

**Engineers Opinion of Probable Cost
Proposed Richmond West Main Street Water & Wastewater Expansion**

DESIGN, PERMITTING & ADMINISTRATIVE (PHASE I & II)

Revised 2-1-22

Description	Unit Cost	Quantity	Total Cost
A. PLANNING & PRELIMINARY ENGINEERING (Phase I & II)			
Archeology	Complete	1	\$0
Wetlands Delineation	Complete	1	\$0
Planning/Conceptual Design (Town/GME)	\$5,000	1	<u>\$5,000</u>
Preliminary Engineering Subtotal =			\$5,000
B. FINAL DESIGN & PERMITTING (Phase I & II)			
Geotechnical Evaluation	\$5,000	1	\$5,000
ROW Surveying & Underground Utility Locating	\$10,000	1	\$10,000
Engineering & Surveying Easement Assistance (as necessary)	\$5,000	1	\$5,000
Hydraulic Analysis	\$10,000	1	\$10,000
Final Design	\$35,000	1	\$35,000
Water & Sewer Commission Review	\$1,000	1	\$1,000
Richmond Zoning Permits	\$2,000	1	\$2,000
Act 250 Permitting	\$15,000	1	\$15,000
Stream Alteration Permitting	\$5,000	1	\$5,000
Wetlands Permitting	\$5,000	1	\$5,000
Permit to Construct (Water)	\$2,000	1	\$2,000
Permit to Construct (Wastewater)	\$2,000	1	\$2,000
VT AOT Coordination/Permitting	\$3,000	1	<u>\$3,000</u>
Final Design/ Permitting Subtotal =			\$100,000
ADMINISTRATION (PHASE I & II)			
Permit Fees	\$5,000	1	\$5,000
Legal (Municipal Bond Issuance)	\$3,000	1	\$3,000
Legal (Right of Way Certification & Easements)	\$10,000	1	\$10,000
Survey (Construction & Permanent Easements)	\$5,000	1	\$5,000
ROW Purchase (placeholder)	\$20,000	1	\$20,000
Misc.	\$5,000	1	<u>\$5,000</u>
Administration Cost Subtotal =			\$48,000
Design, Permitting & Administrative Total =			\$153,000
Contingency (15%) =			\$22,950

Engineers Opinion of Probable Cost for Design, Permitting and Administrative = \$175,950

Note: GME believes Act 250 will request that they review the entire project prior to issuing a permit. As a result, the assumption is both phases I & II will be required to be permitted at the same time.

**Engineers Opinion of Probable Cost
Proposed Richmond West Main Street Wastewater Expansion**

WASTEWATER CONSTRUCTION (PHASE I)

Revised 2-1-22

Description	Unit	Quantity	Unit Cost	Total Cost
A. BIDDING/CONSTRUCTION/AWARD (Phase I)				
Contract & Bid Document Preparation	LS	1	\$3,000	\$3,000
Bidding, Contractor Questions, Bid Review & Recommendation	LS	1	\$5,000	<u>\$5,000</u>
Bidding/Construction/Award Subtotal =				\$8,000
B. WASTEWATER CONSTRUCTION (Phase I)				
Surveying & Site Layout	LS	1	\$5,000	\$5,000
Site Preparation & Misc.	LS	1	\$10,000	\$10,000
3" HDPE Force Main	FT	3,600	\$35	\$126,000
Existing Manhole Coring/Repairs	LS	1	\$1,000	\$1,000
Pump Station Precast Concrete Tank (Assume 2,000 Gal.)	LS	1	\$20,000	\$20,000
Pump Station Pumps/Controls/Plumbing	LS	1	\$20,000	\$20,000
Pump Station Electricity	LS	1	\$10,000	\$10,000
Backup Generator & Control Panel	LS	1	\$25,000	\$25,000
Telemetry	LS	1	\$5,000	\$5,000
8" sleeve Under Route 2 - #235 Huntington Road (ft)	FT	40	\$95	\$3,800
2" Service Stub & Spacers Under Route 2 (#235 Huntington Road)	FT	50	\$100	\$5,000
Pavement Restoration (where necessary)	LS	1	\$2,000	\$2,000
*Blasting/Rock Removal	CY	50	\$400	\$20,000
Landscaping	LS	1	\$10,000	\$10,000
Erosion Control	LS	1	\$10,000	\$10,000
Traffic Control & Signage	LS	1	\$30,000	\$30,000
Excavator for bore pits (assume 1,000' max.)	LS	1	\$5,000	\$5,000
Mobilization/Demobilization	LS	1	\$30,000	\$30,000
Bonds	LS	1	\$5,000	\$5,000
Contingency (10%)	LS	0.10		<u>\$34,280</u>
Phase I Construction Cost Subtotal =				\$377,080
C. Construction Phase Services (Phase I)				
Material Approvals/Shop Drawing Reviews	T&M	1	\$4,000	\$4,000
Project Manager (assume 7 week project)	T&M	1	\$7,500	\$7,500
Field Engineer (7 week project)	T&M	1	\$27,500	\$27,500
Record Drawings	LS	1	\$5,000	<u>\$5,000</u>
Phase I Construction Cost Subtotal =				\$44,000
Engineers Opinion of Total Probable Construction Costs Phase I =				\$429,080

Notes

- Opinion of Probable Cost is based on preliminary phase estimates only. More detailed costs should be developed during Final Design based on actual design quantities and constraints. Prices are based on 2021 cost estimates. It should be noted that material are subject to high variability at thi
- Assumes a limited amount of easement purchase will be required. This assumes cooperative landowners.
- Storage, pumps, alarms, controls and electrical by others.
- Assumes a minimal amount of ledge and large cobbles are encountered during directional drilling.
- "Site Preparation and Misc." includes miscellaneous equipment to be supplied, temporary offices, clean up and contractors contract administration.

**Engineers Opinion of Probable Cost
Proposed Richmond West Main Street Wastewater Expansion**

WASTEWATER CONSTRUCTION (PHASE II)

Revised 2-1-22

Description	Unit	Quantity	Unit Cost	Total Cost
A. BIDDING/CONSTRUCTION/AWARD (Phase II)				
Contract & Bid Document Preparation	LS	1	\$3,000	\$3,000
Bidding, Contractor Questions, Bid Review & Recommendation	LS	1	\$5,000	<u>\$5,000</u>
Bidding/Construction/Award Subtotal =				\$8,000
B. WASTEWATER CONSTRUCTION (Phase II)				
Surveying & Site Layout	LS	1	\$5,000	\$5,000
Site Preparation & Misc.	LS	1	\$10,000	\$10,000
6" PVC Gravity Sewer Line	FT	980	\$45	\$44,100
4' Diam. x 6' Concrete Manhole	EA	4	\$2,000	\$8,000
3" HDPE Force Main (Directionally Bored)	FT	1,820	\$35	\$63,700
Pre-packed Unit (Include Pumps & Controls)	LS	1	\$7,500	\$7,500
Pump Station Hookups/Plumbing	LS	1	\$2,000	\$2,000
Pump Station Electricity	LS	1	\$10,000	\$10,000
Backup Generator & Control Panel	LS	1	\$10,000	\$10,000
Telemetry	LS	1	\$5,000	\$5,000
8" sleeve Under Route 2 - #365 Verburg Ln (ft)	FT	40	\$95	\$3,800
2" Service Stub & Spacers Under Route 2 (#365 Verburg)	FT	50	\$100	\$5,000
8" sleeve Under Route 2 - #1151 West Main Street	FT	40	\$95	\$3,800
2" Service Stub & Spacers Under Route 2 -#1151 West Main Street	FT	50	\$100	\$5,000
Pavement Restoration (where necessary)	LS	1	\$2,000	\$2,000
*Blasting/Rock Removal	CY	50	\$400	\$20,000
Landscaping	LS	1	\$3,000	\$3,000
Erosion Control	LS	1	\$10,000	\$10,000
Traffic Control & Signage	LS	1	\$30,000	\$30,000
Excavator for bore pits (assume 1,000' max.)	LS	1	\$5,000	\$5,000
Mobilization/Demobilization	LS	1	\$30,000	\$30,000
Bonds	LS	1	\$5,000	\$5,000
Contingency (10%)	LS	0.10		<u>\$28,790</u>
Phase II Construction Cost Subtotal =				\$316,690
C. Construction Phase Services (Phase II)				
Material Approvals/Shop Drawing Reviews	T&M	1	\$4,000	\$4,000
Project Manager (assume 6 week project)	T&M	1	\$6,000	\$6,000
Field Engineer (6 week project)	T&M	1	\$24,000	\$24,000
Record Drawings	LS	1	\$5,000	<u>\$5,000</u>
Phase II Construction Cost Subtotal =				\$39,000
Engineers Opinion of Total Probable Phase II Construction Costs =				\$363,690

Notes

1. Opinion of Probable Cost is based on preliminary phase estimates only. More detailed costs should be developed during Final Design based on actual design quantities and constraints. Prices are based on 2021 cost estimates. It should be noted that material are subject to high variability at this time.
2. Assumes a limited amount of easement purchase will be required. This assumes cooperative landowners.
3. Storage, pumps, alarms, controls and electrical by others.
4. Assumes a minimal amount of ledge and large cobbles are encountered during directional drilling.
5. "Site Preparation and Misc." includes miscellaneous equipment to be supplied, temporary offices, clean up and contractors contract administration.

**Engineers Opinion of Probable Cost
Proposed Richmond West Main Street Waterline Expansion**

ALTERNATE A - 12" WATERLINE CONSTRUCTION (PHASE I)

Revised 2-1-22

Description	Unit	Quantity	Unit Cost	Total Cost
A. BIDDING/CONSTRUCTION/AWARD (Phase I)				
Contract & Bid Document Preparation	LS	1	\$3,000	\$3,000
Bidding, Contractor Questions, Bid Review & Recommendation	LS	1	\$5,000	\$5,000
Bidding/Construction/Award Subtotal =				\$8,000
B. CONSTRUCTION (Phase I)				
12" HDPE Water Main	LF	3,600	\$185.00	\$666,000.00
15" Jack & Bore PVC Sleeve Under Route 2 @ Reap	LF	40	\$225.00	\$9,000.00
8" PVC Waterline & Sleeve Spacers (Rt 2 Crossing)	LF	150	\$150.00	\$22,500.00
8" Jack&Bore PVC Sleeve Under Route 2 @ 365 Verburg&1151 W. Main	LF	80	\$95.00	\$7,600.00
3/4" Copper Road Crossing & Spacers for House Services (365 Verburg & 1151 W. Main)	LF	100	\$100.00	\$10,000.00
3" Waterline for House Services on East Side of Route 2	LF	0	\$35.00	\$0.00
3/4" Corp. Stops	EACH	2	\$150.00	\$300.00
3/4" Curb Stops and Boxes	EACH	2	\$200.00	\$400.00
12" Gate Valve	EACH	1	\$3,000.00	\$3,000.00
8" Gate Valve (Reap)	EACH	1	\$2,000.00	\$2,000.00
Fire Hydrant Assembly	EACH	1	\$6,000.00	\$6,000.00
Blasting/Rock Removal	CY	50	\$400.00	\$20,000.00
Class "B" Concrete (Thrust Blocks)	CY	15	\$200.00	\$3,000.00
Landscaping & Re-Establishment of Vegetation	LS	1	\$5,000.00	\$5,000.00
Excavator for bore pits (assume 300' max.)	LS	1	\$5,000.00	\$5,000.00
Erosion Control	LS	1	\$5,000.00	\$5,000.00
Traffic Control & Signage	LS	1	\$30,000.00	\$30,000.00
Mobilization/Demobilization	LS	1	\$30,000.00	\$30,000.00
Bonds	LS	1	\$3,750.00	\$3,750.00
Contingency (10%)	LS	0.10		\$82,855
Construction Subtotal =				\$911,405.00
C. Construction Phase Services (Phase I)				
Material Approvals/Shop Drawing Reviews	T&M	1	\$4,000	\$4,000
Project Manager (assume 8 week project)	T&M	1	\$12,000	\$12,000
Field Engineer (Assume 8 week project)	T&M	1	\$35,000	\$35,000
Record Drawings	LS	1	\$5,000	\$5,000
Construction Documentation Subtotal =				\$56,000

Engineers Opinion of Total Probable Costs for Construction, Documentation & Cert. Phase I =

\$975,405

**Engineers Opinion of Probable Cost
Proposed Richmond West Main Street Waterline Expansion**

ALTERNATE A - 12" WATERLINE CONSTRUCTION (PHASE II)

Revised 2-1-22

Description	Unit	Quantity	Unit Cost	Total Cost
A. BIDDING/CONSTRUCTION/AWARD (Phase II)				
Contract & Bid Document Preparation	LS	1	\$3,000	\$3,000
Bidding, Contractor Questions, Bid Review & Recommendation	LS	1	\$5,000	\$5,000
Bidding/Construction/Award Subtotal =				\$8,000
B. CONSTRUCTION (Phase II)				
12" HDPE Water Main	LF	1,820	\$185.00	\$336,700.00
15" Jack & Bore PVC Sleeve Under Route 2 @ Reap	LF	40	\$225.00	\$9,000.00
8" PVC Waterline & Sleeve Spacers (Rt 2 Crossing @ Mobile)	LF	50	\$100.00	\$5,000.00
3/4" Copper Road Crossing & Spacers for House Services (365 Verburg & 1151 W. Main)	LF	0	\$100.00	\$0.00
3" Waterline for House Services on East Side of Route 2	LF	1,100	\$35.00	\$38,500.00
3/4" Corp. Stops	EACH	10	\$150.00	\$1,500.00
3/4" Curb Stops and Boxes	EACH	10	\$200.00	\$2,000.00
12" Gate Valve	EACH	1	\$3,000.00	\$3,000.00
8" Gate Valve (Reap)	EACH	0	\$2,000.00	\$0.00
Fire Hydrant Assembly	EACH	2	\$6,000.00	\$12,000.00
Blasting/Rock Removal	CY	50	\$400.00	\$20,000.00
Class "B" Concrete (Thrust Blocks)	CY	15	\$200.00	\$3,000.00
Landscaping & Re-Establishment of Vegetation	LS	1	\$5,000.00	\$5,000.00
Excavator for bore pits (assume 300' max.)	LS	1	\$5,000.00	\$5,000.00
Erosion Control	LS	1	\$5,000.00	\$5,000.00
Traffic Control & Signage	LS	1	\$30,000.00	\$30,000.00
Mobilization/Demobilization	LS	1	\$30,000.00	\$30,000.00
Bonds	LS	1	\$3,750.00	\$3,750.00
Contingency (10%)	LS	0.10		\$50,945
Construction Subtotal =				\$560,395.00
C. Construction Phase Services (Phase II)				
Material Approvals/Shop Drawing Reviews	T&M	1	\$4,000	\$4,000
Project Manager (assume 8 week project)	T&M	1	\$12,000	\$12,000
Field Engineer (Assume 8 week project)	T&M	1	\$35,000	\$35,000
Record Drawings	LS	1	\$5,000	\$5,000
Construction Documentation Subtotal =				\$56,000

Engineers Opinion of Total Probable Costs for Construction, Documentation & Cert. Phase II =

\$624,395

**Engineers Opinion of Probable Cost
Proposed Richmond West Main Street Waterline Expansion**

ALTERNATE B - 4" WATERLINE CONSTRUCTION (PHASE I)

Revised 2-1-22

Description	Unit	Quantity	Unit Cost	Total Cost
A. BIDDING/CONSTRUCTION/AWARD (Phase I)				
Contract & Bid Document Preparation	LS	1	\$3,000	\$3,000
Bidding, Contractor Questions, Bid Review & Recommendation	LS	1	\$5,000	<u>\$5,000</u>
Bidding/Construction/Award Subtotal =				\$8,000
B. CONSTRUCTION (Phase I)				
4" HDPE Water Main	LF	3,600	\$45.00	\$162,000.00
10" Jack & Bore PVC Sleeve Under Route 2 @ Reap	LF	40	\$120.00	\$4,800.00
3" HDPE Waterline & Sleeve Spacers (Rt 2 Crossing @ Reap Property)	LF	50	\$75.00	\$3,750.00
3" HDPE Waterline for House Services East Side of Route 2	LF	0	\$35.00	\$0.00
8" Jack&Bore PVC Sleeve Under Route 2 @ 365 Verburg&1151 W. Main	LF	80	\$95.00	\$7,600.00
3/4" Copper Road Crossing & Spacers for House Services (365 Verburg & 1151 W. Main)	LF	100	\$100.00	\$10,000.00
3/4" Corp. Stops	EACH	2	\$150.00	\$300.00
3/4" Curb Stops and Boxes	EACH	2	\$200.00	\$400.00
4" Gate Valve	EACH	2	\$1,000.00	\$2,000.00
8" Gate Valve (Reap)	EACH	0	\$2,000.00	\$0.00
Fire Hydrant Assembly	EACH	0	\$6,000.00	\$0.00
Blasting/Rock Removal	CY	50	\$400.00	\$20,000.00
Class "B" Concrete (Thrust Blocks)	CY	15	\$200.00	\$3,000.00
Landscaping & Re-Establishment of Vegetation	LS	1	\$5,000.00	\$5,000.00
Excavator for bore pits (assume 1000' max.)	LS	1	\$5,000.00	\$5,000.00
Erosion Control	LS	1	\$5,000.00	\$5,000.00
Traffic Control & Signage	LS	1	\$30,000.00	\$30,000.00
Mobilization/Demobilization	LS	1	\$30,000.00	\$30,000.00
Bonds	LS	1	\$3,750.00	\$3,750.00
Contingency (10%)	LS	0.10		<u>\$29,260</u>
Construction Subtotal =				\$321,860.00
C. Construction Phase Services (Phase I)				
Material Approvals/Shop Drawing Reviews	T&M	1	\$4,000	\$4,000
Project Manager (assume 8 week project)	T&M	1	\$12,000	\$12,000
Field Engineer (Assume 8 week project)	T&M	1	\$35,000	\$35,000
Record Drawings	LS	1	\$5,000	<u>\$5,000</u>
Construction Documentation Subtotal =				\$56,000

Engineers Opinion of Total Probable Costs for Construction, Documentation & Cert. Phase I =

\$385,860

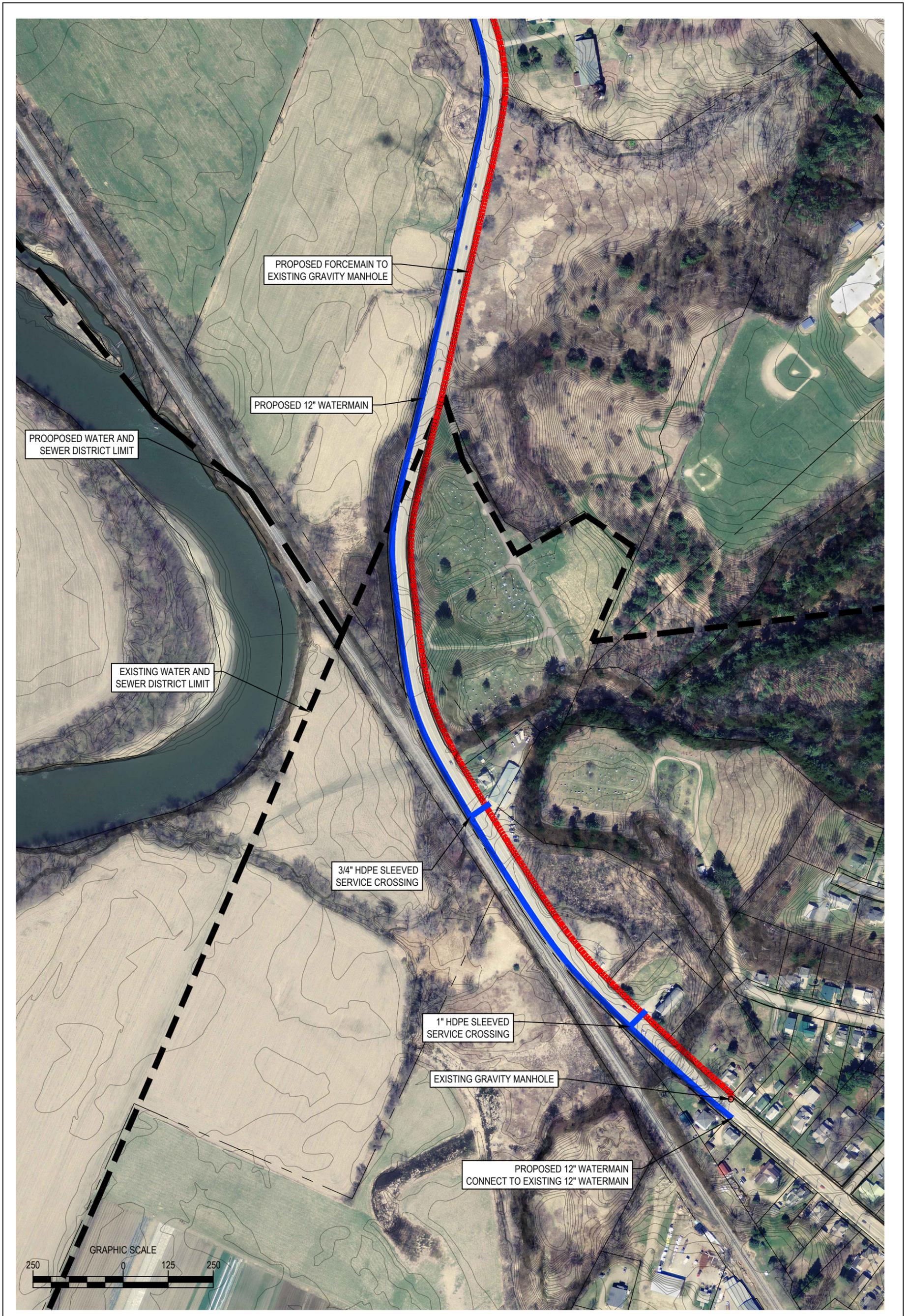
**Engineers Opinion of Probable Cost
Proposed Richmond West Main Street Waterline Expansion**

ALTERNATE B - 4" WATERLINE CONSTRUCTION (PHASE II)

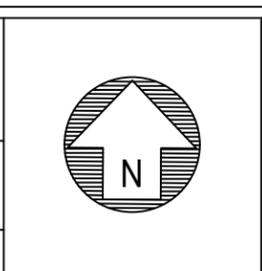
Revised 2-1-22

Description	Unit	Quantity	Unit Cost	Total Cost
A. BIDDING/CONSTRUCTION/AWARD (Phase II)				
Contract & Bid Document Preparation	LS	1	\$3,000	\$3,000
Bidding, Contractor Questions, Bid Review & Recommendation	LS	1	\$5,000	<u>\$5,000</u>
Bidding/Construction/Award Subtotal =				\$8,000
B. CONSTRUCTION (Phase II)				
4" HDPE Water Main	LF	1,820	\$45.00	\$81,900.00
8" Jack & Bore PVC Sleeve Under Route 2 @ Mobile Station	LF	40	\$95.00	\$3,800.00
1" HDPE Waterline & Sleeve Spacers (Rt 2 Crossing @ Reap Property)	LF	50	\$75.00	\$3,750.00
3" HDPE Waterline for House Services East Side of Route 2	LF	1,100	\$35.00	\$38,500.00
1" Corp. Stops	EACH	1	\$150.00	\$150.00
1 " Curb Stops and Boxes	EACH	1	\$200.00	\$200.00
4" Gate Valve	EACH	1	\$1,000.00	\$1,000.00
Fire Hydrant Assembly	EACH	0	\$6,000.00	\$0.00
Blasting/Rock Removal	CY	50	\$400.00	\$20,000.00
Class "B" Concrete (Thrust Blocks)	CY	15	\$200.00	\$3,000.00
Landscaping & Re-Establishment of Vegetation	LS	1	\$5,000.00	\$5,000.00
Excavator for bore pits (assume 1,000' max.)	LS	1	\$5,000.00	\$5,000.00
Erosion Control	LS	1	\$5,000.00	\$5,000.00
Traffic Control & Signage	LS	1	\$30,000.00	\$30,000.00
Mobilization/Demobilization	LS	1	\$30,000.00	\$30,000.00
Bonds	LS	1	\$3,750.00	\$3,750.00
Contingency (10%)	LS	0.10		<u>\$23,105</u>
Construction Subtotal =				\$254,155.00
C. Construction Phase Services (Phase II)				
Material Approvals/Shop Drawing Reviews	T&M	1	\$4,000	\$4,000
Project Manager (assume 8 week project)	T&M	1	\$12,000	\$12,000
Field Engineer (Assume 8 week project)	T&M	1	\$35,000	\$35,000
Record Drawings	LS	1	\$5,000	<u>\$5,000</u>
Construction Documentation Subtotal =				\$56,000

Engineers Opinion of Total Probable Costs for Construction, Documentation & Cert. Phase II = \$318,155



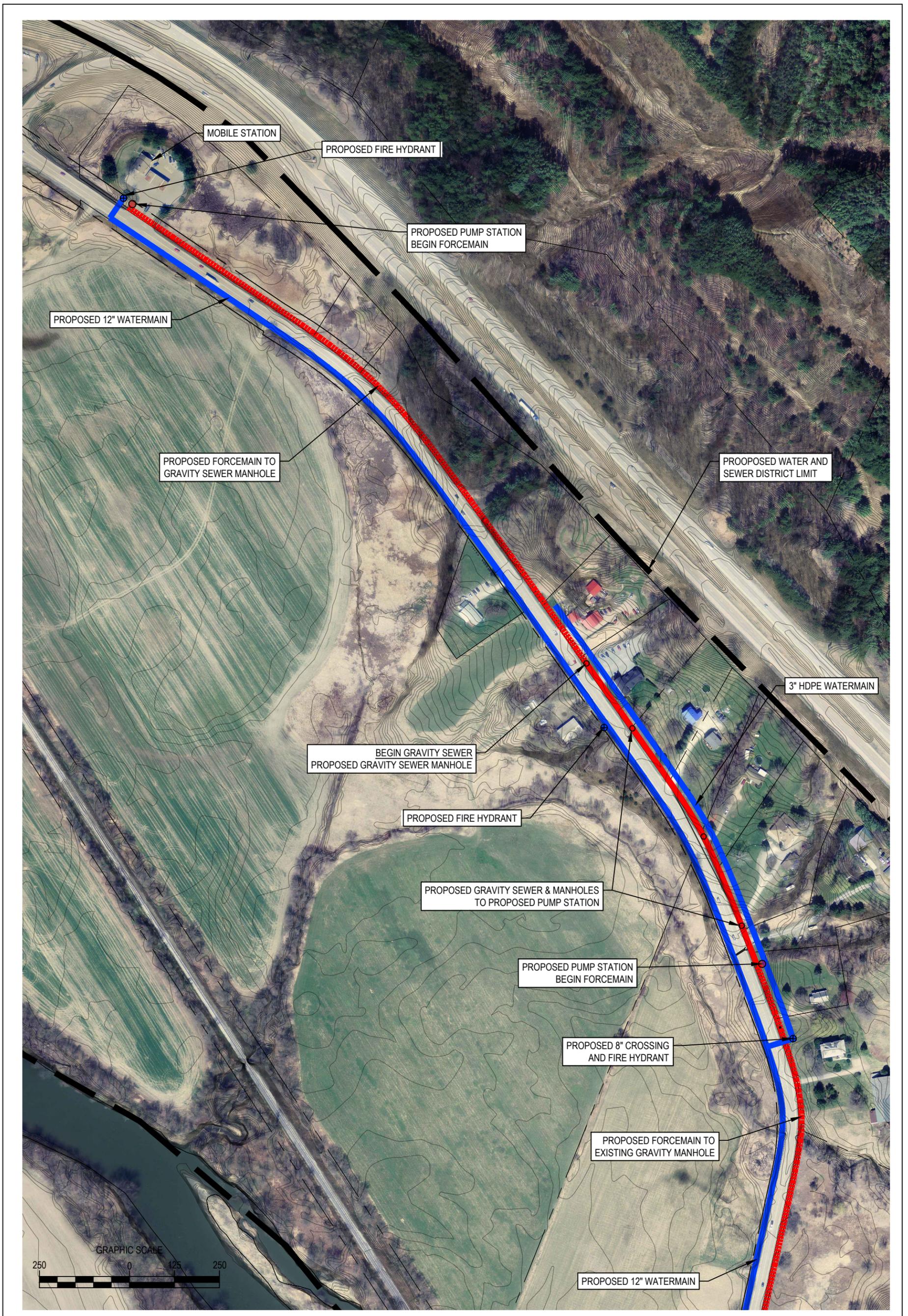
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	CHECKED BY AH	
FIGURE NO. 1	PLOT DATE 1/26/22	PROJECT RICHMOND UTILITY EXPANSION
	SCALE NONE	
	DATE JAN. 2022	CLIENT TOWN OF RICHMOND, VERMONT



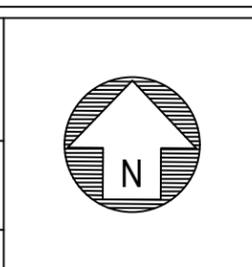
1438 SOUTH BROWNELL ROAD
WILLISTON, VERMONT 05495
PHONE: (802)862-5590
FAX: (802)862-7598

GREEN MOUNTAIN ENGINEERING

CIVIL
WATER
WASTEWATER



PROJECT NO. 24-029	DESIGNED SLP	DRAWING TITLE PROPOSED SEWER AND WATER EXTENSION
	DRAWN BPC	
	CHECKED BY AH	
FIGURE NO. 2	PLOT DATE 1/26/22	PROJECT RICHMOND UTILITY EXPANSION
	SCALE NONE	CLIENT TOWN OF RICHMOND, VERMONT
	DATE JAN. 2022	



1438 SOUTH BROWNELL ROAD
WILLISTON, VERMONT 05495
PHONE: (802)862-5590
FAX: (802)862-7598

**GREEN
MOUNTAIN
ENGINEERING**

CIVIL
WATER
WASTEWATER

Table _____
Town of Richmond, Vermont
West Main Street Sewer Expansion
Estimated Wastewater Flow Demand

Phase I (222 West Main to Reap Property @ 840 West Main)

Address/Description	Lot Size	Current Use	Current # Units	Flow Basis	Current Permitted Unit Flow	Total Current Flow (gpd)	Future Use	Future # Units	Flow Basis	Future Permitted Unit Flow	Total Future Flow (gpd)		
282 West Main	1.01	Duplex	2	gpd/Unit	100	200	Duplex	2	gpd/Unit	100	200		
350 West Main	1.9	Vacant - Wetland	0	gpd	0	0	Vacant - Wetland	0	gpd	0	0		
434 West Main	1.1	Single Family Home	1	gpd/unit	100	100	Single Family Home	1	gpd/unit	100	100		
No Address	+ - 0.5	Cemetery	0	gpd	0	0	Cemetery	0	gpd	0	0		
600 West Main	4.0	Cemetery	0	gpd	0	0	Cemetery	0	gpd	0	0		
650 West Main	20.2	Richmond Land Trust	0	gpd	0	0	Richmond Land Trust	0	gpd	0	0		
35 Willis Farm Road (Reap)	1.0	Lot 1 - Main Office Bldg	42	gpd/empl.	15	630	Main Office Bldg	42	gpd/empl.	15	630		
		Lot 2 - Shop	0	gpd	0	0	Shop/Apartments	1	gpd	500	500		
		Lot 3 - Vacant	0	gpd	0	0	Restaurant/Brewery	1	gpd	3,000	3,000		
		Lot 4 - Vacant	0	gpd	0	0	Office/Shop	1	gpd	500	500		
		Lot 5 - Kerry Walker Vacant	0	gpd	0	0	Yoga & Office Bldg	1	gpd	500	500		
878 W. Main	0.85	Single Family Home	1	gpd/unit	100	100	Single Family Home	3	gpd/unit	100	300		
231 Huntington Rd	402.54	Vacant - Farmland	0	gpd	0	0	Special Flood Hazard Area	1	gpd	100	100		
Total Flow =						1,030	Total Flow =						5,830

Municipal Pump Station
Possible to place house on Route 2

Phase II (840 West Main St. to 1436 West Main - Mobil Gas Station)

Address/Description	Lot Size	Current Use	Current # Units	Flow Basis	Current Permitted Unit Flow	Total Current Flow (gpd)	Future Use	Future # Units	Flow Basis	Future Permitted Unit Flow	Total Future Flow (gpd)		
920 W. Main	2.4	Single Family Home/Home Business	1	gpd/unit	100	100	Multi-Family	9	gpd/unit	100	900		
932 W. Main	2.15	Single Family Home/Home Business	1	gpd/unit	100	100	Multi-Family	8	gpd/unit	100	800		
978 W. Main	1.1	Single Family Home	1	gpd/unit	100	100	Multi-Family	4	gpd/unit	100	400		
1010 W. Main	1	Duplex	2	gpd/unit	100	200	Multi-Family	4	gpd/Unit	100	400		
1012 W. Main	1	Duplex	2	gpd/unit	100	200	Multi-Family	4	gpd/Unit	100	400		
1070 W. Main	1.36	Office Building	20	gpd/empl.	15	300	Multi-Family	5	gpd/Unit	100	500		
1108 W. Main	1.35	Dog Day Care Empl.	8	gpd/empl.	15	120	Employees	8	gpd/empl.	15	120		
		kennels	40	gpd/kennel	25	1,000	kennels	40	gpd/kennel	25	1,000		
		Grooming Station	1	gpd/station	400	400	Grooming Station	1	gpd/station	400	400		
1151 W. Main		Single Family Home	1	gpd/unit	100	100	Single Family Home	1	gpd/unit	100	100		
		Chiropractor	3	gpd/empl.	35	105	Chiropractor	3	gpd/empl.	35	105		
		Chiropractor	16	gpd/empl.	10	160	Chiropractor	16	gpd/empl.	10	160		
360 Governor Peck	167	Vacant - both sides of I-89	0	gpd	0	0	Single Family Home	2	gpd	100	200		
1324 W. Main	0.6	Vacant - High Voltage Power	0	gpd	0	0	Power/Flood Plain	0	gpd/unit	100	0		
1436 W. Main Mobil Gas Station	4.5	1st Pump Set	1	gpd/pump	500	500	1st Pump Set	1	gpd/pump	500	500		
		Additional Pump Sets	3	gpd/pump	300	900	Additional Pump Sets	3	gpd/pump	300	900		
		Employees	6	gpd/empl.	15	90	Employees	6	gpd/empl.	15	90		
365 Verburg, LN	284.66	Vacant Farmland	0	gpd	0	0	Vacant Farmland	0	gpd	1,000	0		
Total Flow =						4,375	Total Flow =						6,975

Only a small portion along Rt. 2
Special Flood Hazard Area
Special Flood Hazard Area
Special Flood Hazard Area
Special Flood Hazard Area
Small portion not in Special Flood Hazard Area