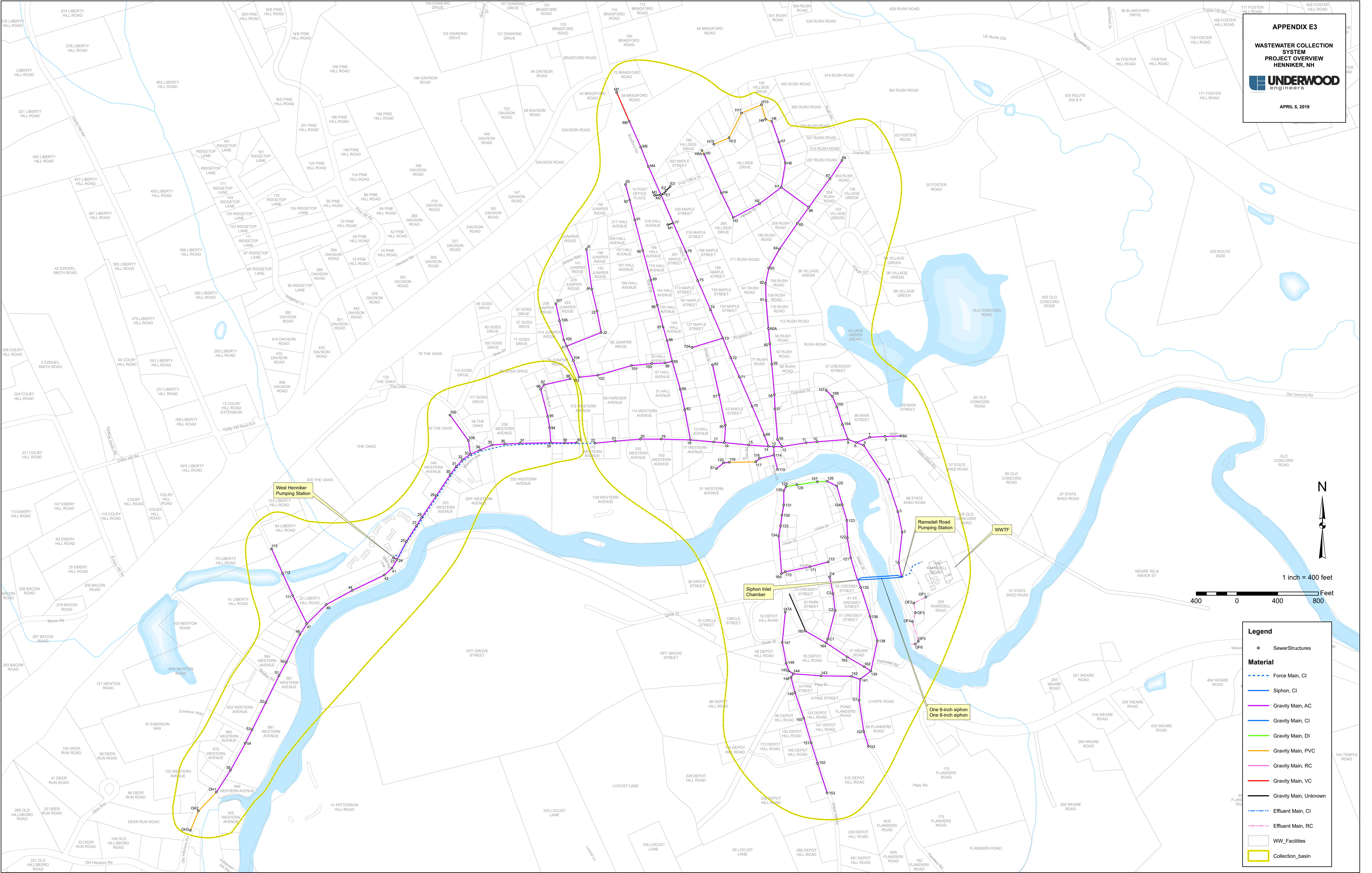
- SewerStructures
- Diameter**
 - 6-inch Force Main
 - 10-inch Force Main
 - Unknown diameter, Gravity Main
 - 8-inch Gravity Main
 - 10-inch Gravity Main
 - 12-inch Gravity Main
 - 18-inch Gravity Main
 - 6-inch Siphon
 - Siphon, 8
 - Effluent Main, 12
 - Effluent Main, 18
- WW_Facilities
- Collection_basin

APPENDIX E3

WASTEWATER COLLECTION
SYSTEM
PROJECT OVERVIEW
HENNIKER, NH

UNDERWOOD
engineers

APRIL 5, 2019



1 inch = 400 feet



Legend

- SewerStructures

Material

- Force Main, CI
- Siphon, CI
- Gravity Main, AC
- Gravity Main, CI
- Gravity Main, DI
- Gravity Main, PVC
- Gravity Main, RC
- Gravity Main, VC
- Gravity Main, Unknown
- Effluent Main, CI
- Effluent Main, RC

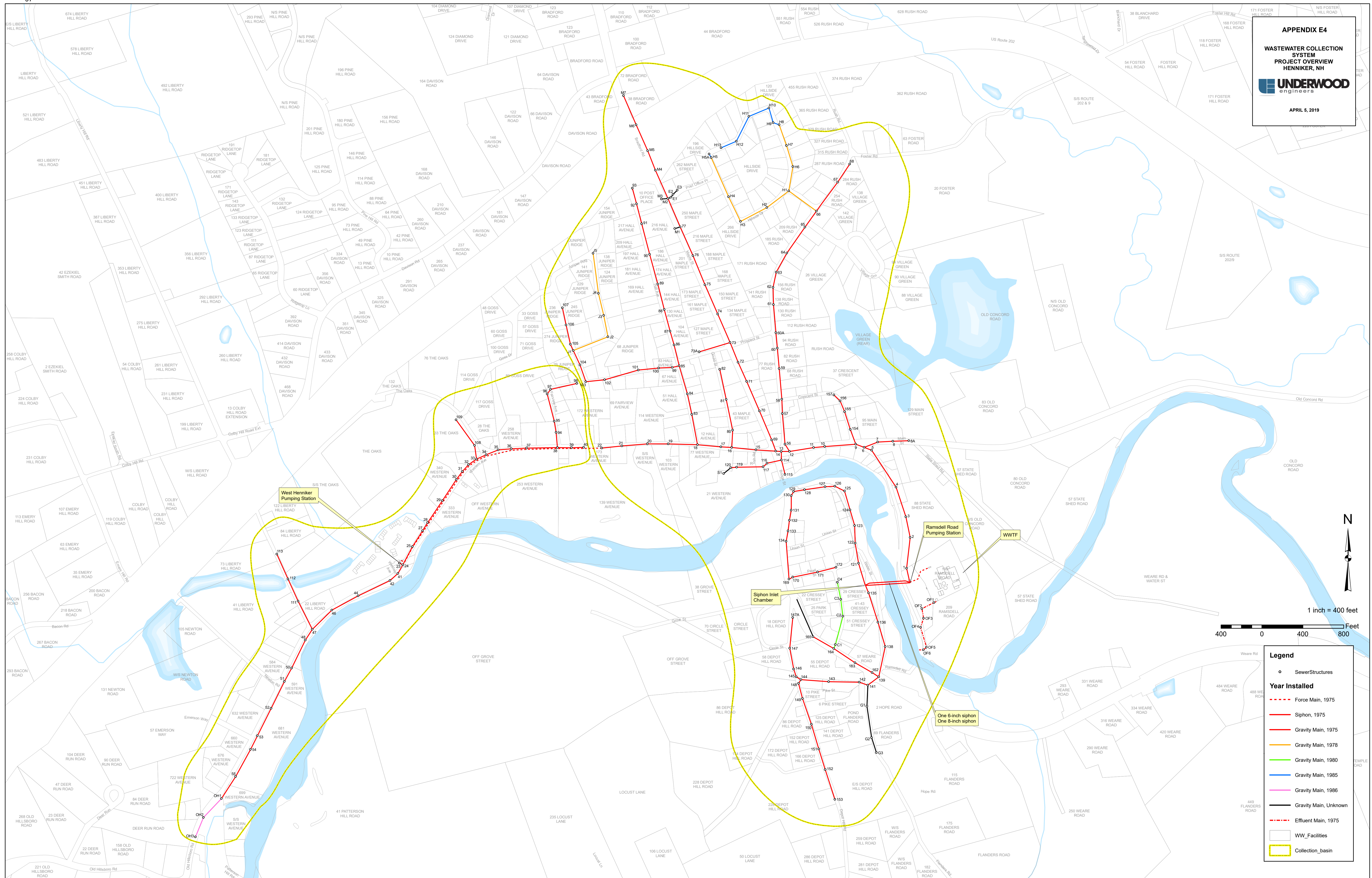
WW_Facilities

Collection_basin

APPENDIX E4

WASTEWATER COLLECTION
SYSTEM
PROJECT OVERVIEW
HENNIKER, NH

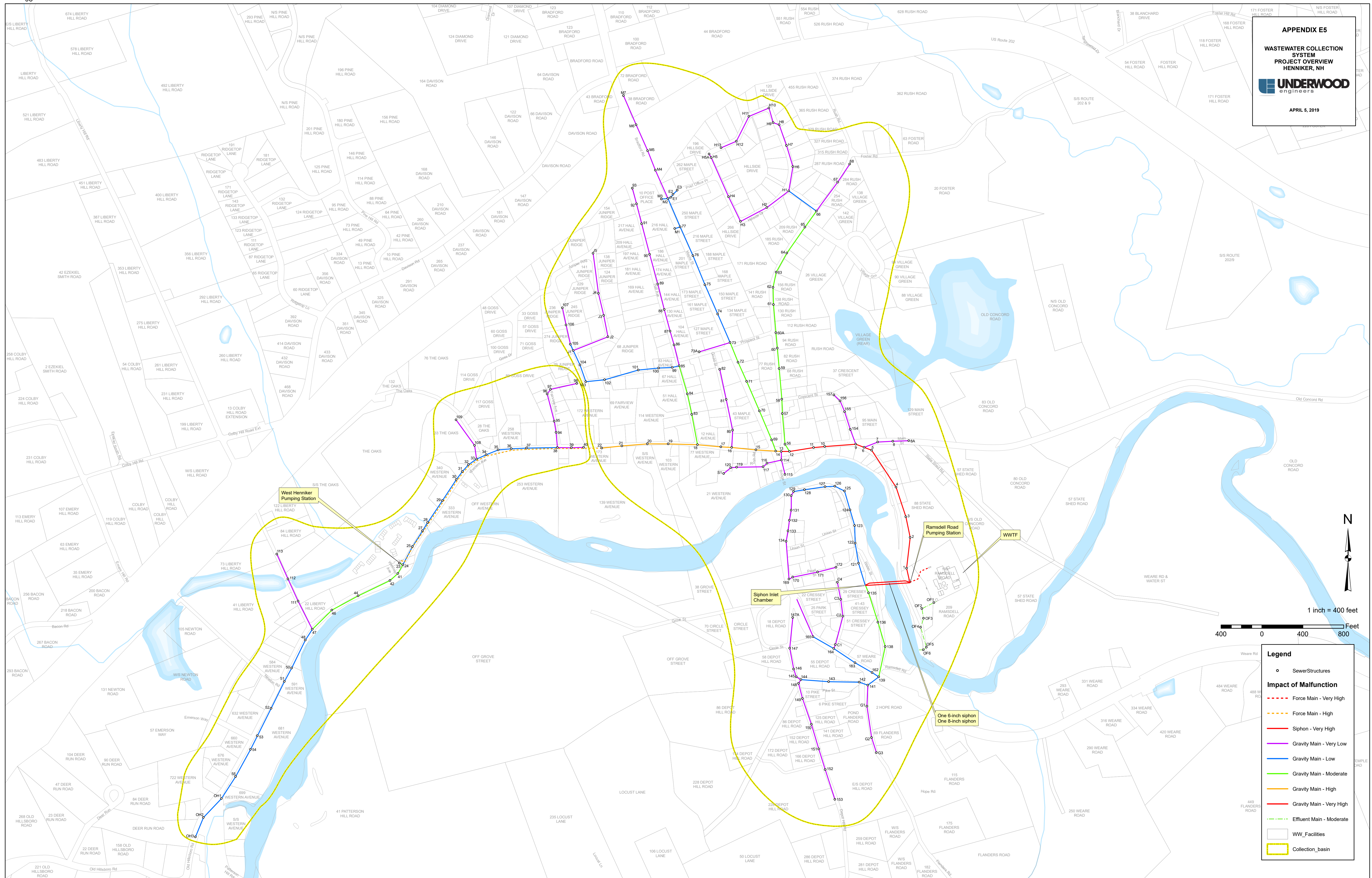
APRIL 5, 2019



APPENDIX E5

WASTEWATER COLLECTION
SYSTEM
PROJECT OVERVIEW
HENNIKER, NH

APRIL 5, 2019

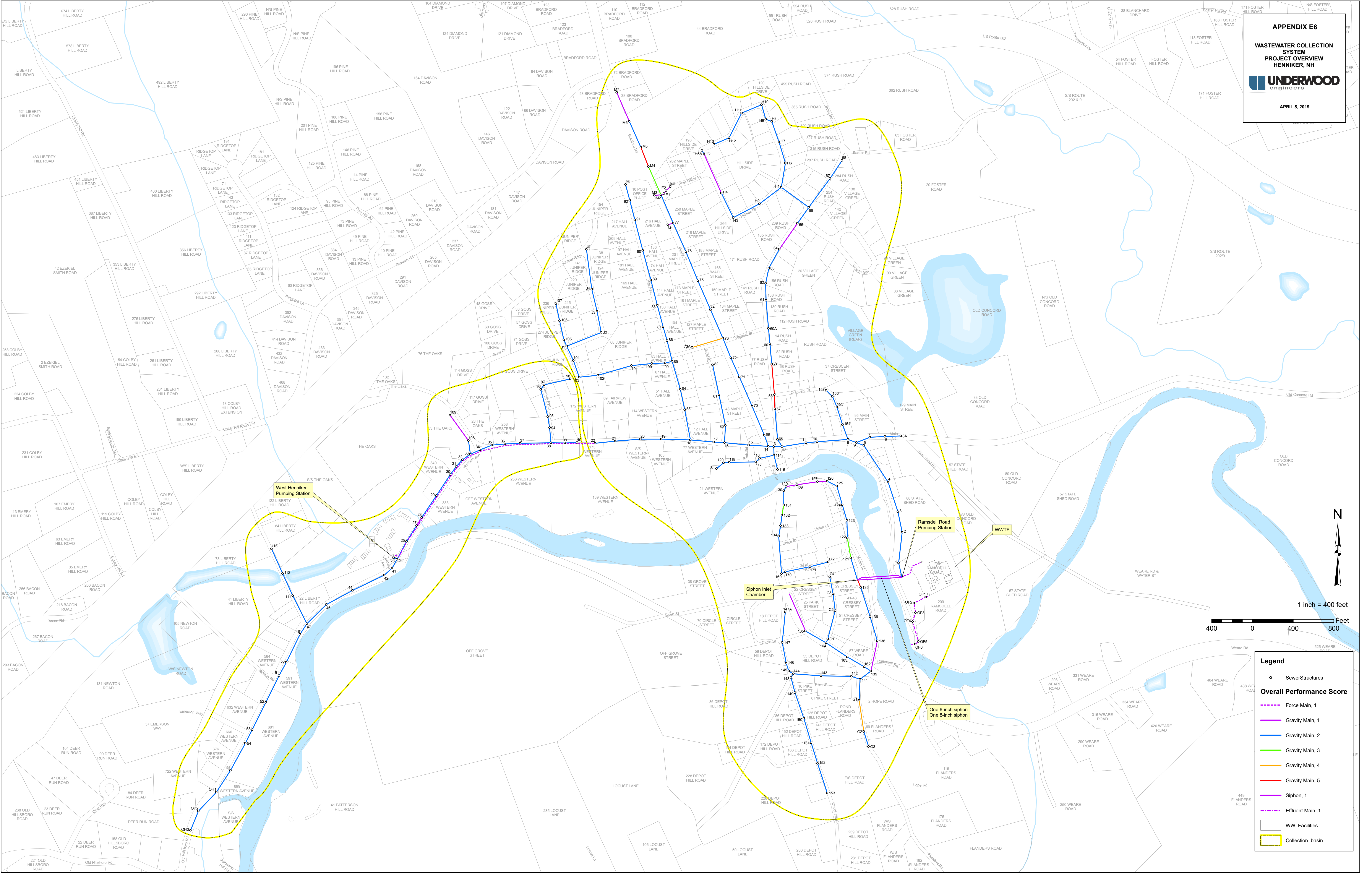


APPENDIX E6

WASTEWATER COLLECTION
SYSTEM
PROJECT OVERVIEW
HENNIKER, NH



APRIL 5, 2019



Legend

○ SewerStructures

Overall Performance Score

----- Force Main, 1

----- Gravity Main, 1

----- Gravity Main, 2

----- Gravity Main, 3

----- Gravity Main, 4

----- Gravity Main, 5

----- Siphon, 1


----- Effluent Main, 1

WW_Facilities

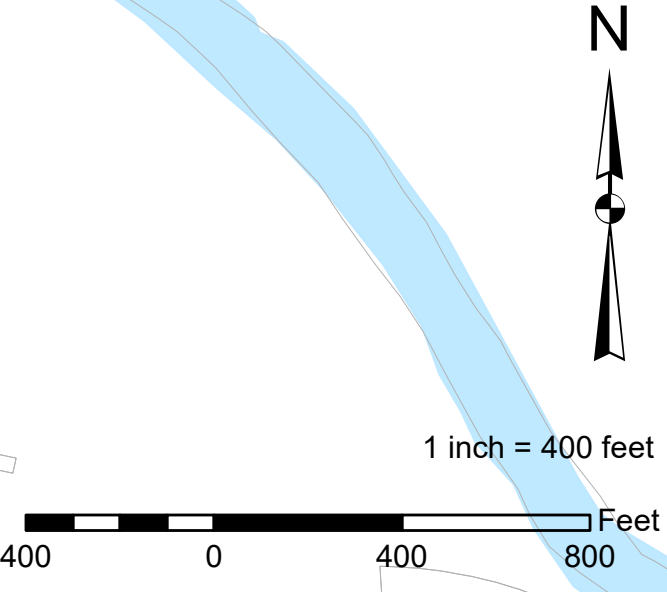
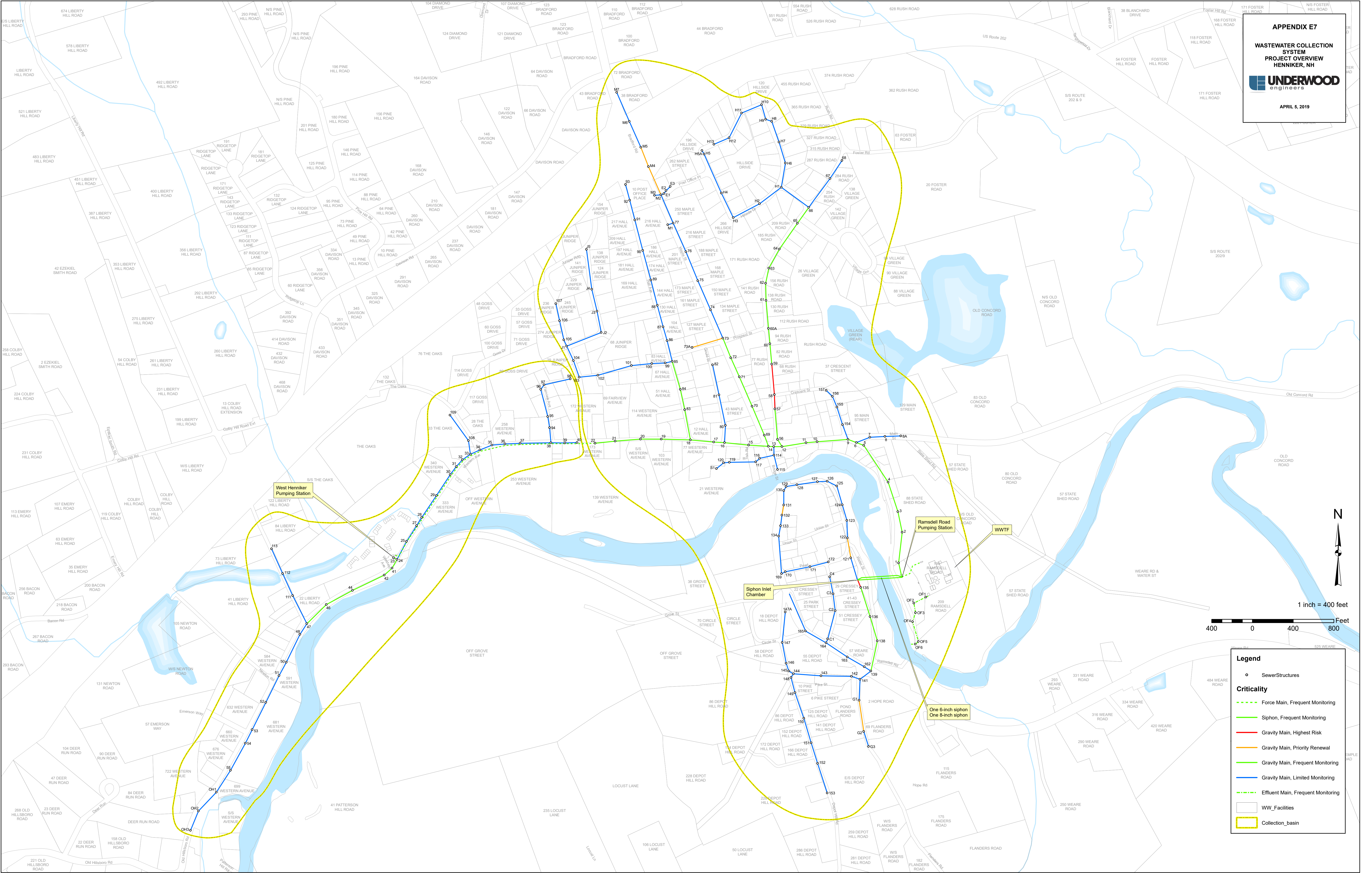
Collection_basin

APPENDIX E7


WASTEWATER COLLECTION
SYSTEM
PROJECT OVERVIEW
HENNIKER, NH

UNDERWOOD
engineers








APRIL 5, 2019





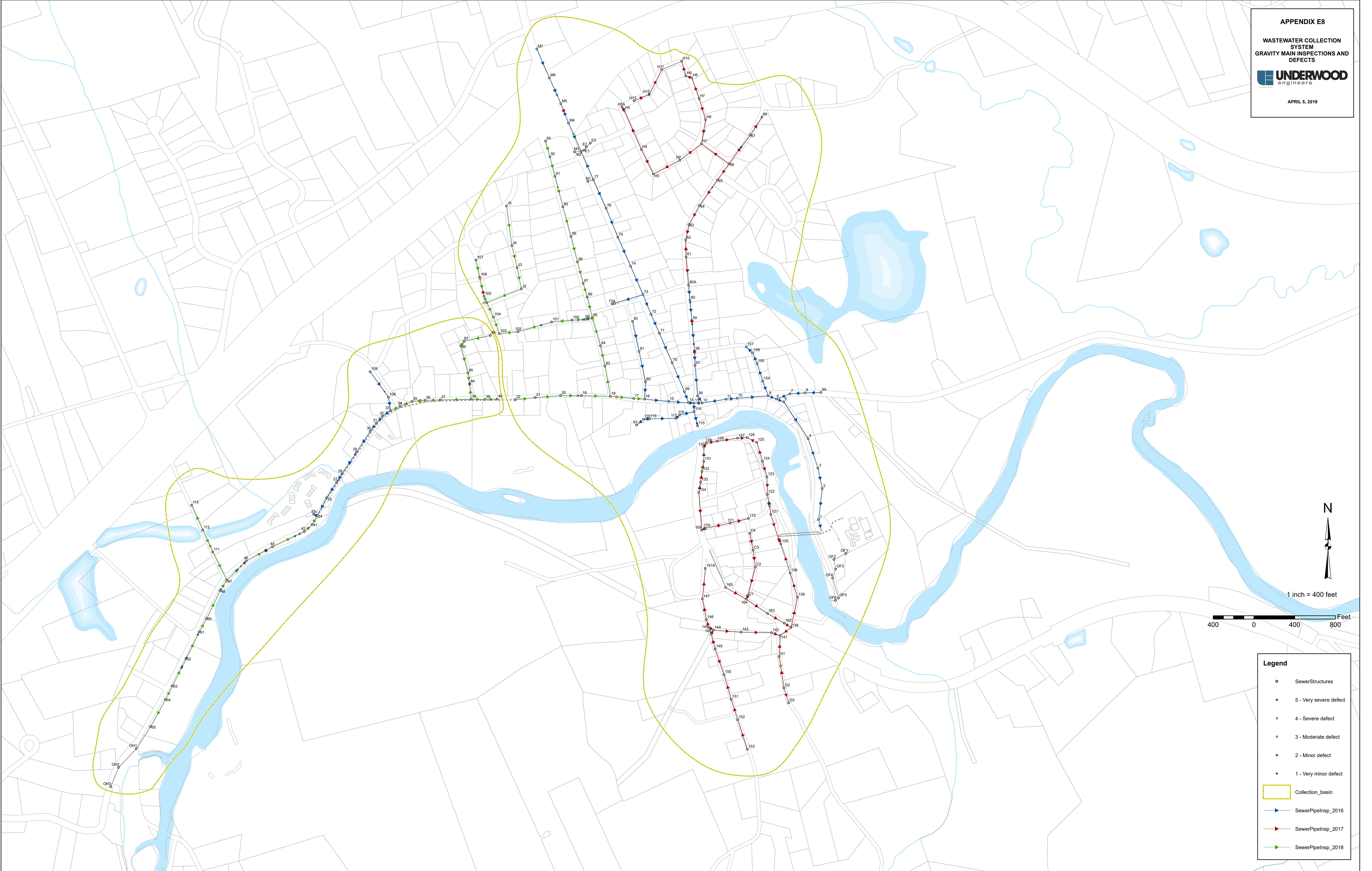
Legend

-  Sewer Structures

Criticality

-  Force Main, Frequent Monitoring
-  Siphon, Frequent Monitoring
-  Gravity Main, Highest Risk
-  Gravity Main, Priority Renewal
-  Gravity Main, Frequent Monitoring
-  Gravity Main, Limited Monitoring
-  Effluent Main, Frequent Monitoring

-  WW Facilities
-  Collection_basin



APPENDIX E8

WASTEWATER COLLECTION SYSTEM
GRAVITY MAIN INSPECTIONS AND DEFECTS

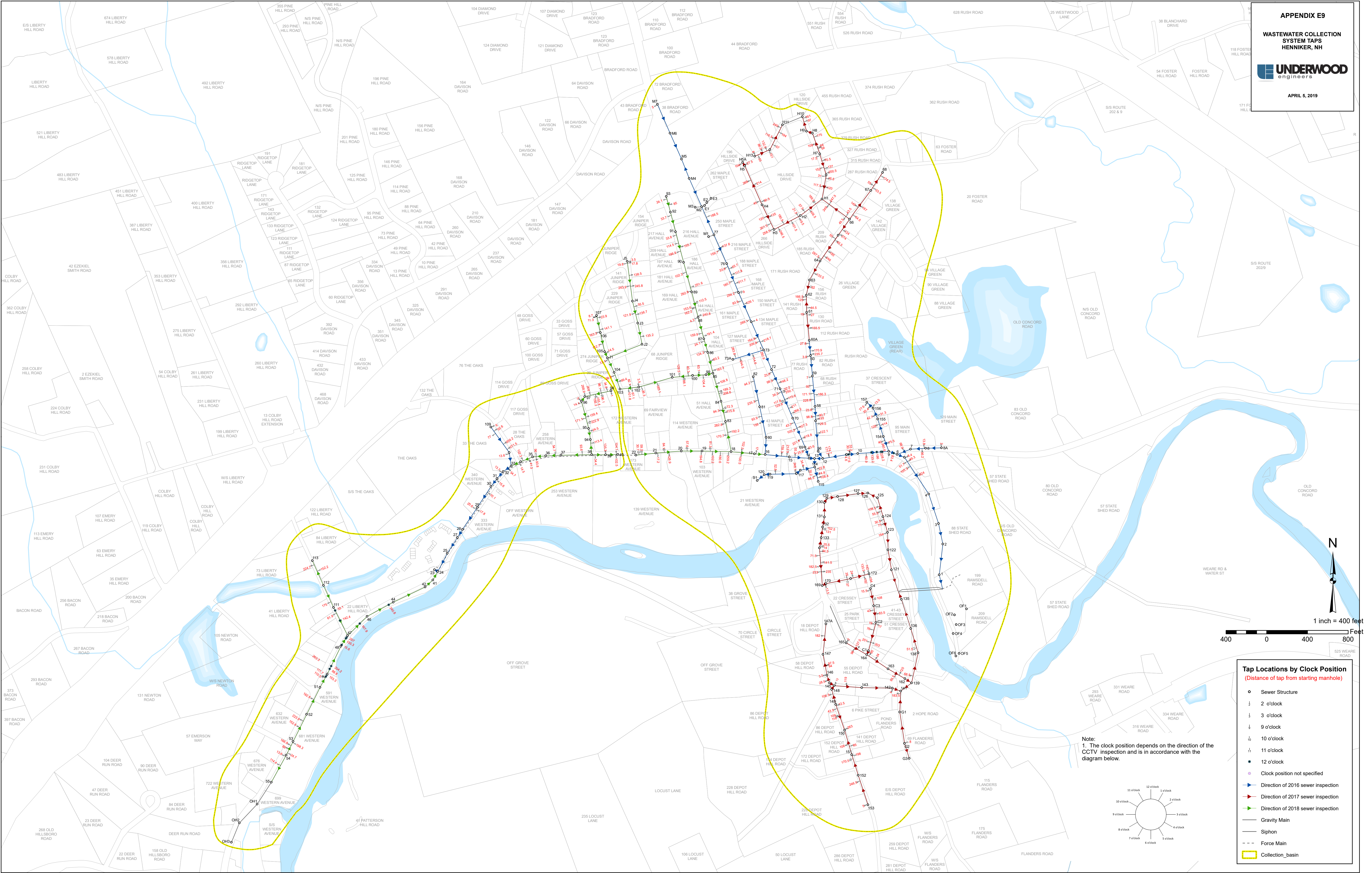
UNDERWOOD
engineers

APRIL 5, 2019

1 inch = 400 feet

Legend

- SewerStructures
- 5 - Very severe defect
- 4 - Severe defect
- 3 - Moderate defect
- 2 - Minor defect
- 1 - Very minor defect
- Collection_basin
- SewerPipeInsp_2016
- SewerPipeInsp_2017
- SewerPipeInsp_2018





Town Hall
18 Depot Hill Road
Henniker, NH 03242

Tel: (603) 428-3221
Fax: (603) 428-4366

Incorporated November 10, 1768
"Only Henniker on Earth"

TOWN OF HENNIKER, NEW HAMPSHIRE

STAFF REPORT

DATE: November 23, 2020
TITLE: Town Hall Remodel
INITIATED BY: Joseph Devine, Town Administrator
PREPARED BY: Joseph Devine, Town Administrator
PRESENTED BY: Joseph Devine, Town Administrator

AGENDA DESCRIPTION:

This is an idea that has been mentioned during several meetings, but no formal action has taken place. I am looking to expand the current office where Planning and Zoning is. By moving the wall I would like to create a more formal conference room between the Planning and Zoning Office and the Town Administrator's Office.

The current office that houses the Assessing Technician would be changed to a copy room where we would place all the copiers, files, office supplies. The Assessing Technician would move to the Planning Zoning Office.

I have not fully vetted the cost, but we are only moving one non-load bearing wall, adding a door, window and moving electrical. I would like to use money leftover from the CARES act to fund it.

Legal Authority: N/A

Financial Details: N/A

Town Administrator Comment: N/A

Suggested Action/Recommendation:

Suggested Motion:

Motion to authorize the Town Administrator to move forward with the rehab of Town Hall.



Town Hall
18 Depot Hill Road
Henniker, NH 03242

Tel: (603) 428-3221
Fax: (603) 428-4366

Incorporated November 10, 1768
"Only Henniker on Earth"

TOWN OF HENNIKER, NEW HAMPSHIRE

STAFF REPORT

DATE: November 23, 2020

TITLE: Changes to Employee Personnel Policy

INITIATED BY: Joseph Devine, Town Administrator

PREPARED BY: Joseph Devine, Town Administrator

PRESENTED BY: Joseph Devine, Town Administrator

AGENDA DESCRIPTION:

Personnel Policy Changes: Second Reading

Change - Addendum A – Section 5

Annual Vacation Time

Current		Change	
After 1 year of employment	Ten (10) Days	1-5 years of employment	Twelve (12) Days
After 5 years of employment	Fifteen (15) Days	6-10 years of employment	Fifteen (15) Days
After 15 years of employment	Twenty (20) Days	11-15 years of employment	Twenty (20) Days
		16 th on	Twenty-Five (25) Days

*Adding additional vacation time does not cost additional dollars for most departments. The exception is the Police Department who would still need to cover the open shift.

New – Addendum A – Section 6

Personal Days

The town will provide two (2) paid personal days each year to all full-time and one (1) paid personal day to part-time employees working regularly at least 20 hours per week. Part-time employees working less than 20 hours per week regularly, Call-Per Diem and temporary employees are not entitled to any paid personal days. Each eligible employee will receive these non-cumulative personal days when hired and each year thereafter, granted on the employee's anniversary date. Personal days may be taken for any purpose except as substitution for suspension as a result of disciplinary action. Personal days must be scheduled and approved by the

Department Head in accordance with the employee's preference and the needs of the Department, so long as notice is provided as soon as practicable.

**Adding personal days will not cost additional dollars for most departments. The exception is the Police Department who would still need to cover the open shift.*

New – Addendum A – Section 7

Longevity Pay

The Town provides longevity pay to full-time employees based on continuous years of service as follows:

<i>Years of Service</i>	<i>Annual Payment</i>
<i>3-5 years</i>	<i>\$250</i>
<i>6-10 years</i>	<i>\$500</i>
<i>11-15 years</i>	<i>\$750</i>
<i>16-20 years</i>	<i>\$1,000</i>
<i>21 or more</i>	<i>\$1,250</i>

Payment shall be made annually on the payroll that includes the employee's anniversary date. Upon termination of employment with the Town, employees shall receive longevity pay pro-rated for the number of days of longevity in that year calculated from the employee's anniversary date to the day employee terminates.

The Town provides longevity pay to part-time employees based on continuous years of service as follow:

<i>Years of Service</i>	<i>Annual Payment</i>
<i>3-5 years</i>	<i>\$125</i>
<i>6-10 years</i>	<i>\$250</i>
<i>11-15 years</i>	<i>\$375</i>
<i>16-20 years</i>	<i>\$500</i>
<i>21 or more</i>	<i>\$625</i>

Payment shall be made annually on the payroll that includes the employee's anniversary date. Upon termination of employment with the Town, employees shall receive longevity pay pro-rated for the number of days of longevity in that year calculated from the employee's anniversary date to the day employee terminates.

The amount of payment will be based on the status (part time/full time) of the employee on their anniversary date.

**The cost to implement this in 2021 will be \$12,250 and would benefit 23 employees the first year.*

Change - Addendum B - Section 1

Add the following language:

An insurance "buyout" shall be included for full-time regular employees provided:

- *That the employee is covered by health insurance from any other source other than the town;*
- *That the employee elects not to be covered by the Town's health insurance; and*
- *That the employee proves to the satisfaction of the Town that he/she has sufficient alternative health insurance coverage.*

The Town shall reimburse the employee meeting the above criteria in the following fashion:

- *Family Coverage* *\$10,000*

- 2-person coverage \$7,500
- Single Coverage \$5,000

Said buy-out shall be included as a table benefit "insurance credit" paid quarterly to the employee. The employee shall furnish the Town with proof of alternative coverage on a yearly basis.

*The additional cost to raise the coverage from \$4,000 to this is \$24,000. We currently have four employees who take the buyout all of which would be covered by a family plan. The yearly cost of a family plan to the town is approximately \$22,000, which is still a savings of almost 55% to the town.

New - Addendum B – Section 9

Tuition Reimbursement

The following reimbursement policy will apply to all full-time employees after one year of service. The Town agrees to provide reimbursement for the cost in accordance with the following:

- *Courses must be approved in advance as recommended by the department head with the approval by the Town Administrator;*
- *Courses are related to the employee's job or as part of an approved career development program;*
- *There is sufficient funding in the budget for that purpose;*
- *Not more than one thousand five hundred dollars (\$1,500) will be paid for an employee in any calendar year for all course reimbursement for that year.*
- *Reimbursement for only the cost of the course will be as follows:*
 - *100% for an A grade;*
 - *90% for a B grade;*
 - *70% for a C grade;*
 - *100% or 0% for a "pass" or "fail" graded course*
- *Proof of course completion and grade attainment must be submitted before reimbursement.*

*I am recommending the Board establish this with \$15,000 in the account. That would allow 10 employees the \$1500 yearly.

New - Addendum A – Section 1 – E

Police Department Shift Differential

Sworn Police Officer's working the evening or midnight shift shall be awarded additional compensation with a shift differential as follows:

\$0.75 (seventy-five cents) per hour for evening shift

\$1.00 (one dollar) per hour for midnight shift

*The cost to the town assuming one officer worked evening shift and one officer worked midnight shift would be \$5,092.08

New – Addendum A – Section 1 – F

Police Department Field Training Officer Stipend

Sworn Police Officer's that have successfully completed a Field Training Officer Program shall, in addition to having the title Patrolman, hold the rank of Field Training Officer and receive an additional \$1.00 per hour during the time actively assigned a trainee by the Chief.

*On average, an officer is in field training for 20 weeks, which would add \$1,120 if the Board approves this policy.

Police Department Hiring Bonus

To keep ourselves competitive, we feel adding a hiring bonus for both certified and non-certified officers. The hope is by doing this we help stand out more when it comes to recruitment.

Certified - \$5,000 hiring bonus, \$2,500 paid when they begin employment and \$2,500 paid when they come off probation.

Non-certified - \$2,000 bonus for non-certified officers. \$1,000 paid when they begin employment and \$1,000 paid when they come off probation.

*The cost of this will never be fully known unless we have planned retirements we can plan for. If we are doing a good job retaining our employees, we hopefully will not need to use this at all

Legal Authority: N/A

Financial Details: \$57,462.08 total cost to implement all changes.

Town Administrator Comment: I feel the Board should move forward with all of the recommendations being proposed.

Suggested Action/Recommendation:

Suggested Motion:

Motion to approve all changes to the personnel policy as presented by the Town Administrator.



**Town of Henniker
Board of Selectman Budget Meeting
Saturday November 14, 2020
Henniker Community Center**

Members Present: Chairman, Kris Blomback; Vice Chair Tia Hooper; Selectman Peter Flynn; Selectman Scott Osgood; Selectman Leon Parker

Recording Secretary: Kelly McCutcheon

Guests: Town Financial Director Russell Roy, Lori Marko (Budget Advisory Commission), Jarrod Gleason (Budget Advisory Commission), Dan Butler via texts (Budget Advisory Commission), and speakers of table items.

Budget Review Process 2021 Saturday, November 14, 2020

Item 1: Consent Agenda

a) Committee Appointment – Jarrod Gleason Budget Advisory Commission

Selectman Flynn moved to approve. Vice Chair Hooper moved to approve. Motion carried 5-0.

Selectman Flynn thanked Town Administrator Joseph Devine and Financial Director Russell Roy for preparing the Board for today's meeting.

Item 2: Budget Presentation

Town Administrator Devine presented a PowerPoint Budget Presentation outlining the Town's tax rate history and the 2021 budget proposal. At this time, the school district has not submitted their rates and DRA has not set their rates. Henniker's tax rate breakdown is as follows:

60% School

32% Municipal

8% County **Video live stream cut out**

Item 3: Selectmen and Budget Advisory Committee Meeting

Table 6 Fire / Rescue: Chief Jim Morse, Chief Greg Aucoin

Chief Aucoin provided an update on staffing and went over the budget. We spoke about the maintenance of ambulances and the importance of undercoat spraying.

Table 7 Patriotic: Chief Jim Morse

Flat budget no questions or comments

Table 8 Emergency Mgmt.: Town Administrator Devine

Flat budget, no request. Selectman Osgood asked what the Emergency Management Director does? Town Administrator Devine stated last year she complete the Hazard Mitigation Plan. This year she has been working on grants for the communications tower at Craney Hill. Additionally, she assisted in the incident at New England College (NEC) at the beginning of the year. Chief Morse spoke very highly of her and stated she was unable to be present today due to attending paramedic training.

Table 9 Wastewater: Ken Levesque

The budget is less than flat being down .05%. With NEC at half of their normal student capacity the water usage at the plant is down 20%, which directly correlates to how much is coming into the plant. Town Administrator Devine stated that it is believed the lack in revenue for the department correlates to NEC's campus being at half capacity. Selectman Flynn stated he nearly fell out of his chair when he opened his sewer bill.

Vice Chair Hooper stated her concern for users on the system and the implications of NEC going remote until February, and if the restaurants have to shut down again, it is going to fall solely on the residential users to bear the cost.

Superintendent Levesque had 10 budget lines that increased more than 100 dollars and 14 budget lines that decreased more than \$100. Vice Chair Hooper asked about the alarm service increase, Russ Roy stated it was spread out across departments.

Vice Chair Hooper asked about the clogged pipe at NEC. Superintendent Levesque stated the repair for that is worked into the 2021 budget, but he is out there weekly monitoring and pumping it. Vice Chair Hooper asked if it only served NEC. Superintendent Levesque stated it serves Depot Hill Road to the stone bridge.

Table 10 Tucker Free Library: Trustees of the Tucker Free Library (Trustee Patti Osgood, Trustee Lynn Piotrowicz

The Trustees stated they did accomplish the mission of coming in under budget at a great pain. They stated they are the most active public building in town and thus needed to increase cleaning by \$10,000. Hours are still decreased but will ideally increase in the spring. The budget does include staff merit raises. Selectman Flynn asked about library revenues being used to offset the library budget. Finance Director Russ Roy stated it is per an RSA that allows the library to operate this way. Trustee Piotrowicz clarified the money is from fees collected at the circulation desk as well as the Cogswell Trust, which the library must spend as legally bound by the terms of the trust.

Trustee Osgood stated that patrons of the library have stated they cannot wait for things to return to normal and are metaphorically dying to be able to come back and hangout at the library, but they are not literally willing to die to come back inside. Mrs. Osgood stated how successful curbside pick up has been despite the enormous undertaking it was for the staff of 5 people; who have been abundantly cautious during the COVID-19 situation.

Also mentioned, if your personal printer runs out of ink, please contact the library and they will be happy to print your document for you for a small fee.

Table 11 Community Concerts: Ruth Zax & Millie Knudsen

Ruth stated how grateful the committee is to the Board for allowing them to hold a safe limited concert series this year; and how they could not have done it without the help of Pats Peak and Henniker Parks and Rec. Henniker Septic donated porta potties saving the town rental cost as well.

With the established protocols for the concerts, no attendees were diagnosed with Covid19 after the concerts. The committee took surveys and 65% of attendees purchased food in Henniker with 90% of attendees patronizing Sonny's, Supper Scoops or Western Ave prior to the concerts starting.

The committee is planning for 2021 assuming Covid-19 guidelines will still be in place. They thanked the Board again for letting them operate this summer, as the Concert Committee provides a service not just to the people of Henniker but also the local businesses, in addition to bringing emotional stability and a sense of relief to residents and concert goes in these uncertain and distressing times. Ruth thanked the Board again for their benevolence and the privilege to serve the town in this capacity.

Table 12 Elections: Lori Marko

The budget increased. Included in the increases is wages for Supervisors going from \$7.25/hour to \$10/hour to be competitive with the surrounding towns (ballot clerks are separate from Supervisors of the Checklist). Chair Blomback praised Lori and her team during both elections this past year.

Table 13 & 14 Police /Animal Control: Chief French

Over 10 a day period 2 officers were assaulted. 1 male officer was kicked in the groin and 1 female officer was overcome in a drunken brawl while awaiting backup from another town because the department does not have the staff to send officers out in teams. Chief French does not want to downplay the department being short staffed as they have before, but the department will be going from 9 full-time to less than 5 full-time officers in the near future.

Vice Chair Hooper stated the under staffing of law enforcement is a national issue. Chief French confirmed within the State there is stealing of qualified candidates through combination of better beneficences packages and pay rate. Despite the contract's employees sign for commitment, some towns will pay the buyout as part of their business plan since it is cheaper in the long run to spend the money and buyout a trained officer than it is to go through the effort of training one only to have them poached as is Henniker PD's life story.

Vice Chair Hooper asked about the call numbers. Chief French stated in the last several months calls for domestic abuse, drug induced psychosis, and suicidal ideation are through the roof and coming in on a weekly basis. Selectman Osgood asked about the Rescue Squad and Chief

French responded they are called if it is safe for them but a lot of the time the people the cause of the calls refuse medical service.

In regards to the increase in pensions, in short, the State has been underfunding the pensions for over a decade despite forcing and selling everyone on their 20% contribution of funding, which decreased to 10% during the 2008 financial crisis, and currently stands at 0% State funding.

Vice Chair Hooper voiced her concerns over the State backing out of numerous commitments that they promised municipalities that played by their rules.

Table 15 &16 Town Clerk/Tax Collector: Kim Johnson

There is a difference in the Town Clerk/Tax Collector functions. Now that the new software is finally operating town transactions should be more convenient.

Table 17 Welfare: Carol Conforti-Adams

Unusual year because of the pandemic and although asked to decrease the budget, she was able to maintain a flat budget from decreasing her paid hours. State mandates require the town to provide aid and support welfare, and it is the budget line the town is allowed to exceed.

Carol stated with the State mandates paperwork is required and applicants must meet the State regulations. Carol stated the town food pantry does a marvelous job supporting those in need in the community. The Board thanked Carol for all the work she does.

Table 18 Highway: Leo Aucoin

Highway Superintendent Aucoin talked through his budget and what he forewent. Vice Chair Hooper fully supported anything the highway department needed.

Table 19 Solid Waste: Kristen Bergeron

Superintendent Bergeron is the only full-time employee overseeing the Transfer Station & Swap Shop, Parks & Recreation, as well as all town owned buildings and land. She did recently hire 2 new part-time employees, but she is responsible for over 17 acres of town land that needs to be landscaped, shoveling town property, maintenance of town buildings and the transfer station & swap shop.

Currently, the department is funded for 2 full-time positions with Kristen being one, but the department used to have a full-time staff of four. Superintendent Bergeron stated how hard it is to find qualified employees who care, and for \$13/hour she is struggling to find qualified employees. Town Administrator Devine confirmed it is throughout the industry this is seen and especially with transfer stations. Selectman Flynn stated if it takes \$15 or \$16 dollars an hour, he supports it because Superintendent Bergeron needs the help.

Table 20 Henniker Athletics: Chris Woodbury

Chris walked the town through the Athletics budget.

No Board questions.

Table 21 Conservation Commission: Mark Mitch
No Board comments.

Table 22 Cemeteries: Tim McComish
Incurred fence destruction that Tim cleaned up for free at no cost to the town. He would like to replace as well as keeping budget the same for stone repair (most frequently commented on). Board was educated on private vs non primate cemeteries.

Table 23 Community Organizations: Organizations
Town Administer Devine discussed the line detail with the Board. The Beautification Committee's budget was discussed at length. Marc McMurphy provided the details of the Beautification Committee and what they are looking to accomplish in 2021. Question came up about the make up of the committee and the affiliation to the Chamber of Commerce. Selectmen Flynn requested the committee provide proof to the Town Administrator of the affiliation.

Table 24 Planning Board: Russ Roy
No changes and Selectman asked about zoning fees and more staff possibly and if the need for the consultant will continue. Town Administer Devine stated what is budgeted has never come close to what is actually spent. Vice Chair Hooper asked for a 5-year summary of what has been expensed, as well as a project summary list.

Table 25 Zoning Board: Russ Roy
No changes and no Board questions.

Table 26 Code: Town Administrator Joseph Devine
Contingent upon Town meeting and the ordinances being passed. If the ordinances do not pass it is a moot point. The large line item is wages.

Table 27 & 28 Town Offices / Executive: Town Administrator Joseph Devine
TOWN OFFICES
Increased with wages. Heat went down due to competitive bid. Historic Commission did not approve the newly designed handicap accessibly ramp for the community center for not meeting historic esthetics. Vice Chair Hooper recommend contractor Bill Marko.

EXECTUIVE
No questions on this budget

Table 29-33Tax Maps/Legal/Insurance/Dues: Russ Roy
TAX MAPS- No questions on this budget. The Board spoke about how nice it is to be able to look at these online and the ability to add other layers of mapping.

LEGAL- Russ Roy provided details about the budget and it being flat.

FLYNN NOT GOOD TO FUND LEGAL BUDGET AT EXPENSE OF OTHER BUDGETS, board stated they want to look at possibly increasing this line.

INSURANCE- RUSS ROY CAN'T BE HEARD

Adjourn



TOWN OF HENNIKER, NEW HAMPSHIRE

Select Board Meeting
Henniker Community Center
57 Main St.
Henniker, NH 03242

November 17, 2020
6:15 pm

Members Present: Chairman, Kris Blomback; Vice Chair Tia Hooper; Selectman Peter Flynn; Selectman Scott Osgood; Selectman Leon Parker

Town Administrator: Joseph R. Devine Jr.

Recording Secretary: Kelly McCutcheon

Guests: Bill Marko, Danny Aucoin, Heidi Aucoin

Public Hearing: To accept the health insurance surplus of funds from HealthTrust FY2020 not to exceed \$19,754.16 to the Town of Henniker per RSA 31:95-b, III(a)

There was no public comment.

Vice Chair Hooper moved to accept the health insurance surplus of funds from HealthTrust FY2020 not to exceed \$19,754.16 to the Town of Henniker per RSA 31:95-b, III(a). Selectman Osgood seconded. Motion carried 5-0.

Item 1: Letter from Kathleen Hatt

Public comment #1 -There was no public comment

CONSENT AGENDA

Item 2: November 3, 2020 Consent Agenda - Intent to Cut Map/Lot 1-586-A

Item 3: November 3, 2020 Consent Agenda - Authorize the hiring of Richard Marsh Highway Department Truck Driver/Laborer, pay grade 16, \$19.59/hour

Item 4: November 5, 2020 Consent Agenda - MS-1 2020

Item 5: November 17, 2020 Consent Agenda

a) Committee Reappointments

i. Shelbie Connor, Paula A. Amato – Economic Development Committee

ii. Heather E. Jones – Athletic Committee

iii. Elizabeth Hustis – Historic District Commission

b) Timber Tax Warrant & Certification of Yield Taxes Assessed: Map/Lot 1-054-B, 1-559, 1-570, 1-603-X1

c) Sewer Abatement 134 Maple Street: \$210.49

d) Authorize the hiring of Kirk Dockham Highway Department Seasonal Plow Truck Operator: \$30.00/hour

e) Intent to Cut Map/Lot 1-717

f) Refund Motor Vehicle Registration \$101.00, Hopkinton Forestry & Land Clearing

Vice Chair Hooper moved to approve the consent agenda as presented. Selectman Flynn seconded. Motion carried 5-0

Item 6: Transfer Station Gate Repair

Superintendent Bergeron stated that only two quotes came back because companies are not willing to travel to Henniker.

Selectman Parker moved to award the gate repair to Overhead Doors for \$3,400 including electrical work. Vice Chair Hooper seconded. Motion carried 5-0.

Item 7: Highway Department Wing Purchase

Highway Superintendent Aucoin is looking to purchase a new wing plow for his trucks. He has received three quotes: 1. Tenco \$4,399.69 2. HP Fairfield \$6,078.00 3. Donovan Equip \$9,900.00. The highway department has sufficient funds in the maintenance/repair line to support this purchase. The Highway Superintendent would like to purchase the wing plow through Tenco.

Selectman Parker moved to award the wing plow purchase to Tenco for \$4,399.69. Vice Chair Hooper seconded. Motion carried 5-0.

Item 8: MSW Disposal and Transportation Bid Award

Vice Chair Hooper moved to table. Selectman Parker seconded. Motion carried 5-0.

Item 9: Health Care Refund

Vice Chair Hooper moved to distribute the funds as presented back to employees. Selectman Parker seconded. Motion carried 5-0.

Item 10: Result of State of NH Auction

At the September 15th meeting the Board authorized Wastewater to purchase a new skid steer and the old one was moved to the Highway Department. Highway then sold the skid steer in this auction for \$8200. In fairness to Wastewater users it would be fair to have \$6,500 of the revenue from auction go back to the Wastewater budget and \$1,700 to the highway budget.

Vice Chair Hooper moved to have \$6,500 of funds received from auction returned to the Wastewater budget and the remaining \$1,700 to go into the Highway Budget. Selectman Parker seconded. Motion carried 5-0.

Item 11: Mini Splits Installation – Teen Center

The current heating system in the Teen Center is old and not working properly. Three companies were contacted; proposals were received to install a new Mitsubishi heating and cooling system. It is the recommendation of Transfer Station Superintendent Bergeron to move forward with Denron Plumbing and HVAC. We have done business with them before; they installed a similar system at the Community Center.

Selectman Parker moved to approve the Town Administrator signing the work order with Denron Plumbing and HVAC to complete the work at the Teen Center as described. Chair Blomback seconded. Motion carried 4-1 (Osgood)

Item 12: Proposed Changes to Personnel Policy

Town Administer Devine stated after reviewing the personnel policy and speaking with the department heads, there is great difficulty in retaining or recruiting employees. He discussed the recommendations outlined on his Staff Report on Personnel Policy changes with the Board.

Vice Chair Hooper moved to move the policy changes forward to a second reading. Selectman Flynn seconded. Motion carried 5-0.

Chair Blomback asked for clarification of part-time vs full-time and how the town is currently staffed.

Item 13: Police Department Step Increases

Town Administer Devine stated the Police department is struggling to retain and hire officers. The cost and time to train new officers is staggering. We should be looking for ways to keep the officers we already have on staff. To help retain these officers, he proposed all sworn Police Officers for the Town of Henniker advance (1) full step which equals a 4% raise, retroactive to November 1, 2020. The Police Department has the funds in the budget to support this change.

Chair Blomback moved to approve for the additional cost of the Police Department Step Increases to improve retention. Vice Chair Hooper seconded. Motion carried 5-0.

Item 14: NH Police Accountability Report

Police Chief French briefed the Board on the finalized report and its impact on the officers in Henniker, as well as future implications.

Item 15: Proposed Ordinances for Town Meeting 2021

- a) Henniker Building Code
- b) Henniker Housing Standards Ordinance
- c) Citation Ordinance

The Board discussed moving the proposed Housing, Building Code, and Citation Ordinances forward to the Planning to hold a public hearing. The next scheduled Planning Board meeting is December 9, 2020. The ballot would indicate that the ordinance has been submitted by the Board of Selectmen and would also include the Planning Board's approval or disapproval. Bill Marko and Heidi Aucoin will represent the Building Department Working Group at the meeting. The Building Department Working Group will hold community outreach meetings to educate the Henniker voters about the ordinances

Selectman Flynn moved the proposed Housing, Building Code and Citation Ordinances forward to the Planning Board and for placement on the Town Meeting Warrant. Selectman Parker seconded. Motion carried 5-0.

Item 16: Acceptance of Board of Selectmen Non-public Minutes October 20, 2020

Selectman Flynn moved to approve as presented. Chair Blomback seconded. Motion carried 4-0-1 (Hooper)

Item 17: Acceptance of Board of Selectmen Meeting Minutes October 20, 2020

Chair Blomback moved to approve as presented. Selectman Parker seconded. Motion carried 4-0-1 (Hooper)

Item 18: Department Reports

Included in the meeting packet

Item 19: Town Administrator Report

Wastewater has a roof leak and is looking to replace the roof on the press room. The Board agreed by consensus to fix the roof with this year's funds following the RFP process

The holiday party will not be happening because of COVID-19. Town Administer Devine asked the Board if he could use the money to purchase a turkey and ham for all full and part-time employee. The Board agreed by consensus.

Town Administer Devine is looking for Board approval to put white lights on Town Hall to help celebrate the holiday season. He has been able to secure borrowing a lift and the Highway Superintendent has offered in assisting with stringing the lights. The Board agreed by consensus.

Item 20: Selectmen Reports

Selectman Osgood stated DES approved the grant paperwork and the State has released the funds.

Selectman Flynn was notable to attend the athletics meeting but will review the minutes and report.

Selectman Parker stated the RMC went over their budget and are planning projects for next year.

Public comment #2:

Heidi Aucoin stated she really likes PTO for all time instead of breaking up between sick, vacation and personal days.

Item 21: Non-public RSA 91-A:3, 11 (a)

Chair Blomback moved to enter non-public. Selectman Osgood seconded. Motion carried 5-0.

“The only Henniker on Earth”



Office of the Town Administrator
Joseph R. Devine, Jr.

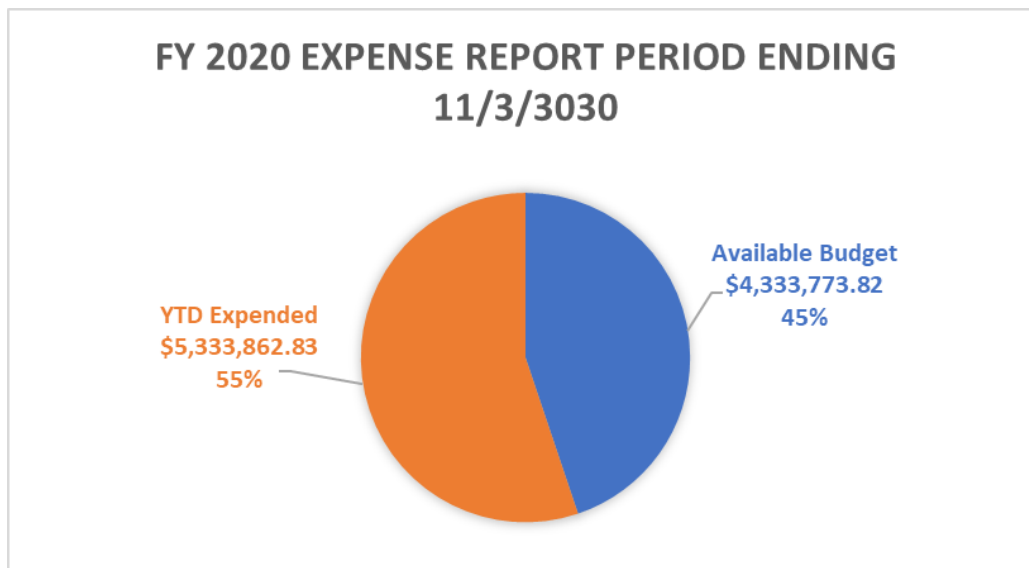
To: Board of Selectmen
From: Joseph Devine, Town Administrator
Date: November 25, 2020
Ref: **Town Administrator's Report**

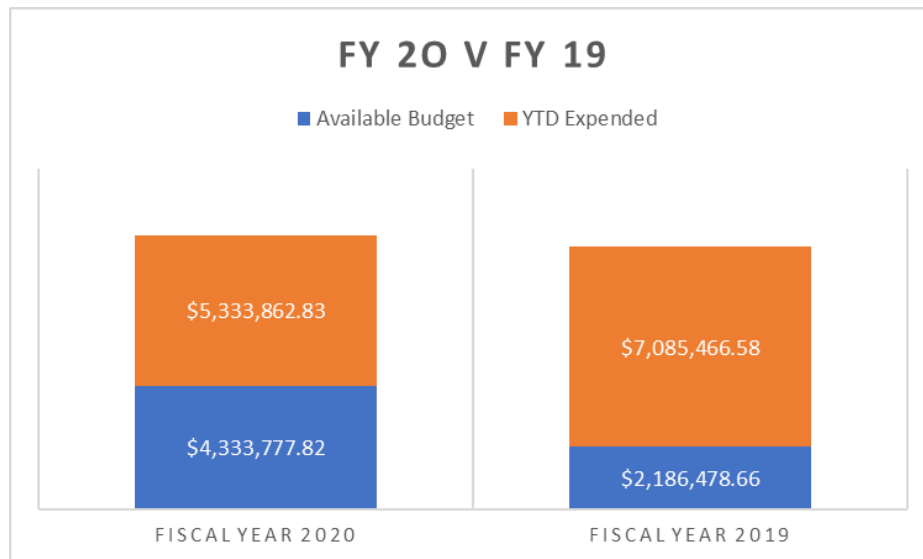
I am pleased to report on the following items:

- **COVID-19 Update** – As of November 24, 2020 we have 17 active cases (0.35% of population), 60 cumulative cases (1.24% of population) and 2,201 people have been tested (45.5% of population). New England College's campus is now closed for Winter Break and will not reopen until February 2021.

We also want to remind residents at all town properties, masks are required based on the new mask mandate by the State of NH

- **FY 20 Expense Report** –At the end of October and with a third of the fiscal year completed, we have expended 55% of the FY 20 budget. There are no glaring issues with the budget.

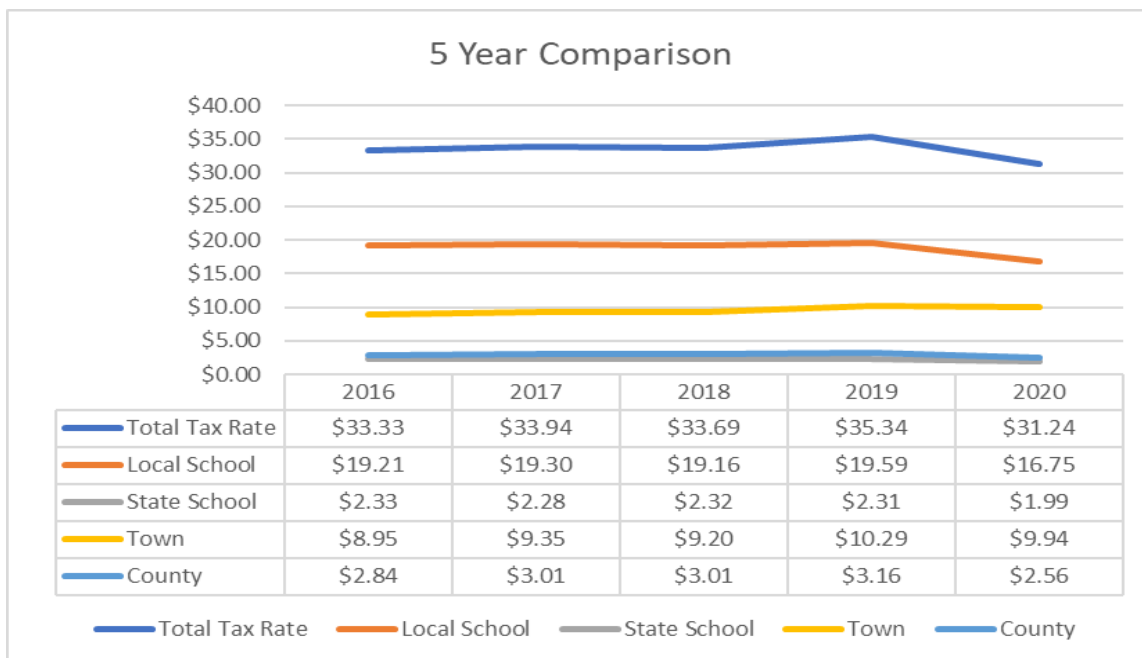




- **2020 Tax Rate** – We have set the tax rate for year ending 2020. The following is that breakdown:

Municipal Tax Rate Calculation				
Jurisdiction	FY 20 Tax Rate	FY 20 Tax Rate	Difference	Percent
Municipal	\$9.94	\$10.28	(\$0.34)	-3.3%
County	\$2.56	\$3.01	(\$0.45)	-15.0%
Henniker Community School	\$10.80	\$12.36	(\$1.56)	-12.6%
John Stark High School	\$5.95	\$7.23	(\$1.28)	-17.7%
State Education	\$1.99	\$2.32	(\$0.33)	-14.2%
Total	\$31.24	\$35.20	(\$3.96)	-11.3%

We have finalized tax bills and they were mailed on November 24th. The due date for the bills is December 28, 2020.



- **Extra Vacation Time/Comp/Holiday** – We currently have several employees that are carrying extra vacation and comp time. Employees cannot carry more than forty (40) hours of compensatory time into a new budget calendar year. No employee may carry over more than one-year accrual of vacation time from one-year anniversary date to the next.

Compensatory Time Off		
Employee	Department	Hour over 40
Colby	Police	41
Martin	Police	74
Bossi	Police	27
Mitchell	Police	3
Berdecia	Police	74
Power	Highway	39.5
Bergeron	Transfer	53

*These hours have already been converted and represent straight time hours

Vacation Time			
Employee	Department	Hours at Risk	Used By
Martin	Police	41	Jan 2021
Bossi	Police	83	July 2021
Mitchell	Police	40	May 2021
Berdecia	Police	12	December 2020
Aucoin	Highway	13	April 2021
Bergeron	Transfer	62	October 2021
Levesque	Wastewater	71	September 2021
Slader	Wastewater	8	October 2021
Meade	Fire/Rescue	78	March 2021
Gagne	Fire/Rescue	34	September 2021
Hornblower	Fire/Rescue	4	June 2021

In speaking with staff these accruals have been a long-time issue, where staff have been allowed to keep rolling the hours. I feel the board needs to act so we can get this all under control.

Here are some ideas to deal with it:

Comp Time

- We pay everyone out at the end of this year as the policy states.
- Speak with DH's and remind them to encourage staff to continue using the time up as the year progresses

Vacation Time

- We can let all staff know they have to use extra time or forfeit the time. The policy already states we are to notify the staff 60 days before their anniversary date of the number of days at risk.
- We could pay out some of the time. This year was a tough year for people using vacation because of the pandemic. We could open to all employees they could buy back up to 1 week of vacation time to help get balances down.

Either way I feel the Town needs to do a better job enforcing these policy rules, which helps getting the problem under control.

Transfer Station Holiday Time – It is my understanding for year's we have allowed transfer station employees to "bank" holiday time as vacation time. I am not sure when or how the practice started, but it is my opinion we should stop doing it. The transfer station is currently open on Tues/Thur/Sat/Sun and if a holiday falls on one of those days the station should be closed. If it does not and the employee is off, they should be paid for the holiday as straight time. So, if the employee has 40 regular hours, they should be paid 40+8 (Holiday) for a total of 48 hours at straight time. There is nothing that speaks to the transfer station banking holiday hours in the personal policy.

*****The Sections below will not be reported on orally to the Board at the meeting but will use this as a chance to update on any pertinent information. Unless the Board has questions or comments and would like to address the information*****

Ongoing Projects

- Shaker Road renaming – Working with Road Agent
- Goal Setting with Select Board
- Craney Hill Emergency Communication Tower

Upcoming Dates

December 1, 2020 @ 6:15pm – Select Board Meeting
 December 2, 2020 @ 7:00pm – Conservation Commission
 December 3, 2020 @ 6:30pm - Capital Improvement Committee
 December 4, 2020 @ 8:00am – Building Department Working Group
 December 9, 2020 @ 6:30pm – Planning Board
 December 15, 2020 @ 6:15pm – Select Board Meeting

Respectfully submitted,



Joseph R. Devine, Jr.
 Town Administrator



Covid-19 Alert – Action Needed!

Police

Primex³, in cooperation with our partners in public safety, is asking our public safety chiefs and administrators to re-evaluate their agencies' Covid-19 risk management protocols as both the nation and state see sharp increases in community transmission of the virus. This community transmission has also given rise to sharp increases in public safety personnel exposures and quarantines which could ultimately impact operational readiness for agencies both large and small in the state.

Primex³ claims data shows that public safety staff Covid-19 exposures and related quarantines fall into two broad categories – coworker exposures and exposures during calls for service – almost in equal numbers. And in most cases, long-identified risk management strategies may help to lessen exposures and the related staffing and financial impacts.

A police detective reports to work and says he was feeling unwell. Within a few days he gets tested and is diagnosed with Covid-19. Five other staff members in the department who had close contact with the detective are required to quarantine and get tested. The event interrupts department investigation operations during the quarantine period.

Action is needed now! Please take a moment and reevaluate the risk management practices outlined below and to reinforce how you and the leadership of your agency are making this a priority through policy enhancement and modeling of important behaviors and work practices.

Screen all Personnel for Signs or Symptoms of Covid-19 at the Start of Each Shift

Although screening for symptoms will not identify asymptomatic or pre-symptomatic individuals, symptom screening remains an important strategy.

- Screen all personnel (and visitors if allowed) for symptoms consistent with Covid-19 and exposure to others with Covid-19 infection. Screen personnel at the start of each shift.* *Screening should include:*



- ✓ Completion of a health screening questionnaire to include travel screening, and if the employee has been advised to self-quarantine because of exposure to someone with Covid-19 infection. A sample health screening questionnaire is available at: [CLICK HERE](#) for a sample questionnaire.
- ✓ Temperature checks and confirm absence of fever associated with Covid-19. Fever is quantified as a temperature $\geq 100.0^{\circ}\text{F}$.

- Promptly manage anyone with symptoms of Covid-19 or who has been advised to self-quarantine.



Covid-19 Alert – Action Needed!

Police

Continued

Enhance Universal Control Measures

Because of the potential for asymptomatic and pre-symptomatic transmission, source control measures are recommended for everyone. The potential for exposure to Covid-19 is not limited to calls for service. Transmission can also occur through unprotected exposures to asymptomatic or pre-symptomatic co-workers in the station.

At-work personnel shall wear a facemask at all times while they are in service and cannot socially distance (6 feet or more), including in offices, breakrooms, vehicles or other spaces where they are in close contact with coworkers. *Safety in the station is equally as important as safety when out on calls for service.*

Enhance Physical Distancing

Designate areas for personnel to take breaks, eat, and drink that allow them to remain at least 6 feet apart from each other, especially when they must be unmasked. Other considerations:

- Assign staff to separate office spaces. Shared offices are a perfect environment for virus spread and exposure.
- Install barriers or shields between staff that must share office space.
- Adjust shift schedules to reduce crowding in shared office spaces.
- Limit car-pooling and reduce vehicle passengers where practical. Require masks if more than the driver is in the vehicle.
- Divide staff for in-service training to assist with social distancing and to limit community transmission within work groups..



While police activities often require close physical contact, when possible, physical distancing (maintaining at least 6 feet between people) is an important strategy to prevent transmission. Some other considerations are:



- Limit non-essential transport of passengers in police vehicles. If necessary, passengers and officers shall wear a cloth face covering.
- Limit unnecessary officer contacts. For example, remain outside on an EMS call unless law enforcement presence is needed/requested.

Page 2 of 3



Covid-19 Alert – Action Needed!

Police

Continued

Maintain Universal Precautions – PPE and Hygiene

- ✓ Limit the number of officers to safely manage individuals.
- ✓ Avoid unnecessary close (within 6 feet) or physical (e.g. touching) contact with members of the general public.
- ✓ Perform as many tasks as possible in areas away from individuals with suspected or confirmed Covid-19.
- ✓ Ensure that cleaning and disinfection procedures are followed consistently. Clean all surfaces that others may have touched, including handles, seats and restraints.
- ✓ Keep a complete change of clothes/uniform at the station, and do not wear work clothes home.
- ✓ Officers must use proper PPE when exposed to persons suspected or confirmed with Covid-19. Personal protective equipment ensembles may vary depending on the interaction but may include gloves, gowns, eye/face protection (e.g., goggles, face shield), face masks and NIOSH-certified disposable N95 filtering facepiece respirators.
- ✓ ***Per Governor's Executive Order - Mask use required if social distancing cannot be maintained.***

Risk Management is the identification, evaluation and prioritization of those conditions that could cause harm or loss. The Covid-19 pandemic is a condition that has and continues to cause harm and loss and requires our constant management and adjustment.

Your partners at Primex³ remain available to help in guiding your many important decisions and strategies to manage this risk. Be alert and act now to review your agencies' strategies.



Joint Guidance on Employee Travel and Return to Work Issues for Local Government Employees

Originally posted June 9, 2020
Revised July 23, 2020, October 27, 2020, and November 18, 2020

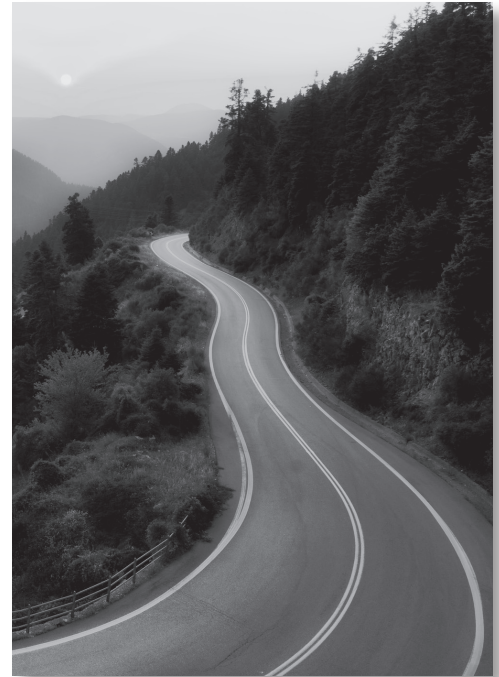
Under the original Executive Order 2020-04, and as continued to the present, only non-essential out-of-state travel by municipal employees for official business purposes was suspended. At the current time, there is no prohibition on personal travel by municipal employees.

Nevertheless, certain travel by municipal employees increases the risk of contracting COVID-19. Because at-risk travel increases the chances of getting infected and spreading COVID-19, municipal employees should be informed that avoiding it is most likely the best way to protect themselves and fellow employees from getting sick. Employees should be informed that while at-risk travel is not prohibited it will be the subject of employer workplace health screening in accordance with public health guidelines.

<https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-in-the-us.html>

Under the **Universal Guidelines** for all New Hampshire Employers and Employees, municipal employers should develop a process for screening employees reporting for work about the existence of COVID-19 symptoms, and other risk factors. The NH Department of Health and Human Services, Division of Public Health Services has also issued a guidance document related to employee travel entitled **New Hampshire COVID-19 General Travel and Quarantine Guidance, & Employer Screening and Exclusion Criteria**. We recommend that employers review this document carefully because it contains important information.

Based on this guidance, when screening for COVID-19 symptoms, municipal employers should include in the daily screening process a question that asks whether the employee has returned from interstate travel outside of Maine, Vermont, Massachusetts, Connecticut, or Rhode Island, international travel or travel on a cruise ship, as well as a question to determine whether the employee is symptomatic or asymptomatic. Additional information important to the employer's assessment is whether the travel was "essential travel" and whether the employee is an "essential critical infrastructure employee," as defined by the Employer Screening and Exclusion Criteria linked above. The relevant employee travel and status information should be evaluated under the assessment grid in the Employer Screening and Exclusion Criteria on the following page.



Joint Guidance on Employee Travel and Return to Work Issues for Local Government Employees (continued)

Isolation and Quarantine Summary

Employee Symptom/Test Status	Household Contact (highest risk) to someone with COVID-19 in past 14 days	Non-Household Close Contact to someone with COVID-19 in past 14 days	Traveled internationally, by cruise ship, or domestically outside of New England	Travel within New England or No Travel
New or unexplained symptom of COVID-19	Isolate and get tested immediately. If negative Self-Quarantine for 14 days from last day of exposure (no exceptions)	Isolate and get tested immediately. If negative Self-Quarantine for 14 days from last day of exposure (unless essential critical infrastructure employee as outlined above)	Isolate and get tested immediately. If negative the person can return to normal activities once they are at least 24 hours without a fever (off fever-reducing medications) and other symptoms are improving, AND any one of the following three criteria apply: 1. Person completes self-quarantine for 14 days from last day of travel 2. Travel was "essential travel" 3. Person tests out of quarantine with a negative SARS-CoV-2 test on day 7 of quarantine (must be a molecular test to detect active infection, such as a PCR test) (Note: If person was tested before day 7 of quarantine due to symptoms and was negative, then a second test on day 7 is still required to end quarantine early.) If traveler is designated as an essential critical infrastructure employee, then person can return to work when they are at least 24 hours without a fever (off fever-reducing medications) and other symptoms improving, but they must quarantine for all other non-work related purposes following the quarantine guidance.	Isolate and get tested immediately. If negative the person can return to normal activities after at least 24 hours without a fever (off fever reducing medications) and other symptoms are improving
Asymptomatic	Self-Quarantine for 14 days from last day of exposure (no exceptions). Get tested	Self-Quarantine for 14 days from last day of exposure (unless essential critical infrastructure employee as outlined above). Get tested	Self-Quarantine for 14 days from last day of travel (unless essential travel) Person has the option of testing out of quarantine with a negative SARS-CoV-2 test on day 7 of quarantine (must be a molecular test to detect active infection, such as a PCR-based test). If traveler is designated as an essential critical infrastructure employee, then person can return to work as outlined above, but they must quarantine for all other non-work related purposes following the quarantine guidance.	No restrictions
Positive Test for COVID-19	Self-Isolate	Self-Isolate	Self-Isolate	Self-Isolate

Joint Guidance on Employee Travel and Return to Work Issues for Local Government Employees (continued)

- Remote work, if available, is encouraged as an alternative to a temporary leave of absence.
- These are general employer recommendations that may be superseded with appropriate guidelines and procedures implemented for specialized positions.
- The State guidance is not mandatory for municipal employers but is strongly recommended by the State, NHMA and Primex³.
- Travel exposure protocols for employers are subject to rapid change so appropriate consultation with the most current CDC and NH DHHS guidance is necessary.
- You may contact Primex³ with any questions regarding application of the employer guidelines.



Risk Management Bulletin



Covid-19 Alert – Action Needed!

Fire/EMS

Primex³, in cooperation with our partners in public safety, is asking our public safety chiefs and administrators to re-evaluate their agencies' Covid-19 risk management protocols as both the nation and state see sharp increases in community transmission of the virus. This community transmission has also given rise to sharp increases in public safety personnel exposures and quarantines which could ultimately impact operational readiness for agencies both large and small in the state.

Primex³ claims data shows that public safety staff Covid-19 exposures and related quarantines fall into two broad categories – coworker exposures and exposures during calls for service – almost in equal numbers. And in most cases, long-identified risk management strategies may help to lessen exposures and the related staffing and financial impacts.

Action is needed now! Please take a moment and reevaluate the risk management practices outlined below and to reinforce how you and the leadership of your agency are making this a priority through policy enhancement and modeling of important behaviors and work practices.

Screen All Personnel for Signs or Symptoms of Covid-19 at the Start of Each Shift

Although screening for symptoms will not necessarily identify asymptomatic or pre-symptomatic individuals, symptom screening remains an important strategy.

- Screen all personnel (and visitors if allowed) for symptoms consistent with Covid-19 and exposure to others with Covid-19 infection. Screen personnel at the start of each shift.*

Screening should include:

- ✓ Completion of a health screening questionnaire to include travel screening, and if the employee has been advised to self-quarantine because of exposure to someone with Covid-19 infection. A sample health screening questionnaire is available at: [CLICK HERE](#) for a sample questionnaire.
- ✓ Temperature checks and confirm absence of fever associated with Covid-19. Fever is quantified as a temperature $\geq 100.0^{\circ}\text{F}$.

- Promptly manage anyone with symptoms of Covid-19 or who has been advised to self-quarantine.

* Screening for on-call and volunteer personnel can be difficult. Off-duty, call and volunteer personnel subject to recall should assess themselves at least once each morning as they are unable to assess their symptoms before responding to an emergency call.

A group of firefighters gather together at the station for training. Masks aren't worn and social distancing is not adhered to. The following day, one of the firefighters exhibits Covid-19 symptoms. All firefighters that were with the symptomatic firefighter the day before now have to quarantine for 14 days, severely impacting the department's ability to respond to calls for service.



Covid-19 Alert – Action Needed!

Fire/EMS

Continued

Enhance Universal Control Measures

Because of the potential for asymptomatic and pre-symptomatic transmission, source control measures are recommended for everyone. The potential for exposure to Covid-19 is not limited to calls for service. Transmission can also occur through unprotected exposures to asymptomatic or pre-symptomatic co-workers in the station.

At-work, personnel shall wear a facemask at all times while they cannot social distance (6 feet apart) including in apparatus, in breakrooms and offices, on the training ground, and any other spaces where they are in close contact with coworkers. *Safety in the station is equally as important as safety when out on calls for service.*

Enhance Physical Distancing

Designate areas for personnel to take breaks, eat, and drink that allow them to remain at least 6 feet apart from each other, especially when they must be unmasked. Other considerations:

- Assign staff in administrative functions to separate office spaces. Shared offices are a perfect environment for virus spread and exposure.
- Install barriers or shields between staff that must share office space. If needed, consider alternative office spaces to reduce room density.
- Assign staff to separate bunk rooms where possible for overnight shifts.
- Limit car-pooling to off-site training and related activities.
- Divide staff for department training to assist with social distancing and to limit community transmission within work groups.
- Consider the use of video conferencing applications (Zoom, Teams) for training activities.

** Manage in-station gathering on call backs to essential personnel. Release companies as soon as practical. Mandate mask use when coming and going from the station.*

While fire and EMS activities often require close physical contact, when possible, physical distancing (maintaining at least 6 feet between people) is an important strategy to prevent transmission. Some considerations are:

- Limit the number of providers in contact with patients to minimize possible exposures.
- Ideally, family members should not ride in the transport vehicle. If riding in the transport vehicle, they shall wear facemasks.



Covid-19 Alert – Action Needed!

Fire/EMS

Continued

Maintain Universal Precautions – PPE and Hygiene

- ✓ Avoid unnecessary close (within 6 feet) or physical (e.g., touching) contact with members of the general public.
- ✓ Perform as many tasks as possible in areas away from individuals with suspected or confirmed Covid-19.
- ✓ Ensure that cleaning and disinfection procedures are followed consistently. Clean all surfaces that others may have touched, including stretchers and re-useable medical equipment. Don't forget office equipment and desk.
- ✓ Keep a complete change of clothes/uniform at the station, and do not wear work clothes home. Call and volunteer personnel and those subject to recall should plan ahead and keep a change of clothes at the station.
- ✓ Fire and EMS personnel must use proper PPE when exposed to persons suspected or confirmed with Covid-19. Personal protective equipment ensembles may vary depending on the interaction but may include gloves, gowns, eye/face protection (e.g., goggles, face shield), face masks and NIOSH-certified disposable N95 filtering facepiece respirators.
- ✓ ***Per Governor's Executive Order - Mask are required if social distancing cannot be maintained.***

Risk Management is the identification, evaluation, and prioritization of those conditions that could cause harm or loss. The Covid-19 pandemic is a condition that has and continues to cause harm and loss and requires our constant management and adjustment.

Your partners at Primex³ remain available to help in guiding your many important decisions and strategies to manage this risk. Be alert and act now to review your agencies' strategies.

