FIFTEEN ROPE FERRY ROAD
WATERFORD, CT 06385-2886

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ATTEST: Cheryl L. Emerson
TOWN CLERK

BOARD OF FINANCE
AGENDA

Waterford Town Hall
Budget Hearing
* Revised

Wednesday, March 19, 2025
Town Hall, 7:00 p.m.

1. Call to Order
2. Public Comment
3. 10111 – Building Maintenance
4. 10130 – Public Works
5. 10138 – Capital Improvements
6. 10139 – Debt Service
7. 10140 – Transfers to Capital and Non-Recurring Expenditure Fund
8. Adjournment

Glenn Patterson, Chairman

FIFTEEN ROPE FERRY ROAD
WATERFORD, CT 06385-2886

PHONE: 860-442-0553
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January 27, 2025

TO: BOARD OF SELECTMEN

RE: FIVE-YEAR CAPITAL IMPROVEMENT PLAN RECOMMENDATIONS

FY 2026-2030

In FY24, the Town of Waterford closed 18 capital projects that were approved and funded. The town continues to focus on completing past projects currently in FY25 and remains committed to funding necessary projects moving forward. These outstanding approved capital projects, contractual obligations, unanticipated supply chain costs and increases, and insurance cost hikes make it necessary for me to continue a "partial moratorium" on any new capital projects that would require an increase in our tax rate. My capital plan recommendations span three periods, each detailed below:

1. Current Approved Capital Projects
2. FY26 Capital Budget Requests
3. Projected Capital Requests Outside the Budget Cycle

Current Approved Projects

The rationale behind focusing on current approved projects is to continue my commitment to completing and closing past capital projects, which were approved and funded by taxpayers in previous years. This commitment is part of my "Capital Completion Plan," now in its third year of implementation. The town completed or closed 18 capital projects over the past year, expending $4,706,728.01, and will continue to work on projects that remain in various stages of completion in FY25.

- Evergreen Pump Station 4th Pump for $369,309
- IT Learning Boards for BOE for $1,074,657
- Road Paving for $325,915
- Financial Software Upgrade for $157,508
- Harvey Avenue Pump Station Rehab for $1,082,496

The town will continue to complete capital projects that remain in various stages of completion in FY25. The largest of approved projects in FY24 and FY25 from the Unassigned Balance of the General Fund were:

- School & Town Security Upgrades $1,982,900
- Leary Park Pickleball Complex $1,197,250
- Waterford High School Tennis Courts $1,148,100
- Waterford High School Turf Field $1,147,000
- Old Norwich Road Paving $1,053,000
- 8 Goshen Road Acquisition $385,000
- Oswegatchie Firehouse Project Manager $306,650
- Community Center HVAC $300,000
- Arnold E. Holm Memorial Park ADA Improvements $273,428
- Town Hall Basketball Courts $117,808

FY2026 Capital Budget Requests

The rationale for the FY26 capital budget requests is to maintain appropriate funding for Current Year Capital Improvements and Transfer to Capital Non-Recurring Requests, while absorbing a staggering $1,142,379 increase in Insurance (23% increase), Fire Services for two additional full-time firefighters (increase $326,705), Police Department (increase $134,453), Building Maintenance (increase $124,176) and Recreation & Parks for an additional maintainer (increase $50,248).

By presenting a capital request that includes necessary projects, I aim to ensure a responsible general operating budget, balance budget requests, and address necessary increases in various departments while completing critical capital projects and paying down Debt Service as scheduled. This approach will ensure I present a responsible general operating budget. A town operating budget absorbing increases in To accomplish my goal of presenting a responsible budget to Waterford residents, while completing necessary capital projects and paying down Debt Service as scheduled, I am increasing the Capital and Debt Service lines in FY26 by 2.86% or $296,516 for projects like:

- $1M for Fleet Management
- $125,000 for Revaluation
- $243,335 for BOE Energy Efficiency program
- $638,172 for Utility Commission projects
- $25,000 for a new Tree Replacement Program
- $15,000 for Fire Alarm Replacement at Quaker Hill Fire Company #2

Projected Capital Requests Outside the Budget Cycle

The rationale for submitting projected capital requests outside the budget cycle, in accordance with current Board of Finance policy, is to address priority projects using the General Fund Balance. This approach focuses on Town Infrastructure, Board of Education needs, and Waterford Beach Park and Library improvements. Over the next five years, I will request the Board of Finance consider using $5M from the General Fund Balance for these critical projects, ensuring a balanced approach to funding and maintaining a healthy General Fund Balance within the Board of Finance's revised range.

- Town Infrastructure: $1M for road paving, $1M for the statewide radio system upgrade, and $500,000 for copper water connectors
- Board of Education: $413,406 for Munis Implementation
- Waterford Beach Park: $350,000 for Band Shell
- Library: $175,000 for Electrical Panel Upgrade

I have considered these current priorities in the plan recommendations and directed Department Heads to apply for all available grants through state and federal agencies. Specifically, over the next five years, I will request the Board of Finance consider using General Fund Balance, as the funding source for the following:

- Road Paving projects
- Town Water & Sewer projects
- Board of Education & Town Building projects

By requesting the Board of Finance consider and approve $5M in capital project spending from GFB over the next five years, it will leave approximately $15M in the town's General Fund Balance - within the Board of Finance's policy range of 13%-15% of total expenditures. This proposed five-year capital plan reflects my recommendation for funding or not funding the project(s) as requested and the manner of that financing. I have continued to consult with Department Heads and have "pushed out" projects on the plan and recommendations, covering the next five years.

Further, I have attempted to balance budget requests and "needs" knowing the town currently has approximately $20M in reserve funds that residents have already contributed to through prior taxation and an additional $23M already appropriated for 69 capital projects. The Town's use of the "General Fund Balance" is a decision made by the Board of Finance. I will continue to recommend committing a portion of GFB for new capital projects, as needed. Based on the past two years' feedback and support funding received capital requests outside the capital cycle, I am again recommending the town expend General Fund Balance as approved by the Board of Finance.

The information supporting this plan is contained in a binder, which includes the CIP Guidelines, Capital Improvement Fund balances, and all the capital improvement requests by our departments. In addition, my recommended plan for the 5-year planning period is attached with my comments, along with the summary of the budgets for the CNR & CYC for the FY 2026 budget. This document and binder constitute my recommendations for the Capital Improvement Plan (CIP) for Fiscal Years 2026-2030. The Town Charter requires the Board of Selectmen ratify these recommendations. I anticipate reviewing these recommendations with the Board of Selectmen at the upcoming budget meeting and hope the Board will ratify the plan. Please feel free to contact Kim Allen, Finance Director, or myself with any questions you may have and thank you for your continued commitment to the Town of Waterford.

Respectfully submitted,

Robert Brule

Robert J. Brule, First Selectman

TOWN OF WATERFORD
FIVE YEAR CAPITAL PLAN
FY2026 -THROUGH FY2030

2/7/2025

LINE ITEM	DESCRIPTION	REC. FUNDING SOURCE	FY-2026 CIP	FY-2026 CNR	FY-2026 GFB	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
ASSESSOR										
57639	REVALUATION	CNR		125,000		125,000	100,000	100,000	100,000	100,000
	SUBTOTAL ASSESSOR:		-	125,000	-	125,000	100,000	100,000	100,000	100,000
BOARD OF SELECTMAN										
55738	FLEET MANAGEMENT PLAN	CIP	1,000,000			1,000,000	1,100,000	1,200,000	1,300,000	1,400,000
	SUBTOTAL BOARD OF SELECTMAN		1,000,000	-	-	1,000,000	1,100,000	1,200,000	1,300,000	1,400,000
BUILDING MAINTENANCE										
55904	EUGENE O'NEILL SEWER PROJECT	CIP						250,000		
55913	JORDAN PARK HOUSE REPAIRS	CIP					25,000			
NEW (FY26)	EUGENE O'NEILL ROOF REPLACEMENT	CNR					100,000			
NEW (FY26)	MUNICIPAL PARKING LOTS	CNR			25,000		25,000	25,000	25,000	25,000
NEW (FY26)	HISTORICAL BUILDING MAINTENANCE	CNR			10,000		10,000	10,000	10,000	10,000
NEW (FY26)	TOWN BUILDING MAINTENANCE	CNR			25,000		100,000	100,000	100,000	10,000
57871	POLICE DEPT BLDG HVAC	CNR		25,000		25,000	200,000	200,000		
57740	COHANZIE REMEDIAION/DEMOLITION	CNR					30,000		250,000	250,000
NEW (FY26)	POLICE DEPT BLDG ROOF	CNR		-	85,000		550,000	550,000		
NEW (FY25)	COMMUNITY CENTER CHILLER REPLACEMENT	CNR					250,000	400,000	400,000	800,000
NEW (FY26)	COMMUNITY CENTER - UST	CNR								75,000
NEW (FY26)	LIBRARY ELECTRICAL SERVICE	CNR			175,000					
NEW (FY26)	EV CHARGING STATIONS	CIP					60,000			
	SUBTOTAL BUILDING MAINTENANCE		-	25,000	320,000	25,000	1,350,000	1,535,000	785,000	1,170,000
EMERGENCY MANAGEMENT										
NEW (FY25)	STATEWIDE RADIO SYSTEM UPGRADE	GFB			1,000,000					
	SUBTOTAL EMERGENCY MANAGEMENT	0	-	-	1,000,000	-	-	-	-	-
SERVICES:										
7	FIRE SERVICE - SCBA UPGRADE PROGRAM	CNR		50,000		50,000	10,000	10,000	10,000	10,000
NEW (FY26)	COHANZIE AIR CONDITIONING	CIP	15,000			15,000				
57888	GOSHEN ROOF REPLACEMENT	CNR			60,000					
	SUBTOTAL FIRE SERVICES		15,000	50,000	60,000	65,000	10,000	10,000	10,000	10,000
INFORMATION TECHNOLOGY:										
57882	COMPUTER REPLACEMENTS	CNR		46,592		46,592	37,035	33,451		
NEW (FY26)	SERVER UPGRADE/REPLACEMENT	CNR		88,500		88,500	88,500			
	SUBTOTAL INFORMATION TECHNOLOGY		-	135,092	-	135,092	125,535	33,451	-	-
PLANNING:										
NEW (FY26)	EDC GATEWAY SIGNS	GFB					100,000			
NEW (FY26)	SCANNING & DOCUMENT MANAGEMENT	CNR					380,000			
	SUBTOTAL PLANNING		-	-	-	-	480,000	-	-	-
POLICE										
NEW (FY26)	MARINE UNIT UPDATES	CIP	31,089							
NEW (FY26)	LOCKER ROOM LOCKERS (3 YEAR PLAN)	CNR					80,000	80,000	80,000	
	SUBTOTAL POLICE		31,089	-	-	-	80,000	80,000	80,000	-

TOWN OF WATERFORD
FIVE YEAR CAPITAL PLAN
FY2026 -THROUGH FY2030

2/7/2025

LINE ITEM	DESCRIPTION	REC. FUNDING SOURCE	FY-2026 CIP	FY-2026 CNR	FY-2026 GFB	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
PUBLIC WORKS:										
57880	PAVING	GFB			1,000,000					
NEW (FY26)	CONCRETE CURB REPLACEMENT	CNR			25,000		50,000	50,000	50,000	50,000
NEW (FY26)	WOODEN STREETLIGHT POLES	CNR					100,000		100,000	
NEW (FY26)	FRIENDSHIP SCHOOL DEMO/RENOVATION	CNR			25,000		250,000	250,000	250,000	250,000
NEW (FY26)	TREE REPLACEMENT	CNR			25,000		25,000	25,000	25,000	25,000
55891	TRANSFER STATION	CNR					20,000	100,000		
NEW (FY25)	NIANTIC RIVER ROAD SIDEWALKS	CIP					250,000	250,000	250,000	250,000
NEW (FY24)	RETAINING WALLS	CNR					35,000			
NEW (FY24)	ROADSIDE BARRIERS	CNR					25,000	25,000	25,000	25,000
NEW (FY25)	ROAD RISK ASSESSMENT	CIP	55,000							
NEW (FY24)	MAJOR ROAD INTERSECTION REALIGNMENT	CIP						55,000		
NEW (FY24)	TRAFFIC SIGNALS	CNR					15,000			250,000
NEW (FY24)	DUMPSTERS/ENCLOSURES	CNR			20,000		35,000			
NEW (FY24)	MINOR ROAD CONSTRUCTION	CNR			50,000		100,000	100,000	100,000	100,000
NEW (FY25)	HUNTSBROOK BRIDGE	CNR					20,000			
	SUBTOTAL PUBLIC WORKS		**55,000**	**-**	**1,145,000**	**-**	**925,000**	**855,000**	**800,000**	**950,000**
RECREATION AND PARKS										
NEW (FY25)	CIVIC TRIANGLE IMPROVEMENTS	CNR					35,000			
NEW (FY26)	LEARY PARK DRAINAGE/LOWER FIELD	CIP						20,000		
NEW (FY26)	TOWN-WIDE PLAYGROUND IMPROVEMENTS	CNR					178,772	143,031	112,963	
57798	CHILDREN'S PLAYGROUND CIVIC TRIANGLE	CNR		25,000		25,000				
55855	TOWN-WIDE COURTS	CNR					450,000	450,000		
55835	LEARY PARK/VETERAN'S FIELD IRRIGATION	CIP							200,000	
57854	WATERFORD BEACH PARK IMPROVEMENTS (Amphitheater Plan)	CNR			350,000					
NEW (FY25)	WATERFORD BEACH GARAGE	GFB					500,000	500,000		
	SUBTOTAL PUBLIC WORKS		**-**	**25,000**	**350,000**	**25,000**	**1,163,772**	**1,113,031**	**312,963**	**-**
UTILITIES COMMISSION:										
NEW (FY24)	WATER PRESSURE IMPROVEMENTS (BLOOMINGDALE RD)	CNR					541,250	541,250	541,250	541,250
55019	CONTRACT 1 (SEWER INTERCEPTOR EASEMENT ACCESS	CNR					250,000	250,000	250,000	250,000
NEW (FY26)	COPPER WATER CONNECTOR REPLACEMENT	GFB								
NEW (FY26)	CROSS CONTRY SEWER MAIN ACCESS	GFB		200,000			500,000	500,000	500,000	500,000
NEW (FY26)	VAUXHALL STREET WATER TANK REHAB	CNR					230,993	230,993	230,993	
NEW (FY26)	WATER TANK ASSEET MANAGEMENT	CNR		46,222		46,222	47,272	95,520	106,267	108,358
NEW (FY26)	FACILITIES EXTERIOR IMPROVEMENTS	CNR					75,000	75,000		
NEW (FY26)	BARTLETT CORNERS WATER BOOSTER	CNR		166,950		166,950				
NEW (FY26)	ROGERS HILL WATER TANK REFAB	CNR						311,500	311,500	311,500
57881	WATER DISTR - PLASTIC SVCS REPLACEMENT	CNR			500,000		250,000	250,000	250,000	275,000
NEW (FY25)	RT85 WASTEWATER PS POWER CONVERSION	CNR					408,690	508,690	100,000	
57890	WEIMES & MARILYN EJECTOR REPLACEMENT	CNR					675,000	675,000	675,000	675,000
NEW (FY24)	PLEASURE BEACH WATER LINE REPLACMENT	CNR					706,800	706,800	706,800	706,800
	SUBTOTAL UTILITIES COMMISSION		**-**	**413,172**	**500,000**	**213,172**	**3,685,005**	**4,144,753**	**3,671,810**	**3,367,908**

TOWN OF WATERFORD
FIVE YEAR CAPITAL PLAN
FY2026 -THROUGH FY2030

2/7/2025

LINE ITEM	DESCRIPTION	REC. FUNDING SOURCE	FY-2026 CIP	FY-2026 CNR	FY-2026 GFB	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
BOARD OF EDUCATION										
NEW (FY26)	FACILITY MAINTENANCE	CNR					100,000	100,000	100,000	100,000
55857	HIGH SCHOOL FIELD FLOORING/BLEACHERS						575,000			
	WHS - BASEBALL DUGOUT/PRESS BOX/ FENCING	CNR					65,000			
57822	IT LEARNING BOARDS-END OF LIFE	CNR						265,000		
57827	IT VITUAL DESKTOP MAIN PROCESSOR	CNR					325,000			
NEW (FY26)	IT IN-CLASS SOUND REPLACEMENT	CNR					476,265			
	IT ELEM CAFÉ PROJECTION REPLACEMENT	CNR					54,000			
	IT AUDITORIUM AUTOMATION REPLACE	CNR					50,000			
57891	ENERGY EFFICIENCY PROGRAM	CNR			243,335		243,335			
NEW (FY24)	WHS - TURF SOFTBALL	CNR					25,000	25,000	25,000	25,000
NEW (FY26)	WHS - TURF/MAIN FIELD	CNR					110,000	110,000	110,000	110,000
NEW (FY25)	QUAKER HILL PLAYGROUND ASPHALT REPAVE	CNR					35,000			
NEW (FY26)	QUAKER HILL PLAYGROUND SURFACE REPLACEMENT	CNR					196,000			
NEW (FY25)	OSWEGATCHIE PLAYGROUND SURFACE REPLACEMENT	CNR						198,030		
NEW (FY25)	GREAT NECK PLAYGROUND REPLACEMENT	CNR							220,080	
NEW (FY24)	QUAKER HILL HEAT PUMP	CNR					180,250			
NEW (FY24)	OSWEGATCHIE HEAT PUMP REPLACEMENT	CNR					177,500	182,250		
NEW (FY24)	GREAT NECK HEAT PUMP REPLACEMENT	CNR						180,500	185,915	
NEW (FY25)	CMS ROOFTOP PUMP REPLACEMENT	CNR							265,000	272,000
NEW (FY24)	BOE MUNIS IMPLEMENTATION	CNR			413,406					
	SUBTOTAL BOARD OF EDUCATION		-	-	656,741	-	2,612,350	1,060,780	905,995	507,000
	TOTAL APPROPRIATION		1,101,089	773,264	4,031,741	1,588,264	11,631,662	10,132,015	7,965,768	7,504,908

LOCIP PROJECTS										
	ENTITLEMENT									
FY26	OLD NORWICH RD AT HUNTS BROOK CROSSING CULVERT		140,000			140,000				
	ENTITLEMENT SUBTOTAL		140,000			140,000	-	-	-	-
	GRANT									
FY26	VETERANS MEMORIAL REPAIRS		50,000			50,000				
FY26	QUAKER HILL FIRE ALARM REPLACEMENT		15,000			15,000				
FY26	ADA WALKWAY FOR STENGER PARK (#55921)		50,000			50,000				
	GRANT SUBTOTAL		115,000	-	-	115,000	-	-	-	-
TOTAL LOCIP PROJECTS			255,000			255,000	-	-	-	-

CIP	1,101,089
CNR	773,264
GFB	4,031,741
	5,906,094

TOWN OF WATERFORD
GENERAL FUND
2025 - 2030 CNR BUDGET

DEPT/AGENCY: 10140 TRANSFERS TO CAPITAL AND NON-RECURRING EXPENDITURE FI

2/11/2025

LINE ITEM	DESCRIPTION	2023/2024 ACTUAL EXPENDED	2024/2025 RTM APPROP.	ACTUAL EXPEND/ ENCUMB AS OF 1/1/25	FY 2026 DEPT/ AGENCY REQUEST	2025/2026 BOS APPROVED	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
ASSESSOR											
57639	REVALUATION	75,000	125,000		125,000	125,000	125,000	100,000	100,000	100,000	100,000
SUBTOTAL ASSESSOR:		**75,000**	**125,000**	**0**	**125,000**	**125,000**	**125,000**	**100,000**	**100,000**	**100,000**	**100,000**
EMERGENCY MANAGEMENT											
SUBTOTAL EMERGENCY MANAGEMENT:		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
FIRE SERVICES											
57777	FIRE SERVICE - SCBA UPGRADE PROGRAM	64,000	0		50,000	50,000	50,000	10,000	10,000	10,000	10,000
57888	GOSHEN ROOF REPLACEMENT	0	60,000								
SUBTOTAL FIRE SERVICES:		**64,000**	**60,000**	**0**	**50,000**	**50,000**	**50,000**	**10,000**	**10,000**	**10,000**	**10,000**
INFORMATION TECHNOLOGY											
57882	COMPUTER REPLACEMENTS	42,250	20,264		46,592	46,592	46,592	37,035	33,451		
57775	SERVER UPGRADE/REPLACEMENT				88,500	88,500	88,500	88,500			
SUBTOTAL INFORMATION TECHNOLOGY:		**42,250**	**20,264**	**0**	**135,092**	**135,092**	**135,092**	**125,535**	**33,451**	**0**	**0**
LIBRARY											
SUBTOTAL LIBRARY		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
PLANNING											
NEW	SCANNING & DOCUMENT MANAGEMENT							380,000			
NEW	EDC GATEWAY SIGNS							100,000			
SUBTOTAL PLANNING		**0**	**0**	**0**	**0**	**0**	**0**	**480,000**	**0**	**0**	
MUNICIPAL BUILDINGS MAINTENANCE											
57871	POLICE DEPT BLDG HVAC		40,000		25,000	25,000	25,000	200,000	200,000		
57740	COHANZIE REMIDIATION/DEMOLITION							30,000		250,000	250,000
NEW	HISTORICAL BUILDING MAINTENANCE							10,000	10,000	10,000	10,000
NEW	TOWN BUILDING MAINTENANCE							100,000	100,000	100,000	100,000
NEW	PUBLIC SAFETY COMPLEX HVAC		100,000								
NEW	EUGENE O'NEILL ROOF REPLACEMENT							100,000			
NEW	COMMUNITY CENTER CHILLER REPLACEMENT							250,000	800,000		800,000
NEW	POLICE DEPARTMENT ROOF							550,000	550,000		
NEW	MUNICIPAL PARKING LOTS							25,000	25,000	25,000	25,000
NEW	COMMUNITY CENTER UST										75,000
SUBTOTAL MUNICIPAL BUILDINGS MAINTENANCE		**0**	**140,000**	**0**	**25,000**	**25,000**	**25,000**	**1,265,000**	**1,685,000**	**385,000**	**1,260,000**
POLICE DEPARTMENT											
NEW	LOCKER ROOM LOCKERS (3 YEAR PLAN)				0	0		80,000	80,000	80,000	
SUBTOTAL POLICE DEPARTMENT		**0**	**0**	**0**	**0**	**0**	**0**	**80,000**	**80,000**	**80,000**	**0**

TOWN OF WATERFORD
GENERAL FUND
2025 - 2030 CNR BUDGET

DEPT/AGENCY: **10140** **TRANSFERS TO CAPITAL AND NON-RECURRING EXPENDITURE FI**

2/11/2025

LINE ITEM	DESCRIPTION	2023/2024 ACTUAL EXPENDED	2024/2025 RTM APPROP.	ACTUAL EXPEND/ ENCUMB AS OF 1/1/25	FY 2026 DEPT/ AGENCY REQUEST	2025/2026 BOS APPROVED	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
PUBLIC WORKS											
NEW	CONCRETE CURBS							50,000	50,000	50,000	50,000
NEW	RETAINING WALLS							35,000			
NEW	TRAFFIC SIGNALS							15,000			
NEW	ROADSIDE BARRIERS							25,000	25,000	25,000	25,000
NEW	WOODEN STREETLIGHT POLES							100,000		100,000	
NEW	DUMPSTERS/STORAGE ENCLOSURES							35,000			
NEW	FRIENDSHIP SCHOOL DEMO/RENOVATION							250,000	250,000	250,000	250,000
NEW	TREE REPLACEMENT							25,000	25,000	25,000	25,000
57696	MINOR ROAD CONSTRUCTION							100,000	100,000	100,000	100,000
55891	TRANSFER STATION							20,000	100,000		
57868	BRIDGE ENGINEERING PLAN							20,000			
SUBTOTAL PUBLIC WORKS		**0**	**0**	**0**	**0**	**0**	**0**	**675,000**	**550,000**	**550,000**	**450,000**
RECREATION & PARKS											
55855	TOWN-WIDE COURTS							450,000	450,000		
57878	REPAIR PLEASURE BEACH ACCESS WALK		145,000								
NEW	WATERFORD BEACH GARAGE RENOVATION							500,000	500,000		
NEW	CIVIC TRIANGLE IMPROVEMENTS							35,000			
57798	CHILDREN'S PLAYGROUND CIVIC TRIANGLE				25,000	25,000	25,000				
NEW	TOWN-WIDE PLAYGROUND IMPROVEMENTS							178,772	143,031	112,963	
SUBTOTAL REC & PARKS		**0**	**145,000**	**0**	**25,000**	**25,000**	**25,000**	**1,163,772**	**1,093,031**	**112,963**	**0**
UTILITIES COMMISSION:											
NEW	WATER PRESSURE IMPROVEMENTS (BLOOMINGDALE RD)							541,250	541,250	541,250	541,250
NEW	CROSS COUNTRY SEWER MAIN ACCESS				200,000	200,000	200,000	500,000	500,000	500,000	500,000
57881	WATER DISTR-PLASTIC SVCS REPLACEMENT	100,000	100,000					250,000	250,000	250,000	275,000
55019	CONTRACT #1 SEWER INTERCEPTOR							250,000	250,000	250,000	250,000
NEW	VAUXHALL WATER TANK REHAB							230,993	230,993	230,993	
NEW	RT85 WASTEWATER PS POWER CONVVERSION							408,690	508,690		
NEW	WATER TANK ASSET MANAGEMENT				46,222	46,222	46,222	47,272	95,520	106,267	108,358
57890	WEIMES & MARILYN EJECTOR REPLACEMENT		19,800					675,000	675,000	675,000	675,000
NEW	FACILITIES EXTERIOR IMPROVEMENTS							75,000	75,000		
NEW	PLEASURE BEACH WATER LINE REPLACMENT							706,800	706,800	706,800	706,800
NEW	BARLETT CORNER WATER BOOSTER				166,950	166,950	166,950				
NEW	ROGERS HILL WATER TANK REFURBISHMENT								311,500	311,500	311,500
SUBTOTAL UTILITIES COMMISSION		**100,000**	**119,800**	**0**	**413,172**	**413,172**	**413,172**	**3,685,005**	**4,144,753**	**3,571,810**	**3,367,908**

TOWN OF WATERFORD
GENERAL FUND
2025 - 2030 CNR BUDGET

DEPT/AGENCY: **10140 TRANSFERS TO CAPITAL AND NON-RECURRING EXPENDITURE FI**

2/11/2025

LINE ITEM	DESCRIPTION	2023/2024 ACTUAL EXPENDED	2024/2025 RTM APPROP.	ACTUAL EXPEND/ ENCUMB AS OF 1/1/25	FY 2026 DEPT/ AGENCY REQUEST	2025/2026 BOS APPROVED	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
BOARD OF EDUCATION											
55857	HIGH SCHOOL FIELD FLOORING/BLEACHERS							575,000			
	WHS - BASEBALL DUGOUT/PRESS BOX/FENCING							65,000			
57822	IT LEARNING BOARDS- CLMS								265,000		
	IT IN-CLASS SOUND REPLACEMENT							476,265			
57827	IT VITUAL DESKTOP MAIN PROCESSOR							325,000			
	IT ELEMENTARY CAFÉ PROJECTION REPLACEMENT							54,000			
	IT AUDITORIUM AUTOMATION REPLACEMENT							50,000			
NEW	FACILITY MAINTENANCE							100,000	100,000	100,000	100,000
NEW	ENERGY EFFICIENCY PROGRAM	243,335	243,335					243,335			
NEW	HVAC EVALUATION/REMIDATION (DISTRICT)		85,000								
NEW	WHS - TURF SOFTBALL							25,000	25,000	25,000	25,000
	WHS - TURF MAIN FIELD							110,000	110,000	110,000	110,000
NEW	QUAKER HILL REPAVE (ASPHALT PLAY AREA)							35,000			
	QUAKER HILL PLAYGROUND SURFACE							196,000			
NEW	OSWEGATCHIE PLAYGROUND RESURFACE								198,030		
NEW	GREAT NECK PLAYGROUND REPLACEMENT									220,080	
NEW	QUAKER HILL HEAT PUMP							180,250			
NEW	OSWEGATCHIE HEAT PUMP REPLACEMENT							177,500	182,250		
NEW	GREAT NECK HEAT PUMP REPLACEMENT								180,500	185,915	
NEW	CLMS ROOFTOP PUMP REPLACEMENT									265,000	272,000
NEW	BOE MUNIS IMPLEMENTATION										
SUBTOTAL BOARD OF EDUCATION		**243,335**	**328,335**	**0**	**0**	**0**	**0**	**2,612,350**	**1,060,780**	**905,995**	**507,000**
DEPARTMENT TOTAL		**524,585**	**938,399**	**0**	**773,264**	**773,264**	**773,264**	**10,196,662**	**8,757,015**	**5,715,768**	**5,694,908**
LESS: GRANTS/OTHER REVENUE											
	UNDESIGNATED FUND BALANCE										
	CT PUBLIC LIBRARY CONSTRUCTION GRANT										
TOTAL FUNDING OFFSETS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
TOTAL GENERAL FUND APPROPRIATION		**524,585**	**938,399**	**0**	**773,264**	**773,264**	**773,264**	**10,196,662**	**8,757,015**	**5,715,768**	**5,694,908**

TOWN OF WATERFORD
GENERAL FUND
2026 - 2030 CAPITAL IMPROVEMENT PLAN (CIP) BUDGET

DEPT/AGENCY: 10138 CURRENT YEAR CAPITAL IMPROVEMENTS 2/11/2025

LINE ITEM	DESCRIPTION	2023/2024 ACTUAL EXPENDED	2024/2025 RTM APPROP.	ACTUAL EXPEND/ ENCUMB AS OF 1/1/25	FY 2026 DEPT/ AGENCY REQUEST	2025/2026 BOS APPROVED	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
BOARD OF SELECTMEN:											
55738	FLEET MANAGEMENT PLAN	1,000,000	1,000,000		1,000,000	1,000,000	1,000,000	1,100,000	1,200,000	1,300,000	1,400,000
SUBTOTAL BD. OF SELECTMEN		1,000,000	1,000,000	0	1,000,000	1,000,000	1,000,000	1,100,000	1,200,000	1,300,000	1,400,000
EMERGENCY MANAGEMENT											
55908	APCO INTELLICOM GUIDECARD SYSTEM	40,000									
55909	EVENTIDE NEXLOGDX RECORDER	88,701									
SUBTOTAL EMERGENCY MANAGEMENT		128,701	0	0	0	0	0	0	0	0	0
FIRE SERVICES:											
55916	COHANZIE SKYLIGHT REPLACEMENT		30,000								
NEW	COHANZIE AIR CONDITIONING				15,000	15,000	15,000				
SUBTOTAL FIRE DEPARTMENT		0	30,000	0	15,000	15,000	15,000	0	0	0	0
INFORMATION TECHNOLOGY:											
55910	NEXGEN TRANSITION	309,520									
55917	CONTENT FILTER UPGRADE/REPLACEMENT		15,163								
SUBTOTAL INFORMATION TECHNOLOGY		309,520	15,163	0	0	0	0	0	0	0	0
MUNICIPAL BUILDINGS MAINTENANCE:											
55912	TOWN DOCK REPLACEMENT	40,000									
NEW	EV CHARGING STATIONS							60,000			
55904	SEPTIC REPLACEMENT (EUGENE O'NEILL)	43,500	153,000						250,000		
55913	JORDAN PARK HOUSE REPAIRS	25,000						25,000			
SUBTOTAL MUNICIPAL BUILDINGS MAINTENANCE		108,500	153,000	0	0	0	0	85,000	250,000	0	0
POLICE DEPARTMENT:											
55918	CELL BLOCK UPDATE		25,575								
NEW	KITCHEN/TRAINING ROOM UPDATES										75,000
NEW	MARINE UNIT UPDATES				31,089	31,089	31,089				
55919	FIREARMS/LASER SITE TRANSITION		53,289								
SUBTOTAL POLICE DEPARTMENT		0	78,864	0	31,089	31,089	31,089	0	0	0	75,000
PUBLIC WORKS:											
	BRIDGES/CULVERTS (OVER 20 FT)										
55911	BLOOMINGDALE RD/HUNTS BROOK	15,000						20,000			
	CONCRETE CURB REPLACEMENT										
NEW	TOWN-WIDE REPLACEMENT										
55901	SANDY HOLLOW & SHORE ROADS										
NEW	MILLSTONE EAST AREA								400,000		
	SIDEWALK REPLACEMENT										
NEW	NIANTIC RIVER ROAD		25,000					250,000	250,000	250,000	250,000
	ROAD RESURFACING/PAVING										
	MISCELLANEOUS										

TOWN OF WATERFORD
GENERAL FUND
2026 - 2030 CAPITAL IMPROVEMENT PLAN (CIP) BUDGET

DEPT/AGENCY: 10138 CURRENT YEAR CAPITAL IMPROVEMENTS 2/11/2025

LINE ITEM	DESCRIPTION	2023/2024 ACTUAL EXPENDED	2024/2025 RTM APPROP.	ACTUAL EXPEND/ ENCUMB AS OF 1/1/25	FY 2026 DEPT/ AGENCY REQUEST	2025/2026 BOS APPROVED	FY-2026	FY-2027	FY-2028	FY-2029	FY-2030
55914	ROTARY LIFT REPLACEMENTS	75,000									
NEW	RETAINING WALLS							35,000			
NEW	TRAFFIC SIGNALS							15,000			
NEW	ROAD RISK ASSESSMENT				55,000	55,000	55,000				
NEW	ROADSIDE BARRIERS							50,000		50,000	
NEW	WOODEN STREETLIGHT POLES							100,000		100,000	
NEW	MAJOR ROAD INSTERSECTION REALIGNMENT								55,000		
55891	TRANSFER STATION							20,000	100,000		
SUBTOTAL PUBLIC WORKS		90,000	25,000	0	55,000	55,000	55,000	490,000	805,000	400,000	250,000
RECREATION & PARKS:											
55835	LEARY PARK/VETERAN'S FIELD IRRIGATION									200,000	
NEW	LEARY PARK DRAINAAGE/LOWER FIELD								20,000		
55921	STENGER PARK BATHROOM & WALKWAY		10,500					10,000			
SUBTOTAL RECREATION & PARKS		0	10,500	0	0	0	0	10,000	20,000	200,000	0
UTILITY COMMISSION:											
SUBTOTAL UTILITY COMMISSION		0	0	0	0	0	0	0	0	0	0
BOARD OF EDUCATION:											
					0	0					
SUBTOTAL BOARD OF EDUCATION:		0	0	0	0	0	0	0	0	0	0
TOTAL BUDGET		1,636,721	1,312,527	0	1,101,089	1,101,089	1,101,089	1,685,000	2,275,000	1,900,000	1,725,000
LESS: GRANTS/OTHER REVENUE (OTHER OFFSETS)											
TOTAL OFFSETS		0	0	0	0	0	0	0	0	0	0
TOTAL GENERAL FUND APPROPRIATION		1,636,721	1,312,527	0	1,101,089	1,101,089	1,101,089	1,685,000	2,275,000	1,900,000	1,725,000

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2026-2030

	DEPARTMENT/ AGENCY:	Assessor						
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	Revaluation	3	125,000	100,000	100,000	100,000	100,000	525,000.00
								-
								-
								-
								-
								-
								-
								-
								-
								-
								-
								-
	TOTALS		125,000.00	100,000.00	100,000.00	100,000.00	100,000.00	525,000.00

INDEX TO FUNDING SOURCES,

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
ASSESSOR	PAIGE WALTON
PROJECT NAME	**DEPARTMENT PRIORITY**
REVALUATION	1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	State mandated town-wide revaluation of all real property to include the special use property fee appraisal of Dominion Nuclear Power Plant. Effective with the 10/1/2023 Grand List, Section 7 of Public Act 22-74, five Revaluation Zones and a new five-year revaluation schedule has been instituted, redistributing the number of revbaluations to be performed annually. the project is undertaken to remain compliant with Connecticut law and to insure uniformity in real property valuations. Funding requested annually for Waterford's next three mandated revaluations, scheduled for October 2026, 2029 & 2034.
2	**PROJECT STATUS IF IN PROGRESS**
	2022 Revaluation completed. RFP for 2026 revaluation anticipated Spring 2025.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	N/A
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	N/A
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	2026 Revaluation will be an update - current average cost ≈ $25/per parcel. Waterford parcel count =9300
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		125,000	100,000	100,000	100,000	100,000
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**125,000**	**100,000**	**100,000**	**100,000**	**100,000**

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2026-2030

	DEPARTMENT/ AGENCY:							
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	SCANNING & DOCUMENT MANAGEMENT	3		380,000				380,000.00
								-
								-
								-
								-
								-
								-
								-
								-
	TOTALS		-	380,000.00	-	-	-	380,000.00

INDEX TO FUNDING SOURCES,

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Planning / Building Department	**CONTACT PERSON** Jonathan Mullen
PROJECT NAME Scanning and Document Management	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The request is to fund scanning of all documents in the Planning and Buildng Departments. The town currenlty has approximatley 1,000,000 paper documents and maps stored in the baement of Town Hall and in the Planning and Buiding Office. Scanning these documents will reduce paper, modernize workflows, protect important town docuemts, The scanned documents will then be intergrated into a document managment system that will proivde convinient managed access to documents for both staff and the public.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	After the initial scanning project is complete the town will maintain existing and input new documents into a document management system which will have a yearly licensign fee.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR				380,000		
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**0**	**380,000**	**0**	**0**

Estimated Content Management Project Pricing for the Town of Waterford, Connecticut

THESE PRICES ARE BASED ON A PRELIMINARY NEEDS ASSESSMENT AND ARE PROVIDED FOR BUDGETARY ESTIMATING PURPOSES ONLY.

When the Municipality is ready to proceed with the work and its comprehensive requirements are determined, a formal quote can be finalized which may include applicable price adjustments.

Costs for Laserfiche Professional Cloud System:

Line Item Description	Model #	Quantity	Unit Price	Total
Laserfiche Cloud				
Laserfiche Cloud - Professional User - Tier 5-49	CLENF2	10	$830.00	$8,300.00
Laserfiche Cloud - Participant User - Tier 10-199	CFPAR	10	$120.00	$1,200.00
Laserfiche Cloud - Public Portal - 1,000 views per month	CLPPAL	1	$600.00	$600.00
Laserfiche Cloud - Forms Portal - 1,000 submissions per month	CLFPAL	1	$1,800.00	$1,800.00
			Laserfiche Cloud Subtotal	**$11,900.00**
Professional Services				
Laserfiche Configuration and Training - remote days		2	$1,400.00	$2,800.00
Laserfiche-Municity Integration (Yr 2 Forward: $2,400.00)		1	$5,000.00	$5,000.00
Laserfiche Project Coordination		1	$300.00	$300.00
			Professional Services Subtotal	**$8,100.00**
			Grand Total	**$20,000.00** *

***Please note that Laserfiche SAAS Software can priced at OMNIA/National Cooperative Purchasing Alliance (NCPA) levels: Contract #01-158 levels which is a 3.1% discount on the Laserfiche SAAS Software.**

****The Municity Legacy Data conversion will have to be scoped. Note that remote data conversion is $195.00 per hour.**

Anticipated annual LSAP/SAAS fees after the included 1st year for the above configuration would be $14,300.00
Note: This estimate is subject to change based upon the then-current support/SAAS prices for that year. Plan for a 5% YOY cost increase to all Laserfiche SAAS models.

Additional ICC-CDS Pricing Information:

Day Rates

- Laserfiche Training/Installation – Onsite Days: $2,200.00 per day (includes travel – 2 day minimum)
- Laserfiche Training/Installation – Remote Day: $1,400.00

Hourly Rates (remote)

- Training/Scoping: $175.00 per hour
- Laserfiche Workflow/Forms Development/Data Conversion: $195.00 per hour
- Laserfiche Integration Development: $210.00 per hour

***Laserfiche Crafted Solutions (developed solutions)**

- Laserfiche Records Retention Essentials (Records Management Automation): $995.00
- *Note that ICC-CDS has other automated solutions, including FOIA, Contract Management, Records Center Management and Application Portals.

General Code Representative: Bruce Cadman
518-441-6496; BCadman@icc-cds.com

DESCRIPTION OF RECOMMENDED COMPONENTS

The Laserfiche Cloud license introduces a straightforward software license that includes a wide variety of features to benefit all departments of the municipality. All of this is hosted on Amazon Web Services, so no internal IT resources are required.

Laserfiche Cloud Professional Features:

Cloud Features	Professional
Packages start at (can add to each pac	$4,150 for 5 users
100 GB storage per user	✓
Document Management	✓
Audit Trail	Starter (+)
Direct Share	✓
Data Encrypted at Rest	✓
Autoscaling of Computing and Storage	✓
Automated and Encrypted Backups	✓
Intrustion Detection	✓
Automated Feature/Secutity Updates	✓
Automated Text Extraction	✓
Import Agent with Email Archiving	✓
Process Automation	✓
Connector	✓
Surveys	✓
Records Management	+

Cloud Integrations	Professional
Microsoft 365 Integration	✓
Integration with SharePoint	✓
Integration w/ Microsoft Dynamics 365	✓
Integration with DocuSign	+
Integration with Salesforce CRM	+
Certified Integration with SAP Archivel	+
Integration with Laser App	+
Laserfiche for Ricoh MFD	+

Cloud Add-Ons	Professional
SDK	+
QuickAgent Fields Complete with Agent	10 (+)
Workflow Bots for Process Automation	1 (+)
Public Portal	+
Forms Portal	+
Participant Users	+
Community Users	+
Smart Invoice Capture	+
Vault	+
Additional Storage	+
ScanConnect	+

-Not Available + Optional Add-On ✓Included

*As a cloud-based system, updates and new features are automatically pushed out, limited/no IT involvement.



Records Imaging & Conversion Services

Version 20220701

Prepared for:

Town of Waterford

Project for: Planning & Building Department

Version 1.00

10/18/2024

Juan Rodriguez
Digital Services Specialist
860-670-0702
Juan.f.rodriguez@ricoh-usa.com

Reservation of Rights

In response to your RFP or invitation, we are pleased to submit this proposal for your consideration. We recognize your right to negotiate and approve the terms and conditions of any contract following award and respectfully reserve the right to do the same. We acknowledge that all contract terms and conditions must be mutually agreed upon by both of us. Our proposal represents our commitment with respect to pricing, equipment specifications and service levels and contemplates that both parties reserve the right to review and negotiate appropriate and mutually acceptable terms and conditions in the exercise of good faith. As is customary for transactions of this type, our proposal is based upon the information provided by you and the assumptions set forth in our response, and any changes to such information or assumptions may, if material, require modification. Upon award, we will be pleased to work with you to promptly finalize mutually acceptable contract terms and, if applicable, provide copies of appropriate contract forms for that purpose.

Proprietary and Confidential Statement

The enclosed materials are proprietary to Ricoh, and Ricoh reserves all right, title, and interest in and to such materials. The terms, conditions, and information set forth herein are confidential to Ricoh and may not be disclosed in any manner to any person other than the addressee, together with its officers, employees, and agents who are directly responsible for evaluating the contents of these materials for the limited purpose intended. Any unauthorized disclosure, use, reproduction, or transmission is expressly prohibited without the prior written consent of Ricoh. These materials summarize a proposed equipment and/or services solution. They are intended for informational purposes only to assist you in your evaluation of Ricoh as a potential business partner. These materials do not represent an offer or a binding agreement.

Jonathan Mullen
Town of Waterford
15 Rope Ferry Road ,
Waterford , CT 06385
860-444-5813
jmullen@waterfordct.org

Dear Jonathan,

Thank you for your interest in Ricoh, the premier provider of high-volume document imaging and conversion services, as a potential partner for document processing services.

As part of desired partnership outlined in prior discussions, Ricoh USA, Inc. has prepared the following proposal to detail conversion services for Town of Waterford ("Client"), specific to . In this proposal, Ricoh will provide recommendations that include services for the operational processes to convert paper into electronic images. Ricoh has outlined the Project scope and estimated costs for this Project Based engagement. The estimated service costs outlined in this document are based on Ricoh's experience and preliminary information received from Client.

Ricoh owns and operates the largest network of secure scanning centers nationwide performing image capture of over 3.2 billion pages of paper and microform last year alone. For over twenty-six years, Ricoh's Document Imaging Services' primary mission has been to accurately capture images from any media (e.g., paper, large format drawings, microfilm, microfiche, aperture cards, electronically stored information, etc.) and deliver them to our clients in a hard-copy or a database-ready format.

Our emphasis on quality, performance, mutual project success while maintaining confidentiality and chain of custody has translated into thousands of satisfied customers who have entrusted Ricoh with their legal, PHI, PII, HIPAA and business-critical documents.

Our technology and labor infrastructure, coupled with our experience within your industry on comparable projects, uniquely positions Ricoh to deliver a superior work product under budget and within deadline.

If you have any questions or feel I have omitted anything in the estimate, please do not hesitate to reach out to me. Thank you for your kind consideration of Ricoh as your partner on this project and I look forward to working with you in the very near future.

Kind Regards,

Juan F Rodriguez

Juan F. Rodriguez
Digital Services Specialist, Offsite

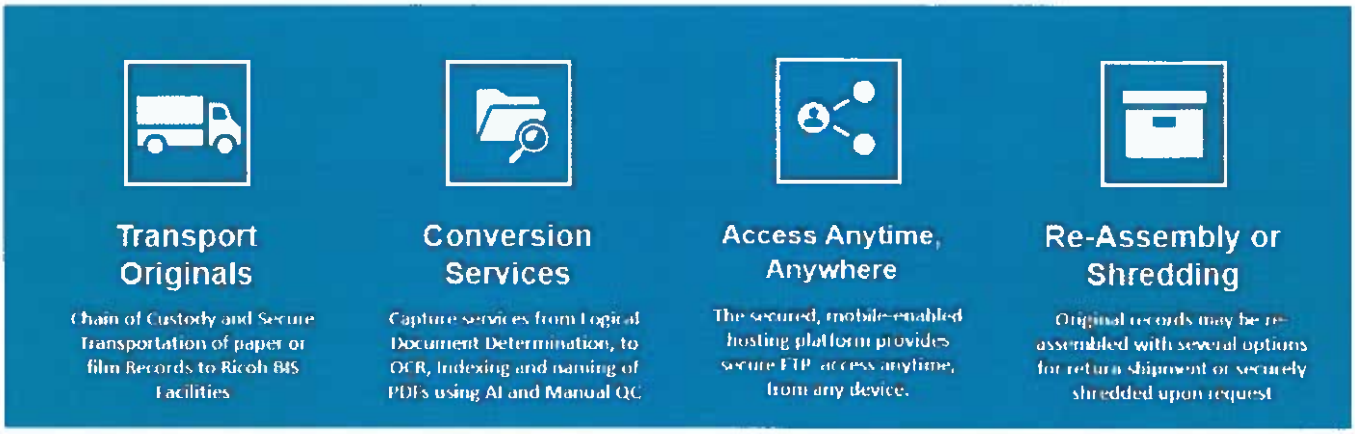
RICOH USA, Inc.
29 Griffin Road South, Unit C
Bloomfield, CT 06002
860.670.0702

juan.f.rodriguez@ricoh-usa.com

Ricoh Digital Imaging Services Overview

Ricoh has been providing fast, secure, local scanning of virtually any type or size of documents for more than 25 years. Ricoh's unique strengths include:

Standardized Process and Services



Professional Conversion Services

Through our national network of processing centers, we have the capacity to scan more than 50 million pages per month. This reinforces our proven track record as the nation's largest provider of document imaging services.

Security and Confidentiality

Ricoh's procedures and protected facilities are designed to ensure that your documents will be kept secure and confidential through the entire project. Each employee has completed a background check, drug testing, and confidentiality agreements. Ricoh trains its processing center staff relative to HIPAA standards for handling confidential healthcare-related documents.

Imaging Expertise and Best Practices

Organizations outsource scanning operations to gain access to expertise and best practices. Using one of our document processing centers, Ricoh consistently delivers world-class service and results by understanding our customers' unique business requirements and applying best practices to meet those needs. Additional details are provided herein.

Turnkey Project Management

Ricoh assigns an experienced project manager and operations team to every imaging project, so projects proceed as planned, and clients have a single point of contact for regular communication. Additional details are provided herein.

Universal Imaging Capabilities

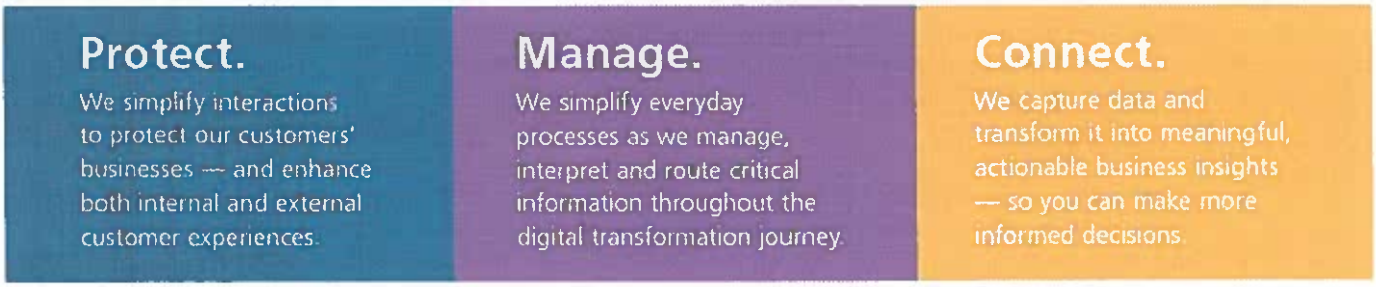
Ricoh supports a wide range of industry-standard and vendor-specific input and output formats. Ricoh has the experience and expertise to provide a seamless data conversion to migrate existing images and metadata to a new document management system while minimizing conversion costs. Ricoh also provides roll microfilm, microfiche, and aperture card scanning services.

Ricoh Security Measures

Ricoh has developed a methodology based on more than a quarter-century of experience that provides our clients a consistent deliverable from any of our Business Information Services Source (BIS Source) locations across the country. These time-tested, documented procedures are rigorously enforced through a continuing education and audit process for both our managers and production staff.

Chain of Custody

We understand the risk associated with the movement of your documents. We track all documents throughout the process - from initial pickup through to delivery - via a documented chain of custody. We collect signatures of release and acceptance whenever all or portions of your materials leave our processing operation. At the completion of the process, you will sign off that you have received all of your materials. Our chain-of-custody process has been designed to document the custody of all customer materials, regardless of type, from release to Ricoh to return. This process enables us to track the location of all materials throughout the process.



Document Handling and Confidentiality

Each of our employees has completed a background check, drug testing and signed a confidentiality agreement. Ricoh BIS professionals are experienced in handling, disassembling, and reassembling clients' important legal files. Our BIS staff is also trained relative to HIPAA and HITECH standards for handling confidential healthcare-related documents.

Security at Every Level

We employ strict protocols for handling data and other confidential information. All BIS Source locations are tightly secured, and our staff goes through rigorous confidentiality and security training and background checks. Your data, whether electronically stored information or paper, is protected physically within our centers, and all converted electronic data is subject to multilevel security through encryption and firewalls. Each BIS Source location has a business continuity plan documented and on file.

Disaster Recovery

Each of our BIS Source locations has a business continuity plan outlining the procedures for that location. Those plans are reviewed and updated quarterly. Additionally, Ricoh's infrastructure mitigates risk associated with data loss and sustained production downtime because Ricoh has BIS Source locations across the country, all adhering to the same policies and procedures and using the same production equipment. We have redundancy built into each of our production conversion processes. If a disaster were to strike our local office, we would personally move all of the work to a nearby office (designated "hot site").

Scope of Services

Volume & Condition Specifications

- Ricoh will pick up the boxes from designated customer facility
  - Assumes 1 trip for pick up
    - Ricoh will provide boxes.
    - Ricoh will prepare and box documents for shipment.
  - Distance is assumed to be 55 miles (one-way) from Ricoh Processing Center
    - Customer Pickup Address is: 15 Rope Ferry Road , Waterford , CT 06385

Project Details

- Total of 2 Populations:
  - Population #1 – Planning Department / with 180 Boxes
    - The boxes are generally 100% full
  - Population #2 – Building Department / with 207 Boxes
    - The boxes are generally 100% full

Transportation, Processing Location & Schedule

- Offsite Transportation may be provided by the Client or may be purchased from Ricoh.
  - For Details and Discussion Topics for Transportation, see Appendix C
- Offsite scanning is provided at Ricoh's secured scanning center(s) in the United States, specifically:
  - Bloomfield, CT
  - Atlanta, GA
  - Cleveland, OH
  - Houston, TX
- Project commencement is estimated to begin within one week of receipt of an executed Statement of Work and/or Customer Order Authorization.
- Chain of custody is documented upon pick-up/delivery and a Ricoh representative will transfer confidential client documents to a secure imaging center for preparation and scanning.
- Ricoh will retain electronic images on Ricoh production server(s) throughout the project for up to thirty (30) days after final delivery. After thirty (30) days from delivery of data and images, Ricoh is not responsible for maintaining any archival image or data information in connection with the delivery.

Population Planning Department Specifications

The Planning Department Population consists of the following:

Capture Specifications

- **Population #1: Population Name: Planning Department**
  - Estimated number of file boxes (1.2cf) total 180
    - Estimated qty UP TO 11"x17" in dimension: 450,000 pages in 180 file boxes (1.2cf)
    - Estimated qty OVER 11"x17" up to 36"x48" in size: 0 per file boxes (1.2cf)
    - Percent of duplex pages: 0%
    - Percent of B&W originals: 100%
    - Percent of color originals: 0%
    - Total anticipated image count: 450,000
    - Total number of resulting electronic files: 14,976 PDFs created
    - Barriers per box: 500-699
  - Data file will be provided by the Client containing all index values: No

- Paper Logical Document Determination is based on no.
  - Examples: Acco clips, staples, paperclips, bands, folders, each folder, or physical file etc.

Paper Condition

- This population will NOT require Archival Handling based on understanding that documents currently ARE in a condition that is suitable for loading into a document handler/feeder for scanning.

Processing Location

- Processing will occur in no other locations than those listed below, without Client approval.
  - Imaging of source media will be performed at Ricoh's or Ricoh's business partner's processing center(s) located in the Continental United States
  - Index capture from images will be performed at Ricoh's or Ricoh's business partner's processing center(s) located in India using a Citrix Environment where servers will reside in Houston, TX.
  - Final conversion processing of images and index data will be performed in Ricoh's AWS Amazon cloud

Image Capture Specifications

- Population pages delivered to Ricoh will be imaged
  - Document preparation is defined as Heavy Prep.
  - Document reassembly is defined as Light Reassembly.
- Capture is based on multi page images in PDF format.
- A Quality Control process will take place at the time of scanning to ensure accuracy.
  - Image quality checking is defined as Statistical/Sample QC.
- Ricoh will capture originals based on the following:
  - Originals will be scanned at a resolution of 300 dots per inch (dpi).
    - Resolution higher than 300 dpi will require custom quotation from Ricoh Operations
- Files will be delivered as multi page PDF images.
  - Capture of black & white originals as bi-tonal (b&w) images.
  - Capture of color originals, (ie: charts, photographs, etc) as bi-tonal (b&w) images.

Paper Index Capture Specifications

- Final indexing requirements will capture 1 total fields
- Ricoh will capture of the following File Level index fields.
    - **FOLDER CAPTURE**
        - ✓ Ricoh needs to scan the paper folder itself to capture index values: Yes
    - **FIELD 1**
        - ✓ Field Name: Folder Tab Information
        - ✓ Field Description: DI - Index Coding Offshore 6 to 10:MP
        - ✓ Value is located Folder

- File naming will be based on indexed fields, as follows:
    - Population 1 =

    - **ADVANCED INDEX SERVICES**
        - ✓ Project requires merging and/or splitting of PDFs: No
        - ✓ Project requires database or spreadsheet lookup for naming of PDFs: No

Delivery of Images

- Index data will be delivered in a comma separated value (CSV) format.
- OCR (Optical Character Recognition) – **Required for Searchable PDF.**
    - OCR will be performed on all images of paper-based populations to create searchable PDFs.
- Resultant images and indexed data will be delivered to Client -provided USB Flash Drive.

Original Media

Original Media for this project be re-assembled and returned to Client

Population Building Department Specifications

The Building Department Population consists of the following:

Capture Specifications

- **Population #2: Population Name: Building Department**
  - Estimated number of file boxes (1.2cf) total 207
    - Estimated qty UP TO 11"x17" in dimension: 517,500 pages in 207 file boxes (1.2cf)
    - Estimated qty OVER 11"x17" up to 36"x48" in size: 0 per file boxes (1.2cf)
    - Percent of duplex pages: 0%
    - Percent of B&W originals: 100%
    - Percent of color originals: 0%
    - Total anticipated image count: 517,500
    - Total number of resulting electronic files: 17,172 PDFs created
    - Barriers per box: 500-699
  - Data file will be provided by the Client containing all index values: No

- Paper Logical Document Determination is based on no.
  - Examples: Acco clips, staples, paperclips, bands, folders, each folder, or physical file etc.

Paper Condition

- This population will NOT require Archival Handling based on understanding that documents currently ARE in a condition that is suitable for loading into a document handler/feeder for scanning.

Processing Location

- Processing will occur in no other locations than those listed below, without Client approval.
  - Imaging of source media will be performed at Ricoh's or Ricoh's business partner's processing center(s) located in the Continental United States
  - Index capture from images will be performed at Ricoh's or Ricoh's business partner's processing center(s) located in India using a Citrix Environment where servers will reside in Houston, TX.
  - Final conversion processing of images and index data will be performed in Ricoh's AWS Amazon cloud

Image Capture Specifications

- Population pages delivered to Ricoh will be imaged
  - Document preparation is defined as Heavy Prep.
  - Document reassembly is defined as Light Reassembly.
- Capture is based on multi page images in PDF format.
- A Quality Control process will take place at the time of scanning to ensure accuracy.
  - Image quality checking is defined as Statistical/Sample QC.
- Ricoh will capture originals based on the following:
  - Originals will be scanned at a resolution of 300 dots per inch (dpi).
    - Resolution higher than 300 dpi will require custom quotation from Ricoh Operations
- Files will be delivered as multi page PDF images.
  - Capture of black & white originals as bi-tonal (b&w) images.
  - Capture of color originals, (ie: charts, photographs, etc) as bi-tonal (b&w) images.

Paper Index Capture Specifications

- Final indexing requirements will capture 1 total fields
- Ricoh will capture of the following File Level index fields.
    - **FOLDER CAPTURE**
        - ✓ Ricoh needs to scan the paper folder itself to capture index values: Yes
    - **FIELD 1**
        - ✓ Field Name: Folder Tab Information
        - ✓ Field Description: DI - Index Coding Offshore 6 to 10:MP
        - ✓ Value is located Folder

- File naming will be based on indexed fields, as follows:
    - Population 2 =

    - **ADVANCED INDEX SERVICES**
        - ✓ Project requires merging and/or splitting of PDFs: No
        - ✓ Project requires database or spreadsheet lookup for naming of PDFs: No

Delivery of Images

- Index data will be delivered in a comma separated value (CSV) format.
- OCR (Optical Character Recognition) – **Required for Searchable PDF.**
    - OCR will be performed on all images of paper-based populations to create searchable PDFs.
- Resultant images and indexed data will be delivered to Client -provided USB Flash Drive.

Original Media

Original Media for this project be re-assembled and returned to Client

Unit Pricing Table

The table below, including the "estimated pre-tax total", is calculated based on the aggregate of all unit pricing multiplied by the corresponding quantities for the services outlined above. The "estimated pre-tax total" is not a fixed cost estimate and is intended solely as a general guideline for anticipated cost(s). **Ricoh will invoice for actual volumes processed.**

Population Planning Department Unit Pricing

QTY	Description	P-Code	Unit	Unit Price	Total
450,000	DI - Image Capture (Heavy)	7036	Image	0.0878	$ 39,510.00
450,000	DI - QC (Statistical/Sample)	7082	Image	0.0231	$ 10,395.00
450,000	DI - Re-Assemble (Light)	7084	Image	0.0258	$ 11,610.00
450,000	DI - OCR	7055	Image	0.0110	$ 4,950.00
450,000	DI - Image Conversion - PDF	723	Image	0.0071	$ 3,195.00
1	DI - USB Flash Drive 8 GB	7043	Drive	39.0000	$ 39.00
14,976	DI - Index Coding Offshore 6 to 10:MP	7110	Field	0.0182	$ 272.56
14,400	DI -Lg Format B&W Scan (per Sheet)	7060	Image	2.0000	$ 28,800.00
Estimates are Pre-Tax			**Estimated Population Total:**		**$ 98,771.56**

Population Building Department Unit Pricing

QTY	Description	P-Code	Unit	Unit Price	Total
517,500	DI - Image Capture (Heavy)	7036	Image	$0.0878	$ 45,436.50
517,500	DI - QC (Statistical/Sample)	7082	Image	$0.0231	$ 11,954.25
517,500	DI - Re-Assemble (Light)	7084	Image	$0.0258	$ 13,351.50
517,500	DI - OCR	7055	Image	$0.0110	$ 5,692.50
517,500	DI - Image Conversion - PDF	723	Image	$0.0071	$ 3,674.25
1	DI - USB Flash Drive 8 GB	7043	Drive	$39.0000	$ 39.00
17,172	DI - Index Coding Offshore 6 to 10:MP	7110	Field	$0.0182	$ 312.53
32,500	DI -Lg Format B&W Scan (per Sheet)	7060	Image	2.0000	$ 65,000.00
Estimates are Pre-Tax			**Estimated Population Total:**		**$145,460.53**

Summary of Additional Fees

QTY	Description	P-Code	Unit	Unit Price	Total
387	DI - Ricoh Boxes	7031	Box	$6.37	$ 2,465.19
24	DI - (hr) ASG Project Management	7002	Hour	$225.00	$ 5,400.00
1	Transportation / Hand time /Labor	7044	Trip	5,500	$ 5,500.00
Estimates are Pre-Tax			**Estimated Additional Fees Total:**		**$ 13,365.19**

Pricing for any requirements to deliver images or data to a customer new or existing content management system or other business application requires further discovery.

Summary of Total Costs

Description	Estimated Total
Total Combined Pricing of all Populations	$244,232.09
Total Combined Pricing of all Additional Fees	$13,365.19
Estimated Pre-Tax Total	**$257,597.28**

The minimum fee for off-site services is $10,000 per project. Ricoh will invoice based on the actual number of units processed multiplied by the unit cost as referenced in the above table. Pricing does not include shipping costs of deliverables.

Production Workflow Notes

Ricoh is extremely sensitive to the fact that we are handling confidential legal, PHI, HIPAA and/or business-critical documents. As such, Ricoh designed its document handling procedures around the tight security standards established for evidentiary and privileged documents relating to extremely sensitive litigation matters. This allows us to maintain strict confidentiality and chain of custody throughout the entire workflow.

Ricoh is also sensitive to the fact that we frequently handle active files that our clients rely on during the regular course of business. When a file from a box that is identified as being "out for imaging", Ricoh's *Rapid Response* service can be activated to retrieve and return the original(s) or produce an electronic copy that can be downloaded securely. Ricoh's entire imaging workflow and customer service is designed to not adversely impact daily business operations.

Pricing Notes:

The foregoing price quotation is valid for 30 days from the date of this proposal. Unit prices are based on the volumes and assumptions as detailed in the *Production Scope & Assumptions* section and are contingent upon analysis of a representative sampling of source media and indexing methodology.

Should the scope or process vary from the assumptions outlined herein, Ricoh reserves the right to submit a revised proposal based on definitions representative of the true project scope and technical requirements. The "Estimated Pre-Tax Total" listed above is calculated based on the aggregate of all unit pricing multiplied by their corresponding quantities. This estimated total is not a fixed cost estimate and is intended solely as a general cost estimate. Ricoh will invoice for actual volumes processed.

Ricoh and Client acknowledge that the services and prices that are offered to Client herein are based on the assumptions contained within this response, and assumptions to be identified by Ricoh during its more detailed evaluation and scope

assessment following the engagement contemplated hereunder. All production processing will be executed pursuant to the imaging and coding instructions and instructions contained in this document and in its addenda herein.

If Ricoh determines during the production processing of Client's document collection that the collection deviates from assumptions, Ricoh reserves the right to adjust unit price for the impacted service (effective as of the earliest date that such deviation occurred), and Client agrees to pay Ricoh in accordance with Ricoh's standard terms and conditions for such services. Ricoh will notify Client of its determination of any deviation from the assumptions contained within this response.

Assumptions:

1. **Transportation quotes are valid for 10 days**, and subject to change due to variances in fuel, courier fees, etc.
2. Archival "Glasswork" imaging would be required in the event the condition of the originals are fragile/antique, hard bound, or the integrity of the document(s) would be compromised by placing them into a mechanized document handler/feeder for scanning.
3. Imaging Pricing assumes originals are in good condition without frayed edges, tears, or brittle/antique paper, not requiring Special Handling or use of a carrier sheet to facilitate scanning.
4. Optical Character Recognition (OCR) - Provides keyword search capability. Should OCR be requested at a later date, Ricoh will provide a revised quote.
    a. OCR is not recommended for oversize maps, photo images, drawings, floor plans files, etc.
    b. OCR is not a reliable method for extraction of handwritten, serif font, small type font under 12 point, data in tables or charts, etc. and should not be considered a reliable method for obtaining "searchable" files in larger PDFs. Ricoh cannot guarantee all words and characters will be captured consistently.
    c. OCR will not be performed on any microform images. Ricoh cannot guarantee the consistency of OCR on microform media.
5. If processing exceptions exceed 3% of the total volume, the Change Order Process will be initiated for review and disposition.
6. If returning originals, original media will be returned to Client thirty (30) days after associated image delivery is complete. Upon Request, for a transport fee, originals may be returned to Customer Site, within 30 days of Scan
7. If shredding, original media will be shredded by Ricoh within thirty (30) days after associated image delivery is complete and Ricoh has written Client authorization to proceed with document destruction. If written authorization is not received within 30 days, original media will be returned to Client and will incur additional return shipping fees. Original Images will be shredded based on the schedule of fees outlined herein

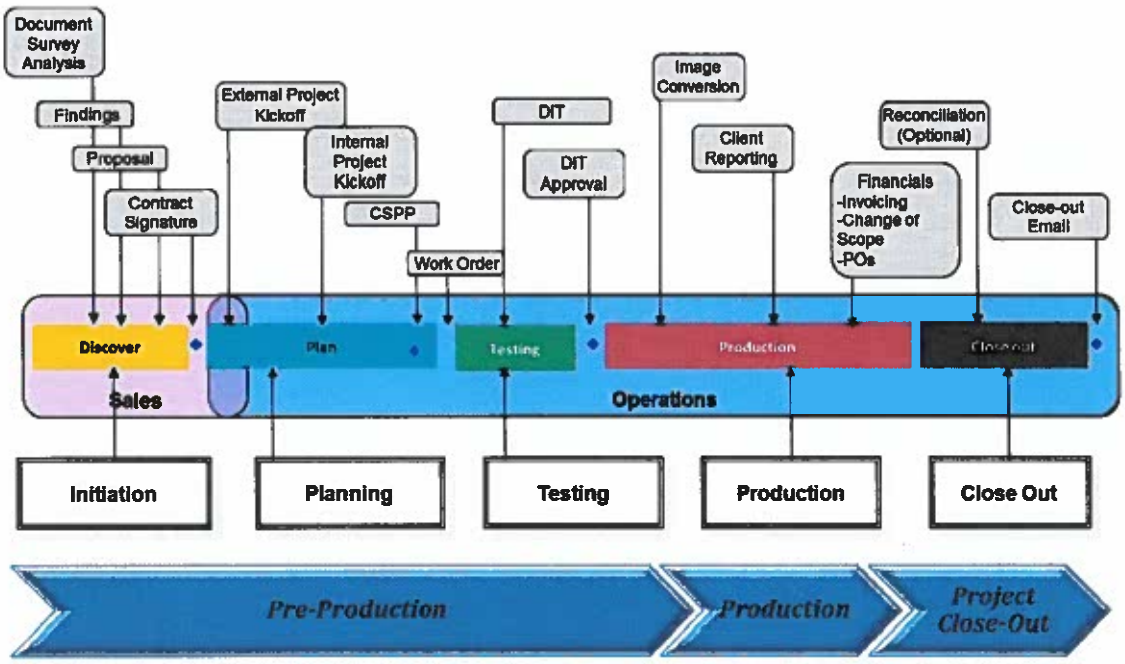
Project Planning

Project Management

A Ricoh Project Manager will be assigned to plan, direct, and coordinate activities of the project to ensure goals and objectives are accomplished within the prescribed time frame and funding parameters.
Specific responsibilities include, but are not limited to:

1. Reviews project proposals and general requirement documents to determine schedule, manpower, funding, and scope limitations.
2. Develops the basic project plan for executing and controlling the project, including workflow, budget, and timeline(s), including the technical specifications with the assistance of the Engineering and Technical staff.
3. Directs the preparation of the plan for organizing, staffing, budgeting, executing, and controlling field projects.
4. Interprets and executes written and/or oral job specifications and instructions into project plan.
5. Coordinates with operations effected by project to plan and develop workflow/procedures and manpower needs.
6. Anticipates and mitigates potential risks by maintaining current knowledge of overall project status.
7. Develops clear written strategy guidelines for communication with clear definition of responsibilities and restraints.
8. Acts as additional client communication liaison between operations, engineering, sales, finance and/or technical staff for a project.
9. Communicates issues and suggestions succinctly and clearly so as to be understood by clients and co-workers.
10. Documents conversations, instructions and changes or deviation in work statements and procedures.
11. Proactively informs clients of project status and issues both in verbal and/or written format.
12. Proactively communicates status of projects and issues to relevant stakeholders.
13. Escalates all issues to a higher mgt level at signs of client dissatisfaction with performance of services or expectations.
14. Responsible for the reconciliation of all client materials.

High-Level Project Plan



** Note: DIT (Data Interchange Test) requires Ricoh ASG Technical Services and client approval which may impact project timeline.

Pre-production activity is targeted to be completed in approximately two to three weeks. Following Customer approval and acceptance of the Conversion Service Project Plan (CSPP), production conversion will commence, and continue over a mutually agreed-on period. The final schedule will be mutually determined between the Ricoh project manager and Customer. Customer will deliver Source Media as necessary to support the planned schedule.
Ricoh's project lifecycle consists of three major phases:

- Pre-production
- Production
- Project close-out

The Ricoh project manager assigned to your account will be responsible for directing all phases and will be the primary point of contact for the entire project. The project manager will execute the operations based on a structured methodology approach. The Ricoh project manager will ensure that each of the phases has mutually agreed upon objectives and deliverable products. Both Ricoh and your organization will have defined responsibilities in each phase, and accordingly both will share in the project success. Transition from one phase of the project to the next shall occur only with Customer expressed approval.

The activities for each phase are described below:

Pre-Production —After contract award, Ricoh's project manager will lead a kick-off meeting with Customer. After kick-off, Ricoh begins work with Customer to finalize procedures and quality specifications.

During this phase, the Ricoh project team works with Customer to complete the Conversion Services Project Plan (CSPP) and presents it to Customer for approval. The purpose of the CSPP is to provide a detailed, documented reference for the complete execution of the project. In the plan, the project manager describes in detail all of the logistical, operational and technical requirements, specifications and procedures of the project.

After approval of the CSPP, Ricoh performs a data interchange test (DIT). The DIT is an end-to-end test of workflow and procedures, and is performed to verify both the technical and logistical elements of the project. The results of the DIT are to be reviewed by Customer and any required adjustments will be communicated back to Ricoh. Ricoh will not proceed with production until a successful DIT is completed and approved by Customer.

Production —With Customer's approval of the interchange test, Ricoh will pick up boxes of files to begin the scanning production and produce deliverable images. The production process will mirror the DIT model.
Ricoh will work with Customer to ensure that the implemented process, scan, index, and import are meeting all of Customer's requirements.
During production, Ricoh will generate monthly reports of production statistics. The format of this report will be developed with Customer but should include totals of documents and images produced and delivered and invoice summaries.

Close-out – The Ricoh project manager closes out all open items and issues and performs a final reconciliation. The project manager conducts an end-of-project meeting. Optionally, data reconciliation reports can be produced detailing anomalies, such as documents in database but not delivered, documents delivered but not in database, duplicate documents or indices.

Appendix A – Definitions

Document Preparation

Client Preparation:

Client performs 100% of the document preparation. This includes removal of all barriers, creation, and insertion of make-ready copies to address contrast issues, fragile pages, small pages that won't feed, etc. Client preparation also includes the unbinding or cutting/trimming of books, pamphlets, etc. that are hard bound, and the insertion of Ricoh-provided barcode sheets, patch sheets, or document coding/indexing sheets. Client preparation requires that all pages are loose.

Light Preparation:

Ricoh performs 100% of the preparation and includes the assumptions listed below:

- Documents are 8 ½ by 11" (letter size) up to 11"x17" (tabloid size)
- Ricoh will insert required barcodes and document coding sheets
- 100 barriers (see definition for barrier) with ~25 pages per barrier
- Guidelines are based on average box size (16x12x10 or 1.2cf)

Medium Preparation:

Ricoh performs 100% of the preparation and includes the assumptions listed below:

- Documents are 8 ½" x 11" (Letter Size) or 11"x17" (tabloid size)
- Ricoh will insert required barcodes and document coding sheets
- 101-499 barriers (see definition for barrier).
- Guidelines are based on average box size (16x12x10 or 1.2cf)

Heavy Preparation:

Ricoh performs 100% of the preparation and includes the assumptions listed below:

- Preparation includes mixed paper sizes
- Ricoh will insert required barcodes and document coding sheets
- 500 barriers (see definition above for barrier) or more in per box
- Guidelines are based on average box size (16x12x10 or 1.2cf)

Quality Control

Basic Quality Control:

Document Scanning Specialist will ensure scanner is cleaned and operating as required. Does not include a page-to-image comparison.

Statistical/Sample Quality Control:

Ricoh will complete image to page QC on 10% of the images per box. **Example** - For a box with an images count of 2,500 images - The Ricoh Quality Control Specialist will review (page-to-image comparison) the first 100 images (~4%) of every box, 50 images (~2%) from the middle of the box, and 100 images (~4%) from the end of the box. The quality control process involves the QC Specialist checking for the following items on the ~10% of the population as defined above:

- Ensure all pages defined in the ~10% sampling were scanned
- No missed back sides
- Images are legible to the original
- Images requiring color are scanned per instructions
- Post-it notes handled per instructions
- Physical document breaks captured correctly per instructions

Full/Image-to-Page Quality Control:

Quality Control Specialist will:

- Perform page-to-image comparison of every page
- Ensure all pages are scanned
- No missed back sides
- Images are legible to the original
- Images requiring color are scanned per instructions
- Post-it notes handled per instructions
- Physical document breaks captured correctly per instructions

Reassembly

No Reassembly:

All documents will remain loose, not returned to folders or binders. No removal of barcode and document coding sheets is necessary. Paper returned to its original pick-up box/container

- Documents are not reassembled (re-stapled, re-clipped, re-bound, etc.)
- Documents are not returned to original folders or binds
- Documents are placed in original pick-up box/container
- Document order is maintained
- Ricoh may or may not remove barcodes placed in the documents during the preparation process

Light Reassembly:

Re-Assembly includes placing pages into folders (not including placing on prongs or within binder rings) without any staples or clips or any other type of barrier. Ricoh may or may not remove barcode and/or document coding sheets.

Medium Reassembly

Re-Assembly includes placing pages into folders, placing them on prongs or binder rings without any staples or clips or any other type of barrier. Ricoh may or may not remove barcode and/or document coding sheets.

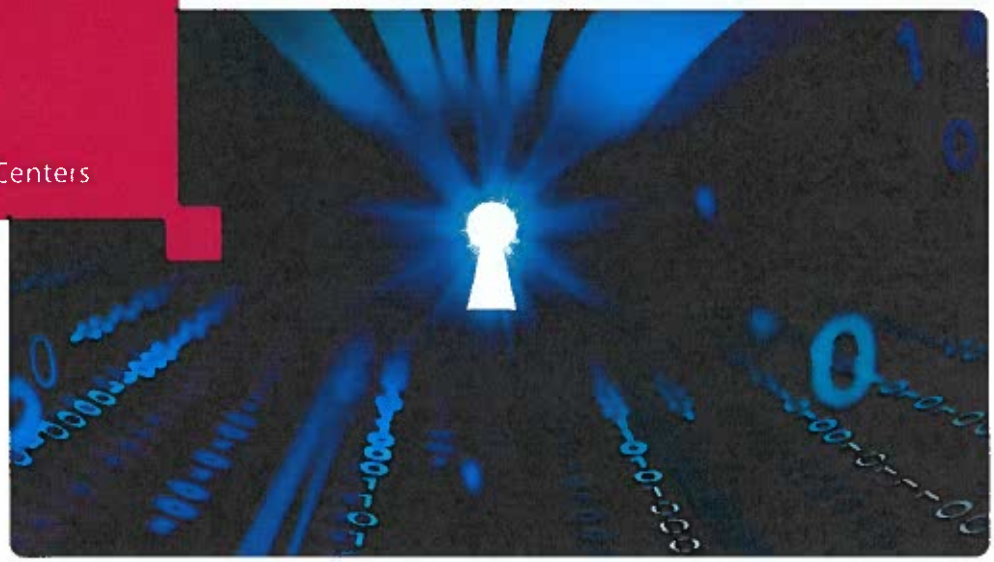
Heavy Reassembly:

Re-Assemble documents as originally received. All barriers replaced as original. Ricoh will remove barcode and document coding sheets.

Digital Imaging Services

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Security: Processing Centers



Certifications and Accreditations

Ricoh has various third-party certifications and accreditations.

- Ricoh USA, Inc. is Safe Harbor certified for our processing centers.
- Ricoh has undergone a Service Organization Controls (SOC) Type 2 audit. A copy of the report, issued by PricewaterhouseCoopers, is available upon request.

Keeping your electronic data and documents secure as well as ensuring the privacy of your employees and customer is critical to the success of your business. If your information becomes compromised, the risk to your reputation and overall goodwill — along with potential sanctions and damages — is greater than ever before. Therefore, it is crucial that your documents are entrusted to a partner who understands document and data security and offers proactive solutions to assist you in protecting your information.

Ricoh is that partner. At our processing centers, our training, processes and technology are designed to provide security for your documents throughout the entire engagement, from the point of pickup to final delivery.

Employee Training & Confidentiality

Ricoh knows that security starts with our employees. Our team is trained and experienced in managing sensitive and confidential documents. We provide focused training on the proper security protocols.

Ricoh's employee training and confidentiality measures include, but are not limited to:

- Annual confidential information training for all processing center employees
- Employee confidentiality agreements
- Company code of ethics
- Pre-employment background checks

Security: Processing Centers

Facility Security

Ricoh's processing centers are secured with controlled, restricted and monitored access. Electronically stored information (ESI) and paper are physically protected within our centers and are subject to our data security policies and processes. We also conduct regular and unannounced security audits to review and reinforce compliance.

Ricoh's facility security measures include, but are not limited to:

- A dedicated corporate security team
- Site-specific business continuity plans
- Security leads in each location
- All facilities locked and secured 24/7
- All office access is controlled and monitored
- All guests escorted at all times
- Regular and unannounced security audits
- Clean desk policy
- No personal items allowed in production areas (including cell phones)
- Production areas are controlled and monitored

Electronic Document Management System Security – DocumentMall™

Ricoh can provide images and index data for import into virtually any commercially available electronic document management system, including DocumentMall from Ricoh - a powerful, Web-enabled document management and storage solution.

DocumentMall security measures include, but are not limited to:

- All data is stored in the data center and is protected from loss, corruption, and unauthorized access
- Physical perimeter and internal defenses designed to protect against unauthorized access to the systems and internal network
- Firewalls and intrusion detection/prevention systems, with monitoring and event logging to evaluate potential threats
- Multi-tiered system architecture to limit access and vulnerabilities due to security breaches
- Redundant storage devices to prevent data loss and ensure integrity
- Regularly scheduled data backups with remote storage of duplicates and a documented recovery plan
- Hardened operating systems on all production machines with regular security patching and vulnerability scanning

Data Security

Ricoh recognizes the importance of protecting your data and treats all data, regardless of classification, as confidential. Ricoh's processing center team works hand-in-hand with Ricoh's physical and information security teams, as well as legal and audit departments, to ensure that robust, relevant data policies, procedures and processes are always in place.

Ricoh's data security measures include, but are not limited to:

- Secure indexing process
- Dedicated, secure document network
- Production area access is restricted and monitored
- Data transmissions utilize SSL 128-bit encryption or better, including importing and exporting of data
- Application-level security for role-based user access privileges
- Audit logs capture user activities
- Third-party vulnerability assessments performed on routine basis
- Anti-virus management

Document Security

Ricoh understands the risks associated with the movement of client documents. That's why we track all documents from initial pickup, through the production process, and to delivery through a documented chain of custody. Ricoh offers company-owned vehicles to provide secure local document pickup and delivery services, and we offer encrypted media delivery upon request.

Ricoh's document security measures include, but are not limited to:

- Local pickup and delivery by trained Ricoh employees
- Documents are secured at every point
- Delivery media encrypted upon request; during transportation data is protected using AES 256-bit encryption
- Secure File Transfer Protocol is utilized for electronic data transfers
- Documented chain of custody
- All documents, regardless of classification, are treated as confidential

Visit Ricoh at **www.ricoh-usa.com.**

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Appendix C: Transportation for Physical Records

Transportation Discussion Details

- The total volume of boxes to be transported Select one... exceed 100 boxes
  - Office Hours (Customer's Local Time): 8:00 – 5:00
  - Any special instructions (E.g. non-typical working days):
- Note: Most Ricoh-provided shipping starts at $1,000 per trip outside of a 100-mile radius of BIS Centers.

Common Transportation Options

- **Courier (Box Truck or Van)** - For any size shipments and box sizes.
  - Box Truck sizes vary and may be scaled based on qty of boxes to transport

Box trucks are most common. Below are some alternate shipping methods that could help reduce costs, depending on the size and needs of the project:

- **ReloCubes** - For any size shipments and box sizes.
  - Cubes can handle up to 150 standard (1.2 cu ft) boxes per ReloCube.
  - Cubes can be dropped off one day for loading and picked up the next day for transport.
  - ReloCubes are not available at all locations.
  - ReloCubes do not require a loading dock. They take up half of a typical sized parking spot.
  - Locks are not provided, but they can be locked with Customer supplied locks.
    - If using a combination lock, Customer to send the combination to Ricoh PM
  - Multiple ReloCubes may be rented if a loading dock is not available.
    - Less practical if over 300 boxes due to client loading labor requirement
  - Pallets are not recommended for ReloCubes.
    - Boxes must be loaded directly on the floor of the cube and stacked accordingly for transport
    - They must be loaded properly for transport against walls with no gaps and as flat as possible
    - Customer Select one... provide a flat, open space where the ReloCubes can be offloaded and placed for loading
    - How long will the client need to load or unload the ReloCube? 1 days

- **Exclusive Use Semi-Trailer** - For larger size shipments (70+) of any box sizes.
  - Commonly chosen for larger projects with multiple populations, longer distances and / or many boxes
  - Require boxes to be on Pallets & shrink wrapped. A loading dock is required.
  - Loading Dock: The Customer Select one... a Loading dock that can handle a 53' trailer
    - Client Select one... provide palletizing / shrink wrap
    - Client Select one... require provide forklift / pallet jack and their own staff to load
    - All answers should be yes to use this option.
      - For pickups in large metropolitan areas where freight traffic is high, a trailer with a lift gate may be requested. In this case, pallets with shrink wrapped boxes are still required but a loading dock is not. A pallet jack would be needed. This is rare.
    - Client may elect to select a specific carrier. However, Client will work directly with them to schedule and procure the service and pay that carrier directly.

Public Works Department

Memo

To: Robert Brule, First Selectman

From: Gary J Schneider, Director of Public Works

cc: Kimberly Allen, Finance

Date: November 15, 2024

Re: Building Maintenance CIP 2026-2030

The focus this year is divided between roofs and building support systems. It does include one project that will ready the Town for the transition to EV for our staff vehicles. There are some grants available, but they don't cover the cost of the entire project.

The project for the Library is a new project, but it is critical for the operation of the building. Failure of the electrical service means the building will be closed. Replacement under an emergency operation would be costly and take weeks for a temporary work around. And we will still have to complete this project.

This is the same for the chiller replacement at the Community Center. Original to the building, it is time to replace it. I don't want to experience what the Board of Education had at the Clark Lane Middle School with their chiller.

The "repair the leak when it happens" is not a good way to protect the interiors of the buildings. While our contractor can continue to patch and seal where/when a new leak develops, there is a point in time that the replacements are justified.

The CIP submitted also includes outlying years identifying key maintenance projects concerning roofs and HVAC in our major facilities.

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2026-2030

	DEPARTMENT/ AGENCY:							
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	HVAC - CHILLER - COMMUNITY CENTER	3	250,000		800,000		800,000	1,850,000.00
2	LIBRARY ELECTRICAL SERVICE	3	175,000					175,000.00
3	POLICE STATION ROOF	3	85,000		850,000		250,000	1,185,000.00
4	EUGENE O'NEILL ROOF	3	250,000					250,000.00
5	EV CHARGING STATIONS	1	60,000					60,000.00
6	MUNICIPAL PARKING LOTS	3		1,200,000				1,200,000.00
7	COHANZIE REMIDIATION/DEMO	3		30,000		500,000		530,000.00
8	JORDAN PARK HOUSE	1		25,000				25,000.00
9	EUGENE O'NEILL SEWERS	1			250,000			250,000.00
10	COMMUNITY CENTER - UST	3					75,000	75,000.00
								-
	TOTALS		820,000.00	1,255,000.00	1,900,000.00	500,000.00	1,125,000.00	5,600,000.00

INDEX TO FUNDING SOURCES,

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Building Maintenance	Gary J. Schneider
PROJECT NAME	**DEPARTMENT PRIORITY**
HVAC - Chiller - Community Center	1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The chiller is at the end of its service life. It is original to the building (2003). If this unit fails during the cooling season, most services at the building would have to be cancelled. Potable window exhaust cooling units that were used at the Library would not work in this facility. One can expect a lead time of 23 weeks after the project is awarded. Design, bid and award would take about 12 weeks with installation taking another 10 weeks. It must be timed so that the unit can be taken offline in November of the calendar year. The plan is to have the unit installed in early spring of 2026.
2	**PROJECT STATUS IF IN PROGRESS**
	Studies have been completed for the Police Station, Public Safety and the Community Center
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Attached expanded narrative

7 **COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		250,000		800,000		800,000
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**250,000**	**0**	**800,000**	**0**	**800,000**

MEMORANDUM: TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Heating, Ventilation and Air Conditioning – Town Facilities

Over the years, Town Hall, Youth Service Bureau (YSB), Library and Municipal Complex HVAC systems have all been addressed. Several facilities still require a major renovation while others will require component replacement. All buildings will be connected to the Building Management System (BMS) to monitor, control the use of energy, equipment run time and identify equipment failures. Local access is given to a facility user to assist in scheduling of the public spaces.

The major renovation work remaining are at:
Public Safety: The January 2020 report found that most of the equipment at Public Safety is "operating beyond their useful service life". Although the boilers have been replaced as part of the natural gas conversion, an underground tank has been removed and the roof top unit has been replaced, the remainder of the system must be addressed. This project will address the remaining components at the Public Safety Building, a critical facility housing the Director of Fire Services, the Office of the Fire Marshal and our 24/7 Dispatch and Emergency Operations Director.

Police Station: The January 2020 report found at the Police Station; "...existing equipment such as the exhaust systems, cabinet unit heaters and radiant ceiling panels throughout the building are original to the 1990 construction. A large quantity of the equipment mentioned are nonfunctional". Although the natural gas conversion replaced the burner on the boiler and removed the underground tank, here too, the rest of the system at the Police Station must be addressed.

Component Replacement:
Community Center: The chiller is at the end of its service life. It is original to the building (2003). If this unit fails during the cooling season, most services at the building would have to be cancelled. The portable window exhaust cooling units that were used at the Library would not work in this facility. One can expect a lead time of 23 weeks after the project is awarded. Design, bid and award would take about 12 weeks with installation taking another 10 weeks. It must be timed so that the unit can be taken offline in November of the calendar year. The plan is to have the unit installed in early spring of 2026.

From: Kenneth Hipsky <khipsky@rzdesignassociates.com>
Sent: Friday, September 27, 2024 4:40 PM
To: Gary Schneider
Subject: Waterford Community Center Chiller

**CAUTION: This email originated from outside of the organization.
Do not click links or open attachments unless you recognize the sender's email address and know the content is safe.**

Gary,

Below is what I received from Trane on the chiller at the Community Center.

When you factor in installation (i.e. demo, rigging, piping, electrical, DDC controls, general conditions and overhead and profit) and about 10% escalation you are looking at a project of at least $225,000 plus engineering. Suggest a budget of at least $250,000.

Assuming it makes it into next years approved budget, because of the lead time, we would need to complete design next summer and get it right out to bid in order to have it installed in the spring of 2026.

Ken

From: Halpern, Greg <Greg.Halpern@trane.com>
Sent: Friday, September 27, 2024 3:29 PM
To: Kenneth Hipsky <khipsky@rzdesignassociates.com>
Subject: RE: [WARNING-EXT]RE: Waterford Community Center

Hi Ken,

1. Chiller selection with a configured specification attached. Width is the same as existing, length is shorter, but it is slightly taller. Will fit in the existing enclosure. Existing chiller is a screw machine, this one is a scroll. It is more efficient, meets ASHRAE 2019/CT Energy Code. Same breaker size. Budget is around $125,000. Will depend on final options, extended warranty might be the only other thing I would put on it. Lead time is about 23 weeks.

From: Kenneth Hipsky <khipsky@rzdesignassociates.com>
Sent: Friday, September 27, 2024 12:19 PM
To: Halpern, Greg <Greg.Halpern@trane.com>
Subject: Waterford Community Center

Hi Greg.

The town is looking to replace this chiller next fiscal year. Can you provide me a selection and budget?

The unit sits in a fenced enclosure. How does new unit compare physically with existing chiller?

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Building Maintenance	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Electrical Service (Main) - Library	**DEPARTMENT PRIORITY** 2

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The facility is currently served by overhead pole mounted transformers located at the end of a pole line into the property from Route 156. From the transformers, the cables enter conduits on the pole that then becomes a buried conduit until it enters the basement. Over the years, water has entered the conduits that then drains into the main switch, corroding the cabinet and the electrical connection. It must be replaced. It would be cost effect to underground all utilities that are on the current pole. Along with electrical, communions (fiber and copper) would be moved underground from the first pole near Rt 156 to the building. This would remove two old wooden utility poles.
2	**PROJECT STATUS IF IN PROGRESS**
	Replacement of the main switch has been designed
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	Complete failure would close the building until the work can be replaced
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Attached expanded narrative memorandum: Plan Public Library Electrical Service Upgrade
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		175,000				
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**175,000**	**0**	**0**	**0**	**0**

MEMORANDUM: TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS

To: File

From: Gary J Schneider

Date: November 15, 2024

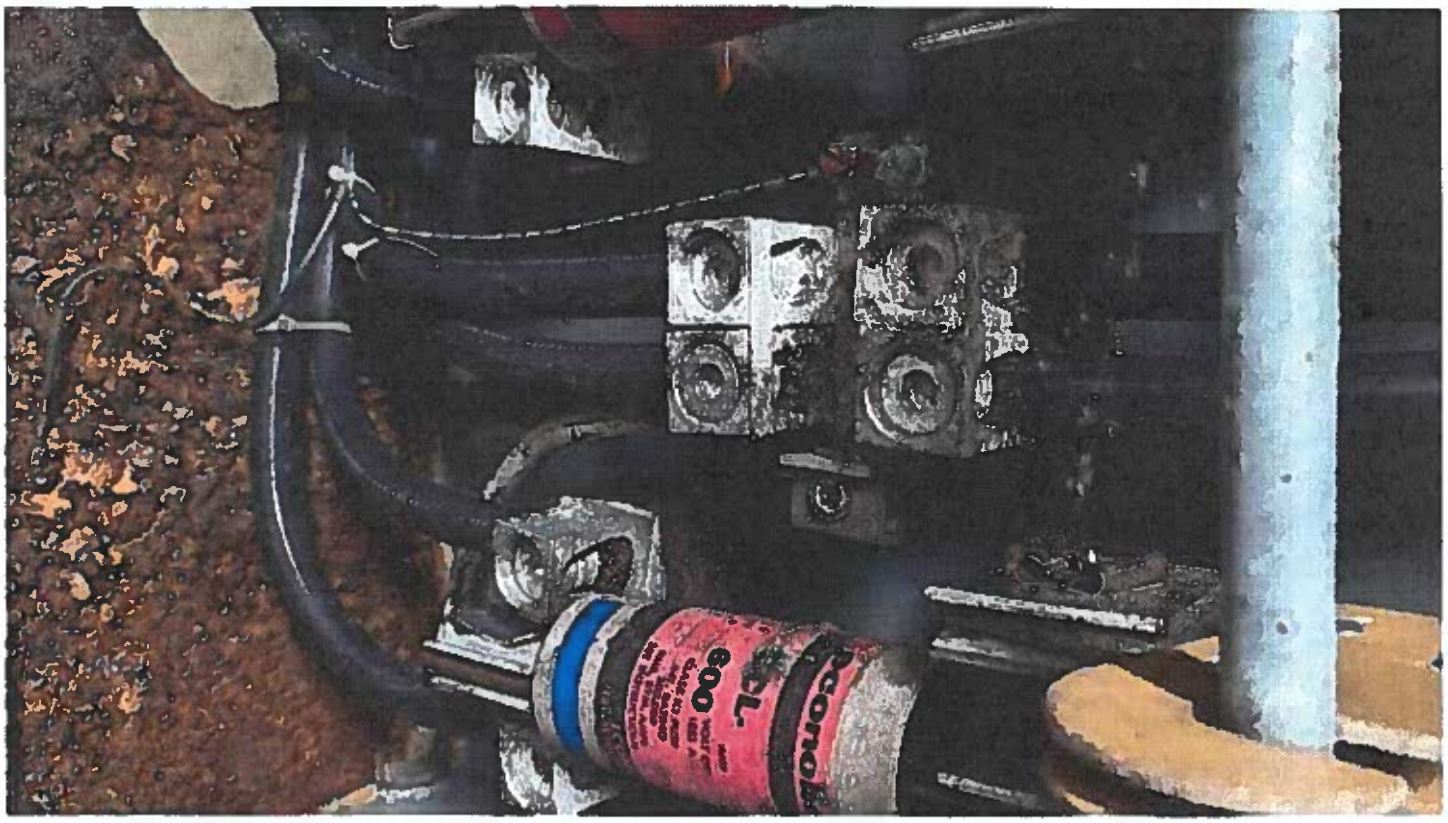
Re: Electrical Service (Main) – Library

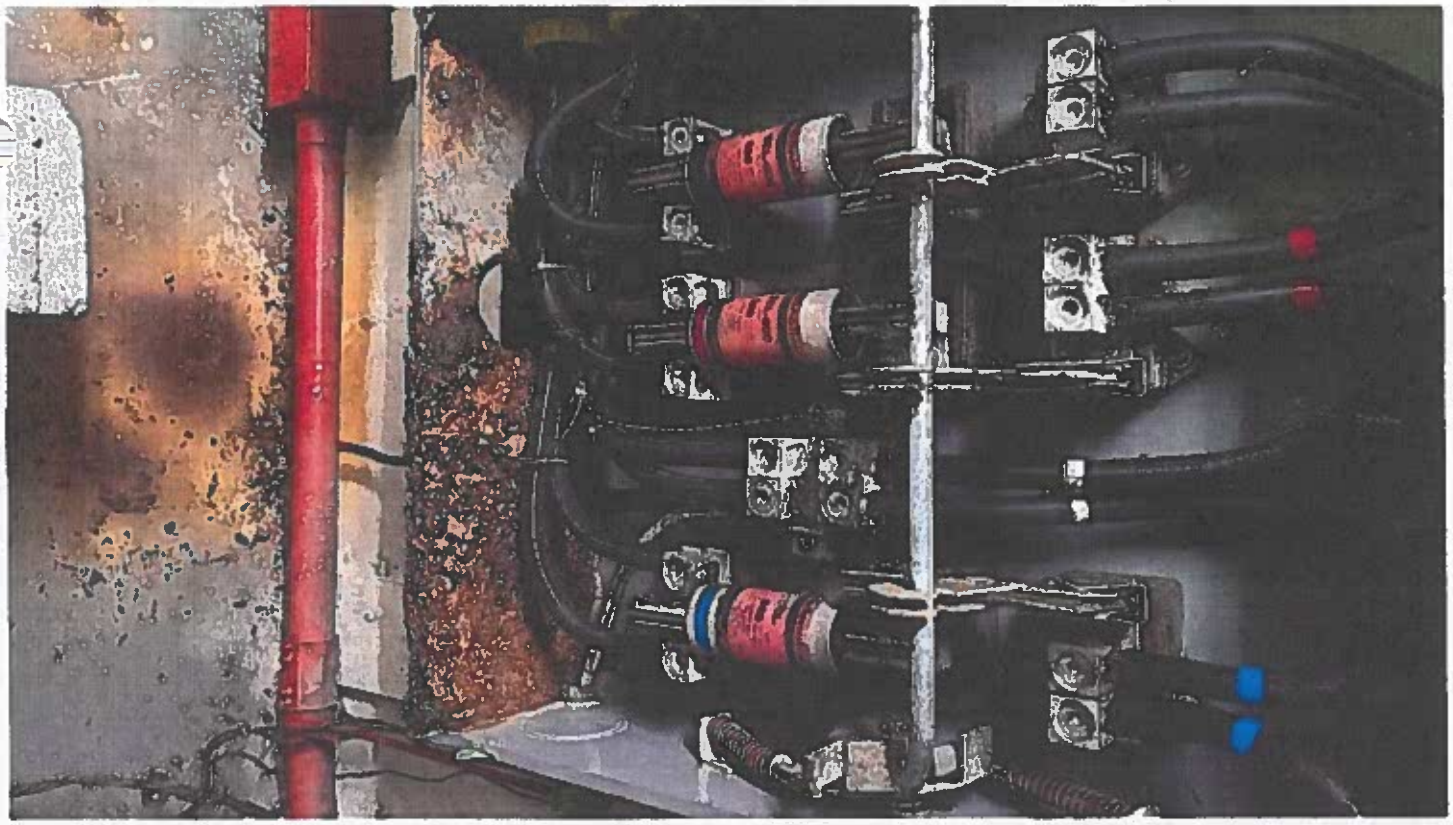
The Library's electrical is currently served by overhead, pole mounted transformers located at the end of a pole line into the property from Route 156. From the transformers, the cables enter conduits on the pole that then becomes a buried conduit until it enters the basement. Over the years, water has entered the conduits that then drains into the main switch corroding the cabinet and the electrical connections.

The Utility Company will require a pad mounted transform when any replacement work to the main switch is done. Although the Utility will replace and own the pad mounted transformer, the costs to pull the new wires into the building are the responsibly of the town. The condition of the existing underground conduits from the pole to the building is questionable, thus new conduits will be installed along with the pad mounted transformer.

It would be cost effect to underground all utilities that are on the current pole. Along with electrical, communions (fiber and copper) would be moved underground from the first pole near Rt 156 to the building. This would remove two old wooden utility poles.

Part of this project will be the replacement of four electrical panels throughout the building. The panels are operating beyond their service life, are Federal Pacific panels which are obsolete and are difficult and costly to find replacement breakers for.





TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Building Maintenance	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Roofs - Police Station	**DEPARTMENT PRIORITY** 3

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The Police Station, which has a shingled roof, continues to have problems with water infiltration. The Police Station was re-roofed in 2013, but the acceptance of a change to the original plans (a credit for the deletion of a waterproofing membrane in the valleys) has resulted in leaks in several areas of the building. Sections of the roof must be stripped and waterproofing installed under a new course of shingles. There has been concerns of mold inside the building where the leaks are occurring. FY 28 is to replace the Library roof with FY 30 addressing the roof at Town Hall
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	If not addressed, additional funds for repairs, indoor air quality testing and cleaning will continue until the roof is repaired.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Estimating Sheet dated Nov, 2024

7	COST/FUNDING SOURCE						
	FUNDING SOURCE	**APPROVED FUNDING TO DATE**	**FY2026**	**FY2027**	**FY2028**	**FY2029**	**FY2030**
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		85,000		850,000		250,000
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**85,000**	**0**	**850,000**	**0**	**250,000**

TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS
MEMORANDUM

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Roofs – Police Department

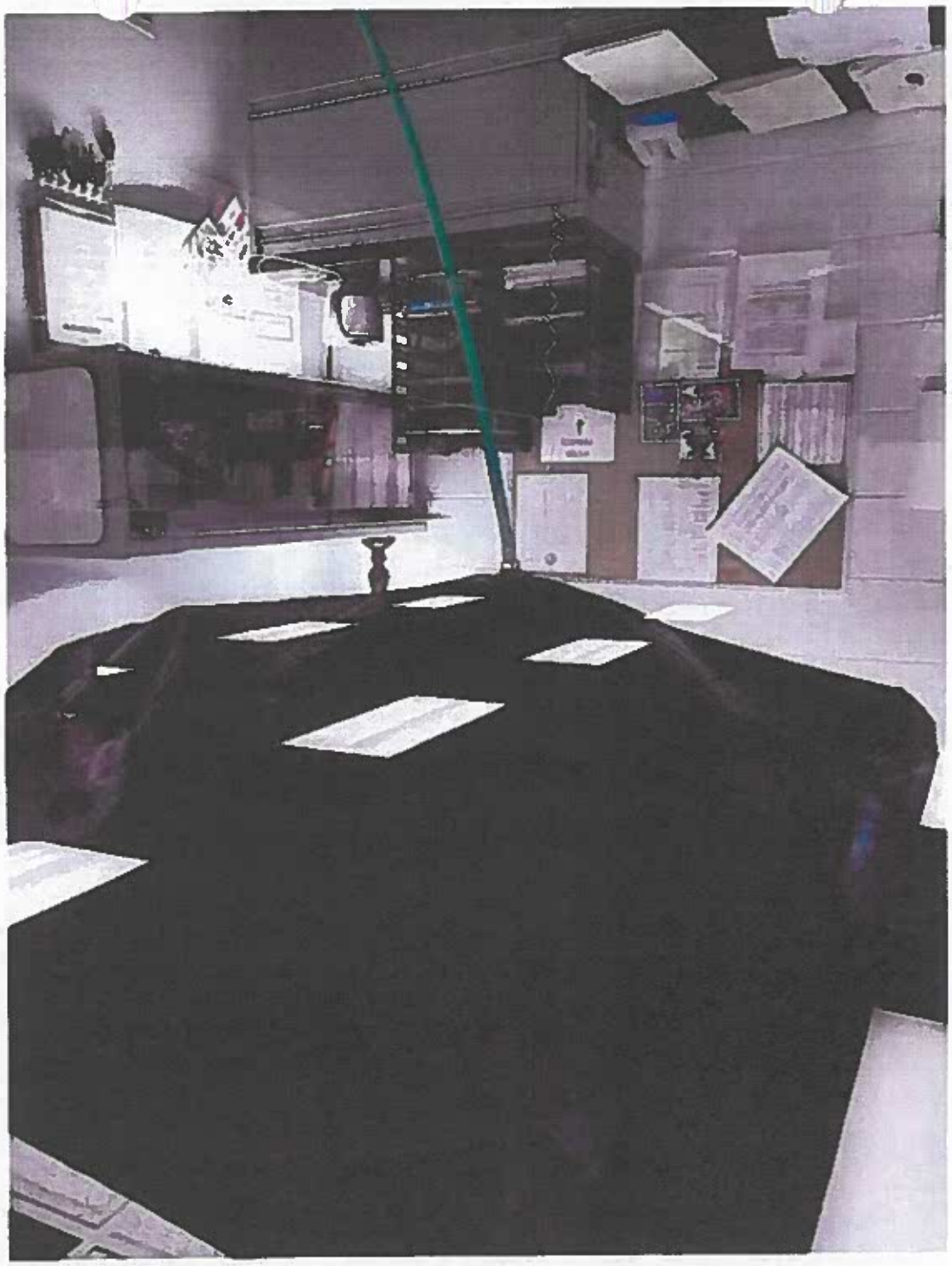
The roof has been replaced at the Public Safety Building. The effort needs to continue on the other facilities. To assist in this effort, the built up roofs at the Community Center, Town Hall, and Library were inspected by using infrared scanning of the roofs.

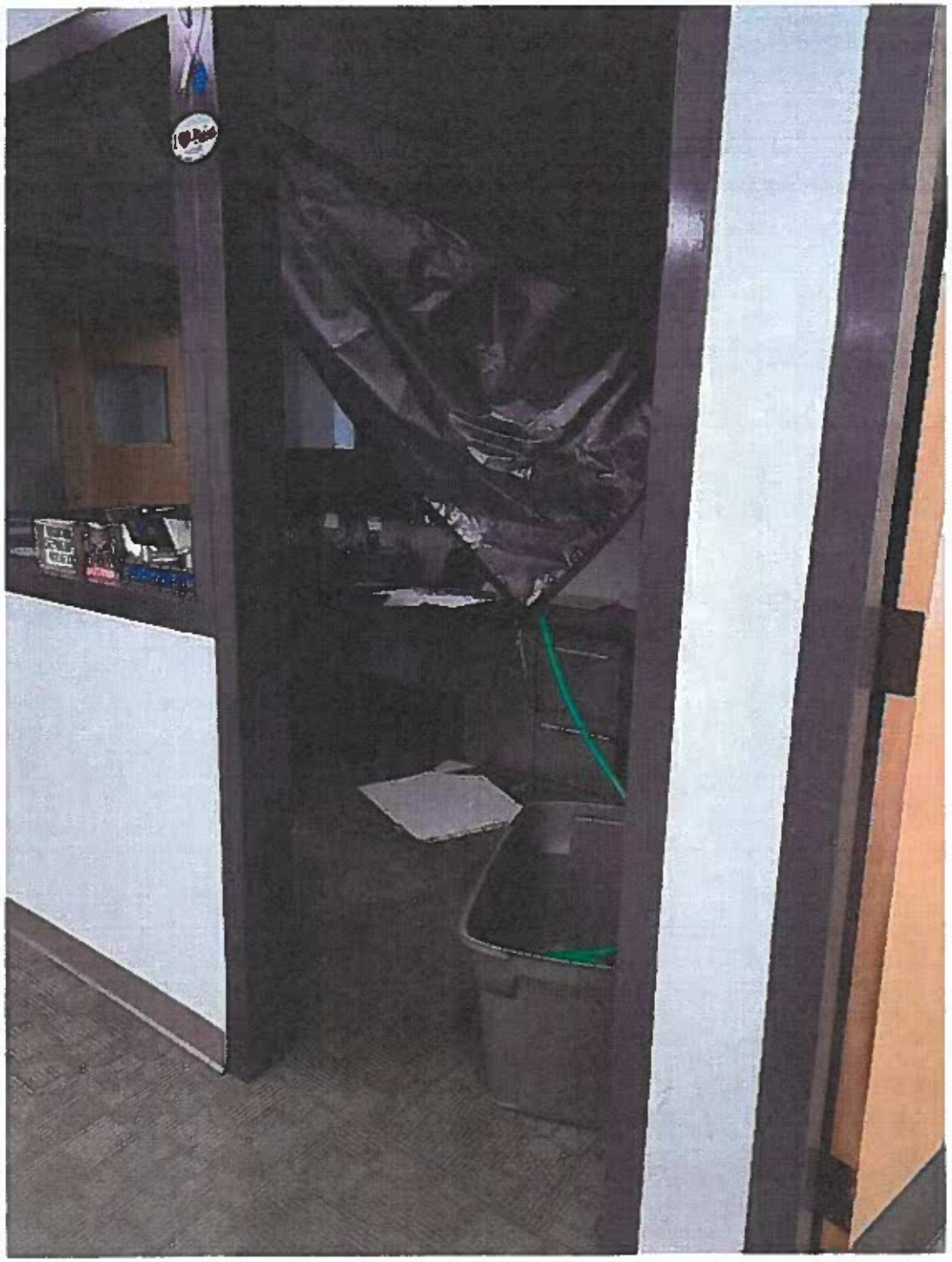
- Town Hall (2003): condition fair
- Community Center (2003): condition fair
- Library (1995): condition poor

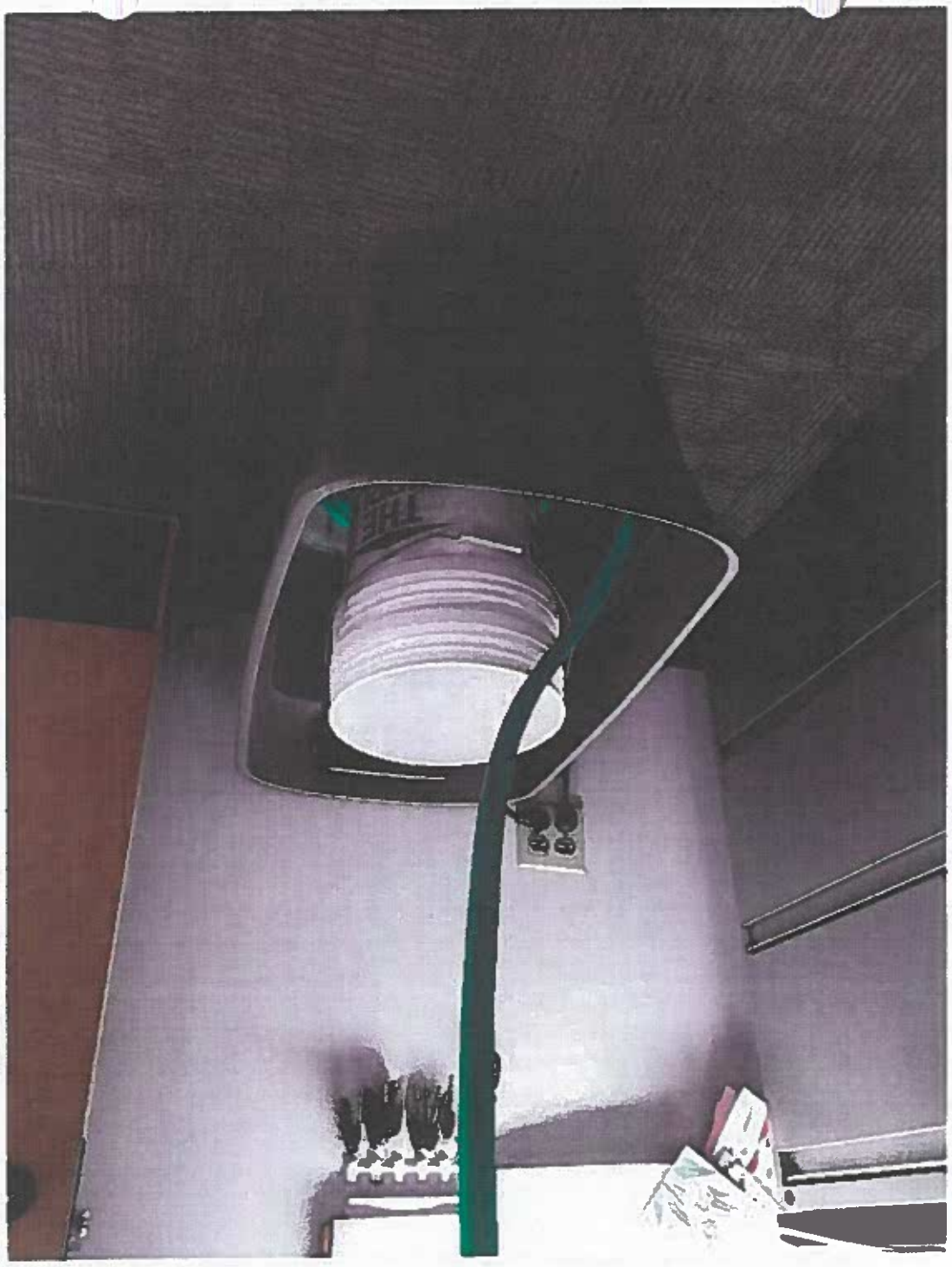
In addition to the facilities above, the Police Station, which has a shingled roof, continues to have problems with water infiltration. The Police Station was re-roofed in 2013, but the acceptance of a change to the original plans (a credit for the deletion of a waterproofing membrane in the valleys) has resulted in leaks in several areas of the building. Sections of the roof must be stripped and waterproofing installed under a new course of shingles. There has been concerns of mold inside the building where the leaks are occurring.

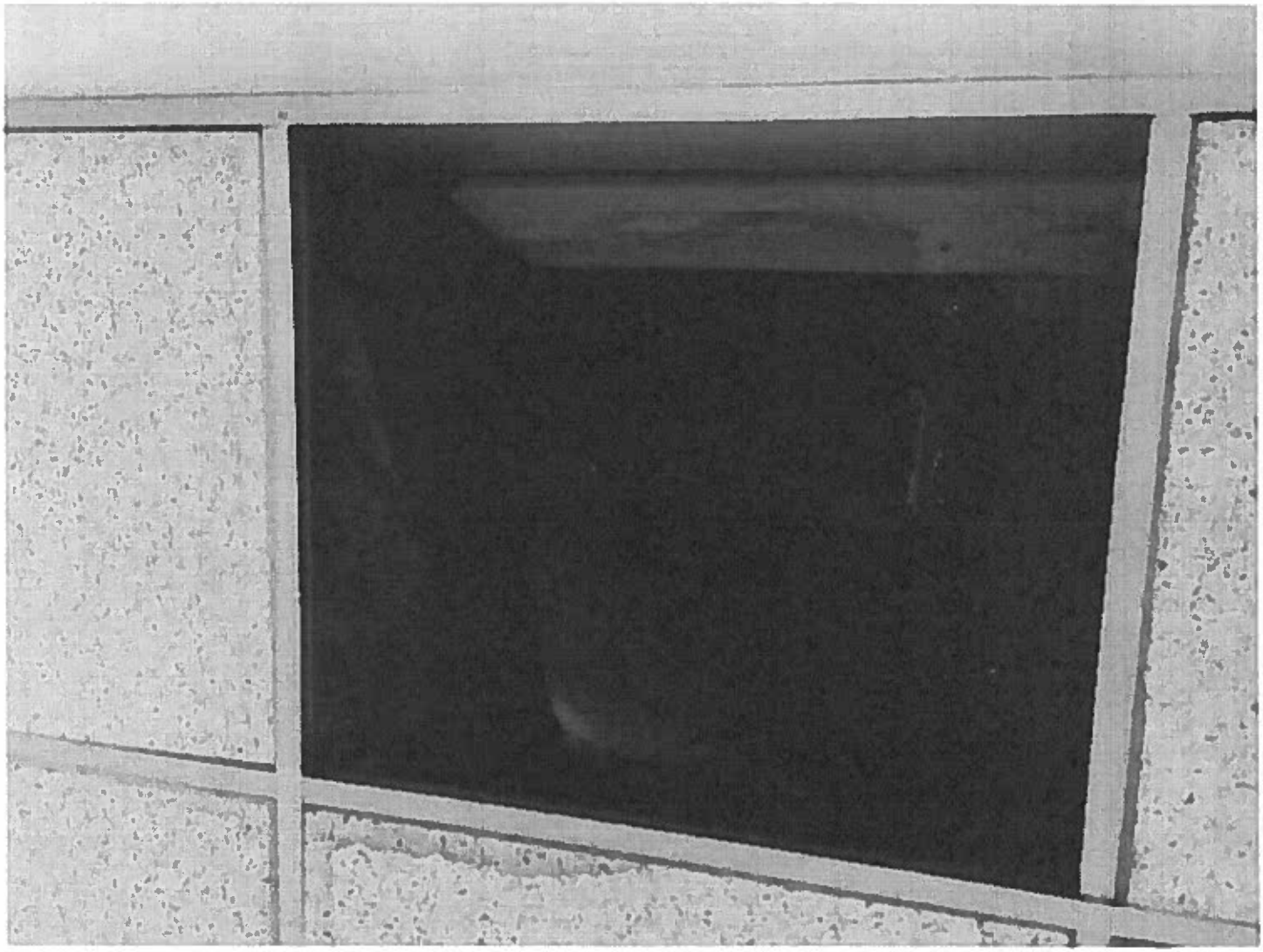
Estimate - Roof Repairs Police Station 6-Nov-24

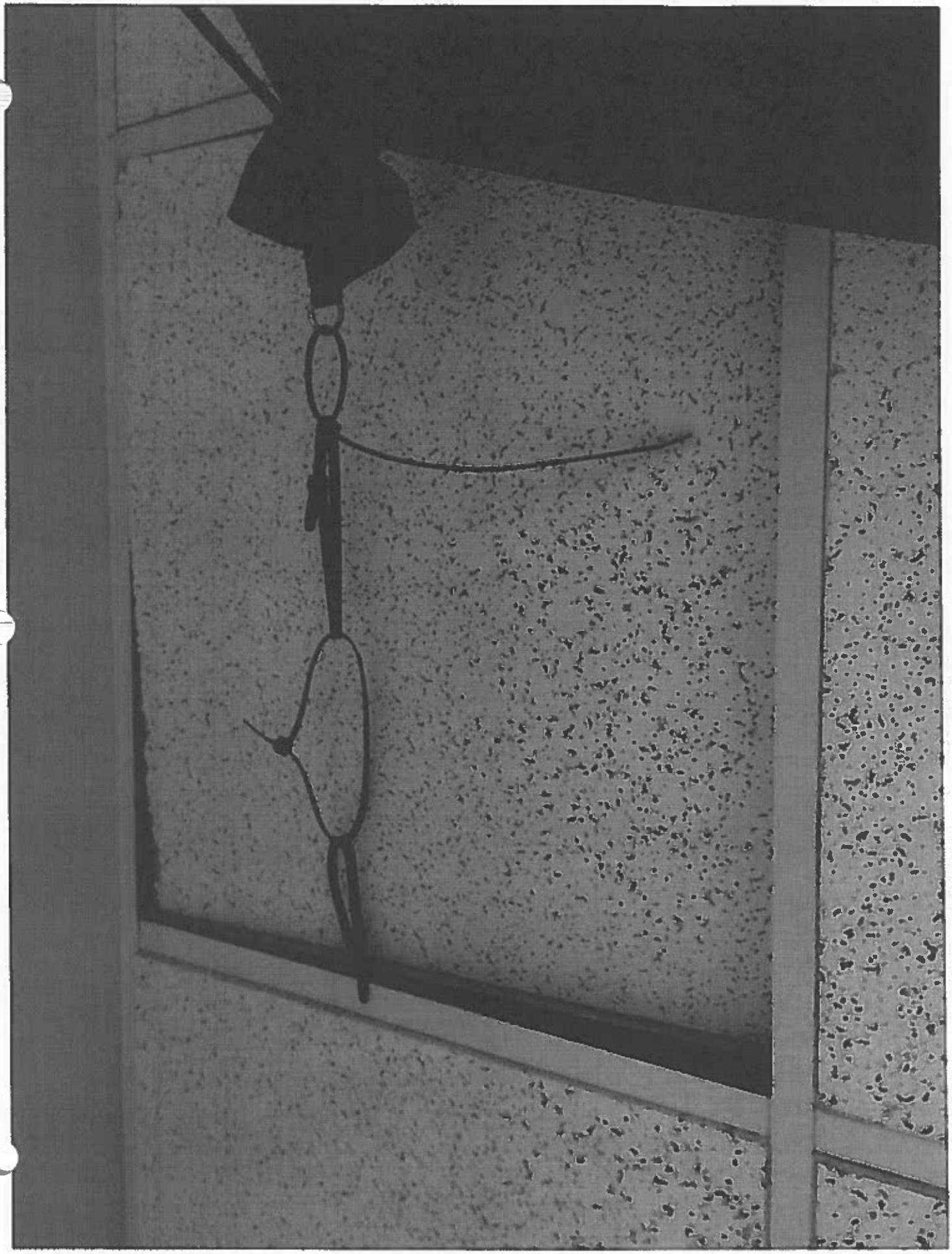
Area	73' x 30' x $35/sf	$	76,650	Included disposal cost
Soft Costs	8% Plans/Specifications	$	6,132	
Total		$	82,782	
Inflation 3%		$	85,265	

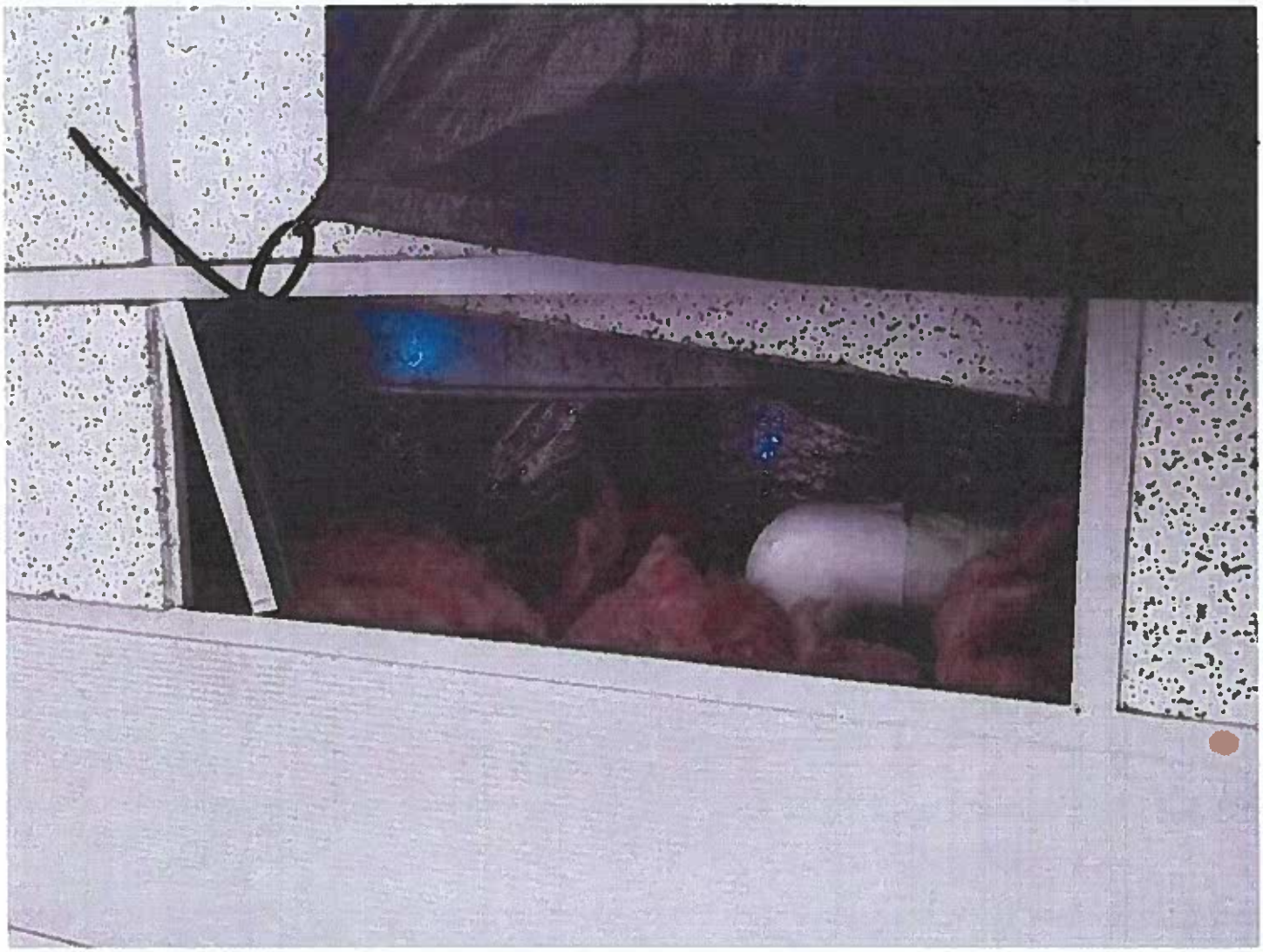












TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Building Maintenance	Gary J. Schneider
PROJECT NAME	**DEPARTMENT PRIORITY**
Eugene O'Neill Theater - Roof	4

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

A portion of the Dina Merrill Theater building was addressed with a new roof in 2019.

The remaining portion of the theater roof that was not addressed continues to lose asphalt shingles causing leaks

2 PROJECT STATUS IF IN PROGRESS

None

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

None

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

Increase costs in professioal services operation budget, having contactor find the leak and patch.

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

None

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

Attached expanded narrative memorandum

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital	43,500					
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		250,000				
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	43,500	250,000	0	0	0	0

TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS
MEMORANDUM

To: File

From: Gary J Schneider

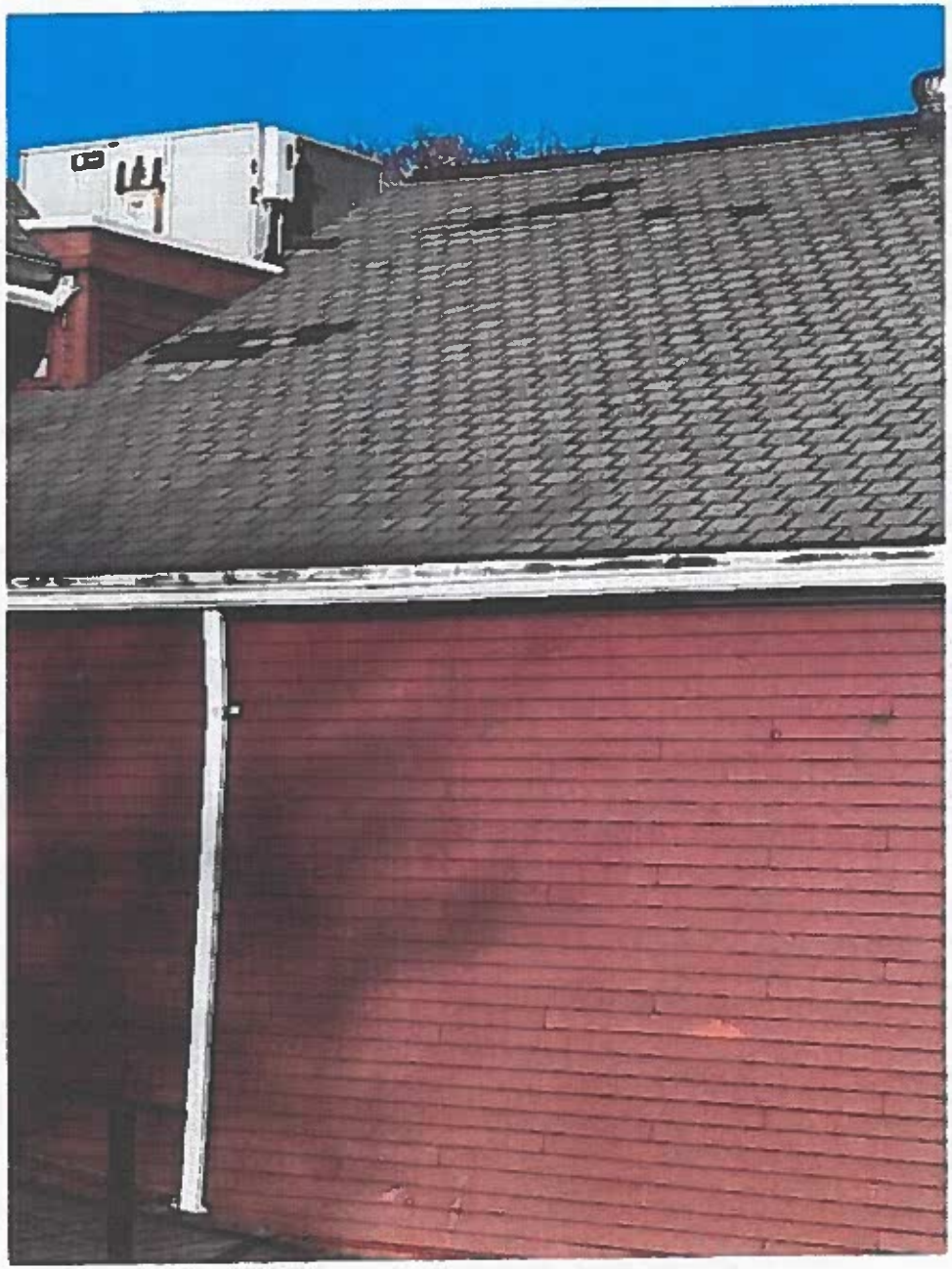
Date: November 15, 2024

Re: Roofs – Eugene O'Neill Theater Center

The site has seen the re-roofing of the Hammond Mansion along with repointing of its brick chimneys.

A portion of the Dina Merrill Theater building was addressed with a new roof in 2019.

The remaining portion of the theater roof that was not addressed continues to lose asphalt shingles causing leaks.





TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Building Maintenance	Gary J. Schneider
PROJECT NAME	**DEPARTMENT PRIORITY**
EV Charging Stations	5

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The Town must prepare for the change over from gasoline to electric vehicles (EV) or plug-in hybrid electric vehicles (PHEV). Charging stations for municipal use will be required at the Municipal Complex, Town Hall and Public Safety Complex for the municipal fleets that are dispatched from those areas. Charging an all-electric vehicle (EV) or plug-in hybrid electric vehicle (PHEV) will require the installation of charging stations and in most cases, electrical circuits installed from an electrical panel deep within the building. The costliest part is not the charging unit itself, but rather any upgrades necessary to the electrical equipment and any trenching for the conduit to install the charging unit to the existing facility service.
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (Include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	None

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		60,000				
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	60,000	0	0	0	0

TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS
MEMORANDUM

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: EV Charging Stations

The Town must prepare for the addition of electric vehicles (EV) or plug-in hybrid electric vehicles (PHEV) to our fleet. Charging stations for municipal use will be required at the Municipal Complex, Town Hall and Public Safety Complex for the municipal fleets that are dispatched from those areas. Sites for public use are not included in this project.

Charging an all-electric vehicle (EV) or plug-in hybrid electric vehicle (PHEV) will require the installation of charging stations and in most cases, electrical circuits installed from an electrical panel deep within the building. The costliest part is not the charging unit itself, but rather any upgrades necessary to the electrical equipment and any trenching for the conduit to install the charging unit to the existing facility service.

These stations will be reserved for Town vehicles only and thus will be located in secured parking areas. The Town would provide exterior fast charging (240 v) at the charging stations. Recharging times can vary—typically, 30 minutes for fast charging and 4-6 hours (Level 2), depending on the size and current depletion of the battery.

NATIONAL LEAGUE OF CITIES
CITIES STRONG TOGETHER

ELECTRIC VEHICLE CHARGING FOR CITY LEADERS

IMPORTANT TERMS

To better understand the basics of EVs when talking with residents, community leaders, private companies and other government officials, this fact sheet outlines some of the main things local leaders need to know.

Check out **NLC's Electric Vehicle Charging: A Primer for Municipal Leaders** brief to see how cities are stepping into the EV space and the questions local leaders need to ask themselves as they get started.

KEY CONCEPTS

Battery Electric Vehicles (BEVs): What most people consider to be "electric vehicles," or EVs. They run solely on the electricity from their batteries. An example includes the Tesla Model 3.

Plug-in Hybrid Electric Vehicles (PHEVs): Can be driven and charged like an electric vehicle but have a traditional engine that runs on gasoline as well. These can be considered EVs as they require similar infrastructure to charge. An example includes the Toyota Prius Prime.

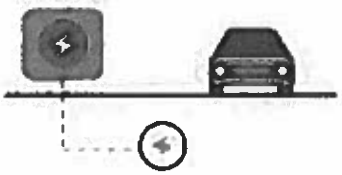
Electric Vehicle Supply Equipment (EVSE): The infrastructure that supplies electricity to an electric vehicle. Commonly, EVSE refers to charging stations or charging docks.

Charging station: Similar to a gas station but provides electricity for EVs instead of gasoline. These usually contain Level 2 or Level 3 chargers.

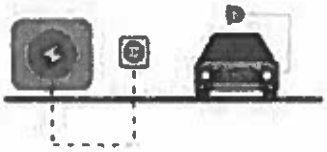
At-home charger: An EV charger that can be placed in a typical home, usually a Level 1 or Level 2 charger.

Battery swap station: A commercial station that will swap out a used EV battery for a fully charged one.

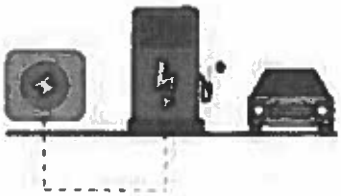
THREE TIERS OF EV READINESS



EV Capable:
An installed electrical panel with the potential to be a future EV charger.

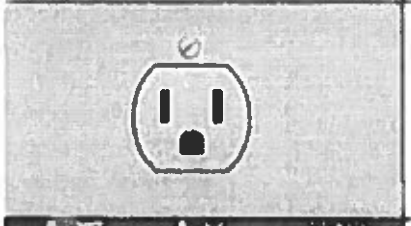


EV Ready:
An installed electrical panel capacity and raceway with conduit to terminate in a junction box or 240-volt charging outlet. It can charge a vehicle with additional equipment.



EV Installed:
Contains the necessary electrical work and the physical EV charger to power a vehicle when plugged in.

Source: Image based on Orlando, FL EV Readiness Policy



Level 1 charging:
The most cost-efficient charging station, typically found in homes with a 120-volt outlet. They charge an average of three to six miles of range per hour. A full charge can take 24 hours.



Level 2 charging:
A charging station that requires the high power of a 240-volt outlet. They are frequently found in commercial settings but are becoming more common in homes. They charge around 18-28 miles of range per hour. A full charge can take up to eight hours.



Level 3 charging:
Known as DC fast charge or fast charge, these are the highest power (480 volts) and fastest charges currently available. Currently, a faster charger can add a 200-mile range (close to a full charge) in about an hour.

Images source Charge Hub Charging Guide

With some basic knowledge of EVs, local leaders can decide how they want their communities to get ready for electric vehicles.

Electrification, grid upgrades and demand from EV drivers is going to happen, and cities need to be aware of these impacts in their communities. Cities should begin by going through NLC's primer on EVs, and can then dive into some of the resources listed there.

Gary Schneider

From: Justin Kearney <justinkearney@titanenergyne.com>
Sent: Friday, October 11, 2024 5:32 PM
To: Gary Schneider; jmulllen@waterfordct.org
Cc: Andrea Laemmel; Adam Teff
Subject: Solar & EV Charging - Titan Energy - Waterford CT
Attachments: Waterford TitanGen Presentation.pdf

Importance: High

CAUTION: This email originated from outside of the organization.
Do not click links or open attachments unless you recognize the sender's email address and know the content is safe.

Hi Gary,

Thanks again for your time today.

As promised, please see attached proposed statement of work and list of relevant experience for TitanGen's solar consulting process through CCM. We are eager to continue the conversation and would look forward to setting up another time to go through a more formal review of the sites we spoke on today (the capped landfill and municipal complex building). On the latter, it would be helpful to obtain a recent copy of the Eversource electricity invoice, as well as understand any of the specifics around the current energy contract in place with Constellation.

Additionally, please see below for some more information on our EV Charging consulting process and experience:

We have installed EV Chargers for the following municipalities:

- Weston
- Columbia
- Coventry
- Guilford
- Pomfret
- Windham
- Madison

Usually, an EV Charger installation for 2 plugs is about $15-20,000, depending on the distance from the electrical source to the ideal parking spaces. The level 2 dual port chargers (two plugs on one pedestal) cost range from $7,500-12,000, depending on the hardware/software selected. We usually offer 3 different options for hardware/software, some we've installed regularly and recommend and some out of preference of the customer.

We can work with the town to discuss EV Chargers in three capacities:

1. Full turnkey, Titan manages the project installation, all town permits/utility approvals, and training on the software
2. Titan runs the RFP and helps guide the town through the selection process
3. Titan proposes an owner and operator of the chargers, turnkey solution, no maintenance/network fees to the town, revenue split with owner and town for fees

Please let us know your thoughts on this when you get a chance – if I don't talk to you sooner, have a great weekend.

Thanks much,

Justin Kearney, CEP
Vice President | Titan Energy
750 Main Street - Suite 1000 | Hartford, CT 06103
Cell: (860) 324-8289 | Fax: (860) 436-3469
E-Mail: JustinKearney@TitanEnergyNE.com Website: www.titanenergyne.com

TITAN ENERGY
Creative energy solutions

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From: Gary Schneider <gschneider@waterfordct.org>
Sent: Tuesday, October 8, 2024 9:06 AM
To: Justin Kearney <justinkearney@titanenergyne.com>
Subject: RE: EV Chargers - Waterford CT - Titan Energy

The Planning Director, Jon Mullen (jmullen@waterfordct.org) is also available, Friday at 11 would be great.

Gary J Schneider
Director of Public Works
Town of Waterford
Public Works Department

From: Justin Kearney <justinkearney@titanenergyne.com>
Sent: Monday, October 7, 2024 3:57 PM
To: Gary Schneider <gschneider@waterfordct.org>
Subject: RE: EV Chargers - Waterford CT - Titan Energy

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Hi Gary,

Nice speaking with you this morning.

I talked to our team and it looks like Friday after 11:00 AM will work best here.

Let me know if that will work for you, and I can send over a calendar invite -- we were thinking a virtual meeting to start and then we can arrange site visits following that?

Thanks much,

Justin Kearney, CEP
Vice President | Titan Energy
750 Main Street - Suite 1000 | Hartford, CT 06103
Cell: (860) 324-8289 | Fax: (860) 436-3459
E-Mail: JustinKearney@TitanEnergyNE.com Website: www.titanenergyne.com

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From: Gary Schneider <gschneider@waterfordct.org>
Sent: Monday, October 7, 2024 7:35 AM
To: Justin Kearney <justinkearney@titanenergyne.com>
Subject: RE: EV Chargers - Waterford CT - Titan Energy

This morning is open for me 860-444-5864

Gary J Schneider
Director of Public Works
Town of Waterford
Public Works Department

From: Justin Kearney <justinkearney@titanenergyne.com>
Sent: Friday, October 4, 2024 4:38 PM
To: Gary Schneider <gschneider@waterfordct.org>
Cc: Andrea Laemmel <alaemmel@titanenergyne.com>; Donald Potter <dpotter@titanenergyne.com>
Subject: EV Chargers - Waterford CT - Titan Energy

CAUTION: This email originated from outside of the organization.
Do not click links or open attachments unless you recognize the sender's email address and know the content is safe.

Hi Gary,

I understand you had expressed interest on our website to understand some of the general costs for EV Charging installations at the town level.

We would be happy to walk you through the process, and how Titan might be able to help.

I have CC'd Titan Energy's project team here on this email – so please let us know if there is a good time to chat and learn more about Waterford's need.

Thanks much – if I don't talk to you sooner, have a great weekend.

Best,

Justin Kearney, CEP
Vice President | Titan Energy
750 Main Street - Suite 1000 | Hartford, CT 06103
Cell: (860) 324-8289 | Fax: (860) 436-3459
E-Mail: JustinKearney@TitanEnergyNE.com Website: www.titanenergyne.com

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TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Building Maintenance	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Municipal Parking Lots	**DEPARTMENT PRIORITY** 6

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The project would address the Public Safety site. It would reduce the number of parking spaces, increase secured parking for the police, provide safe traffic flow throughout the entire area, and provide for storm water treatment and proper security lighting. Existing funds will complete the south entrance to the site.
2	**PROJECT STATUS IF IN PROGRESS**
	Funding is in place to bid the south entrance to the site. Plans are being compited for bid in Feburary of 2025
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Expanded narrative, 60% submission plans dated November 12, 2021 entitled Public SafetyComplex Improvements

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance	460,420		1,200,000			
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**460,420**	**0**	**1,200,000**	**0**	**0**	**0**

MEMORANDUM: TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Municipal Parking Lots

The Department is responsible to manage the condition of parking lots at Town Hall, Community Center, Library, Municipal Complex and the Public Safety Complex (YSB, Police, and Dispatch). In total, over 400,000 sf of asphalt surface needs to be maintained. Maintenance include line striping, signage, lighting, drainage and curbing.

Those parking lots in need of reconstruction are:

- The Police/YSB/Public Safety lots: Previous years have set aside funds for the design and construction. These funds did not take into account the need for additional parking spaces at the Police Department. The common parking spaces at this complex is the result of adding additional uses without a plan of traffic management, parking or stormwater management.
    - The project would address the entire site. It would reduce the number of parking spaces, increase secured parking for the police, provide safe traffic flow throughout the entire area, and provide for storm water treatment and proper security lighting
- Town Hall: Curb replacement, new surface course, lighting, signage and line striping.

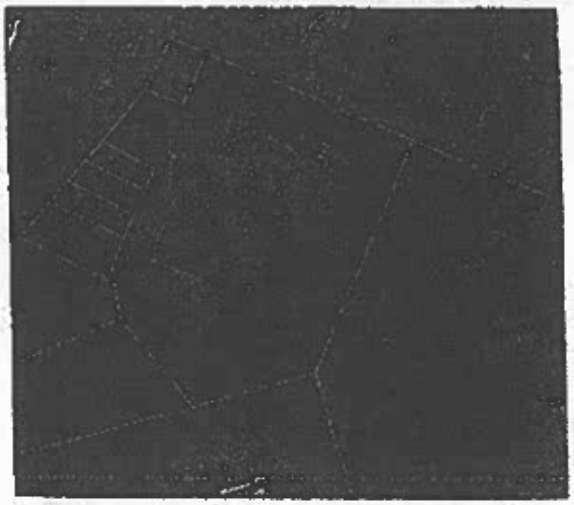
Other parking lots in need of just maintenance are:

- Library: Repairs to the curbing, lighting, line striping.
- Community Center: Curb replacement, line striping.

TOWN OF WATERFORD

PUBLIC SAFETY COMPLEX IMPROVEMENTS

200 BOSTON POST ROAD



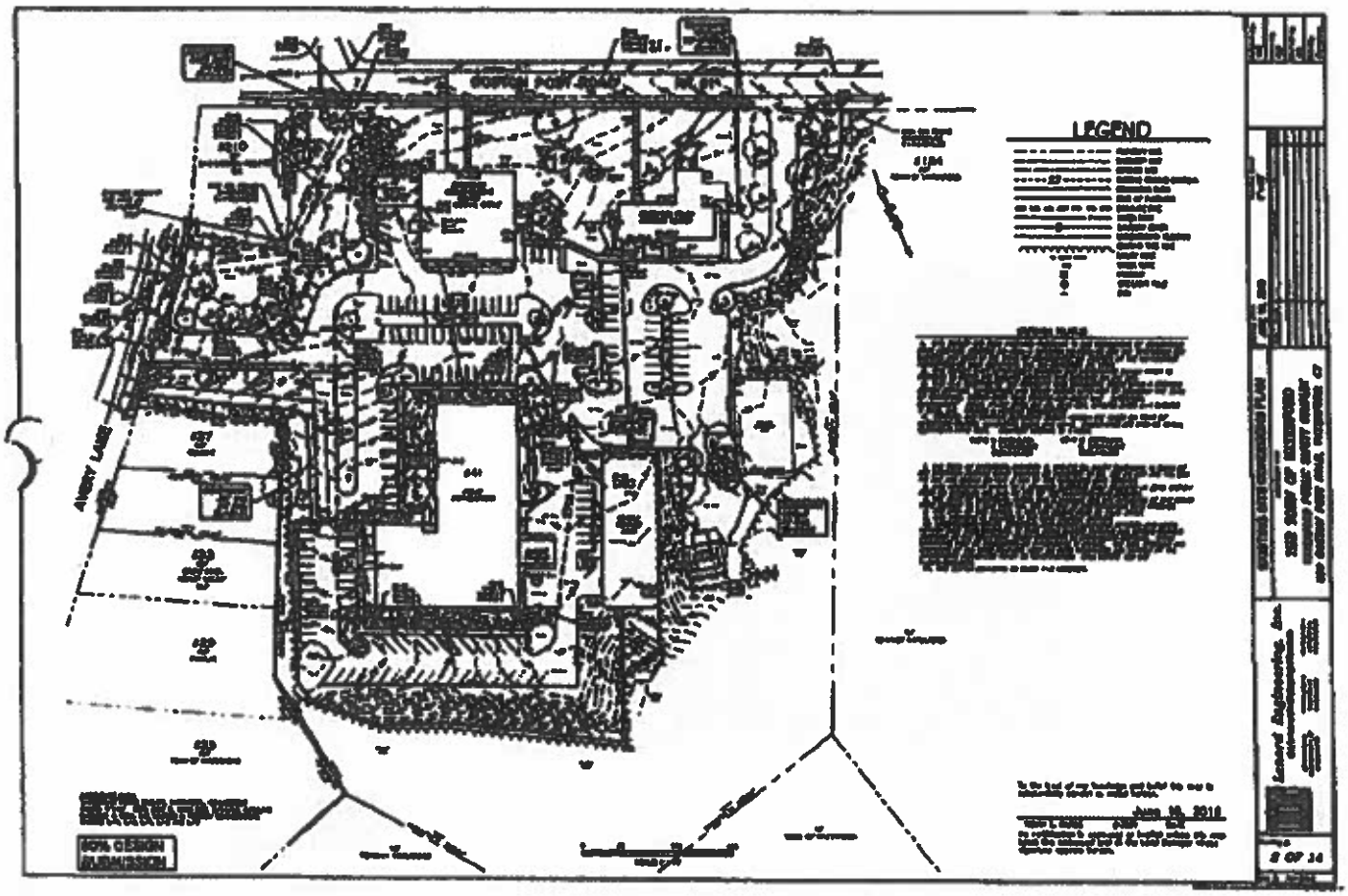
LIST OF DRAWINGS

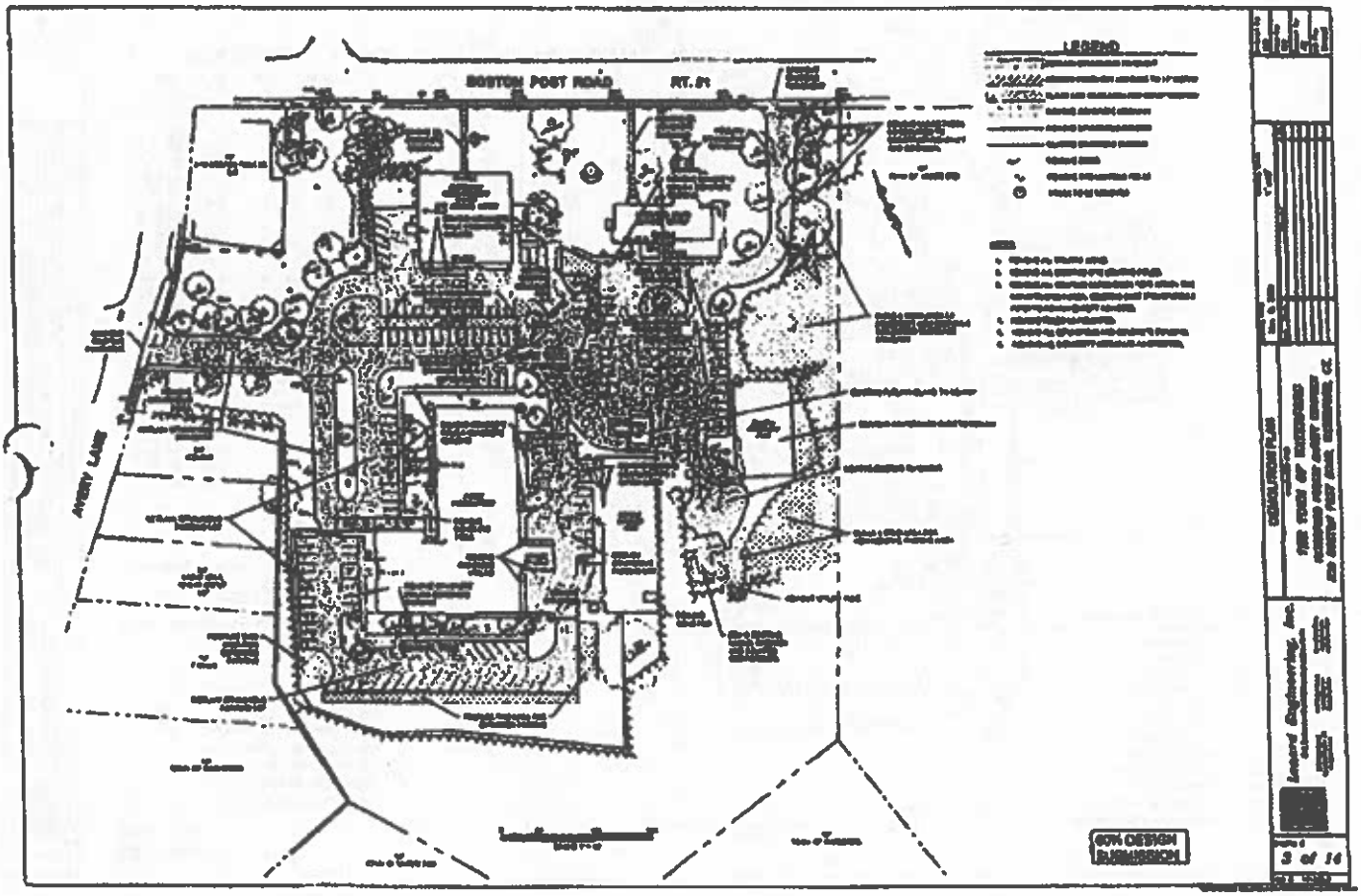
SHEET	TITLE
1	COVER
2	EXISTING CONDITIONS PLAN
3	DEMOLITION PLAN
4	LAYOUT & DRAINAGE PLAN
5	GRADING PLAN
6	PAVEMENT PLAN
7	SIDEWALKS PLAN 1
8	SIDEWALKS PLAN 2
9	RETAINING WALL PLAN
10	LIGHTING PLAN 1
11	LIGHTING PLAN 2
12	SITE DETAILS
13	SITE DETAILS
14	SITE DETAILS

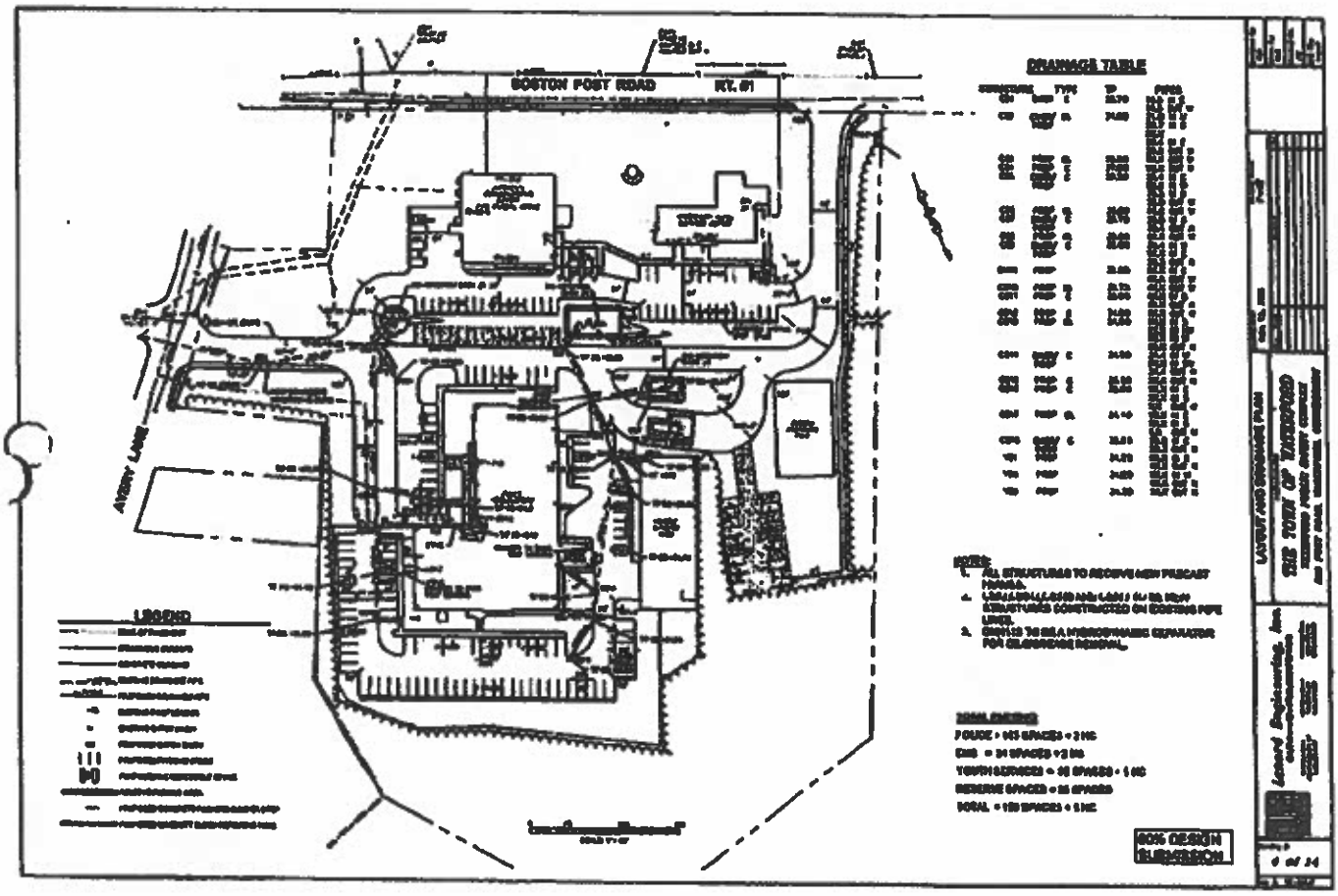
60% SUBMISSION

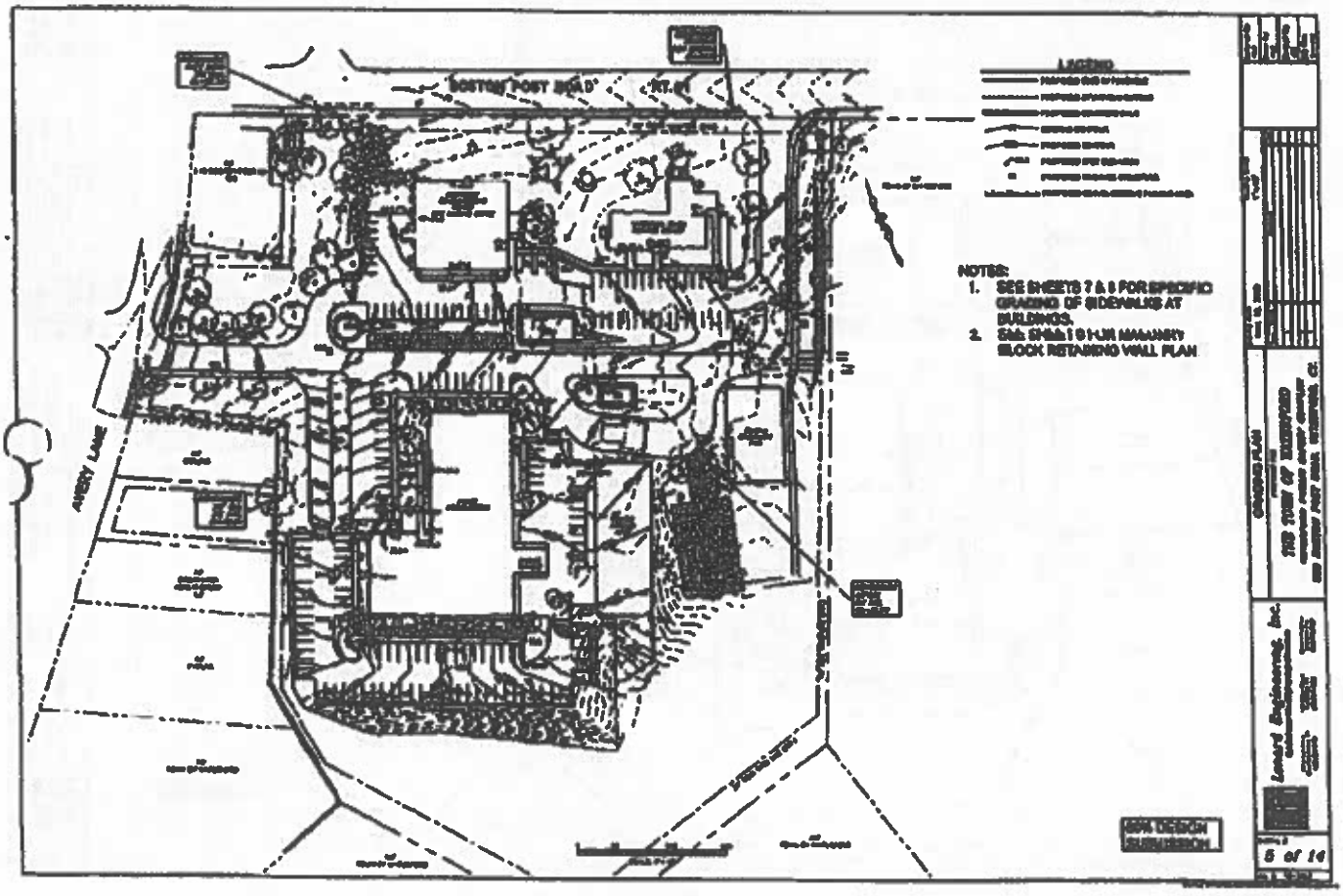
NOVEMBER 12, 2021

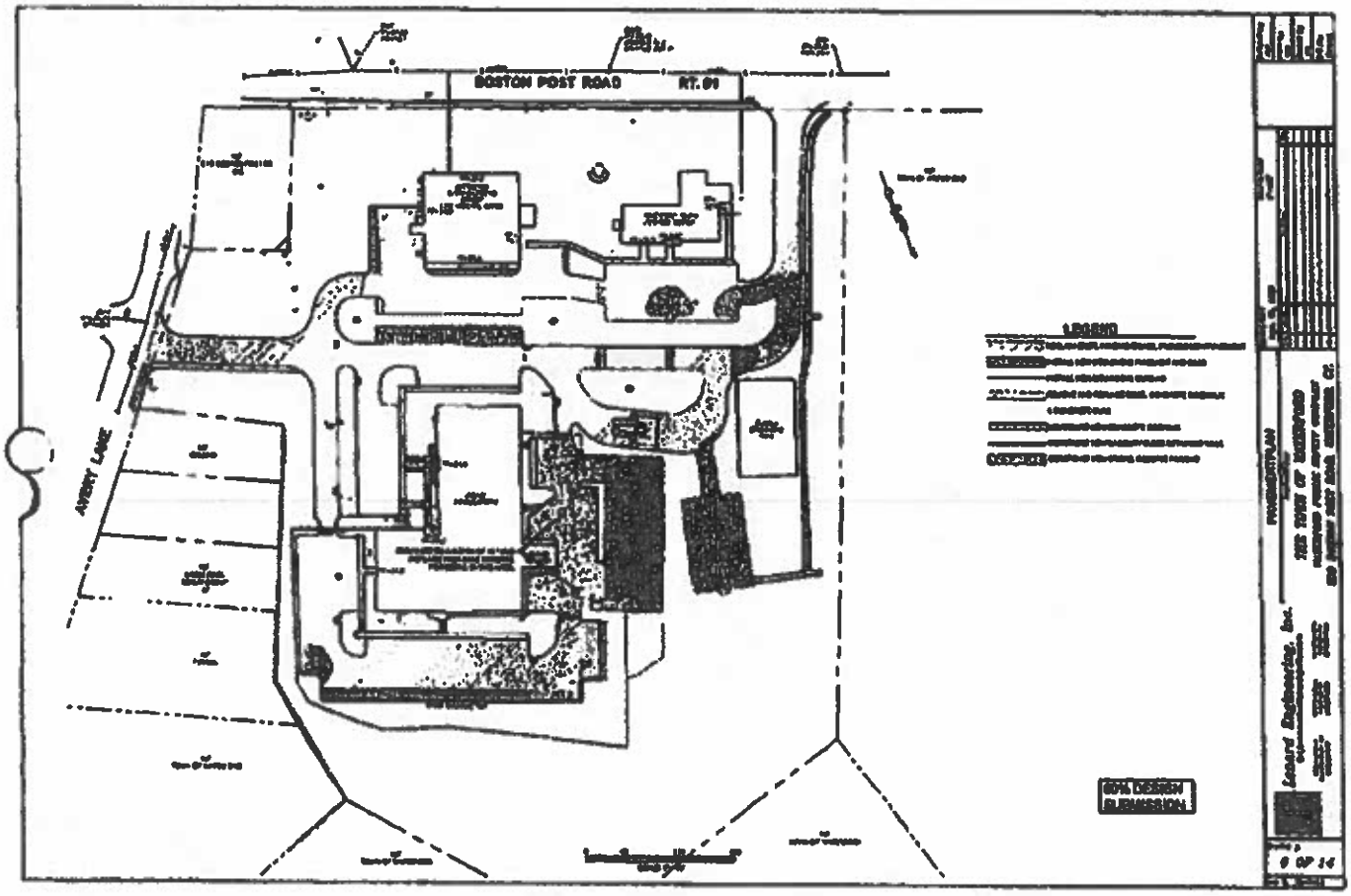
Lenard Engineering, Inc

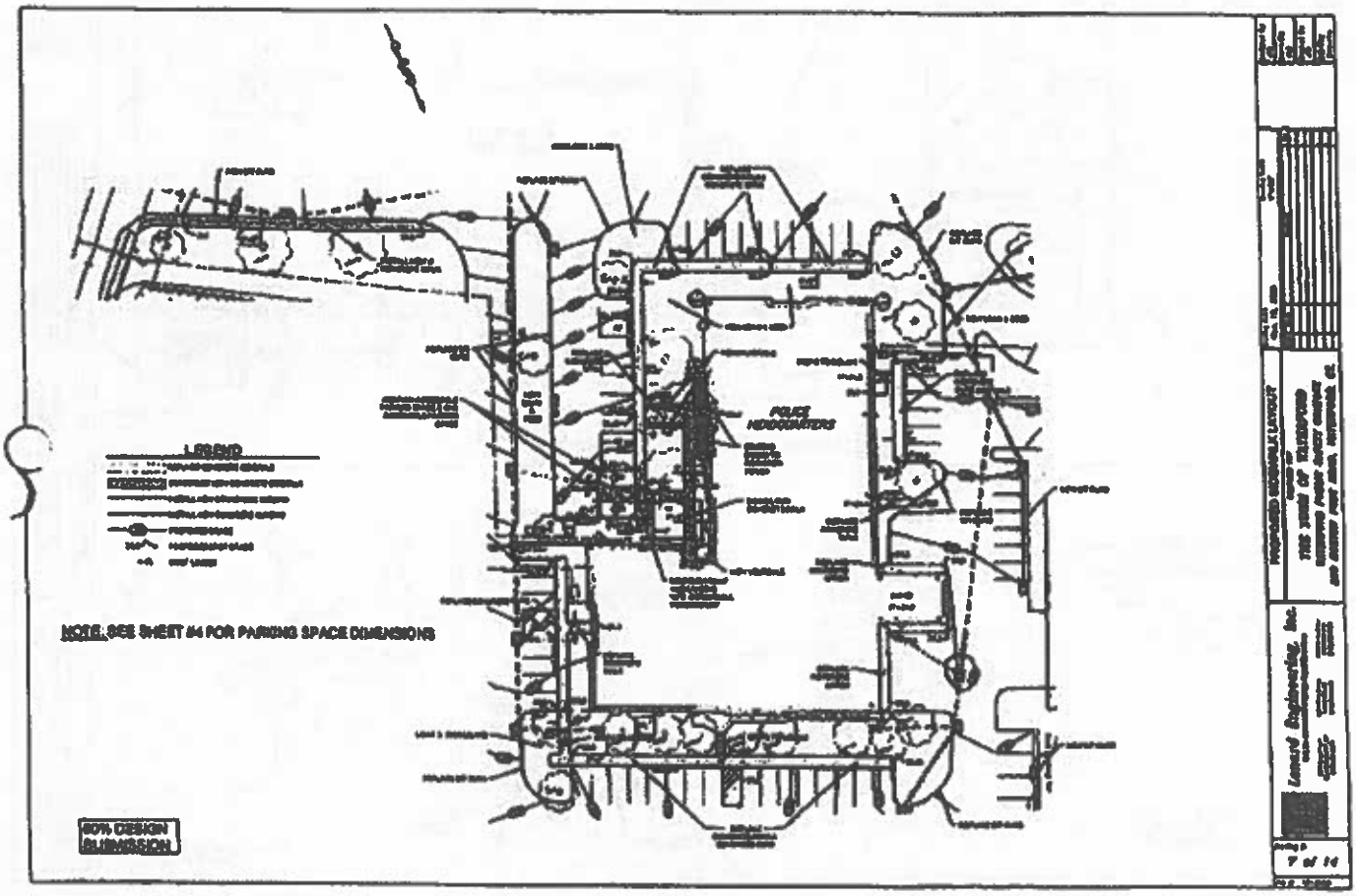

LEGEND

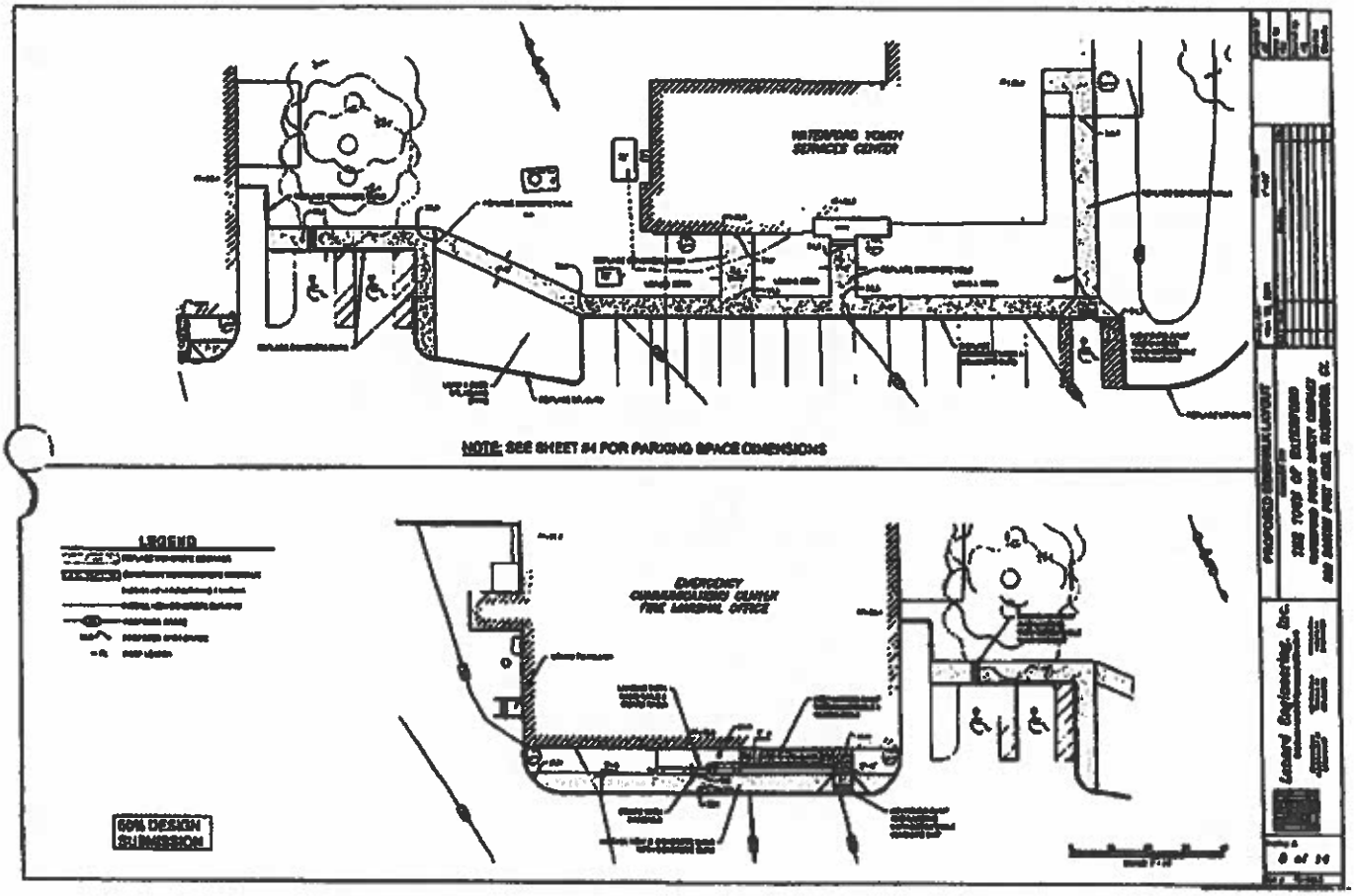

BOSTON POST ROAD
RT. 1
AVERY LANE
LEGEND
SITE PLAN
SITE DEVELOPMENT PLAN
GYM DESIGN SUBMISSION
3 of 14

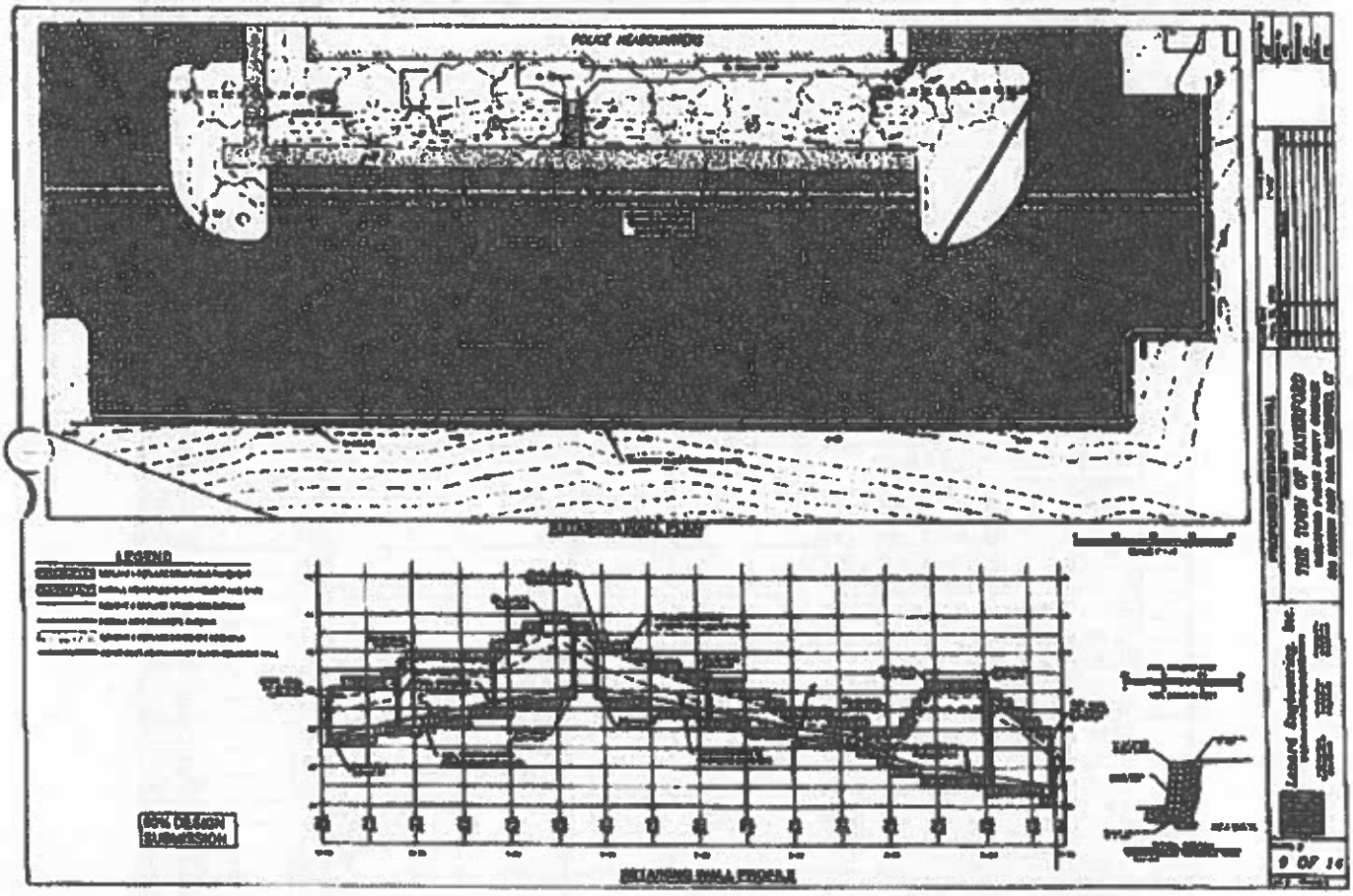

BOSTON POST ROAD
RT. 01
DRAINAGE TABLE
LEGEND
NOTES:
60% DESIGN SUBMISSION


BOSTON POST ROAD
AVERY LANE
LEGEND
NOTES:
1. SEE SHEETS 7 & 8 FOR SPECIFIC GRADING OF SIDEWALKS AT BUILDINGS.
2. SEE SHEET 9 FOR MASONRY BLOCK RETAINING WALL PLAN
GRADING PLAN
5 of 14


BOSTON POST ROAD
RT. 01
AVERY LANE


LEGEND
NOTE: SEE SHEET #4 FOR PARKING SPACE DIMENSIONS
60% DESIGN SUBMISSION


NOTE: SEE SHEET #4 FOR PARKING SPACE DIMENSIONS
LEGEND
60% DESIGN SUBMISSION


POLICE HEADQUARTERS
LEGEND
SITE DESIGN SUBMISSION
RETAINING WALL PROFILE
THE TOWN OF WATERFORD
9 OF 14

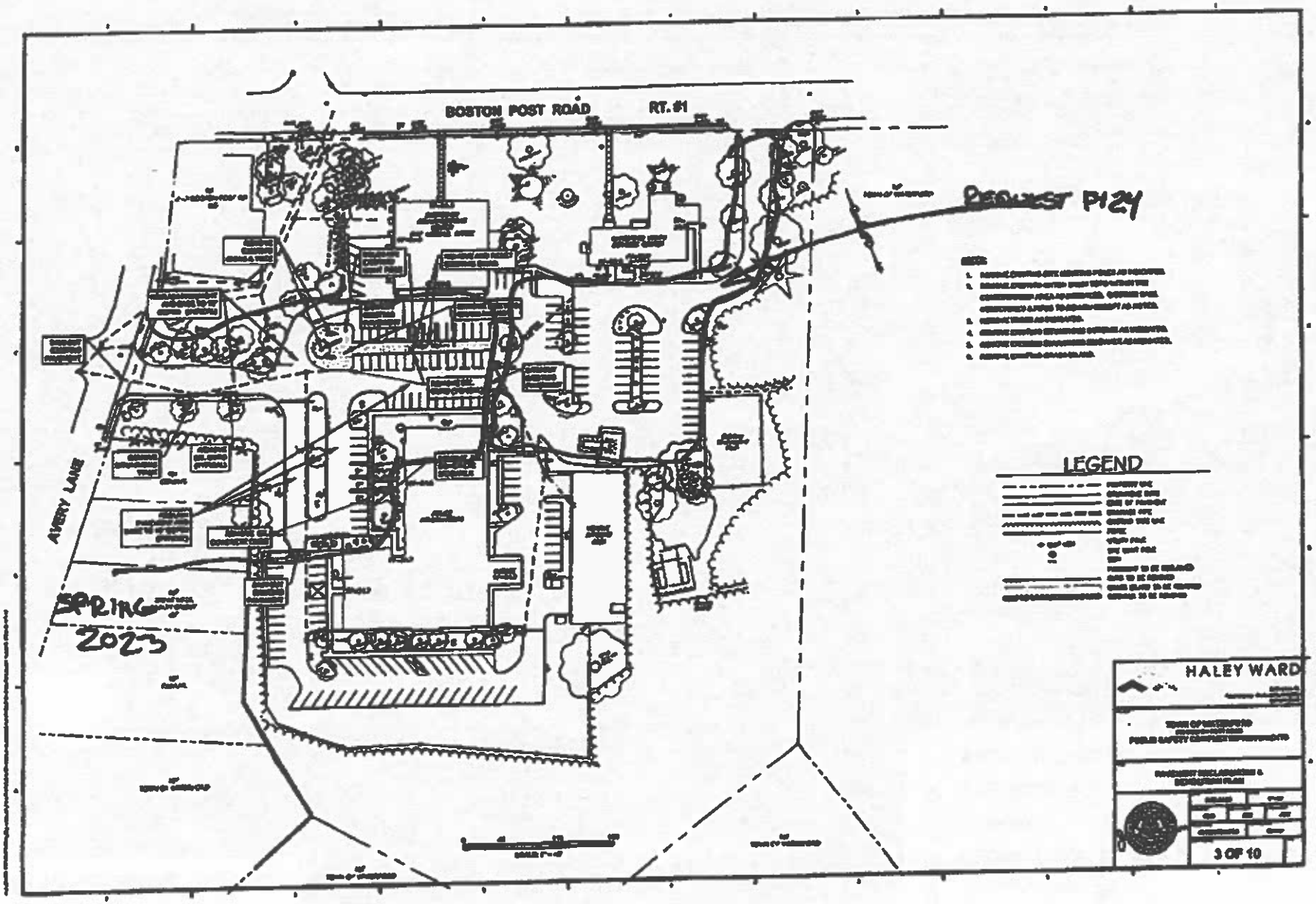
Lenard Engineering, Inc.
2210 Main Street
Glastonbury, CT 06033-6068

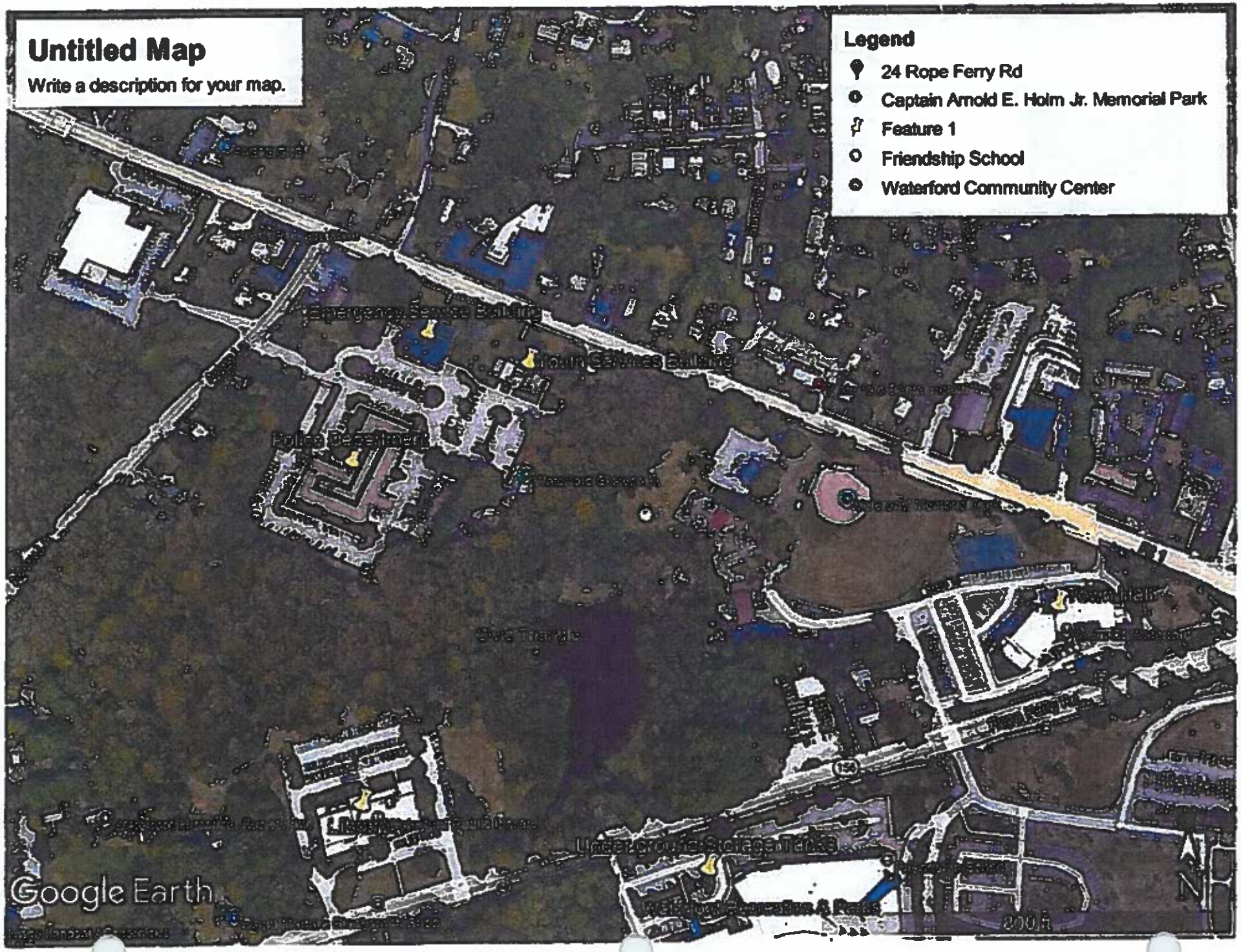
OPINION OF PROBABLE COST
Public Safety Complex
Site Work and Lighting Improvements
Waterford, CT

Revised Estimate 2-9-2022
LEI Job No. 19-385.2
Prepared By: JEE

	Item	Estimated Quantity and Unit Measure		Estimated Unit Price	Extended Price
1	Mobilization and Project Closeout	LS		$50,000	$50,000
2	Catch Basin Protection	LS		$3,000	$3,000
3	Sediment and Erosion Control Measures	LS		$10,000	$10,000
4	Maintenance & Protection of Traffic	LS		$5,000	$5,000
5	Traffic Police	500	HR	$37	$18,500
6	Tree Removal	16	EA.	$500	$8,000
7	Clearing and Grubbing	1	Acres	$5,000	$5,000
8	Construction Fencing	LS		$5,000	$5,000
9	Removal of Concrete Bit. Curbing	5500	LF	$8	$46,200
10	Removal of Concrete Sidewalk	715	SY	$36	$25,597
11	Pavement and Base Material Removal (Non-Reclaimed Areas)	200	CY	$30	$6,000
12	Removal of Gravel Base Material at Impound Area	1100	CY	$10	$11,000
13	Environment Testing of Impound Area Soil	1	LS	$5,000	$5,000
14	Disposal of Impound Area Soil	1	Allowance	$10,000	$10,000
15	Pavement and Base Reclamation	12,320	SY	$4	$43,120
16	Earth Excavation	500	CY	$20	$10,000
17	Provide Gravel Parking Areas	1200	SY	$35	$42,000
18	Install New HMA Pavement (3" thick)	2200	Ton	$140	$308,000
19	Remove and Relocate Signs	31	EA.	$100	$3,100
20	Install New Concrete Sidewalk	7800	SF	$13	$98,800
21	Install New Concrete Curbing	950	LF	$32	$30,020
22	Install New Pavement Roadbase (Non-Reclaimed Areas)	1500	CY	$30	$45,000
23	Concrete ADA Sidewalk Ramp	4	EA.	$3,000	$12,000
24	Construct New Bioretention Basins	3	EA.	$10,000	$30,000
25	Construct New Bioretention Swales	100	LF	$75	$7,500
26	Remove Existing Catch Basins	3	EA.	$1,000	$3,000
27	Provide New Catch Basin Type- Type C	2	EA.	$800	$1,600
28	Provide New Catch Basin Type- Type CI	0	EA.	$800	$0
29	Provide New Catch Basin- Type C	9	EA.	$4,000	$36,000
30	Provide New Catch Basin- Type CI	7	EA.	$4,000	$28,000
31	Provide New Drain Manhole- Hydrodynamic Separator	1	EA.	$15,000	$15,000
32	Install 8" PVC Drainage Pipe	300	LF	$30	$9,000
33	Install 18" HDPE Drainage Pipe	400	LF	$80	$32,000
34	Install 18" Piping Drainage Pipe	200	LF	$85	$17,000
35	Grass Surface Restoration	6000	SY	$9	$54,000
36	Remove Existing Light Fixtures, Wires, Conduits	1	LS	$5,000	$5,000
37	Provide New Poles and Light Fixtures	33	EA.	$2,400	$84,800
38	Install New Poles, Conduits and Circuits	1	LS	$100,000	$100,000
38	Electrical Connections for New Lighting	1	LS	$40,000	$40,000
39	Landscaping Design	1	LS	$10,000	$10,000
40	Construct New Versa-Lok Retaining Wall	1	LS	$75,000	$75,000
41	Install New Trees and Landscaping	1	Allowance	$40,000	$40,000
	Sub-Total - Items 1-41				$1,387,437
	Rock-In-Trench Excavation, If encountered		CY	$200	$0
	Remove unsuitable soil, replace with gravel fill (if encountered)		CY	$25	$0
	Estimated Construction Cost				$1,387,437
	10% Contingency				$138,744
	Estimated Construction Cost w/Contingency				$1,526,181

Say $1.53 million


BOSTON POST ROAD
RT. #1
AVERY LANE
SPRING 2023
LEGEND
HALEY WARD
3 OF 10


Untitled Map
Write a description for your map.
Legend
24 Rope Ferry Rd
Captain Arnold E. Holm Jr. Memorial Park
Feature 1
Friendship School
Waterford Community Center
Emergency Service Building
Police Department
Google Earth
200 ft

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Building Maintenance	Gary J. Schneider
PROJECT NAME	**DEPARTMENT PRIORITY**
Cohanzie - Vacant School	7

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The building continues to deterioate. The roof has been breached, all the windows have been boarded up and the front door has now been chained shut. Due to the roof breach, the floors have water damage and the indoor air quality is questionable. Funds are requested to engage in a consulting engineer to develop abatement and demolition plans and cost estimates to complete the demolition at Cohanize School site, which involves the removal of building and its foundations, removal of asphalt pavements, final grading and loaming and seeding of the site.
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	None

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance			30,000		500,000	
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	0	30,000	0	500,000	0

TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS
MEMORANDUM

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Cohanzie School Building

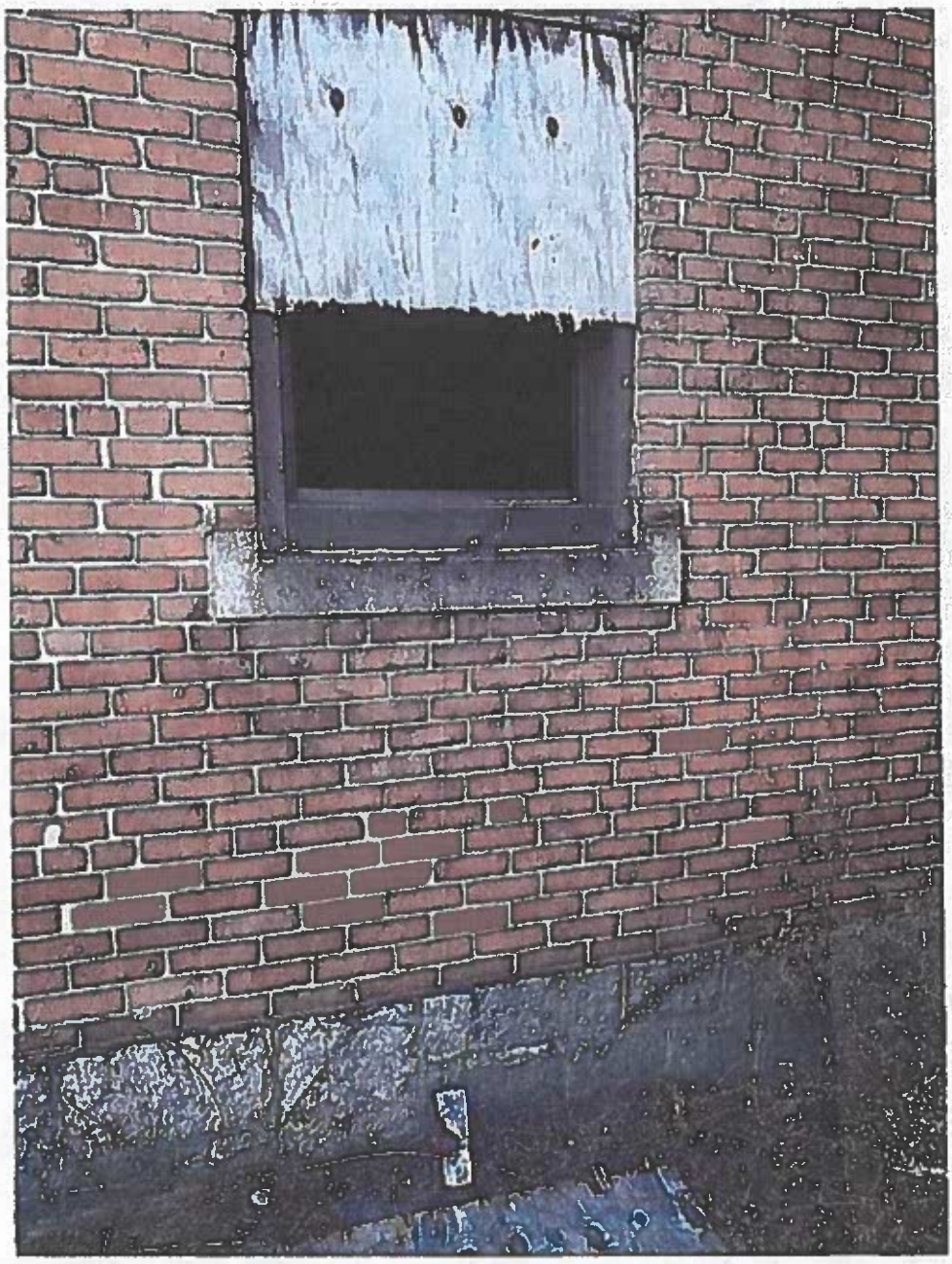
Demolitions of vacant structures eliminate funding yearly building operating (including security measures) costs, avoids any future costs to stabilize the buildings, reduces the town's potential liability (risk avoidance) and consolidates our real estate footprint.

It also provides the opportunity for further redevelopment or reuse of the site that is in tune with the changing dynamics of the Town addressing long-term community needs and goals.

The current condition of the building is deteriorating. The roof had been breached and has been patched, all the windows have been boarded up and the front door has now been chained shut. Due to the roof breach, the floors have water damage and the indoor air quality is questionable.

Estimated costs to complete the demolition at Cohanzie School site, will involve the removal of building and its foundations, removal of asphalt pavements, final grading and loaming and seeding of the site is $500,000. (Estimate based on recent demolition costs of $35,000 for a 650 sf structure). The capping of the sanitary sewer and removal of the water service has already been completed.

The first phase would be to engage a consulting engineer to develop abatement and demolition plans and refine the cost estimates. The second phase will be to complete the removal of the building and foundation, asphalt pavements and site fencing.



TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Building Maintenance	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Jordan Park House	**DEPARTMENT PRIORITY** 8

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

The Historic Properties Commission has identified maintenance concerns to the structure and the surrounding area. Work to this structure must adhere to standards for historic properties. Work on the surrounding area can be accomplished with Town Forces, the work to the building itself must be performed by craftsmen skilled in historic properties work.
This is work that must be performed to keep the integrity of the structure sound.

2 PROJECT STATUS IF IN PROGRESS

The chimney repairs have been bid and will be in the process of awarding that project to the lowest qualified bidder.

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

None

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

None

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

None

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

Letter dated September 30, 2022 from the Historic Properties Commission Chair

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance	25,000		25,000			
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**25,000**	**0**	**25,000**	**0**	**0**	**0**

MEMORANDUM: TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Jordan Park House

The Historic Properties Commission has identified several maintenance concerns to the structure that must be addressed. They are:

- Portico post, east
- Portico gutter, east
- Stair railings
- Roof Slates
- Window Glazing
- Trim trees

Work to this structure must adhere to standards for historic properties performed by craftsmen skilled in historic properties work. This work is required to keep the structure sound.

To date, the exterior oil tank has been replaced with an interior tank and the chimney work will be completed spring 2025. Next, the slate roof will be addressed. Several pieces have loosened and need to be reattached.

FIFTEEN ROPE FERRY ROAD
WATERFORD, CT 06385-2886

PHONE: 860-442-0553
www.waterfordct.org

September 30, 2022

Robert J. Brule
First Selectman
Town of Waterford

Dear Rob:

A major concern of the Historic Properties Commission is the deteriorating condition of the Jordan Park House, formerly the Waterford Public Library. We are asking, therefore, for $15,000 - $20,000 to be included in the FY '24 Capital Plan for repairs and site work.

Other than the temporary repair of the basement-entry roof, no maintenance of any consequence has been performed since 2001-2002.

Features in need of attention/repair (See photos):
- Chimney (urgent)
- Portico post, east (liability, urgent)
- Portico gutter, east
- Stair railings
- Roof slates (repair/replace missing/damaged)
- Window glazing (primarily south-facing sashes)
- Oil Tank (code?)
- Trim trees, north boundary
- Other?

The Park House is one of the most historically and architecturally significant buildings in town and is an established historic property pursuant to CGS 7-147p – 7-147y and Ch. 2.86, Code of Ordinances. Both the building and the land were gifts to the town, the former by Anna Rumrill Hammond, and the latter by the Nevins sisters, on both Great Neck Road and the present park site. (See "Jordan Park House"). Continuing to ignore the condition of the building is nothing short of irresponsible and an insult to civic-minded women to whom we should honor.

Furthermore, the Waterford Historical Society has brought increasing attention to the park (commonly called the "green") in recent years with programs and events for all ages. The Historical Society, in fact, still has use of the Park House albeit on a limited basis. Its maintenance, therefore, is all the more important especially in light of liability issues.

Meanwhile funding possibilities will be explored for a much-needed structural condition assessment and feasibility study.

Thank you for your consideration and interest.

Respectfully,

John R.M.N.

John J. O'Neill, Jr., Historic Properties Commission Chairman

Bob

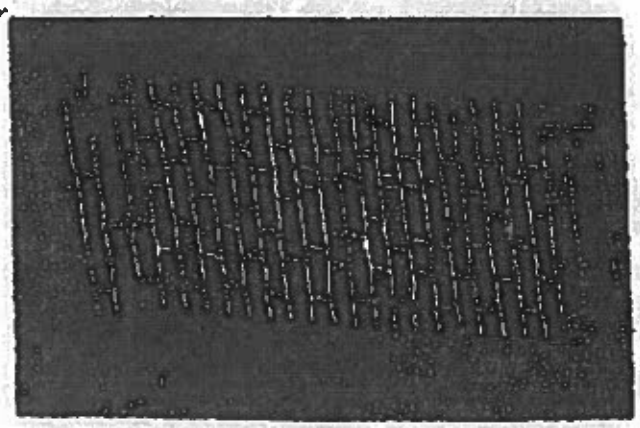
Robert M. Nye, Municipal Historian

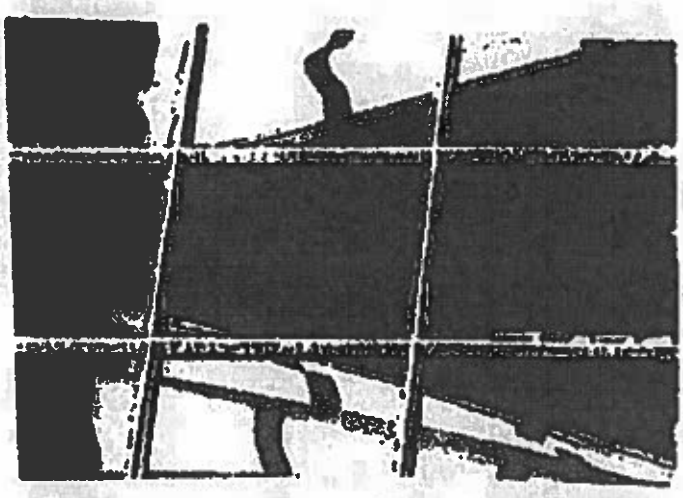
Attachments: "Jordan Park House" (included in the 1999 application for historic property designation).
Photos.

c.c.: Gary Schneider, Director, Public Works Department
Abby Piersall, Director, Planning & Development
Brian Flaherty, Director, Recreation & Parks
Kristen Widham, President, Waterford Historical Society

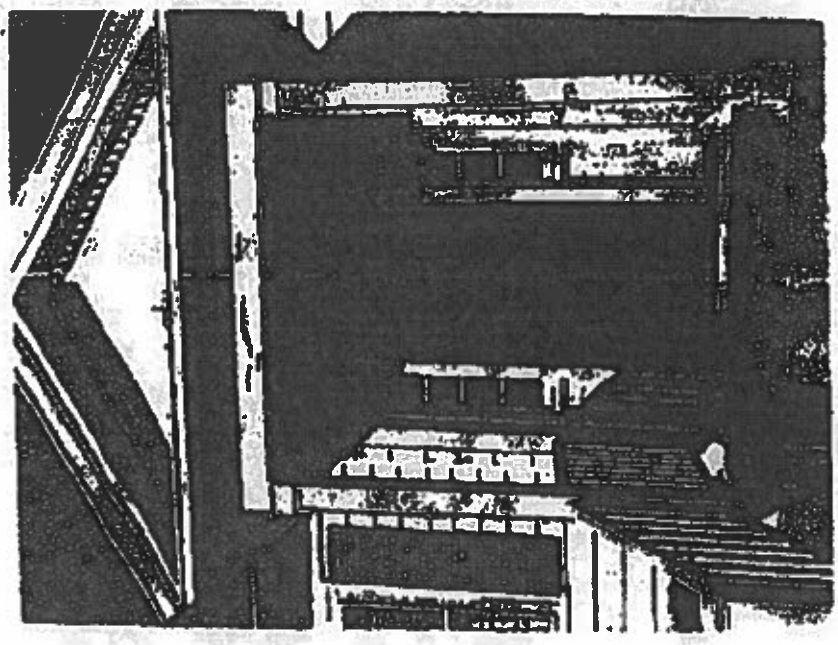
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PUBLIC WORKS

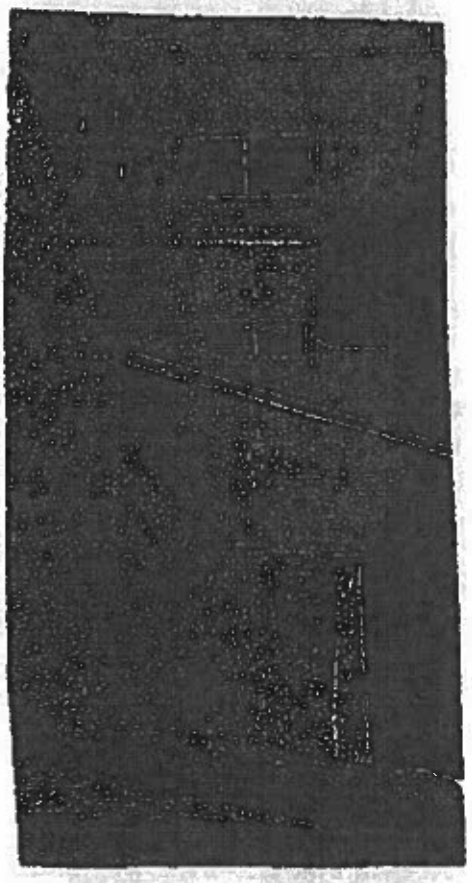
2



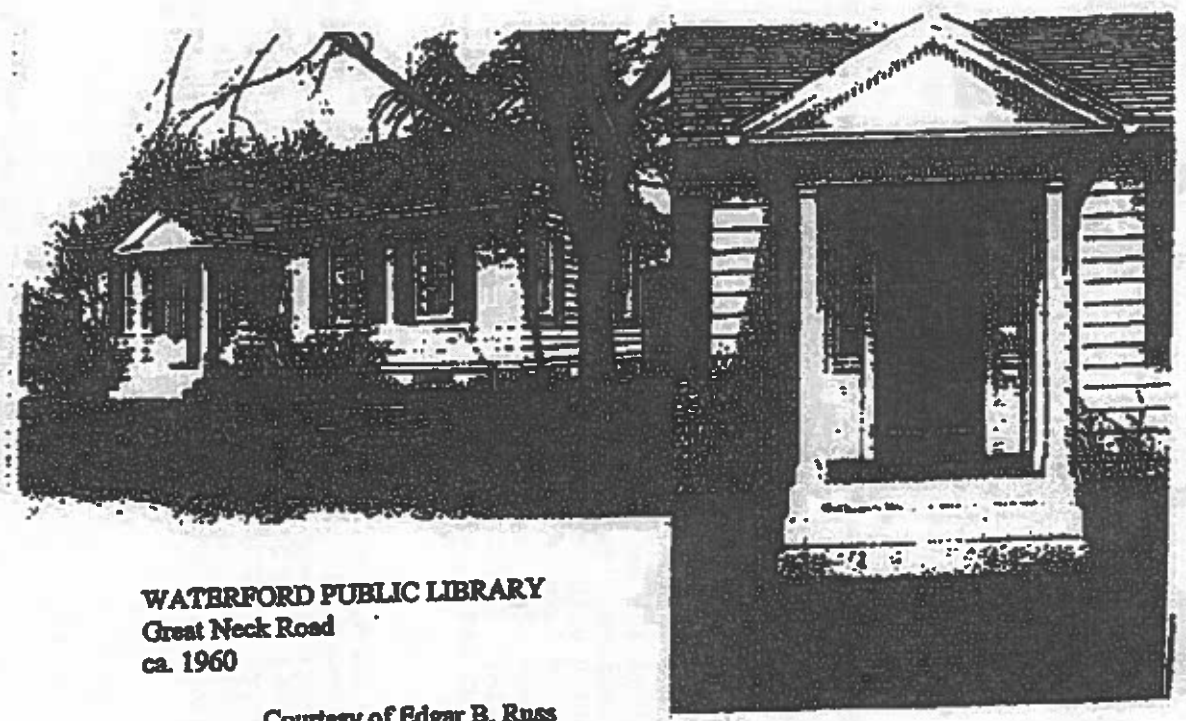


1





3



WATERFORD PUBLIC LIBRARY
Great Neck Road
ca. 1960

Courtesy of Edgar B. Russ

FIFTEEN ROPE FERRY ROAD

Town of Waterford

WATERFORD, CT 06385-2886

NOTE; The following was included as part of the application for historic property designation, 1999.

JORDAN PARK HOUSE

Proposed Historic Property
The proposed historic property is the Jordan Park House located at 65 Rope Ferry Road. Constructed in 1928, the building was the town of Waterford's first purpose-built library. Originally located approximately a quarter of a mile to the south on Great Neck Road, the building was moved to its present site in 1961. Today the Park House houses the offices of the Waterford Historical Society and is used extensively by a variety of community groups.

Historical Significance
Realizing the need for a public library, both for the school children and the adults of the town, a group of civic-minded citizens met at the Jordan School on May 3, 1922 and voted to form a library association. The following year, on May 22, 1923, the articles of incorporation were signed. With donated furnishings and a collection numbering 1,302 books, the town's first library opened on March 1, 1924 in a shed on the property of Mrs. William (Rose) Saunders at 90 Rope Ferry Road in Jordan Village. (The ca. 1889 building was originally the shop of carriagemaker Orlando Gilbert).

In an effort to obtain a more adequate facility, a building fund was established, which by early 1927 amounted to $473.52. Meanwhile, Mrs. Edward Crowninshield Hammond announced to the library committee her intention of giving a library to the town in memory of her parents, James and Anna Chapin Rumrill.

Anna Rumrill Hammond's father was the Vice-president of the Boston and Albany Railroad which was founded by her grandfather, Chester W. Chapin of Springfield, Massachusetts. The Rumrills built a summer "cottage" at Goshen Farm in the late 1870s. The property included part of today's Harkness Memorial State Park as well as the farm to the west, recently conveyed to the state by Ostrom Enders. The Rumrill's summer residence burned around 1916, though the brick garage survives today on the Harkness property.

After their marriage in 1905, Edward C. Hammond brought Anna to his Walnut Grove Farm, today's Eugene O'Neill Memorial Theater Center. Hammond was president of the New London Northern Railroad and was active in civic affairs, serving the town in the state legislature and chairing the town's first board of finance. He was a driving force behind the building of the town's first hall of records (1936) on Boston Post Road.

Meanwhile, Anna Hammond acquired a little over a quarter of an acre "on the northeasterly side of the highway leading from Jordan Village to Great Neck" from the Nevins sisters, Anna Louise, Cornelia Leonard, and Marian Nevins MacDowell, wife of the noted composer, the late Edward MacDowell. The new library building was formally opened on September 8, 1928.

By the post-World War II years, however, the library became hard-pressed to meet the demands of Waterford's mushrooming population. When the State Highway Department condemned it for the new railroad overpass and realignment of Great Neck Road in January 1959, the building had already outgrown itself. On March 14, 1961, the library re-opened in temporary quarters at 91 Rope Ferry Road in the recently vacated post office (across the street from its original 1924 site in Jordan Village). The present library, across from the Nevins homestead, was opened February 25, 1966.

In the meantime, the library association had donated their building to the town on August 7, 1961. It was moved later that year to its present site, the northwest corner of Jordan Village Park, a 3.8 acre gift of land from Anna L. Nevins to the town (1952). At the Representative Town Meeting of August 6, 1962, it was resolved that: "The Old Waterford Library Building, now located in Jordan Park be hereafter known as Jordan Park House." The building was formally re-opened as a community house the following month on September 30. Until 1984 the Park House served as the offices of the Department of Recreation and Parks and since then, the Waterford Historical Society, Inc.

Architectural/Cultural Significance

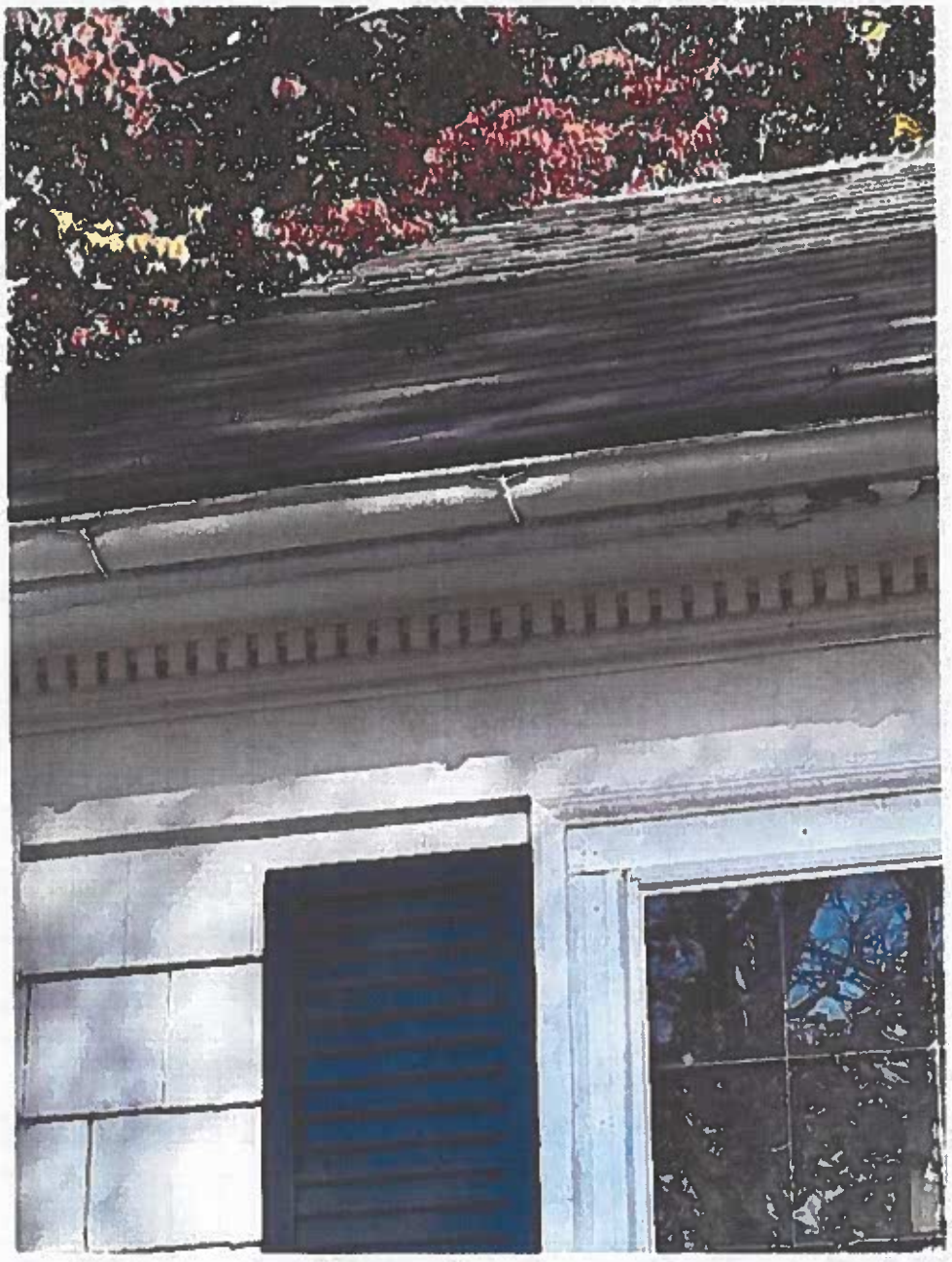
The Jordan Park House is a fine example of the Colonial Revival style. Notable features include 12-over-12 windows, an interior end chimney which services the large fireplace, and a denticulated cornice at the eaves of the slate-covered, gable roof. The entrance bay and vestibule are defined by a pedimented gable carried on square posts. A lunette window fills the west gable end.

The interior has plastered walls, chair rail and hand hewn ceiling beams. The fireplace is well-proportioned with vertical pine paneling above. A painting by Waterford resident Henry C. White, an original member of the Old Lyme art colony, at one time hung over the fireplace (it now hangs in the present library). The

landscape oil was a gift of Henry and his son Nelson C. White in 1929. Anna Rumrill Hammond reportedly furnished the library "entirely in the colonial manner," even to the extant lighting fixtures and hooked rugs. Today, a print of the old library building by another Old Lyme impressionist (and former Waterford resident), the late Roger Dennis, hangs over the fireplace mantel.

National Register of Historic Places

The inventory of Jordan Village, which included the Jordan Park House, was completed and submitted to the Connecticut Historical Commission in early 1990. Later that same year, the Jordan Village Historic District was listed on the National Register of Historic Places. Architectural historian Mary E. McCahon was retained by the Jordan Village Historic District Committee to conduct the survey and prepare the nomination application. The attached inventory of the Park House was completed by Waterford Municipal Historian Robert M. Nye and reflects some minor changes and corrections to Ms. McCahon's original submission.



TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Building Maintenance	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Eugene O'Neill - Sewers	**DEPARTMENT PRIORITY** 9

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	A previous phase (Phase 1) of the sewer construction program connected the new cottages, Log Cabin, and the upper portion of the Theater to the sewer line. Phase 2 that would have completed the sewer to the rest of the buildings on site was never funded. The uncompleted Phase 2 has been broken into smaller parts. In FY 25, funds were approved to connect the Production House, the lower level of the Theater and the White House to the public sewer. Future phase(s) would connect the Hammond Mansion to a new gravity sewer line and connect the Farm House, by its own grinder pump, to the low pressure sewer line that was installed to service the toilets at the beach.
2	**PROJECT STATUS IF IN PROGRESS**
	MCA Consulting Engineers analysis of the site and opinions to investiagate further dated November 3, 2023. Funding was approved in FY 23 for this efffort.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (If none, simply state that in the area below)**
	Attached expanded narrative memorandum

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance	153,000			250,000		
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**153,000**	**0**	**0**	**250,000**	**0**	**0**

MEMORANDUM: TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS

To: File

From: Gary J Schneider

Date: November 15, 2024

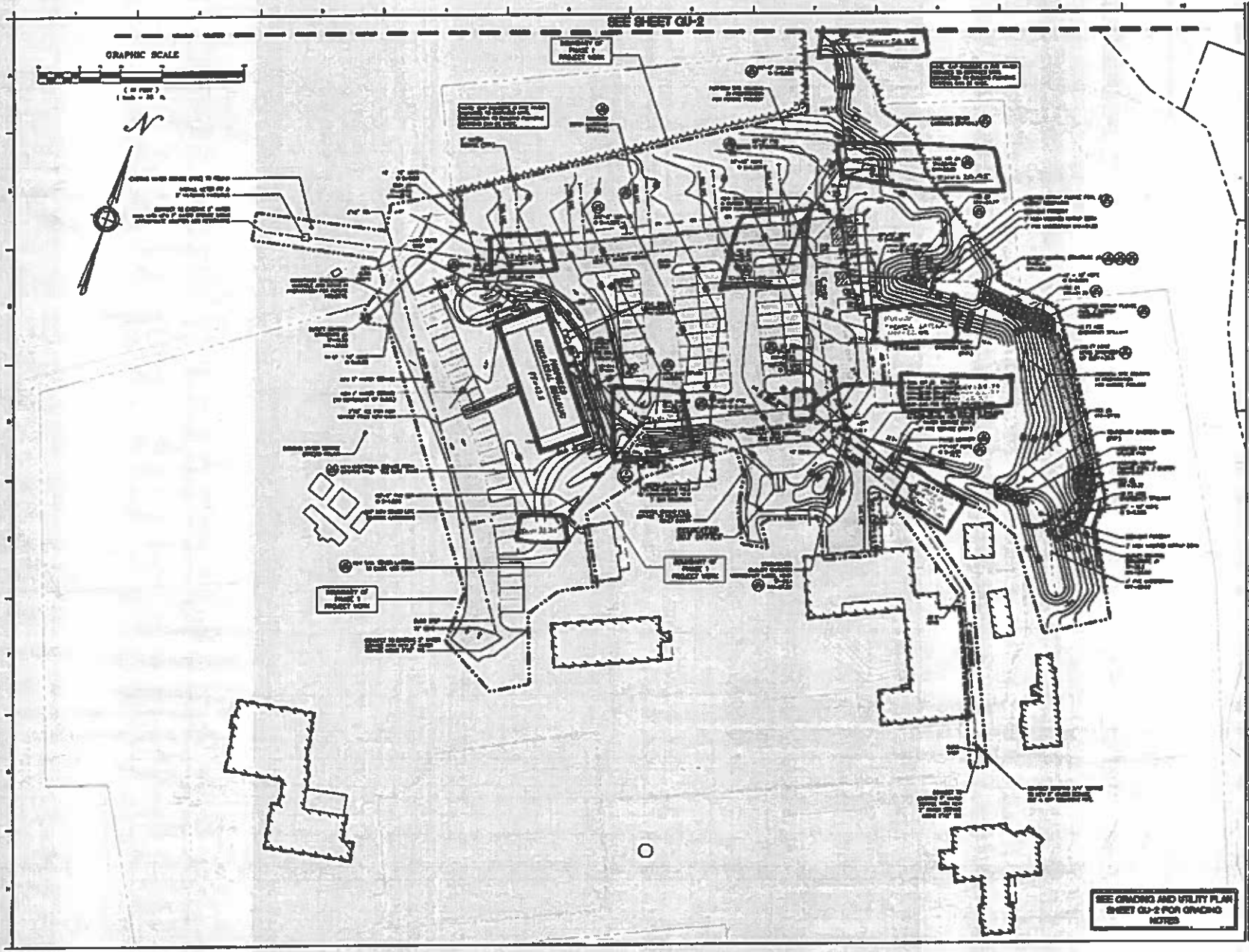
Re: Eugene O'Neill Center Sewers

All buildings except the Hammond Mansion (main office, housing and cafeteria) and the Farm House (dormitory) have been connected to public sewer.

A previous phase (Phase 1) of the sewer construction program connected the new cottages, Log Cabin, and the upper portion of the Theater to the sewer line. Phase 2 that would have completed the sewer to the rest of the buildings on site was never funded.

The uncompleted Phase 2 has been broken into smaller parts. In FY 25, funds were approved to connect the Production House, the lower level of the Theater and the White House to the public sewer.

Future phase(s) would connect the Hammond Mansion to a new gravity sewer line and connect the Farm House, by its own grinder pump, to the low pressure sewer line that was installed to service the toilets at the beach.



CENTERBROOK

Construction Documents Set

Eugene O'Neill Theater Center: Rehearsal Building

SITE GRADING & UTILITIES PLAN

SANITARY SEWER AS-BUILTS

GU-1

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Building Maintenance	Gary J. Schneider
PROJECT NAME	**DEPARTMENT PRIORITY**
UST - Community Center	10

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

The Community Center will require the existing tanks to be removed by 2033. The tanks (2) were to be used as a secondary fuel source for the three boilers at the Community Center/Friendship School. The tanks were installed at a time when the price difference between heating oil and natural gas greatly fluctuated and there was a concern about the availably of natural gas. That is not the case now. The Center will use natural gas for heat and hot water. The tanks need to be removed with all the underground piping. The internal piping to the 3 boilers (1 Town, 2 Friendship School) will also be removed. The tanks are located in the parking lot which will involve the replacement of curbing and asphalt surfaces.

2 PROJECT STATUS IF IN PROGRESS

None

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

None

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

The issue is not operational budgets, but the possible of the DEEP issuing a Notice of Violation and the costs associated with possible fines and attorney fees.

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

None

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

None

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						75,000
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**0**	**0**	**0**	**75,000**

TOWN OF WATERFORD
DEPARTMENT OF PUBLIC WORKS
MEMORANDUM

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Underground Storage Tanks (UST) Community Center

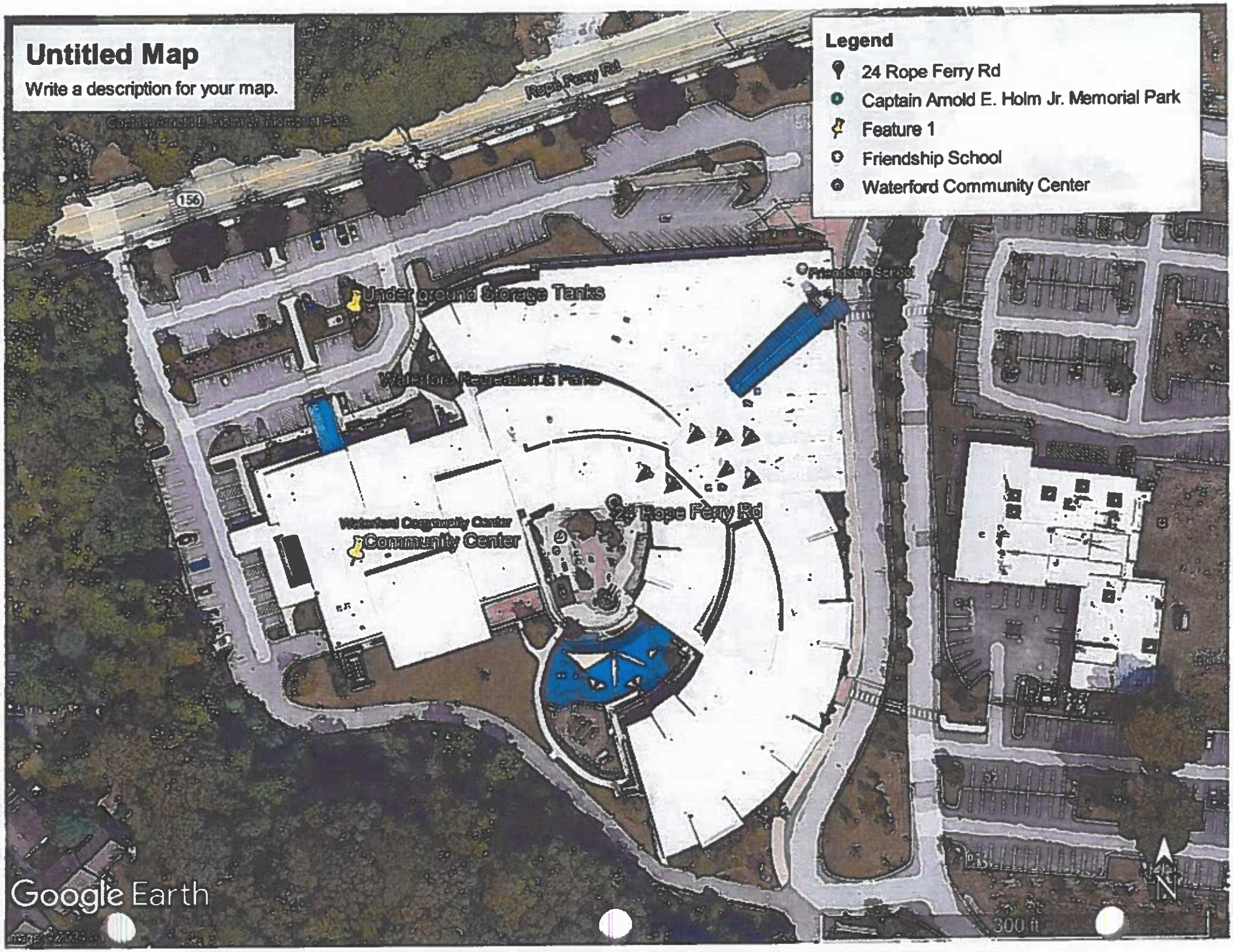
An underground storage tank must be removed when they have reached their end of service life. The Community Center will require the existing tanks to be removed by 2033. The tanks (2) were to be used as a secondary fuel source for the three boilers at the Community Center/Friendship School. The tanks were installed at a time when the price difference between heating oil and natural gas greatly fluctuated and there was a concern about the availably of natural gas. That is not the case now. The Center uses natural gas for heat and hot water.

The tanks need to be removed with all the underground piping. The internal piping to the 3 boilers (1 Town, 2 Friendship School) will also be removed. The tanks are located in the parking lot which will involve the replacement of curbing and asphalt surfaces.

Soil testing must be completed to properly close out the removal. This requires the certification of a Licensed Environment Professional (LEP).

In order to avoid integrity testing of the tanks for the last 3 years of their life, the tanks should be removed in 2030.

Note: Any remaining tanks at the Fire Houses and Waterford Utility Commission's pump stations are not included in this project.


Untitled Map
Write a description for your map.
Legend
24 Rope Ferry Rd
Captain Arnold E. Holm Jr. Memorial Park
Feature 1
Friendship School
Waterford Community Center
Rope Ferry Rd
156
Underground Storage Tanks
Waterford Community Center
Community Center
24 Rope Ferry Rd
Google Earth
300 ft
N

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2026-2030

	DEPARTMENT/ AGENCY:							
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	Quaker Hill FD Fire Alarm	1	15,000					15,000.00
1	SCBA bottle repalcement	3	50,000					50,000.00
1	Cohanzie Air Conditioning	1	15,000					15,000.00
2	Jordan FD Bathroom reno	1		75,000				75,000.00
2	Equipment Replacement	1		75,000				75,000.00
3	Goshen Pitched Roof	3	60,000	65,000				125,000.00
3	Jordan Windows	1			60,000			60,000.00
4	Knox Box Upgrades	1				40,000		40,000.00
4	Cohanzie Bunk room reno	1				50,000		50,000.00
5	Jordan Bunk Room reno	1					50,000	50,000.00
5	Quaker Hill Generator	1					55,000	55,000.00
1	Pre-Emption Traffic Lights	1						-
	TOTALS		140,000.00	215,000.00	60,000.00	90,000.00	105,000.00	610,000.00

INDEX TO FUNDING SOURCES,

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Fire Services	Steve Dubicki
PROJECT NAME	**DEPARTMENT PRIORITY**
Quaker Hill Fire Alarm replacement	1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	FireAlarm system is old and out dated, causing repair and replacement problems. It is no longer able to clear alarms and has constant alarms in alarm mode due to parts and equipment unable to be repalced. Sections of the system are not covering the building properly.System needs to get replaced and upgraded to meet code and standards. New system will monitor all areas of the fire house and outer buildings and meet future needs.
2	**PROJECT STATUS IF IN PROGRESS**
	Received a quote from a local contractor
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	N/A
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	This project is to large to do with our operating budget. The cost of replacement is$ 12,855 and should be done with the Capital Improvement Plan.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	See attached quote
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital		15,000				
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	15,000	0	0	0	0

INTEGRATED SECURITY SOLUTIONS LLC
388 Butlertown Road
Oakdale, CT 06370
860-701-0815

Proposal

Proposal Date: 10/2/2024
Proposal #: 1818.

Bill To:
Quaker Hill Fire Department
17 Old Colchester Road
Quaker Hill, CT 06375

Qty	Description	Rate	Total
	Upgrade the existing FCI 10-zone Fire Alarm System to include the following:		
1	FireLite ES200X Addressable Fire Alarm Control Panel with (1) Cell/Internet Communicator for Central Station monitoring	1,700.00	1,700.00
5	FireLite SD365 Smoke Detectors	125.00	625.00
24	FireLite H365 Heat Detector to replace existing detectors	110.00	2,640.00
1	FireLite H365 Heat Detector to install a new heat detector in the rear detached garage bay	110.00	110.00
6	FireLite BG12LX Addressable Pull Stations	140.00	840.00
2	MDF300 Dual Monitor Modules one for each sprinkler riser, main building and back garage	175.00	350.00
1	MMF301 with 40-Degree Low Temp Sensor for rear garage heat loss	100.00	100.00
8	System Sensor Horn Strobes to replace existing older style horns (This is an estimate on quantity)	65.00	520.00
	Miscellaneous electrical parts including conduit and cable as needed	250.00	250.00
	Labor to install, test and program	5,720.00	5,720.00
	Annual Central Station Monitoring via Internet and Cell Backup will be $540 per year		
	Note: System subject to fire marshall approval.		
	Note: An external antenna may be required for cell signal. This will be at an added expense of $475		

All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, hurricane and other necessary insurance. Our workers are fully covered by Worker's Compensation insurance.

Subtotal	$12,855.00
Total	$12,855.00

Acceptance of Proposal--The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment as outlined above

SIGNATURE_____

Date of Acceptance_____

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Fire Services	**CONTACT PERSON** Steve Dubicki
PROJECT NAME SCBA- breathing apparatus replacement	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The Fire Department bottles for the SCBA-self contained breathing apparatus are expiring in the courseof the next few years.This is a multi year project. We have one station remaining to complete the swap out of the bottles.These bottles have a life span of 15 years. F/Y 23-24 had 47 coming out of service. F/Y 24-25 we have 40 coming out of service. F/Y 25/26 has 20 coming out of service. Over the next two years we will be completed in this project.Thisproject has to be completed for the Health and Safety of our personnel and to be compliant with our equipment.
2	**PROJECT STATUS IF IN PROGRESS**
	Two years into this project.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	This project effects every one of our Fire Compaines.This is a major component of our air packs.
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	This is too large of a purchase to put inot a operating budget.This needs to be covered by the CIP plans as previous years.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	see attached

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital		50,000				
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**50,000**	**0**	**0**	**0**	**0**

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Fire Services	**CONTACT PERSON** Steve Dubicki
PROJECT NAME Cohanzie Fire Company Air Conditioning	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Cohanzie Fire Company has through the wall A/C units that do not adaquately cool the rooms. This would properly cool two spaces within the building. Some Fire Alarm relocating, wall repair and window repairs will need to be made also.
2	**PROJECT STATUS IF IN PROGRESS**
	Quotes from one vendor
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	N/A
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	This project is too large to do with an operating budget. A CIP plan is the best course of action for this project.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	See attached

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital		15,000				
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**15,000**	**0**	**0**	**0**	**0**

Stephen Dubicki Jr.

From: Stephen Dubicki Jr.
Sent: Tuesday, October 1, 2024 3:32 PM
To: Stephen Dubicki Jr.
Subject: FW: Cohanzie Station
Attachments: Mitsubishi Brochure 2023.pdf

From: Jonathan Duncklee <jduncklee@dunckleeinc.com>
Sent: Thursday, July 25, 2024 4:01 PM
To: Michael Howley <mhowley@waterfordct.org>
Subject: RE: Cohanzie Station

CAUTION: This email originated from outside of the organization.
Do not click links or open attachments unless you recognize the sender's email address and know the content is safe.

Hi Michael,
Here's your options for lounge and bunk room:

One outdoor unit with two indoor units installed as heat pump for $12,171
Or
Two outdoor units two indoor units ac only $10,366
Or
Two outdoor units two indoor units ac and heat pump $11,257
12 year parts warranty 1 year labor warranty

Not included:
Electrical to outdoor units, removal of window sleeve units, moving fire alarm light in lounge
Please let me know your thoughts

From: Michael Howley <mhowley@waterfordct.org>
Sent: Saturday, July 13, 2024 4:14 PM
To: Jonathan Duncklee <jduncklee@dunckleeinc.com>
Subject: Re: Cohanzie Station

That works
Sent from my iPhone

On Jul 13, 2024, at 11:26 AM, Jonathan Duncklee <jduncklee@dunckleeinc.com> wrote:

Quote

MES SHIPMAN'S FIRE EQUIPMENT CO.

(860) 442-0678

Quote #	QT1850880
Date	08/26/2024
Expires	09/10/2024
Sales Rep	Fratus, John
Shipping Method	FedEx Ground
Customer	Waterford Fire Marshal (CT)
Customer #	C253670

Bill To
Waterford Fire Marshal (CT)
204 Boston Post Road
Waterford CT 06385
United States

Ship To
Waterford Fire Marshal (CT)
204 Boston Post Road
Waterford CT 06385
United States

Item	Alt. Item #	Units	Description	QTY	Unit Price	Amount
804722-01			CYL&VLV ASSY,CARB,45MIN,4500	28	$1,625.00	$45,500.00

Subtotal	$45,500.00
Shipping Cost	$0.00
Tax Total	$0.00
Total	$45,500.00

This Quotation is subject to any applicable sales tax and shipping and handling charges that may apply. Tax and shipping charges are considered estimated and will be recalculated at the time of shipment to ensure they take into account the most current information.

All returns must be processed within 30 days of receipt and require a return authorization number and are subject to a restocking fee.

Custom orders are not returnable. Effective tax rate will be applicable at the time of invoice.

QT1850880

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2024-2025 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Waterford Fire services	**CONTACT PERSON** Chief Michael J. Howley
PROJECT NAME Company 3 Roof replacement	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Goshen fire station roof has been giving us problems for the last three years. Contractor has been out making repairs/patches as needed. Both the flat roofing 2/3 of roof and pitched shingle roof 1/3 needs to be replaced. Contractor stating membrane material is at life end and showing signs of severe aging. The single ply materials are streching, delaminating and tenting. This materials is becoming brittle and causing holes and getting worse.Leaks are being caused by voids in membrane. Leaks are causing damage on the interior insulation and tiles. Repairs have been made to carry us through the winter.
2	**PROJECT STATUS IF IN PROGRESS**
	Repairs have been made again in fall of FY 24 hoping this will get us through the winter months. Getting quotes/estimates for roof project for FY 25 budget.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	Normal budget process will not cover cost of roof replacment project.
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	Budget process will not cover roof replacment. Working on estimates with contractors for CIP FY 25. Project estimates will be attached.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Attached

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital		60,000	60,000	65,000		
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**60,000**	**60,000**	**65,000**	**0**	**0**

WATERFORD POLICE DEPARTMENT
41 AVERY LANE
WATERFORD, CT 06385-2819

Marc Balestracci
Police Chief

(860) 442-9451 TEL
mbalestracci@waterfordct.org

To: Finance Director, Kim Allen
Cc: First Selectman Rob Brule
From: Marc Balestracci, Chief of Police
Date: October 28, 2024
Re: Capital Improvement Request for Fiscal Year 2026

The police department is requesting only one capital improvement project for fiscal year 2026. This project, which is in collaboration with the Town of East Lyme Police Department, addresses the much needed updates to the regional marine vessel.

In addition to the marine vessel updates back-up documentation, the department's five and ten year capital plans are attached as well.

If you need any additional information, please let me know.

Thank you,

Marc Balestracci
Chief of Police
Waterford Police Department

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM-FY 2026-2030

	Police Department							
DEPT PRIORITY	**PROJECT NAME**	**FUNDING SOURCE**	**FISCAL YEAR 2026**	**FISCAL YEAR 2027**	**FISCAL YEAR 2028**	**FISCAL YEAR 2029**	**FISCAL YEAR 2030**	**TOTAL**
1	Marine Unit Updates (1/2) with ELPD	1	31,089					**31,089**
	WPD Locker Room Updates	1/3		80,000	80,000	80,000		**240,000**
	Kitchen / Training Room Updates	1					75,000	**75,000**
								0
								0
								0
								0
								0
	TOTALS		**31,089**	**80,000**	**80,000**	**80,000**	**75,000**	**346,089**

INDEX TO FUNDING SOURCES.

1 CURRENT YEAR CAPITAL IMPROVEMENTS
3 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM-FY 2031-2035

	Police Department							
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2031	FISCAL YEAR 2032	FISCAL YEAR 2033	FISCAL YEAR 2034	FISCAL YEAR 2035	TOTAL
	Marine Patrol Engine Replacement (1/2) with ELPD		45,000					45,000
	Traffic Safety Project			45,000				45,000
	Command Post Update				60,000			60,000
	Firearms Transition					60,000		60,000
	Training Project						30,000	30,000
								60,000
								0
								0
								0
								0
	TOTALS		45,000	45,000	60,000	60,000	30,000	300,000

INDEX TO FUNDING SOURCES.

1 CURRENT YEAR CAPITAL IMPROVEMENTS
3 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Waterford Police Department	**CONTACT PERSON** Marc Balestracci, Chief of Police
PROJECT NAME Marine Vessel Updates	**DEPARTMENT PRIORITY** 1

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

This project covers half of the cost for the needed updates to the marine vessel, as it is a shared asset with the Town of East Lyme. The East Lyme Police Department is budgeting for their share of the cost in FY 26 as this project has been planned for several years. The project will include hull repair, electronics upgrades, interior decking replacement and new exterior lettering. It also includes a 10% contingency for unexpected costs associated with the updates. A detailed description as well as back-up documentaion is being provided with this request.

2 PROJECT STATUS IF IN PROGRESS

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital		31,089				
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**31,089**	**0**	**0**	**0**	**0**

Waterford Police Department

Marine Vessel Update

Fiscal Year 2026 Request

Hull Repair:

The bottom paint is scheduled to be stripped to bare metal, prepped and painted. Over time since 2011, the barrier has worn in some areas and is not holding paint well. In other areas, the paint is uneven. The waterline on the vessel was not properly painted and will be raised as well. The vinyl boot stripe along the waterline and vinyl "racing stripe" in the bow will be replaced.

Cost at time of request: $16,600.18

Electronics Update:

This project will update the aging port side chart plotter to match the Raymarine Axiom on the starboard side. This will allow both units to work together as currently only one side has infrared capabilities.

The aging Raymarine thermal camera will be replaced with a Flir thermal imaging camera specifically designed for law enforcement search and rescue operations and to assist in safe operation and navigation.

This project will replace the current Automatic Identification System providing capabilities to send messages, route and search information back and forth between vessels involved in a search and rescue mission. AIS is integrated with the chart plotters to identify other vessels and their locations, speed and heading.

Cost at time of request: $34,359.47

Interior Decking Repair:

Both the pilot house and the forward deck have areas of substantial paint chipping. The rubber matting in the pilot house is worn and past its useful life. The Aquatration deck material is a long lasting material that is more durable and cost effective then continuing to prep, paint and add non-skid applications to these areas.

Cost at time of request: $3,800.00

Vinyl Lettering Replacement:

This project will replace the cracked and worn "POLICE" lettering on the topside of the pilot house. It will replace the faded and worn "POLICE" decals on the bow, "DHS" and "MARINE PATROL" decals on both the port and starboard bow.

Cost at time of request: $1,765.00

Total cost of project: $56,524.65

Waterford share of project: $31,089 ($28,262.32 in costs and $2,826.00 in contingency)

SIGNcraft
BETTER by DESIGN

Estimate

ADDRESS
Town of Waterford
Police Department
41 Avery Lane
Waterford,
Waterford, CT 06385

ESTIMATE # 4979
DATE 10/07/2024

P.O. NUMBER
SE CT Marine Patrol

SALES REP
John

ACTIVITY	QTY	RATE	AMOUNT
Digitally Printed Graphics:Digital Printed Graphics Multiple digitally printed reflective lettering, decals / patches with lamination, also includes bow and back door replacement 2 color lettering. Decals, lamination, removal of existing, prep of surfaces, installation of all.	1	1,765.00	1,765.00T

We appreciate the opportunity to work with you.
Let us know how we can help!

SIGN CRAFT
5 Black Point Road
Niantic, CT 06357
(860) 739-2863

info@signcraftsigns.com
www.signcraftsigns.com

SUBTOTAL	1,765.00
TAX	0.00
TOTAL	**$1,765.00**

Accepted By

Accepted Date

B Jags Marine, dba AquaTraction of Connecticut
800 Flanders Rd Unit 3 Bldg 3
Mystic, CT 06355
+1 8609495336
sales@aquatractionct.com

Estimate

ADDRESS	SHIP TO
Mike Firmin 41 Avery Lane Waterford, CT 06385	Mike Firmin 41 Avery Lane Waterford, CT 06385

ESTIMATE #	DATE
1092	09/20/2024

DESCRIPTION	AMOUNT
2011 Sea Ark Defender 28'	0.00
Waterford Town Dock	0.00
6mm Border Line	3,400.00
Color TBD -Cabin Floor -Helm area	
**Badge Logo Discussed, itemized below - Logo(s) Laser Etched or Routed 14"x18" Max - Cost $ 100 ea. * Laser Etched or Routed 20"x24" Max - Cost $ 200 ea. * Laser Etched or Routed. 24"x36" Max - Cost $ 275 ea. * - Routed Ruler(s) 36" Ruler Cost $ 75 ea. * 76" Ruler Cost $ 150 ea. * 76 + " - Must be multiple pads - Consult dealer for pricing. *Price does not include tax – Sales tax will be collected with final payment.	400.00
• To ensure adhesion installation temperature must be 60 Deg f + • Prior to installation carpet/ Cushion snaps must be removed and holes filled, deck to be clean, dry and free of obstructions (by others) • The high gloss interior of some boat models boats can potentially cause issues with " light amplification" due to the Sun's rays focusing onto our decking in internal corners, off mirror finished hardware, etc.. potentially causing the foam to shrink if the focal point of the surfaces exceed 80 deg F. We will try to identify these areas prior to installation and propose a method to minimize the glare by adding some	0.00

DESCRIPTION	AMOUNT
ecorative accents with our 3mm material or a matte finish vinyl pad to prevent the issue. Additional costs may be incurred if this looks to be an issue on your boat. • Some Marinas impose charges to outside Vendors/Contractors. Customers will be responsible for any charges imposed by Marina / Storage facility, ETC to AquaTractionCT LLC. We suggest customers check on their marinas policy prior to AQCT starting any work on your boat. • Quote is Valid for 60 Days	
Please see attached product warranty.	0.00
This warranty excludes all labor rates after 1 season of project completion. Labor for repair, existing floor removal, and any work above and beyond new installation NOT INCLUDED	0.00
We appreciate the opportunity to work with you as your exclusive factory certified AquaTraction Installer.	
SUBTOTAL	3,800.00
TAX	0.00
TOTAL	**$3,800.00**

Accepted By

Accepted Date

DOCKSIDE ELECTRONICS SERVICE

18 Stafford Street
Mystic, CT 06355
860.536.1919

Estimate

DATE	ESTIMATE #
9/20/2024	5979

NAME / ADDRESS	SHIP TO
WATERFORD PD 41 Avery Road Waterford, CT 06385	

Boat Name	P.O. NO.	TERMS	SHIP VIA	FOB
Police Boat		DUE ON RECEIPT		

ITEM	QTY	DESCRIPTION	SE...	RATE	TOTAL
E70658	1	AXIOM2 Pro 16 RVM HybridTouch 16" Multifunction Display with integrated 1kW Sonar, DV, SV, and realvison 3D sonat		6,499.99	6,499.99T
E70518	1	Flir M364C Thermal /Visiable Camera		22,495.00	22495.00T
E70537	1	AR200 ClearCruise Augmented Reality (AR) Video Stabilization Module		574.99	574.99T
E70529	1	AIS 5000 EAIS		6,499.99	6,499.99T
		Subtotal			36069.97
Discount 15		15% Discount Allowed		-15.00%	-5,410.50
INSTALL KIT	1	Intallation Kit		400.00	400.00T
INSTALL	1	Replace C90W with Axiom Pro 16" Display. Install new thermal camera and heading sensor. Replace AIS, program as necessary. Software updates and on board orientation. Installation to be done at Dockside Electronics Location		3,300.00	3,300.00

Fax #	E-mail		
860-536-9272	tim@dockside-electronics.com	**Subtotal**	$34,359.47
		Sales Tax (0.0%)	$0.00
		Total	$34,359.47

All service calls are subject to a minimum charge of $145. A 50% deposit is required on all new installations. If final payment has not been received after 30 days of completion of services, the credit card we have on file for you will be billed the invoice total in addition to a 3% service fee. Estimates will be honored for 30 days. Additional Freight Charges May Apply.

Customer Signature _____

CC #_____ exp _____ code#_____

Crocker's Boatyard, INC. Service Invoice

56 Howard Street • Shaw's Cove • New London, CT 06320-4999
860-443-6304 • Fax 860-443-0279
www.crockersboatyardinc.com

9000001045

**** ESTIMATE ****

Salesman	Customer No	Telephone # 1	Telephone # 2	Delivery Date	Finish Date	Customer PO #	Page
GC	4471456	(860) 442-9451	( ) -	09/23/23	09/23/23		1

WATERFORD POLICE DEPT
41 AVERY LANE
WATERFORD,, CT 06385

Make	Model	Year
	POLICE BOAT	

Serial Number	Stock ID	Tag/Key	Hours/Miles
	4471456		

Engine Man.	Vessel Type	Registration	Warranty Terms
		K#040	

Power	Writer	Purchase Date	Product	LOA
	GC	00/00/00		32. 0

Job/Op Code	Qty	Type	Tech#	Description	List	Net	Total

Printed Date 10/02/24 3:49 pm
Customer email : mfirmin@waterfordct.org

HWBL25 32.00 Qty HAUL,WASH,BLOCK,LAUNCH 25'-32' 590.00

Parts: Labor: 590.00 Sublet: Total HWBL25 590.00

JOB01 Flat MEDIA BLAST BOTTOM 10000.00

Media blast to bare aluminum.

Parts: Labor: 10,000.00 Sublet: Total JOB01 10,000.00

PBTM4 32.00 Qty PAINT BOTTOM 4 COATS 1050.00

Apply 4 coats of epoxy barrier coat. Raise waterline.

***** P A R T S *****

Qty	Vndr	Part Number	Description	List	Net	Extension
1	L	50-93141	SMS PAINT SUIT W/HOOD -		18.35	18.35
4	L	130-MPR530F9	ULTRAWEAVE 3/8" - 9 ROLL		11.86	47.44
4	L	320-1000427	DEEPWELL PAINT TRAY LINE		3.50	14.00
1	L	71-09171	2090 BLUE 1" TAPE .94"X6		7.90	7.90
2	L	SEA5189924	GLOVES-LATEX PACKAGE		3.41	6.82
2	L	71-8511	RESPIRATOR W/NOSE CLIP		5.36	10.72
2	L	199-60205	NEW WHITE KNIT WIPERS 8		7.70	15.40
1	L	50-92141	9" HD 5 WIRE ROLLER FRAM		4.39	4.39
1	L	986-QAC184	ACETONE QT @4		16.29	16.29
3	L	93-47004701G	PETTIT PROTECT HIGH BUIL		175.99	527.97
3	L	93-41004101G	PET. PROTECT HIGH BUILD		175.99	527.97

Parts: 1,197.25 Labor: 1,050.00 Sublet: Total PBTM4 2,247.25

PBTM3 32.00 Qty PAINT BOTTOM 3 COATS 880.00

First coat will be opposite of final color.

***** P A R T S *****

Qty	Vndr	Part Number	Description	List	Net	Extension

Launching at any time requires account to be paid in full.
All accounts will be subject to 1 ½% interest per month on unpaid balances over 30 days.
The amount due reflects a 3% discount for payments by cash or check.
Credit card payments can be processed at www.crockersboatyardinc.com

Customer Signature

Wallace Software Solutions (401) 436-3030 • www.Wallace1.com

You created this PDF from an application that is not licensed to print to novaPDF printer (http://www.novapdf.com)

Crocker's Boatyard, INC. Service Invoice

56 Howard Street • Shaw's Cove • New London, CT 06320-4999
860-443-6304 • Fax 860-443-0279
www.crockersboatyardinc.com

9000001045

**** ESTIMATE ****

Salesman	Customer No	Telephone # 1	Telephone # 2	Delivery Date	Finish Date	Customer PO #	Page
GC	4471456	(860) 442-9451	( ) -	09/23/23	09/23/23		2

WATERFORD POLICE DEPT
41 AVERY LANE
WATERFORD,, CT 06385

Make	Model	Year
	POLICE BOAT	

Serial Number	Stock ID	Tag/Key	Hours/Miles
	4471456		

Engine Man.	Vessel Type	Registration	Warranty Terms
		K#040	

Power	Writer	Purchase Date	Product	LOA
	GC	00/00/00		32. 0

Printed Date 10/02/24 3:49 pm

Job/Op Code	Qty	Type	Tech#	Description	List	Net	Total
				***** PARTS *****			
	1	L		50-93141 SMS PAINT SUIT W/HOOD -		18.35	18.35
	1	L		71-09171 2090 BLUE 1" TAPE .94"X6		7.90	7.90
	1	L		SEA5189924 GLOVES-LATEX PACKAGE		3.41	3.41
	1	L		71-8511 RESPIRATOR W/NOSE CLIP		5.35	5.35
	1	L		199-60205 NEW WHITE KNIT WIPERS 8		7.70	7.70
	1	L		50-92141 9" HD 5 WIRE ROLLER FRAM		4.40	4.40
	1	L		986-QAC184 ACETONE QT @4		16.25	16.25
	1	L		320-1000436 3 QT BLK DEEPWELL ROLLER		16.50	16.50
	1	L		320-1000878 MIX N MEASURE TALL 2.5 Q		5.27	5.27
	6	L		321-14032 2IN CHIP BRUSH @ 24		3.84	23.04
	3	L		130-MPR530F9 ULTRAWEAVE 3/8" - 9 ROLL		11.87	35.61
	3	L		320-1000427 DEEPWELL PAINT TRAY LINE		3.50	10.50
	3	L		93-1899G ODYSSEY TRITON BLACK 189		435.99	1307.97
	2	L		93-1300G ECO HRT PONTOON GREY GAL		252.99	505.98
Parts: 1,968.23 Labor: 880.00 Sublet:				Total PBTM3			2,848.23
JOB02		Hour		REMOVE VINYL DECALS			.00
				Removal of graphics is TBD at $145 per hour. We really have no idea how difficult it will be to remove at this point.			
Parts:		Labor:		Sublet:	Total JOB02		
JOB03		Flat		DESIGN, FABRICATE, INSTALL NEW VINYL			900.00
				Striping on the bottom of the boat golden yellow and blue			
Parts:		Labor: 900.00		Sublet:	Total JOB03		900.00

*** COMMENTS ***

*This estimate is an approximation and is not a guaranteed price. The estimate is based on a visual

Launching at any time requires account to be paid in full.
All accounts will be subject to 1 ½% interest per month on unpaid balances over 30 days.
The amount due reflects a 3% discount for payments by cash or check.
Credit card payments can be processed at www.crockersboatyardinc.com

Customer Signature

Wallace Software Solutions (401) 438-3030 * www.Wallace1.com

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Crocker's Boatyard, INC. Service Invoice

56 Howard Street • Shaw's Cove • New London, CT 06320-4999
860-443-6304 • Fax 860-443-0279
www.crockersboatyardinc.com

9000001045

**** ESTIMATE ****

Salesman	Customer No	Telephone # 1	Telephone # 2	Delivery Date	Finish Date	Customer PO #	Page
GC	4471456	(860) 442-9451	( ) -	09/23/23	09/23/23		3

WATERFORD POLICE DEPT
41 AVERY LANE
WATERFORD,, CT 06385

Make	Model	Year
	POLICE BOAT	

Serial Number	Stock ID	Tag/Key	Hours/Miles
	4471456		

Engine Mfr.	Vessel Type	Registration	Warranty Terms
		K#040	

Power	Writer	Purchase Date	Product	LOA
	GC	00/00/00		32. 0

Job/Op Code	Qty	Type	Tech#	Description	List	Net	Total

Printed Date 10/02/24 3:49 pm

*** C O M M E N T S ***

inspection of the vessel and previous repairs. This estimate is valid for 30 days. Upon disassembly, further damage or other issues not visible could be discovered, requiring the need for additional estimates.
*Upon acceptance, CBY or its subcontractors will perform the services described in the estimate. Any additional services requested and not covered by the estimate will incur additional charges.
*In order to schedule the job, a 50% deposit would be required with the balance due upon completion of the job.

***** F E E S *****

EVO ENVIRONMENTAL FEE $14.70

Launching at any time requires account to be paid in full.
All accounts will be subject to 1 ½% interest per month on unpaid balances over 30 days.
The amount due reflects a 3% discount for payments by cash or check.
Credit card payments can be processed at www.crockersboatyardinc.com

Payment Type:

Customer Signature

Labor	13420.00
Parts	3165.48
Sublet	
Total Fees	14.70
Tax	
AMOUNT DUE	16600.18

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Public Works Department

Memo

To: Robert Brule, First Selectman

From: Gary J Schneider, Director of Public Works

cc: Kimberly Allen, Finance Director

Date: November 15, 2024

Re: Public Works CIP 2026 – 2030

Enclosed please find the proposed Capital Program for Public Works

I am following your guidance to prepare a report by July 2025 for a 3 year, $4 million resurfacing plan. It is not part the capital program submitted.

Projects 1, 2, and 4 are continuations of projects that were previously funded. I have placed Project 1 first as it will correct a serious safety issue that exists at Hunts Brook crossing of Old Norwich Road.

Project 5 starts at the Town Hall. Instead of just rehabbing the enclosure, it would make sense to move it to a new location. Outline years will see the other town facilities addressed.

Project 3 is the start to address issues boarding Niantic River Road and the river. Several residents and the Flood and Erosion Control Board has made requests to address the erosion happening in this area.

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2026-2030

	DEPARTMENT/ AGENCY:	Public Works - 30						
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	Bridges/Culverts Under 20'	6	115,000		25,000			140,000.00
2	Sidewalk Replacement - NRR	6	25,000					25,000.00
3	Risk Assessment - Roadways	6	55,000					55,000.00
4	Minor Road Reconstruction	6	1,000,000		35,000		600,000	1,635,000.00
5	Dumpsters & Storage Enclosures	6	20,000	35,000				55,000.00
6	Concrete Curb Replacement	6	400,000		400,000			800,000.00
7	Realignment of Major Intersections	6			55,000			55,000.00
8	Huntsbrook Bridge	6		20,000				20,000.00
9	Retaining Walls	6		35,000				35,000.00
10	Traffic Signals	6		15,000			250,000	265,000.00
11	Transfer Station	6		20,000	100,000			120,000.00
12	Wooden Streetlight Poles	6		100,000		100,000		200,000.00
13	Roadside Barriers	6		50,000		50,000		
	TOTALS		1,615,000.00	275,000.00	615,000.00	150,000.00	850,000.00	3,405,000.00

INDEX TO FUNDING SOURCES,

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Bridges/Culverts Under 20'- Old Norwich Road	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The bridge over the brook at Old Norwich Town Road, (bridge #15004) safety issue will be addressed. On the downstream side, only a chain link fence is keeping vehicles from a 15 foot drop into the brook; on the upstream side, unsecured small concrete blocks were placed at the edge of the road. Both don't meet acceptable safety structures for road crossings. Funds requested in FY 28 are for the re-inspection of the 13 bridges in our inventory.
2	**PROJECT STATUS IF IN PROGRESS**
	Plans are completed, can place out to bid once construction funds approved.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	Nnone
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	No impact to the Department's budget
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Opinion of Probable Cost dated November 16, 2024 Haley Ward, Expanded Narrative, Plans: Guard Rail Installation
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance	35,000	115,000		25,000		
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**35,000**	**115,000**	**0**	**25,000**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Bridges/Culverts Under 20'

The Town has 13 bridges/culverts that the State of Connecticut field screened in 2018. The State no longer provides inspections of these structures. That task falls back onto the Town. These structures are not on the National Bridge Inventory as the span is 20 feet or less, but they still carry traffic over our water courses. As with our larger bridges, serious problems such as load restrictions and closures can be prevented by programming renovation work. Funds had been requested in the FY26 operation budget to re-inspect these 13 bridges/culverts.

The goal is to address the issues on the bridges/culverts before the need for repair or rehabilitation is urgent or in the worst case, the necessary to close the road until corrective action is taken.

When these structures are renovated, the Department will analyze not only the structure, but items such as width of road at the crossing making them safe for vehicles using the structure and adding protection to the water course that flows through them. Such measures may include compliant guard rail systems, bank stabilization and alignment of the watercourse to the road. These projects would be consistent with Town of Waterford Hazard Mitigation Plan - December 2017 and MS4 General Permit.

For FY26, the bridge over the brook at Old Norwich Town Road, (bridge #15004) safety issue will be addressed. On the downstream side, only a chain link fence is keeping vehicles from a 15 foot drop into the brook; on the upstream side, unsecured small concrete blocks were placed at the edge of the road. Both do not meet acceptable safety structures for road crossings.

The remaining bridge/culvert locations will be addressed in future years based on the findings of the inspection report.

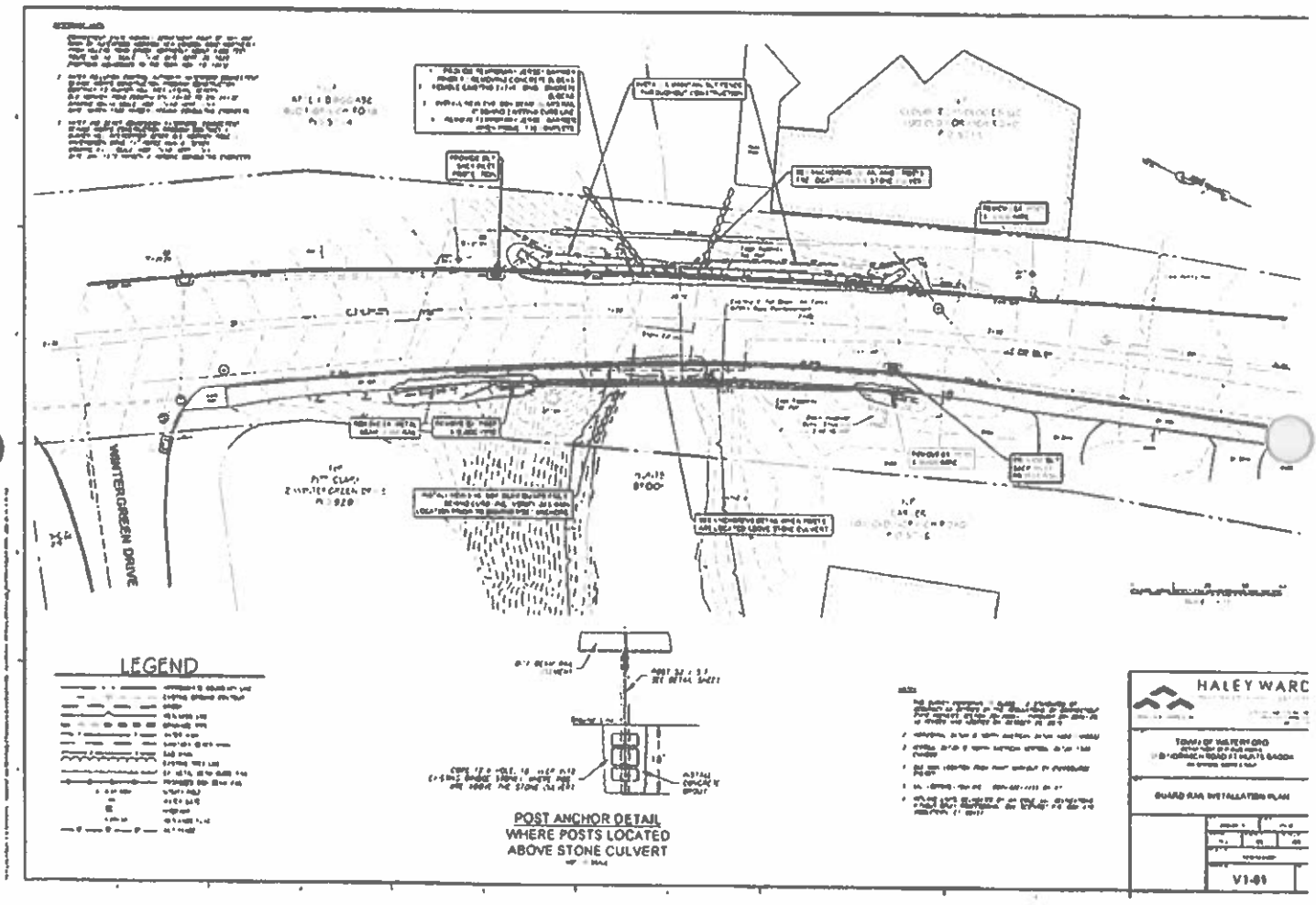
Haley Ward, Inc.
2210 Main Street
Glastonbury, CT 06033-6088

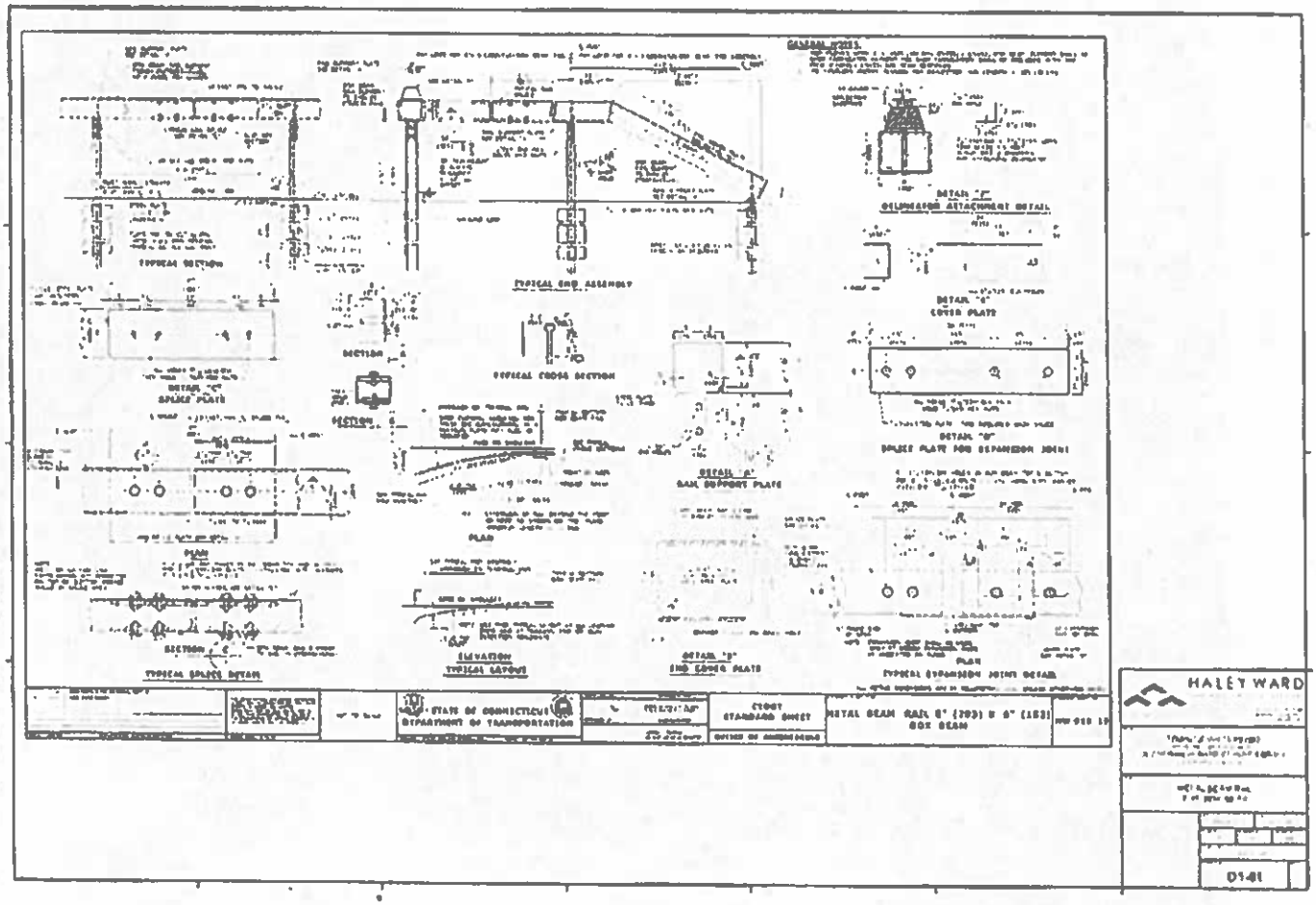
OPINION OF PROBABLE COST
Old Norwich Road.
Guardrail Replacement and Associated Construction
Waterford, CT

Estimate 10/16/24
HW Job No. 24001
Prepared By: JEE

	Total Item	Estimated Quantity and Unit Measure	Estimated Unit Price	Extended Price
1	Mobilization and Project Closeout	1 LS	$20,000.00	$20,000.00
2	Catch Basin Protection	1 LS	$2,000.00	$2,000.00
3	Maintenance & Protection of Traffic	1 LS	$10,000.00	$10,000.00
4	Trafficperson	200 HR	$45.00	$9,000.00
5	Install Temporary Jersey Barriers	1 LS	$2,000.00	$2,000.00
6	Remove Existing Concrete Blocks	1 LS	$5,000.00	$5,000.00
7	Remove Misc. Guardrails, Guy Wires, Etc.	1 LS	$5,000.00	$5,000.00
9	Install New 8" x 6" Box Beam Guardrails & Posts	200 LF	$150.00	$30,000.00
10	Install Guard Rail End Assemblies	4 EA.	$2,500.00	$10,000.00
21	Grass Surface Restoration	50 SY	$10.00	$500.00
	Sub-Total - Items 1-14			$93,500.00
	Rock-in-Trench Excavation, if encountered	0 CY	$200.00	$0.00
	Remove unsuitable soil, replace with gravel fill (if encountered)	0 CY	$25.00	$0.00
	Estimated Construction Cost			$93,500.00
	20 % Contingency			$18,700.00
	Estimated Construction Cost w/Contingency			$112,200.00
	SAY			**$115,000.00**

C:\Users\gschneider\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\F5ONORBA\Estimate Old Norwich Rd 10-16-24


WINTERGREEN DRIVE
LEGEND
POST ANCHOR DETAIL
WHERE POSTS LOCATED
ABOVE STONE CULVERT
HALEY WARD
GUARD RAIL INSTALLATION PLAN
V1-01


HALEY WARD
D1-81


98 Old Norwich Rd Waterford, Connecticut
Google
Google Earth

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Sidewalk Replacement - Niantic River Road	**DEPARTMENT PRIORITY** 2

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Niantic River Road Sidewalk: Schematic Design has been completed. Although the entire length of Niantic River Road has sidewalks, this project starts at the intersection of Old Niantic River Road and ends at the intersection of West Street. 4 locations were investigated to determine the course of action required to construct the sidewalk. Of these 4 locations, only one will involve acquiring a permanent easement to install the sidewalk. The other 3 have private property structures on town property. These will need to be moved back onto the private property. Funds will be used to prepare the draft "taking map" for a permanet easement and tentative plans to move the private structures onto private property.
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	Minor Impact. Current practice is just to make the condition safe
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	See attached expanded narrative. Haley Ward analysis of critical areas

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance	25,000	25,000				
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**25,000**	**25,000**	**0**	**0**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Sidewalk Replacement

This Capital project supports surface transportation projects which encompass roads, street accessories, sidewalks, and bridges. The objective is to provide safe, attractive, and efficient public transportation ways and infrastructure systems that support them.

With many sidewalks around the Town in need of repair and replacement, this project will request funding for multiple years to repair sidewalks, improve walkability, and increase pedestrian safety throughout our community. The Town has an extensive network of sidewalks not only in neighborhoods, but connecting neighborhoods with each other and other town parks, local businesses and community services. Sidewalks also provide a visual character of community, equal to what a good road provides. By providing a safe walkway, we will be encouraging people to use this healthy and environmentally sustainable mode of travel and more attractive place to live and work.

This project will provide funds to replace sections of concrete and asphalt sidewalks that are not salvageable, eliminating trip hazards and missing portions of the walks.

Also included in this project will be the replacement or installation of ADA ramps, address structure constrictions within the sidewalk and properly locate crosswalks where required. Sidewalks will be replaced with "like material", concrete for concrete, asphalt for asphalt.

It is recommended that this multi-year project be a mix of local neighborhood sidewalks and connecting sidewalks. Once these areas have been addressed, the project will move to the sidewalks on State Roads. As the Department moves into replacing sidewalks, this project will comply will the Transition Plan, Title II of the ADA.

Niantic River Road Sidewalk: Schematic Design has been completed. Although the entire length of Niantic River Road has sidewalks, this project starts at the intersection of Old Niantic River Road and ends at the intersection of West Street. There are areas mostly between 6th and 10th Avenues where there is conflict with two fixed objects restricting the width to under 36 inches. These areas must be further investigated to determine if the objects are on town property or if a permanent easement must be acquired. In any case, the restriction must be resolved. A primary plan has been completed and identified 4 locations requiring further work to determine what course of action is required to construct the sidewalk in these locations. Of these 4 locations, only one will involve acquiring a permanent easement to install the sidewalk. The other 3 have private property structures on town property. These will need to be moved back onto the private property.

Update: Concrete sidewalks have been replaced on Summer, David, Norman and William Streets were replaced in 2024.

NIANTIC RIVER ROAD SIDEWALK IMPROVEMENTS

Haley Ward, Inc. was contracted to examine several critical areas where sidewalk design would have to be evaluated. Utilizing property records and physical survey of the existing conditions, Haley Ward visited sites at #127-129 Niantic River Road, #141-145 Niantic River Road, #149-151-153 Niantic River Road, #155-157 Niantic River Road, and #147 Niantic River Road. Haley Ward was able to recover adequate property boundary information to establish the town Right of Way along these portions of the project.

At #127, the proposed sidewalk must skirt around Utility pole #6323 which has a vertical guy wire and the base of a ledge outcrop. Both obstacles should present no significant issues.

At #129, there is an existing 2' tall x 18" thick concrete retaining wall along the frontage. The wall is determined to be completely within the town Right of Way. According to the current property owner, the Town of Waterford constructed the wall, (at the request of the then property owner), when the sanitary sewers were constructed. We recommend that the northern end of the wall be shortened by 14' to allow installation of a 4' wide Type 16 HC Ramp. Some regrading or reconfiguring of the wall would be required. The new walk would end up being approximately 4'-2" wide between the curb & retaining wall.

At #141, we have a utility pole and fire hydrant conflict. There is an existing dry fieldstone wall along the frontage. The wall is almost entirely within the town Right of Way. Existing clearance is only about 3'. In order to install a 4' wide Type 16 HC Ramp, we recommend removing 10' of the southern end of the stone wall. The 3 existing utility poles along Niantic River Road are installed just behind the existing curbline. We recommend a new 4' wide sidewalk with a 2' wide grass strip, incorporating the utility poles.

The existing stone wall narrows in front of #145. In order to install a 4' wide Type 16 HC Ramp, we recommend removing 14' of the northern end of the stone wall. This wall is a barrier-type construction, no significant regarding is required.

The property at #147 has a new concrete masonry stonewall which was constructed after our initial survey. We located the new wall and determined that although it is within the town Right of Way, there is adequate room for a 5' wide walk along the frontage except for in the vicinity of pole # 6317. If we narrow the walk to 3'-8" we can squeeze by the pole without disrupting the stairway and end of the wall.

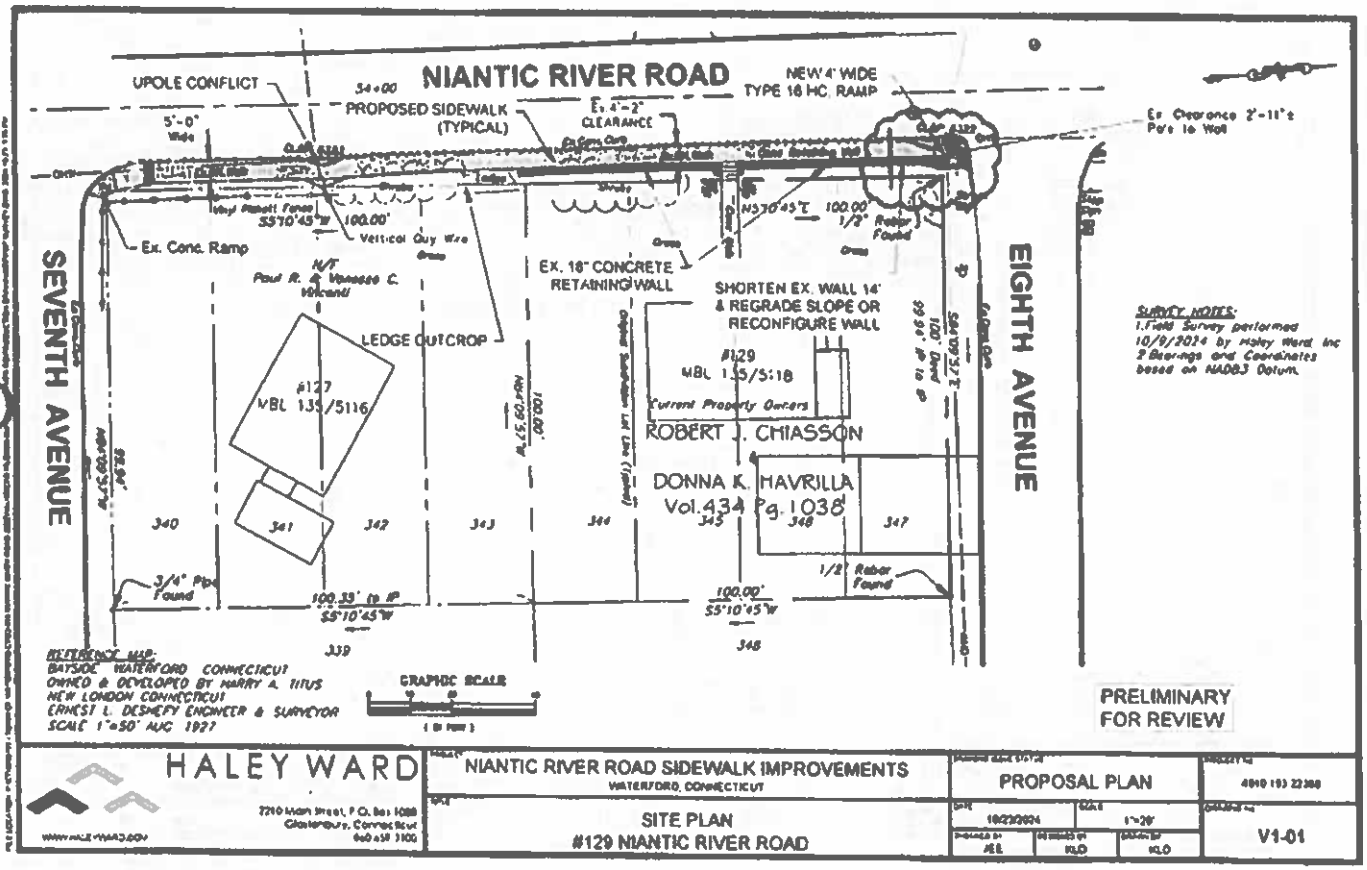
At #149-151, a hydrant and utility pole #6316 (which is currently in the middle of the sidewalk) present challenges. With the removal of hedges as depicted on the plans, we can divert a 4' wide sidewalk behind the obstacles. A wider walk will require an easement.

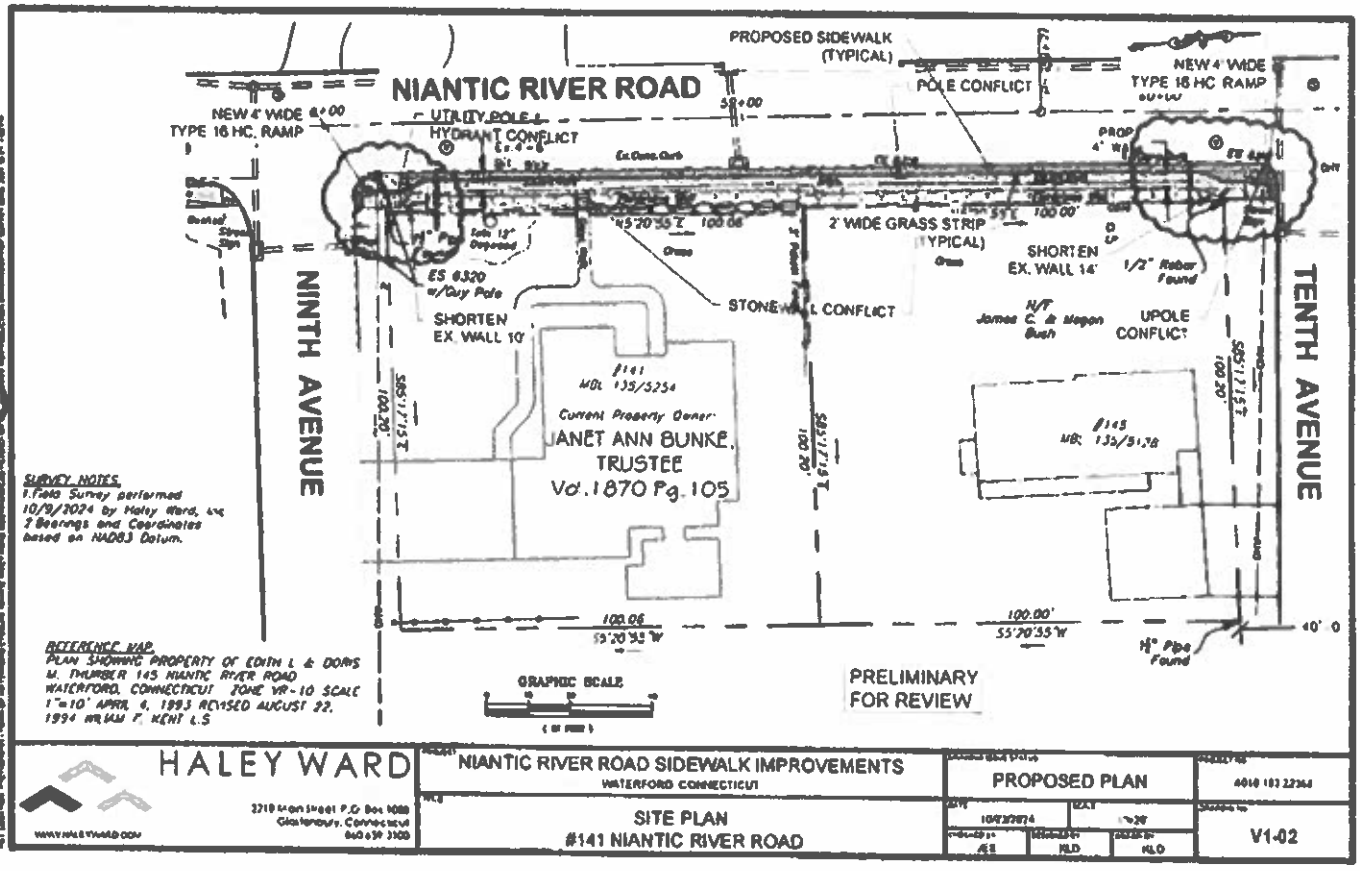
Further north at #153A Niantic River Road, pole #6314, again in the middle of the existing sidewalk, presents the same solution. However, a 4' wide walk will require an easement of 1' by 12' long.

It must be noted that every effort to preserve these property markers should be taken, as it is the keystone for all the adjacent surveys.

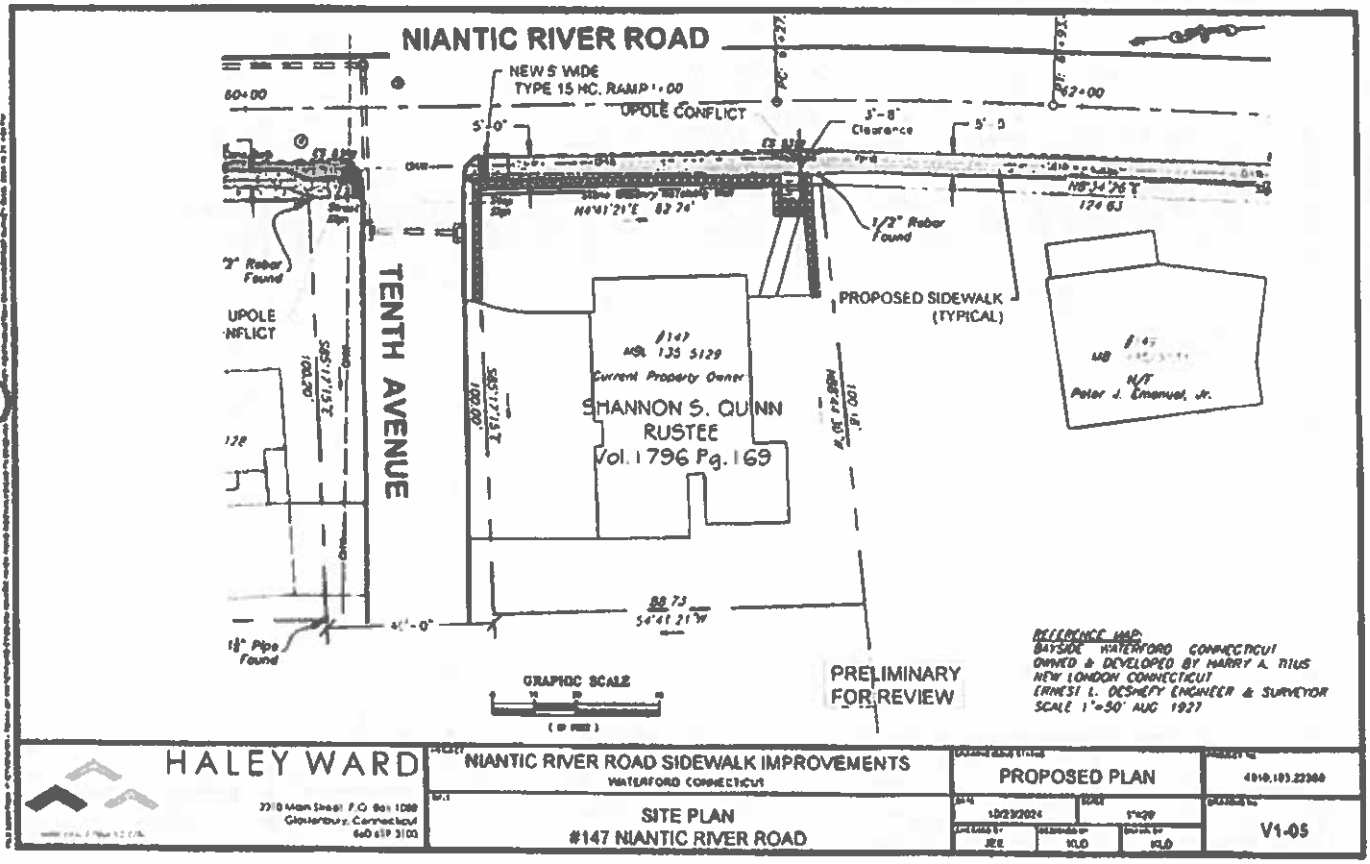
Properties at #155 & 157 Niantic River Road are specified on a map entitled "Plan showing land to be acquired from Kelly L. Green & Michael A Marzulli for sidewalk purposes by the Town of Waterford Public Works Department April 1998". Our field survey reveals that the stone masonry wall is primarily inside the Right of Way along the frontage of house #155. There was no acquisition by the town on this lot. A 5' wide walk can be constructed.

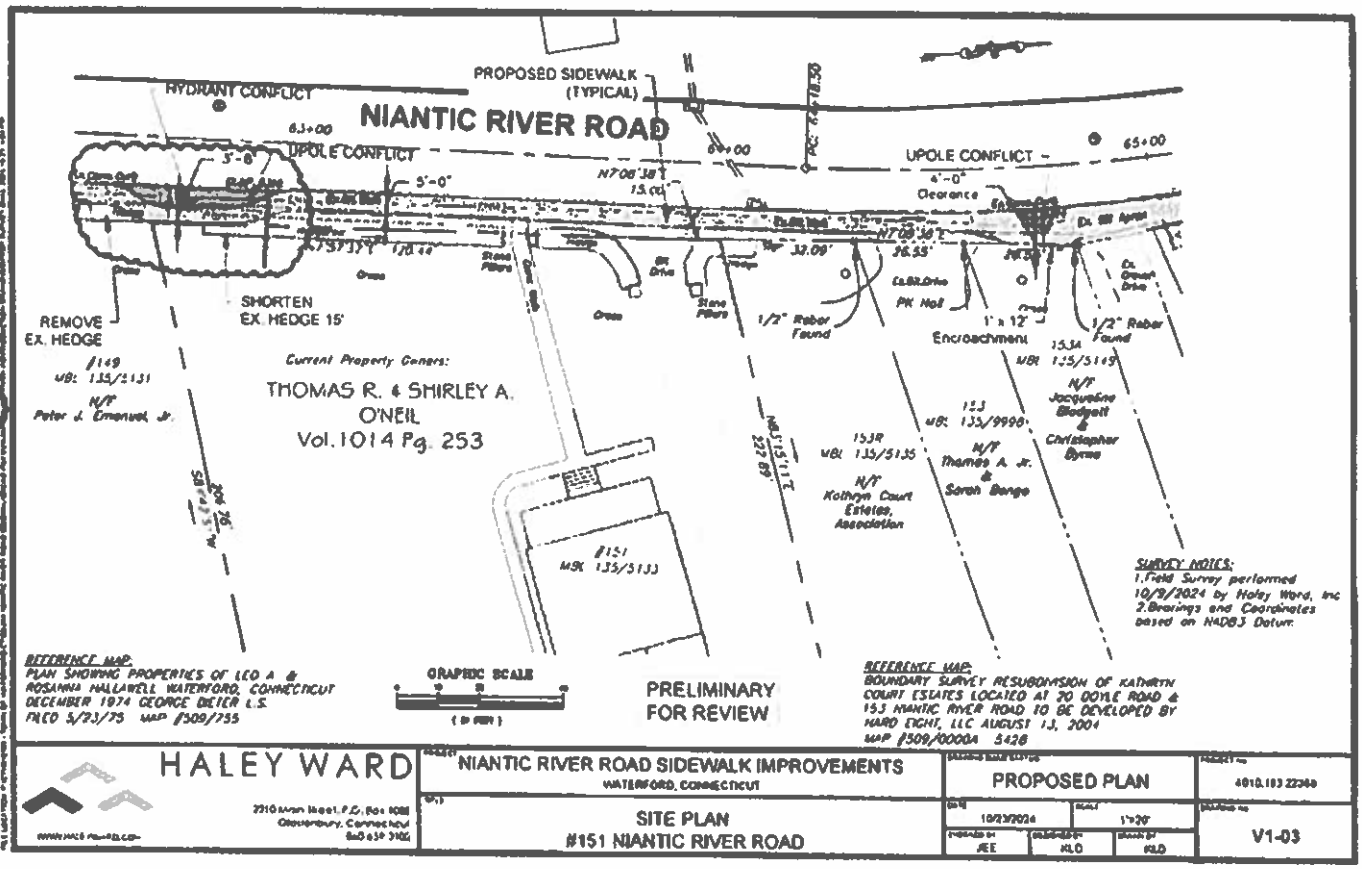
At #157, land was acquired for sidewalk purposes. The existing sidewalk is paved from the back of curb to the face of the wall, which is approximately 5' wide, except near pole #6313 and an adjacent hydrant. The existing sidewalk is encroaching. In this area we recommend narrowing the walk to 3'-7" for a length of 10'.


NIANTIC RIVER ROAD
SEVENTH AVENUE
EIGHTH AVENUE
UPOLE CONFLICT
PROPOSED SIDEWALK (TYPICAL)
NEW 4' WIDE TYPE 1B HC. RAMP
Ex. Conc. Ramp
EX. 18" CONCRETE RETAINING WALL
SHORTEN EX. WALL 14' & REGRADE SLOPE OR RECONFIGURE WALL
LEDGE OUTCROP
#127 VBL 135/5116
#129 VBL 135/5118
Current Property Owners
ROBERT J. CHIASSON
DONNA K. HAVRILLA
Vol. 434 Pg. 1038
Paul R. & Vanessa C. Wilcenti
Vertical Guy Wire
1/2" Rebar Found
3/4" Pipe Found
100.00'
S5°10'45"W
N5°10'45"E
340
341
342
343
344
345
346
347
348
339
SURVEY NOTES:
1. Field Survey performed 10/9/2024 by Haley Ward, Inc
2. Bearings and Coordinates based on NAD83 Datum.
REFERENCE MAP:
BAYSIDE WATERFORD CONNECTICUT
OWNED & DEVELOPED BY HARRY A. TITUS
NEW LONDON CONNECTICUT
ERNEST L. DESMERY ENGINEER & SURVEYOR
SCALE 1"=50' AUG 1927
GRAPHIC SCALE
PRELIMINARY FOR REVIEW
HALEY WARD
NIANTIC RIVER ROAD SIDEWALK IMPROVEMENTS
WATERFORD, CONNECTICUT
SITE PLAN
#129 NIANTIC RIVER ROAD
PROPOSAL PLAN
10/23/2024
1"=20'
V1-01



HALEY WARD 3210 Main Street P.O. Box 1088 Glastonbury, Connecticut 860 659 3100 WWW.HALEYWARD.COM	NIANTIC RIVER ROAD SIDEWALK IMPROVEMENTS WATERFORD CONNECTICUT	PROPOSED PLAN	4010 183 22364
	SITE PLAN #141 NIANTIC RIVER ROAD	10/23/2024 · 1"=20' AES · MLD · MLD	V1-02


NIANTIC RIVER ROAD
NEW 5' WIDE TYPE 15 HC. RAMP
UPOLE CONFLICT
5'-8" Clearance
PROPOSED SIDEWALK (TYPICAL)
TENTH AVENUE
#147
Current Property Owner
SHANNON S. QUINN
RUSTEE
Vol. 1796 Pg. 169
Peter J. Emanuel, Jr.
1/2" Rebar Found
2" Rebar Found
18" Pipe Found
GRAPHIC SCALE
PRELIMINARY FOR REVIEW
REFERENCE MAP
BAYSIDE WATERFORD CONNECTICUT
OWNED & DEVELOPED BY HARRY A. TILUS
NEW LONDON CONNECTICUT
ERNEST L. DESHEFY ENGINEER & SURVEYOR
SCALE 1"=50' AUG 1927
HALEY WARD
NIANTIC RIVER ROAD SIDEWALK IMPROVEMENTS
WATERFORD CONNECTICUT
PROPOSED PLAN
SITE PLAN
#147 NIANTIC RIVER ROAD
10/23/2024
1"=20'
V1-05



HALEY WARD

2310 Main Road, P.O. Box 1088
Glastonbury, Connecticut
860 659 3102

NIANTIC RIVER ROAD SIDEWALK IMPROVEMENTS
WATERFORD, CONNECTICUT

SITE PLAN
#151 NIANTIC RIVER ROAD

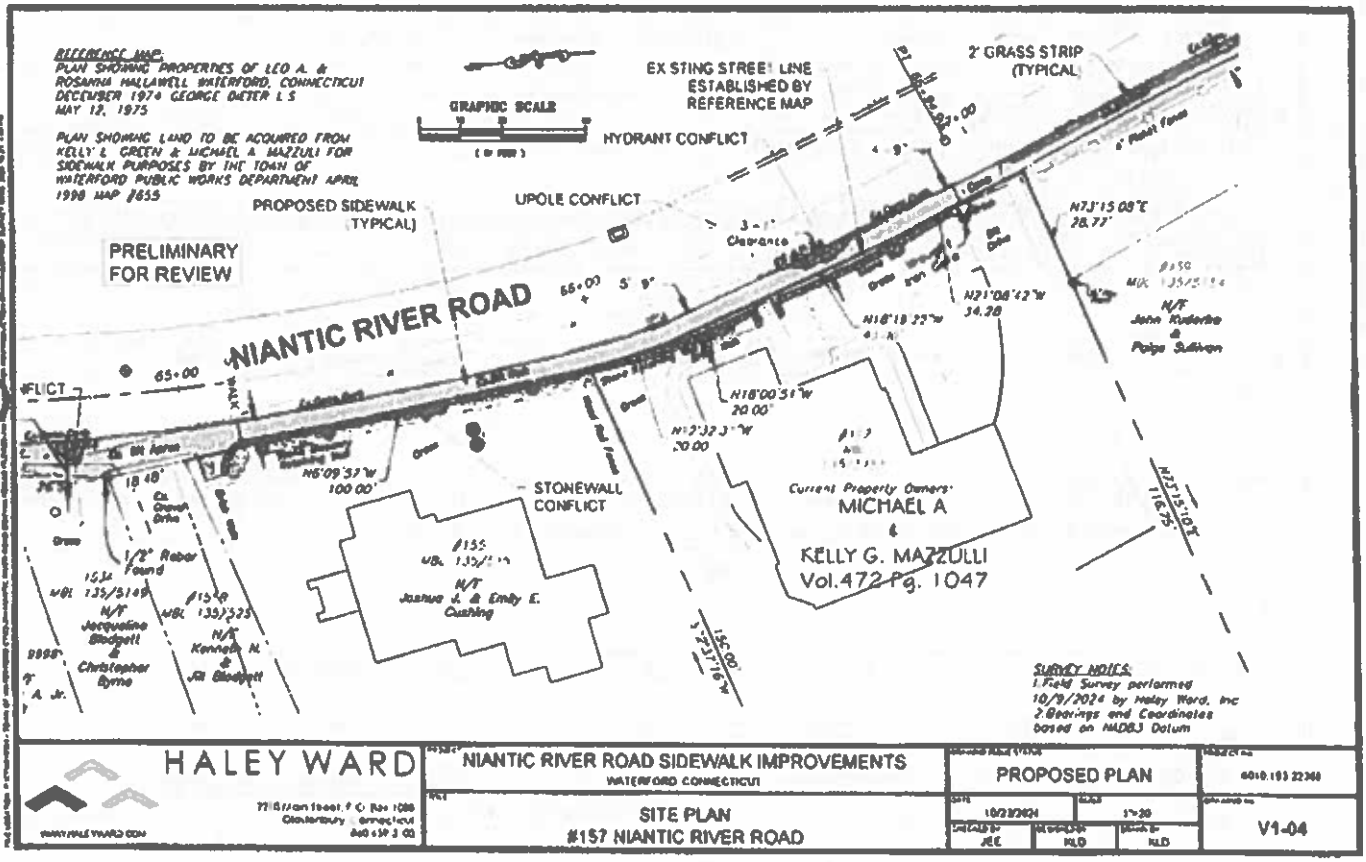
PROPOSED PLAN

10/9/2024 | 1"=20'

AEE | MLO | MLO

4810.103 22369

V1-03


REFERENCE MAP:
PLAN SHOWING PROPERTIES OF LEO A. & ROSANNA HALLAWELL WATERFORD, CONNECTICUT DECEMBER 1976 GEORGE DIETER L.S. MAY 12, 1975
PLAN SHOWING LAND TO BE ACQUIRED FROM KELLY L. GREEN & MICHAEL A. MAZZULI FOR SIDEWALK PURPOSES BY THE TOWN OF WATERFORD PUBLIC WORKS DEPARTMENT APRIL 1998 MAP #655
GRAPHIC SCALE
EX STING STREET LINE ESTABLISHED BY REFERENCE MAP
2' GRASS STRIP (TYPICAL)
HYDRANT CONFLICT
PROPOSED SIDEWALK (TYPICAL)
UPOLE CONFLICT
PRELIMINARY FOR REVIEW
NIANTIC RIVER ROAD
65.00'
N6°09'37"W 100.00'
STONEWALL CONFLICT
#155 N/T Joshua J. & Emily E. Cushing
Current Property Owners: MICHAEL A & KELLY G. MAZZULLI Vol.472 Pg. 1047
N/T John Ruberto & Paige Sullivan
N18°00'51"W 20.00'
N71°15'09"E 28.77'
N21°08'42"W 34.38'
N71°15'09"E 116.75'
1/2" Rebar Found
#154 N/T Jacqueline Blodgett & Christopher Byrne
#156 N/T Kenneth M. & Jill Blodgett
SURVEY NOTES:
1. Field Survey performed 10/9/2024 by Haley Ward, Inc
2. Bearings and Coordinates based on NAD83 Datum
HALEY WARD
NIANTIC RIVER ROAD SIDEWALK IMPROVEMENTS
WATERFORD CONNECTICUT
PROPOSED PLAN
SITE PLAN
#157 NIANTIC RIVER ROAD
10/23/2024
1"=20'
JEC
MLD
MLD
V1-04

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Public Works	Gary J. Schneider
PROJECT NAME	**DEPARTMENT PRIORITY**
Risk Assessment - Roadways	3

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	In 2017 Waterford completed a Climate Change Risk Vulnerability, Risk Assessment and Adaptat on Study. Section F, Adaptation Strategies – Roadways, identified 6 (four town, 2 state) areas on the "network of evacuation and emergency access routes that should be strengthened to improve the Town's resilience to flooding". • Oswegatchie Road o Near Point Comfort Road, raise roadway o Reinforce Roadway Embankments at Keeny Cove • Niantic River Road – Reinforce Roadway Embankments • Gardiners Wood Road - Elevate /redesign (Separate CIP project) • Old Norwich Road – Elevate roadway near Old Colchester Road Funding for the Niantic River Road will involve the services of a consulting engineer to identify and recommend options to address the issues identified in the report.
2	**PROJECT STATUS IF IN PROGRESS**
	2017 Waterford completed a Climate Change Risk Vulnerability, Risk Assessment and Adaptation Study by Kleinfelder Northeast, Inc.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (Include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	Grants may be available for a portion of these projects
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (If none, simply state that in the area below)**
	See attached expanded narrative and excerpts from the Climate Change Risk Vulnerability. Risk Assessment and Adaption Study, as well as a memo prepared by the Town's Environmental Planner Maureen Fitzgerald.

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		55,000				
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**55,000**	**0**	**0**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Risk Assessment Roadways

In 2017 Waterford completed a Climate Change Risk Vulnerability, Risk Assessment and Adaptation Study. Section F, Adaptation Strategies – Roadways, identified 6 (4 town, 2 state) areas on the "network of evacuation and emergency access routes that should be strengthened to improve the Town's resilience to flooding" that should be addressed.

Those four locations are:

- Oswegatchie Road
  - Near Point Comfort Road, raise roadway
  - Reinforce Roadway Embankments at Keeney Cove
- Niantic River Road – Reinforce Roadway Embankments
- Gardiners Wood Road - Elevate /redesign
- Old Norwich Road – Elevate roadway near Old Colchester Road (Note, this section of the road flooded due the 5-8 inches of rain from IDA.)

FY26 would be funding to hire a consulting engineer to evaluate the issues concerning the extent of coastal embankment and shoreline erosion along portions of Niantic River Road and at Grimsey Beach.

CIP REQUEST

Survey & Engineering Services to Evaluate Alternatives for Shoreline & Embankment Stabilization Along the Niantic River

Locations: Niantic River Road Shoreline: Daniels to 4th Avenue and Grimsey Beach: 47 Oswegatchie Road

Purpose: To evaluate the degree and extent of coastal embankment and shoreline erosion along portions of the Niantic River between Daniels Avenue and 4th Avenue and the shoreline at Grimsey Beach where municipal infrastructure including roadway, utilities and public beachfront lie close to eroding shorelines. The evaluation will include a detailed survey of existing conditions and engineered alternatives and associated cost estimates for reinforcing shorelines and embankments and incorporate living shoreline elements that promote establishment of tidal wetlands to absorb wave energy and reduce erosive forces.

The Town completed a Climate Change Risk Vulnerability, Risk Assessment and Adaptation Study in 2015 identified these areas as vulnerable to coastal flooding and erosion. Adaptation strategies identified for Niantic River Road include reinforcement of roadway embankments to prevent erosion of the roadway embankment during major storms.

A report was submitted by the Waterford Flood & Erosion Control Board dated December 1, 2021 documenting concerns of embankment erosion along Niantic River Road in the vicinity of 3rd an 4th Avenues and recommending a survey of the area and solutions to prevent damage to the roadway.

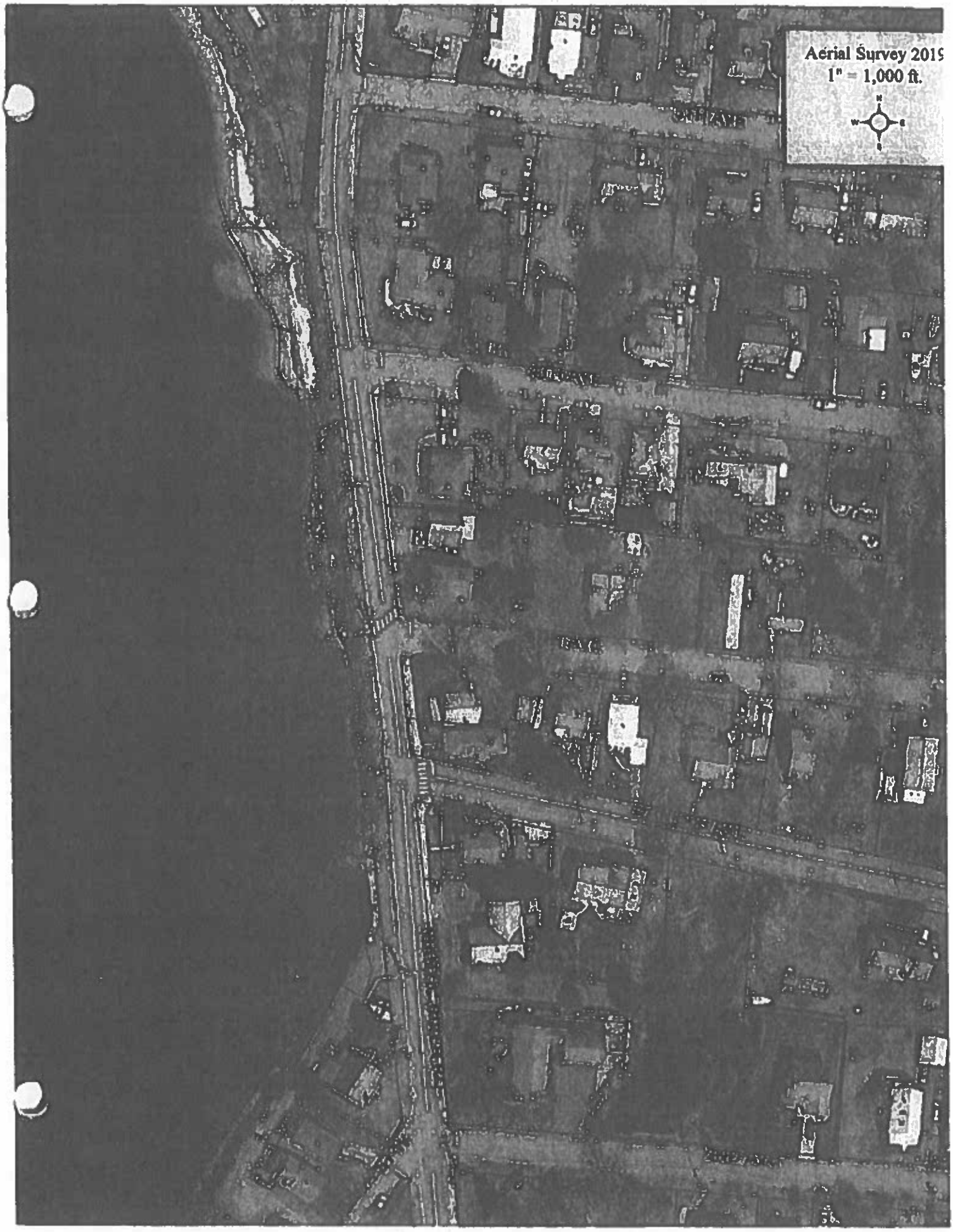
Adaptation strategies for Oswegatchie Road near Grimsey Beach, south of Point Comfort Road, include raising portions of the roadway or reinforcing roadway embankments. (Refer to report excerpts attached). The Grimsey Beach shoreline is a good location to implement living shoreline features to restore and enhance natural coastal vegetation, attenuate wave energy and currents, and reduce soil erosion as well as reinforcing the stone block retaining wall that supports the access drive.

Scope of Work:

1) Survey of coastal area features, tidal wetlands, submerged aquatic vegetation, existing shoreline structure locations and elevations, topography, CTDEEP Coastal Jurisdiction Line, and identification of eroding areas. Survey mapping should be consistent with necessary documentation and mapping for State of CT DEEP permitting requirements.

2) Engineered assessment of coastal dynamic wave forces and storm–induced waves affecting the stability of the coastal shoreline embankments and rates of erosion.

3) Design alternatives for reinforcing eroding shoreline areas and supporting municipal infrastructure, including evaulation of implementing living shoreline features to attenuate wave energy and enhance/restore coastal riparian habitats.


Aerial Survey 2019
1" = 1,000 ft.
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Waterford Flood and Erosion Control Board
Niantic River Road Erosion Report
Approved December 1, 2021

To the Waterford Board of Selectmen and Conservation Commission:

On October 6, 2021, following the public comment of several concerned residents, the Flood and Erosion Control Board conducted a site walk along Niantic River Road in the vicinity of 3rd and 4th Avenues. Our members found the concerns of the residents to be justified as we documented and observed considerable erosion up to and beneath Niantic River Road. Consistent with our charge to document and report flooding and erosion issues, we wanted to advise the Board of Selectmen and the Conservation Commission of our observations and concerns.

Attached, you will find the minutes from the site walk as well as relevant photographs showing the extent of the erosion. There exists, in some sections of this area, erosion barriers. In the areas where erosion barriers are absent, there is significant erosion of the embankment supporting Niantic River Road and evidence of erosion underneath the roadway itself. It appears that a combination of loose, sandy and rocky soil, extreme rainfall events, and recent storms have all created an increasingly hazardous situation for this section of roadway.

We strongly recommend that a professional survey of this area be completed to prevent any risk to the integrity of Niantic River Road. Possible solutions may depend on the significance of the erosion underneath the road, but will likely require the extension of the erosion barriers across this section of the embankment.

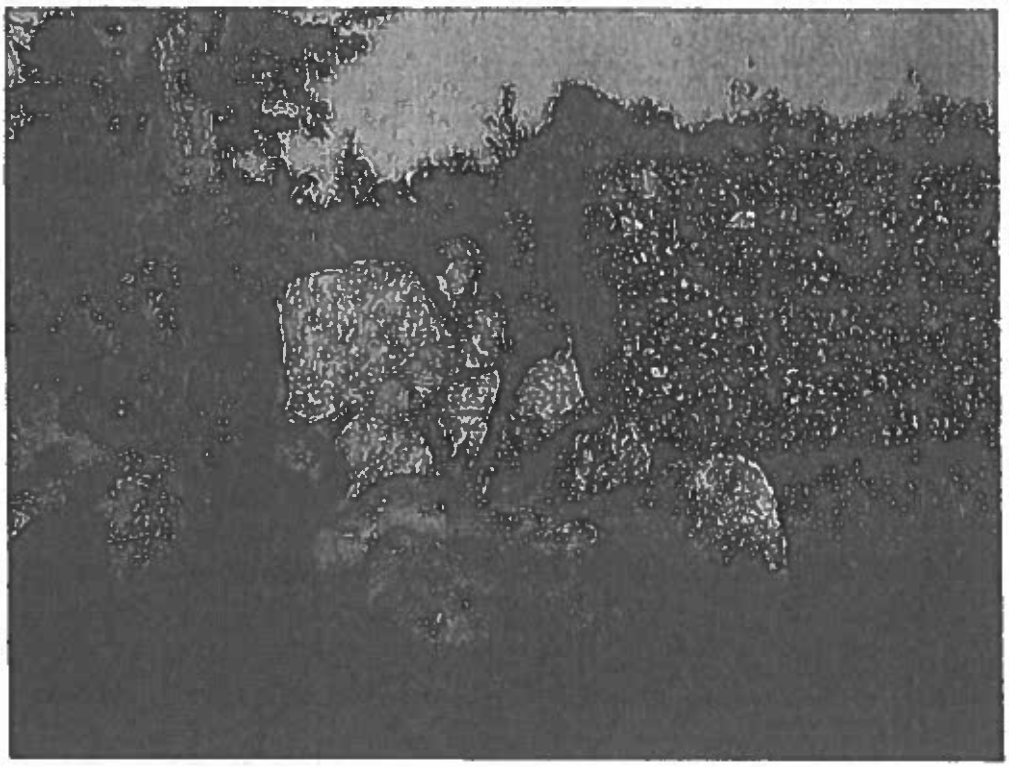
Respectfully submitted on December 1, 2021 by:
Baird Welch-Collins - Chair
Alexander Kuvalanka - Treasurer
Christopher Callahan
George Harran
Jennifer Kohl

Waterford Flood & Erosion Control Board Special Meeting Minutes for October 6, 2021

Members Present: Baird Welch-Collins, George Harran, Alex Kuvalanka, Chris Callahan
Residents Present: Susan Perry Luxton, Charlie Perry, Rich Cirillo, Patricia Couture, Richard Heller, Sandra Ribeiro, Geraldine Kuenkler, Michelle Palmieri, Chad Gentile, Jeannine Kenney, Terry Kenney

1. Special Meeting called to order at 5:30 pm by Baird Welch-Collins.
2. Site Walk Niantic River Road Erosion
   a. FECB members met with residents to view & discuss their concerns regarding sedimentation erosion occurring along Niantic River Road in the vicinity of 3rd & 4th avenues.
   b. The erosion taking place is due in part to the Niantic River eroding the base of the bank below Niantic River Road & at the base of 5 power poles along the road in the vicinity of 3rd & 4th avenues.
   c. The existing erosion control consists of large boulders that were placed along the beach at the base of the bank. The river flows freely in & around the boulders eroding the base of the bank. Vegetation is present on the bank however; it is not of the types that would help to absorb or stabilize any runoff.
   d. Additionally, previous strong storms have produced runoff that flows across the road & flows down the bank causing further erosion of the bases of the 5 power poles and the edge of Niantic River Road.
   e. FECB will contact Town Staff to determine the appropriate action to be taken.
3. Special Meeting adjourned at 6:28 pm.

Respectively submitted by Chris Callahan



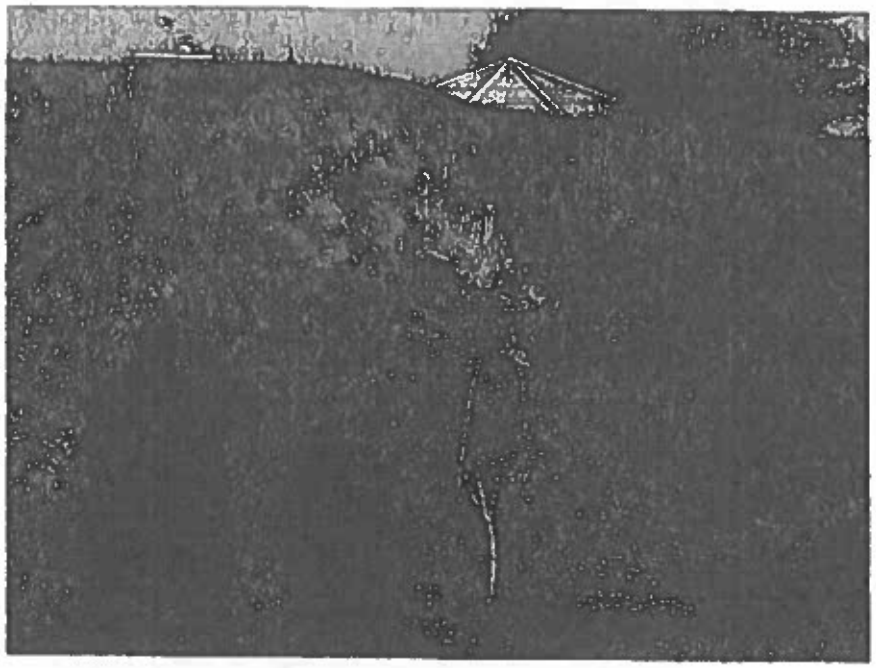
End of the erosion barrier and the beginning of the eroding bank.



Area of key concern where the erosion is nearing the roadway.



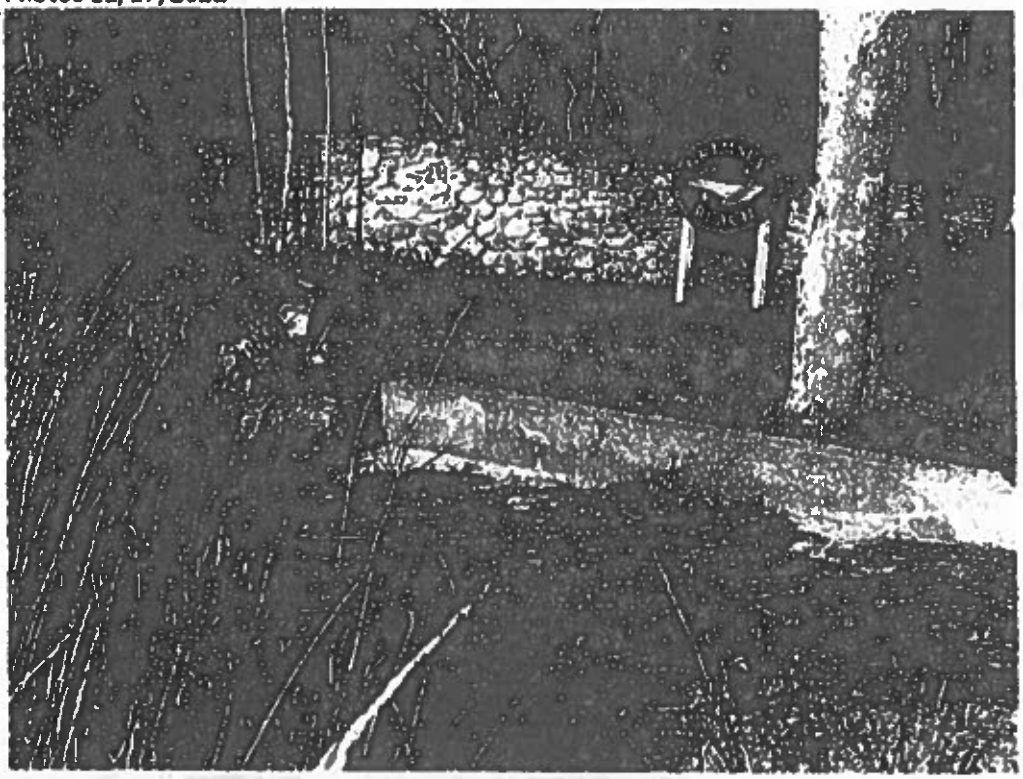
Evidence of erosion underneath the road surface.

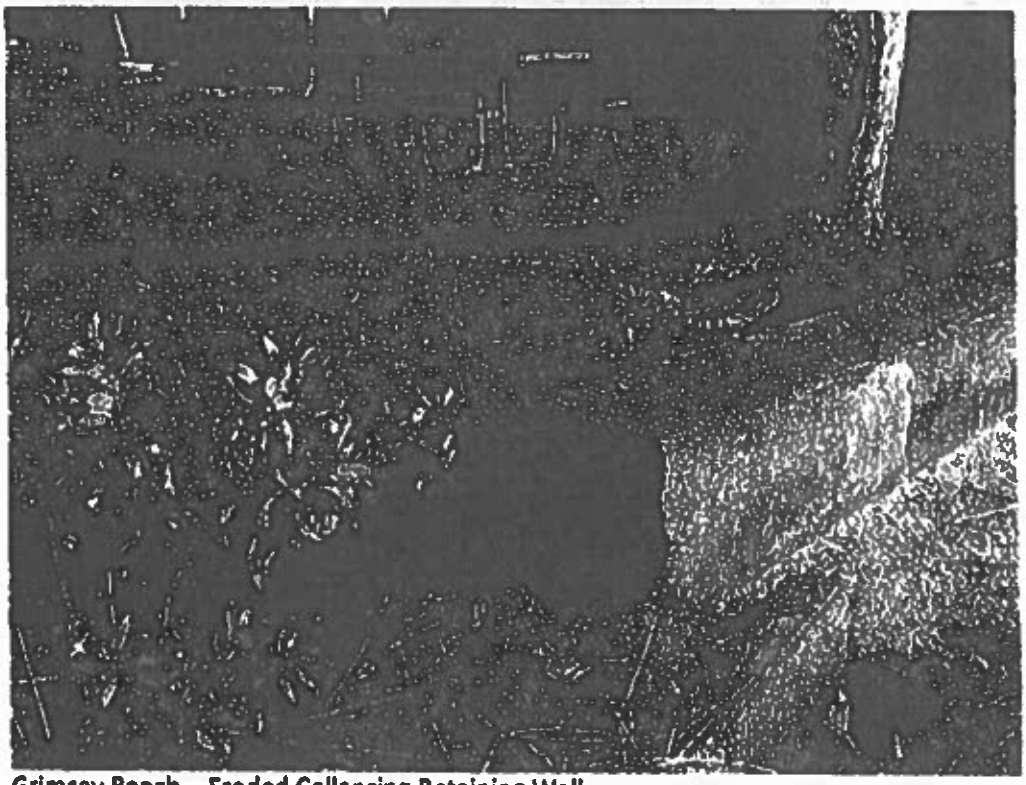


Additional area of concern where the embankment has partially collapsed.


Aerial Survey 201
1" = 1,000 ft.
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S
GRIMSEY BEACH
47 OSWEGATCHIE RD

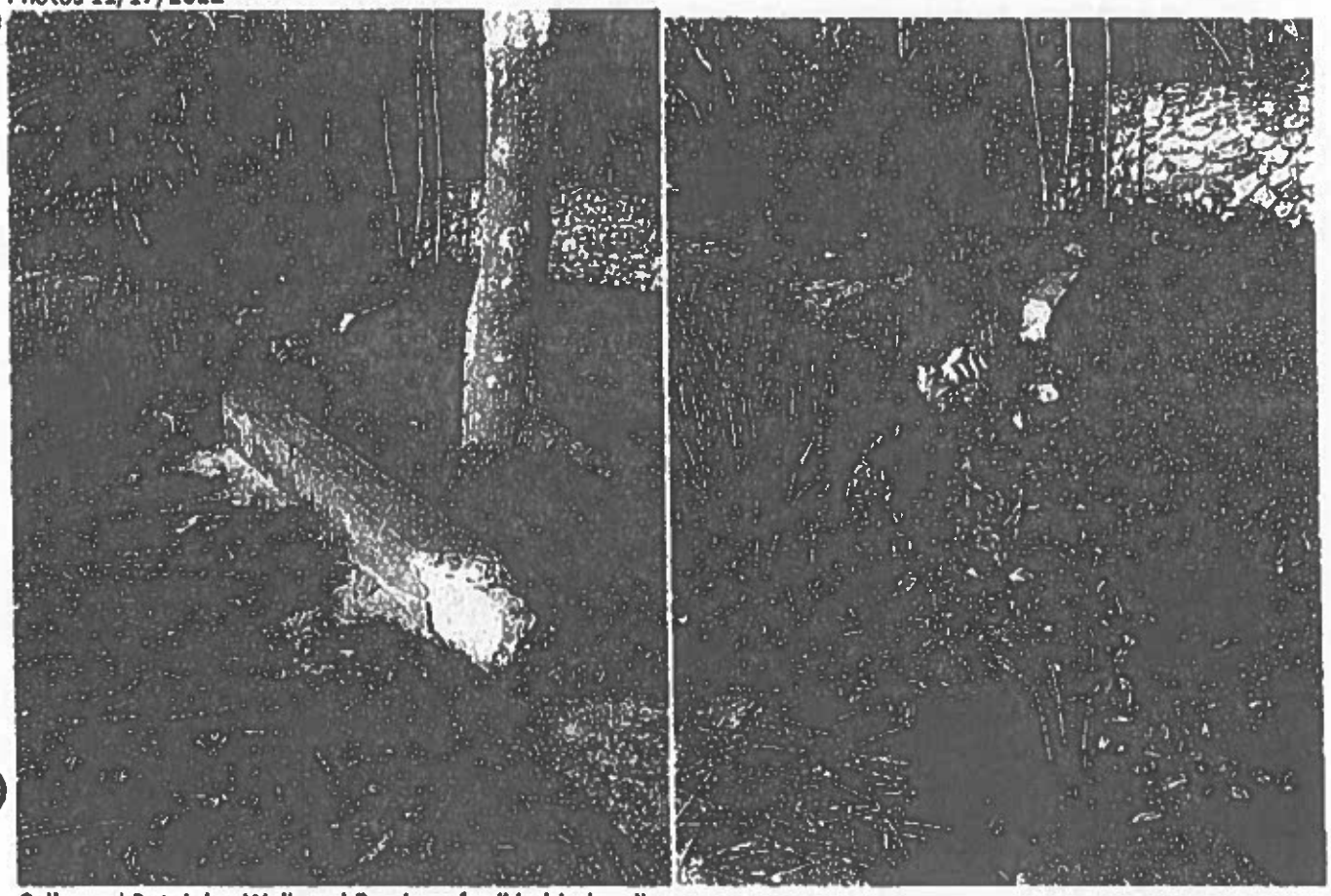
Town of Waterford Property
47 Oswegatchie Road
Photos 11/17/2022





Grimsey Beach – Eroded Collapsing Retaining Wall

Town of Waterford Property
47 Oswegatchie Road
Photos 11/17/2022



Collapsed Retaining Wall, and Erosion of soil behind wall

Town of Waterford Property
47 Oswegatchie Road
Photos 11/17/2022



Erosion of Park Land Encroaching on Access Drive Retaining Wall

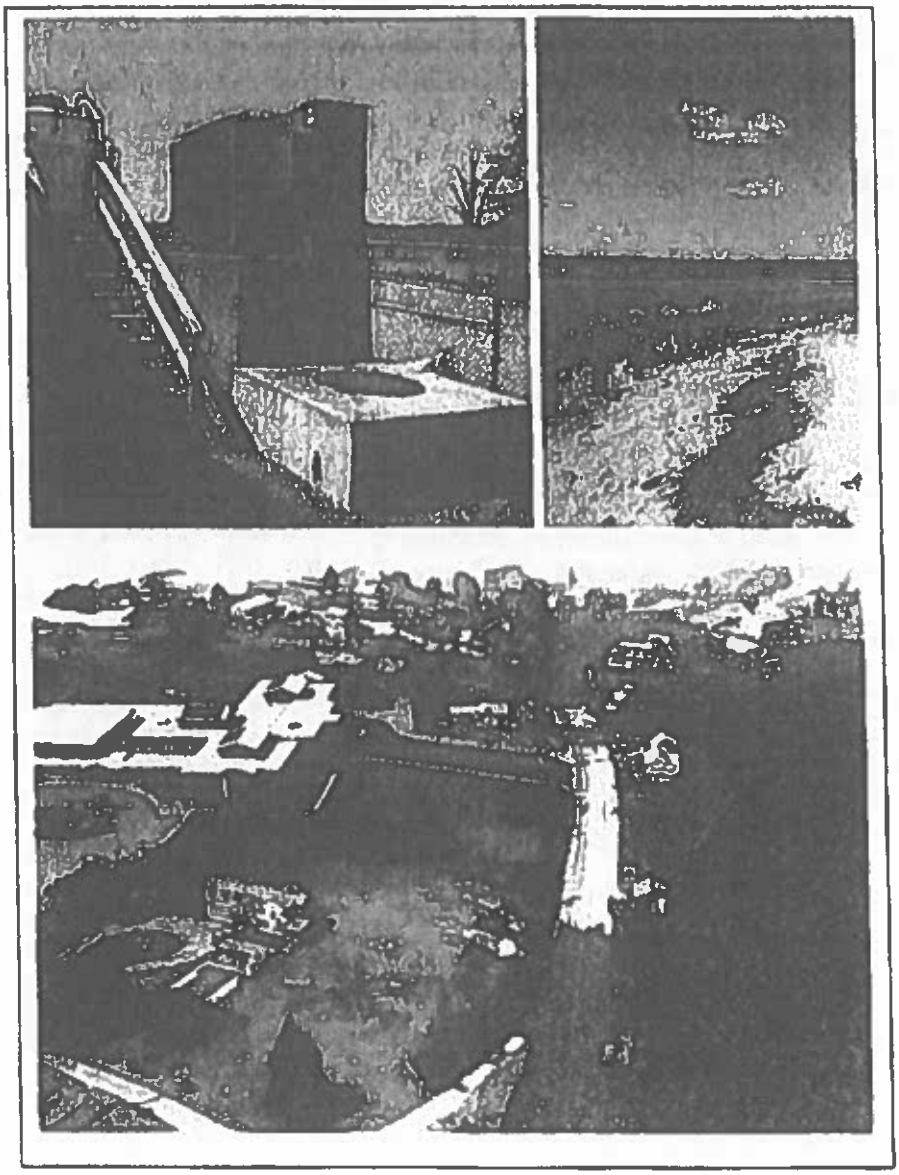


Erosion of Grass Park Land

CDBG-DR 2015

CLIMATE CHANGE RISK VULNERABILITY, RISK ASSESSMENT AND ADAPTATION STUDY

WATERFORD, CONNECTICUT



Prepared For:
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385

Prepared By:
Kleinfelder Northeast, Inc.
215 First Street
Cambridge, MA 02142

November 16, 2017

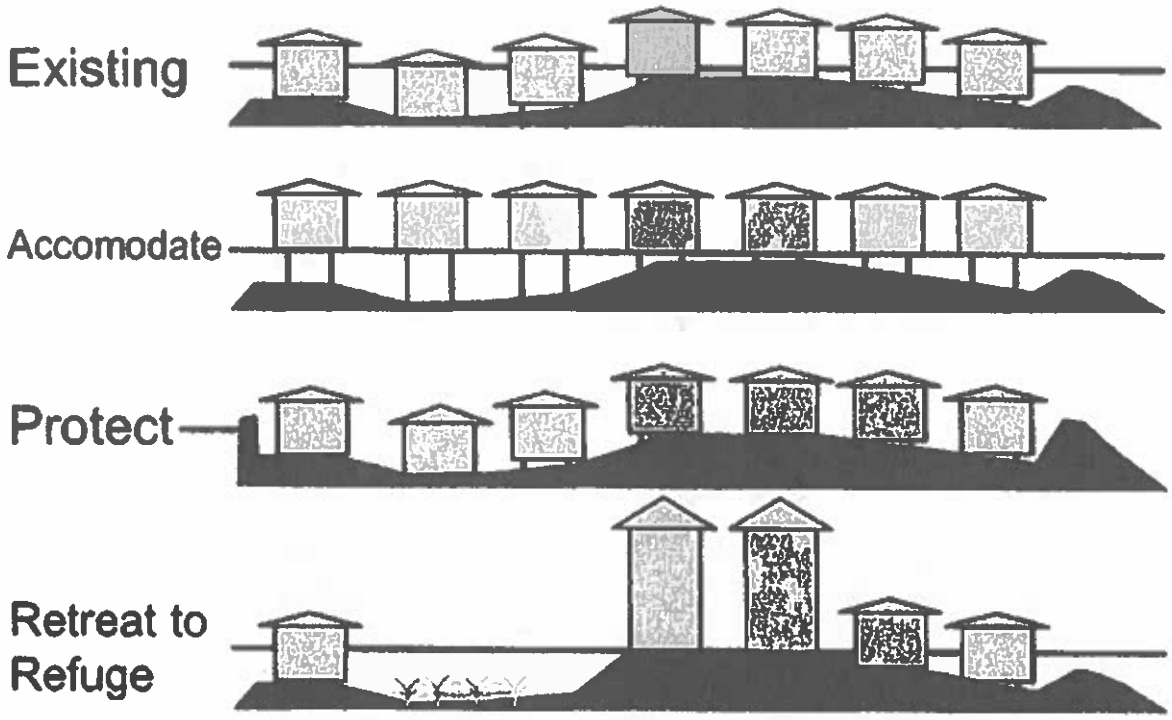


Figure 18 - Conceptual Illustration of Protect, Accommodate and Retreat Strategies Approaches

Protection

Protection strategies try to prevent unsafe conditions and physical damage from occurring by creating a barrier between flood water and vulnerable areas, infrastructure, and buildings. To be truly effective over the longer term, existing protective structures may need to be raised incrementally, in response to sea level rise, and strengthened to withstand the forces of increasingly powerful storms. New structures may also be needed to protect areas that have not historically flooded.

Sea walls, beach dunes, dikes, bulkheads, levees, revetments, flood gates, temporary flood protection barriers, dry floodproofing, and hurricane barriers are all examples of protection strategies that aim to prevent flood water from reaching sensitive areas.

Examples of existing protective structures in Waterford include a seawall and stone revetment along Niantic River Road as shown in Figure 19 and a concrete flood wall and raised electrical panels at the Bolles Court Pump Station as shown in Figure 20.

Accommodation

Accommodation strategies accept that vulnerable areas, infrastructure, and buildings will flood, but aim to minimize and control physical damage and unsafe conditions. Accommodation strategies may include physical, operational, or regulatory measures as shown in Figure 21.

Type of Measure	Examples		
Physical	Construct an artificial floodway to convey flood water away from roadways and homes to a natural area or flood-tolerant green space that can store the water with limited damage.	Raise new and existing structures, for example on stilts or piles, above flood elevations with additional freeboard to provide a safety factor.	Implement wet floodproofing measures such as raising occupied spaces and utilities above flood elevations, building with flood damage resistant materials, or using flood-resilient structural design.
Operational	Improve flood evacuation and emergency planning by updating scenarios and plans, training first responders, or providing education and resources to residents and businesses in high flood risk areas.		
Regulatory	Strengthen building codes and zoning to require or encourage projects in high flood risk areas to implement increased setbacks, physical accommodation measures, onsite flood storage, or protection or enhancement of existing natural systems (e.g., dunes, wetlands).		

Figure 21 - Examples of Accommodation Strategies

Retreat

Retreat strategies recognize the fact that in some areas it may be too costly, technically not feasible, or politically unrealistic to prevent damage from rising sea levels and storm surge, and that the best strategy is to remove vulnerable infrastructure, buildings, or populations from high-risk flood zones. These areas can then be transformed back to more natural states to provide protective, recreational, or other functions that are compatible with occasional or regular flooding. Retreat strategies require significant planning to relocate infrastructure and buildings or re-settle populations in areas outside of high-risk flood zones.

Examples of retreat strategies include property buyouts, relocation of roads and infrastructure, implementation of new zoning or other regulations that limit new construction, reconstruction, or expansion of structures in high-risk flood areas, and policies and programs that steer development towards areas that are safe from flood risks.

Cost Estimating

When appropriate, order-of-magnitude cost estimates were developed for several potential adaptation strategies. These cost estimates are based on engineering judgement and are not based on detailed engineering studies or analyses. As such, these cost estimates are only intended to be used for general planning purposes, and not detailed construction cost budgeting. Before more accurate project budget cost estimates can be made, additional surveying, subsurface exploration, engineering, and permitting must be performed.

Where possible, approximate quantities associated with a potential strategy were estimated, and then appropriate unit costs were assigned to these quantities. The estimates also included mark-ups for general conditions (15%), contractor overhead (5%), contractor profit (5%), design contingency (25%), insurance and bonds (1.5%) and Town of Waterford project costs (20%) for such things as project supervision, consultant fees, and bidding/advertising.

Adaptation Strategy – Niantic River Road

Adaptation Strategy – Reinforce Roadway Embankments- Estimated Range of Construction Costs: $187,000 - $311,000

Much of Niantic River Road is shown to flood for a present day 1% storm event for both coastal (El. 10.03) and riverine (El. 12.0) storms. For the 2070 timeframe, the predicted water elevations for a 1% storm event are El. 13.27 and El. 13.2 for coastal and riverine storms, respectively. The lowest road elevation is El. 3.30 with several other low spots averaging closer to El. 6.0.

Niantic River Road is a relatively long road subject to flooding with numerous homes and driveways directly adjacent to the road. Therefore, raising the road, even to only meet present-day flood levels, is not practically feasible.

It is also not practical to install permanent flood walls or other flood prevention devices because the height would effectively block most water views from the roadway as well as many of the homes. There would also need to be too many openings in the wall required for access to driveways that would be difficult to seal up in advance of a major storm.

Therefore, we do not believe that it is reasonably feasible to prevent flooding of Niantic River Road. Instead we recommend that the embankments of two of the lowest sections of road directly adjacent to the water be reinforced with additional stone revetment or sheet pile cut-off walls to prevent erosion of the road embankment during a major storm. Although the road would be out of service during a major flood, the goal is to return it to service as quickly as possible after the water recedes. If sections of the road collapse, reopening the road would be greatly delayed. The total length of revetment reinforcement is estimated to be 540 feet. The total estimated cost to construct this revetment reinforcement is in the range of $187,000 to $311,000.

Adaptation Strategy – Evacuation

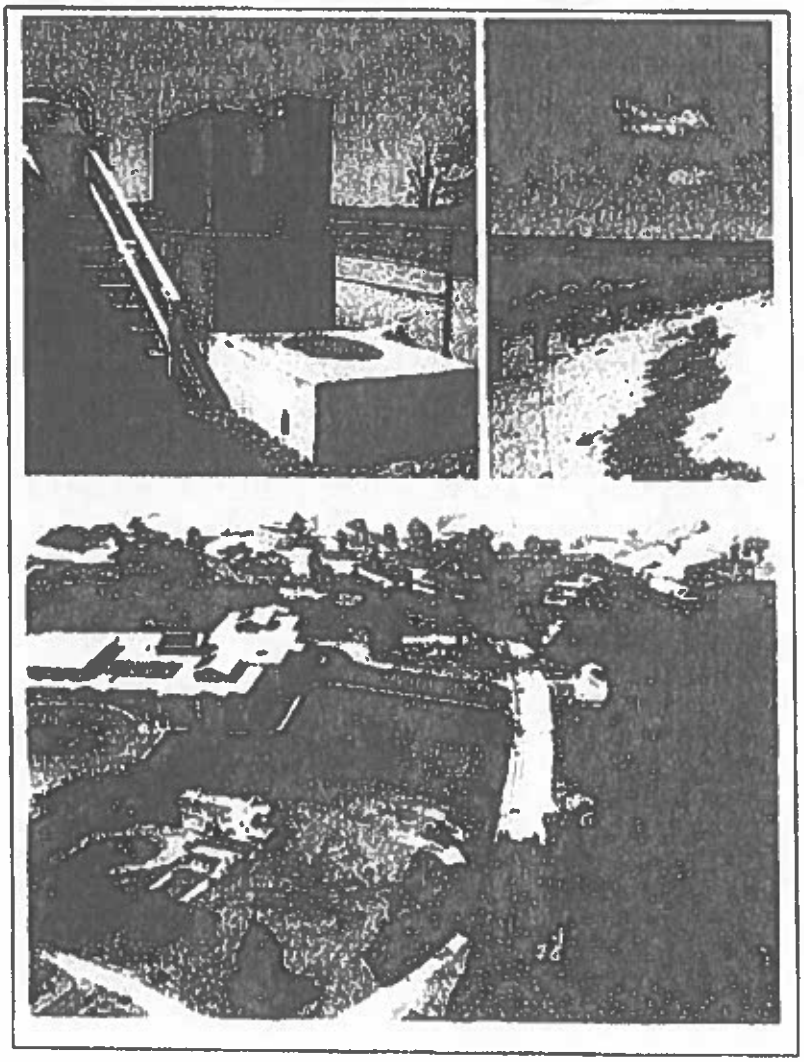
As mentioned above, there are many roads in Waterford that will flood in a major flood event. It would be cost prohibitive to raise all affected roads. Another strategy is for the Town to purchase an amphibious vehicle to assist with evacuations in the event that neighborhoods become isolated due to severe flooding. Figure 32 shows two examples of such vehicles. One is similar to the "Duck Boat Tour" boats in Boston. These amphibious vehicles can drive on roads, but when the roads are flooded they can drive into the water and turn into boats. They seat about 20 people, which would make them an excellent rescue vehicle. Another option is a large-wheeled ex-military type vehicle.

The cost to purchase these type of vehicles is difficult to predict. A good source of amphibious vehicles is from surplus military equipment, which is often auctioned off through the Department of Homeland Security or made available to Public Safety Departments under various grants. A budgetary estimate would be in the range of $75,000 to $100,000. In addition, to the capital purchase cost, the cost of annual maintenance and storage should be factored in.

CDBG-DR 2015

CLIMATE CHANGE RISK VULNERABILITY, RISK ASSESSMENT AND ADAPTATION STUDY

WATERFORD, CONNECTICUT



Prepared For:
Town of Waterford
15 Rope Ferry Road
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Prepared By:
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215 First Street
Cambridge, MA 02142

November 16, 2017

E. ADAPTATION STRATEGIES - BUILDINGS/FACILITIES

Base Flood Elevations

Flood maps produced for this project depict potential water surface elevations at various time frames for a 1% (100 year) probability event. These are known as the Base Flood Elevations (BFE). This means that there is a 1% chance in the given year that there will be a storm that generates flood elevations exceeding the elevations shown in the table. The currently approved FEMA Flood Insurance Rate Maps define the current legally-binding BFEs for the Town of Waterford. Table 4 below depicts potential future BFEs, taking into account the effects of future sea level rise and storm surge and higher precipitation levels. In most cases, the BFEs shown in Table 4 are higher than the current FEMA BFEs.

Table 4 - Potential Future Base Flood Elevations (BFEs) for 1% (100-Year) Probability Flood

Facility	Critical Elevation	Coastal			Riverine		
		Present	2030	2070	Present	2030	2070
Mago Point Pump Station	6.91		10.58	13.27		13.39	14.3
Niantic River Pump Station	10.40	10.03	10.58	13.27		12.36	13.20
Oil Mill Pump Station	10.63	10.03	10.58	13.27		12.36	13.20
Jordan Park House Building 13	15.00	9.11	9.66	12.35		15.45	16.50
Jordan Park House Building 15	14.00	9.11	9.66	12.35		15.45	16.50
Bolles Court Pump Station	10.07	9.87	10.42	13.11	10.00	10.30	11.00
Quaker Hill Pump Station	10.30	9.87	10.42	13.11	10.00	10.30	11.00
Shore Drive Pump Station	9.66	8.89	9.53	12.22	No	No	No
Seaside Drive Pump Station	10.28	8.89	9.53	12.22	No	No	No
Gardiners Wood Pump Station	10.70	8.89	9.53	12.22	No	No	No
Stony Brook Pump Station	13.10	10.03	10.58	13.27	12.00	12.36	13.2
Colonial Drive Pump Station	11.86	8.89	9.53	12.22	No	No	No
East Neck Pump Station	12.78	8.80	9.53	12.22	No	No	No
Dock Road Pump Station	12.70	8.89	9.53	12.22	No	No	No
Harrison's Landing Pump Sta.	15.70	9.87	10.42	13.11	11.00	11.33	12.10
Jordan Park House Building 14	16.00	9.11	9.66	12.35	15.00	15.45	16.50
Public Works Facility	122.39	No	No	No	117.00	120.51	126.7
Quaker Hill Fire Station	14.40	9.87	10.42	13.11	No	No	No

Colors indicate the time horizon of vulnerability: = Present = 2030 = 2070

Design Flood Elevations

When designing adaption measures to protect against the effects of long-term flooding, a Design Flood Elevation (DFE) needs to be established to determine the height of flood protection required to protect the asset.

DFEs for pump stations will be determined based on the design guide specific to the design of wastewater treatment works in New England: *Technical Report-16, "Guides for the Design of Wastewater Treatment Works"* from the New England Interstate Water Pollution Control Commission (NEIWPCC). In this document, under the section *Protection of New and Existing Equipment*, it states: *Apply the standard of a 1% annual chance of flood elevation (100-year flood elevation) plus 2 feet for non-critical equipment and plus 3 feet for critical equipment.* As most equipment inside a pump station, such as electric switches and panels, pump motors and

emergency generators, is considered critical equipment, the DFE for pump stations will be defined as the BFE plus 3 feet.

DFEs for other vulnerable buildings will be determined using the American Society of Civil Engineers publication ASCE 24-14 "Flood Resistant Design and Construction". Table 6-1 in ASCE 24-14 defines DFE's depending on the Flood Design Class of the Facility. For Fire Stations, the Flood Design Class is Class 4, with an additional freeboard of 2 ft. For other buildings, the Flood Design Class is Class 2, with an additional freeboard of 1 ft.

DFEs for the impacted buildings and facilities in Waterford are shown in Table 5 below. For example, to be more resilient by 2070, the Quaker Hill Pump Station should be protected to an elevation of 16.11, which is the higher of the coastal and riverine flood DFEs

Table 5 - Proposed Design Flood Elevations (DFEs) for 1% (100-Year) Probability Flood

Facility	Critical Elevation	Coastal			Riverine		
		Present	2030	2070	Present	2030	2070
Bolles Court Pump Station	10.07		13.42	16.11	13.00	13.30	14.00
Quaker Hill Pump Station	10.30		13.42	16.11	13.00	13.30	14.00
Jordan Park House Building 13	15.00	10.11	10.66	13.35		16.45	17.50
Jordan Park House Building 14	16.00	10.11	10.66	13.35	16.00	16.45	17.50
Jordan Park House Building 15	14.00	10.11	10.66	13.35		16.45	17.50
Shore Drive Pump Station	9.66		12.53	15.22	N/A	N/A	N/A
East Neck Pump Station	12.78	11.89	12.53	15.22	N/A	N/A	N/A
Colonial Drive Pump Station	11.86		12.53	15.22	N/A	N/A	N/A
Gardiners Wood Pump Station	10.70		12.53	15.22	N/A	N/A	N/A
Dock Road Pump Station	12.70	11.89	12.53	15.22	N/A	N/A	N/A
Seaside Drive Pump Station	10.28		12.53	15.22	N/A	N/A	N/A
Mago Point Pump Station	6.91		13.58	16.27		16.39	17.30
Oil Mill Pump Station	10.63		13.58	16.27		15.36	16.20
Stony Brook Pump Station	13.10	13.03	13.58	16.27		15.36	16.20
Niantic River Pump Station	10.40		13.58	16.27		16.36	16.20
Public Works Facility	122.39	N/A	N/A	N/A	118.00	121.5	129.7
Harrison's Landing Pump Sta	15.70	12.87	13.42	16.11	14.00	14.33	15.10
Quaker Hill Fire Station	14.40	11.87	12.42	15.11	N/A	N/A	N/A

Colors indicate the time horizon of vulnerability: = Present = 2030 = 2070

Pump Stations: DFE = BFE + 3 ft.
Fire Stations: DFE = BFE + 2 ft
Other Buildings DFE = BFE + 1 ft

Impacted Wastewater Pump Stations

The proposed Design Flood Elevations exceed the critical elevations at a total of 13 wastewater pump stations at various time frames, which would cause flooding of the pump stations. If flooding were to occur, the likely result would be damage to electrical equipment, pump motors and emergency generators that could potentially keep the pump stations out of service for an extended period of time while repairs are made. This would require the Town to provide emergency pumping. Even if the pump stations could be cleaned and re-started quickly, there would likely be long-term corrosion effects that would greatly reduce the service life of the facilities. Therefore,

Table 6 – Adaptation Recommendations for Building and Facilities (Continued)

BUILDING OR FACILITY	DFE YEAR	ADAPTATION RECOMMENDATIONS	ESTIMATED CONSTRUCTION COST
PUBLIC WORKS FACILITY	El. 129.7 2070	**Adaptation Strategy No. 1 – Temporary Flood Barrier to El. 129.70** This strategy provides long-term protection to the Public Works Facility to Elevation 129.70 using a lower cost temporary flood barrier system. This elevation is the projected DFE in 2070. Protecting to this elevation prevents flooding of the facility, although the surrounding roads may be flooded. Specific recommendations include the following: • Purchase, store and have ready for deployment during a flood event 400 ft. of 6 ft. high temporary flood barrier along east and south sides • Install a sump pump system to drain the space between the wall and the building from rain water and flood water that may seep under the wall. The sump pump should discharge over the wall.	$200,000
	El. 129.7 2070	**Adaptation Strategy No. 2 – Permanent Flood Wall to El. 129.70** This strategy provides long-term protection to the Public Works Facility to Elevation 129.70 using a more expensive, but permanent flood wall system. This elevation is the projected DFE in 2070. Protecting to this elevation prevents flooding of the facility, although the surrounding roads may be flooded. Specific recommendations include the following: • Construct 400 ft. of 6 ft. high permanent flood wall along east and south sides of building with a passive vehicle barrier at the roadway entrance) • Install a sump pump system to drain the space between the wall and the building from rain water and flood water that may seep under the wall. The sump pump should discharge over the wall.	$1,200,000
	El. 129.7 2070	**Adaptation Strategy No. 3 – Replace Building with Flood-Resistant Building** This strategy provides long-term protection to the Public Works Facility to Elevation 129.70 with the most expensive solution, replacing the building. This elevation is the projected DFE in 2070. Protecting to this elevation prevents flooding of the facility, although the surrounding roads may be flooded. Specific recommendations include the following: • Replace the building with a new flood-proof building with the lowest floor above El 129.70.	$11,814,000
QUAKER HILL FIRE STATION	El. 15.11 2070	**Adaptation Strategy No. 1 – Floodproof to El. 15.11** This strategy provides long-term protection to the Quaker Hill Fire Station to Elevation 15.11. This elevation is the projected DFE in 2070. Protecting to this elevation will prevent flooding of the lower level of the station, which houses the kitchen, and some HVAC, communications and electrical systems. Implementing these recommendations will allow the station to function during a flood event, although many roads near the station may be flooded. Specific recommendations include the following. • Furnish and store a temporary 4 ft. high panelized flood barrier system that can be deployed before a major flood along the lower (northeast) side of the station and attached to the building at both ends. The total length of barrier is approximately 50 ft. • Regrade the small concrete block retaining wall at the northeast corner of the station and construct a concrete pad to receive the flood barrier to allow it to be attached to the building. • Seal miscellaneous electrical conduits and penetrations below El. 15.11 that would allow water to enter the building.	$72,000

F. ADAPTATION STRATEGIES - ROADWAYS

Many roads in Waterford are wholly or partially vulnerable to coastal and/or riverine flooding in the present, 2030 and 2070 timeframes. Roadway flooding has a number of potential consequences. The most common impact is a temporary disruption to economic activity and access to public services. At a minimum, flooded roadways can be closed for short periods after a flood to allow for debris removal and cleanup. At worse, flooded roads can be closed for extensive periods of time for extensive repairs to washed-out embankments, damaged pavements, damaged or exposed utilities, and damaged signage and safety equipment. The most significant impacts affect life safety. For example, the most common cause of flood-related drowning deaths is from people driving through moving or standing water on roadways. Another danger is that emergency services will be unable to respond to medical emergencies and fires in areas isolated by flooding.

Roadway flooding risks can be mitigated by a variety of physical strategies, including:

- Raising roadways or bridges above projected flood levels.
- Relocating roadways to routes over higher ground.
- Creating new emergency access routes to serve areas potentially cut off from flooding.
- Enlarging culverts to reduce flooding from flow restrictions (riverine only).
- Creating or enlarging stormwater pump stations (riverine only).
- Enlarging natural flood storage areas and diverting flows to these areas (riverine only).
- Adding bio-swales and other green infrastructure on roadsides to slow and store rainfall runoff and to improve runoff quality (riverine only).
- Adding structural protection to prevent erosion and roadway undermining.

These physical strategies are often challenging to implement. Raising or relocating roads by any substantial amount typically requires property takings and might result in impacts to adjacent wetlands. Increasing flood storage or flow through culverts can increase flooding upstream or downstream from the improvements. As such, these types of projects require technical study, stakeholder and community engagement, extensive permitting and significant capital resources.

The Town and the State of Connecticut have implemented many projects over the years to address roadway flooding risks, including replacing and enlarging culverts, elevating bridges, reinforcing roadway embankments, removing debris from culverts and drains, and improving roadway drainage systems.

Preventing all roads in Waterford from flooding is not realistically feasible due to the number of vulnerable roads, the extremely high capital cost to raise or otherwise protect roads, and the numerous physical constraints to changing roadway alignments. The following operational strategies can be applied in many situations to help mitigate life safety impacts:

- Implement road closures in advance of flooding.
- Install permanent warning signs at road segments prone to flooding.
- Educate drivers of the dangers of driving through flooded roads.
- Issue early evacuation orders to areas typically isolated by flooding.
- Pre-stage emergency response assets in flood-isolated areas.
- Obtain emergency equipment, such as boats and high water vehicles, to be able to provide emergency access to flood-isolated areas.

Figure 28 shows a network of evacuation and emergency access routes in Waterford that should be strengthened to improve the Town's resilience to flooding. It also identifies some possible adaptation strategies to improve the accessibility of certain areas that could otherwise become isolated during flooding events.

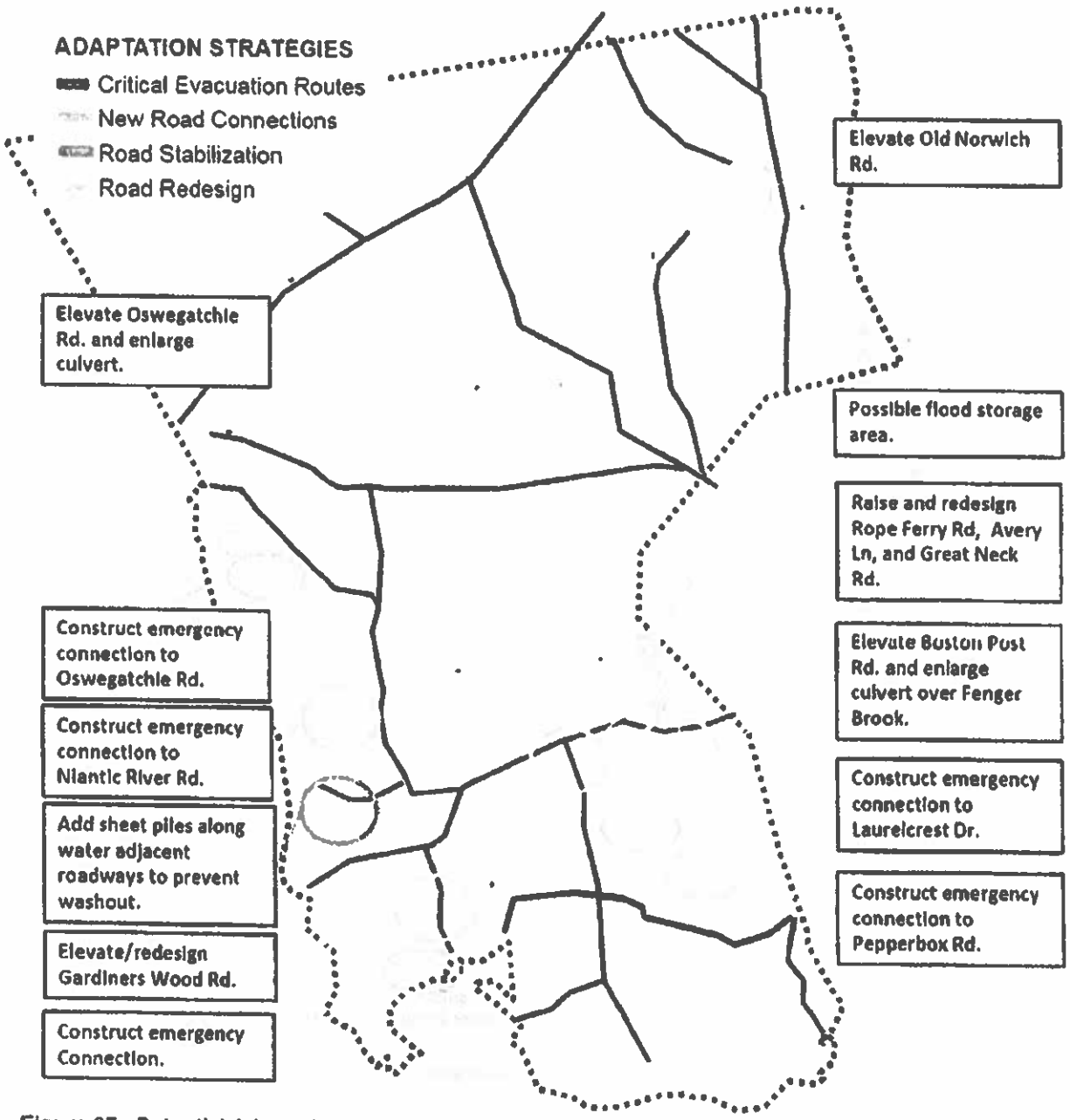


Figure 27 - Potential Adaptation Strategies to Strengthen Evacuation and Emergency Access Routes

Below are discussions on several adaptation strategies for several specific roads.

Adaptation Strategies – Gardiners Wood Road

The southern end of Gardiners Wood Road, at its intersection with Millstone Road East, is subject to coastal flooding in the present, 2030 and 2070 time frames.

The low-point elevation at Gardiners Wood Road near the railroad tracks is approximately El. 6.8. The projected coastal flood levels are El. 8.89 in the present, El. 9.53 in 2030 and El. 12.22 in 2070. Raising the road at the low point by 2.73 feet to be above the 2030 flood or 5.42 feet to be above the 2070 flood is not realistic because it would require raising the tracks to meet current required bridge under-clearances. Raising this section of high-speed track would require raising thousands of feet of embankment and track to meet track vertical curve requirements. Therefore, raising the road at the southern end intersection with the railroad is not considered to be a feasible option.

The road also floods regularly from overwash caused by heavy precipitation running along Gardiners Wood Road from Rope Ferry Road. There is a relatively large drainage catchment area that drains along the road and eventually discharges under Jordan Cove Road into Long Island Sound. There are three culverts that the drainage must pass through, and it appears that these culverts might be undersized, which causes the water to back-up and flood onto the roadway. Performing a drainage study or culvert analyses to verify their capacity was not part of the scope of this project.

Adaptation Strategy No. 1 - Drainage Improvements on Gardiners Wood Road – Estimated Range of Construction Costs: $1,797,000 - $2,994,000

Adaptation Strategy No. 1, as illustrated in Figure 28 below, will help address flooding related to heavy precipitation with drainage improvements along the southern end of Gardiners Wood Road. It does not address coastal flooding issues, which would still flood the lower roadway area during a major storm surge event. Implementing this adaptation strategy will help to eliminate nuisance flooding that causes cumulative damage to the road and impacts emergency services to the neighborhood. Recommendations for this strategy include the following:

- Perform a detailed drainage and hydraulic study of the roadway corridor to project drainage flows along Gardiners Wood Road in the present, 2030 and 2070 time frames. Verify the capacities of the three existing culverts.
- Raise the middle and northern parts of Gardiners Wood Road to fill in a low point in the vicinity to the entrance of the baseball fields at the south end of the road. The length of road to be raised is approximately 450 feet. The low point at about El 7.3 would be raised to about El. 10.5.
- Build a "constructed stormwater wetland" on the west side of Gardiners Wood Road just upstream of the 42-inch culvert that crosses Gardiners Wood Road. Provide a sediment forebay to remove sediment at the north end of the stormwater wetland to help reduce stormwater velocity and to remove sediment. The constructed wetland would act as a storage basin to attenuate the flow of stormwater and improve the water quality of the discharge into Long Island Sound. By raising the road in this area by up to 3 feet would substantially more storage volume for roadway runoff.
- Replace the existing 42-inch culvert under Gardiners Wood Road and the culvert under the railroad tracks with larger, higher capacity culverts. This will help to reduce overwash on the road when the existing culverts do not have sufficient capacity and geometry to pass through the required stormwater volume and velocity.

- Replace the Jordan Cove culvert with a larger culvert, if the drainage analysis indicates that the culvert is undersized in 2070. The cost estimate assumes replacement.
- Construct a large sediment forebay between the northernmost culvert under Gardiners Wood Road and the railroad track. This will help remove sediment from the flow prior to discharging into Long Island Sound.
- Clean all existing drainage pathways of accumulated sediment and debris that reduces the capacity of the drainage system.

It should be noted that during a major coastal flood event, water will overtop Jordan Brook Road and flood Gardiners Wood Road under the railroad bridge. In this case, the road will be impassable under the bridge. If the road is raised as proposed, coastal flooding would not affect the road north of the railroad, until it reached approximately El. 10.1. Flood barriers and tide gates could be installed to prevent coastal flooding beyond the railroad tracks, but the road south of the tracks would still be impassable, so these measures are not warranted for this strategy. The duration of coastal flooding is dependent on the storm duration and tide cycles, but in general would not be expected to be longer than 12 hours, assuming a storm lasts through two tide cycles. This area can be expected to drain relatively quickly due to its proximity to the coast.

Adaptation Strategy No. 2 – Flood Wall's on Gardiner Wood Road, Millstone Road East and Jordan Cove Road – Estimated Range of Construction Costs: $877,000 - $1,462,000

This adaptation strategy, as illustrated in Figure 29, would address coastal flooding issues. Although this strategy could be implemented as a stand-alone strategy, we recommend that it be implemented together with Strategy No. 1, which addresses flooding issues due to heavy precipitation that could occur independent of coastal flooding. The costs shown are in addition to the costs identified in Strategy No. 1. Under this concept, Gardiners Wood Road and Millstone Road East could remain open during a coastal flood up to an elevation 12.22, which would provide emergency access to the neighborhood. Access to Jordan Cove Road, however, would be closed during the flood. This would address coastal flooding concerns through 2070. This concept includes the following:

- Construct concrete floodwalls with a top-of wall elevation of El. 12.22. Building to El. 12.22 would result in a wall with a maximum height of about 4.92 feet in front of the house at 305 Millstone Road East. The wall would need to have openings at two house driveways, across Jordan Cove Road, and across Windward Way. These openings would need to be closed with a temporary barrier just prior to a major flood. The total length of floodwall (varying height) would be approximately 360 feet.
- Install a tide gate at the downstream end of the culvert under the railroad tracks to prevent coastal flood water from flooding Gardiners Wood Road through the culvert system. It should be noted that the tide gate will keep coastal flood waters out, but it will also prevent roadway drainage from precipitation from discharging to Long Island Sound. Assuming a major rain event is occurring simultaneously with a major coastal flood, there would be some drainage overflow onto the roadway. The exact quantities and expected depths of flooding would have to be determined as part of the drainage and hydraulic analysis for the project.
- Install a pre-packaged duplex pump system at the low point of the intersection of Millstone Road and Gardiners Wood Road to pump out any accumulation of drainage on the roadway. In lieu of a permanent fixed pump, a portable gas-fired pump could also be used.

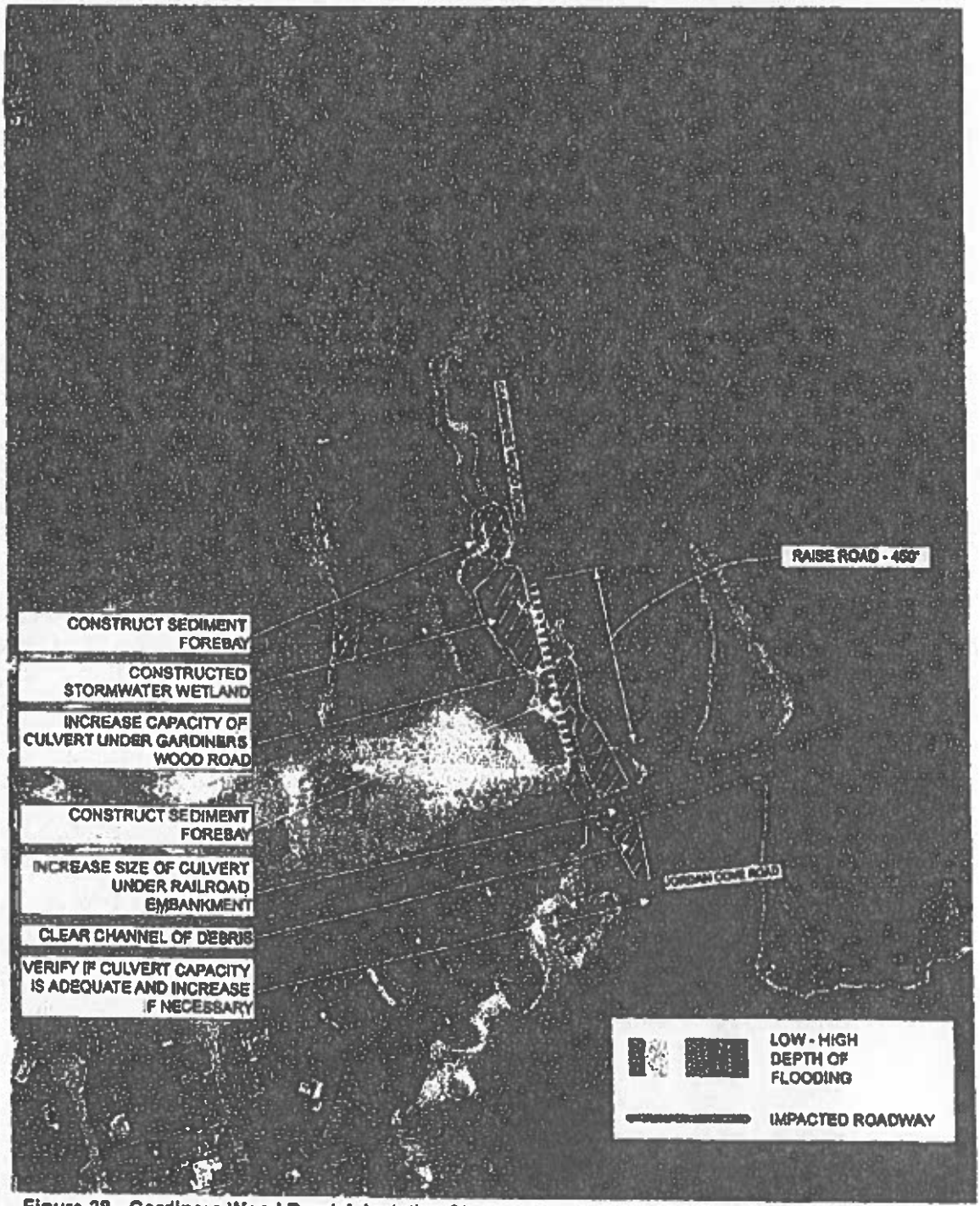


Figure 28 - Gardiners Wood Road Adaptation Strategy No. 1 - 2070, 100-Year Coastal Flood Scenario

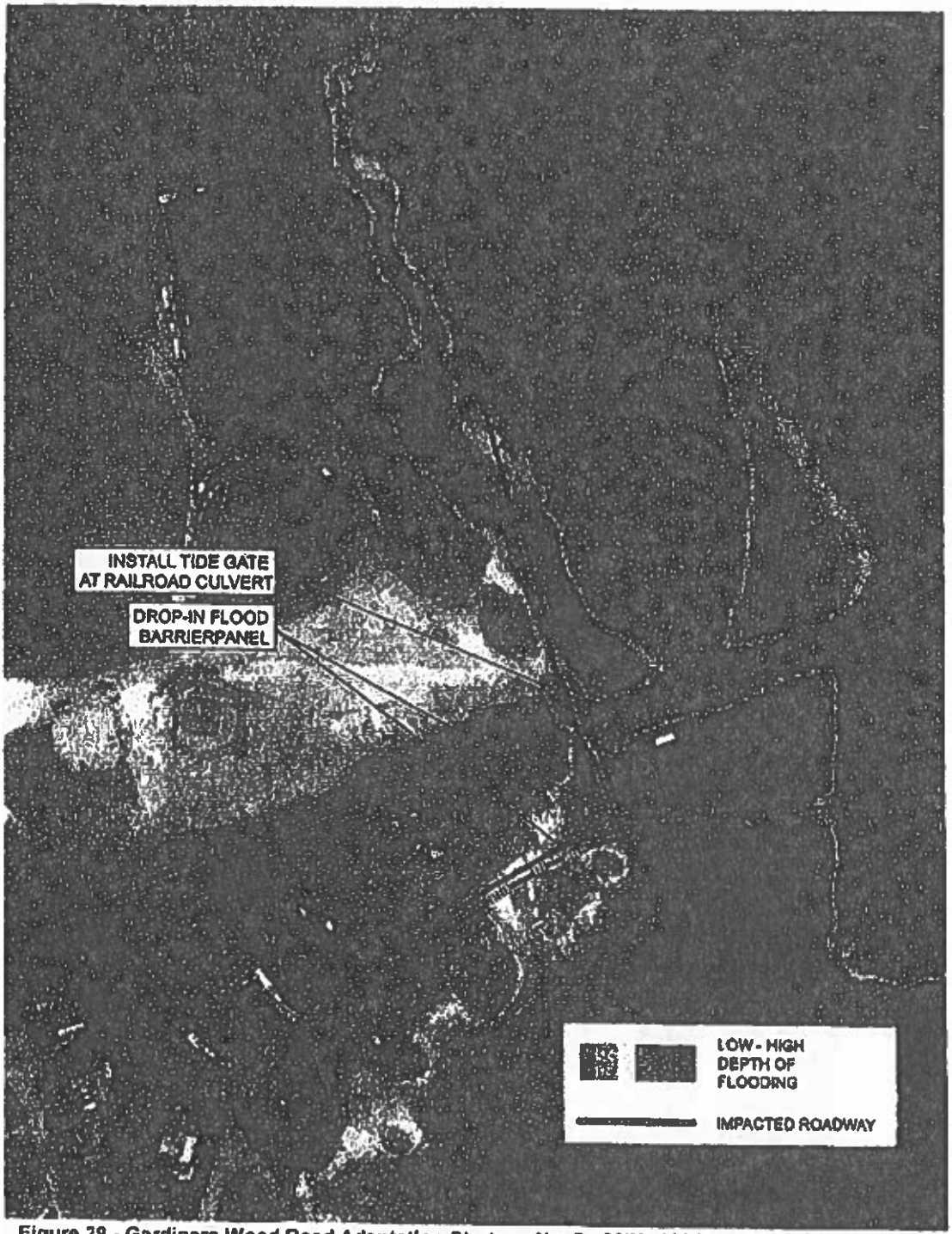


Figure 29 - Gardiners Wood Road Adaptation Strategy No. 2 - 2070, 100-Year Coastal Flood Scenario

Adaptation Strategies – Oswegatchie Road

As illustrated in Figure 30, there are two sections of Oswegatchie Road that are vulnerable to flooding. One is on the Niantic River near Point Comfort Road. The low point in the road is approximately El. 7.50 feet and the length that can flood is about 130 feet long. The other section of road is along the north end of Keeney Cove, near the intersection with Niantic River Road. This section of road is about 300 feet long and varies in elevation between El. 4.8 to about El. 5.8. For the 2030 timeframe, the predicted water elevations for a 1% (100 year) storm are El. 10.58 and El. 12.36 for coastal and riverine storms, respectively. For the 2070 timeframe, the predicted water elevations for a 1% (100 year) storm event are El. 13.27 and El. 13.2 for coastal and riverine storms, respectively.

If both ends of Oswegatchie Road are flooded, there is a relatively large neighborhood that would not have vehicular access into or out of the neighborhood during a flood. In addition, a major flood could cause major damage to the roadway infrastructure and associated utilities, which could be costly to repair and keep the road out of service for several weeks. This would be a public safety issue as well as a major inconvenience to citizens living in this area of town.

Adaptation Strategy No. 1 – Raise Oswegatchie Road near Point Comfort Road - Estimated Range of Construction Costs: $516,000 - $860,000

The best way to adapt to future flooding and to maintain emergency access to the adjacent neighborhood is to raise Oswegatchie Road just south of Point Comfort Road. We estimate that this road can be raised over a distance of about 500 feet to a minimum elevation near El. 13. Several driveways would need to be adjusted, but it appears that there is room to do so. This would provide long-term flood protection for a 100-year storm in 2070. This is the recommended approach to maintain at least one means of egress into the neighborhood.

Adaptation Strategy No. 2 – Reinforce Roadway Embankments- Estimated Range of Construction Costs: $118,000 - $196,000

If Oswegatchie Road is raised per Adaptation Strategy No. 1, it is not necessary to raise the section of road along Keeney Cove, as the adjacent neighborhood would have at least one means of emergency access. However, the road along Keeny Cove could be susceptible to erosion and possible collapse during an extreme coastal or riverine flood in the present, 2030 or 2070 timeframes. Therefore, to minimize the potential for roadway damage, this strategy reinforces the roadway embankments for about 300 feet of roadway directly adjacent to Keeny Cove with additional stone revetment or sheet pile cut-off walls to prevent erosion of the road embankment during a major storm. Although the road would be out of service during a major flood, the goal is to return it to service as quickly as possible after the water recedes. If sections of the road collapse, reopening the road would be greatly delayed. The total length of revetment reinforcement is estimated to be 300 feet.

Adaptation Strategy No. 3 – Construct New Emergency Road- Estimated Range of Construction Costs: $175,000 - $290,000

This strategy allows both ends of Oswegatchie Road to flood, but constructs a new emergency access road from Raymond Lane to Pamela Way to allow emergency services to access the otherwise isolated neighborhood. The general area of the potential emergency road is shown in Figure 30. There are also other possible starting and ending points for a small new emergency access road. This emergency road does not necessarily need to be a paved access road for daily use, but rather it can be a "Geo-Grid" cellular, interlocking HDPE paving grid for reinforcing grass, creating a surface that

can be driven on. This road would normally be closed to vehicular traffic, but would be opened in advance of a major flood event. This strategy helps to provide emergency access to the neighborhood, but could result in potential damage to Oswegatchie Road, which could be costly to repair and keep the road out of service for several weeks, causing a major inconvenience to citizens living in this section of town.

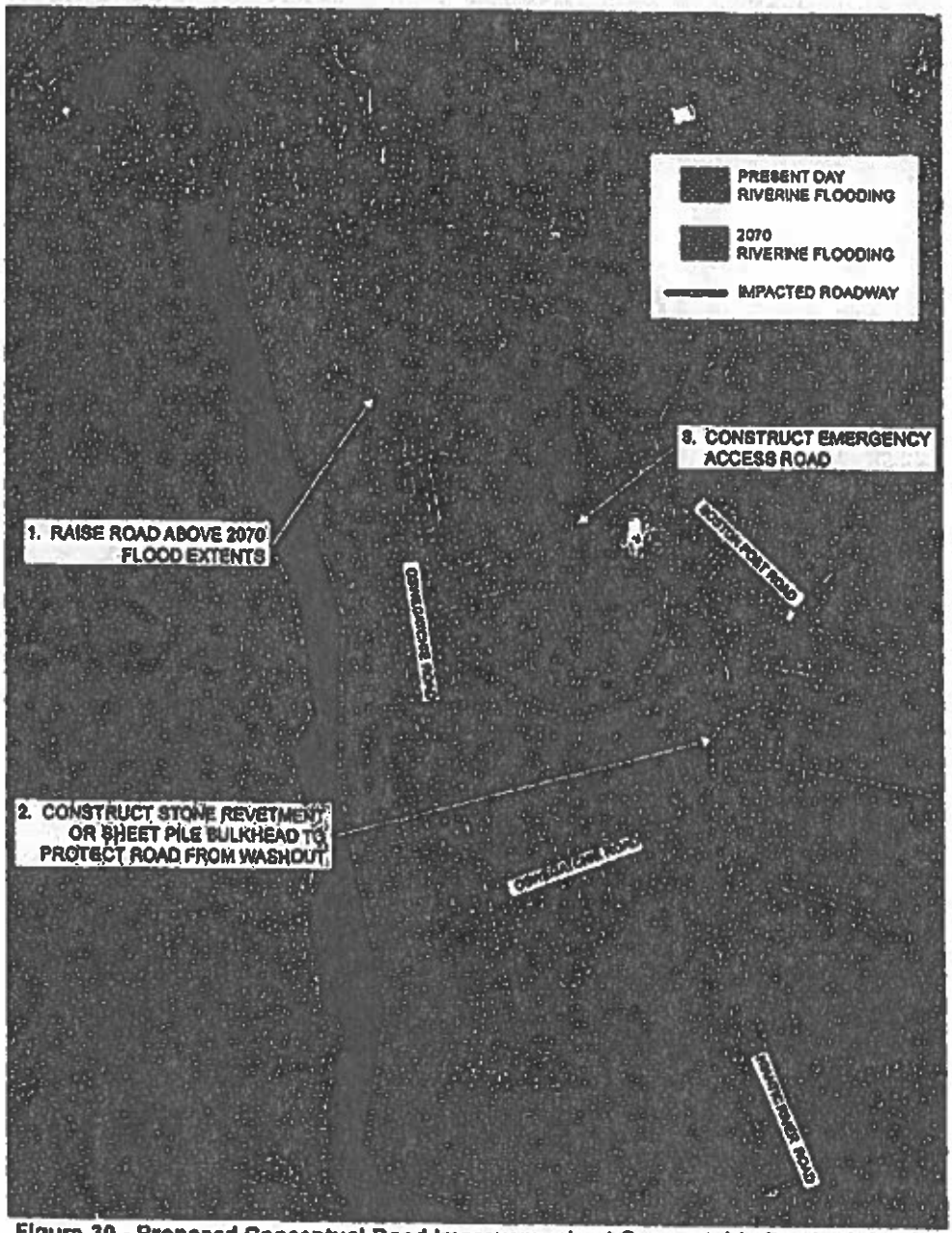


Figure 30 - Proposed Conceptual Road Improvements at Oswegatchie Road – 2070, 100-Year Riverine Flood Scenario

Adaptation Strategy – Rope Ferry Road / Avery Lane / Great Neck Road

The intersection of Rope Ferry Road, Avery Lane and Great Neck Road currently floods from riverine flooding during 100-year storms in the present, 2030 and 2070 timeframes. This is an important intersection in Waterford, and ideally should be protected from flooding. This will help to minimize damage to the roadway infrastructure, including underground and overhead utilities. The proposed strategy described below, will offer protection for a 100-year riverine flood in 2070.

Adaptation Strategy – Raise Elevation of Intersection - Estimated Range of Construction Costs: $2,079,000 - $3,466,000

As illustrated in Figure 31, this strategy proposes to raise the elevation of the intersection a maximum of 4.50 feet to a Design Flood Elevation of 16.50 corresponding to the 2070 (riverine) flood elevation with no additional freeboard. The proposed lengths of road modification are estimated to be as follows:

- Rope Ferry Road: 990 feet
- Avery Lane: 420 feet
- Great Neck Road: 320 feet

Please note that these lengths of road are estimates suitable for long-term planning purposes based on engineering judgement. No roadway geometry, engineering, traffic or environmental studies or utility investigations were conducted as part of this project to determine actual geometry and code-related issues that will affect the length of work and associated costs.

A number of driveways serving adjacent properties would also need to be adjusted to accommodate the raised roadway.

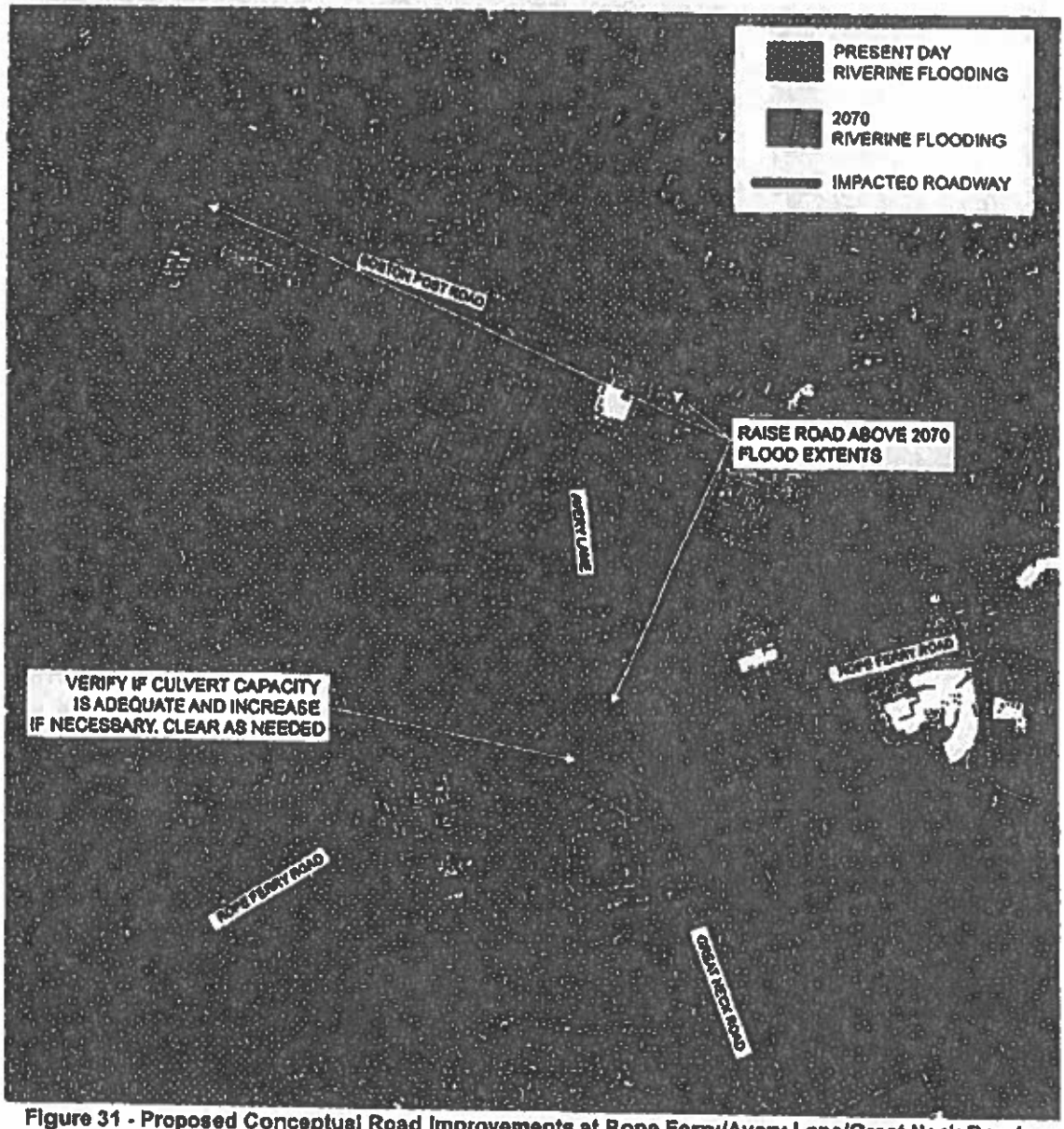


Figure 31 - Proposed Conceptual Road Improvements at Rope Ferry/Avery Lane/Great Neck Road – 2070, 100-Year Riverine Flood Scenario Shown

Adaptation Strategy – Niantic River Road

Adaptation Strategy – Reinforce Roadway Embankments- Estimated Range of Construction Costs: $187,000 - $311,000

Much of Niantic River Road is shown to flood for present day 1% storm event for both coastal (El. 10.03) and riverine (El. 12.0) storms. For the 2070 timeframe, the predicted water elevations for a 1% storm event are El. 13.27 and El. 13.2 for coastal and riverine storms, respectively. The lowest road elevation is El. 3.30 with several other low spots averaging closer to El. 6.0.

Niantic River Road is a relatively long road subject to flooding with numerous homes and driveways directly adjacent to the road. Therefore, raising the road, even to only meet present-day flood levels, is not practically feasible.

It is also not practical to install permanent flood walls or other flood prevention devices because the height would effectively block most water views from the roadway as well as many of the homes. There would also need to be too many openings in the wall required for access to driveways that would be difficult to seal up in advance of a major storm.

Therefore, we do not believe that it is reasonably feasible to prevent flooding of Niantic River Road. Instead we recommend that the embankments of two of the lowest sections of road directly adjacent to the water be reinforced with additional stone revetment or sheet pile cut-off walls to prevent erosion of the road embankment during a major storm. Although the road would be out of service during a major flood, the goal is to return it to service as quickly as possible after the water recedes. If sections of the road collapse, reopening the road would be greatly delayed. The total length of revetment reinforcement is estimated to be 540 feet. The total estimated cost to construct this revetment reinforcement is in the range of $187,000 to $311,000.

Adaptation Strategy – Evacuation

As mentioned above, there are many roads in Waterford that will flood in a major flood event. It would be cost prohibitive to raise all affected roads. Another strategy is for the Town to purchase an amphibious vehicle to assist with evacuations in the event that neighborhoods become isolated due to severe flooding Figure 32 shows two examples of such vehicles. One is similar to the "Duck Boat Tour" boats in Boston. These amphibious vehicles can drive on roads, but when the roads are flooded they can drive into the water and turn into boats. They seat about 20 people, which would make them an excellent rescue vehicle. Another option is a large-wheeled ex-military type vehicle.

The cost to purchase these type of vehicles is difficult to predict. A good source of amphibious vehicles is from surplus military equipment, which is often auctioned off through the Department of Homeland Security or made available to Public Safety Departments under various grants. A budgetary estimate would be in the range of $75,000 to $100,000. In addition, to the capital purchase cost, the cost of annual maintenance and storage should be factored in.

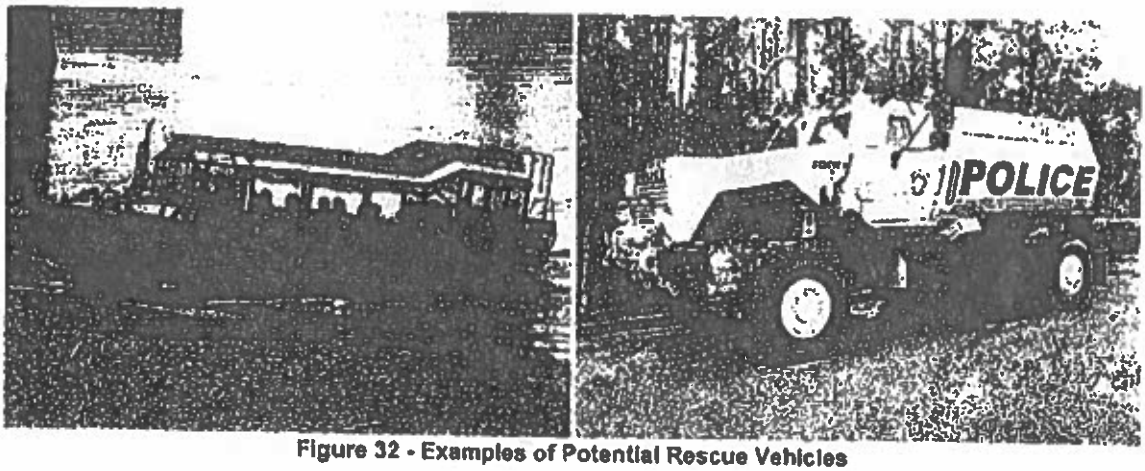


Figure 32 - Examples of Potential Rescue Vehicles

Adaptation Strategy – Waterproofing Wastewater Manholes

The Town of Waterford has already waterproofed all wastewater manholes located within the current FEMA 100-year mapped floodplain. The purpose for waterproofing the wastewater manholes is to prevent surcharging and flooding wastewater pump stations from floodwater entering leaking manholes. However, based on the flood mapping generated by this project, the floodplain will likely expand beyond the current FEMA 100-year floodplain in the future.

As discussed with the Working Group, we recommend that wastewater manholes located within the current FEMA 500-year floodplain be waterproofed with gasketed, bolted-down manhole covers with sealed rims to help minimize infiltration of flood water into the wastewater pump stations during a major flood.

Using the GIS layer of manhole locations provide by Town staff, we estimate that there are 229 manholes in the zone between the 100-year and 500 year flood plains that should be waterproofed. Table 7 shows the distribution of these manholes by pump station area, and Figure 33 shows the distribution graphically. At an estimated cost of $2,500 per manhole, the estimated cost to waterproof 229 manholes is approximately $573,000. We recommend prioritizing the waterproofing of wastewater manholes based on the same risk-prioritization of the pump stations to which the manholes drain to.

Table 7 - Recommended Wastewater Manholes to be Waterproofed

Sewer Drainage Area	No. of Manholes Between Current 100-Year and 500-Year FEMA Floodplains
Gardners Wood Road	15
Quaker Hill	5
Seaside	14
Shore Road	8
Stony Brook	5
Bolles Court	1
Dock Road	19
East Neck Road	14
Total	229

LEGEND

	High Priority
	Medium Priority
	Lower Priority
	Low Priority

Waterford Flood and Erosion Control Board
Niantic River Road Erosion Report
Approved December 1, 2021

To the Waterford Board of Selectmen and Conservation Commission:

On October 6, 2021, following the public comment of several concerned residents, the Flood and Erosion Control Board conducted a site walk along Niantic River Road in the vicinity of 3rd and 4th Avenues. Our members found the concerns of the residents to be justified as we documented and observed considerable erosion up to and beneath Niantic River Road. Consistent with our charge to document and report flooding and erosion issues, we wanted to advise the Board of Selectmen and the Conservation Commission of our observations and concerns.

Attached, you will find the minutes from the site walk as well as relevant photographs showing the extent of the erosion. There exists, in some sections of this area, erosion barriers. In the areas where erosion barriers are absent, there is significant erosion of the embankment supporting Niantic River Road and evidence of erosion underneath the roadway itself. It appears that a combination of loose, sandy and rocky soil, extreme rainfall events, and recent storms have all created an increasingly hazardous situation for this section of roadway.

We strongly recommend that a professional survey of this area be completed to prevent any risk to the integrity of Niantic River Road. Possible solutions may depend on the significance of the erosion underneath the road, but will likely require the extension of the erosion barriers across this section of the embankment.

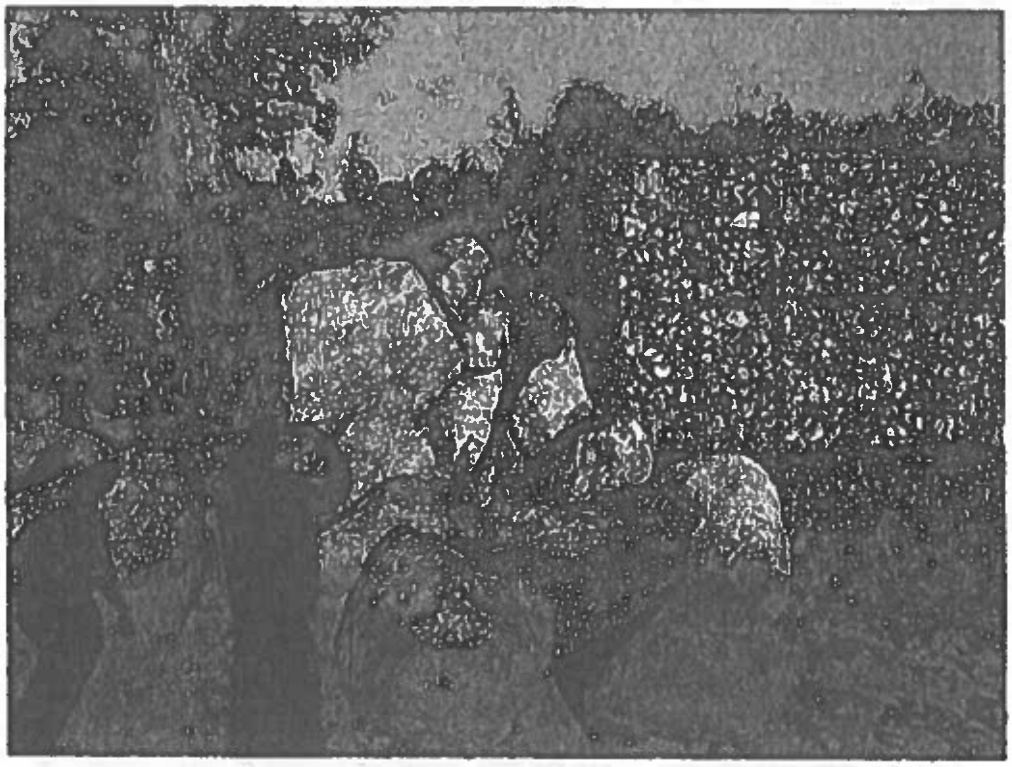
Respectfully submitted on December 1, 2021 by:
Baird Welch-Collins - Chair
Alexander Kuvalanka - Treasurer
Christopher Callahan
George Harran
Jennifer Kohl

Waterford Flood & Erosion Control Board Special Meeting Minutes for October 6, 2021

Members Present: Baird Welch-Collins, George Harran, Alex Kuvalanka, Chris Callahan
Residents Present: Susan Perry Luxton, Charlie Perry, Rich Cirillo, Patricia Couture, Richard Heller, Sandra Ribeiro, Geraldine Kuenkler, Michelle Palmieri, Chad Gentile, Jeannine Kenney, Terry Kenney

1. Special Meeting called to order at 5:30 pm by Baird Welch-Collins.
2. Site Walk Niantic River Road Erosion
   a. FECB members met with residents to view & discuss their concerns regarding sedimentation erosion occurring along Niantic River Road in the vicinity of 3rd & 4th avenues.
   b. The erosion taking place is due in part to the Niantic River eroding the base of the bank below Niantic River Road & at the base of 5 power poles along the road in the vicinity of 3rd & 4th avenues.
   c. The existing erosion control consists of large boulders that were placed along the beach at the base of the bank. The river flows freely in & around the boulders eroding the base of the bank. Vegetation is present on the bank however; it is not of the types that would help to absorb or stabilize any runoff.
   d. Additionally, previous strong storms have produced runoff that flows across the road & flows down the bank causing further erosion of the bases of the 5 power poles and the edge of Niantic River Road.
   e. FECB will contact Town Staff to determine the appropriate action to be taken.
3. Special Meeting adjourned at 6:28 pm.

Respectively submitted by Chris Callahan



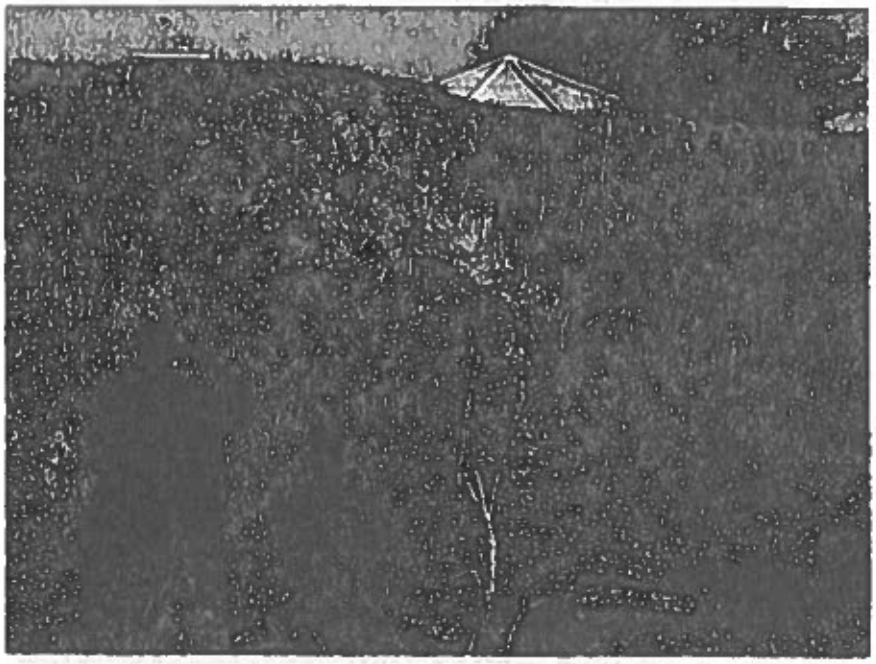
End of the erosion barrier and the beginning of the eroding bank.



Area of key concern where the erosion is nearing the roadway.



Evidence of erosion underneath the road surface.



Additional area of concern where the embankment has partially collapsed.

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Minor Road Reconstruction	**DEPARTMENT PRIORITY** 4

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

This project supports surface transportation projects which encompass roads, street accessories, sidewalks, and bridges. The objective is to provide safe, attractive, and efficient public transportation ways and infrastructure systems that support them.
The minor reconstruction for Vivian Street and a portion of Norman Street would involve the removal of the asphalt sidewalk, driveway aprons and road, regrading and compaction, resurfacing of the road, installation of asphalt curbs, driveway aprons, resetting of manholes and catch basins.
A section of Vauxhall Street (aprox. 3,200 ft) from the Montville Town line south to the transmission lines was never reconstructed. It currently is a narrow road with numerous rock formations next to the travel lanes. It is anticipated that there is ledge under the existing pavement that would need to be removed before resurfacing can take place. Drainage systems are mostly open ditches along the sides of the road.

2 PROJECT STATUS IF IN PROGRESS

None

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

None

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

Minor impact. Current practice is just to make the road condition safe. Minor savings in pothole patchine materials

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

None

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

Attached expanded narrative memorandum. Probable Cost Estimate, Lenard Engineering November 3, 2021. BLS Inflation Calulator.

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		1,000,000		35,000		600,000
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**1,000,000**	**0**	**35,000**	**0**	**600,000**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Minor Road Reconstruction

A minor reconstruction could involve the removal of rock and trees, guard rail installation, the widening of the road in various locations to meet a 24 foot minimum width and the re-grading of side slopes before resurfacing can take place. It could also involve off street parking pads, sidewalks that abut the curbing and driveway aprons that are integral to the walks.

Vivian Street and a portion of Norman Street are unique to the Town in that:

- Asphalt sidewalks are next to the asphalt curbing
- Small residential lots resulting in a large amount of driveway aprons to address
- Off street parking areas that are not driveways, but abut the sidewalks.

To resurface these two roads, the entire right of way must be addressed. Asphalt sidewalks, curbing and roads would be reclaimed and regraded to provide proper drainage. Driveway aprons need to be matched to existing driveways and utility manholes adjusted. It follows "once in, all done" goal of the Department. Plans and cost estimates have been prepared. Once funding for construction is authorized, this project can be placed out to bid.

A section of Vauxhall Street (approximately 3,200 ft.) from the Montville Town line south to the transmission lines was never reconstructed. It currently is a narrow road with numerous rock formations next to the travel lanes. It is anticipated that there is ledge under the existing pavement that would need to be removed before resurfacing can take place. Drainage systems are mostly open ditches along the edges of the road.

This project requires consultant engineering support to prepare a plan, cost estimates and bid packages for construction.

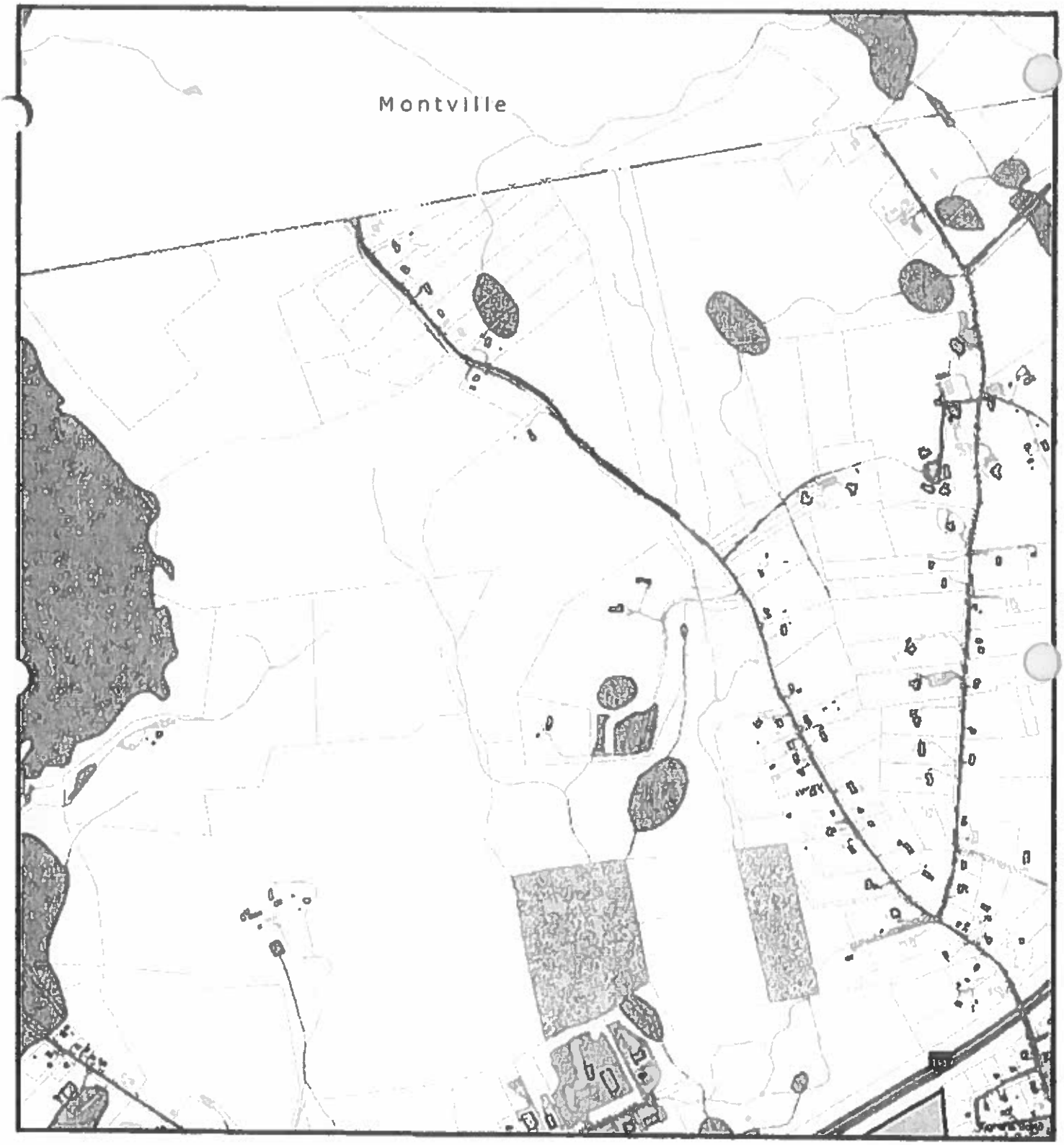
Lenard Engineering, Inc.
2210 Main Street
Glastonbury, CT 06033-6088

OPINION OF PROBABLE COST
Norman St. and Vivian St.
Roadway and Sidewalk Improvments
Waterford, CT

Estimate 11/3/21
LEI Job No. 21-366
Prepared By: JED

Total	Item	Estimated Quantity and Unit Measure	Estimated Unit Price	Extended Price
	Mobilization and Project Closeout	1 LS	$70,000.00	$70,000.00
	Catch Basin Protection	1 LS	$10,000.00	$10,000.00
	Maintenance & Protection of Traffic	1 LS	$35,000.00	$35,000.00
	Trafficperson	500 HR	$37.00	$18,500.00
	Removal of Bituminous Concrete Curbing	4690 LF	$4.40	$20,636.00
	Removal of Bituminous Concrete Sidewalk	825 SY	$32.20	$26,565.00
	Paving HMA S0.375	1180 TONS	$140.00	$165,200.00
	Paving HMA S0.5	1180 TONS	$120.00	$141,600.00
	Full Depth Road Reclamation	8100 SY	$4.50	$36,450.00
	Bituminous Sidewalk	1300 SY	$60.00	$78,000.00
	Bituminous Concrete Driveway	4310 SF	$18.60	$80,166.00
	Concrete Sidewalk Ramp	850 SF	$22.80	$19,380.00
	Detectable Warning Pad	10 EA.	$247.00	$2,470.00
	Saw Cutting	1300 LF	$5.40	$7,020.00
	Bituminous Concrete Curbing	4470 LF	$7.40	$33,078.00
	Demolition - Catch Basin	2 EA.	$750.00	$1,500.00
	Install Type "C" Catch Basin	2 EA.	$3,400.00	$6,800.00
	Adjust CB Top	9 EA.	$500.00	$4,500.00
	Replace CB top w/MH Top	1 EA.	$1,000.00	$1,000.00
	Grass Surface Restoration	1500 SY	$9.00	$13,500.00
	Sub-Total - Items 1-40			**$771,365.00**
	Rock-in-Trench Excavation, if encountered	CY	$200.00	$0.00
	Remove unsuitable soil, replace with gravel fill (if encountered)	CY	$25.00	$0.00
	Estimated Construction Cost			**$771,365.00**
	10% Contingency			**$77,137.00**
	Estimated Construction Cost w/Contingency			**$848,502.00**

Say $850,000.00

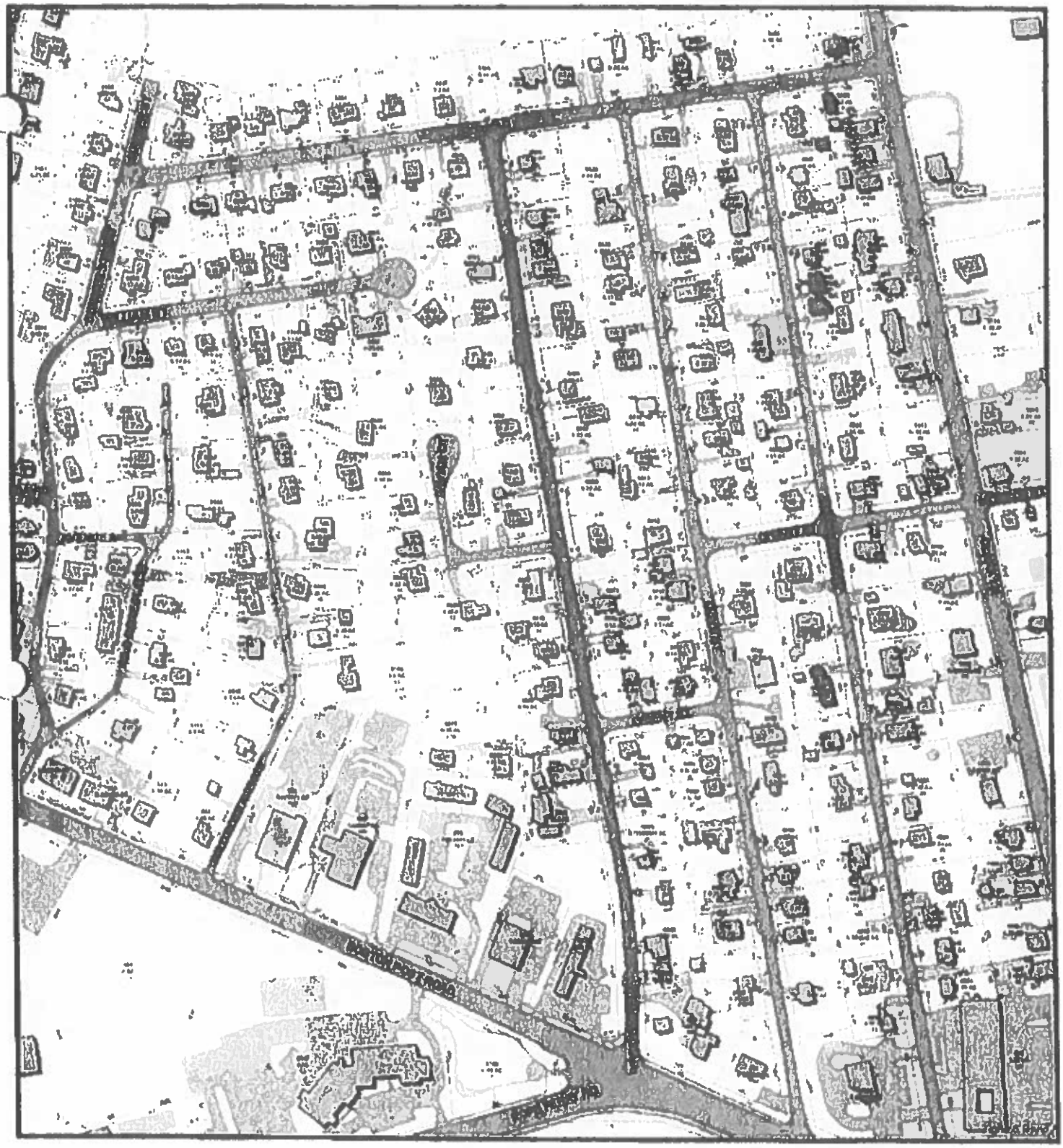


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12/1/2022 11:07:55 AM

Scale: 1"=250'

Scale is approximate

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CPI Inflation Calculator

CPI Inflation Calculator

$ 850,000.00

in year1 month January year1 year 2021

has the same buying power as

$1,002,188.42

in year2 month January year2 year 2024

Calculate

About the CPI Inflation Calculator

The CPI inflation calculator uses the Consumer Price Index for All Urban Consumers (CPI-U) U.S. city average series for all items, not seasonally adjusted This data represents changes in the prices of all goods and services purchased for consumption by urban households.

U.S. BUREAU OF LABOR STATISTICS Postal Square Building 2 Massachusetts Avenue NE Washington, DC 20212-0001

Telephone 1-202-691-5200 Telecommunications Relay Service:7-1-1 www.bls.gov Contact Us

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Dumpsters and Storage Enclosures	**DEPARTMENT PRIORITY** 5

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	All municipal locations (to include Schools) provide dumpsters, pads and screening at the locations. Some of these are nearing the end of service life. Four of the Town's school locations and the recently renovated Municipal Complex project have addressed the storage enclosures and screening (fencing and concrete pad). But for these sites, the replacement of the dumpsters still needs to be addressed. The municipal sites (Town Hall, Community Center, Police and Library) must address not only the dumpsters, but the enclosures and screenings that are required in their site plan approval.
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	None
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		20,000	35,000			
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**20,000**	**35,000**	**0**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

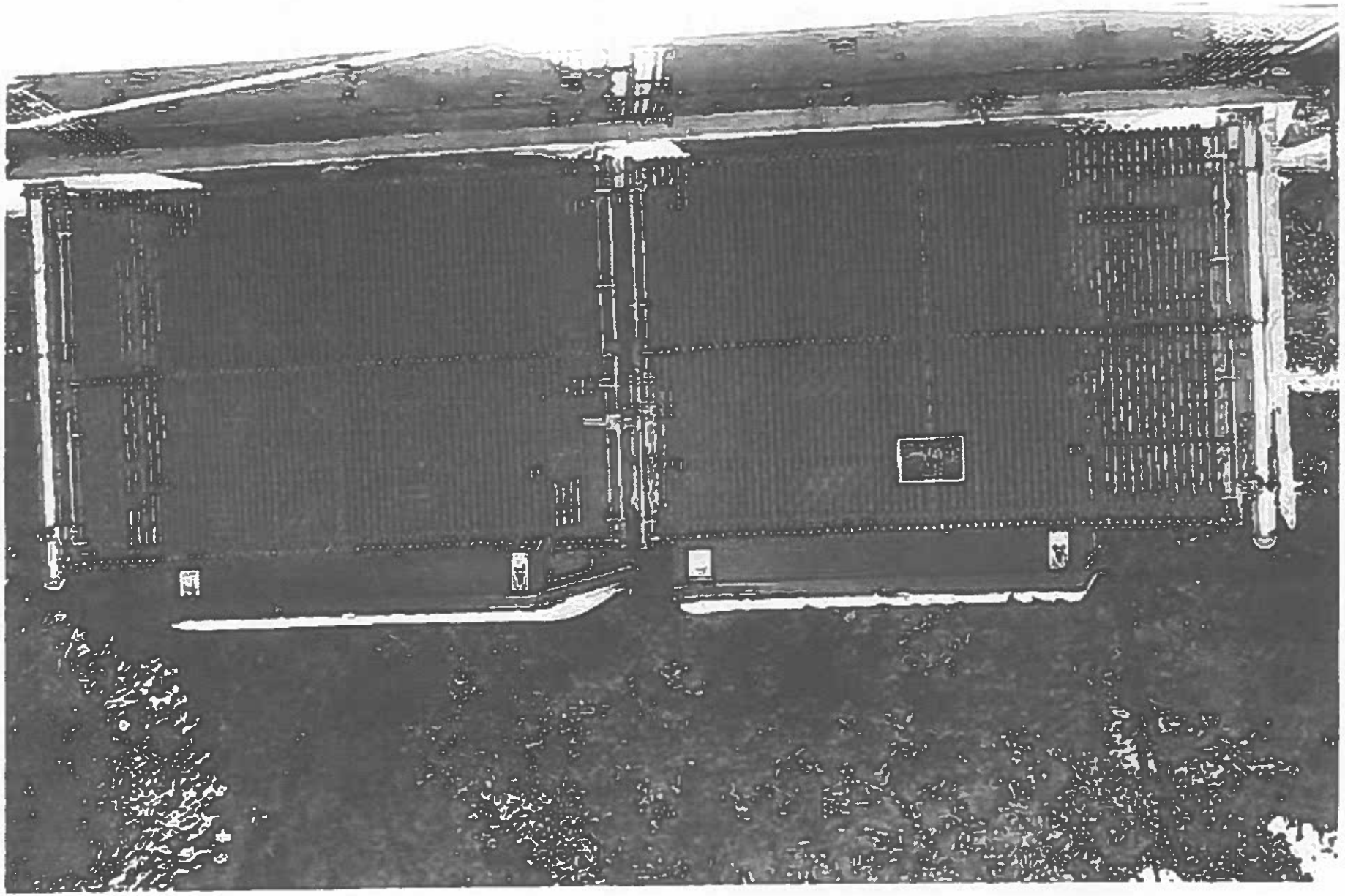
Date: November 15, 2024

Re: Dumpster and Storage Enclosures (Town owned)

All municipal locations (to include Schools) provide dumpsters, pads and screening of the locations. These are nearing the end of service life.

Four of the Town's school locations and the recently Municipal Complex project have addressed the storage enclosures and screening (fencing and concrete pad). But for these sites, the replacement of the dumpsters still needs to be addressed.

The municipal sites (Town Hall, Community Center, Police and Library) must address not only the dumpsters, but the enclosures and screenings that are required in their site plan approval.



TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Concrete Curb Replacement	**DEPARTMENT PRIORITY** 6

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Deteriorated sections of concrete curbing in the Millstone East Neighborhood must be replaced before the road can be scheduled to be resurfaced. The curbing has spalled to a point where the steel rebar is being exposed and is becoming a hazard to tires or the walking public. Patching the spalled concrete is not cost effective as the water and salt has already reached the untreated steel and the spalling will continue until all affected sections have been removed. Modern concrete mixes are formulated to stand up to salt (chlorides) intrusion. • Gunshot, Lanyard Lane, Race Rock, Windward Way and Millstone Road East.
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	Paving of the roads will be held off until the curbing condition is addressed.
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	Minor impact. Current practice is just to make the condition safe.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	See attached expanded narrative, Estimated cost per linear foot dated 11/2024.
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance		400,000		400,000		
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**400,000**	**0**	**400,000**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Concrete Curb Replacement

This project supports surface transportation projects which encompass roads, street accessories, sidewalks, and bridges. The objective is to provide safe, attractive, and efficient public transportation ways and infrastructure systems that support them.

Our existing roadside curbing is either asphalt or concrete. Asphalt curbing typically is addressed when the road is resurfaced. Deteriorated sections are removed in mass just before the new surface is placed and then the curbs are reinstalled. Deteriorated sections of concrete curbing should be addressed before the road is scheduled to be resurfaced. You don't want to pave a road and then cut out the section of the new pavement in the gutter to remove the old curb and install the new.

The concrete curbing in many areas has spalled to a point where the steel rebar is being exposed and is becoming a hazard to tires or the walking public. Patching the spalled concrete is not cost effective as the water and salt has already reached the untreated steel causing the bars to rust and expand causing the spalling. This will continue until there is nothing left.

The deteriorated sections would be removed and precast concrete sections would be reinstalled. Modern concrete mixes are formulated to stand up to salt (chlorides) intrusion.

The first round of concrete curb replacement was for Sandy Hollow Drive. This was completed in 2024. The unit price (Engineer's estimate) for that work was $100/lf.

Proposed for FY26 is to address the roads in the Millstone East area of Town. This two year project will prepare those roads for resurfacing in FY28.

	CL	Gutter	
Gunshot Road	945	1890	
Racerock Road	1016	2032	
Lanyard Lane	810	1620	
Millstone Road E	1662	3324	
Windward Way	2288	4576	
		13442	8065.2

Engineer's Estimate for Sandy Hollow ($100/lf remove and install precast)

Assume 40% of curb is acceptable
Mountable curb

No escalation for inflation

$ 806,500

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Realignment of Major Intersections	**DEPARTMENT PRIORITY** 7

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	This project supports surface transportation projects which encompass roads, street accessories, sidewalks, and bridges. The objective is to provide safe, attractive, and efficient public transportation ways and infrastructure systems that support them. Our road network have several intersections of our collector streets with state roads that have less then efficient geometrics. Cross Road at Route 1; Lake Ponds Road at Route 85; Braman at Route 213 and Fog Plain Road at Route 1 alignments or sight lines don't meet current design standards. Realignment of the intersection may involve turn lanes, sight line improvements and the acquisition of additional right of way. This project will provide reduced traffic wait times, reductions in accidents and would address pedestrian access
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	None

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance				55,000		
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**0**	**55,000**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Realignment of Major Intersections with State Roads

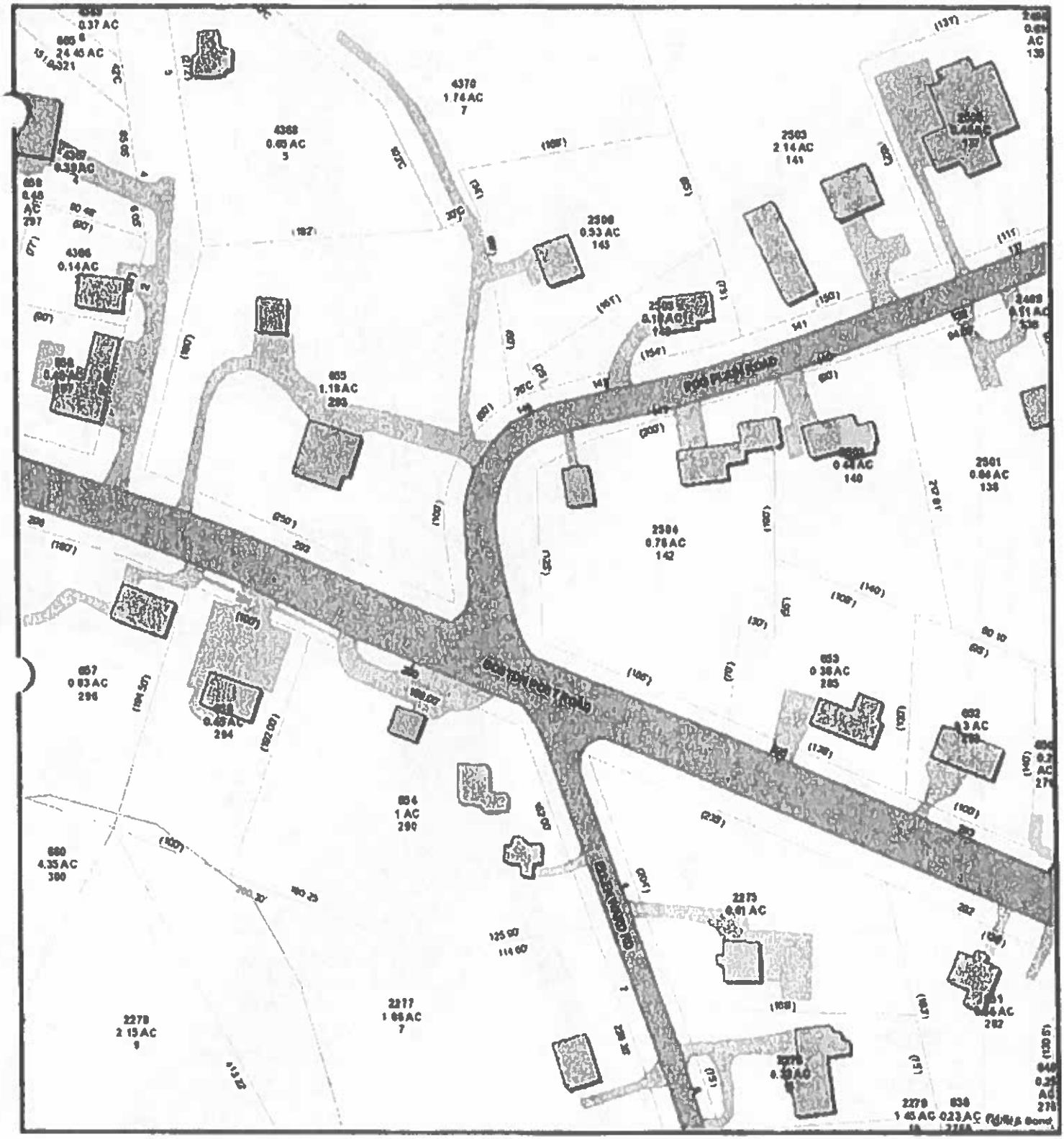
This capital project supports surface transportation projects which encompass roads, street accessories, sidewalks, and bridges. The objective is to provide safe, attractive, and efficient public transportation ways and infrastructure systems that support them.

Our road network has numerous intersections of our collector streets with State roads. Several have less then efficient geometrics.
Cross Road at Route 1 has a 5 leg intersection with narrow right of way and restrictive turn radius
Lakes Pond Road at Route 85
Braman at Route 213 sightlines
Fog Plain Road at Route 1 alignment and or sight lines.

All don't meet current design standards. Realignment of the each intersection may involve turn lanes, sight line improvements and the acquisition of additional rights of way.

This project will provide reduced traffic wait times, reductions in accidents and would address pedestrian access.

This work must be coordinated with the State DOT.

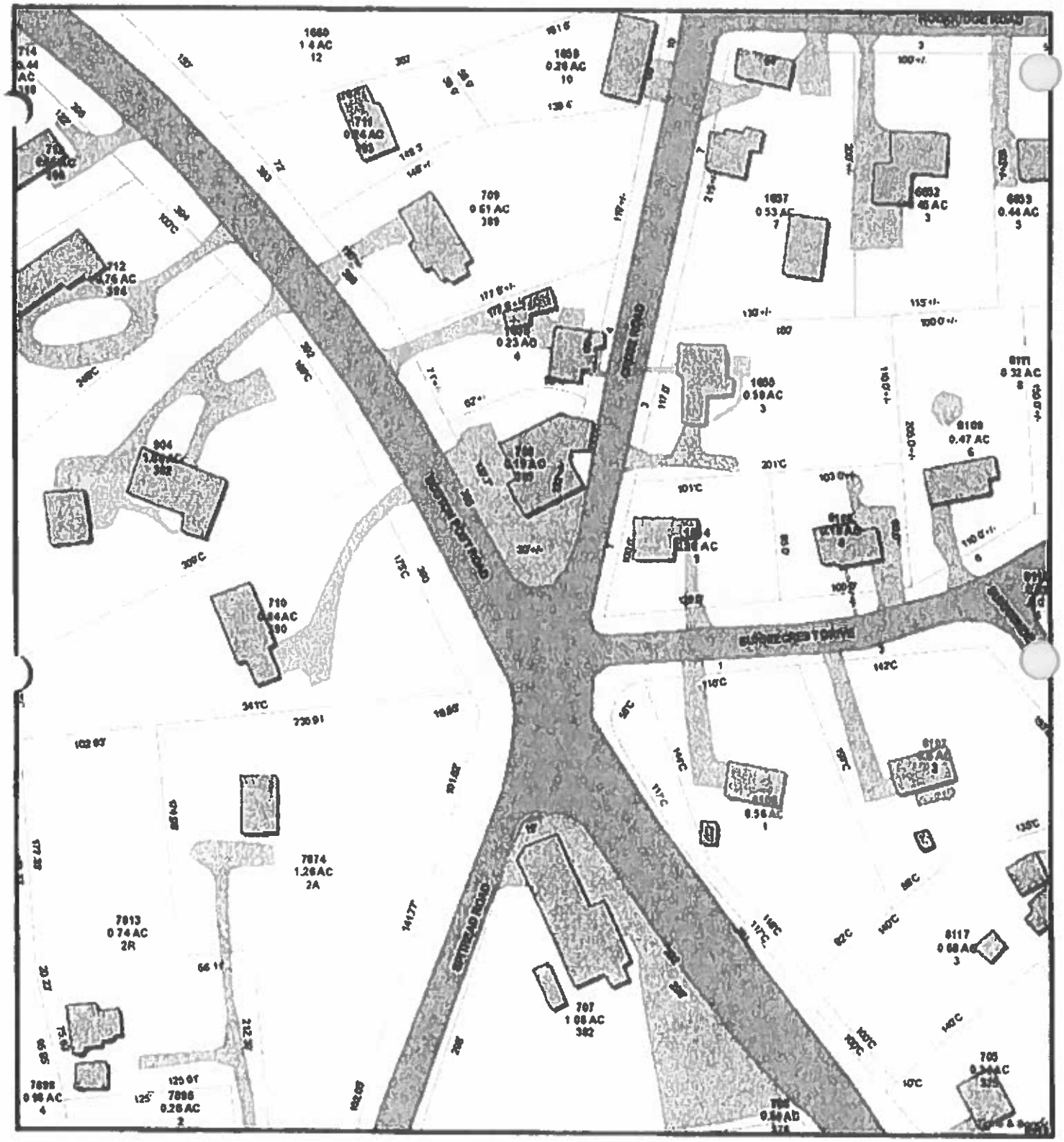


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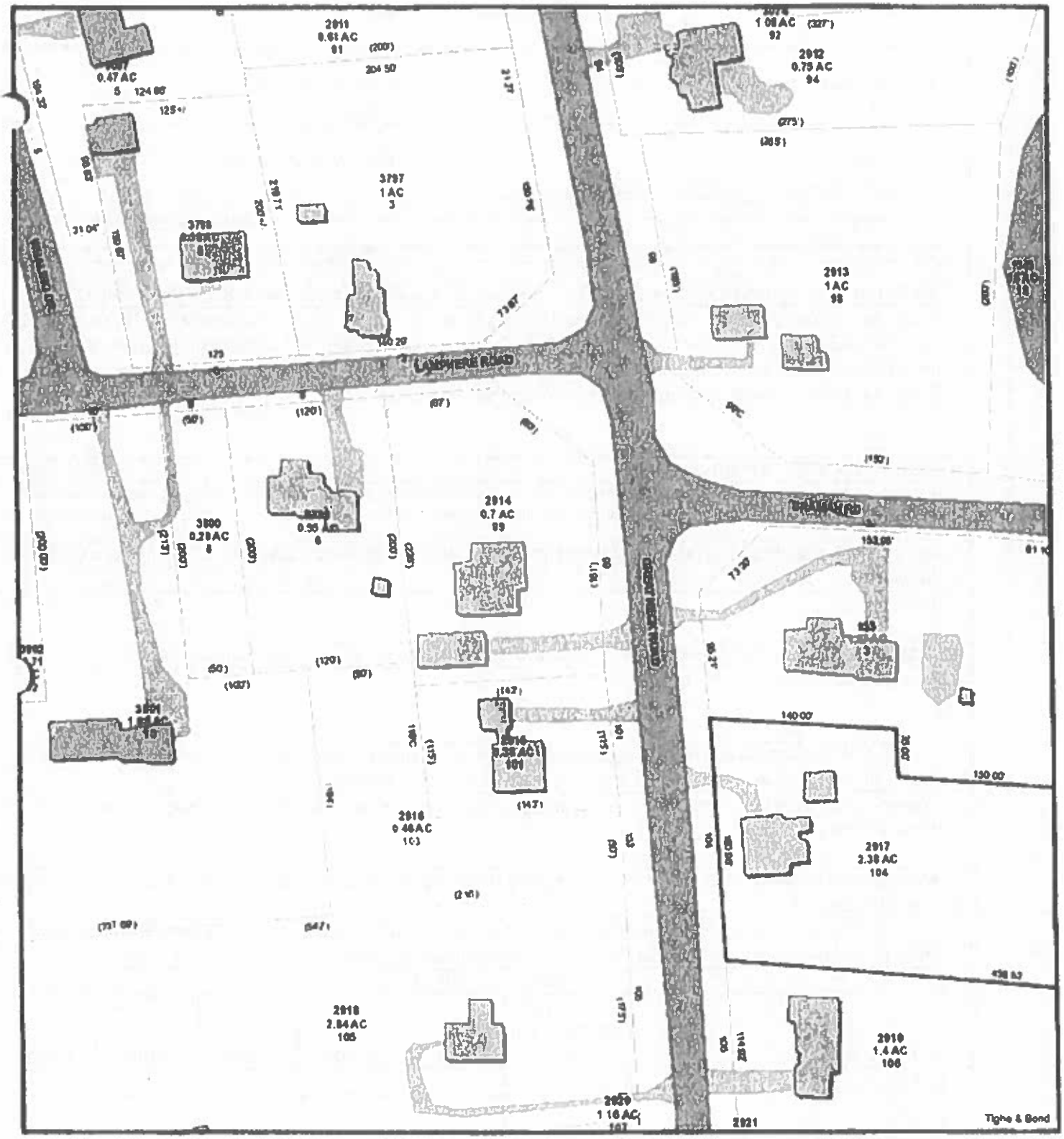


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TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Huntsbrook Bridge at Bloomingdale Road	**DEPARTMENT PRIORITY** 8

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	From the rains that were the result of storm Ida, the bridge over the Huntsbrook at Bloomingdale Road (bridge # 06139) was overtopped causing the closure of the road, erosion of bank near the abutment and asphalt road surface was lost. An analysis of the bridge in 2014 found that the brook will overtop the bridge in a 27 year storm. Over topping of the bridge will shut the road down, a major concern for emergency services.
2	**PROJECT STATUS IF IN PROGRESS**
	A report was completed by Haley Ward dated November 1, 2023 entitled Preliminary Hydraulic Analysis, Bridge 06139 was staffed through the different Town Departments for comment. It was decided that the study area should also include all downstream bridge(s) and the brook channel itself.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	No impact to the Department's budget
5	**GRANT FUNDING/OTHER FUNDING, If applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	Funded in FY23 were funds to prepare Design Concepts. All projects will be reviewed to determine if they are eligible for State or Federal Bridge grants.
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (If none, simply state that in the area below)**
	Expanded narrative, excerpt from Kleinfelder report dated Nov 18, 2014, inspection report. Expert of the Haley Ward Study dated November 2023, proposal for further study dated Aug 22, 2024
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance	15,000		20,000			
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**15,000**	**0**	**20,000**	**0**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Huntsbrook Bridge at Bloomingdale

There are 7 bridges on the National Bridge Inventory (spans over 20") that the State DOT inspects every 2 years. The last inspection results were published in April of 2022. The rating scale used by the State has found 4 rated good and 3 rated fair.

Of these seven bridges, 5 are on primary local roads that move traffic throughout the town.

The rating system consists of these levels:

- Excellent - No noticeable deficiencies or deterioration
- Very Good – No problems requiring attention
- GOOD Condition - some minor problems
- Satisfactory – Structural elements show some minor deterioration nonstructural cracking, potential exists for major maintenance.
- FAIR - all primary structural elements are sound, but may have minor section loss, structural cracking, spalling or scour; potential exists for minor rehabilitation.
- POOR - advanced section loss, deterioration, spalling or scour
- SERIOUS - loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. Rehabilitation or repair required immediately
- CRITICAL - advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present, or scour may have removed substructure support. Need for immediate repair or rehabilitation is urgent; unless closely monitored it may be necessary to close the bridge until corrective action is taken.
- IMMINENT FAILURE - major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic, but corrective action may put back in light service.
- FAILED - out of service - beyond corrective

Serious bridge problems such as load restrictions and closures can be prevented by programming renovation work. The goal is to address the issues on the bridges before they are downgraded to poor or worse conditions.

Not included on this list are two bridges that are on the city line between New London and Waterford on Highland Avenue (fair) and Glenwood Avenue (Good) over Alewife Cove. In most cases involving bridges that span a municipal boundary, an inter-local agreement would be entered into to assign a lead community and assign costs.

Funding would retain the services of a qualified bridge engineering firm to fully inspect the structures and specify the required repairs with construction funding requested in the following years. The bridge engineering firm would take the findings from the State inspection reports, and prepare a preliminary design and cost estimates for future year funding. All projects will be reviewed to determine if they are eligible for State or Federal Bridge grants.

From the rains that were the result of Ida, the bridge over Hunts Brook at Bloomingdale Road (bridge # 06139) was overtopped causing the closure of the road, some erosion of the bank near the abutment and some minor asphalt road surface was lost. An analysis of the bridge in 2014 found that the brook will overtop the bridge in a 27 year storm. Overtopping of the bridge will shut the road down, a major concern for emergency services. Funding was approved in FY24 to complete the analysis.

A report was completed by Haley Ward dated November 1, 2023 entitled Preliminary Hydraulic Analysis, Bridge 06139 was staffed through the different Town Departments for comment. It was decided that the study area should also include all downstream bridge(s) and the brook channel itself.

HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

August 22, 2024

Mr. Gary Schneider
Director of Public Works
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385

RE: ***Proposal for Professional Services, Conduct Additional Hydraulic Modeling on Hunt Brook, Downstream of Bloomingdale Road, Waterford, CT***

Dear Mr. Schneider:

As requested, Haley Ward, Inc. (Haley Ward) is pleased to submit this proposal for the Town's review and acceptance. As discussed with Town staff, our original hydraulic study recommended replacement of the three existing culverts on Bloomingdale Road with a clear span bridge opening to reduce flooding and roadway overtopping. Town staff requested downstream impact analysis if this bridge were constructed.

Note that precise determinations of downstream impacts would involve significant and costly modeling efforts; hence we are proposing an intermediate step to estimate flows. If these estimated flow increases are minimal, then no additional analyses may be required. However, if these flow increase are significant, then additional analyses using more detailed methods may be required, which is outside of this scope.

SCOPE OF SERVICES

1) Update Existing Hydraulic Model, Create New Hydrograph– We will update the HEC-RAS hydraulic model utilized to size the hydraulic openings at Bloomingdale Road, and create a downstream "Hydrograph", which takes into effect the reduction of storage behind the new Bloomingdale Bridge.

   We will utilize this hydrograph to estimate the potential for increased flows downstream of Bloomingdale Road.

2210 Main Street, P.O. Box 1088, Glastonbury, CT 06033
T: 860.659.3100 | HALEYWARD.COM

2) Obtain Available Mapping for Hunts Brook, Oil Mill Road Bridge and Old Norwich Road Bridge – Haley Ward will obtain available mapping for Hunts Brook downstream of Bloomindale Road, as well as available plans for the Oil Mill Road and Old Norwich Road bridge structures.

3) Conduct Preliminary Impact Analyses- Haley Ward will evaluate the impacts on the Oil Mill and Old Norwich Road bridge crossings, based on the preliminary estimate of flow generated by the new Hydrograph.

4) Review Meetings and Summary Memo- We will attend one meeting with the Town to review our findings and answer your questions. We will summarize these meeting results in memo format.

PROPOSED FEES

We propose to complete this work as specified for a lump sum fee of $ 16,000.

We hope the Town finds our proposal acceptable, and we look forward to continuing to serve Waterford on this project. If you or others have any questions or comments, I am at your service.

Respectfully submitted,
Haley Ward, Inc.

James E. Ericson, PE
Regional Manager | Vice President

HALEY WARD.
ENGINEERING | ENVIRONMENTAL | SURVEYING

November 1, 2023

Gary Schneider, Director of Public Works
Town of Waterford
1000 Hartford Road
Waterford, CT 06385

Re: Hunts Brook Flooding Evaluation Study at Bloomingdale Road, Waterford CT;
Haley Ward Project No. 4010195.22367

Dear Mr. Schneider:

In accordance with our proposal, Haley Ward, Inc. prepared a study to evaluate options to alleviate flooding on Hunts Brook, in the vicinity of Bloomingdale Road. Our work included field survey, stream cross-section surveys, mapping, creating a hydraulic model and evaluating improvement options.

A) Hydraulic Modeling – **Attachment A** is our Modeling Report for Hunts Brook. This study has the following major conclusions:

1) Hunts Brook has a **10.9 square mile** watershed area at Bloomingdale Road, which sets the methodologies required for analysis. Our approach is consistent with Connecticut DOT and DEEP methodologies for structure design with watershed areas over 10 square miles.

2) The ConnDOT drainage manual classifies this structure class as **large**, due to the watershed area **exceeding 10 square miles.** This mandates a 100 year frequency design storm and minimum freeboard heights for the new structure.

3) ConnDOT recommends the use of USGS Stream Stats data. For the 100-year return frequency storm, the calculated flow rate is **1,340 cfs.**

4) Haley Ward utilized GEOHEC-RAS software for this analysis and evaluated various hydraulic opening improvements for replacement structures ranging between 20 - 35 feet.

5) Our results show that a new 30-foot span bridge structure provides the optimal solution. A bridge with this opening passes the 100-year design storm, while keeping water surface elevations within the channel with no overtopping of the road or impacts to neighboring properties.

B) Schematic Design Plans- **Figure 1** is the Existing Conditions Plan for Bloomingdale Road, showing the three existing 6 foot diameter reinforced concrete pipes, and the stream channel immediately upstream and downstream of the roadway.

Figure 2 shows the preliminary design layout for the new 30' span bridge, along with minor realignment of Bloomingdale Road, and re-grading of the channel.

Figure 3 is the preliminary cross section plan, with the previous 6' diameter culverts superimposed. Note that the 100 year storm event water surface elevation is shown, along with the **1.99 feet of under clearance** beneath the low chord of the bridge, and **4.76 feet of freeboard** below the low point of the reconstructed roadway.

C)Cost Estimate - Haley Ward recently completed design and construction administration services for a similar project, the Route 77 DOT Bridge in Killingworth. **Attachment B** is our cost estimate for this very similar structure, adjusted for inflation since the time of construction.

The estimated 2023 construction cost for the proposed 30' span bridge, including removal of the existing triple- 5' diameter culverts, is approximately **$ 2.0 million.**

Table 1 is an overall project cost estimate, including engineering design, permitting, construction administration and inspection, as well as 20 % contingences. The overall project cost is **$ 2.9 million.**

D) Permitting - The following permits likely will be required for this project:

Local – Inland Wetlands
Planning and Zoning (8-24 approval)
Representative Town Meeting (RTM)

State- DEEP- Inland Water Resources Permits- Water Diversion
- Section 401 Water Quality Certificate

Federal- Army Corp of Engineers Connecticut General Permit GP-19
Section 404 Permit

In addition, the following permits may also be required:

- Natural Diversity Data Base (NDDB)Study
- State Historic Preservation Office (SHPO) Study
- DEEP Flood Management Certification (if State funds are used)
- FEMA Letter of Map Revision

We look forward to discussing this report with you and other Town officials, and feel free to contact me with any questions or comments.

Respectfully submitted,
HALEY WARD, INC.

James E. Ericson, PE
Regional Manager / Vice President

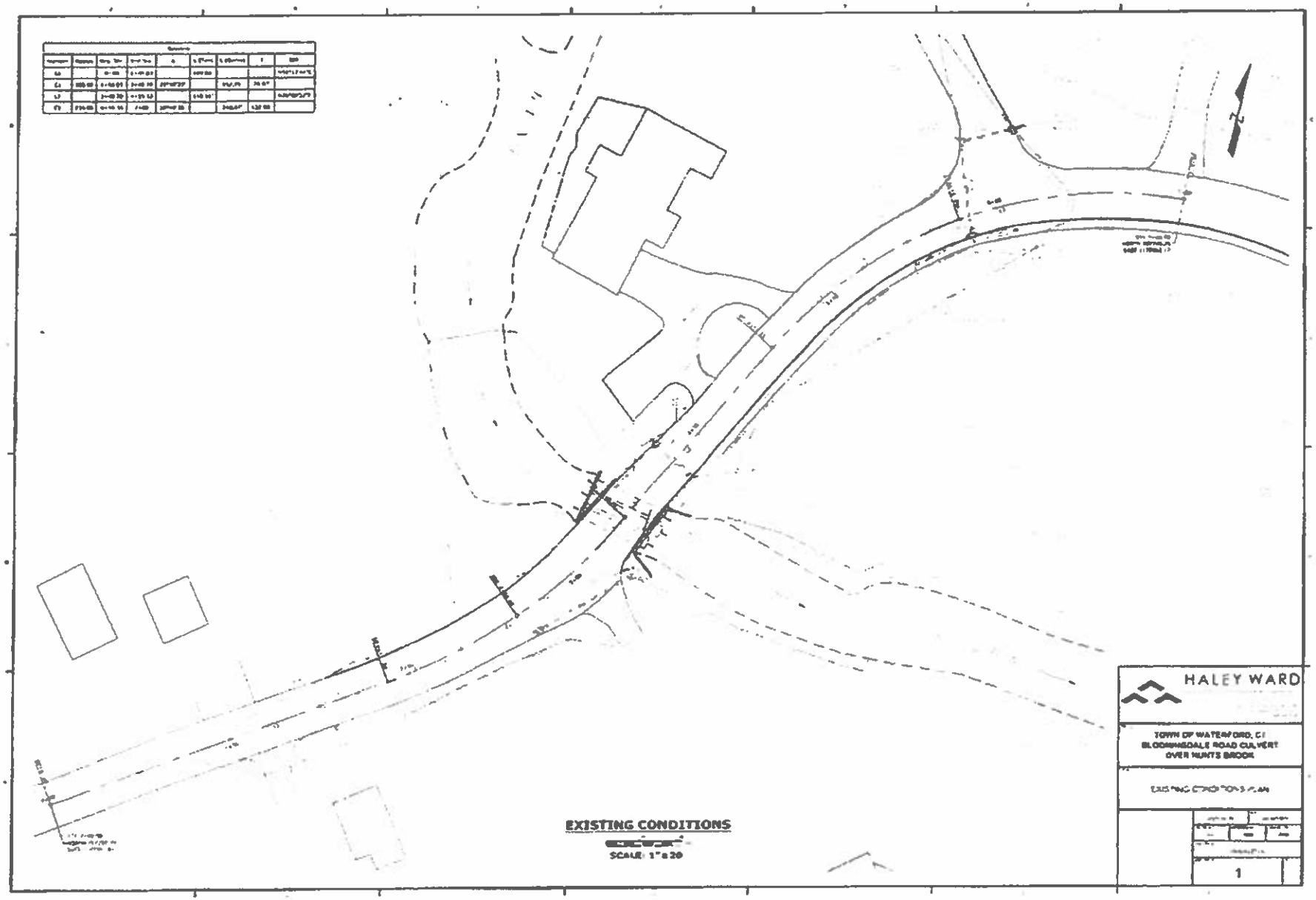
Haley Ward, Inc
2210 Main Street
Glastonbury, CT 06033-6088

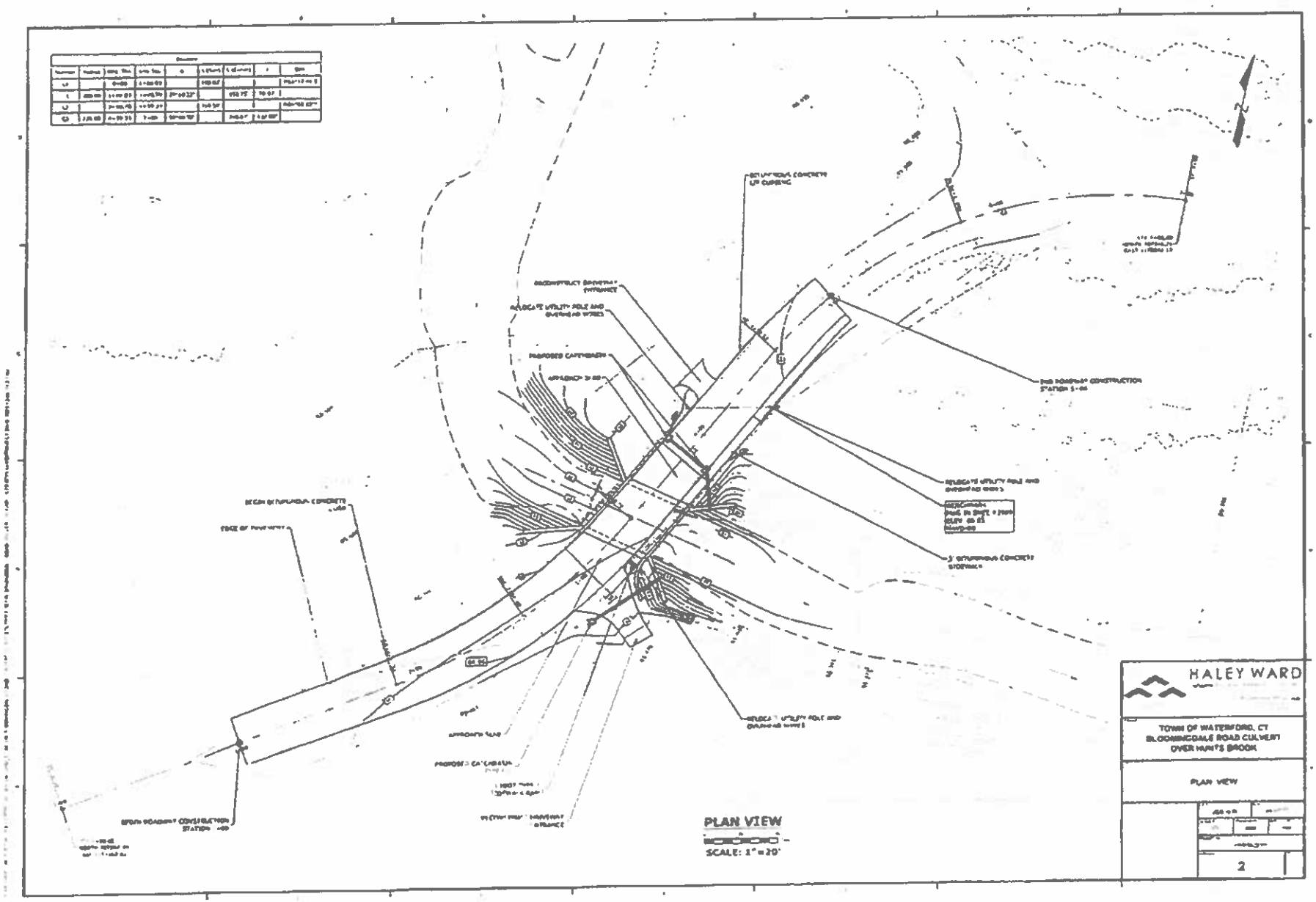
TABLE 1 - OPINION OF PROBABLE COST
Construct 30' Span Replacement Bridge
Bloomingdale Road over Hunts Brook
Waterford, CT

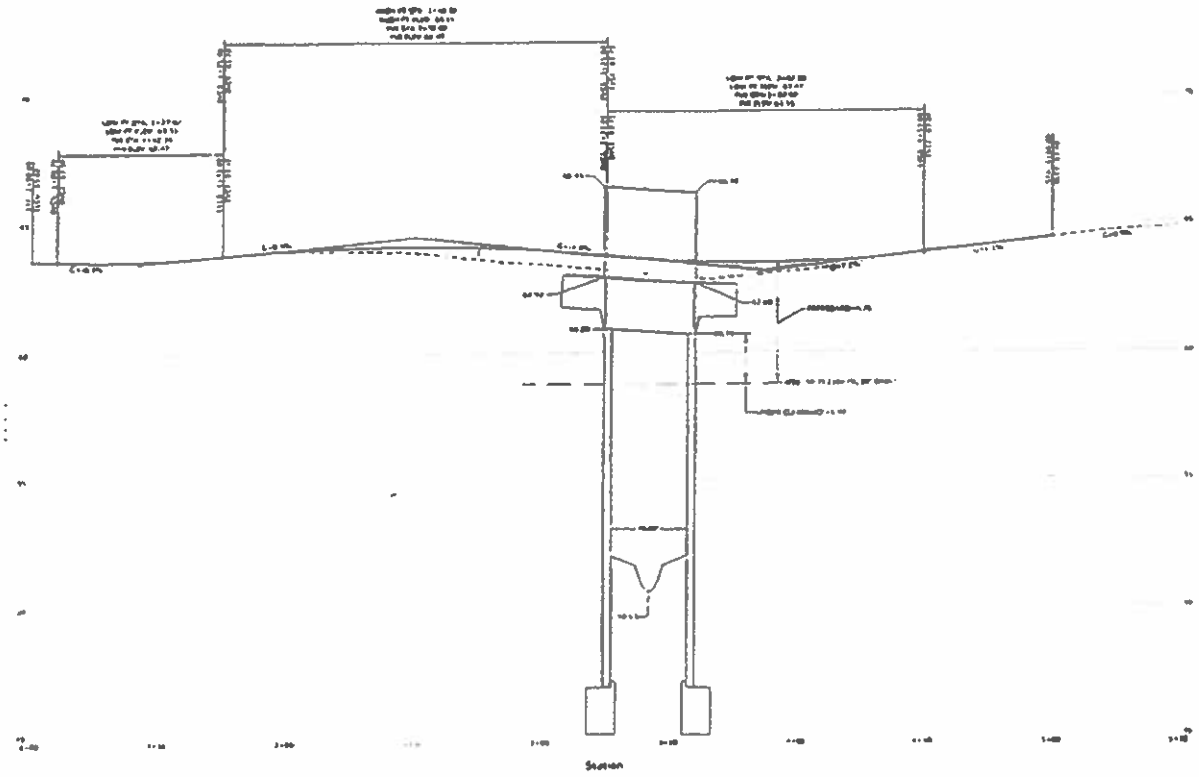
Estimate 10-9-2023
LEI Job No. 22-360
Prepared By JEE

	Total Item	Estimated Quantity and Unit Measure	Estimated Unit Price	Extended Price
1	Demolish Existing Culverts, Construct New 30' Span Bridge	1 LS	$2,000,000	$2,000,000
2	Final Engineering Design, Permitting (15 %)	1 LS	$300,000	$300,000
3	Engineering Services during Construction (10 %)	1 LS	$200,000	$200,000
4	Contingencies (20 %)	1 LS	$400,000	$400,000
	Estimated Project Cost w/Contingency			**$2,900,000**

FIGURES


EXISTING CONDITIONS
SCALE: 1" = 20'
HALEY WARD
TOWN OF WATERFORD, CT
BLOOMINGDALE ROAD CULVERT
OVER HUNTS BROOK
1


PLAN VIEW
SCALE: 1" = 20'
HALEY WARD
TOWN OF WATERFORD, CT
BLOOMINGDALE ROAD CULVERT
OVER HAM'S BROOK
PLAN VIEW
2



ROADWAY PROFILE

SCALE: 1" = 20

HALEY WARD

TOWN OF WATERFORD, CT
BLOOMINGDALE ROAD CULVERT
OVER HUNTS BROOK

ROADWAY PROFILE

3

ATTACHMENT A
HYDRAULIC MODELING REPORT

HALEY WARD.

ENGINEERING | ENVIRONMENTAL | SURVEYING

MEMORANDUM

To: Gary Schneider, Director of Public Works

From: David N. Battista, P.E.

Re: Preliminary Hydrologic and Hydraulic Analysis
Bridge 06139 - Bloomingdale Road over Hunts Brook – Waterford, CT

Date: November 1, 2023

This memorandum summarizes Haley Ward's preliminary findings and recommendations for the replacement of Bridge 06139. We researched hydraulic design criteria, estimated design flows, prepared hydrologic and hydraulic analyses, and explored alternate proposed bridge openings to arrive at a recommended structure type and size.

Based on our preliminary findings, Haley Ward recommends that the Town of Waterford pursue removal of the existing three-barrel culvert system and replacement with a 30-foot span bridge. We also recommend modest improvements to the approach and departure sections and a small increase in the roadway vertical alignment to optimize hydraulic performance of the structure.

The recommended 30-foot span bridge will meet Connecticut Department of Transportation (CT DOT) hydraulic-sizing criteria for Large Structure-Class bridge and will keep the proposed 100-year water-surface profile less than one foot above the *Natural-Condition* water surface profile as required by Connecticut Department of Energy and Environmental Protection (CT DEEP) hydraulic design guidance. The proposed 30-foot span bridge will pass the 500-year flood without overtopping the roadway.

We note that the 100-year *Proposed-Condition* water-surface profile ranges from 3.5 to 5 feet lower than the 100-year *Existing Condition* water-surface profile upstream of the bridge. This large change eliminates overtopping, provides low-chord under-clearance during the 100-year flood and significantly reduces inundation on upstream properties. However, the change also reduces floodplain storage upstream of the bridge, which results in an increase in peak-discharge rates downstream. Study of instantaneous changes to floodplain hydrology (inflow hydrograph development and flood routing calculations for the *Existing* and *Proposed Conditions*) would be required to determine whether the changes are significant. Such a study is beyond the scope of our engagement at this stage of the project.

140 Willow Street, Suite 8, Winsted, CT 06098
T: 860.379.6669 | HALEYWARD.COM

The CT DEEP *Hydraulic Analysis Guidance Document* mentions that significant alterations in floodplain hydrology that result in increased downstream discharges may be considered intolerable. If so, the CT DEEP could require the Town to preserve the *Existing-Condition* water-surface profile or to throttle the bridge opening downward to achieve some form of compromise between reduction in upstream water-surface profile elevations and increase in downstream peak-discharge rates. If the Town decides to pursue this project further, we recommend a pre-application meeting with the CT DEEP to review these preliminary findings and set direction for further hydrologic and hydraulic analyses.

The state of practice in Connecticut and regulatory pressure from State and Federal agencies generally drive the need for a bridge or open-bottom structure for Large Structure-Class bridges like this one. These types of structures must be founded on shallow bedrock, if available, or on deep piles to withstand the possibility of scour damage during periods of flooding. A geotechnical investigation and scour analysis are beyond the scope of our engagement at this stage in the project. However, we note that reduction in bridge span to preserve upstream floodplain hydrology will increase the potential for scour if shallow bedrock is not present.

Hydraulic Design Criteria

Chapter 9 of the Connecticut Department of Transportation (CT DOT) *Drainage Manual* presents design criteria required for various structure classes. Structure classes are based on drainage basin size. **Table 9-2** of the *Drainage Manual* shows minimum freeboard and under-clearance criteria for various structure classes:

Table 9-2

SUMMARY OF HYDRAULIC CRITERIA[5]

CONNDOT STRUCTURE CLASS[3]	DRAINAGE AREA sq km (sq. mile)	DESIGN FREQUENCY (year)	CHECK FREQUENCY (year)	MINIMUM FREEBOARD[1] FOR DESIGN FREQUENCY m (ft)	MINIMUM BRIDGE UNDER-CLEARANCE FOR DESIGN FREQUENCY m (ft)
Minor	<2.59 (1) (no established watercourse)	25	-	0.3 (1)	-
Small	<2.59 (1)	50	100	0.3 (1)	-
Intermediate[4]	≥2.59 (1) <25.9 (10)	100	500	0.3 (1)	0.3 (1)
Large[4]	≥25.9 (10) <2590 (1000)	100	500	0.3 (1)	0.6 (2)
Monumental	≥2590 (1000)	100[2]	500[2]	0.3(1)[2]	0.6 (2)[2]

The subject crossing has a drainage area of 10.9 square miles; accordingly, Table 9-2 classifies Bridge 06139 as a "Large" structure. Figure 1 shows the drainage area for this bridge. For Large structures, any new replacement structure must be designed for the 100-year recurrence-interval flood, with at least two feet of under-clearance and at least

one foot of freeboard. In addition, the implications of the 500-year recurrence interval flood must be explored.

The Connecticut Department of Energy and Environmental Protection (CT DEEP) Inland Water Resources Division published a manual entitled "*Hydraulic Analysis Guidance Document*". Section 2 of the Governing Policies portion of this manual specifies that the *Proposed-Condition* water surface profile should be no more than one foot higher than the *Natural Condition* water-surface profile.

Haley Ward perceives the foregoing CT DOT and CT DEEP criteria as the state of practice for hydraulic sizing of replacement bridges in Connecticut, including those on state highways or those on municipal highways that are funded with state and federal dollars.

In certain cases, State flood-management regulations allow relaxation of ConnDOT design standards on low-volume, non-state roadways that lie close to the floodplain elevation. If the project is funded entirely with municipal dollars, it may be possible for the Town to win approval for a reduced-capacity design through analysis and discussion with State and Federal regulators. If the Town pursues relaxation of CT DOT and CT DEEP design standards, the Town will have to contend with periodic traffic disruptions and roadway damage associated with more-frequent overtopping. For this analysis, Haley Ward followed the CT DOT and CT DEEP design criteria described above.

Design Flow

For structures on larger streams and rivers, the CT DOT typically requires the use of current USGS regression equations for Connecticut to establish design flow-rates for the hydraulic design of bridges and culverts, with at least one independent method to check the regression-equation results. Haley Ward used the USGS StreamStats web tool to generate the following regression-equation results for Bridge 06139:

Recurrence Interval	Flow Rate
2-Year	393 CFS
10-Year	710 CFS
25-Year	930 CFS
50-Year	1,130 CFS
100-Year	1,340 CFS
500-Year	1,970 CFS

The US Geological Survey (USGS) maintained Stream Gage 01127760 at the site of Bridge 06139 from 1964 to 1976, a period of relative drought. Peak discharge rates predicted at this gage for various recurrence-interval floods are substantially lower than the predictions generated by the current Connecticut regression equations for the same location.

Haley Ward opted against using the gage data directly or a weighted average of stream-gage data and statewide regression-equation discharge rates for design because of the short period of record and drought-influenced results at the gage.

Haley Ward also reviewed a document entitled *Hydrologic Design Report - Old Mill Road Bridge over Hunts Brook (Structure No. 05518) for the Town of Waterford* dated February 9, 2007 by SEA Consultants, Inc. This bridge is located downstream of the subject bridge and has a drainage area of 11.5 square miles. The SEA report utilized the simplified USGS Regression Equations for Connecticut to predict flood discharges for the Old Mill Road structure. The results are somewhat higher than the results generated by Haley Ward using the current USGS multi-parameter regression equations at Bloomingdale Road, even after factoring the difference in drainage areas.

The SEA report contained an excerpt from a 1968 publication entitled "Storm Drainage Study – Southeastern Connecticut Region" by Cahn Engineers. In this study, Cahn computed the peak 10-year discharge for the Bloomindale Road crossing at 1,200 to 1,250 CFS using the Rational Method (the current CT Regression Equations return a value of 710 CFS for the 10-year recurrence interval).

Figure 2 presents an excerpt from the New London County Flood Insurance Rate Map - Panel No. 09011C0363J. The location of Bridge 06139 is identified on this excerpt. The excerpt shows that Bridge 06139 is located in Flood Zone A (No Base Flood Elevations Determined). Accordingly, no peak discharge rates were determined for this location.

Based on a review of available data, Haley Ward rejected further consideration of stream-gage data or information from the SEA report. We opted to recommend discharge rates for design as generated by the Connecticut Multi-Parameter Statewide Regression Equations. These rates are present in the table above.

Hydraulic Model Development

Haley Ward utilized the Hydrologic Engineering Center River Analysis Software (HEC-RAS) to generate hydraulic models for this analysis. Figure 3 shows the location of the river baseline and the positions of hydraulic cross sections employed in our hydraulic models.

We compiled geometry for the analysis using Lidar surface in the overbank areas (obtained from Connecticut Environmental Conditions Online) and surveyed cross sections of Hunts Brook in the channel to generate hydraulic cross sections. By combining these two data sets, we compiled hydraulic cross sections in specific locations upstream and downstream of Bloomingdale Road within the model. We defined Manning's roughness coefficients, obstruction (buildings), and ineffective flow areas for each of the cross sections.

Haley Ward developed a *Natural-Condition* model using the aforementioned cross-sections without the presence of the Bloomingdale Road culverts, roadway embankment, or associated ineffective flow areas. This procedure established the *Natural-Condition* water-surface profile target previously discussed.

To generate the *Existing-Condition* model, Haley Ward added the three Bloomingdale Road culverts, roadway embankment, and associated ineffective flow areas.

We then created four *Proposed-Condition* models, each with its own unique bridge span (20, 25, 30, and 35 feet) and associated ineffective flow areas. We created a slightly modified roadway profile (used in each of the four *Proposed-Condition* models) to reflect probable bridge and parapet dimensions and to correct minor deficiencies in the existing roadway alignment.

To meet the CT DOT under-clearance requirements, we raised the roadway approximately six inches. Once the roadway profile was established, we estimated pavement and deck thicknesses using Plate 5.6.6 of the CT DOT *Bridge Design Manual* and guidance from in-house structural engineers. We determined low-chord elevations by subtracting the estimated pavement and deck thicknesses from the proposed roadway profile.

Results

The following tables summarize the elevation difference between the 100-Year *Proposed Condition* and 100-Year *Natural Condition* water surface profiles at each River Station, low-chord under-clearance, and freeboard for each of the four *Proposed Condition* scenarios. Exhibit A contains comparative water surface profiles for each alternative.

Alternative 1 – 20' Span:

River Station	100-Year NatCon WSE (NAVD-88)	100-Year ExCon WSE (NAVD-88)	100-Year ProCon WSE (NAVD-88)	Δ WSE ProCon-ExCon (FT)	Δ WSE ProCon-NatCon (FT)	LC Under-Clear. (FT)	Free-Board (FT)
1281	60.58	64.08	60.72	-3.36	0.14		
929	60.05	64.04	60.26	-3.78	0.21		
659	59.15	63.98	59.5	-4.48	0.35		
600	59.17	63.98	59.57	-4.41	0.4		
560	58.09	63 92	59.4	-4.52	1.31	1.30	4.07
521.21			Bridge				
487	58.3	58.3	58.3	0	0	2.4	
476	58.37	58.37	58.37	0	0		
440	58.15	58.15	58.14	-0.01	-0.01		
391	57.25	57.25	57.28	0.03	0.03		
371	56.49	56.49	56.49	0	0		
206	54.59	54.59	54.59	0	0		

Alternative 2 – 25' Span:

River Station	100-Year NatCon WSE (NAVD-88)	100-Year ExCon WSE (NAVD-88)	100-Year ProCon WSE (NAVD-88)	Δ WSE ProCon-ExCon (FT)	Δ WSE ProCon-NatCon (FT)	LC Under-Clear. (FT)	Free-Board (FT)
1281	60.58	64.08	60.54	-3.54	-0.04		
929	60.05	64.04	59.99	-4.05	-0.06		
659	59.15	63.98	59.05	-4.93	-0.1		
600	59.17	63.98	59.12	-4.86	-0.05		
560	58.09	63.92	58.93	-4.99	0.84	1.77	4.54
521.21			Bridge				
487	58.3	58.3	58.3	0	0	2.40	
476	58.37	58.37	58.37	0	0		
440	58.15	58.15	58.14	-0.0	-0.0		
391	57.25	57.25	57.28	0.03	0.03		
371	56.49	56.49	56.49	0	0		
206	54.59	54.59	54.59	0	0		

Alternative 3 – 30' Span:

River Station	100-Year NatCon WSE (NAVD-88)	100-Year ExCon WSE (NAVD-88)	100-Year ProCon WSE (NAVD-88)	Δ WSE ProCon-ExCon (FT)	Δ WSE ProCon-NatCon (FT)	LC Under-Clear. (FT))	Free-Board (FT)
1281	60.58	64.08	60.47	-3.61	-0.11		
929	60.05	64.04	59.87	-4.17	0.18		
659	59.15	63.98	58.83	-5.15	0.32		
600	59.17	63.98	58.92	-5.06	-0.25		
560	58.09	63.92	58.71	-5.21	0.62	1.99	4.76
521.21			Bridge				
487	58.3	58.3	58.31	0.01	0.01	2.39	
476	58.37	58.37	58.38	0.01	0.01		
440	58.15	58.15	58.16	0.01	0.01		
391	57.25	57.25	57.24	-0.01	-0.01		
371	56.49	56.49	56.49	0	0		
206	54.59	54.59	54.59	0	0		

Alternative 4 – 35' Span:

River Station	100-Year NatCon WSE (NAVD-88)	100-Year ExCon WSE (NAVD-88)	100-Year ProCon WSE (NAVD-88)	Δ WSE ProCon-ExCon (FT)	Δ WSE ProCon-NatCon (FT)	LC Under-Clear. (FT)	Free-Board (FT)
1281	60.58	64.08	60.44	-3.64	-0.14		
929	60.05	64.04	59.81	-4.23	-0.24		
659	59.15	63.98	58.7	-5.28	-0.45		
600	59.17	63.98	58.8	-5.18	-0.37		
560	58.09	63.92	58.58	-5.34	0.49	2.12	4.89
521.21			Bridge				
487	58.3	58.3	58.3	0	0	2.40	
476	58.37	58.37	58.37	0	0		
440	58.15	58.15	58.14	-0.01	-0.0'		
391	57.25	57.25	57.28	-0.03	-0.03		
371	56.49	56.49	56.49	0	0		
206	54.59	54.59	54.59	0	0		

The results show the optimal structure size to be a 30-foot span bridge. The difference between the proposed condition and the natural condition water surface elevations is 0.6 feet which is less than one foot as required by the CT DEEP. The distance to the low chord is calcu ated to be 2.0 ft. This matches the CT DOT design criteria. Freeboard is four times or greater than the CT DOT requirements. All targets are met with this structure size.

Haley Ward recommends that the Town pursue final des'gn using a 30-foot span bridge.

As noted in Table 9-2 of the CT DOT Drainage Manual, the implications of the 500-Year check flood must be investigated for "Large" structures. Exhibit B contains comparative water-surface profi e plots for each of the four alternatives explored.

The fol owing tables present the e eval'on differences between the 500-year *Existing Condition* and *Proposed Condition* water surface profiles, the 500-year low-chord under-clearance and the 500-year overtopp'ng depth for each of the alternatives under consideration:

Alternative 1 – 20' Span:

River Station	500-Year ExCon WSE (NAVD-88)	500-Year ProCon WSE (NAVD-88)	Δ WSE ProCon-ExCon (FT)	Low Chord Under-Clearance (FT)	Freeboard (FT)	Overtopping Depth (FT)
1281	64.63	63.58	-1.05			
929	64.57	63.47	-1.1			
659	64.47	63.25	-1.22			
600	64.48	63.22	-1.26			
560	64.40	63.05	-1.35	N/A	0.42	N/A
521.21	Culvert	Bridge				
487	59.47	59.48	0.01	1.22		
476	59.58	59.57	-0.01			
440	59.26	59.24	-0.02			
391	58.00	58.02	0.02			
371	57.35	57.35	0			
206	55.73	55.73	0			

Alternative 2 – 25' Span:

River Station	500-Year ExCon WSE (NAVD-88)	500-Year ProCon WSE (NAVD-88)	Δ WSE ProCon-ExCon (FT)	Low Chord Under-Clearance (FT)	Freeboard (FT)	Overtopping Depth (FT)
1281	64.63	61.96	-2.67			
929	64.57	61.59	-2.98			
659	64.47	60.64	-3.83			
600	64.48	60.73	-3.75			
560	64.40	60.47	-3.93	0.23	3.00	N/A
521.21	Culvert	Bridge				
487	59.47	59.48	0.01	1.22		
476	59.58	59.57	-0.01			
440	59.26	59.24	-0.02			
391	58.00	58.02	0.02			
371	57.35	57.35	0			
206	55.73	55.73	0			

Alternative 3 – 30' Span:

River Station	500-Year ExCon WSE (NAVD-88)	500-Year ProCon WSE (NAVD-88)	Δ WSE ProCon-ExCon (FT)	Low Chord Under-Clearance (FT)	Freeboard (FT)	Overtopping Depth (FT)
1281	64.63	61.81	-2.82			
929	64.57	61.39	-3.18			
659	64.47	60.28	-4.19			
600	64.48	60.39	-4.09			
560	64.40	60.10	-4.3	0.60	3.37	N/A
521.21	Culvert	Bridge				
487	59.47	59.51	0.04	1.19		
476	59.58	59.59	0.01			
440	59.26	59.27	0.01			
391	58.00	57.94	-0.06			
371	57.35	57.35	0			
206	55.73	55.73	0			

Alternative 4 – 35' Span:

River Station	500-Year ExCon WSE (NAVD-88)	500-Year ProCon WSE (NAVD-88)	Δ WSE ProCon-ExCon (FT)	Low Chord Under-Clearance (FT)	Freeboard (FT)	Overtopping Depth (FT)
1281	64.63	61.73	-2.9			
929	64.57	61.28	-3.29			
659	64.47	60.07	-4.4			
600	64.48	60.20	-4.28			
560	64.40	59.88	-4.52	0.82	3.59	N/A
521.21	Culvert					
487	59.47	59.48	0.01	1.22		
476	59.58	59.57	-0.01			
440	59.26	59.24	-0.02			
391	58.00	58.02	0.02			
371	57.35	57.35	0			
206	55.73	55.73	0			

HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

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PROJECT No. : 4010193.22376 DRAWING No. : WATERSHED

PROJECT: BLOOMINGDALE ROAD CULVERT, WATERFORD, CT

TITLE: WATERSHED MAP Figure 1

DWN. BY: CG CHK. BY: DNB DATE 2023.10.09

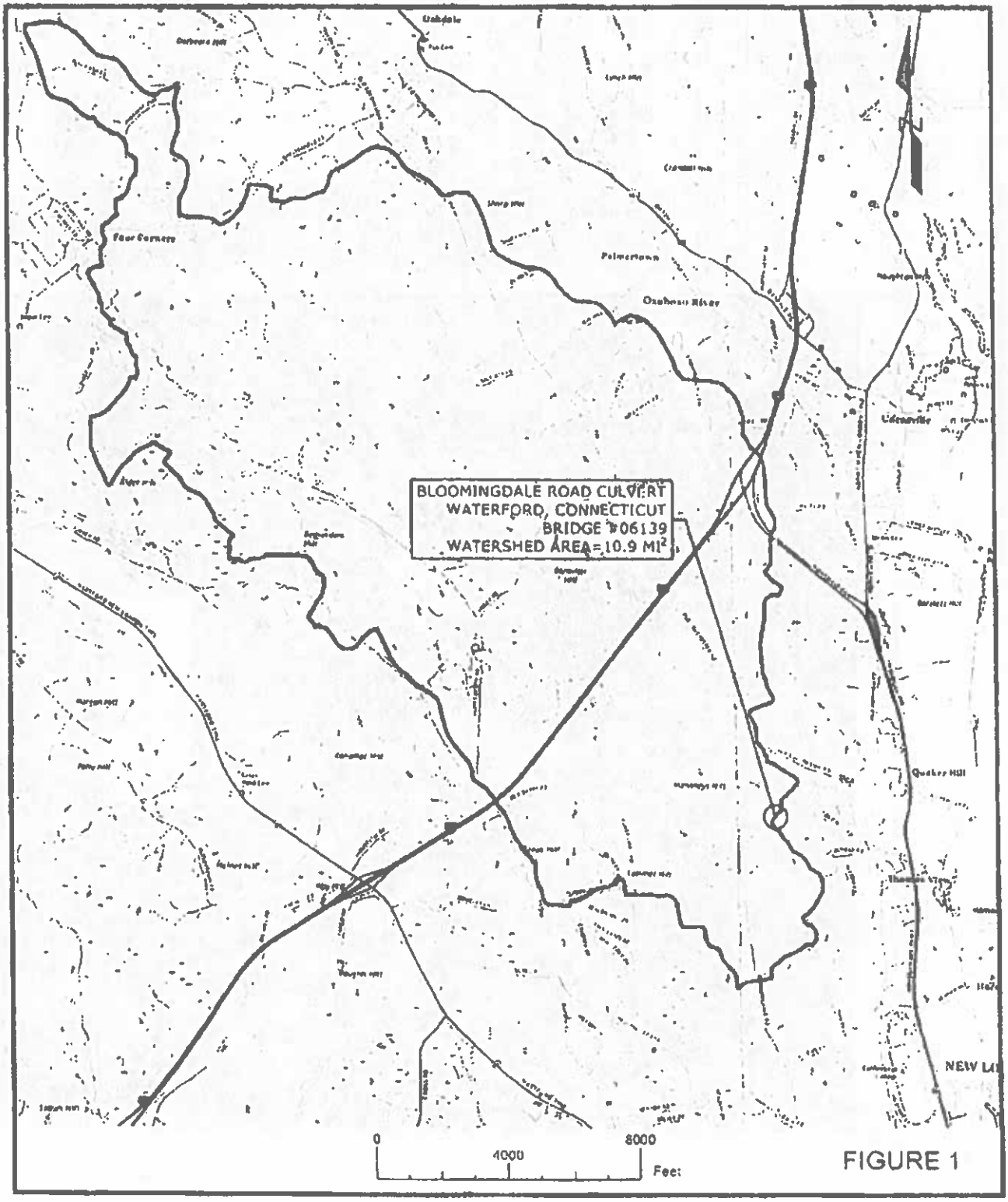
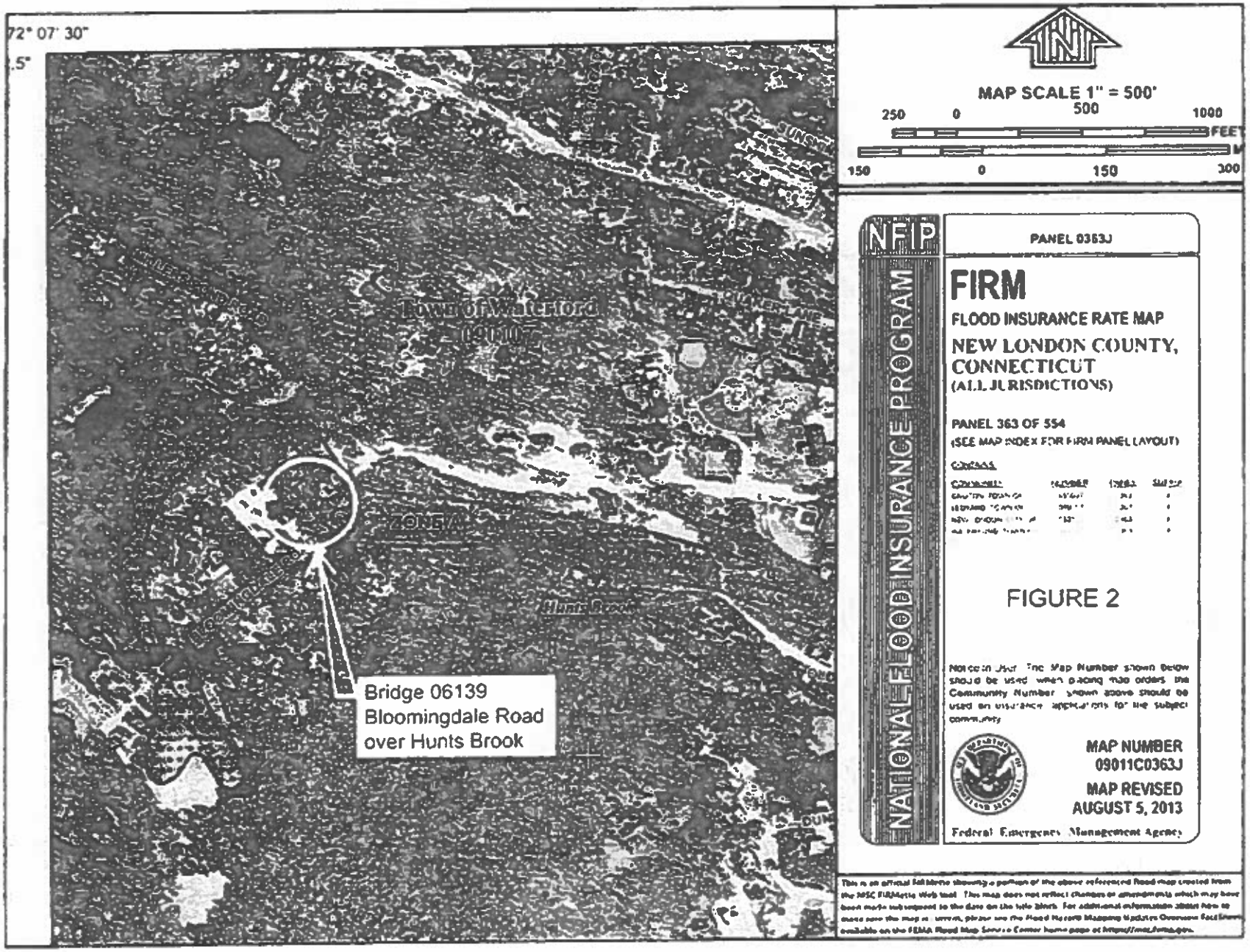


FIGURE 1


72° 07' 30"
.5'
Town of Waterford
09010
ZONE A
Hunts Brook
Bridge 06139
Bloomingdale Road
over Hunts Brook
MAP SCALE 1" = 500'
250 0 500 1000
FEET
150 0 150 300
NFIP
NATIONAL FLOOD INSURANCE PROGRAM
PANEL 0363J
FIRM
FLOOD INSURANCE RATE MAP
NEW LONDON COUNTY, CONNECTICUT
(ALL JURISDICTIONS)
PANEL 363 OF 554
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
FIGURE 2
MAP NUMBER
09011C0363J
MAP REVISED
AUGUST 5, 2013
Federal Emergency Management Agency

KLEINFELDER
Bright People. Right Solutions.

MEMORANDUM

TO: Daniel Steward, First Selectman, Town of Waterford, CT

FROM: Neil Kulikauskas, P.E.
Hannah Bloomquist

DRAFT

DATE: November 18, 2014

SUBJECT: Bloomingdale Road Culvert Investigation & Analysis

---

1. Background

The Bloomingdale Road culvert over Hunts Brook (Structure No. 06139) was constructed in 1970, and consists of three 72-inch reinforced concrete pipes ranging from 40-feet to 45-feet in length. Local flooding and overtopping of Bloomingdale Road at the culvert crossing has been observed in the past during large and high-intensity rainfall events.

The purpose of our work was to analyze the hydrology and hydraulics of the existing culvert; compare results with other published data; determine the adequacy of the existing culvert; and evaluate potential system alternatives, if necessary. This memorandum summarizes our investigative methodology, results, and recommendations.

2. Existing Conditions

The watershed to the Bloomindale Road culvert crossing is approximately 10.5 square miles in size, and is comprised largely of wooded land with minimal residential and commercial development. Hunts Brook is the prominent watercourse in the watershed. It is a natural watercourse originating in the northern portions of the watershed in Montville as Deep Hollow Brook and its tributaries. The stream is naturally winding but generally runs in a southeast direction, discharging to Smith Cove in the Quaker Hill section of Waterford. Hunts Brook flows through two significant impoundments prior to the Bloomindale Road crossing: Cuheca Lake and Millers Pond.

In the vicinity of the Bloomingdale Road culvert, Hunts Brook continually varies in width from 40-feet to 100-feet wide (from bank to bank), with a slope of approximately 0.4%. Approximately 70 feet upstream of the culvert, the stream has a 35° bend east toward the culvert. Just after the bend there exists a beaver dam that spans across much of the stream width. The stream then constricts to approximately 20 feet wide at the culvert crossing.

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5. Conclusions and Recommendations

Our investigations and analysis has been completed using documented assumptions and available resources, including topography mapping, aerial photography, and culvert reports and plans. Based on this, we have developed the following conclusions and recommendations:

1) While there are several approved methodologies (including past studies) for determining design flows to the culvert, the TR-55 analysis performed herein is considered to be most accurate and should be used for future analysis and recommendations.

2) The existing culvert is designed to safely carry the 18-year storm, with 1.0 foot of freeboard; and the 27-year storm without overtopping the roadway.

3) The design frequency requirements for municipally-owned structures can typically vary from 10-year to 500-year discharges. The required level of design depends on the level of risk (loss of life, loss of property, etc.) associated with the failure of the crossing and change in floodwaters upstream and downstream.

4) The existing culvert would not meet the CTDOT requirements for state-owned structures. (There is no state requirement for level of design on local roads.)

5) For the 100-year storm, the width of flow overtopping the roadway (approximately 210 feet) is consistent with the approximate FEMA floodplain width both upstream and downstream of the culvert.

6) The capacity of the crossing could be increased by adding pipes or replacing with a box or bridge structure.

7) The level and extent of changes in flood elevations upstream or downstream created by increasing the capacity of the culvert is not known. Additional hydraulic analysis would be required in order to determine the level and extent of changes in flood elevations along Hunts Brook as a result of various proposed alternative improvements.

KLEINFELDER 500 Enterprise Drive, Suite 4B, Rocky Hill, CT 06067 p | 860.563.7775 f | 860.563.6744

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Retaining Walls	**DEPARTMENT PRIORITY** 9

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Oswegatchie Road is one of the several Town roads that have been identified as an evacuation route. There is a segment of the road near lot #166 where the embankment next to the road is held up by a dry stone retaining wall. The wall, if it fails, would block the means of egress. Failure of the wall would also impact the electrical circuit to that area. Funding is being programed for consulting engineer to inspect the structure and make recommendations for repairs to the retaining wall. Funding for construction would be proposed for the following years.
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	None

7 **COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance			35,000			
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**35,000**	**0**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Retaining Walls

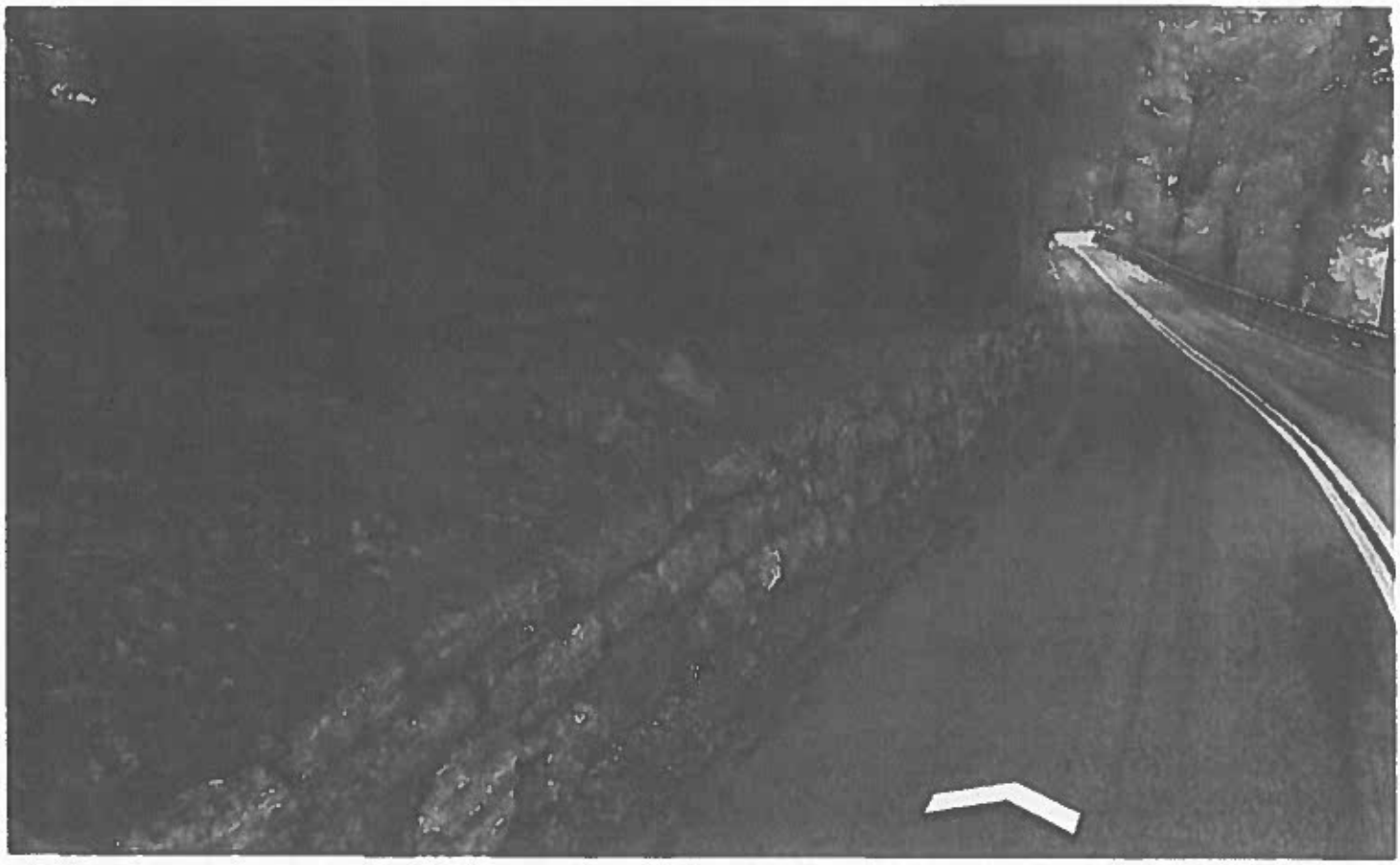
Several roads are either held up or have slopes that are held back by retaining walls. Cross Road and Oswegatchie Road are several of the Town roads that have been identified as an evacuation route and have retaining walls.

On Oswegatchie Road, there is a segment of the road near lot #166 where the embankment next to the road is held up by a dry stone retaining wall. The wall, if it fails, would block the means of egress. Failure of the wall would also impact the electrical circuit to that area.

Over the years, trees have matured and have impacted the wall. One place in particular, a tree has pushed the wall closer to the road. The tree was removed years ago and the area has been marked with reflectors to warn vehicles of the intrusion into the road. This wall is over 4 feet in height and runs for approximately 300 feet. The opposite side of the road has a metal guide rail. There are no shoulders on this stretch of road with the travel portion in the area of the wall averaging only 22 feet in width.

Although it appears stable for the near future, funding should be programed for a consulting engineer to inspect the structure and made recommendations for repairs to the retaining wall. Funding for construction would be proposed for the following years.

The retaining wall on Cross Road appears to be stable.



TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Traffic Signals	**DEPARTMENT PRIORITY** 10

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The Town is responsible for traffic signals installed at certain intersections of Town roads. Currently, the Town has four locations where traffic signals are Town owned. Those are Parkway South with Cross Road, Parkway North with Cross Road, the flashing beacon at the Municipal Complex and Route 85 and Millstone Road/Seaview Terrace with Route 1. (Jordan and the Oswegatchie Fire Houses both have a traffic signal that is maintained by Fire Services.) The traffic engineer would review each of the intersections and prepare a report of the condition of existing equipment, recommended replacement schedule, and cost estimates for these critical signals.
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	None
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance			15,000			250,000
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**15,000**	**0**	**0**	**250,000**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Traffic Signals

The Town is responsible for traffic signals installed at the intersections of Town roads. A town driveway onto a State road (usually a warning beacon) or installed at the Town's request. All other locations are the responsibility of the State DOT to maintain.

Currently, the Town has four locations where traffic signals are Town owned. Those are Parkway South with Cross Road, Parkway North with Cross Road, the flashing beacon at the Municipal Complex on Route 85 and Millstone/Seaview Terrace with Route 1.

Jordan and Oswegatchie Fire Houses both have a traffic signal that is maintained by Fire Services.

The traffic signals at the intersections of Cross Road and Parkway North and South were installed when the State did the bridge structure. The Town should be planning for their replacement.

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Transfer Station	**DEPARTMENT PRIORITY** 11

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

The recyclable area of the transfer station was built in the early 2000's as part the the total project. Recyclable volumes have exploded and the area has not been upgraded to handle the increase. The electrical service to the compactor has been found to be under sized and trips out serveral times each year. Without this unit, the collection vehicles must make the trip to Willimantic to discharge their loads. The compaction unit holds 4 collection vehicles loads. This project will also investigate options to increase the efficiency of the transfer station of what is collected (waste and recyclables) and how it is transported to processing facilites.

2 PROJECT STATUS IF IN PROGRESS

None

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

None

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

None

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

None

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

Google Earth image of the Transfer Station

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance			20,000	100,000		
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**20,000**	**100,000**	**0**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Transfer Station

This project will address several areas that support the Transfer Station operations at the Municipal Complex. The Transfer Station was constructed in 2000.

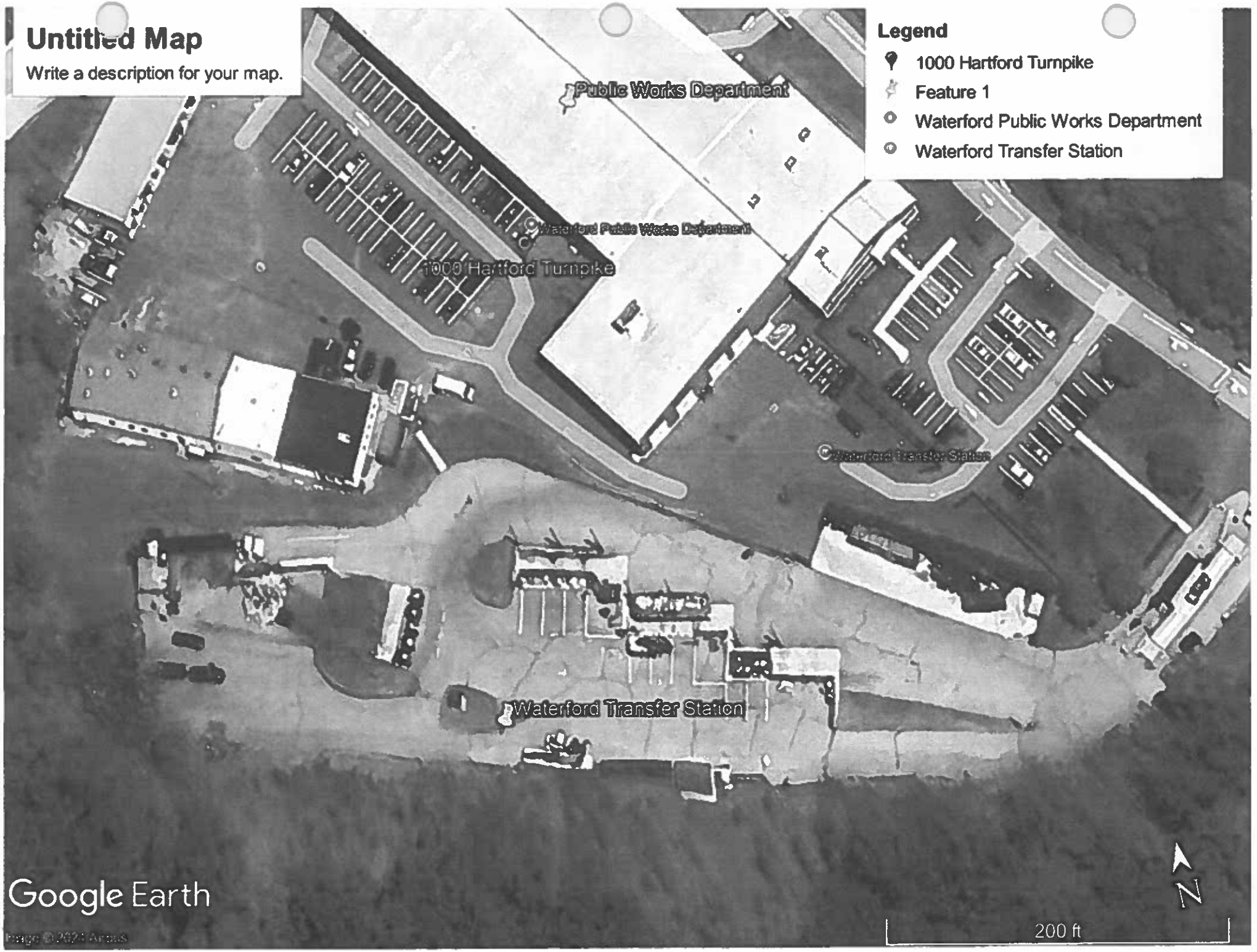
The Transfer Station consists of the following components:

- Scale (replaced in FY23) and office for the attendant
- Drop off area for residents and small commercial accounts
- Recycling area (motor oil, bulbs, appliances, tires, mattresses)
- Operations area for public works (curbside recyclables transfer area)

An office trailer is used as a scale house and inspection point for incoming vehicles. This trailer was purchased for use at the Miner Lane Temporary Transfer Station site, when the Town was preparing to close the landfill. It was then moved to its current location after Miner Lane closed. Trailers of this type have a life of 10 -15 years. The trailer includes toilet facilities, lightning protection and is secured to handle cash.

The curbside recyclable transfer area was designed at its origin. Recyclable volumes have exploded and the area has not been upgraded to handle the increase in volume. It can take over 30 minute to discharge the load from the truck into the ream that compacts the material into the transfer trailer. The electrical service to the compactor has been found to be undersized and fails several times a year. Without this unit, the collection vehicles must make the trip to Willimantic to discharge their loads. The trailer that the compactor packs into will hold 4 collection vehicle loads.

This project will also investigate options to increase the efficiency of transportation of what is collected (waste and recyclables) to the regional processing facilities.


Untitled Map
Write a description for your map.
Legend
1000 Hartford Turnpike
Feature 1
Waterford Public Works Department
Waterford Transfer Station
Public Works Department
Waterford Public Works Department
1000 Hartford Turnpike
Waterford Transfer Station
Waterford Transfer Station
Google Earth
N
200 ft

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Wooden Streetlight Poles	**DEPARTMENT PRIORITY** 12

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The Town is responsible for wooden poles as they only hold the street light. They are approaching the end of their service life. The project involves not only the replacement of the pole, but includes the detachment/reattachment of the light fixture to the pole. Eversource is also involved as they must disconnect and reconnect the power to the light fixture.
2	**PROJECT STATUS IF IN PROGRESS**
	None
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Spreadsheet by type and location
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance			100,000		100,000	
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**100,000**	**0**	**100,000**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Wooden Streetlight Pole Replacement

In several subdivisions, the electric power lines were installed underground eliminating the need for utility poles. That eliminated the ability of the Town to install streetlights on someone else's pole. To provide street lighting on these subdivisions roads, wooden poles were installed to attach the light fixture. There was no standard pole or fixture required by the Town and all were direct burial of the wooden pole into the ground. There are a total of 162 direct burial poles that must be replaced.

Unlike areas that have overhead wires where a utility company is responsible for the pole, the Town is responsible for these poles as they only hold the streetlight. The poles are approaching the end of their service life.

The project involves not only the replacement of the pole, but includes the detachment/reattachment of the light fixture to the pole. Eversource is also involved as they must disconnect and reconnect the power to the light fixture.

SINGLE STANDING WOOD STREET LAMP POSTS TOWNWIDE COUNT: SUMMARY

LAMP STYLE: LNT(LANTERN) CBH(COBRA HEAD)

ZONE I -MONDAYS ROUTE:

ROAD	QUANTITY	STYLE
TRUMBULL	1	LNT
BALDWIN	1	LNT
PERKINS FARM	2	CBH
COLONIAL	8	LNT
LAUREL CREST	3	LNT
WHALING	1	LNT
LINCOLN	3	LNT
ROBIN HILL	2	LNT
COOLIDGE	1	LNT
WALLACE	1	LNT
COUNTRY CLUB	5	LNT
WESTWOOD	5	CBH
MAYFAIR	2	CBH
PEPPERBOX	5	CBH
GOUNDRY	2	CBH

TOTAL LNT - 26
TOTAL CBH - 16
TOTAL POLES - 42

ZONE II -TUESDAYS ROUTE:

ROAD	QUANTITY	STYLE
WINDY RIDGE	1	CBH
DIANE	2	CBH
ALMOND	2	CBH
DEVONSHIRE	11	CBH
YORKSHIRE	8	CBH
LANCASHIRE	2	CBH
KING FISHER	2	CBH

TOTAL LNT - 0
TOTAL CBH - 28
TOTAL POLES - 28

ZONE IIb - WEDNESDAYS ROUTE

ROAD	QUANTITY	STYLE
INA	2	CBH
PAULA	12	CBH
DOYLE	3	CBH
MEMORY	2	CBH
MANATUCK	1	CBH
INDIAN VALLEY	2	CBH
RAYMOND	1	CBH
SCENIC VIEW	3	CBH
MALLARD	2	CBH
PAMELA	3	CBH

TOTAL LNT - 0
TOTAL CBH 31
TOTAL POLES - 31

ZONE IV - THURSDAYS ROUTE:

ROAD	QUANTITY	STYLE
EAST LAKE	1	CBH
MILTON	3	CBH
RAINBOW	2	CBH
CLARK PLACE	1	CBH
APPLEWOOD	2	CBH

TOTAL LNT 0
TOTAL CBH 9
TOTAL POLES 9

ZONE V - FRIDAYS ROUTE:

ROAD	QUANTITY	STYLE
SOLIER	1	CBH
HICKORY	6	CBH
PADGETT	1	CBH
TWIN LAKES	13	CBH
WATERVIEW	2	CBH
POND EDGE	3	CBH
LEARY PARK	4	CBH
ROGERS HILL	4	CBH
QUINLEY	4	CBH
CONNSHIRE	4	CBH
LATIMER	1	CBH
WARWICK	1	CBH
GREENTREE	3	CBH
WH TE OAK	2	CBH
MELANIE	2	CBH
MARILYN	1	CBH

TOTAL LNT - 0
TOTAL CBH - 52
TOTAL POLES 52

TOWNWIDE SUMMARY: TOTAL LNT 26
TOTAL CBH - 136
TOTAL POLES 162

COUNT AND SUMMARY COMPLETED ON APRIL 27, 2023
BY ERIK J KELLY.

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Public Works	**CONTACT PERSON** Gary J. Schneider
PROJECT NAME Roadside Barriers	**DEPARTMENT PRIORITY** 13

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Roadside barriers are longitudinal barriers used to prevent a vehicle from leaving the roadway and striking a fixed object or terrain feature that is considered more hazardous than the barrier itself. Many of our existing systems do not meet current standards and may even cause more damage than what they are intended to prevent.
2	**PROJECT STATUS IF IN PROGRESS**
	Inventory of existing barriers is on-going.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	None
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	None
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Guardrail locations report dated July 2020

7 **COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance			50,000		50,000	
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**50,000**	**0**	**50,000**	**0**

TOWN OF WATERFORD
MEMORANDUM

PUBLIC WORKS
DEPARTMENT

To: File

From: Gary J Schneider

Date: November 15, 2024

Re: Roadside Barriers

Waterford has over 5 miles of roadside barriers with a replacement cost of over $2.6 million dollars. Roadside barriers are longitudinal structures used to prevent a vehicle from leaving the roadway and striking a fixed object or terrain feature that is considered more hazardous than the barrier itself. Many of our existing systems do not meet current standards and may even cause more damage than what they are intended to prevent.

There needs to be an inventory and the analysis of the condition of the existing systems. For each location, a review of the most current information from the American Association of State Highway and Transportation Officials, U.S. Department of Transportation, Federal Highway Administration, and State of Connecticut Department of Transportation Form 818 to determine if a barrier system is required and, if so, determine the proper barrier system to be installed.

Once this initial analysis has been completed, areas will be prioritized and a funding request will be made.

1-Jul-20

Guardrail Locations...

Street	Location	Type	Footage
Gallows La	Between Hse # 85 and the water tank	Posts and cable	120
Gallows La	By pole #323E4	5 Posts NO cable	25
Gallows La	By the N.L. Town Line	Posts and cable	155
Bloomingdale Rd	Between pole # 2965 and Pole # 2961	Posts and cable	547
Burlake Rd	In the Cul-de-sac	Posts and cable	51
Sunshine Rd	Near Pole #8122 to Hse #9	Posts and cable	138
Sunshine Rd	Near Pole # 8663 to near Hse #25	Posts and cable	284
Old Mill Rd	From the Bridge to the area of Hse #16	Posts and cable	425
Old Mill Rd	From Hse #12 to by Pole #3353	Posts and cable	330
Old Norwich Rd	Area of Pole # 3416 to the area of Pole 3417	Posts and cable	250
Old Norwich Rd	Hse #119	Posts and cable	50
Old Norwich Rd	Hse 151	Posts and cable	80
College Ct	At the Dead End by the drop Only 2 of the posts are left	Posts NO cable	30
	Vauxhall St		
	NORTHBOUND		
	Flexbeam by the I-95 Overpass (overlaping Flexbeam) to Hse # 587	Posts and cable	1,247
	By Hse # 708 to by Hse # 718	Steel I-Beam and cable	450
	By hHse # 729 to near entrance to Leary Park	Steel I-Beam and cable	354
	SOUTHBOUND		
	By Hse #836 Way back off the road LENGTH IS APPROXIMATE	Posts and cable	350
	By Hse 237 to Pole #8239	Posts and cable	139
	Hse # 818 to Hse # 812	Steel I-Beam and cable	157
	Intersect. Of Vauxhall St by F.W.Webb to Flex-Beam by I-95 Bridge	Posts and cable	900
	xxx		
Briarwood Dr	By the Pump Station	3 Posts NO cable	25
Kenyon Rd	By Hse #15 to by Pole #7896	5 Posts NO cable	56
Harvey Av by Rt 85 Eastbound	By Pole #4145 to Pole #4143	Posts and cable	268
Harvey Av by Rt 85 Westbound	From Pump Station Driveway to by Pole # 4145	Posts and cable	200

Gilead Rd	Cul-de-sac	Posts and cable	145
Harbour View	At the 90 degree turn back into the yard of Hse #22	4 Posts NO cable. Some missing	70
Cross Rd Southbound	Around Pole #9266 to Pole #9262	Posts and cable	750
Cross Rd Northbound	Around Pole #9262 to around Pole #9266	Posts and cable	765
	Wtfd. Pkwy. North - East of Cross Rd		
	EASTBOUND		
	By the I-95 South Exit Ramp to by Pole # 4065	Posts and cable	460
	By Pole 4060 to by Pole # 4055	Posts and cable	475
	WESTBOUND		
	Area of Pole #4062 to just past the traffic light	Posts and cable	876
	Wtfd. Pkwy. North - West of Cross Rd		
	WESTBOUND		
	Area of Pole #4015 to the area of Pole #4006	Posts and cable	1,762
	Area of Pole # 3999 to the area of Pole #3997	Posts and cable	324
	Area of Pole # 3994 to the area of Pole #3992	Posts and cable	370
	EASTBOUND		
	Area of Pole #3992 to the area of Pole #3999	Posts and cable	1,435
	Area of Pole #4002 to the area of Pole #4004	Posts and cable	340
	Area of Pole #4005 to the area of Pole #4009	Posts and cable	819
	Area of Pole #3184 to Pole #3181	Posts and cable	560
	Wtfd. Pkwy. South - East of Cross Rd		
	EASTBOUND		
	By Pole #4164	Posts and cable	130
	By Pole #4163	Posts and cable	111
	Area of Pole #4162 to the area of Pole #4160	Posts and cable	316
	Area of Pole #4151 to bt the driveway to CocaCola	Posts and cable	150
	Area of Pole #4149 to the area of Pole #4148	Posts and cable	200
	Near the end of the road NO landmark	Posts and cable	135
	WESTBOUND		
	Near the end of the road NO landmark	Posts and cable	117
	By Pole #4148	Posts and cable	172
	Area of Pole #4150 to the area of Pole #4152	Posts and cable	315

	From the Weigh Scale Entrance to Beechwood Dr	Posts and cable	930
	Area of Pole #4160 to the area of Pole #4162	Posts and cable	316
	The Old Cemetery to the area of Pole #4164	Posts and cable	140
	Wtfd. Pkwy. South - West of Cross Rd		
	WESTBOUND		
	Area of Pole #7723 to the area of Pole #7719	Posts and cable	875
	Area of Pole #7718 to the area of Pole #7717	Posts and cable	340
	Area of Pole #7716 to the area of Pole #7714	Posts and cable	350
	Area of Pole #3322 5K to the area of Pole #7734	Posts and cable	190
	EASTBOUND		
	Area of Pole #7734 to the area of Pole #3322 5K	Posts and cable	150
	By the entrance to I-95 near Gilead Rd to the area of Pole #7716	Posts and cable	430
	Area of Pole 7717 to the area of Pole # 7719	Posts and cable	310
	Area of Pole # 7725 to the Flex-beam	Posts and cable	155
	xxx	xxx	
Gurley Rd Westbound	Pole #3459	Posts and cable	78
Gurley Rd Eastbound	Near Wtfd Pkwy South	8 Posts NO cable	70
Oil Mill Northbound	South of the Rt 395 Overpass unmaintained	6 Posts NO cable	36
Oil Mill Rd Southbound	North of the Rt 395 overpass	4 Posts NO cable	20
Oswegatchie Rd by Wilcox Ct	Area of Pole #826	Posts and cable	75
	Niantic River Rd		
	SOUTHBOUND		
	Starts by MissVans Ct and runs onto Oswegatchie Rd	Posts and cable	290
	Start at Hse #274 and goes to the neighbor	Posts and cable	86
	Area of Pole #6281 6K to the area of Pole #6285 30K	Posts and cable	380
	Hse #222	Posts and cable	60
	The Posts and wire at Hse #222 end with	4 Posts NO cable	20
	Hse #190 to Hse #186	Posts and cable	247
	Hse #178 to Hse #172	Posts and cable	357
	NORTHBOUND		
	Hse 187 to the are of Pole #982	Posts and cable	375
	Pole #6291	Posts and cable	76

	Are of Hse # 241		Posts and cable	100
	xxx		xxx	
Mago Blvd	At the intersect. Of Wood St	Rails converted to a fence	4 Posts NO cable	30
Yorkshire Dr	Hse #50		Posts and cable	190
Kingfisher Way	Assembly goes onto Kestral La		Steel I-Beam and wire	70'
Miner La	Area of the High School Driveway to the area of Pole #705		Posts NO cable	695
xx	Number of posts for Miner La is unknown so many are missing			
Jordan Cove Rd	Area of Pole #3721 to the area of Gardiners Wood		Steel I-Beam and cable	330
Jordan Cove Rd	Area of Gardiners Wood Rd to the area of Pole #3721		Steel I-Beam and cable	265
Millstone Rd East	Access gate to the Millstone Wildl fe Sanctuary **Maybe private		7 Posts NO cable	45
Gardiners Wood Rd	Pole #8217		Posts and cable	200
Shore Rd	Area of Pole #1194 near Anita Av		Posts and cable	84
Windy Ridge Pl	There is low wooden fence that runs along the drop off			230

Feet 25,953

Mileage 4.9

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2025-2030

	DEPARTMENT/ AGENCY:							
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	Children's Playground Equipment	1	25,000					25,000
1	Equipment Storage/Garage Plan	1		Under review				0
1	Town Wide Court Repairs - WBP Tennis	6		450,000				450,000
1	Town Wide Court Repairs - QH/Hoelck Park Tennis	6		450,000				450,000
1	Stenger Farm Park Accessible Walk & Parking Lot Repairs	5						0
1	Jordan Park House Parking Lot Repairs	1						0
2	Waterford Beach Park Perfromance Stage	1	300,000					300,000
2	Civic Triangle Improvements	1		35,000				35,000
2	Leary Park Drainage and Lower Field Access	5			20,000			20,000
3	Atheltic Field Irrigation - Veterans and Leary Park	1				200,000		200,000
2	Town Wide Playground Improvements	1		178,772	143,031	112,963		434,766
								0
	TOTALS		325,000	1,113,772	163,031	312,963	0	1,914,766

INDEX TO FUNDING SOURCES,

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Recreation and Parks	**CONTACT PERSON** Ryan McNamara
PROJECT NAME Children's Playground Equipment	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	A pavilion set off the south end of the playground would be constructed for shelter and community engagement. The Gardiner Family Foundation has generously donated $50,000 towards this project to date, with an anticipated additional $10,000 in 2025. There is currently $40,000 allocated in this fund that would bring the total to $100,000. The concepts and design have been identified and the costs quoted at approximately $110,000. A request of $25,000 is being submitted to cover the anticipated difference in matyerial cost and project contingency.
2	**PROJECT STATUS IF IN PROGRESS**
	Discussions held with Gardiner Family representatives and concepts and quotes provided by company. Location and design also vetted with Civic Triangle project engineers Kent & Frost for uniformity.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	N/A
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	Due to the upper tier responsibility level of the entire park (Civic Triangle), there is staff present on a daily basis to clear any debris from the area and surfacing. Wood treatments would be expected intermittently as required for routine maintenance.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	$60,000 of the project will be funded through the Gardiner Family Foundation
6	**ATTACH PLAN, ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Picture and Quote of project attached

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital	40,000	25,000				
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	40,000	25,000	0	0	0	0

Ryan,

Finally got all the pieces together.
Drawings attached (again), shelter pricing below, and install pricing below.

MSL-20x30STGMR – total price of $49,280.00, including shipping.
Deduct $7,000.00 if you don't want the stained tongue and groove ceiling.
Installation = $29,000.00
Deduct $4,000.00 if you don't include the T&G ceiling.
Add $22,000.00 to include a 24'x34' concrete slab.

RAM-20x24STGMR - total price of $42,700.00, including shipping.
Deduct $6,400.00 if you don't want the stained tongue and groove ceiling.
Installation = $27,000.00
Deduct $4,000.00 if you don't include the T&G ceiling.
Add $18,500.00 to include a 24'x28' concrete slab.

MAR20x24STGMR - total price of $63,675.00, including shipping.
Deduct $11,400.00 if you don't want the stained tongue and groove ceiling. $52,275
Installation = $40,000.00 x 30% = $52,000
Deduct $7,000.00 if you don't include the T&G ceiling. 33K x 30% = 9,900
Add $18,500.00 to include a 24'x28' concrete slab.

FYI – installation pricing does NOT include prevailing wage rates. PW rates will increase install pricing by approx. 30%.

Let me know if/when you are ready to narrow this down and put one of these onto a formal quote.

Best,

Brian Iafolla | CPSI
Park and Playground Consultant
M.E. O'Brien & Sons, Inc.
17 Trotter Drive
Medway, MA 02053
Main Office: 800 835 0056
Direct/Cell: 508 404 7190
www.obrienandsons.com
Brian_iafolla@obrienandsons.com

$134,175

OR

$113,675

O'BRIEN & SONS
ELEMENTS FOR A GREAT OUTDOORS

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Ryan McNamara

From: Brian Iafolla <BrianIafolla@obrienandsons.com>
Sent: Tuesday, July 9, 2024 2:44 PM
To: Ryan McNamara
Subject: Shade / Pavilion
Attachments: MSL-20X30.pdf; RAM-20X24.pdf; MAR-20X24.pdf

CAUTION: This email originated from outside of the organization.
Do not click links or open attachments unless you recognize the sender's email address and know the content is safe.

Ryan,

Finally got all the pieces together.
Drawings attached (again), shelter pricing below, and install pricing below.

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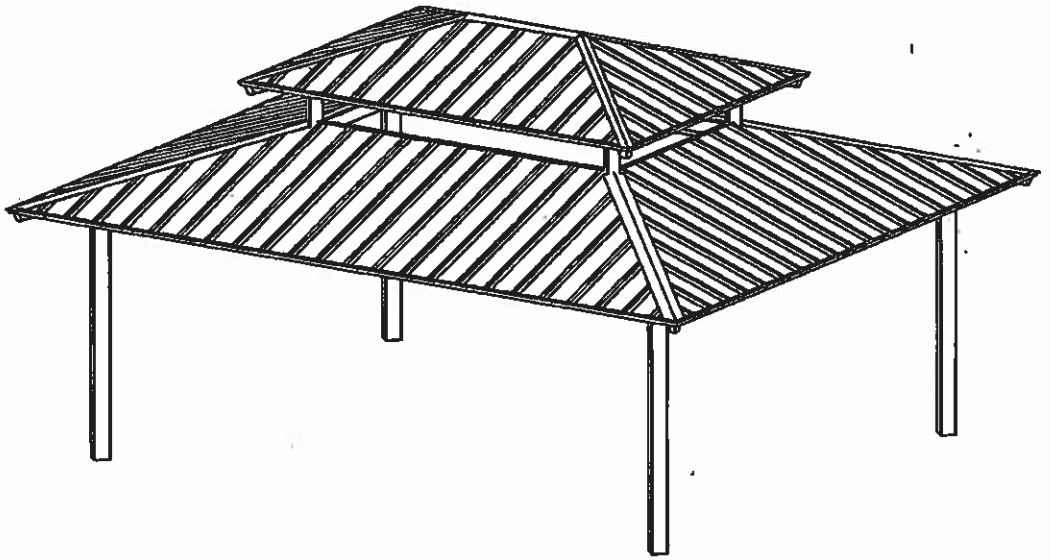
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PROJECT:

LOCATION:

BUILDING TYPE: MAR 20X24

ROOF TYPE: MULTI-RIB

DRAWING LIST:

SHEET NUMBER	DRAWING DESCRIPTION
CS	COVER SHEET
1	ARCHITECTURAL ELEVATIONS
2	STRUCTURAL FRAMING PLAN
3	COLUMN LAYOUT

FABRICATOR APPROVALS:
CITY OF PHOENIX, AZ APPROVED FABRICATOR #C08-2010
CITY OF LOS ANGELES, CA APPROVED FABRICATOR #15596
CITY OF RIVERSIDE, CA APPROVED FABRICATOR #SP06-0033
CITY OF HOUSTON, TX APPROVED FABRICATOR #470
CLARK COUNTY, NV APPROVED FABRICATOR #284
STATE OF UTAH APPROVED FABRICATOR 02009-14

CERTIFICATES:
MIAMI-DADE COUNTY CERTIFICATE OF COMPETENCY NO. 16-0613.16
PCI (POWDER COATING INSTITUTE) 4000 CERTIFIED

MATERIALS:

DESCRIPTION	ASTM DESIGNATION
TUBE STEEL	A500 (GRADE B)
SCHEDULE PIPE	A53 (GRADE B)
RMT PIPE	A518
LIGHT GAGE COLD FORMED	A1003 (GRADE 50)
STRUCTURAL STEEL PLATE	A36
ROOF PANELS (STEEL)	A653

GENERAL NOTES:
UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED TO ONLY SUPPORT WHAT IS SHOWN ON THESE DRAWINGS. POLIGON MUST BE CONTACTED IF ANYTHING ELSE IS TO BE ATTACHED TO THIS STRUCTURE (WALLS, COLUMN WRAPS, RAILINGS, ETC.) SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

UNLESS NOTED OTHERWISE, THIS STRUCTURE WAS DESIGNED ASSUMING A 20' SEPARATION BETWEEN ANY ADJACENT STRUCTURE WITH AN EAVE HEIGHT EQUAL TO OR GREATER THAN THE EAVE HEIGHT OF THIS STRUCTURE. IF THAT SEPARATION DOES NOT EXIST, POLIGON MUST BE CONTACTED SO THE DESIGN OF THIS STRUCTURE CAN BE REVIEWED AND POSSIBLY REVISED.

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL.

ALL WELDING IS PERFORMED BY AMERICAN WELDING SOCIETY CERTIFIED WELDERS AND CONFORMS TO THE LATEST EDITION OF AWS D1.1 OR D1.3 AS REQUIRED.

PARTS SHOWN MAY BE UPGRADED DUE TO STANDARDIZED FABRICATION. REFER TO THE SHIPPING BILL OF MATERIALS FOR POSSIBLE SUBSTITUTIONS.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT THE PRIMARY FRAME INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM FIVE (5) YEARS DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

FOR PROPER FIELD INSTALLATION OF THE BUILDING IT IS RECOMMENDED THAT ELECTRIC WIRING, IF REQUIRED, BE RUN THROUGH THE STRUCTURAL MEMBERS BEFORE THE BUILDING IS ERECTED.

STOP!!
NOT FOR CONSTRUCTION

USE FOR PRELIMINARY PLANNING AND ESTIMATING ONLY

DRAWING: COVER SHEET
SCALE: 1:42
REV LEVEL: A

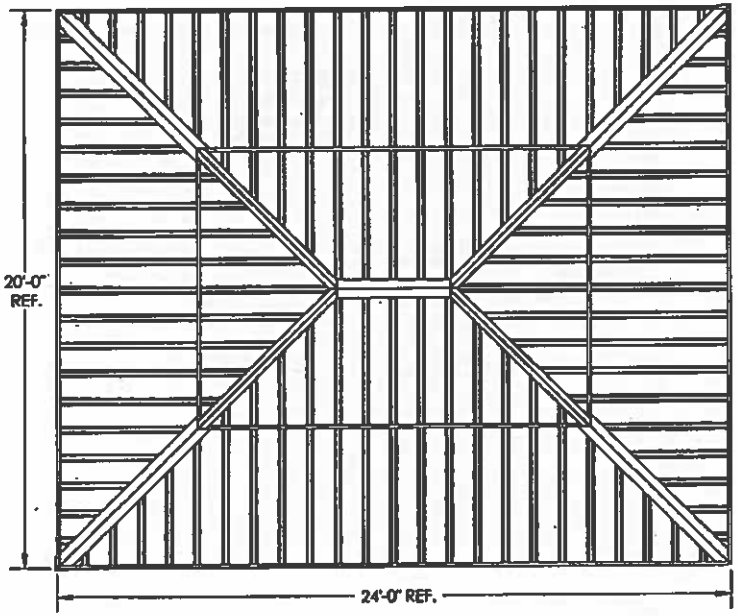
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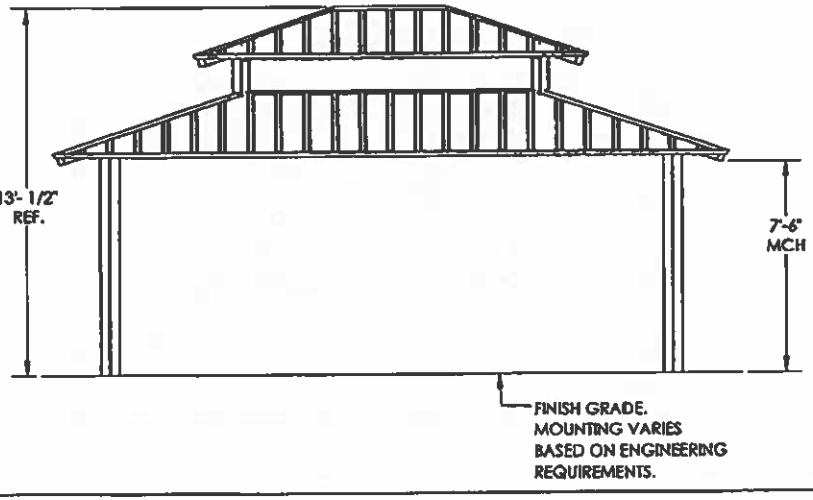
SHEET: CS

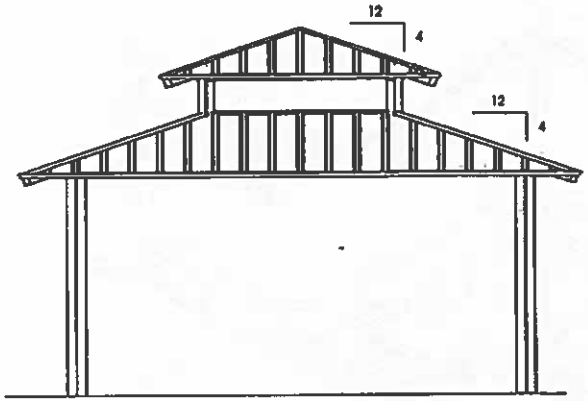
GENERAL ROOF NOTES:

1. METAL ROOFING:
   - 24 GAUGE
   - GALVALUME COATED
   - KYNAR 500 PAINTED
2. TRIM COLOR MATCHES ROOF
3. SEE POLIGON.COM FOR COLOR OPTIONS









STOP!!
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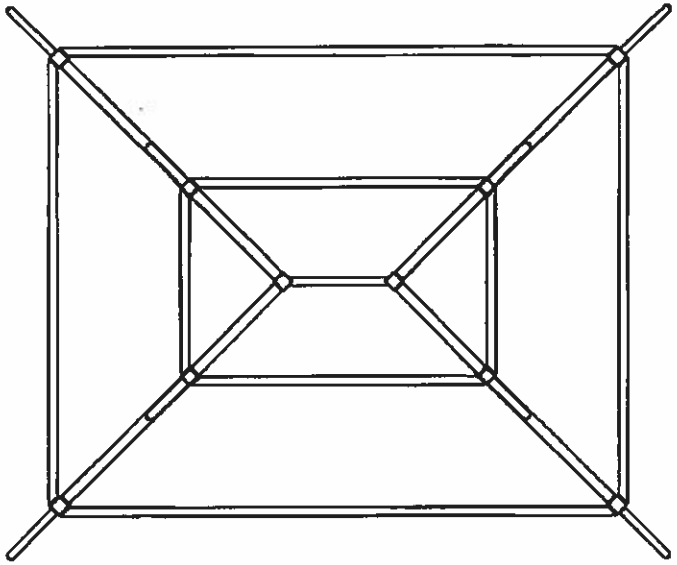
USE FOR PRELIMINARY PLANNING AND ESTIMATING ONLY

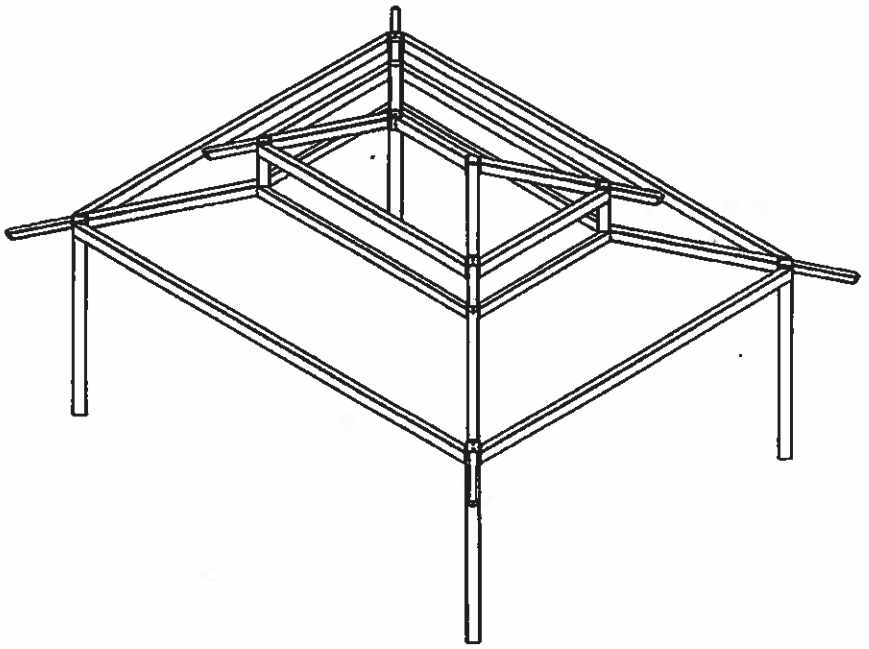
DRAWING: ARCHITECTURAL ELEVATIONS
SCALE: 1:36
REVISED: A

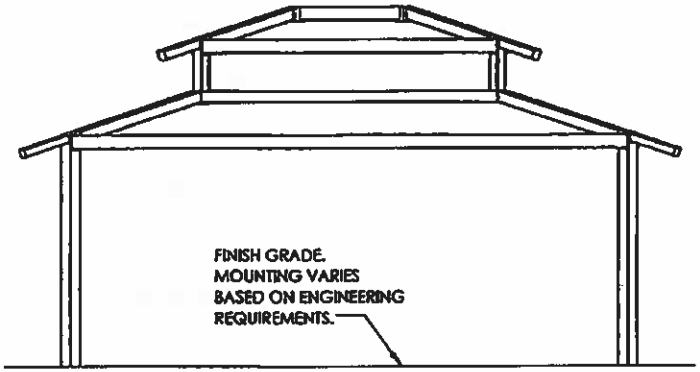
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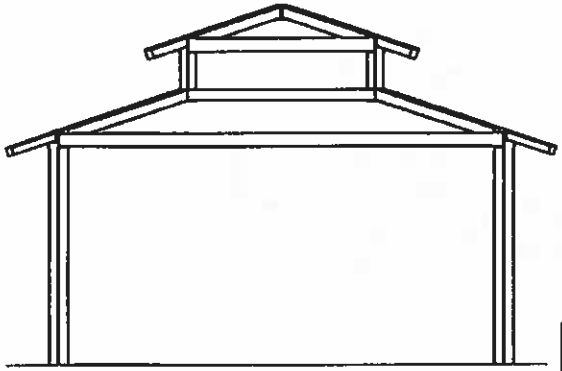
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SHEET 1









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DRAWING: STRUCTURAL FRAMING PLAN
SCALE: 1:36
REV LEVEL: A

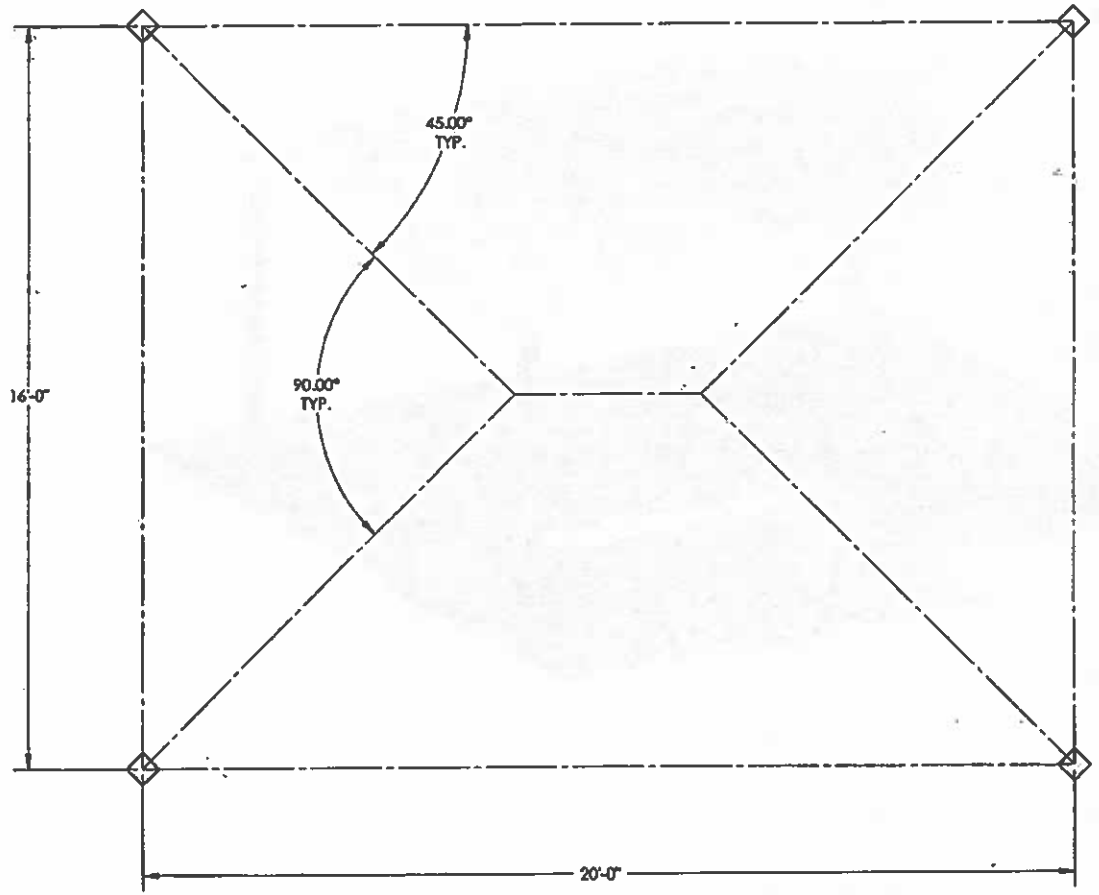
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SHEET 2

BASEPLATE NOTES:

1. POLIGON ENGINEERING WILL DETERMINE REQUIRED BASEPLATE DESIGN AFTER ENGINEERING PACKAGE IS ORDERED.
2. CUSTOMER MAY SUGGEST PREFERRED BASEPLATE DESIGN.



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USE FOR PRELIMINARY PLANNING AND ESTIMATING ONLY

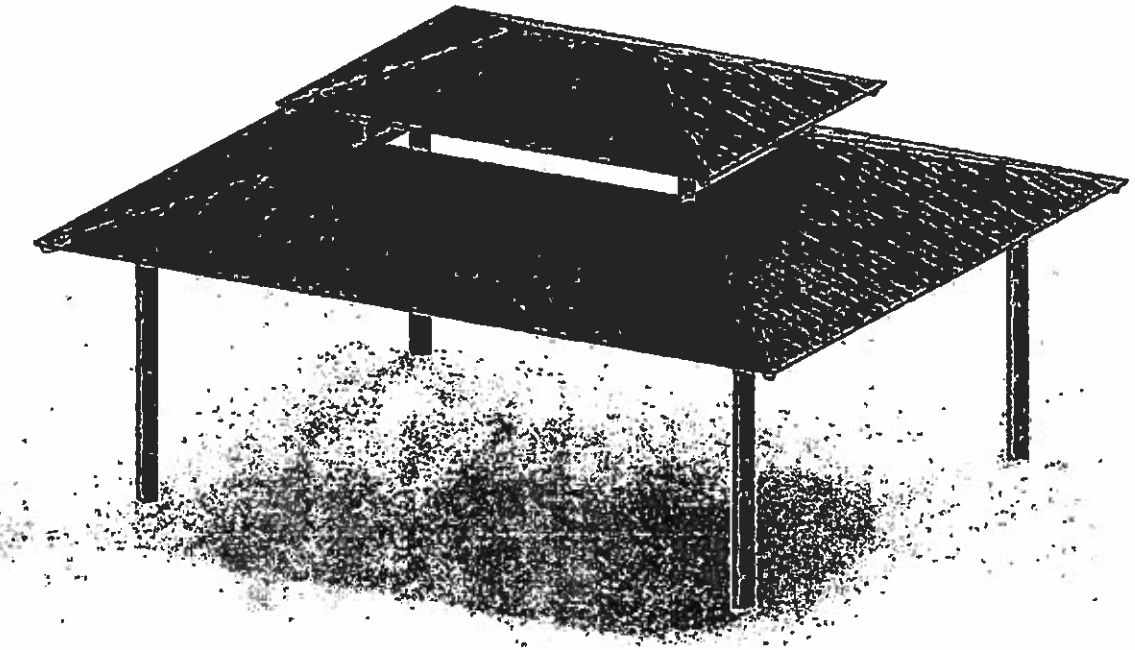
DRAWING: COLUMN LAYOUT
SCALE: 1:30
REV LEVEL: A

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SHEET 3

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FRAME COLOR: SURREY BEIGE
ROOF COLOR: EVERGREEN

COLORS SHOWN ARE FOR REFERENCE ONLY.
CONTACT INFO@POLIGON.COM TO REQUEST ACTUAL COLOR SAMPLES.

MAR 20X24

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Recreation and Parks	**CONTACT PERSON** Ryan McNamara
PROJECT NAME Equipment Storage/Garage Plan	**DEPARTMENT PRIORITY** 2

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Update and renovation to the Waterford Beach Park garage to replace the full use of the garage located inside the Civic Triangle. The current location of the garage does not allow for continued park improvements and offerings. The loss of storage and operation of the garage will be restored at the WBP site. This intent is to provide adequate storage and cover for our equipment and machines, while also providing a suitable place for the maintainers to work on projects and discuss projects.
2	**PROJECT STATUS IF IN PROGRESS**
	Barton and Loguidice have been developing the plan and meeting with Town staff for review along the way.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	The Utitlity Department is currently peforming a sewer project within the park.
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	Expected monetary savings in long term upkeep and maintenance with proper protection and storage of machinery and equipment. New homebase location may alter previous schedules but will be modified to find most efficient operation
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available).**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (If none, simply state that in the area below)**
	Plan in progress. Once plan is complete, concept drawings and estimates to finish the project will be submitted for approvals.
7	**COST/FUNDING SOURCE**

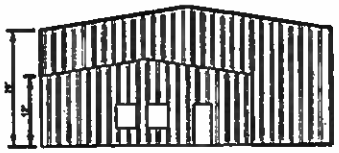
	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	0	0	0	0	0



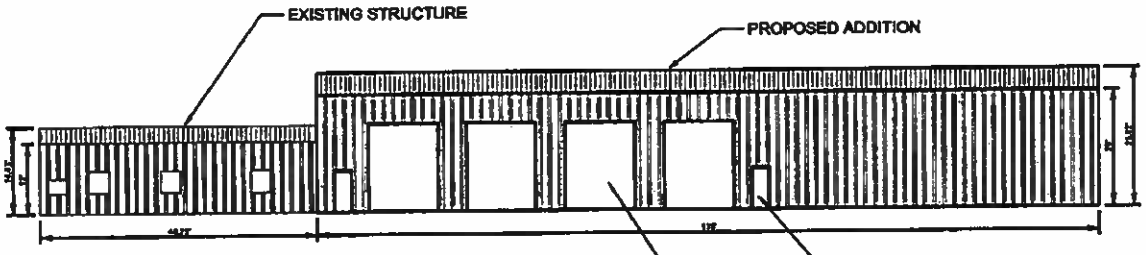
PROPOSED NORTH SIDE ELEVATION



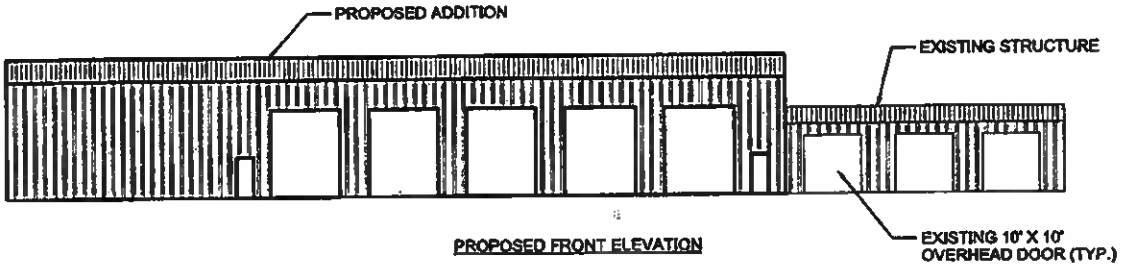
EXISTING NORTH SIDE ELEVATION



PROPOSED SOUTH SIDE ELEVATION



PROPOSED REAR ELEVATION



PROPOSED FRONT ELEVATION

Barton & Loguidice
41 Bassin Drive
Glastonbury, CT 06033
Phone: (860) 633-8779
Fax: (860) 633-8971
www.bartonandloguidice.com

Civil Engineering • Environmental Consulting • Land Surveying • Construction Management

PROJ. ENGINEER	MNB
PROJ. MANAGER	MNB
OFFICE REVIEW	MMZ

REVISIONS

SCALE: 1" = 20'

BUILDING ELEVATIONS

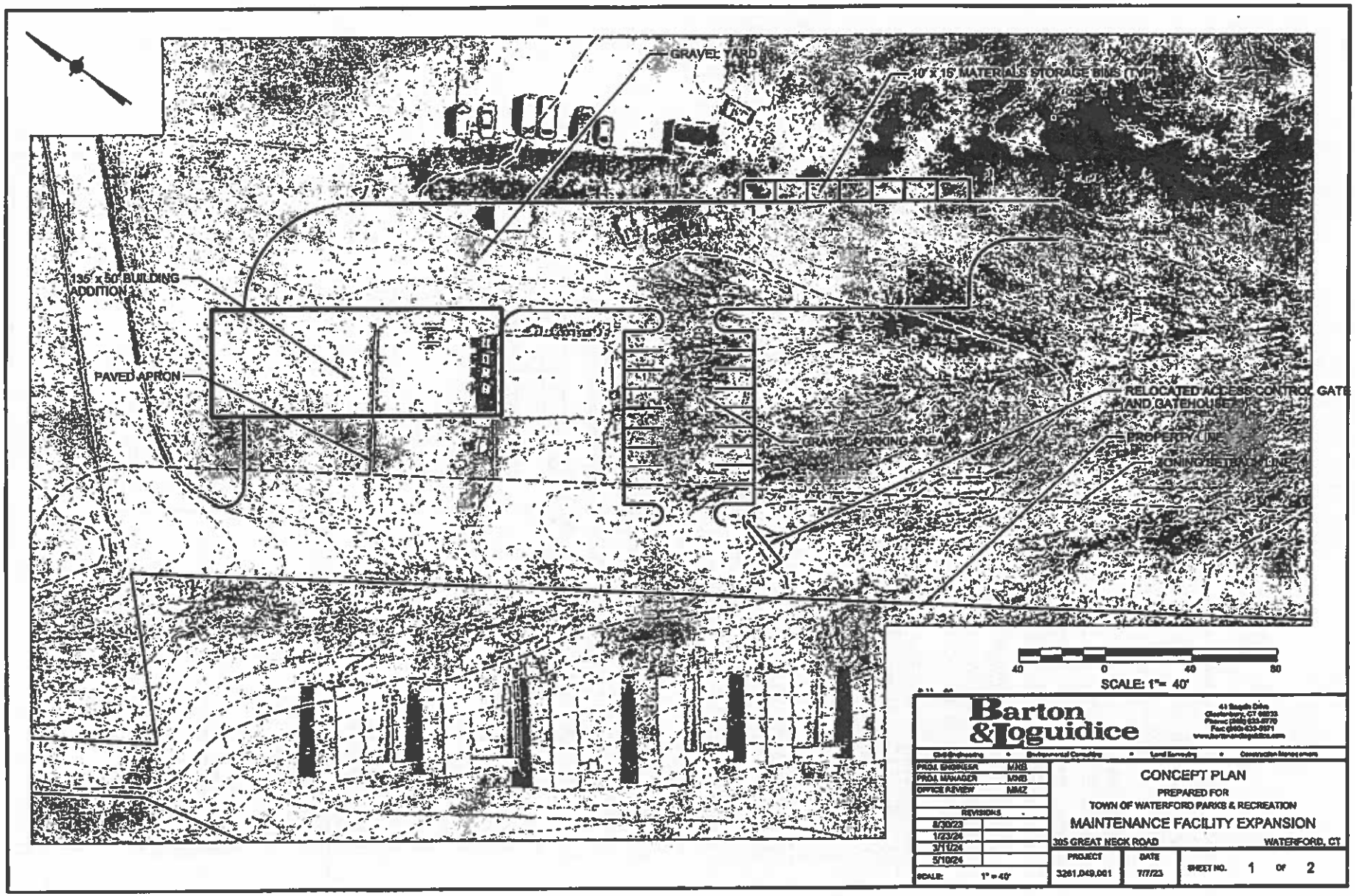
PREPARED FOR

TOWN OF WATERFORD PARKS & RECREATION

MAINTENANCE FACILITY EXPANSION

305 GREAT NECK ROAD, WATERFORD, CT

PROJECT	DATE	SHEET NO.
3281.049.001	5/10/24	2 OF 2



Barton & Loguidice

PROJ. ENGINEER	MKB
PROJ. MANAGER	MKB
OFFICE REVIEW	MMZ

REVISIONS

8/30/23	
1/23/24	
3/11/24	
5/10/24	
SCALE:	1" = 40'

CONCEPT PLAN

PREPARED FOR

TOWN OF WATERFORD PARKS & RECREATION

MAINTENANCE FACILITY EXPANSION

305 GREAT NECK ROAD, WATERFORD, CT

PROJECT	DATE	SHEET NO.
3261.049.001	7/7/23	1 OF 2

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Recreation and Parks	Ryan McNamara
PROJECT NAME	**DEPARTMENT PRIORITY**
Town Wide Court Repairs	1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The two remaining courts in town left to renovate to post tension concrete are the tennis courts located at Waterford Beach Park and Hoelck Park/Quaker Hill. There are two (2) courts at each location. The playing surface is in dire need of repair to continue providing this type of activity.
2	**PROJECT STATUS IF IN PROGRESS**
	Courts being renovated at Town Hall and Leary park in 2025.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	N/A
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	Both sets of courts are located in areas where services and landscaping management already occur. The appropriate surfacing will eliminate current conditions that require removing debris from surface and structural cracking.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Plans and concepts will be requested through the CT cooperative purchasing consortium to find cost savings. Current estimates are approximately $200-$250,000 per court.
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance			450,000			
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	0	450,000	0	0	0

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Recreation and Parks	Ryan McNamara
PROJECT NAME	**DEPARTMENT PRIORITY**
Town Wide Court Repairs	1

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	Courts being renovated at Town Hall and Leary park in 2025.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	N/A
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applica**
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5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Plans and concepts will be requested through the CT cooperative purchasing consortium to find cost savings. Current estimates are approximately $200-$250,000 per court.
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance			450,000			
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS -	0	0	450,000	0	0	0

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Recreation and Parks	Ryan McNamara
PROJECT NAME	**DEPARTMENT PRIORITY**
Stenger Farm Park Accessible Walk & Parking Lot Repair	2

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	There is a need for an accessible pathway/walk installed from the parking lot to the Dog Park. Repairs to the parking lot should be considered while performing this installation for potential cost savings. A pre-cast bathroom facility will also be included as an add alternative to the project
2	**PROJECT STATUS IF IN PROGRESS**
	Plan being designed by Haley Ward in 2024/2025
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	N/A
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	This would add linear feet of walks to clear from debris and any weather hazards. A bathroom would add the necessary time to stock and clean on a regular basis. The park is already frequented for trash, landscaping, and trail maintenance by our maintenance staff.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	Potential offset with LOCIP funding
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (If none, simply state that in the area below)**
	Plan is in development stage

7 **COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital	$8,500 for the plan				
2	Utility Budget/Sewer Cap Maint Fund					
3	Transfer to CNR					
4	Short/Long-term Bonds					
5	LoCIP (detail in section 5 above)					
6	CNR Undesignated Fund Balance					
7	Federal/State Grants (detail in section 5)					
8	Other Funding (detail in section 5 above)					
	TOTALS	0	0	0	0	0

HALEY WARD.
ENGINEERING | ENVIRONMENTAL | SURVEYING

March 17, 2023

Mr. Ryan McNamara, Director
Town of Waterford Recreation and Park Commission
15 Rope Ferry Road
Waterford, CT 06385
Email: rmcnamera@waterfordct.org

Re: Proposal for Professional Services, ADA Pathway Design, Stenger Farm Park Parking Lot to Dog Park Entry Area, Waterford, CT

Dear Mr. McNamara:

As requested, Haley Ward, Inc. is pleased to provide this proposal. As discussed, the Town would like to provide an ADA accessible pathway from the parking area at Stenger Park, to the entrance of the dog park enclosure.

SCOPE OF SERVICES

1) Record Research - We will conduct land record research and obtain available mapping and deeds for this parcel. We have assumed a current boundary survey is on file, and we will attempt to tie into this survey or the best available map showing property boundaries as part of our work.

2) Field Survey – We will conduct a field survey, and locate visible boundary markers, approximate edges of parking areas, signs, the limits of dog park fencing, gates and flat landing areas inside the gates, and areas between the parking lots and gates. We will prepare a base map at an acceptable scale, for use in design.

3) Design Plans- Handicapped Parking Spaces- We will designate parking spaces closest to the dog park entry for handicap vehicle parking and show paving and striping designs.

2210 Main Street, P.O. Box 1088, Glastonbury, CT 06033
T: 860.659.3100 | HALEYWARD.COM

4) ADA Pathway Design - We will design a ADA compliant concrete sidewalk between the parking spaces and the dog park entry gates. This pathway will pass on both sides of the existing Dog Park sign, and terminate at the access gates.

5) ADA Fencing and Landing Design – We will evaluate the existing gates for ADA compliance and make recommendations if needed. We will evaluate various treatments for the landing (existing bricks, concrete, others) which will help reduce the existing soil erosion condition.

6) Preliminary Plan and Cost Estimate – We will provide a preliminary plan and cost estimate for your review and comments. We will meet with you on one occasion, and discuss potential changes.

7) Final Plan, Technical Specifications and Bid Quantities- We will incorporate agreed upon changes into final plans, develop technical specifications and bid quantities, and provide you with final documents suitable for bidding and construction.

8) Additional Services – We have not included any permitting services, services during bidding or construction in our scope. We can provide these upon request.

COMPENSATION

We propose to complete this work for a lump sum fee of $ 8,000.

AUTHORIZATION

If this proposal is acceptable to you, please sign in the approval block and return a signed copy for our files. Haley Ward is prepared to initiate work on this project upon receipt of a signed copy of this proposal. Out of scope services will not be performed without your prior written approval.

If you have any questions concerning this proposal or if additional services are needed, please contact either of the undersigned at (860) 659-3100.

Sincerely,
Haley Ward, Inc.

James E. Ericson
Regional Manager

Jee
Enc.

Acceptance and Authorization to Proceed on behalf of "company":

Signature: _____ Billing Address: _____

Printed Name: _____ City/State/ZIP: _____

Date: _____ Email (Optional): _____

Phone: _____ Fax: _____

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Recreation and Parks	**CONTACT PERSON** Ryan McNamara
PROJECT NAME Jordan Park House Parking Lot Improvements	**DEPARTMENT PRIORITY** 4

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

Enlarging a parking lot to allow for accessible parking and emergency access and egress is an important step in ensuring that everyone can safely and easily access the facilities. Here are some reasons why enlarging a parking lot for these purposes is a good idea:
1. Compliance with the Americans with Disabilities Act (ADA): The ADA requires that all public facilities, including parking lots, be accessible to people with disabilities. Enlarging the parking lot to allow for more accessible parking spaces is one way to ensure that the facility is compliant with the ADA standards1.
2. Increased accessibility: Enlarging the parking lot to allow for more accessible parking spaces makes the facility more accessible to people with disabilities, including those who use wheelchairs or other mobility devices. This can help to increase the number of visitors to the facility and make it a more inclusive space for everyone1.
3. Improved safety: Enlarging the parking lot to allow for emergency access and egress can help to improve safety in the facility by providing a clear path for emergency vehicles to enter and exit the area. This can help to prevent accidents and injuries, especially in the event of an emergency2.
4. Enhanced visitor experience: Enlarging the parking lot to allow for more accessible parking spaces can enhance the visitor experience by making it easier for people to navigate the facility and use its amenities. This can help to create a more positive experience for visitors and encourage them to return to the facility in the future3.
In conclusion, enlarging a parking lot to allow for accessible parking and emergency access and egress is a smart investment that can help to improve safety, accessibility, and visitor experience.

2 PROJECT STATUS IF IN PROGRESS

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

Plan cost $8,500 to peform scope

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital		8,500				
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	8,500	0	0	0	0

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2024-2025 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Recreation and Parks	**CONTACT PERSON** Ryan McNamara
PROJECT NAME Civic Triangle Improvements	**DEPARTMENT PRIORITY** 2

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project).**	
	The need to update parks with athletic field irrigation, new dedicated pickleball and basketball court surface repairs, and park alterations can be justified for several reasons: 1. Safety and Quality of Life: Upgrading the playground ensures that children have a safe and enjoyable place to play, enhancing the quality of life for families in the community. 2. Physical Activity and Health: New athletic field irrigation allows for better maintenance, ensuring that the fields are playable year-round and encouraging physical activity among residents, which is vital for public health. 3. Sports Facilities: New tennis and basketball court surfaces provide opportunities for residents of all ages to engage in recreational and competitive sports, fostering physical fitness and community engagement. 4. Inclusivity: Modernizing the park can include features designed for people with disabilities, ensuring that everyone in the community has equal access to recreational opportunities. 5. Community Building: A well-maintained park serves as a focal point for the community, where residents can socialize, participate in events, and build a stronger sense of unity. 6. Economic Benefits: Improved parks can attract visitors, potentially boosting local businesses through	
2	**PROJECT STATUS IF IN PROGRESS**	
	Plans and most estimates received.	
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**	
	Town Hall Basketball Courts	
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**	
	Portable fencing will alleviate some of the trimming required at the fence lines. The removal of the fencing allows for multi-purpose events and activities at the park that the current fencing prohibits. Considering all of the activity and opportunity, scheduling of the areas will require a bit more coordination.	
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**	
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**	
	Fencing removal, light pole plan replacement/update, walkways, Veterans garage, irrigation/water element	

7. COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital			50,000	50,000		
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	0	50,000	50,000	0	0

Proposed Work Order

Suchocki & Son, Inc.
43 Hatchetts Hill Rd
Old Lyme, CT 06371

Date: September 12, 2023
CO #: Job#

Vendor: Suchocki & Son Inc.
43 Hatchetts Hill Rd
Old Lyme, CT 06371
P- 860-889-2283

Customer: Town OF Waterford CT
15 Rope Ferry Rd Waterford CT

Contact: Jonathan Mullen

Additional time:

Scope of Work to be Performed:

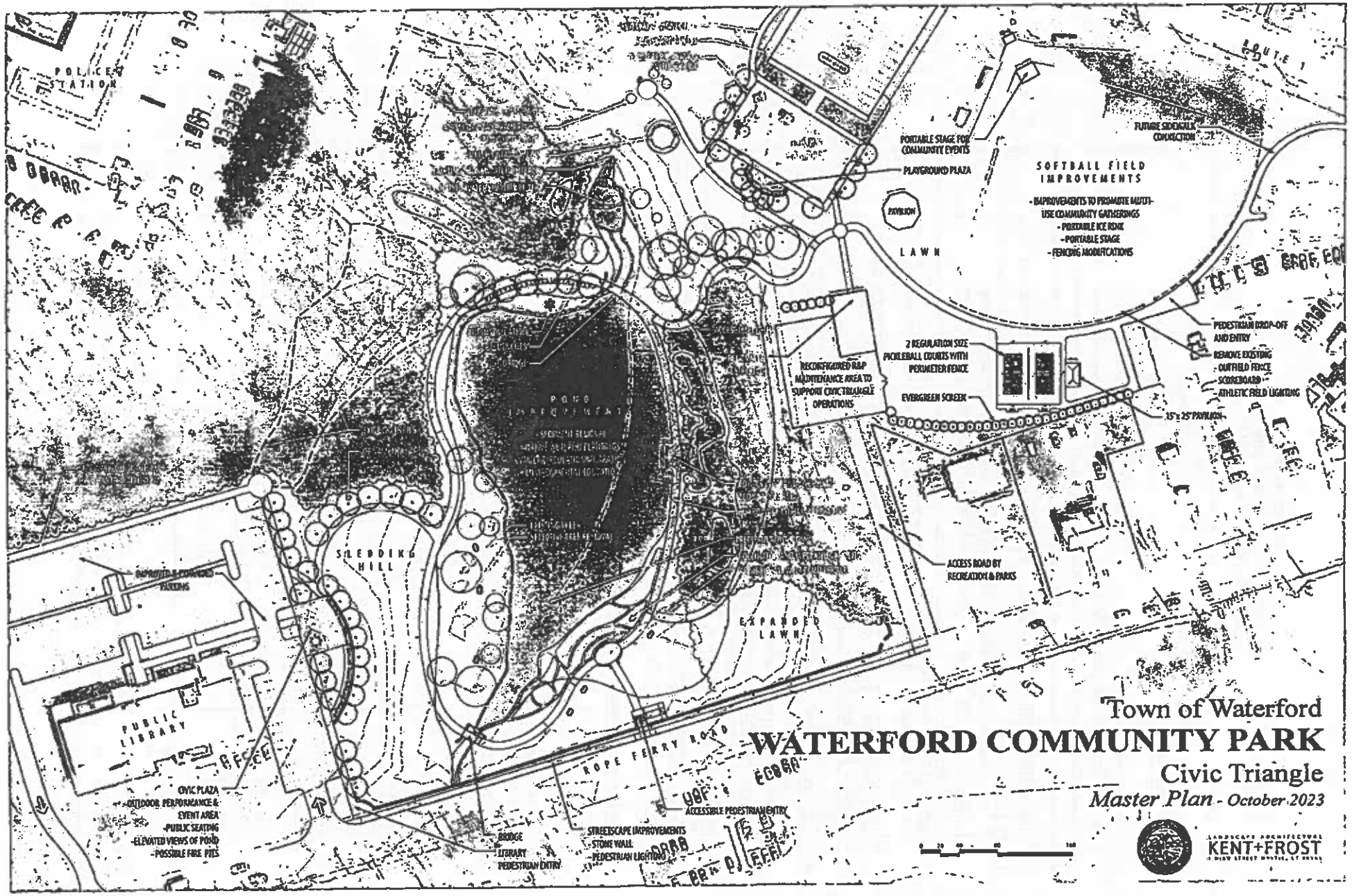
Removal of approximatley 690' of chain link fence around ball field
Excavate and remove concrete bases
Dispose of fence and concrete debris off site
Top soil and seed disturbed areas
Cut and remove (4) stadium lights excavcate and remove footings
Remove score board keep board in wokring condition

Qty	UNIT	Description	Unit Price	Line Total
1.00	LS	Cut and remove fence	$ 7,500.00	$ 7,500.00
1.00	LS	Fence disposal	$ 1,000.00	$ 1,000.00
1.00	LS	Excavate and dispose of concrete bases	$ 7,200.00	$ 7,200.00
1.00	LS	Topsoil and site restoration	$ 3,700.00	$ 3,700.00
4.00	eq	Disconnect/ Remove Stadium lighting	$ 3,600.00	$ 14,400.00
1.00	LS	Disconnect and dismantle score board	$ 1,650.00	$ 1,650.00
				$
				$
			Work Total	$ 35,450.00
			Sales Tax	
			Subtotal	$ 35,450.00
			10%	
			Total	$ 35,450.00

*Additional 10% applied to all change orders for small materials overhead

Authorized by *Date*

Phone: (860) 889-2283 Fax: (860) 886-8240 e-mail: justdigit@sbcglobal.net


POLICE STATION
ROUTE 1
PORTABLE STAGE FOR COMMUNITY EVENTS
PLAYGROUND PLAZA
PAVILION
LAWN
SOFTBALL FIELD IMPROVEMENTS
- IMPROVEMENTS TO PROMOTE MULTI-USE COMMUNITY GATHERINGS
- PORTABLE ICE RINK
- PORTABLE STAGE
- FENCING MODIFICATIONS
FUTURE SIDEWALK CONNECTION
2 REGULATION SIZE PICKLEBALL COURTS WITH PERIMETER FENCE
RECONFIGURED R&P MAINTENANCE AREA TO SUPPORT CIVIC TRIANGLE OPERATIONS
EVERGREEN SCREEN
PEDESTRIAN DROP-OFF AND ENTRY
REMOVE EXISTING
- OUTFIELD FENCE
- SCOREBOARD
- ATHLETIC FIELD LIGHTING
15'x 25' PAVILION
POND IMPROVEMENTS
SLEDDING HILL
ACCESS ROAD BY RECREATION & PARKS
EXPANDED LAWN
ASPHALT & POWDER PARKING
PUBLIC LIBRARY
ROPE FERRY ROAD
CIVIC PLAZA
- OUTDOOR PERFORMANCE & EVENT AREA
- PUBLIC SEATING
- ELEVATED VIEWS OF POND
- POSSIBLE FIRE PITS
BRIDGE
LIBRARY PEDESTRIAN ENTRY
STREETSCAPE IMPROVEMENTS
- STONE WALL
- PEDESTRIAN LIGHTING
ACCESSIBLE PEDESTRIAN ENTRY
Town of Waterford
WATERFORD COMMUNITY PARK
Civic Triangle
Master Plan - October 2023
KENT+FROST

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Recreation and Parks	Ryan McNamara
PROJECT NAME	**DEPARTMENT PRIORITY**
Leary Park Drianage and Lower Field Access	1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	This project would improve drainage through the northern end of park, including extending accessibility to softball field, playground, and lower field, and any necessary adjusments for emergency access.
2	**PROJECT STATUS IF IN PROGRESS**
	courts and pathways from the parking lot to the existing courts are being renovated/installed in 2025
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	N/A
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	These improvements accentuate the services that are already provided at the park. Staff are on site daily to check for regular trash and debris as well as cleaning and stocking the bathrooms. Increased use could mean an uptick in materials. garbage bags, toilet paper, etc.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	N/A
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Funding for plan requested in 2026. Expect to have better review after current project completes
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2025	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital	20,000					
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)				250,000		
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	20,000	0	0	250,000	0	0

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Recreation and Parks	**CONTACT PERSON** Ryan McNamara
PROJECT NAME Athletic Field Irrigation - Leary	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Installing an irrigation system at Leary Park in Waterford, CT, would ensure efficient water management, promoting healthier, more sustainable landscaping. With consistent and targeted watering, the system would reduce water waste, enhance the park's aesthetic appeal, and help maintain the vitality of lawns and plantings throughout the seasons. Additionally, an irrigation system would support the park's environmental goals by conserving water resources while ensuring the park remains a welcoming and well-maintained space for visitors year-round.
2	**PROJECT STATUS IF IN PROGRESS**
	Rough designs have been drawn up for sprinkler locations at each field and hook ups to exisiting water source
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	Current plans for renovating court surfaces and accessibility in progress for 2025
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	A secondary meter would be installed to offset any water used for the irrigation. The ebenfits should be seen in less material in teerms of seed and fertilizer to help maintain safe playing surfaces.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	Figure used as an estimate. Pricing to be established with plan and vendor.
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital					150,000	
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	0	0	0	150,000	0

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Recreation and Parks	Ryan McNamara
PROJECT NAME	**DEPARTMENT PRIORITY**
Town Wide Playground Improvements	1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**	
	Town playgrounds located at Leary Park, Waterford Beach Park, and Dedrick Park require updated elements for residents. Accessibility to and from our parks and structures is vital in providing equittable services. These type of improvements increase property value and provide an attraction to bring business and activity to the area. Playgrounds are an essential piece of youth development and social interactions.	
2	**PROJECT STATUS IF IN PROGRESS**	
	Plans and estimates have been drafted.	
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**	
	Current plans for renovating court surfaces and accessibility in progress for 2025 at Leary Park. Perfromance Stage at Waterford Beach Park. There are no other capital plans expected at Dedrick park at this time.	
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**	
	Playgrounds will require the same inspection process and review that the current playscapes receive.	
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**	
	Currently researching	
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**	
	Initial pricing and scope	
7	**COST/FUNDING SOURCE**	

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital			178,772	143,031	112,963	
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	0	178,772	143,031	112,963	0

childscapes
playgrounds built for safety and fun

835 Plain Street
Unit 21
Marshfield, MA 02050
781-837-8412 Fax: 781-837-9229

Estimate

Date	Estimate #
2/1/2024	2024-005CT3

Billing Address	Ship To
Waterford Parks & Recreation 15 Rope Ferry Road Waterford, CT 06385	Waterford Beach Park 317 Great Neck Road Waterford, CT 06385

Email Address	rmcnamara@waterfordct.org

Rep	Job Name	Customer Name	Customer Phone
NM	Waterford Bea	R McNamara	860-444-5881

Description	Qty	Rate	Total
Childscapes shall perform the following procedures in the construction of new Custom Play area at Waterford Beach Park, in Waterford, CT.			
1. Supply custom design 38-177343-3	1	60,754.00	60,754.00
2. Shipping and handling to Waterford, CT.	1	5,834.00	5,834.00
3. State contract discount 8.5% EG0030945.		-5,164.09	-5,164.09
4. Site preparation for approximately 3750 feet.	1	8,334.00	8,334.00
5. Installation of Custom Playground equipment by Childscapes manufacturer trained and CPSI/NCPAI/OSHA certified installers.	1	48,334.00	48,334.00
6. Concrete for equipment footings.	1	2,875.00	2,875.00
7. Supply and install 140 yards of certified wood fiber safety surfacing and (1) layer of filter fabric			
Materials & freight.	1	6,004.00	6,004.00
Machinery and labor.	1	3,925.00	3,925.00
Fabric.	1	800.00	800.00
Disposal of existing mulch.	1	6,334.00	6,334.00
Dumpster.	1	1,667.00	1,667.00
Demo old labor.	1	3,334.00	3,334.00

1. Contractor/Customer is responsible for quantity and color confirmation.
2. Prices are valid for 30 days from date of Estimate and subject to review thereafter.
3. Installation, if quoted, excludes rock/excess debris removal and other unforseen conditions.

Signature

Printed Name & Title

As titled, I am an authorized signer for the above named entity, empowered to execute this contract.

Subtotal	$143,030.91
Sales Tax (6.25%)	$0.00
Total	$143,030.91

Phone #
781-837-6412

childscapes
playgrounds built for safety and fun

835 Plain Street
Unit 21
Marshfield, MA 02050
781-837-6412 Fax: 781-837-9229

Estimate

Date	Estimate #
2/1/2024	2024-005CT2

Billing Address	Ship To
Waterford Parks & Recreation 15 Rope Ferry Road Waterford, CT 06385	Leary Park 739 Vauxhall Street Waterford, CT 06385

Email Address	rmcnamara@waterfordct.org

Rep	Job Name	Customer Name	Customer Phone
NM	Leary Park	R McNamara	860-444-5881

Description	Qty	Rate	Total
Childscapes shall perform the following procedures in the construction of new Custom Play area at Leary Park, in Waterford, CT.			
1. Supply custom design 38-177341-2	1	69,967.00	69,967.00
2. Shipping and handling to Waterford, CT.	1	7,000.00	7,000.00
3. State contract discount 8.5% EG0030945.		-5,947.20	-5,947.20
4. Site preparation for approximately 4250 feet.	1	13,000.00	13,000.00
5. Installation of Custom Playground equipment by Childscapes manufacturer trained and CPSI/NCPAI/OSHA certified installers.	1	56,250.00	56,250.00
6. Concrete for equipment footings.	1	4,642.00	4,642.00
7. Supply and install 300 yards of certified wood fiber safety surfacing and (1) layer of filter fabric			
Materials & freight.	1	7,159.00	7,159.00
Machinery and labor.	1	4,900.00	4,900.00
Fabric.	1	800.00	800.00
Disposal of existing mulch.	1	8,000.00	8,000.00
Dumpster.	1	3,334.00	3,334.00
Demo old labor.	1	9,667.00	9,667.00

1. Contractor/Customer is responsible for quantity and color confirmation.
2. Prices are valid for 30 days from date of Estimate and subject to review thereafter.
3. Installation, if quoted, excludes rock/excess debris removal and other unforseen conditions.

Subtotal	$178,771.80
Sales Tax (6.25%)	$0.00
Total	$178,771.80

_____
Signature

_____
Printed Name & Title

As titled, I am an authorized signer for the above named entity, empowered to execute this contract.

Phone #
781-837-6412

childscapes
playgrounds built for safety and fun

835 Plain Street
Unit 21
Marshfield, MA 02050
781-837-6412 Fax: 781-837-9229

Estimate

Date	Estimate #
2/1/2024	2024-005CT

Billing Address	Ship To
Waterford Parks & Recreation 15 Rope Ferry Road Waterford, CT 06385	Lisa Dedrick Memorial field 45 Dayton Road Waterford, CT 06385

Email Address	rmcnamara@waterfordct.org

Rep	Job Name	Customer Name	Customer Phone
NM	Lisa Dedrick	R McNamara	860-444-5881

Description	Qty	Rate	Total
Childscapes shall perform the following procedures in the construction of new Custom Play area at Lisa Dedrick Memorial Park, in Waterford, CT.			
1. Supply custom design 38-177342-2	1	45,006.00	45,006.00
2. Shipping and handling to Waterford, CT.	1	4,334.00	4,334.00
3. State contract discount 8.5% EG0030945.		-3,825.51	-3,825.51
4. Site preparation for approximately 780'.	1	2,697.00	2,697.00
5. Installation of Custom Playground equipment by Childscapes manufacturer trained and CPSI/NCPAI/OSHA certified installers.	1	50,834.00	50,834.00
6. Concrete for equipment footings.	1	2,500.00	2,500.00
7. Supply and install 50 yards of certified wood fiber safety surfacing and (1) layer of filter fabric			
Materials & freight.	1	1,500.00	1,500.00
Machinery and labor.	1	2,334.00	2,334.00
Fabric.	1	800.00	800.00
Disposal of existing mulch.	1	1,782.00	1,782.00
Dumpster.	1	1,667.00	1,667.00
Demo old labor.	1	3,334.00	3,334.00

1. Contractor/Customer is responsible for quantity and color confirmation.
2. Prices are valid for 30 days from date of Estimate and subject to review thereafter.
3. Installation, if quoted, excludes rock/excess debris removal and other unforseen conditions.

Subtotal	$112,962.49
Sales Tax (6.25%)	$0.00
Total	$112,962.49

Signature

Printed Name & Title

As titled, I am an authorized signer for the above named entity, empowered to execute this contract.

Phone #
781-837-6412

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	CONTACT PERSON
Recreation and Parks	Ryan McNamara
PROJECT NAME	**DEPARTMENT PRIORITY**
Waterford Beach Park Performance Stage	1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**	
	In 2021, the exisiting stage structure was removed due to safety concerns. Since that time, R&P has borrowed temporary, panel staging for perfromance events. (Set up as 24' x 20'). Waterford Beach park is a sought after space for entertainers seeking to play in one of the largest venues in for public provided entertainment. The R&P Summer Concert Series, alone, attracts over 12,000 over the course of the season. This type of structure would help in providing adequate space and performance area for entertainment of various sizes and functions.	
2	**PROJECT STATUS IF IN PROGRESS**	
	Initial design concepts, considering aesthetics, acoustics, and functionality are under review.	
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**	
	It will not be impacted, however, there is the garage project in planning stages at WBP	
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**	
	A structure would not require consistent set up and breakdown, alleviating risk management concerns, time saved through multiple staff to layout and set up	
5	**GRANT FUNDING/OTHER FUNDING, If applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**	
	$35,000 designated for planning?	
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (If none, simply state that in the area below)**	
	Sample concept and estimates attached	
7	**COST/FUNDING SOURCE**	

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029
1	Current Year Capital		425,000			
2	Utility Budget/Sewer Cap Maint Fund					
3	Transfer to CNR					
4	Short/Long-term Bonds					
5	LoCIP (detail in section 5 above)					
6	CNR Undesignated Fund Balance					
7	Federal/State Grants (detail in section 5)					
8	Other Funding (detail in section 5 above)					
	TOTALS	0	425,000	0	0	0

Ryan,

I just worked up this pricing for another client the other day. Let me know if this would suffice or if you are looking for something different.
These are wooden structure options – FYI.

Two drawings attached for reference.

Option 1:
Standard bandshell #3, with walls, with storage rooms = $173,875.00
Metal roof upgrade = +$6,000.00
Factory applied coat of stain = +$26,000.00
Freight = $3,000.00
Engineering fees = $1,500.00

Option 2:
Bandshell #3, **No walls, No storage rooms** = $91,500.00
Metal roof upgrade = +$4,000.00
Factory applied coat of stain = +$8,500.00
Freight = $2,500.00
Engineering fees = $1,500.00

Basic notes, applicable to both options:
- Roof pitch is 6:12, designed for a standard 30 PSF live load & 90 MPH wind speed
- Kiln dried cedar, double T&G, nominal 4" x 8" exterior walls
- Gothic arch, glulam SYP columns with metal base shoes & anchor bolts
- Zinc plated fasteners, powder coated steel plates
- Roof decking shall consist of 2" x 6" nominal #1 SYP single T&G with a V-joint
- 2" x 8" cedar fascia
- 8' eave height
- 30 year architectural grade shingle package and roofing felt
- (for structure with rooms/walls) Primed 18 ga metal exterior door(s) & 16 ga metal frame(s) - field painting required, hardware included

This above pricing does NOT include installation, but I have an installer looking at these and I expect to have some install numbers by the end of the week.

Best,

Brian Iafolla | CPSI
Park and Playground Consultant
M.E. O'Brien & Sons, Inc.
Cell: 508 404 7190

O'BRIEN & SONS
ELEMENTS FOR A GREAT OUTDOORS

M.E. O'Brien & Sons, Inc is an Equal Opportunity Employer EOE/AA

Ryan McNamara

From: Brian Iafolla <BrianIafolla@obrienandsons.com>
Sent: Wednesday, November 13, 2024 1:23 PM
To: Ryan McNamara
Subject: RE: Town of Waterford
Attachments: BAND3-STNDRD (7) (9).pdf; BAND3-NO WALLS (4).pdf

CAUTION: This email originated from outside of the organization.
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Ryan,

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O'BRIEN & SONS
ELEMENTS FOR A GREAT OUTDOORS

M.E. O'Brien & Sons, Inc is an Equal Opportunity Employer EOE/AA

From: Ryan McNamara <rmcnamara@waterfordct.org>
Sent: Tuesday, November 12, 2024 2:20 PM
To: Brian Iafolla <Brianlafolla@obrienandsons.com>
Subject: Town of Waterford

Hey Brian!
I hope all is well! We have been crunching away at projects in town and am circling back with another request.
We still intend to move forward with the pavilion structure at the playground, I am just awaiting matching funds from the Town...
I am looking for ballpark numbers, not exact quote, to install a bandshell or amphitheater at Waterford Beach park for our summer concert series...we would need a base of at least 24x24 and open on the sides with a cover...if you could send a few styles with some soft numbers, I would really appreciate it!
I flipped through the book...are most people doing the Carnival or monoslopes?
I have to have something to our Finance Director by Friday to consider for the upcoming year.
Let me know if it is possible!

Thank you,

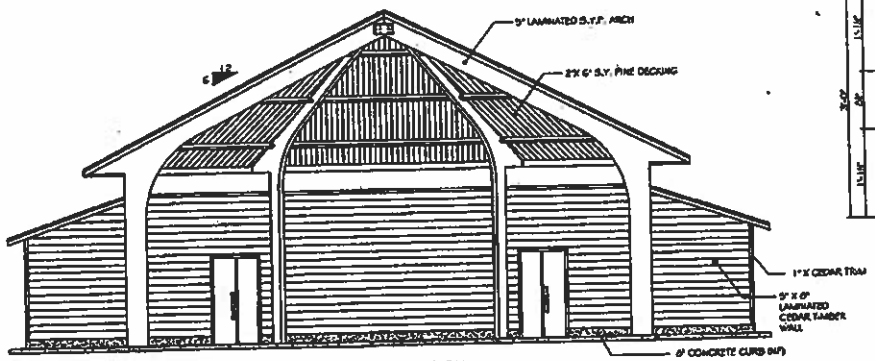
Ryan McNamara
Director Waterford Recreation and Parks Commission
15 Rope Ferry Road, Waterford, CT 06385
P: 860-444-5881
F: 860-440-5717

Disclaimer

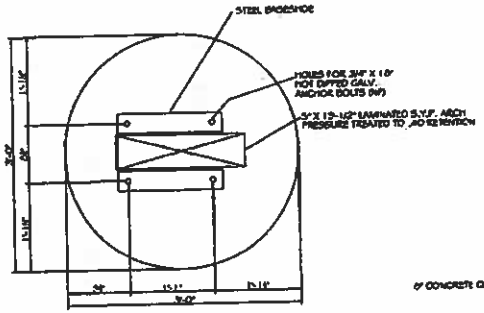
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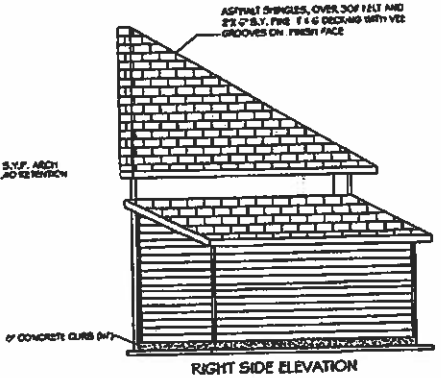
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SCALE: NTS

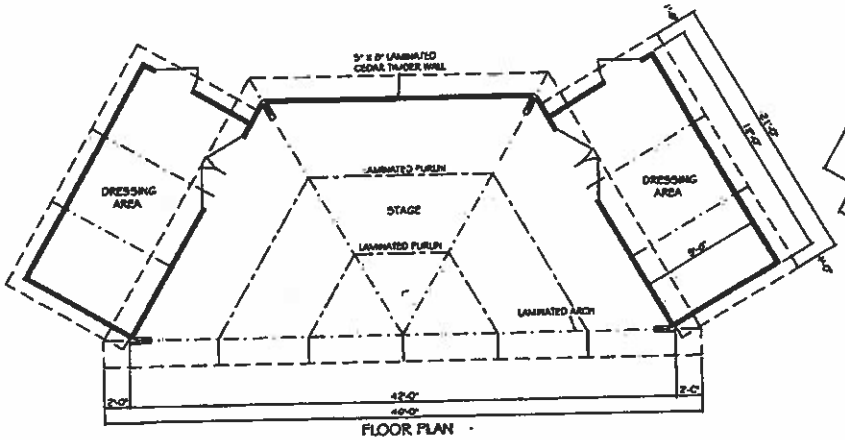


FRONT ELEVATION

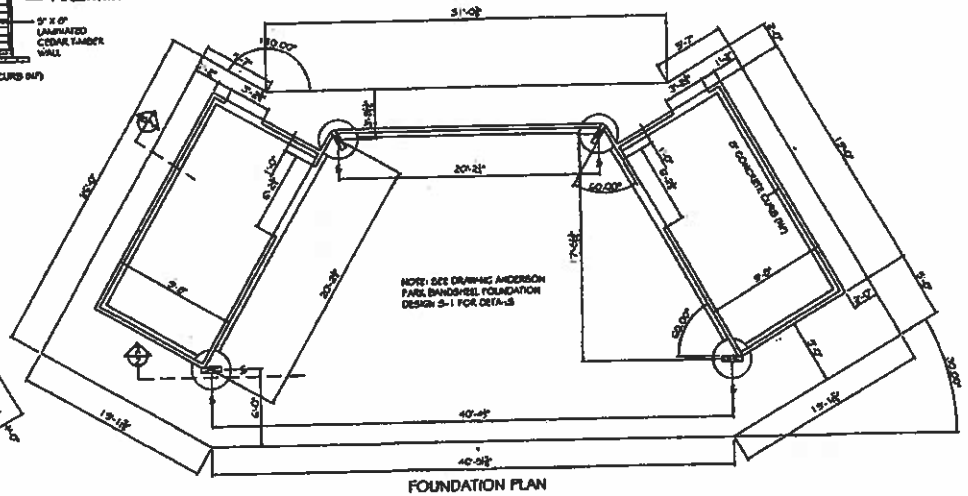




RIGHT SIDE ELEVATION



FLOOR PLAN



FOUNDATION PLAN

CFP
P.O. BOX 145
WEST OLIVE, MI 49460
800-653-9495
WWW.CEDARFORESTPRODUCTS.COM

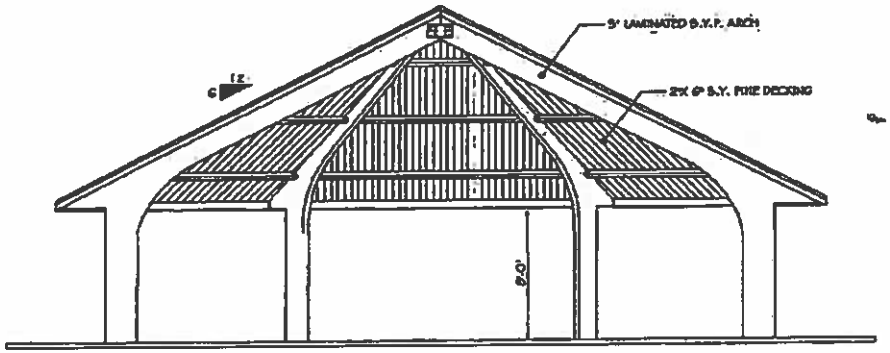
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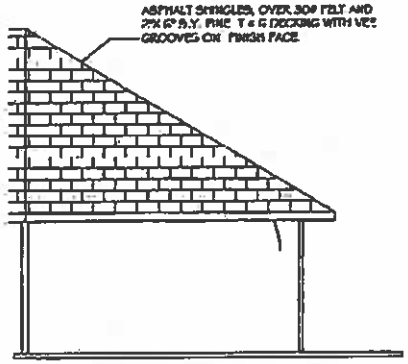
MODEL NUMBER:	BAND3	SHOWN WITH STANDARD OPTIONS
DESCRIPTION:	Band 3 - Standard Shelter	
Possible Options:	☐ Ribb METAL ROOF ☐ STANDING SEAM ROOF ☐ CEDAR SHINGLES	☐ METAL BASE SHOES ☐ STEEL COLUMNS ☐ CUSTOM ROOF PITCH ☐ LIGHTNING PROTECTION ☐ 2 TIER ROOF ☐ CUPOLA

REVISION DATES	DRAWN BY:	DATE
	ZEB-BAM	11-14-10

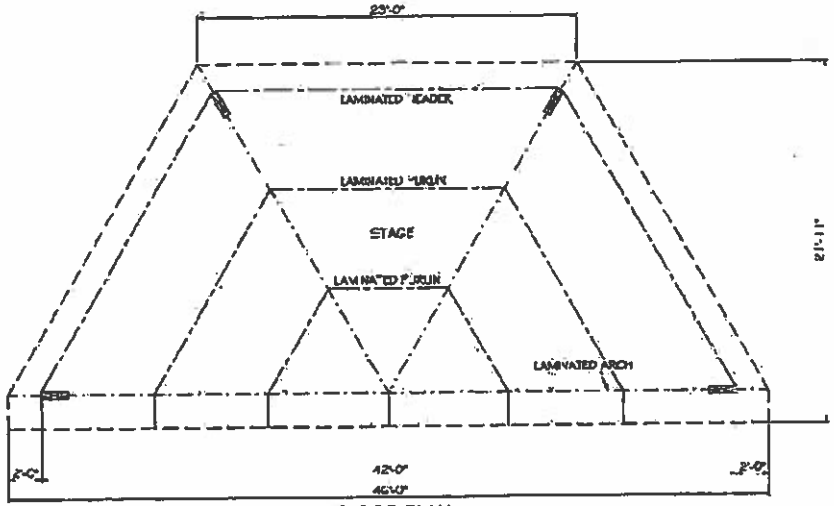
SHEET: 1 OF 1



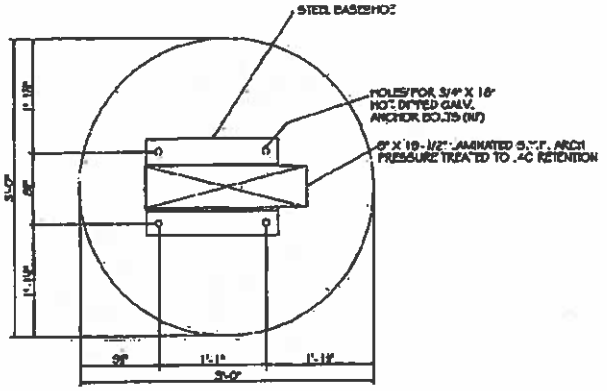
FRONT ELEVATION



RIGHT SIDE ELEVATION



FLOOR PLAN



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MODEL NUMBER: BAND3-MOD SHOWN WITH STANDARD OPTIONS
DESCRIPTION: Band 3 - Custom w/Cut Walls

Possible Options:
- ☐ 26ga METAL ROOF
- ☐ STANDING SEAM ROOF
- ☐ CEDAR SHINGLES
- ☐ METAL BASE ENDS
- ☐ STEEL COLUMNS
- ☐ CUSTOM ROOF PITCH
- ☐ LIGHTNING PROTECTION
- ☐ 12 PER ROOF
- ☐ CUPOLA

SHEET: 1 OF 1

Town of Waterford

Recreation and Parks

Capital Improvement Review and Plan

2025 – 2030 Capital Plan Considerations & Development:

Consolidation of Recreation and Parks Projects for Efficient and Equitable Opportunities

R&P has performed a review of projects and identified a new approach to enhancing our offerings and properties. First and foremost, equitable access to the parks and elements available is a priority. Each project has been reviewed to update the infrastructure with accessibility aspects to existing and planned amenities.

By consolidating projects, we can take advantage of pricing for construction costs, materials, and labor, and ensure that the available resources are being used in the most efficient and effective way possible.

These improvements also weigh heavily in the future of Waterford and the amenities the Town provides to its residents and families. The value of the park properties and useful life improves with these goals in mind.

This can help to ensure that all members of the community have access to the same opportunities and resources, regardless of their background or socioeconomic status, while also reducing costs and streamlining the planning process.

Objective:
To consolidate existing recreation and parks projects within our town to implement updated reviews and improvements that enhance safety, accessibility, and equitable opportunities, while minimizing construction equipment transport costs.

Scope:
This directive applies to all recreation and parks projects. It encompasses a comprehensive approach to re-evaluate and improve these spaces to ensure they align with our commitment to safety, inclusivity, and cost-efficiency.

- Long Range Planning reviews with R&P Commission subcommittees
- The master plan encompasses the consolidation of multiple projects into a unified endeavor to reduce construction/equipment/transport costs and optimize resources.
- Emphasizing the importance of safety improvements, inclusive design, and cost-efficiency in updating decades of old infrastructure and equipment.
- Safety Enhancements: Trail systems, walkways, court surfacing, playground improvements
  a. Prioritize safety measures in the consolidation process, including modernized equipment, improved lighting, and enhanced security features.
  b. Ensure that pathways and facilities are designed and maintained to minimize safety risks.

- Equitable Opportunities:
  a. Implement accessibility enhancements to cater to individuals with diverse needs, including ramps, braille signage, and sensory features.
  b. Promote inclusivity in the design of parks and recreation spaces to ensure equal access for all residents.

- Cost Reduction:
  a. Explore cost-saving opportunities through the consolidation of projects, sharing of resources, and reducing duplication of efforts.
  b. Seek efficient construction methods to minimize expenses related to equipment transport and construction.

- Community Engagement:
  a. Involve the community in the decision-making process and gather input on the consolidation plan, safety enhancements, and accessibility improvements.
  b. Ensure transparency and open communication with residents throughout the project.

- Project Implementation:
  a. Execute the consolidation plan in phases, prioritizing areas with the greatest need and potential for improvement.
  b. Monitor the progress of each project and ensure that safety and equity goals are met.

- Evaluation and Reporting:
  a. Conduct regular evaluations of the projects to measure the impact on safety and equity.
  b. Provide transparent and regular reports to city officials, stakeholders, and the community on the progress, outcomes, and cost-efficiency of the projects.

- Budget Allocation:
  a. Allocate sufficient funds from through operating and capital budgets to support the consolidation of recreation and parks projects as outlined in the master plan.

  This directive seeks to create a more unified, safe, and inclusive environment within Waterford's recreation and parks spaces while optimizing resources and reducing costs. It reflects our commitment to providing all residents with equitable opportunities for recreation and enjoyment.

- Department review criteria for our parks involves:
  1. Safety and Quality of Life: Upgrading the playground ensures that children have a safe and enjoyable place to play, enhancing the quality of life for families in the community.
  2. Physical Activity and Health: New athletic field irrigation allows for better maintenance, ensuring that the fields are playable year-round and encouraging physical activity among residents, which is vital for public health.
  3. Sports Facilities: New tennis and basketball court surfaces provide opportunities for residents of all ages to engage in recreational and competitive sports, fostering physical fitness and community engagement.
  4. Inclusivity: Modernizing the park can include features designed for people with disabilities, ensuring that everyone in the community has equal access to recreational opportunities.

5. Community Building: A well-maintained park serves as a focal point for the community, where residents can socialize, participate in events, and build a stronger sense of unity.
6. Economic Benefits: Improved parks can attract visitors, potentially boosting local businesses through increased tourism and event hosting.
7. Environmental Sustainability: Updated irrigation systems can use water more efficiently, reducing waste and contributing to environmental sustainability.
8. Property Values: Upgraded parks and sports facilities can have a positive impact on nearby property values, benefiting homeowners in the area.
9. Education and Skill Development: Playgrounds and sports facilities provide opportunities for children to develop essential skills, including physical, social, and cognitive abilities.
10. Increased Usage: High-quality facilities are more likely to be used by residents, resulting in a better return on the community's investment.
11. Competitive Advantage: Attractive parks and sports amenities can give the community a competitive advantage in attracting new residents, businesses, and investment.
12. Aging Infrastructure: If the existing park infrastructure is outdated or deteriorating, an update becomes necessary to ensure continued safe and functional use.

Project Identification:

I. Current projects and funding listing:

33723-55838	Children's Playground Equipment: Received $10,000 donation from Gardiner Family Foundation. Plan to integrate with Civic Triangle phase I plans. Balance: $50,000
CNR	
20537-57854	WBP Concert Improvements: Continue exploring options as the summer concert series grows. Balance should cover plan design. Balance: $30,000
20537-57735	Leary Park Roadway: Will be included with the Leary Drainage and Lower Field Access project

II. Updated review:

A. Pleasure Beach Walk:

Status: (Expected completion in Spring/Summer 2025)

B. Children's Playground Equipment

Status & Benefit: A pavilion set off the south end of the playground would be constructed for shelter and community engagement. The Gardiner Family Foundation has generously donated $50,000 towards this project to date, with an anticipated additional $10,000 in 2025. There is currently $40,000 allocated in this fund that would bring the total to $100,000. The concepts and design have been identified and the costs quoted at approximately $110,000. A request of $25,000 is being submitted to cover the anticipated difference in material cost and project contingency.

C. Equipment/Storage Garage Plan (From Vets-WBP Shop)

Benefits: Allow for expanded space within Civic Triangle Park for programming and community events
Updated building to properly house staff and equipment for park and maintenance operations

Goals: Provide storage for all equipment to protect from elements
Cleaning and changing room for staff
Appropriate facility drainage to allow for proper equipment maintenance/cleaning
Updated utilities for more efficient use and lower costs

Status: Initial design for area received from Barton and Loguidice
Exterior site plan under review with Planning & Zoning: Interior specs being discussed

Other projects within the park:
Utility Commission has a sewer project that will be coordinated.

D. Town-wide Court Repairs/Resurfacing:

Status: (Town Hall Basketball and Leary Park Pickleball/Tennis/Basketball expected completion in Summer 2025.)

Benefit: Improved surfacing for safe and consistent play. The length of the warranty allows for a greater value and return on investment.

Goals: PT concrete combines durability, stability, and low maintenance costs, making it the safest choice for court sports. Whether it's tennis, basketball, or any other sport, PT concrete ensures a reliable and secure playing surface for athletes of all levels.

Asset Numbers

Quaker Hill School	(2) Tennis/pickleball	N/A	$200-$250,00/court
WBP	(2) Tennis/pickleball	#9204031563	1990 – 3

FieldTurf (State of CT Cooperative purchasing) quotes : Post Tension concrete, fencing, pathways

Justification: Recreation and Parks is responsible for the maintenance of the following tennis/pickleball and basketball courts in the Town of Waterford: Leary Park (1 basketball, 4 tennis), WBP (2 tennis), QH (2 tennis), Town Hall (2 basketball, introduce 2 new pickleball. The courts were installed in the ***mid 1970's*** and have received crack and surfacing repairs, painting, and other remedies that have not been as successful as hoped. A more permanent solution is desired for our residents and justifications are:

Post-tensioned concrete and asphalt are both commonly used materials for tennis courts and other sports surfaces. The advantages and considerations for each:

I. Asphalt:

o Ease of Construction: Asphalt courts have been popular due to their ease of construction and the readily available materials associated with asphalt's primary application (roadways and parking lots).

o Flexible Pavement: Asphalt is a flexible pavement, which means that over time, cracking of the pavement is inevitable. While effective management of cracking is feasible for roads and parking lots, these maintenance issues pose a greater risk to tennis players.

o Maintenance Challenges: Asphalt courts often suffer from cracking, poor drainage, and unstable subgrade soils. Sawed joints are recommended to relieve tension in the court surface, but new cracks can still form within the play area.

o Specialty Asphalt Mixes: While asphalt is commonly used for roads, the asphalt mix for tennis courts needs adjustments. Specialty mixes cost more and present challenges for producers and installers.

II. Post-Tensioned Concrete (PT Concrete):

o Rigid and Reinforced: PT concrete is a rigid, reinforced concrete pavement. Its design eliminates jointing and cracking issues that plague asphalt courts.

o Longer Lifespan: The lifespan of PT concrete can be almost double that of an asphalt court. It offers durability and longevity.

o Stability on Unstable Soils: PT concrete can span unstable soils where asphalt might fail.

o Lower Maintenance Costs: PT courts require less crack repair and resurfacing compared to asphalt courts.

In summary, IPT concrete courts earn the trophy for durability, playability, and long-term value. They resist crack development, settling, and heaving, provide better drainage, and offer a uniform playing surface. While PT construct is more expensive to install initially, the lower maintenance costs over the court's life make it a compelling choice for those seeking a reliable and long-lasting tennis court.

E. Stenger bathroom and accessible walk

Plan being designed and cost forecast for project with Haley Ward

Benefit:	Improved access to the dog park Water and restroom facility for health/wellness and park experience
Goals:	Provide restroom accommodations to the numerous visitors and residents Water element for cleaning and providing drinking water
Status:	Funding provided for plan in FY'25. Concept and costs expected to be available for FY'26

This project scope will be to have a pre-cast concrete restroom facility installed, which will meet all required building and ADA accessibility requirements. The structure can be installed on a compacted stone base, which eliminates the need for a concrete slab/foundation. It's designed to be vandal resistant and would require minimal maintenance. Over two decades ago, residents on the Stenger Farm Advisory Committee recommended a restroom facility for this widely used town park. Parks of 100 acres in size, along with the amount of visitors using this park, more than justifies having a restroom facility. It would make this park consistent with other large town parks which have restroom facilities (Civic Triangle, Leary Park, Waterford Beach Park). Outdoor recreation (hiking, fishing, running, dog walking, bicycling, photography, nature appreciation, cross country skiing) increase each year

at this facility, as well as special events. Clark Lane Middle School's athletic and educational programs utilize the park on a year round basis, as well as scout groups and the general public. The town's dog park is located here which is extensively used by the public. An accessible walkway to the dog park and bathroom is needed for this property.

F. JPH Parking lot

Benefit: Increased access to parking spaces to comply with ADA requirements
Allow ease of access for emergency vehicles during special events

Goals:

Cost to plan design received

Enlarging a parking lot to allow for accessible parking and emergency access and egress is an important step in ensuring that everyone can safely and easily access the facilities. Here are some reasons why enlarging a parking lot for these purposes is a good idea:

1. Compliance with the Americans with Disabilities Act (ADA): The ADA requires that all public facilities, including parking lots, be accessible to people with disabilities. Enlarging the parking lot to allow for more accessible parking spaces is one way to ensure that the facility is compliant with the ADA standards.
2. Increased accessibility: Enlarging the parking lot to allow for more accessible parking spaces makes the facility more accessible to people with disabilities, including those who use wheelchairs or other mobility devices. This can help to increase the number of visitors to the facility and make it a more inclusive space for everyone.
3. Improved safety: Enlarging the parking lot to allow for emergency access and egress can help to improve safety in the facility by providing a clear path for emergency vehicles to enter and exit the area. This can help to prevent accidents and injuries, especially in the event of an emergency.
4. Enhanced visitor experience: Enlarging the parking lot to allow for more accessible parking spaces can enhance the visitor experience by making it easier for people to navigate the facility and use its amenities. This can help to create a more positive experience for visitors and encourage them to return to the facility in the future.

In conclusion, enlarging a parking lot to allow for accessible parking and emergency access and egress is a smart investment that can help to improve safety, accessibility, and visitor experience.

Plan Cost: $8,000

G. Waterford Beach Park Performance Stage

Benefit: Waterford Beach Park is a cherished community space that hosts numerous seasonal events, with the highlight being the Summer Concert Series. This series attracts top bands from the region and draws crowds of 2,000 to 6,000 people per concert, making it the largest public venue for concerts in Southeast Connecticut. Currently, the park relies on portable temporary staging, which poses several challenges and risks. Establishing a permanent performance stage would enhance safety, efficiency, and the overall experience for both performers and attendees.

Goals:

1. **Safety Concerns:**
    - **Manual Setup Risks:** The manual setup and breakdown of temporary stages increase the risk of injury to staff and volunteers. A permanent structure would eliminate these hazards, providing a safer environment for all involved.

- **Structural Integrity:** Portable stages are prone to wear and tear, which can compromise their structural integrity over time. A permanent stage would offer a more robust and reliable platform, reducing the risk of accidents during events.

2. **Operational Efficiency:**
   - **Time and Labor Savings:** Erecting and dismantling temporary stages is labor-intensive and time-consuming. A permanent stage would significantly reduce the labor required for event setup and breakdown, allowing staff to focus on other critical tasks.
   - **Consistency and Reliability:** A fixed stage ensures consistent quality and reliability for every event, minimizing disruptions and last-minute technical issues.
3. **Enhanced Event Experience:**
   - **Professional Infrastructure:** A permanent stage can be designed with optimal acoustics, lighting, and other performance needs in mind, providing a superior experience for both performers and the audience.
   - **Aesthetic Appeal:** A well-designed permanent stage enhances the park's visual appeal, creating a more attractive and inviting venue for events.
4. **Economic Benefits:**
   - **Cost-Effective:** Although the initial investment in a permanent stage is significant, it will save money in the long run by eliminating the recurring costs associated with renting, transporting, and maintaining temporary stages.
   - **Increased Attendance:** Improved facilities can attract larger audiences and higher-profile performers, boosting local tourism and supporting the economy.
5. **Compliance and Adaptation:**
   - **Floodplain Considerations:** The proposed stage would adhere to all town and regulatory requirements for construction in a floodplain zone. This ensures that the structure is safe, durable, and compliant with environmental standards.
   - **Community Support:** Engaging the community in the planning process can garner public support and ensure that the stage meets the needs and expectations of local residents.

Conclusion:

A permanent performance stage at Waterford Beach Park is a prudent and forward-thinking investment. It addresses current safety concerns, enhances operational efficiency, improves the quality of events, and provides long-term economic benefits. By ensuring compliance with all relevant regulations, the new structure will serve as a safe, reliable, and attractive venue for years to come, enriching the cultural and recreational fabric of Waterford.

H. Civic Triangle Park Improvements

Benefits: Creating more programmable spaces allowing for diverse opportunities

Goals: Provide larger range of outdoor activity and community engagement. Staff continue to review opportunities for development and accessibility. Considerations to modify fencing, improve lighting and pathways, replace and relocate scoreboard, include pavilion, and discuss minimal water elements.

The need to update parks or perform park alterations can be justified for several reasons:

Enhancing Community Well-Being

1. **Improved Recreational Opportunities**: Expanded facilities such as sports courts, playgrounds, and fitness areas provide residents with more ways to stay active and healthy.
2. **Social Interaction**: Parks serve as community hubs where people can gather, socialize, and participate in events, fostering a sense of community and belonging.

Environmental Benefits

1. **Green Space Conservation**: Developing existing parks helps preserve green spaces within urban areas, promoting biodiversity and providing habitats for local wildlife.
2. **Air Quality Improvement**: Trees and plants in parks act as natural air filters, improving air quality by absorbing pollutants and releasing oxygen.

Economic Advantages

1. **Increased Property Values**: Proximity to well-maintained parks can boost property values in the surrounding areas, benefiting homeowners and the local economy.
2. **Tourism and Local Business**: Parks with unique features can attract visitors, supporting local businesses and stimulating the economy.

Accessibility and Inclusivity

1. **Inclusive Design**: Upgrades can include accessible pathways, sensory gardens, and adaptive playground equipment, ensuring that everyone, including those with disabilities, can enjoy the park.
2. **Community Programs**: Expanded facilities allow for a wider range of programs and activities that cater to diverse groups, from children to seniors.

Health and Wellness

1. **Mental Health**: Parks provide a serene environment for relaxation and stress relief, contributing to better mental health for residents.
2. **Physical Health**: Access to outdoor recreational areas encourages physical activity, reducing the risk of lifestyle-related diseases.

Resilience and Sustainability

1. **Climate Adaptation**: Parks can incorporate features like rain gardens and permeable surfaces to manage stormwater runoff and reduce flooding risks.
2. **Sustainable Practices**: The development plan can include sustainable practices such as the use of native plants, solar lighting, and energy-efficient buildings.

Community Engagement

1. **Public Involvement**: The planning process can involve community input, fostering a sense of ownership and pride among residents.
2. **Educational Opportunities**: Parks can include educational features like nature trails, interpretive signs, and community gardens to teach about local ecology and sustainability.

Conclusion

Investing in the development of existing parks is a strategic move that can yield a multitude of benefits, enhancing the quality of life for residents, protecting the environment, and boosting the local economy. By planning thoughtfully and engaging the community, parks can become even more vibrant and valuable assets to the community. In justifying these updates, it's important to consider the specific needs and preferences of the local community, conduct cost-benefit analyses, and engage with residents to ensure the proposed changes align with their desires and priorities. Investing in the improvement of a local park can have a far-reaching positive impact on the community's overall well-being and vitality.

Improvements under review :

- Lighting
- Walks/pathways throughout park and off of Rte1/BPR to park
- Fencing
- Use of garage building
- Development of surrounding park grounds

Other projects within the park:

Children's Playground Equipment: Received $10,000 donation from Gardiner Family Foundation. Plan to integrate with Civic Triangle phase II plans once Phase I completes.
Balance: $50,000

Jordan Park House Parking Lot Improvements

I. **Leary Park Drainage and Lower Field Access-**

Benefit and Goals:

1. Access to Lower Park Area:

- **Enhanced Accessibility:** Ensuring easy access to the lower park area will make it more welcoming and usable for all community members, including individuals with disabilities, families with strollers, and elderly citizens.
- **Visitor Experience:** Improved access encourages more frequent use and enjoyment of the park's facilities.

2. Softball Field:

- **Community Engagement:** A well-maintained softball field provides a venue for local sports leagues, school teams, and recreational players, promoting physical fitness and community interaction.
- **Event Hosting:** The field can host tournaments and events, which can foster local pride and bring economic benefits through increased park usage.

3. Playground: (noted in town-wide playground improvements)

- **Child Development:** A safe and engaging playground supports physical, social, and cognitive development in children.
- **Family Recreation:** Playgrounds create a space where families can spend quality time together, enhancing community cohesion.

4. Viewing on Hill Above Lower Field:

- **Spectator Comfort:** Creating a designated viewing area on the hill above the lower field offers spectators a comfortable and elevated vantage point to watch games and events.
- **Community Space:** This area can also serve as a gathering spot for picnics, relaxation, and community events.

5. Drainage Improvements:

- **Safety and Maintenance:** Proper drainage is essential to prevent flooding, erosion, and waterlogging, which can damage park infrastructure and create hazardous conditions.
- **Sustainability:** Effective drainage solutions contribute to the long-term sustainability and usability of the park by protecting the landscape and reducing maintenance costs.

6. Emergency Vehicle Access:

- **Safety and Emergency Response:** Providing dedicated access for emergency vehicles ensures rapid response times in case of accidents, health emergencies, or other incidents within the park.
- **Regulatory Compliance:** Ensuring compliance with safety regulations and standards is vital for the park's operation and the well-being of its visitors.

Lighting and Safety Considerations

- **No Interior Park Lighting:** The decision to exclude interior park lighting addresses safety and policing concerns. Adequate lighting could potentially attract unwanted activities during nighttime, posing risks to the safety of park visitors.
- **Alternative Solutions:** To balance safety and usability, focus on ensuring sufficient lighting in critical areas such as entrances, exits, and pathways leading to the parking lot while keeping the interior dark.

Conclusion

This proposed project aims to enhance the functionality, safety, and accessibility of the municipal park, making it a vibrant and welcoming space for the entire community. By addressing key infrastructure needs and prioritizing the well-being of visitors, the development will significantly contribute to the quality of life in Waterford

J. Athletic Field Irrigation

Benefit and Goals: **Enhanced Turf Health and Quality**

1. **Consistent Watering:** An irrigation system provides consistent and even watering, ensuring that all areas of the field receive the appropriate amount of water. This helps maintain lush, healthy turf.
2. **Disease Prevention:** Proper hydration reduces the stress on grass, making it less susceptible to diseases. Healthy turf is more resilient and can withstand heavy use better.

Improved Playability

1. **Optimal Playing Conditions:** Regular irrigation keeps the turf in optimal condition, providing a safe and consistent playing surface for athletes. This reduces the risk of injuries caused by uneven or hard ground.
2. **Extended Playing Season:** With adequate water supply, the turf can remain in good condition throughout the growing season, allowing for extended use of the fields.

Efficient Water Use

1. **Water Conservation:** Modern irrigation systems are designed to be efficient, using water sensors and timers to optimize watering schedules. This reduces water waste and ensures that the fields are watered only when necessary.
2. **Localized Watering:** Irrigation systems can target specific areas of the field that need more water, rather than indiscriminately watering the entire field. This targeted approach further conserves water.

Labor and Time Savings

1. **Automated Systems:** Irrigation systems can be automated, reducing the need for manual watering. This frees up groundskeeping staff to focus on other maintenance tasks.
2. **Consistent Maintenance:** Automated systems ensure that the field is watered regularly without relying on human intervention, which can sometimes be inconsistent.

Cost-Effective in the Long Run

1. **Reduced Water Costs:** Efficient use of water reduces overall water consumption, leading to lower utility bills.
2. **Lower Maintenance Costs:** Healthy turf requires fewer repairs and less frequent reseeding, resulting in lower long-term maintenance costs.

Environmental Benefits

1. **Sustainable Practices:** Using water-efficient irrigation systems aligns with sustainable practices and environmental stewardship, promoting responsible use of natural resources.
2. **Erosion Control:** Proper irrigation helps maintain soil structure and prevents erosion, especially in areas prone to heavy use.

Aesthetic Appeal

1. **Uniform Greenery:** A well-watered field is visually appealing, with uniform green turf that enhances the overall look of the athletic facilities.

2. **Community Pride:** Well-maintained fields can instill a sense of pride in the community, encouraging more frequent use and fostering local sports programs.
   Installing irrigation systems on athletic fields is a smart investment that enhances turf health, playability, water efficiency, and overall maintenance. It contributes to creating a safe, sustainable, and enjoyable environment for athletes and spectators alike.

K. Town Wide Playground Improvements

Benefits: Updated elements for residents, improved accessibility, property value and town attraction

Goals: Introduce accessible elements and sidewalks to playgrounds
Provide updated challenges and play equipment

Status: Met with Miracle and Burke vendors to get an idea of total costs. Quotes provided

Leary Park playground: Two (2) structures – Asset#9204030534 Year installed: 2003
Asset#9902200011 Year installed: 1998
Estimated Cost: **$178,772**

Dedrick Park playground: One (1) structure – Asset#9902170016 Year installed: 1999
Estimated Cost: **$112,963**

Waterford Beach Park: One (1) structure – Asset N/A – donated during elementary school consolidation
Estimated Cost: **$143,031**

2030 and BEYOND NOTES/CONSIDERATIONS:

Barry Farm – Sportsmen Club – Civic Triangle Trails – State grants
New bathroom facilities at Leary and Vets parks
Kayak Rentals
QH Concession and infrastructure – codes, etc.
Lower Stenger pond enhancements and benches
Water fountains w/bottle fillers – wall-mounted = +$6,000

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2026-2030

	DEPARTMENT/ AGENCY:							
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	SERVER UPGRADE REPLACEMENT	3	177,000					177,000.00
2	COMPUTER REPLACEMENTS	3	46,592	37,035	33,451			117,078.00
								-
								-
								-
								-
								-
								-
								-
								-
								-
								-
	TOTALS		223,592.00	37,035.00	33,451.00	-	-	294,078.00

INDEX TO FUNDING SOURCES,

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY IT DEPARTMENT	**CONTACT PERSON** JEFFREY ROBILLARD
PROJECT NAME SERVER UPGRADE REPLACEMENT	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The request is for three servers to replace the three current aging hosts that provide the on premise virtual server infrastructure for the town. It is vital that all the hosts have identical hardware and versioning to ensuring the virtual servers can migrate from one host to another without compatibility issues, and thus they need to be replaced all at the same time. These hosts will provide the backbone of our virtual infrastructure for another 6 years. This project includes the cost of installation/migration and current Microsoft Windows Data Center Server software licensing.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	The new hosts have half the number of CPU cores as our current system. The reduction was calculated against current workloads to reduce the cost of our yearly VMWare licensing based on CPU cores. We expect this to reduce VMWare licensing by almost half in future years, a potential reduction of roughly $6000 for FY27.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		177,000				
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**177,000**	**0**	**0**	**0**	**0**

TOTAL COMMUNICATIONS

Itemized Pricing

Quote Prepared For: Town of Waterford — Quote Expires: 11/20/2024

CPE MATERIAL

QTY	PART NUMBER	DESCRIPTION	UNIT PRICE	TOTAL PRICE
	Alternate 1			
1	Servers Refresh (Red. Lic Cost)-need 64 vSph FDTN, and 3xDC Server 2024		-	-
1	UCS-M7-MLB	UCS M7 RACK MLB	-	-
1	DC-MGT-SAAS	Cisco Intersight SaaS	-	-
3	DC-MGT-IS-SAAS-ES	5yrs Infrastructure Services SaaS/CVA - Essentials	2,115.00	6,345.00
1	SVS-DCM-SUPT-BAS	Basic Support for DCM	-	-
3	DC-MGT-UCSC-1S	UCS Central Per Server - 1 Server License	-	-
1	DC-MGT-ADOPT-BAS	Intersight - 3 virtual adopt session http://cs.co/requestCSS	-	-
3	UCSC-C240-M7SX	UCS C240M7 Rack w/oCPU, mem, drv, 2Uw24SFF HDD/SSD backplane	5,335.00	16,005.00
3	CON-SNT-UCSCPC34	5yrs SNTC-8X5XNBD UCS C240M7 Rack w/oCPU, mem, drv, 2Uw24S	3,201.94	9,605.82
3	UCS-TPM-002D-D	TPM 2.0 TCG FIPS140-2 CC+ Cert M7 Intel MSW2022 Compliant	37.70	113.10
3	UCSC-RAIL-D	Ball Bearing Rail Kit for C220 & C240 M7/M8 rack servers	156.10	468.30
3	CIMC-LATEST-D	IMC SW (Recommended) latest release for C-Series Servers.	-	-
72	UCSC-BBLKD-M7	UCS C-Series M7 SFF drive blanking panel	-	-
72	UCS-DDR5-BLK	UCS DDR5 DIMM Blanks	-	-
3	UCSC-HSHP-C240M7	UCS C240 M7 Heatsink	-	-
3	UCSC-FBRS2-C240-D	C240 M7/M8 2U Riser2 Filler Blank	-	-
3	UCSC-FBRS3-C240-D	C240 M7/M8 2U Riser3 Filler Blank	-	-
3	UCS-CPU-I6544Y	Intel I6544Y 3.6GHz/270W 16C/45MB DDR5 5200MT/s	7,361.29	22,083.87
24	UCS-MRX96G2RF3	96GB DDR5-5600 RDIMM 2Rx4 (24Gb)	2,657.13	63,771.12
3	UCSC-RIS1A-240-D	C240 M7 Riser1A; (x8;x16x, x8); StBkt; (CPU1)	208.96	626.88
3	UCSC-P-B7D32GF-D	Cisco-Emulex LPe35002-M2-2x32GFC Gen 7 PCIe HBA	3,365.00	10,095.00
3	UCSC-P-IQ10GC-D	Cisco-Intel X710T4LG 4x10 GbE RJ45 PCIe NIC	935.30	2,805.90
6	UCSC-PSU1-1200W-D	1200w AC Titanium Power Supply for C-series Rack Servers	375.13	2,250.78
6	CAB-9K12A-NA	Power Cord, 125VAC 13A NEMA 5-15 Plug, North America	-	-
3	UCS-SID-INFR-UNK-D	Unknown	-	-
3	UCS-SID-WKL-UNK-D	Unknown	-	-
1	Win Server 2022 DC		-	-
3	DG7GMGF0D65N:0002	Windows Server 2022 Datacenter - 16 Core (NCE COM BAS PER 1TM)	6,156.00	18,468.00
275	DG7GMGF0D5VX:0007	Windows Server 2022 -1 USER CAL PERPETUAL 10 YR LIC	46.00	12,650.00
			-	-
1	S&H	Freight	1,673.29	1,673.29
	Labor			
1	PSP	PSP $10K Block of Time:54.2 Hours@ $184.50 per hour	10,000.00	10,000.00

PROJECT SUMMARY

Material Summary	176,962.06
Subtotal	176,962.06
Total Customer Price	176,962.06

* All work to be performed during normal business hours Monday through Friday between 8:00am and 5:00pm unless otherwise specified.

Cisco UCS C240 M7 Rack Server

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The Cisco UCS® C240 M7 Rack Server delivers industry-leading performance and expandability.

Product overview



The Cisco UCS C240 M7 Rack Server is well-suited for a wide range of storage and I/O-intensive applications such as big data analytics, databases, collaboration, virtualization, consolidation, and high-performance computing in its two-socket, 2RU form factor.

The Cisco UCS C240 M7 Rack Server extends the capabilities of the Cisco UCS rack server portfolio. It incorporates the 4th or 5th Gen Intel® Xeon® Scalable Processors with 60 percent more cores per socket advanced features like Intel Advanced Matrix Extensions (AMX), Data Streaming Accelerator (DSA), In-Memory Analytics Accelerator (IAA), and QuickAssist Technology (QAT), many applications will see significant performance improvements.

You can deploy the Cisco UCS C-Series rack servers as standalone servers or as part of the Cisco Unified Computing System™ managed by Cisco Intersight™ or Cisco UCS Manager[1] to take advantage of Cisco® standards-based unified computing innovations that can help reduce your Total Cost of Ownership (TCO) and increase your business agility.

The Cisco UCS C240 M7 Rack Server brings many new innovations to the UCS rack server portfolio. With the introduction of PCIe Gen 5.0 expansion slots for high-speed I/O, a DDR5 memory bus, and expanded storage capabilities, the server delivers significant performance and efficiency gains that will improve your application performance. Its features including the following:

- Supports up to two 4th or 5th Gen Intel Xeon Scalable CPU, with up to 64 cores per socket
- Up to 32 DDR5 DIMMs for up to 8 TB of capacity using 256 GB DIMMs (16 DIMMs per socket)
- Up to 5600 MT/s DDR5 memory plus other speeds depending on the CPU installed
- Up to 8 PCIe 4.0 slots or up to 4 PCIe 5.0 slots, plus a hybrid modular LAN on motherboard (mLOM) /OCP 3.0 slot
- Support for Cisco UCS VIC 15000 Series adapters as well as third-party options
- Up to 28 hot-swappable Small-Form-Factor (SFF) SAS/SATA or NVMe drives (with up to 8 direct-attach NVMe drives)
    - New tri-mode RAID controller supports SAS4 plus NVMe hardware RAID
    - Option for 28 NVMe drives at PCIe Gen4 x2 each

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- M.2 boot options
  - Up to two 960GB SATA M.2 drives with hardware RAID, or
  - Up to two 960GB NVMe M.2 drives with NVMe hardware RAID
- Up to eight GPUs supported
- Modular LOM / OCP 3.0
  - One dedicated PCIe Gen4x16 slot that can be used to add an mLOM or OCP 3.0 card for additional rear-panel connectivity.
  - mLOM slot that can be used to install a Cisco UCS Virtual Interface Card (VIC) without consuming a PCIe slot, supporting quad port 10/25/50 Gbps or dual port 40/100/200 Gbps network connectivity
  - OCP 3.0 slot features full out-of-band management for select adapters

High performance for data-intensive applications

The Cisco UCS C240 M7 Rack Server is well suited for a wide range of enterprise workloads, including:

- Big data and analytics
- Collaboration
- Small and medium-sized business databases
- Virtualization and consolidation
- Storage servers
- High-performance appliances

Cisco UCS C240 M7 Rack Servers can be deployed as standalone servers, part of a Cisco UCS-managed environment, or through Cisco Intersight. When used in combination with Cisco Intersight, the C240 M7 brings the power and automation of unified computing to enterprise applications, including Cisco SingleConnect technology, drastically reducing switching and cabling requirements.

Cisco Intersight leverages the familiar capabilities of UCS Manager with service profiles, templates, and policy-based management to enable rapid deployment and help ensure deployment consistency. It also enables end-to-end server visibility, management, and control in both virtualized and bare-metal environments.

The Cisco Integrated Management Controller (IMC) delivers comprehensive out-of-band server management with support for many industry standards, including:

- Redfish Version 1.13.0 (2021.1 schema0)
- Intelligent Platform Management Interface (IPMI) v2.0
- Simple Network Management Protocol (SNMP) v2 and v3
- Syslog
- Simple Mail Transfer Protocol (SMTP)

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- Key Management Interoperability Protocol (KMIP)
- cKVM (all-new Cisco KVM)
- Command-Line Interface (CLI)
- XML API

Management Software Development Kits (SDKs) and DevOps integrations exist for Python, Microsoft PowerShell, Ansible, Puppet, Chef, and more. For more information about integrations, see Cisco DevNet (https://developer.cisco.com/site/ucs-dev-center/).

Product specifications

Table 1 lists the specifications for the Cisco UCS C240 M7 Rack Server.

Table 1. Specifications

Item	Specifications
Form factor	2RU rack server
Processors	Up to 2x 5th Gen Intel Xeon Scalable processors (1 or 2) or Up to 2x 4th Gen Intel Xeon Scalable processors (1 or 2)
Memory	32 DDR5-5600 DIMM slots (16 DIMMS per CPU): 16, 32, 48, 64, 96, 128, 256GB at up to 5600 MT/s for up to 8TB of memory with 5th Gen Intel Xeon Scalable processors or 32 DDR5-4800 DIMM slots (16 DIMMS per CPU): 16, 32, 64, 128, 256GB at up to 4800 MT/s for up to 8TB of memory with 4th Gen Intel Xeon Scalable processors
PCIe expansion	Up to 8 PCIe 4.0 slots or up to 4 PCIe 5.0 slots plus 1 dedicated 24-Gbps RAID controller slot and 1 dedicated mLOM slot
RAID controllers	• Internal controllers: ◦ 24-Gbps modular tri-mode controller supports SAS 4 or NVMe hardware RAID ◦ Cisco 12-Gbps modular RAID controller (PCIe 4.0) with 4-GB Flash-Backed Write Cache (FBWC), or ◦ Cisco 12-Gbps modular SAS Host Bus Adapter (HBA) • External controller: Cisco 12-Gbps 9500-8e SAS HBA
Internal storage	Backplane options: • Up to 28 x 2.5-inch SAS and SATA HDDs/ SSDs and NVMe SSDs (up to 8 NVMe direct attach) • Up to 28 x 2.5-inch NVMe PCIe SSDs (all direct-attach Gen4 x2)
mLOM/OCP 3.0	One dedicated socket (x16 PCIe lane) that can be used to add an mLOM or OCP 3.0 card for additional rear-panel connectivity. • mLOM slot can flexibly accommodate 10/25/50 and 40/100/200 100-Gbps Cisco VIC adapters. • OCP 3.0 slot features full out-of-band manageability that supports Intel X710 OCP Dual 10GBase-T via mLOM interposer.

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Item	Specifications
Power supplies	Hot-pluggable, redundant platinum and titanium options: • Platinum: 1050W DC, and 1600W AC • Titanium: 1200W AC, and 2300W AC
Other storage	• Dedicated Baseboard Management Controller (BMC) FlexMMC for utilities (on board) • Dual M.2 SATA/NVMe SSDs with HW RAID support
Management	• Cisco Intersight • Cisco Integrated Management Controller (IMC) • Cisco UCS Manager
Rack options	Cisco ball-bearing rail kit with optional reversible cable management arm
Hardware and software interoperability	See the Cisco Hardware and Software Interoperability List for a complete listing of supported operating systems and peripheral options.

System requirements

Table 2 lists system requirements for the server.

Table 2. System requirements

Item	Requirements
Cisco IMC	Release 4.3(1) or later

Ordering information

Table 3. Ordering Information

Part #	Product description
UCSC-C240-M7SX	C240 M7 2RU standard server with up to 28x SFF drive bays
UCSC-C240-M7SN	C240 M7 2RU NVMe optimized server with up to 28x NVMe drive capability

For information about installing or upgrading your server, see the Cisco UCS C240 M7 Server Installation and Service Guide.

For ordering information, see Cisco UCS C240 M7 SFF rack server specifications sheet

Warranty information

The Cisco UCS C240 M7 Rack Server has a three-year, Next-Business-Day (NBD) hardware warranty and a 90-day software warranty.

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Cisco support

Augmenting the Cisco Unified Computing System (Cisco UCS) warranty, Cisco Smart Net Total Care® and Cisco Solution Support services are part of Cisco's technical services portfolio. Smart Net Total Care combines Cisco's industry-leading and award-winning foundational technical services with an extra level of actionable business intelligence that is delivered to you through the smart capabilities in the Smart Net Total Care portal. Learn more about Smart Net Total Care.

Cisco Solution Support includes both Cisco product support and solution-level support, resolving complex issues in multivendor environments on average 43 percent more quickly than with product support alone. Cisco Solution Support is a critical element in data center administration, helping to rapidly resolve any issue encountered while maintaining performance, reliability, and return on investment.

This service centralizes support across your multivendor Cisco environment for both our products and solution partner products that you have deployed in your ecosystem. Whether there is an issue with a Cisco product or with a solution partner product, just call us. Our experts are the primary point of contact and own the case from first call to resolution. Learn more about Cisco Solution Support.

Product sustainability

Information about Cisco's Environmental, Social, and Governance (ESG) initiatives and performance is provided in Cisco's Corporate Social Responsibility (CSR) and sustainability reporting.

Table 4. Cisco environmental sustainability information

Sustainability topic		Reference
General	Information on product-material-content laws and regulations	Materials
	Information on electronic waste laws and regulations, including our products, batteries, and packaging	WEEE compliance
	Information on our product takeback and reuse program	Cisco Takeback and Reuse Program
	Sustainability inquiries	Contact: csr_inquiries@cisco.com
	Operating and non-operating conditions	Product specifications
Material	Product packaging weight and materials	Contact: environment@cisco.com

Product environmental information

Product environmental information for users per Commission Regulation (EU) 2019/424 https://www.cisco.com/web/dofc/23906226.pdf.

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Cisco and partner services

Cisco and our industry-leading partners deliver services that can accelerate your transition to a Cisco UCS X-Series Modular System solution. Cisco Unified Computing Systems Services can help you create an agile infrastructure, accelerate time to value, reduce costs and risks, and maintain availability during deployment and migration. After deployment, our services can help you improve performance, availability, and resiliency as your business needs evolve and help you further mitigate risk. For more information, visit https://www.cisco.com/go/unifiedcomputingservices.

Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital® makes it easier to get the right technology to achieve your objectives, enable business transformation, and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services, and complementary third-party equipment in easy, predictable payments. Learn more.

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Document history

New or revised topic	Described in	Date
Support for 5th Gen Intel® Xeon® Scalable Processors with 5600MT/s DDR5	Product Specifications	December 14, 2023

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

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TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
IT DEPARTMENT	JEFFREY ROBILLARD
PROJECT NAME	**DEPARTMENT PRIORITY**
COMPUTER REPLACEMENT	2

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The request is to purchase computers used across town each year as a replacement schedule with an expected 7 year life cycle rotation. By maintaining this rotation we expect that we will be able to maintain an inventory of equipment that is fully supportable for cybersecurity updates/patches defined by Windows operating systems OS hardware limitations. In FY26 (QTY 39) - Town Clerk,First Selectman,Human Resources,Building/Planning,Tax Collector,Registrar,Emergency Management, Dispatch, Youth Services. FY27(QTY 31) Fire,Library,IT. FY28(QTY 28)-Parks and Recreation, Senior Services, Public Access Computers (Community Center&Library).
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	There will not be any positive or negative on the impact to other line items in the budget for this 1 for 1 PC replacements project.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR	64,514	46,592	37,035	33,451		
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**64,514**	**46,592**	**37,035**	**33,451**	**0**	**0**

DELL Technologies

Cart (1 item)

My Saved Items

Items	Quantity	Price



OptiPlex Small Form Factor Plus

Save for later

1

$1,194.66

Tech Specs

OptiPlex Small Form Factor (Plus 7020)
OptiPlex Small Form Factor Plus 7020

Processor
Intel® Core™ i5 14500 vPro® (24MB cache, 14 cores, 20 threads, up to 5.0 GHz Turbo)

Operating System
Windows 11 Pro, English, Brazilian Portuguese, French, Spanish

Memory
16 GB: 2 x 8 GB, DDR5

Storage
512GB M.2 PCIe NVMe Class 35 Solid State Drive

Additional Storage
No Additional Hard Drive

3rd Storage
No Additional Hard Drive

Graphics
Intel® Graphics

Show All

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2026-2030

	DEPARTMENT/ AGENCY:							
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	Energy Efficiency Project	3	243,335					243,335.00
2	IT Chromebooks / Ipads	3	197,000	202,910	208,997	215,267	221,725	1,045,899.75
3	IT - BOE Munis Implementation	3	413,406					413,406.00
4	Quaker Hill Repavement of asphalt play area	3	35,000					35,000.00
5	Quaker Hill Heat Pump Replacement / BMS	3	175,000	180,250				355,250.00
6	Field House Flooring / Bleacher renovation	3	575,000					575,000.00
7	WHS - TURF Softball	3	45,000	45,000	45,000	45,000	45,000	225,000.00
8	WHS - TURF Main Field	3	110,000	110,000	110,000	110,000	110,000	550,000.00
	IT - In class sound replacement	3		476,265				476,265.00
	IT - Virtual Server	3		325,000				325,000.00
	Quaker Hill Playground Surface Replacement	3		196,000				196,000.00
	Oswegatchie Heat Pump Replacement / BMS	3		177,500	182,250			359,750.00
	Baseball field dugout / press box / fencing remediation	3		65,000				65,000.00
	IT - Elementary Cafeteria Projection Replacement	3		54,000				54,000.00
	IT - Auditorium Automation Replacement	3		50,000				50,000.00
	Oswegatchie Playground Surface Replacement	3			198,030			198,030.00
	Great Neck Heat Pump Replacement / BMS	3			180,500	185,915		366,415.00
	IT - IT LEARNING BOARDS CLMS	3			265,000			265,000.00
	Great Neck Playground Replacement	3				220,080		220,080.00
	CLMS - Rooftop Unit Replacement	1				265,000	272,000	537,000.00
	TOTALS		1,793,741.00	1,881,925.00	1,189,777.30	1,041,262.22	648,725.24	6,555,430.75

INDEX TO FUNDING SOURCES.

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Board of Education	**CONTACT PERSON** Joseph Mancini
PROJECT NAME Energy Efficiency Project	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	This is the on bill financing for the energy efficiency project that the Board of Education performed in 2022. During the 2023 budget cycle this was moved out of the operating budget and recommended that it be moved to Capital. The financing was done at zero percent interest and the project covered new LED lighting in all five schools, improved transformers, VFD's for the kitchens, and other energy savings.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	None

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR	486,670	243,335	243,335			
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**486,670**	**243,335**	**243,335**	**0**	**0**	**0**

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Board of Education	**CONTACT PERSON** Joseph Mancini
PROJECT NAME IT Chromebooks / Ipads	**DEPARTMENT PRIORITY** 2

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The replacement cycle for Chromebooks and Ipads was moved from the General Fund to CIP during the 2023 Budget Cycle. Presently there are roughly 2,000 chromebooks and 450 Ipads in circulation through our schools. This request for the 2025-2026 school year is for 400 chromebooks at a unit price of $410 and 100 Ipads at a unit price of $330.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		197,000	202,910	208,997	215,267	221,725
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**197,000**	**202,910**	**208,997**	**215,267**	**221,725**

VIVACITY TECH

Vivacity Tech PBC
641 Fairview Ave N
Suite #150
Saint Paul MN 55104

QUOTE INFO	ACCOUNT INFO
Quote# QUO3008505 Expires: 11/13/2024	**Account#** 73015
Project Name (375) Acer 511 w/ 4yr EMP+ + VSuite	**Account Name** Waterford School District

PREPARED FOR	SALES REPRESENTATIVE
Mark Geer mgeer@waterfordschools.org	**Mark Baker** mbaker@vivacitytech.com

SKU	PRODUCT	QTY	PRICE	TOTAL
NX.KD4AA.002	Acer Chromebook 511 C736-C09R - Intel N100/4GB/32GB - 11in/Non-Touch - New	375	$260.00	**$97,500.00**
VT4YR-EMPLUS-NT	4-Year Empower Plus Warranty (Non-Touch) Vivacity Tech EMPOWER+ Warranty: Includes choice of Vivacity case (excludes backpacks) and Blue Light Blocking Screen Protector installed by Vivacity Tech technicians Available for Education-Grade Chromebooks Covers both manufacturer's defects and accidental damage Priority repair for all covered devices No deductibles, claim limits, or shipping charges Battery and power adapter replaced up to 10% of the covered fleet Theft and loss reimbursements are available with valid police report Self-Maintainer option available By purchasing a Vivacity Branded Warranty, you agree to the terms and conditions of the warranty. Full T&C's are available on the Dream portal or upon request.	375	$100.00	**$37,500.00**
VT6DRM	Dream Subscription	375	$0.00	**$0.00**
VT6SRA	Student Repair Academy Subscription	375	$0.00	**$0.00**
				$37,500.00
CROSSWDISEDUNEW	Chrome OS Education License	375	$32.00	**$12,000.00**
VTPART-11BL-GS	Vivacity Tech Blue Light Blocking Tempered Glass Screen Protector for 11.6" Clamshell	375	$0.00	**$0.00**
SVC-SPI	Vivacity Tech Screen Protector Installation Service	375	$0.00	**$0.00**
VT-EMPLUS-SHELL	Empower Plus Warranty Shell Add-on Includes Rugged Hard Shell Case for Acer Chromebook 511 C736 / C736T	375	$10.00	**$3,750.00**
SVC-CCA	Vivacity Tech Chromebook/Case Assembly Service	375	$0.00	**$0.00**
SVC-WG	Vivacity Tech White Glove Service - Enroll Device in Console - Update OS to current version (to the date the service is performed)	375	$3.00	**$1,125.00**

Vivacity Tech reserves the right to assign any order to our vendor Assignment of Funds programs. The programs are a beneficial way for Vivacity to accommodate to education or government end user orders. Please note that under these programs, the remittance address may change and additional paperwork may be required. Should this order be allocated to one of these programs, the Vivacity procurement team will follow-up further communication. We thank you in advance for your assistance in facilitating Vivacity's participation in these beneficial partnership programs. Pricing provided on Quotes expires on the expiration date stated on each Quote or while supplies last. If pricing is no longer accurate at the time of purchase your dedicated Account Manager will work with you to create an updated Quote. We're excited about this opportunity to work with you and your school district. If you have questions or concerns, please check with your dedicated Account Manager listed on this quote, or contact our Sales Team at (877) 731-2069 option 1 or sales@vivacitytech.com. Vivacity Tech is the first Public Benefit Corporation to provide hardware technology to schools, as such we are required to give back a portion of our profits to schools for technology purposes. We believe we have a responsibility to ensure our nation's students succeed. Our efforts go far beyond selling products and begin with our team forming long-lasting partnerships focused on school districts' success.

VIVACITY TECH

Vivacity Tech PBC
641 Fairview Ave N
Suite #150
Saint Paul MN 55104

QUOTE INFO	ACCOUNT INFO
Quote# QUO3008505 Expires: 11/13/2024	**Account#** 73015
Project Name (375) Acer 511 w/ 4yr EMP+ + VSuite	**Account Name** Waterford School District

SKU	PRODUCT	QTY	PRICE	TOTAL
SVC-VT-ATAG	Vivacity Tech Asset Tagging Service - VT Provided	375	$3.00	**$1,125.00**
FEE-S&H	Vivacity Tech Shipping & Handling	1	$700.00	**$700.00**

Notes: Credit Card payments are subject to a 3% convenience fee.

Contract:

Subtotal: $153,700.00

Tax Total: $0.00

Grand Total: $153,700.00

Vivacity Tech reserves the right to assign any order to our vendor Assignment of Funds programs. The programs are a beneficial way for Vivacity to accommodate to education or government end user orders. Please note that under these programs, the remittance address may change and additional paperwork may be required. Should this order be allocated to one of these programs, the Vivacity procurement team will follow-up further communication. We thank you in advance for your assistance in facilitating Vivacity's participation in these beneficial partnership programs. Pricing provided on Quotes expires on the expiration date stated on each Quote or while supplies last. If pricing is no longer accurate at the time of purchase your dedicated Account Manager will work with you to create an updated Quote. We're excited about this opportunity to work with you and your school district. If you have questions or concerns, please check with your dedicated Account Manager listed on this quote, or contact our Sales Team at (877) 731-2069 option 1 or sales@vivacitytech.com. Vivacity Tech is the first Public Benefit Corporation to provide hardware technology to schools, as such we are required to give back a portion of our profits to schools for technology purposes. We believe we have a responsibility to ensure our nation's students succeed. Our efforts go far beyond selling products and begin with our team forming long-lasting partnerships focused on school districts' success.

Proposal

Proposal Number
2111910105

Account Number/Name
41901
WATERFORD PUBLIC SCHOOLS

Created On
11/12/2024

Created By
Mark Geer

Thank you for creating your proposal, details are provided below. You can access this proposal from your Apple Store for Education Institution by searching proposal number 2111910105.

Item	Product / Description	Total Quantity	Unit Price	Total Price
1	MPQ03LL/A 10.9-inch iPad Wi-Fi 64GB - Silver	100	329.00	32,900.00 USD
			Subtotal	32,900.00 USD
			Estimated Tax	0.00 USD
			Total	32,900.00 USD

Please note that your order subtotal does not include sales tax or rebates. Sales tax and rebates, if applicable, will be added when your order is processed. Your order total may include estimated sales tax that is subject to change at the time your order is processed.

How to Order

If you would like to convert this Proposal to an order, log into your Apple Store for Education Institution and select 'Proposal' from the pull-down menu. Search for this Proposal by entering the Proposal Number referenced above.

Note: A Purchaser login is required to order. Visit your Apple Store for Education Institution to login or create your Purchaser Apple ID.

The prices and specifications above correspond to those valid at the time the Proposal was created and are subject to change. Purchases are subject to the terms and conditions of your agreement with Apple and the Apple Store for Education Institution.

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TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Board of Education	**CONTACT PERSON** Joseph Mancini
PROJECT NAME IT-BOE Munis Implementation	**DEPARTMENT PRIORITY** 3

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Munis is an Enterprise Resource Planning (ERP) software that manages the core functions of our operations. Presently Waterford Board of Education uses ADS (Tyler Technologies), which is a software that is made by the same vendor as Munis. ADS is no longer supported by Tyler Technology, the town is already using Munis, and it's time to upgrade the system. Munis covers the following areas which are detailed on the quote, financial management, revenue management, content management, and human resource management. Munis is widely adopted throughout municipalities in Connecticut and allows for better access and visibility to information. There are two items on the quote, the implementation of $413,406 which will cover the first year of implementation and the recurring expense of $52,386 for subsequent years.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	There is the potential for this to replace other recurring software apps should the integration prove as promising as the demonstrations.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		413,406				
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	0	413,406	0	0	0	0

Quoted By:	Christian Coons
Quote Expiration:	04/07/25
Quote Name:	Waterford BOE, CT-ERP-Profund to Munis
Quote Description:	Waterford BOE, CT - ERP - Profund to EERP (Munis) ON PREM

Sales Quotation For:

Town of Waterford
15 Rope Ferry Rd
Waterford CT 06385-2202

Shipping Address:

Tyler License Fees and Related Services

Description	Qty	License	Hours	Module Total	Year One Maintenance
Additional					
Enterprise Forms Processing (including Common Form Set)	1	$ 7,500.00	0	$ 7,500.00	$ 1,500.00
Payroll	1	$ 12,882.00	168	$ 12,882.00	$ 2,319.00
Financial Management					
Accounting	1	$ 12,900.00	88	$ 12,900.00	$ 2,322.00
Accounts Payable	1	$ 5,200.00	24	$ 5,200.00	$ 936.00
Budgeting	1	$ 5,200.00	32	$ 5,200.00	$ 936.00
Project & Grant Accounting	1	$ 3,300.00	16	$ 3,300.00	$ 594.00
Purchase Orders	1	$ 4,400.00	16	$ 4,400.00	$ 792.00
Requisitions	1	$ 2,750.00	16	$ 2,750.00	$ 495.00
Revenue Management					
Accounts Receivable	1	$ 3,850.00	32	$ 3,850.00	$ 693.00
General Billing	1	$ 2,850.00	16	$ 2,850.00	$ 513.00
Content Management					

Content Manager Core	1	$ 10,000.00	32	$ 10,000.00	$ 1,800.00
Human Resources Management					
Human Resources & Talent Management	1	$ 15,798.00	88	$ 15,798.00	$ 2,844.00
Recruiting	1	$ 3,800.00	16	$ 3,800.00	$ 684.00
Data Insights					
Enterprise Analytics and Reporting - Legacy License	1	$ 5,300.00	40	$ 5,300.00	$ 954.00
TOTAL		**$ 95,730.00**	**584**	**$ 95,730.00**	**$ 17,382.00**

Tyler SaaS and Related Services

Description	Qty	Imp. Hours	Annual Fee
Human Resources Management			
Absence and Substitute Management Suite	1	40	$ 5,220.00
Employee Access	1	16	$ 3,400.00
Time & Attendance w Mobile Access - Up to 500 Employees	1	144	$ 19,668.00
TOTAL		**200**	**$ 28,288.00**

Tyler Annual Services

Description	QTY	Imp. Hours	Annual Fee
Recurring Services			
System Management Services Contract	1	0	$ 4,346.00
TOTAL:		**0**	**$ 4,346.00**

Professional Services

Description	Quantity	Unit Price	Ext Discount	Extended Price	Maintenance
COA Import Hours	12	$ 175.00	$ 0.00	$ 2,100.00	$ 0.00
Payroll Accruals Import Hours	8	$ 175.00	$ 0.00	$ 1,400.00	$ 0.00
Payroll Deductions Import Hours	12	$ 175.00	$ 0.00	$ 2,100.00	$ 0.00

Payroll Employee Master Import Hours		12	$ 175.00	$ 0.00	$ 2,100.00	$ 0.00
Professional Services		304	$ 125.00	$ 0.00	$ 38,000.00	$ 0.00
Conversions – See Detailed Breakdown Below					$ 19,140.00	$ 0.00
Project Management		100	$ 200.00	$ 0.00	$ 20,000.00	$ 0.00
Remote Implementation		784	$ 200.00	$ 0.00	$ 156,800.00	$ 0.00
	TOTAL				**$ 241,640.00**	**$ 0.00**

3rd Party Hardware, Software and Services

Description	Qty	Unit Price	Unit Discount	Total Price	Unit Maint/SaaS	Unit Maint/SaaS Discount	Total Maint/SaaS
Touchscreen 7: Proximity Reader	10	$ 2,365.00	$ 0.00	$ 23,650.00	$ 237.00	$ 0.00	$ 2,370.00
TOTAL				**$ 23,650.00**			**$ 2,370.00**

Summary	**One Time Fees**	**Recurring Fees**
Total Tyler License Fees	$ 95,730.00	$ 17,382.00
Total SaaS	$ 0.00	$ 28,288.00
Total Tyler Services	$ 241,640.00	$ 4,346.00
Total Third-Party Hardware, Software, Services	$ 23,650.00	$ 2,370.00
Summary Total	**$ 361,020.00**	**$ 52,386.00**
Contract Total	**$ 413,406.00**	

Unless otherwise indicated in the contract or amendment thereto, pricing for optional items will be held For six (6) months from the Quote date or the Effective Date of the Contract, whichever is later.

Customer Approval: _____ Date: _____

Print Name: _____ P.O.#: _____

All Primary values quoted in US Dollars

Detailed Breakdown of Conversions (Included in Summary Total)

Description	Qty	Unit Price	Unit Discount	Extended Price
Financials				
Accounting	1	$ 4,000.00	$ 2,000.00	$ 2,000.00
Accounts Payable	1	$ 6,200.00	$ 3,100.00	$ 3,100.00
Project Accounting	1	$ 4,000.00	$ 2,000.00	$ 2,000.00
Purchase Orders	1	$ 3,600.00	$ 1,800.00	$ 1,800.00
Human Resources Management				
Human Resources Management	1	$ 14,300.00	$ 7,150.00	$ 7,150.00
Revenue Management				
General Billing	1	$ 6,180.00	$ 3,090.00	$ 3,090.00
	TOTAL			**$ 19,140.00**

Optional Tyler Annual Services

Description	Qty	Imp. Hours	Annual Fee
Recurring Services			
User Monitoring and Response	1	0	$ 5,000.00
	TOTAL:	**0**	**$ 5,000.00**

Comments

Client agrees that items in this sales quotation are, upon Client's signature or approval of same, hereby added to the existing agreement ("Agreement")

between the parties and subject to its terms. Additionally, payment for said items, as applicable but subject to any listed assumptions herein, shall conform to the following terms:

- License fees for Tyler and third party software are invoiced upon the earlier of (i) deliver of the license key or (ii) when Tyler makes such software available for download by the Client;
- Fees for hardware are invoiced upon delivery;
- Fees for year one of hardware maintenance are invoiced upon delivery of the hardware;
- Annual Maintenance and Support fees, SaaS fees, Hosting fees, and Subscription fees are first payable when Tyler makes the software available for download by the Client (for Maintenance) or on the first day of the month following the date this quotation was signed (for SaaS, Hosting, and Subscription), and any such fees are prorated to align with the applicable term under the Agreement, with renewals invoiced annually thereafter in accord with the Agreement.
- Fees for services included in this sales quotation shall be invoiced as indicated below.
    - Implementation and other professional services fees shall be invoiced as delivered.
    - Fixed-fee Business Process Consulting services shall be invoiced 50% upon delivery of the Best Practice Recommendations, by module, and 50% upon delivery of custom desktop procedures, by module.
    - Fixed-fee conversions are invoiced 50% upon initial delivery of the converted data, by conversion module, and 50% upon Client acceptance to load the converted data into Live/Production environment, by conversion module.
    - Except as otherwise provided, other fixed price services are invoiced upon complete delivery of the service. For the avoidance of doubt, where "Project Planning Services" are provided, payment shall be invoiced upon delivery of the Implementation Planning document. Dedicated Project Management services, if any, will be invoiced monthly in arrears, beginning on the first day of the month immediately following initiation of project planning.
    - If Client has purchased any change management services, those services will be invoiced in accordance with the Agreement.
    - Notwithstanding anything to the contrary stated above, the following payment terms shall apply to services fees specifically for migrations: Tyler will invoice Client 50% of any Migration Fees listed above upon Client approval of the product suite migration schedule. The remaining 50%, by line item, will be billed upon the go-live of the applicable product suite. Tyler will invoice Client for any Project Management Fees listed above upon the go-live of the first product suite. Unless otherwise indicated on this Sales quotation, annual services will be invoiced in advance, for annual terms commencing on the date this sales quotation is signed by the Client. If listed annual service(s) is an addition to the same service presently existing under the Agreement, the first term of the added annual service will be prorated to expire coterminous with the existing annual term for the service, with renewals to occur as indicated in the Agreement.
- Expenses associated with onsite services are invoiced as incurred.

Tyler's quote contains estimates of the amount of services needed, based on our preliminary understanding of the scope, level of engagement, and timeline as defined in the Statement of Work (SOW) for your project. The actual amount of services required may vary, based on these factors.

Tyler's pricing is based on the scope of proposed products and services contracted from Tyler. Should portions of the scope of products or services be altered by the Client, Tyler reserves the right to adjust prices for the remaining scope accordingly.

Unless otherwise noted, prices submitted in the quote do not include travel expenses incurred in accordance with Tyler's then-current Business Travel Policy.

Tyler's prices do not include applicable local, city or federal sales, use excise, personal property or other similar taxes or duties, which you are responsible for determining and remitting. Installations are completed remotely but can be done onsite upon request at an additional cost.

In the event Client cancels services less than four (4) weeks in advance, Client is liable to Tyler for (i) all non-refundable expenses incurred by Tyler on Client's behalf; and (ii) daily fees associated with the cancelled services if Tyler is unable to re-assign its personnel.

The Implementation Hours included in this quote assume a work split effort of 70% Client and 30% Tyler.

Implementation Hours are scheduled and delivered in four (4) or eight (8) hour increments.

Tyler provides onsite training for a maximum of 12 people per class. In the event that more than 12 users wish to participate in a training class or more than one occurrence of a class is needed, Tyler will either provide additional days at then-current rates for training or Tyler will utilize a Train-the-Trainer approach whereby the client designated attendees of the initial training can thereafter train the remaining users.

ReadySub Absence and Substitute Management Suite is a SaaS solution that also utilizes Twilio for notifications to substitutes and other staff. Relevant terms of use can be found here https://www.tylertech.com/terms/tyler-saas-services and here https://www.tylertech.com/terms/twilio-terms-of-use.

Financial library includes: standard A/P check, standard EFT/ACH, standard Purchase order, standard Contract, 1099M, 1099INT, 1099S, 1099NEC and 1099G.

Accounting conversion includes: Actuals (total balances only) up to 5 years, Budgets (total balances only) up to 5 years

Accounts Payable conversion includes: Standard - Vendors, Remit Addresses, 1099 Amounts, Check History(Header, Detail) - up to 5 years, Invoices (Header, Detail) - up to 5 years

In the event Client acquires from Tyler any edition of Content Manager software other than Enterprise Edition, the license for Content Manager is restricted to use with Tyler applications only. If Client wishes to use Content Manager software with non-Tyler applications, Client must purchase or upgrade to Content Manager Enterprise Edition.

Tyler's form library prices are based on the actual form quantities listed, and assume the forms will be provided according to the standard Enterprise ERP form template. Any forms in addition to the quoted amounts and types, including custom forms or forms that otherwise require custom programming, are subject to an additional fee. Please also note that use of the Tyler Forms functionality requires the use of approved

printers as well. You may contact Tyler's support team for the most current list of approved printers. Any forms included in this quote are based on the standard form templates provided. Custom forms, additional forms and any custom programming are subject to additional fees not included in this quote. The additional fees would be quoted at the time of request, generally during the implementation of the forms. Please note that the form solution provided requires the use of approved printers. You may contact Tyler's support team for the most current list of approved printers.

General Billing library includes: standard invoice, standard statement, standard general billing receipt and standard miscellaneous receipt.

Personnel Actions Forms Library includes: standard Personnel Action form - New and standard Personnel Action Form - Change.

Human Resources Management conversion includes: Standard - Employee Master, Address, Accumulators (Earnings & Deduction totals by period) - up to 5 years, Check History - up to 5 years, Earning/Deduction History - up to 5 years, PM Action History - up to 5 years, Certifications, Education

Project Accounting conversion includes: Standard, Actuals - up to 5 years, Budgets - up to 5 years

Standard Project Management responsibilities include project plan creation, initial stakeholder presentation, bi-weekly status calls, updating of project plan task statuses, and go-live planning activities.

Purchase Orders conversion includes: Standard - Open POs, Closed POs - up to 5 years

Tyler's System Management Services is calculated at 25% of the Enterprise ERP annual maintenance. There is a $2,500 minimum annual fee. Systems Management Services are invoiced when you sign this sales quotation and are provided in accordance with the terms of service for Tyler Systems Management found here: https://www.tylertech.com/terms/tyler-systems-management-terms-of-service.

For the avoidance of doubt, User Monitoring & Response is a subscription service, not SaaS. Notwithstanding the foregoing language, payment of annual subscription fees for User Monitoring & Response commence on the availability of the service. User Monitoring & Response services will renew automatically for additional one (1) year terms, and subsequent subscription fees are due annually in advance on the anniversary of the availability date at our then-current rates. Pricing is based on client's current network size as defined by their entity size. Any material increases of network size may result in additional fees being assessed for the User Monitoring & Response service upon renewal.

General Billing conversion includes: Standard - CID, Recurring Invoices, Bills(Header, Detail), Payment History, Invoices - up to 5 years

Your acquisition of clocks and/or clock maintenance is subject to the following terms: https://www.tylertech.com/terms/executime-clock-terms.

PROFESSIONAL SERVICES - CHART OF ACCOUNTS REDESIGN - 304 HOURS

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Board of Education	**CONTACT PERSON** Joseph Mancini
PROJECT NAME Quaker Hill Repavement of asphalt play area	**DEPARTMENT PRIORITY** 4

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	This is the the repavement of the aspalt play area used by students during recess. The area is showing signs of heaving, with some potential trip hazards. The estimate of $35,000 was provided by public works based on the square footage of the area. Please note, this is not the rubber playground area, the expected year of replacement of that surface is 2027.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		35,000				
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**35,000**	**0**	**0**	**0**	**0**

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Board of Education	**CONTACT PERSON** Joseph Mancini
PROJECT NAME Quaker Hill Heat Pump / BMS replacement	**DEPARTMENT PRIORITY** 5

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

Quaker Hill Elementary was completed in 2008 and the building heat pumps have started to fail over the past few years. The systems that were installed, specifically at quaker hill, use R-22 refrigerant. R-22 is more commonly known as freon. When leaks develop in these systems it has become cost prohibitive to repair, costs of freon are over $150/Lb and each unit holds between 5 and 10 lbs. The second part of this project is the replacement of the building management system (BMS). This is the system that monitors and controls the buildings mechanical and electrical systems.

2 PROJECT STATUS IF IN PROGRESS

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		175,000	180,250			
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**175,000**	**180,250**	**0**	**0**	**0**

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Board of Education	**CONTACT PERSON** Joseph Mancini
PROJECT NAME Field House Flooring / Bleacher Renovation	**DEPARTMENT PRIORITY** 6

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	This is the initial request to replace the existing tara-flex floor in the high school field house. The existing taraflex floor was put into service in 1996. TaraFlex is a urethane based gym sheet system. The existing system has reached the end of life and we are routinely reparing the flooring. Over the past year we've seen considerably more blisters appearing and seams failing. There have been improvements made to this product over the last 28 years and Waterford should expect to see 25 years from the replacement flooring. This project would also work on addressing the updating/repairing of the bleachers to an easier solution for setups and breakdowns.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		575,000				
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**575,000**	**0**	**0**	**0**	**0**

PROPOSAL

ORDER DATE: 11/13/2018
ORDER #: 0028503
CUSTOMER NUMBER: WPS5801

PLEASE SIGN, DATE AND RETURN TO INITIATE ORDER.
Please issue P.O. & payment to Thor Performance Products.

I _____, as authorized representative of the sold to facility, have reviewed this proposal and accept it. I agree to make all payments in accordance with the payment schedule outlined below. DATED_____.

THOR PERFORMANCE PRODUCTS, INC.
2640 Route 9w
Cornwall, NY 12518
(800) 348-5815

SOLD TO:
Waterford Public Schools
15 Rope Ferry Rd.
Jay Miner 860-625-5532
Waterford, CT 06385

SHIP TO:
Waterford High School
20 Rope Ferry Rd.
Jay Miner 860-625-5532
Waterford, CT 06385

CONFIRM TO:
Jay Miner 860-625-5532 jminer@waterfordschools.org

CUSTOMER P.O.	SHIP VIA	TERMS	PRICE GOOD THROUGH
	CHR	SEE PAYMENT SCHEDULE BELOW	12/13/2018

Item Code	Unit	Qty	Price	Amount
WATERFORD PUBLIC SCHOOLS				
WATERFORD HIGH SCHOOL FIELD HOUSE				
TARA-SPORTMDT Taraflex Sport M Plus DRY-TEX Wood 7.35mm Full Roll 86'-6" x 4'-11" 426.25 sq ft Half Roll Available	SF	4,688.75	6.18	28,976.48
WOOD FOR CENTER VOLLEYBALL COURT				
TARA-WR Taraflex Weld Rod CR-50 5mm 328' WOOD COLOR	ROLL	4.00	159.41	637.64
TARA-SPORTMDTSC Taraflex Sport M Plus DRY-TEX Solid Color 7.35mm Full Roll 67'-3" x 4'-11" 330.98 sq ft Half Roll Available BORDER COLOR	SF	8,274.75	6.18	51,137.96

Continued

PROPOSAL

ORDER DATE: 11/13/2018
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CUSTOMER NUMBER: WPS5801

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	CHR	SEE PAYMENT SCHEDULE BELOW	12/13/2018

Item Code	Unit	Qty	Price	Amount
TARA-WR Taraflex Weld Rod CR-50 5mm 328'	ROLL	5.00	159.41	797.05
WELD ROD SOLID COLOR				
TARA-SURFACES Taraflex Surface Solid Color 2.1mm Full Roll 98'-5" x 4'-11" 484.36 sqft Half Roll 49'-2.5" x 4'-11" 242.18sqft 15 Colors	SF	5,564.62	5.12	28,490.85
BLEACHER BLOCK WEAR LAYER FOR UNDER BLEACHERS				
TARA-WR Taraflex Weld Rod CR-50 5mm 328'	ROLL	3.00	159.41	478.23
TARA-BB Taraflex BleacherBlok Full Rolls Only	SF	5,433.68	6.03	32,765.09
ADHESIVE, PATCH, BASE, TRANSITIONS				
TARA-GERPUR Taraflex Gerpur for Dry-Tex 2.5 Gallons covers 300sqft	EACH	62.00	272.97	16,924.14

Continued

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	CHR	SEE PAYMENT SCHEDULE BELOW	12/13/2018

Item Code	Unit	Qty	Price	Amount
NP-MAPEI-G21	EACH	38.00	165.00	6,270.00
G21 2-PART URETHANE ADHESIVE 2 GALLON UNIT COVERAGE RUBBER TO CONCRETE - 250-370 SF PER PAIL RUBBER TO RUBBER - 150 SF PER PAIL BLEACHERBLOK TO SURFACE				
MISC-FLOOR	EACH	38.00	165.00	6,270.00
MAPEI G-15 ADHESIVE BLEACHERBLOK TO CONCRETE				
TARA-GERPATCH	EACH	188.00	24.98	4,696.24
Gerflor Gerpatch Patching Compound Comes in 10 lb bags, sold 4 bags to a box. Average Coverage of 100 SF per bag **Non-Returnable Item**				
J-1/8-RUB-4B	LF	720.00	3.00	2,160.00
Johnsonite 1/8" Rubber Base 4" High Black 120' Carton				
NP-CTA-XX-H	LF	48.00	5.25	252.00
1/4" to 1/8" Material Black LABOR				

Continued

PROPOSAL

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	CHR	SEE PAYMENT SCHEDULE BELOW	12/13/2018

Item Code	Unit	Qty	Price	Amount
CFS-INS-MTO	EACH	16,552.00	1.25	20,690.00
Tear Out - Includes tear out of existing floor by machine. Does not include any major concrete repair or work. Anything beyond this is not included and considered additional work above and beyond what is priced herein. Additional work will be charged and due at the time of install. Installation will not proceed until payment is made. Based on Prevailing Wage.				
CFS-INS-GERPATC	EACH	188.00	50.00	9,400.00
Taraflex Gerpatch Installation Price Per Bag				
MISC-FLOOR	EACH	1.00	6,440.00	6,440.00
LABOR FOR REMOVING AND REINSTALLING BLEACHERS				
CFS-INS-GL	EACH	3.00	2,750.00	8,250.00
Games Lines Installation-NON UNION Including: 1-Basketball 1-Volleyball INCLUDES 2 COLORS. Each additional color is an extra $500.00 (1) VOLLEYBALL SET - WHITE (2) CROSS COURT SETS - YELLOW (1) FULL COURT BB - YELLOW (2) PICKLEBALL - TBD				
CFS-INS-GL	EACH	1.00	5,500.00	5,500.00

Continued

PROPOSAL

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CUSTOMER P.O.	SHIP VIA	TERMS	PRICE GOOD THROUGH
	CHR	SEE PAYMENT SCHEDULE BELOW	12/13/2018

Item Code	Unit	Qty	Price	Amount
Games Lines Installation-NON UNION				
(4) 2" LINES FORMING 3 TRACK LANES				
SPRING LANES RUN DOWN ONE LONG SIDE OF GYM				
COLOR - WHITE				
CFS-INS-LOGO INCLUDES ALL MATERIALS AND LABOR FOR ALL LOGOS -	EACH	1.00	12,978.60	12,978.60
(2) "W" WITH SPEAR (2) "WATERFORD" (1) CENTER COURT "LANCERS"				
CFS-INS-SWPV Seam Welded Performance Vinyl Installation PREVAILING WAGE Price per Sqft.	EACH	18,528.12	2.85	52,805.14
MATERIAL Material quantity include cutting loss based on industry guidelines, material takeoff techniques and material increment requirements. Extra material is to be used for attic stock. THOR Performance Products is not responsible for excess materials due to changes in the plans or layout after order is placed, changes made without notification or for changes made during installation. All returned materials are subject to freight charges and restocking fees at the expense of the purchaser.	EACH			
FREIGHT	EACH			

Continued

PROPOSAL

ORDER DATE: 11/13/2018
ORDER #: 0028503
CUSTOMER NUMBER: WPS5801

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	CHR	SEE PAYMENT SCHEDULE BELOW	12/13/2018

Item Code	Unit	Qty	Price	Amount

Freight: INSIDE DELIVERY IS INCLUDED

UNLOADING BY INSTALLER, THOR IS NOT INCLUDED.

ANY ADDTIONAL FREIGHT CHARGES THAT ARE NOT PREAUTHORIZED WILL BE BILLED DIRECTLY TO THE CUSTOMER
INLOAD EACH

1. Unless specifically stated otherwise on the signed proposal: INSIDE DELIVERY IS INCLUDED

2. Rolled products will require hand trucks and Tiled products will require a Pallet Jack or Fork Lift for unloading.

3. It is recommended that at least 3 people be available for unloading. Larger orders will require more labor.

4. Standard Freight Charges include Curbside Delivery only.
PLEASE ADVISE IF ANY OF THE ADDITIONAL SERVICES LISTED BELLOW APPLIES TO YOUR DELIVERY, THESE ARE NOT INCLUDED:

**LIFT GATE REQUIRED
**INSIDE DELIVERY NECESSARY
**NO ACCESS TO FORK LIFTS OR HAND TRUCKS
**TIME RESTRICTIONS
**NO LOADING DOCK
**UNLOADING
These must be arranged PRIOR to shipment, preferably at the time this order is placed.

5. Any changes to delivery date or services must be done NO LATER THAN 72 HOURS of given ship date or additional storage/redelivery fees will be incurred.

6. When truck is unloaded please inspect product for any damage.
ANY & ALL Damage MUST be noted on Bill Of Lading

7. Restocking fee on any cancelled or returned orders.

Continued

PROPOSAL

ORDER DATE: 11/13/2018
ORDER #: 0028503
CUSTOMER NUMBER: WPS5801

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CUSTOMER P.O.	SHIP VIA	TERMS	PRICE GOOD THROUGH
	CHR	SEE PAYMENT SCHEDULE BELOW	12/13/2018

Item Code	Unit	Qty	Price	Amount
PAYMENT OPTION	EACH			

To place the order:
Please sign/date all pages of the proposal and fax/email to:
845-534-4111 (fax) or Sabrena@ThorPP.com
*** SIGN/DATE EACH PAGE IN BOX IN UPPER RIGHT CORNER OF PROPOSAL
*** ORDERS ARE NOT VALID UNELSS ALL PAGES ARE COMPLETED.

Payment Methods:
UPS/FedEx
THOR Performance Products/ 79 Pleasant Hill Road/ Mountainville NY 10953
*** REFERNCE THOR'S ORDER # ON CHECKS
Located in the upper right corner of each proposal page.

Wire Transfer
Empire State Bank/ 68 North Plank Road/ Newburgh NY 12550
P: 845-561-0003
Routing #: 021913862
Account #: 20 000 9095

We also accept Visa, Mastercard or American Express.
Completed Credit Card Authorization Form required.

ORDERS ARE NOT PROCESSED UNTIL SIGNED PROPOSAL and PAYMENT ARE RECEIVED. PLEASE EXPEDITE PAYMENT FOR RUSH ORDERS.

PAYMENT-SCH	EACH			

Continued

PROPOSAL

ORDER DATE: 11/13/2018
ORDER #: 0028503
CUSTOMER NUMBER: WPS5801

PLEASE SIGN, DATE AND RETURN TO INITIATE ORDER.
Please issue P.O. & payment to Thor Performance Products.

I _____, as authorized representative of the sold to facility, have reviewed this proposal and accept it. I agree to make all payments in accordance with the payment schedule outlined below. DATED_____.

THOR PERFORMANCE PRODUCTS, INC.
2640 Route 9w
Cornwall, NY 12518
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SOLD TO:

Waterford Public Schools
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Waterford, CT 06385

CUSTOMER P.O.	SHIP VIA	TERMS	PRICE GOOD THROUGH
	CHR	SEE PAYMENT SCHEDULE BELOW	12/13/2018

Item Code	Unit	Qty	Price	Amount

PAYMENT TERMS ARE AS FOLLOWS:

50% DEPOSIT DUE WITH ORDER: $ 149.867.71
DUE 2 WEEKS PRIOR TO SHIPPING: $119,894.17
DUE UPON ARRIVAL AT THE JOBSITE: $ 29,973.54
(A Visa/Mastercard is required to secure the final payment)

INCLUDE YOUR ORDER # ON PAYMENT METHOD
YOUR ORDER # IS IN UPPER RIGHT CORNER OF PROPOSAL
CONTACT-CC EACH
For any questions/changes to the proposal,
CONTACT: Cat Chalpin 800-348-5815, Ext. 223
Email: Catherine@ThorPP.com

Less Deposit:	0.00
Less Payment:	0.00
Order Balance:	299.735.42

Net Order:	295,919.42
Freight:	3,816.00
Sales Tax:	0.00
Order Total:	299,735.42

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Board of Education	**CONTACT PERSON** Joseph Mancini
PROJECT NAME WHS - Turf Softball	**DEPARTMENT PRIORITY** 7

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

The average life expectancy of a turf field is 10 years. Turf field has some advantages in that the fields are available for a higher volume of use and hypotehtically are available year round with signifiantly less maintenance and the added benefit of reduced impact injuries. The expected cost of this rehabilition is around $450,000 and would take place in roughly 9 years, we are asking that there be a yearly appropriation to fund this future effort.

2 PROJECT STATUS IF IN PROGRESS

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

5 GRANT FUNDING/OTHER FUNDING, If applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		45,000	45,000	45,000	45,000	45,000
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**45,000**	**45,000**	**45,000**	**45,000**	**45,000**

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Board of Education	**CONTACT PERSON** Joseph Mancini
PROJECT NAME WHS - Turf Main	**DEPARTMENT PRIORITY** 8

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The average life expectancy of a turf field is 10 years. Turf field has some advantages in that the fields are available for a higher volume of use and hypotehtically are available year round with signifiantly less maintenance and the added benefit of reduced impact injuries. The expected cost of this rehabilition is around $110,000 and would take place in roughly 11 years, we are asking that there be a yearly appropriation to fund this future effort.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		110,000	110,000	110,000	110,000	110,000
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**110,000**	**110,000**	**110,000**	**110,000**	**110,000**

FIFTEEN ROPE FERRY ROAD WATERFORD, CT 06385

TO: Mr. Robert J. Brule - First Selectman
FROM: Jill N Stevens – Director of Utilities
DATE: November 15, 2024

RE: Utility Commission – Capital Improvements Plan FY 26-30

Dear First Selectman Brule,

In summary, the major funding requests for FY 26 from CYC and Transfers to CNR are as follows:

- Cross-Country Sewer Mains Access Project.
  Sewer mains collect wastewater from our Town's parcels and convey this wastewater to downstream pumping stations via a vast network of piping and pumping stations to a point terminating at the Main pumping station, which then conveys the wastewater to the regional treatment facility in New London. Of the Town's 150 miles of sewer piping, approximately 15.6 miles lie within cross-country easement areas, which are outside of roadways. Many of these sewer mains traverse through heavily wooded cross-country easement areas, which are becoming more challenging to access. Accessibility is crucial in order to conduct a full assessment evaluation and to provide timely access to conduct immediate or corrective repairs to the sewer main or structures. The goal of this project is to recreate the original easement access area or create alternate access points.
  Contract #1 was the Town's very first sewer construction project, which began in 1970. This project entailed the installation of approximately 13,000 linier feet of sewer main. A Special Appropriation in the amount of $250,000 for engineering services was appropriated for the Contract #1 Sewer Main Access project in 2023. Survey work to identify the Contract #1 easement area, manholes, intersecting property lines, and other utilities within the easement area commenced in October of 2023 and was completed in the spring of 2024. Preliminary design is complete, and approval for the final design package (drawings and specifications) to be used for contractor bid solicitation and construction for Phase One of the restoration project was granted by the Utility Commission at the November 2024 meeting.
  Phase one will encompass the southern section of the interceptor beginning at the intersection of Great Neck Road and Rope Ferry Road to the end of the interceptor at Evergreen Avenue Pump Station. Phase two which encompasses the northern section of the interceptor from Boston Post Road to Great Neck Road requires the acquisition of additional easements to gain access to the interceptor during

restoration and for the Utility Commission staff in the future. Splitting the project into two Phases allows restoration work to begin while easements are procured, so that once Phase one is complete easements will be in place and Phase two can begin shortly thereafter. Our engineering firm estimates construction costs up to $350,000 for Contract One Restoration. A detailed construction costs estimate for Phase One will be provided with the final design package.
Many of the Town's easement area will require surveys to delineate boundaries, identify wetland soils and engineering services to design access travel surfaces based upon the survey findings. It is the intent of the Utility Commission to establish a multi-year request necessary to fund the survey, engineering and reconstruction of each of the Town's cross-country sewer main easement areas.
$500,000/Yr from Current Year Capital (CYC)

- Plastic Water Service Replacement Program
  There are approximately 7900 water services in Town, many of which are plastic and have exceeded their useful life resulting in unaccounted for water loss and degradation to the Town roads. The goal of this program is to replace the aging plastic water services with copper line prior to DPW paving the roads.
  To date through a cooperative WUC/DPW effort, we have replaced 162 water service lines, totaling 3,416 linear feet. In FY26 the DPW has identified several roads scheduled to be repaved, within these roads lie approximately 280 water services, of those approximately 122 may need to be replaced. Service line replacement costs are on average $4100 each depending upon the service line length and location.
  It is our intent to continue to replace these water services prior to DPW paving the roads in doing so we are requesting a multi-year funding schedule and program for the replacement of plastic water services. This will be in conjunction with the DPW roads improvement program. Based upon the aforementioned number of services that may need to be replaced less current available funding the Utility Commission requests $275,000 from Transfers to Capital & Nonrecurring (CNR)

- Route 85 Wastewater Pumping Station Power Conversion.
  Since the Rt 85 wastewater pumping station was constructed, the station's electric power and stand by power has been provided by the Crystal Mall. It is the intent of the Commission to be responsible for the commercial and standby power to this pumping station in order to assure reliable service from the electrical components and proper maintenance of the emergency standby power source. To achieve this we will have to install our own emergency generator and commercial power service components. An evaluation was conducted in 2007, which identified two alternatives ranging in costs from $432K to $602K. Utilizing the Engineering News Record's Construction Costs Index inflation factor of 1.69 from 11/2007 to 11/2024, a representative value range is $730,080 to $1,017,380
  $508,690/Yr from Current Year Capital

- Water Tank Asset Management Program
  The Town of Waterford owns three water storage tanks, the 750,000 gallon Fargo Tank, the 300,000 gallon Vauxhall tank and the 1.25 Million gallon Rogers Hill tank. In 2024 the Fargo Road Tank refurbishment project was completed; prior to this renovation, the Fargo Road water tank had its original coat of paint, which had far exceeded its useful life expectancy by approximately 10 years. This work was necessary to preserve the Town's significant investment in its infrastructure and to extend the life of its asset; if routine maintenance of infrastructure is ignored, it turns into an emergency capital investment and typically costs three times that of routine maintenance. If this tank had not undergone the recent rehabilitation, the structural integrity of the tank would have eventually failed, requiring that the tank be replaced at a significant cost to the Town.
  Many municipalities do not realize the financial investment they have in their water storage tanks. These key municipal water distribution system components often receive the least attention and yet, they can potentially experience serious issues without proper tank asset management. Contamination from animals or debris, corrosion and other issues can trigger customer complaints, municipal regulatory compliance violations and costly water distribution service disruptions. A Water Tank Management Program for these valuable assets would preserve the significant investment the Town has made in water storage tanks by guaranteeing routine inspections and maintenance of the water storage tanks does not fall behind, thus improving the reliability of the system. A sustainable water tank management solution also makes budgeting easier as initial repair costs can be spread out over a few years if necessary and all future interior and exterior renovation costs are included.
  Our request is to initiate a funding schedule that would enroll the three water storage tanks in a Tank Asset Management program progressively, beginning with Fargo Road in FY26, this tank will not require any Upfront Renovation (UR) costs to enroll in the program, only annual Maintenance plan (MP) costs. The Vauxhall Tank does require UR costs, prior to enrollment, those costs have been requested under a separate CIP Project with a Department Priority of 4, upon completion of the UR work, if approved, the tank could be enrolled in the program in FY 28. The Rogers Hill Tank requires UR work as well, again these costs have been requested under a separate CIP Project with a Department Priority of 10, upon completion of the UR work, if approved, the tank could be enrolled in the program in FY31.
  $46,222 in FY26, $47,272 in FY27, $95,520 in FY28 from Current Year Capital

- Bartlett Corners Water Booster Station Decommissioning.
  In 2006, the Town constructed water system improvements that enhanced water pressures and fire flows to the Quaker Hill area of Waterford. Included in this project were a new 2500 gpm capacity water booster pumping station near the intersection of Old Colchester and Old Norwich Roads, and a 1.5 million gallon pre-cast, pre-stressed concrete water storage tank constructed on Rogers Hill. From 1977 up to

2006, the Bartlett Corners Hydro-pneumatic Station served a small high service area on a hill in the northeast corner of Waterford consisting of approximately 20 residential customers on Lathrop Road, Lower Bartlett Road, Upper Bartlett Road, Pepperidge Road and South Bartlett Road. Once the new Quaker Hill water system improvements were activated in 2006, the Bartlett Corners Station was inactivated however not fully decommissioned. In 2009 a decommissioning report was prepared which identified costs of $105,000 to properly decommission the station. This project has been identified within previous CIPs. Utilizing the Engineering News Record's Construction Costs Index inflation factor of 1.59 from 11/2009 to 11/2024, the current decommissioning costs estimate is $166,950
$166,950 from Transfers to Capital & Nonrecurring (CNR)

Respectfully Submitted,

Jill N Stevens

Director of Utilities.

Cc. Utility Commission
Kimberly Allen – Finance Director

TOWN OF WATERFORD
CAPITAL IMPROVEMENT PLAN
PROJECT CONSOLIDATION FORM FY 2026-2030

	DEPARTMENT/ AGENCY:							
DEPT PRIORITY	PROJECT NAME	FUNDING SOURCE	FISCAL YEAR 2025-2026	FISCAL YEAR 2026-2027	FISCAL YEAR 2027-2028	FISCAL YEAR 2028-2029	FISCAL YEAR 2029-2030	TOTAL
1	Cross Country Sewer Main Access	1	500,000	500,000	400,000	300,000	300,000	**2,000,000.00**
2	Plastic Water Services Replacement	3	275,000	225,000	225,000	250,000	250,000	**1,225,000.00**
3	Rt 85 Wastewater Pump Station Power	1	508,690	508,690				**1,017,380.00**
4	Vauxhall Street Water Tank Rehab	1	230,993	230,993	230,993			**692,979.00**
5	Wiemes Ct & Marylin Rd Ejector Stations	3	560,000	560,000	560,000	560,000	560,000	**2,800,000.00**
6	Water Tank Asset Management	1	46,222	47,272	95,520	106,267	108,358	**403,639.00**
7	Facilities Exterior Improvements	1	50,000	50,000	50,000			**150,000.00**
8	Bartlett Corners Water Booster	3	166,950					**166,950.00**
9	Pleasure Beach Water Main Replacement	3		706,800	706,800	706,800	706,800	**2,827,200.00**
10	Rogers Hill Water Tank Refurbishment	3			311,500	311,500	311,500	**934,500.00**
11	Bloomingdale Water Pressure Improvements	3		541,250	541,250	541,250	541,250	**2,165,000.00**
								-
	TOTALS		**2,337,855.00**	**3,370,005.00**	**3,121,063.00**	**2,775,817.00**	**2,777,908.00**	**14,382,648.00**

INDEX TO FUNDING SOURCES,

1 CURRENT YEAR CAPITAL IMPROVEMENTS
2 UTILITY BUDGET/SEWER CAPITAL MAINTENANCE FUND
3 TRANSFER TO CAPITAL & NONRECURRING.
4 SHORT AND LONG TERM DEBT FINANCING
5 LoCIP
6 CNR UNDESIGNATED FUND BALANCE
7 FEDERAL/STATE GRANTS
8 OTHER FUNDING

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Cross-Country Sewer Main Access	**DEPARTMENT PRIORITY** 1

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The goal of this project is to obtain readily available access to all cross-country sewer mains. Accessibility is crucial in order to conduct a full assessment evaluation and to provide timely access to conduct immediate or corrective repairs to the sewer main or structures. The goal of this project is to recreate the original easement access area or create alternate access points to all areas that are not within paved roadway areas. Funds were granted for the Contract #1 easement area in 2023, this request is to continue the access program to the remaining cross country easement areas.
2	**PROJECT STATUS IF IN PROGRESS**
	Preliminary design is complete for Contract 1, and the final design package work for Phase One of the restoration project will begin in December. A probable cost for restoration is in the range of $250,000 - 350,000
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	Accessibility will allow pipeline evaluation crew to conduct our sewer system evaluation survey and create the ability to access the pipeline and manholes in the event of an emergency
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	Minimal impact on operational budget, however, accessibility will allow staff to conduct routine and emergency repairs in a timely manner, in lieu of creating access on a emergency basis which will be far more costly and greatly reduce the potential of adverse environmental impact.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	See backup material

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital	250,000	500,000	500,000	400,000	300,000	300,000
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**250,000**	**500,000**	**500,000**	**400,000**	**300,000**	**300,000**

Cross Country Sewer Main Access Project

Sewer mains collect wastewater from our Town's parcels and convey this wastewater to downstream pumping stations via a vast network of piping and pumping stations to a point terminating at the Main pumping station, which then conveys the wastewater to the regional treatment facility in New London. Of the Town's 150 miles of sewer piping, approximately 15.6 miles lie within cross-country easement areas, which are outside of roadways. Many of these sewer mains traverse through heavily wooded cross-country easement areas, which are becoming more challenging to access. Accessibility is crucial in order to conduct a full assessment evaluation and to provide timely access to conduct immediate or corrective repairs to the sewer main or structures. The goal of this project is to recreate the original easement access area or create alternate access points.

Contract #1 was the Town's very first sewer construction project, which began in 1970. This project entailed the installation of approximately 13,000 linier feet of sewer main. A Special Appropriation in the amount of $250,000 for engineering services was appropriated for the Contract #1 Sewer Main Access project in 2023. Survey work to identify the Contract #1 easement area, manholes, intersecting property lines, and other utilities within the easement area commenced in October of 2023 and was completed in the spring of 2024. Preliminary design is complete, and approval for the final design package (drawings and specifications) to be used for contractor bid solicitation and construction for Phase One of the restoration project was granted by the Utility Commission at the November 2024 meeting.

Phase one will encompass the southern section of the interceptor beginning at the intersection of Great Neck Road and Rope Ferry Road to the end of the interceptor at Evergreen Avenue Pump Station. Phase two which encompasses the northern section of the interceptor from Boston Post Road to Great Neck Road requires the acquisition of additional easements to gain access to the interceptor during restoration and for the Utility Commission staff in the future. Splitting the project into two Phases allows restoration work to begin while easements are procured, so that once Phase one is complete easements will be in place and Phase two can begin shortly thereafter. Our engineering firm estimates construction costs up to $350,000 for Contract One Restoration. A detailed construction costs estimate for Phase One will be provided with the final design package.

Many of the Town's easement area will require surveys to delineate boundaries, identify wetland soils and engineering services to design access travel surfaces based upon the survey findings. It is the intent of the Utility Commission to establish a multi-year request necessary to fund the survey, engineering and reconstruction of each of the Town's cross-country sewer main easement areas.

Upon completion of the Contract #1 restoration, our goal is to continue to other major cross-country easement areas, Contract # 2 and 3, which possess many of the same land characteristics as Contract #1. A map depicting all of our cross-country areas is attached.

SEWER DISTRIBUTION SYSTEM



TOWN OF WATERFORD

WATER POLLUTION CONTROL AUTHORITY



KEY PLAN
SCALE 1"=1000'

LEGEND

- PROPOSED SANITARY SEWER 18" OR SMALLER
- PROPOSED SANITARY SEWER 24" OR LARGER
- PROPOSED MANHOLE
- PROPOSED HOUSE OR BUILDING CONNECTION - 6"
- TEST PIT
- EXISTING HOUSE - LOWER FIGURES INDICATE STILL ELEVATION
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING WATER MAIN
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF CONCRETE PAVEMENT UNDER BLACKTOP PAVEMENT WHERE KNOWN
- EXISTING GUARDRAIL
- EXISTING FENCE
- EXISTING WALL (STONE ETC.)
- EXISTING GROUND CONTOUR
- PROPERTY LINE
- EXISTING MANHOLES
- EXISTING CATCH BASIN
- EXISTING GATE VALVE ON WATER MAIN
- EXISTING HYDRANT ON WATER MAIN
- EXISTING POLE
- EXISTING TREE
- TRAVERSE POINT ON BASE LINE SURVEY
- SOIL BORING
- GROUND WATER LEVEL AT BORING AT TIME BORING WAS TAKEN
- LEDGE
- HOUSE CONNECTION DEPTH OF SERVICE

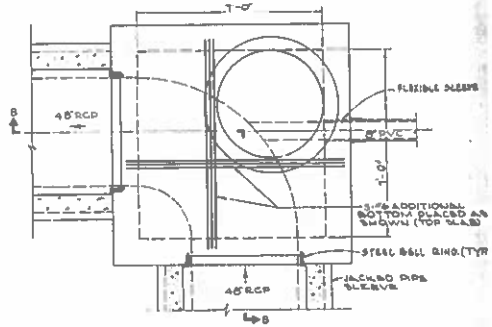
MANHOLE COORDINATES

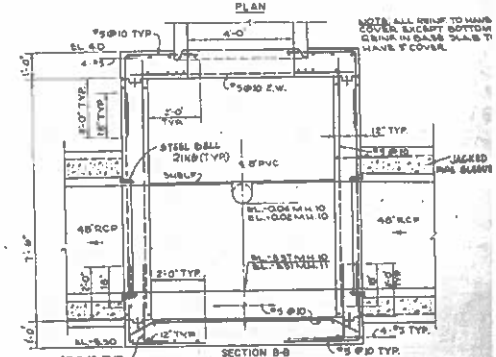
MH NO.	NORTH	EAST
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1	182,935.3	779,[illegible]
2	182,951.4	776,721.4
3	183,064.4	776,[illegible]
9	183,[illegible]	775,[illegible]
10	183,[illegible]	775,[illegible]
11	183,[illegible]	775,[illegible]
12	183,[illegible]	775,[illegible]
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42	183,[illegible]	767,[illegible]
43	183,[illegible]	767,[illegible]

PLOT PLAN 1.1
(ADDENDUM NO 1)

GENERAL NOTES

1. ELEVATIONS REFER TO TOWN OF WATERFORD DATUM (U.S.C. & G.S. MEAN SEA LEVEL)
2. LOCATIONS OF HOUSE CONNECTIONS ARE APPROXIMATE. THE FINAL LOCATIONS AND NUMBER OF CONNECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER
3. TRAVERSE POINTS ON SURVEY BASE LINE ARE NAILS DRIVEN INTO WOODEN HUBS SET FLUSH WITH EXISTING GROUND GRADE OR DRILL HOLES IN CONCRETE OR STONE, OR NAILS IN PAVT
4. THRUST BLOCKS OF CLASS B CONC. SHALL BE PROVIDED FOR ALL FITTINGS AT EXISTING WATER LINES EXPOSED BY TRENCH EXCAVATION. BEARING AREA SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER WITH THE CONCURRENCE OF THE CONTROLLING UTILITY CO
5. TEST PITS AT LOCATIONS WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER SHALL BE 8 FEET LONG BY 5 FEET WIDE TO DEPTHS AS REQUIRED
6. RIM ELEVATIONS OF MANHOLE COVERS ARE TO BE SET FLUSH WITH EXISTING OR FINISHED PAVED SURFACES, RIM ELEVATIONS OF MANHOLE COVERS IN WOODED AREAS SHALL BE SET 2 FEET ABOVE EXISTING GROUND SURFACE AS DIRECTED BY THE ENGINEER.
7. FORCE MAIN AND GRAVITY SEWERS SHALL BE FIELD RELOCATED AS NECESSARY TO MEET THE FOLLOWING DISTANCE CRITERIA FROM EXISTING WATER MAINS
   a. MINIMUM OF 10 FEET HORIZONTALLY OR
   b. CLOSER THAN 10 FEET HORIZONTALLY IF THE DISTANCE OF THE INVERT OF THE WATER MAIN ABOVE THE CROWN OF THE SEWER OR FORCE MAIN IS 18 INCHES OR GREATER
   c. WHERE PERPENDICULAR OR ANGULAR CROSSINGS OCCUR, JOINTS IN EXISTING WATER MAINS AND PROPOSED FORCE MAIN OR SEWERS SHALL BE LOCATED AS FAR FROM EACH OTHER AS POSSIBLE THE DESIRABLE DISTANCE BEING 10 FEET OR MORE.
8. THE LOCATIONS OF EXISTING WATER MAINS ARE APPROXIMATE BASED ON THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE LOCATIONS SHOWN ON THE DRAWINGS AND FOR THE PROTECTION OF THE WATER SERVICES DURING CONSTRUCTION. IN THE CASE OF DAMAGE, REPAIRS AND OR REPLACEMENT SHALL BE DONE BY THE CONTROLLING UTILITY CO. AT THE CONTRACTOR'S EXPENSE.
9. WATERTIGHT FRAMES AND COVERS SHALL BE USED ON ALL MANHOLES WHERE RIM ELEVATION IS 4' OR BELOW ELEVATION 12.50 UNLESS SHOWN ON THE DRAWINGS OR DIRECTED OTHERWISE BY THE ENGINEER
10. THE CONTRACTOR SHALL FURNISH ALL PROTECTIVE DEVICES AS REQUIRED BY THE UTILITIES COMPANY AT NO ADDITIONAL EXPENSE TO THE CONTRACT
11. ALL SEWER STUBS TO BE PLUGGED UNLESS OTHERWISE DIRECTED BY THE ENGINEER.





NOTE ALL RIMS TO MANHOLE COVER EXCEPT BOTTOM RING IN BASE SLAB TO HAVE 5" COVER.

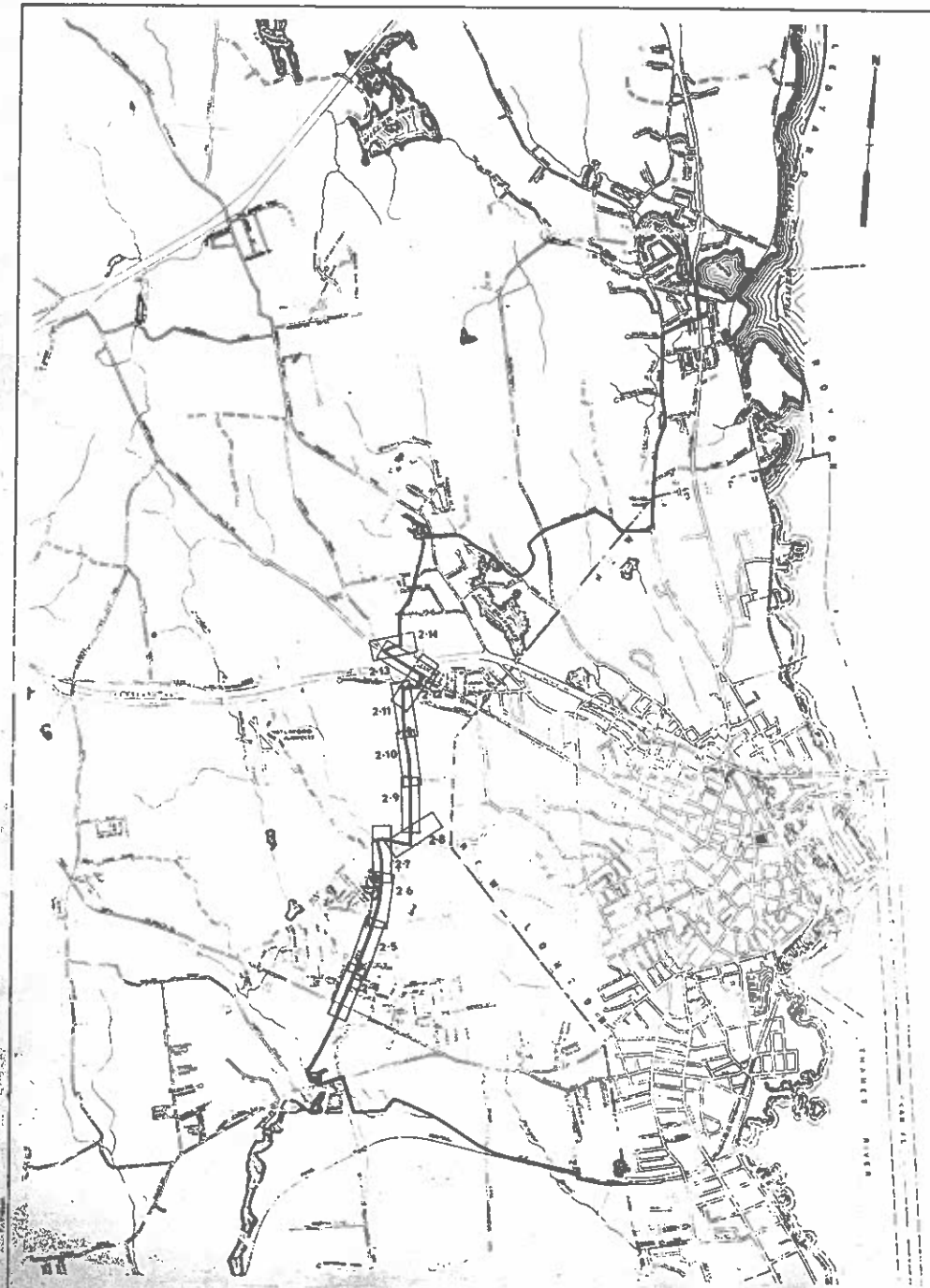
SPECIAL MANHOLES No. 10 & 11
SCALE: 1/2"=1'-0"
MH NO 10 AS SHOWN - MH NO 11 OPPOSITE HAND - DELETE 30" WATER MAIN AT "B" OR MISSION

WATERFORD CONNECTICUT
SEWAGE WORKS CONSTRUCTION PROGRAM
CONTRACT I
CENTRAL INTERCEPTOR
KEY PLAN, LEGEND & GENERAL NOTES

HAYDEN, HARDING
Consulting Engineers Boston, Massachusetts

DESIGN	P.A.J.	SCALE	AS NOTED
DRAWN	P.J.C.	DATE	JUNE 1972
CHECKED	E.M.H.		
APPROVED	W.H.D.		

1.1



KEY PLAN
Scale: 1" = 1400'

LEGEND

- PROPOSED SANITARY SEWER 18 INCHES OR SMALLER
- PROPOSED SANITARY SEWER 24 INCHES OR LARGER
- PROPOSED MANHOLE
- PROPOSED HOUSE OR BUILDING CONNECTION - 6 INCHES
- TEST PIT
- EXISTING HOUSE - LOWER FIGURES INDICATE SILL ELEVATION
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING WATER MAIN
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF CONCRETE PAVEMENT UNDER BLACKTOP PAVEMENT WHERE SHOWN
- EXISTING GUARDRAIL
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- EXISTING GROUND CONTOUR
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- GROUND WATER LEVEL AT BORING AT TIME BORING WAS TAKEN

GENERAL NOTES

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2. LOCATIONS OF HOUSE CONNECTIONS ARE APPROXIMATE. THE FINAL LOCATIONS AND NUMBER OF CONNECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER
3. TRAVERSE POINTS ON SURVEY BASE LINE ARE NAILS DRIVEN INTO WOODEN HUBS SET FLUSH WITH EXISTING GROUND GRADE OR DRILL HOLES IN CONCRETE OR STONE, OR NAILS IN POLE
4. THRUST BLOCKS OF CLASS B CONC. SHALL BE PROVIDED FOR ALL FITTINGS AT EXISTING WATER LINES EXPOSED BY TRENCH EXCAVATION. BEARING AREA SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER WITH THE CONCURRENCE OF THE CONTROLLING UTILITY CO OR AS DIRECTED BY HIGHWAY PERMIT.
5. TEST PITS AT LOCATIONS WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER SHALL BE 8 FEET LONG BY 5 FEET WIDE TO DEPTHS AS REQUIRED
6. RIM ELEVATIONS OF MANHOLE COVERS ARE TO BE SET FLUSH WITH EXISTING OR FINISHED PAVED SURFACES UNLESS SHOWN OTHERWISE ON THE PLAN OR DIRECTED BY THE ENGINEER
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   a. MINIMUM OF 10 FEET HORIZONTALLY OR
   b. CLOSER THAN 10 FEET HORIZONTALLY IF THE DISTANCE OF THE INVERT OF THE WATER MAIN ABOVE THE CROWN OF THE SEWER OR FORCE MAIN IS 18 INCHES OR GREATER
   c. WHERE PERPENDICULAR OR ANGULAR CROSSINGS OCCUR, JOINTS IN EXISTING WATER MAINS AND PROPOSED FORCE MAIN OR SEWERS SHALL BE LOCATED AS FAR FROM EACH OTHER AS POSSIBLE. THE DESIRABLE DISTANCE BEING 10 FEET OR MORE
8. THE LOCATIONS OF EXISTING WATER MAINS ARE APPROXIMATE, BASED ON THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE LOCATIONS SHOWN ON THE DRAWINGS AND FOR THE PROTECTION OF THE WATER SERVICES DURING CONSTRUCTION. IN THE CASE OF DAMAGE, REPAIRS AND OR REPLACEMENT SHALL BE DONE BY THE CONTROLLING UTILITY CO AT THE CONTRACTOR'S EXPENSE
9. WATERTIGHT FRAMES AND COVERS SHALL BE USED ON ALL MANHOLES. WHERE RIM ELEVATION IS AT OR BELOW ELEVATION 12.50 UNLESS SHOWN ON THE DRAWINGS OR DIRECTED OTHERWISE BY THE ENGINEER
10. THE CONTRACTOR SHALL FURNISH ALL PROTECTIVE DEVICES AS REQUIRED BY THE UTILITIES COMPANY AT NO ADDITIONAL EXPENSE TO THE CONTRACT

GENERAL NOTES FOR WATER

1. MINIMUM EARTH COVER OVER PIPES SHALL BE 4'-6"
2. HYDRANTS TO BE LOCATED AT STREET CORNER OR AT PERPENDICULAR PROPERTY LINE OF ADJACENT PROPERTIES FACING STREET
3. VALVES AT STREET INTERSECTION TO BE LOCATED AT INTERSECTING POINTS OF PERPENDICULAR STREET LINE EXTENSION WITH WATER MAIN.
4. ALL PAVEMENTS ARE BLACKTOP MACADAM OR BITUMINOUS UNLESS NOTED OTHERWISE.
5. THE LOCATION OF UTILITY MAINS SHOWN ON THESE PLANS IS APPROXIMATE AND HOUSE SERVICE CONNECTIONS ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES INVOLVED TO DETERMINE THE EXACT LOCATION OF MAINS AND SERVICES TO PREVENT DAMAGE AND LOSS OF SERVICE DURING CONSTRUCTION
6. MINIMUM VERTICAL CLEARANCE BETWEEN PROPOSED WATER MAIN AND EXISTING UTILITIES OR EXISTING CULVERTS SHALL BE 6 INCHES UNLESS OTHERWISE NOTED.

MANHOLE COORDINATES

MH NO.	NORTH	EAST
47	187,327.776	767,697.493
47A	187,335.660	767,668.937
48	187,616.582	767,789.367
49	187,848.116	767,886.824
50	188,044.715	767,980.442
51	188,236.933	768,068.085
52	188,424.732	768,156.846
53	188,712.500	768,270.816
54	189,025.893	768,390.821
55	189,327.476	768,529.414
56	189,771.335	768,643.812
57	190,149.160	768,726.918
58	190,535.289	768,796.389
59	190,942.113	768,767.940
60	191,307.295	768,679.591
61	191,884.726	768,602.416
62	191,711.487	768,697.860
63	191,731.729	768,819.787
64A	191,681.939	768,997.014
65A	191,658.988	769,279.700
66	191,645.908	769,897.536
67	191,900.942	769,581.159
68	192,298.300	769,575.373
69	192,539.750	769,575.410
70	192,690.548	769,574.500
71	192,990.129	769,524.958
72	193,145.081	769,524.983
73	193,338.198	769,580.840
74	193,533.140	769,534.210
75	193,861.131	769,430.907
76	194,210.696	769,327.634
77	194,667.626	769,332.910
78	194,925.478	769,286.958
79	195,225.651	769,283.862
80	195,589.537	769,335.366
81	195,676.724	769,298.450
82	195,747.200	769,328.642
83		
84		
85		
86		
86A		
86B		
86C		
86D		
86E		
81A		

* MH NO. 81A

WATER AND SEWER COMMISSION
WATERFORD CONNECTICUT
SEWAGE WORKS CONSTRUCTION PROGRAM
CONTRACT E

NEVINS BROOK INTERCEPTOR SEWER

KEY PLAN, LEGEND & GENERAL NOTES

METCALF & EDDY
BAYBER HARDING
Consulting Engineers - Boston, Massachusetts

DESIGNED B.A.H.
DRAWN B.A.H.
CHECKED B.A.H.
APPROVED

SCALE AS SHOWN
DATE
SHEET NO. 2.1



KEY PLAN
Scale: 1" = 1400'

LEGEND

- PROPOSED SANITARY SEWER 18 INCHES OR SMALLER
- PROPOSED SANITARY SEWER 24 INCHES OR LARGER
- PROPOSED MANHOLE
- PROPOSED HOUSE OR BUILDING CONNECTION - 6 INCHES
- TEST PIT
- EXISTING HOUSE - LOWER FIGURES INDICATE SILL ELEVATION
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING WATER MAIN
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF CONCRETE PAVEMENT UNDER BLACKTOP PAVEMENT WHERE SHOWN
- EXISTING GUARDRAIL
- EXISTING FENCE
- EXISTING WALL (STONE ETC.)
- EXISTING 5-FOOT CONTOUR
- PROPERTY LINE
- EXISTING MANHOLES
- EXISTING CATCH BASIN
- EXISTING GATE VALVE ON WATER MAIN
- EXISTING HYDRANT ON WATER MAIN
- EXISTING POLE
- EXISTING TREE
- TRAVERSE POINT IN BASE LINE SURVEY
- SOIL BORING
- GROUND WATER LEVEL AT BORING AT TIME BORING WAS TAKEN

GENERAL NOTES

1. ELEVATIONS REFER TO TOWN OF WATERFORD DATUM (U.S.C. & G.S. MEAN SEA LEVEL)
2. LOCATIONS OF HOUSE CONNECTIONS ARE APPROXIMATE. THE FINAL LOCATIONS AND NUMBER OF CONNECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER
3. TRAVERSE POINTS ON SURVEY BASE LINE ARE NAILS DRIVEN INTO WOODEN HUBS SET FLUSH WITH EXISTING GROUND GRADE OR DRILL HOLES IN CONCRETE OR STONE, OR NAILS IN PAVEMENT
4. THRUST BLOCKS OF CLASS B CONC. SHALL BE PROVIDED FOR ALL FITTINGS AT EXISTING WATER LINES EXPOSED BY TRENCH EXCAVATION. BEARING AREA SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER WITH THE CONCURRENCE OF THE CONTROLLING UTILITY CO.
5. TEST PITS AT LOCATIONS WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER SHALL BE 6 FEET LONG BY 3 FEET WIDE TO DEPTHS AS REQUIRED
6. RIM ELEVATIONS OF MANHOLE COVERS ARE TO BE SET FLUSH WITH EXISTING OR FINISHED PAVED SURFACES UNLESS SHOWN OTHERWISE ON THE PLAN OR DIRECTED BY THE ENGINEER
7. FORCE MAIN AND GRAVITY SEWERS SHALL BE FIELD RELOCATED AS NECESSARY TO MEET THE FOLLOWING DISTANCE CRITERIA FROM EXISTING WATER MAINS
   a. MINIMUM OF 10 FEET HORIZONTALLY OR
   b. CLOSER THAN 10 FEET HORIZONTALLY IF THE DISTANCE OF THE INVERT OF THE WATER MAIN ABOVE THE CROWN OF THE SEWER OR FORCE MAIN IS 18 INCHES OR GREATER
   c. WHERE PERPENDICULAR OR ANGULAR CROSSINGS OCCUR JOINTS IN EXISTING WATER MAINS AND PROPOSED FORCE MAIN OR SEWERS SHALL BE LOCATED AS FAR FROM EACH OTHER AS POSSIBLE. THE DIFFERENCE DISTANCE BEING 10 FEET OR MORE
8. THE LOCATIONS OF EXISTING WATER MAINS ARE APPROXIMATE, BASED ON THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE LOCATIONS SHOWN AND FOR THE PROTECTION OF THE WATER SERVICES DURING CONSTRUCTION. ANY DAMAGE, REPAIRS AND OR REPLACEMENT SHALL BE DONE BY THE CONTROLLING UTILITY CO. AT THE CONTRACTOR'S EXPENSE
9. WATERTIGHT FRAMES AND COVERS SHALL BE USED IN ANY MANHOLE WHOSE RIM ELEVATION IS AT OR BELOW ELEVATION 12.50 UNLESS SHOWN ON THE DRAWINGS OR DIRECTED OTHERWISE BY THE ENGINEER
10. THE CONTRACTOR SHALL FURNISH ALL PROTECTIVE DEVICES AS REQUIRED BY THE UTILITIES COMPANY AT NO ADDITIONAL EXPENSE TO THE CONTRACT.
11. ALL SEWER STUBS SHALL HAVE FACTORY MADE END PLUGS.

MANHOLE COORDINATES			DEFLECTION ∠
MH No.	NORTH	EAST	
91	196768.9000	769079.9000	
92	197249.8384	769040.4809	3° 49' 32.5"
93	197533.588[illegible]	768994.1834	90° 30' 54.7"
94	197539.0496	769042.1958	89° 18' 19.8"
95	197[illegible]27.0495	769015.[illegible]	33° 42' 46.2"
96	197533.4951	769[illegible]72	63° 51' 06.0"
97	198206.4447	769271.9965	34° 06' 48.0"
98	198474.1457	769[illegible]815	42° 27' 32.1"
99	198629.1780	769367.2547	20° 37' 09.[illegible]
100	198769.0[illegible]	769379.[illegible]	39° 42' 44.[illegible]
101	198941.0249	769944.[illegible]	39° 06' 33.7"
102	199246.80[illegible]	769[illegible]440	15° 33' 51.[illegible]
103	199630.3950	769[illegible]3.9[illegible]	48° 04' 47.9"
104	199657.33[illegible]	769914.2[illegible]	44° 54' 36.8"
105	199693.3187	769711.[illegible]	81° 30' 30.0"
106	199[illegible]8745	769795.3331	89° 59' 59.3"
107	199[illegible]4769	770091.[illegible]	0° 58' 08.9"
108	199[illegible]9181[illegible]	770500.[illegible]	63° 33' 45.[illegible]
109	199636.2[illegible]	770670.[illegible]	21° 09' 24.6"
110	199408.84[illegible]	770761.[illegible]	33° 31' 50.2"
111	199300.1099	770962.[illegible]	25° 45' 23.6"
112	199288.[illegible]190	771223.[illegible]	24° 30' 58.7"
113	199[illegible]2.[illegible]45	771[illegible]436	31° 29' 59.[illegible]
114	199088.[illegible]390	771[illegible]932	19° 51' 2[illegible].4
115	198[illegible]06.[illegible]	771[illegible]1.[illegible]	71° 44' 29.6"
116	198[illegible]29.8[illegible]	771[illegible]245.[illegible]	71° 36' 2[illegible].2
117	198[illegible]70.[illegible]	771[illegible]361.[illegible]	41° 23' [illegible]1.7"
118	198[illegible]48.[illegible]024	772[illegible]060.[illegible]	72° 39' 38.5"
119	198[illegible]19.[illegible]	772[illegible]8170.	41° 22' 54.9"
119A	199[illegible]67.[illegible]	772[illegible]15.[illegible]	14° 41' 44.9"
120	199[illegible]6.[illegible]270	772[illegible]42.[illegible]	85° 01' 02.9"
121	199375.[illegible]80	772[illegible]80[illegible]	[illegible]8° 45.1"
122	199525.[illegible]	772[illegible]2500	6° 08' 09.[illegible]
122A	199[illegible]7.2429	772[illegible]62.[illegible]	90° 38' 03.6"
123	199749.8338	772[illegible]19.3429	0° 00' 00.0"
124	199[illegible]81.8859	772[illegible]68.[illegible]	106° 56' 00.9"
125	199[illegible]23.[illegible]	772[illegible]04.[illegible]	87° 39' 54.2"
126	[illegible]8.[illegible]	772[illegible]	

WATER AND SEWER COMMISSION
WATERFORD CONNECTICUT
SEWAGE WORKS CONSTRUCTION PROGRAM
CONTRACT 3
QUAKER HILL INTERCEPTOR

KEY PLAN LEGEND & GENERAL NOTES

HAYDEN & HARDING
Consulting Engineers · Boston, Massachusetts 0215[illegible]

DRAWN	P.A.L.
DESIGNED	J.F.B.
CHECKED	E.M.D.
APPROVED	W.F.D.

SCALE: AS NOTED
DATE: MAY 1972
DRAWING: 3-0
69159 3

WRIGHT-PIERCE
Engineering a Better Environment

Memorandum

Date: **6/10/2024**

Project No.: **21580**

To: **Jim Bartelli – Director of Utilities**
Jill Stevens – Assistant Director of Utilities

From: **Barry Parfitt, PE**

Subject: **Preliminary Design for the Waterford Contract 1 Sewer Interceptor Easement Restoration**

Introduction

The Waterford Utility Commission (WUC) is responsible for the operation and maintenance of an extensive wastewater collection system, including approximately 145 miles of gravity sewers and force mains. This collection system was constructed during the 1970s and 1980s, and the majority of the collection system is now between 40 to 50 years old.

The Contract 1 interceptor is a vital artery of this system. Constructed around 1977, this 42 and 48-inch diameter interceptor receives flows from the Town's wastewater collection system as well as from New London, East Lyme and Point of Woods in Old Lyme. This interceptor is approximately 2.3 miles long, starting at Jordan Cemetery on the Boston Post Road and terminating at the Evergreen Pump Station on the southeastern side of Waterford. It is the largest interceptor in the Town of Waterford's collection system.



MH 17 @ Miner Lane and

All wastewater collection systems require routine maintenance and repairs to provide safe, efficient, and reliable service. Systems that are not properly maintained can result in sanitary sewer overflows (SSOs) due to sewer blockages, sewer pipe failures and/or pump station failures. Aging systems eventually require capital repairs and upgrades that are beyond typical routine maintenance and repairs. If collection systems are not properly maintained and repaired, they can be subject to catastrophic failures, SSOs and/or damage to property, which can result in costly emergency repairs.

Project Need

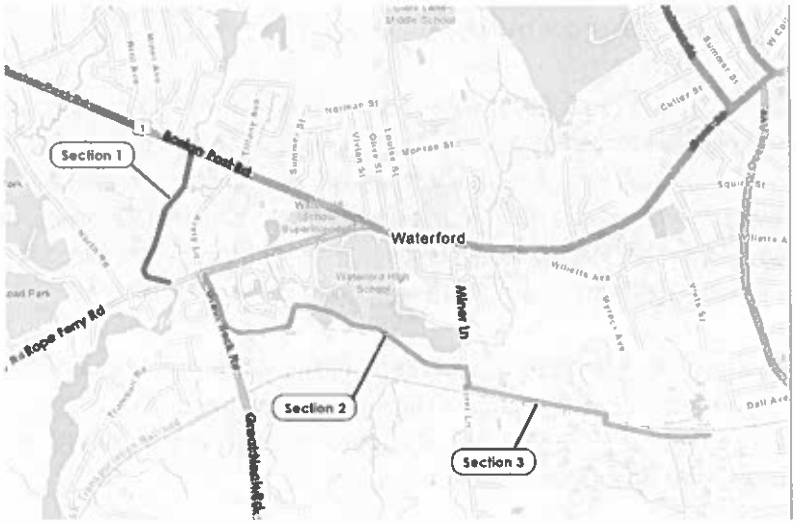
Access to the Contract 1 interceptor has become increasingly difficult since its original construction. The sewer is located mostly through cross-country areas and over time these areas have become difficult to access due to plant overgrowth and increased ponding and wet areas that have spread over sections of the interceptor. Many of the manhole frames are raised above grade to prevent infiltration. However, maintenance staff are not able to access many manholes in order to properly inspect the condition of the sewer line and address any maintenance needs.

Additionally, if any emergency situations were to arise, response efforts would be delayed until access could be established.

The overall purpose of this easement restoration project is to allow Waterford staff (and equipment, vehicles, etc.) access to the Contract 1 Interceptor to facilitate sewer maintenance and repairs. In order to regain access, overgrown vegetation and trees within the sewer easement will need to be removed in a manner that complies with local, state, and federal regulations. In addition, the WUC will need to confirm there are sufficient entry points into the easement to allow equipment and vehicles to enter. Some entry or access points may be outside of the current sewer easement. These new access points would require additional easements and possible additional clearing.

Existing Conditions

For the purpose of this project, Contract 1 Interceptor is divided into three segments defined by major roads where the interceptor crosses. The **Northern Section (Section 1)** begins at the Jordan Cemetery located at 240 Boston Post Road, and flows southward, adjacent to Nevins Brook. The sewer crosses a marshy area at the confluence of Nevins Brook and Jordan Brook and then crosses Rope Ferry Road at Jordan Brook.



The **Central Section (Section 2)** begins at the intersection of Rope Ferry Road and Great Neck Road, and flows southward, adjacent to Great Neck Road until turning eastward. The interceptor continues eastward past the Rope Ferry Commons and Waterford High School until reaching Miner Lane.

The **Southern Section (Section 3)** begins at Miner Lane, just north of the railroad tracks. The interceptor flows eastward parallel to the railroad tracks, crosses beneath the tracks and continues eastward to the Evergreen Pump Station.

Sewer Easement

A 30-foot-wide easement in favor of the Town of Waterford was established during the original construction of the Contract 1 Interceptor. Original construction drawings from 1977 and easement maps were provided by WUC for our review. To understand where the current sewer and easement boundaries exist, a subconsultant was contracted to perform a boundary survey and install flags to designate the 30-foot-wide easement. The survey drawing is included in Appendix A and accurately depicts the existing sewer location, the easement boundary, and boundaries of intersecting and abutting properties. The survey drawing also identifies the interceptor manhole locations, trees/shrubs larger than 12" in diameter, utilities, culverts, roadways, etc. We were able to verify that the entire length of the Contract 1 interceptor is located within the 30-foot easement except for one 85-ft segment that crosses outside the easement between the High School and Miner Lane. However, this encroaching segment is located on the Town of Waterford property. The survey also verified that the sewer is not centered within the easement in all cases.

Floodplain

The various aspects of the floodplain are defined by the Federal Emergency Management Agency (FEMA). The Contract 1 Interceptor is shown schematically on the FEMA flood map in **Appendix B** which was obtained through the FEMA website. The Northern Section of the interceptor, from Boston Post Road to Rope Ferry Road lies mostly in the FEMA defined floodway of Nevins Brook and Jordan Brook. FEMA prohibits the placement of fill within a floodway unless it has been demonstrated that it will not result in any increase in flood levels.

The Central Section of the interceptor crosses in and out of the 500-year floodplain, which is defined as an area with a 0.2% annual chance of flood hazard. The Southern Section crosses in an out of the 100-year floodplain, which is defined as an area with a 1% annual chance of flood hazard. The Town of Waterford does not permit fill within the 100-year floodplain.

Wetlands & Watercourses

Local Jurisdiction

The Contract 1 Interceptor passes through wetlands and watercourses for much of its length. Although wetlands were not delineated as part of this preliminary study, the Town of Waterford Wetlands and Watercourses map was reviewed, along with National Wetlands Inventory map, managed by the U.S. Fish and Wildlife Service. Additionally, previous wetlands delineation maps of various intersecting properties were reviewed. These resources provided a clear indication that a substantial length of the interceptor crosses through wetlands. This was also confirmed from a site walk performed with Waterford staff.

Wetlands come under the jurisdiction of the Waterford Conservation Commission. Due to the extent of wetlands that cross-country sewers pass through and the need to maintain a collection system that protects the environment, the Commission has approved a general permit for maintenance activities within the wetlands. The current permit expires in 2028.

This permit authorizes the cutting of vegetation that are located on wetlands and adjacent upland areas within the sewer easement areas. Cutting is limited to 20-feet in width to allow for vehicle access. The permit allows for temporary vehicle access and placement of temporary crossings to minimize disturbance to inland wetlands and watercourses. The permit does not authorize obstructing, diverting, or adding fill in the wetlands. A copy of this permit is included in **Appendix C**.

State & Federal Jurisdiction

The Army Corps of Engineers (ACOE) and Connecticut Department of Energy & Environmental Protection (CT DEEP) also have jurisdiction over activities that could create a disturbance within wetlands. For a tree and vegetation clearing project, a disturbance could be created when soils are disturbed by performing work below grade (i.e. removal of tree roots or soils) or adding fill. Removal and/or grinding of stumps down to grade is not considered a disturbance of the wetlands, and would not require an ACOE permit. We have consulted with Julie Bjorkman, an environmental permitting consultant, and her report is included in **Appendix D**.

In summary, removal of tree roots within wetlands would require an ACOE permit. The area disturbed by this work dictates the level of permitting (and overall time and effort) required. An area totaling 5,000 square feet (sf) or less may be permitted under General Permit #6 (Self-Verification). An area greater than 5,000-sf but less than 0.5 acres also may be permitted under General Permit #6, but with a Pre-Construction Notification (PCN). This also necessitates a PCN concurrence from the CT DEEP. Disturbance greater than 0.5 acres requires an Individual Permit

and would also require a Water Quality permit through CT DEEP. The Self-Verification can be completed via an online application with a turnaround time of approximately 4-6 weeks. The preparation and approval process for the PCN, Individual Permit and Water Quality permits are considerably more involved and would take several months.

Amtrak

The Southern Section of the interceptor runs parallel to the railroad tracks owned by Amtrak. At one point, the interceptor crosses underneath (perpendicular to) the railroad tracks and then continues running parallel along the south side of the railroad tracks. Based on the survey field work, we have confirmed that no clearing work would be performed within the Amtrak property line. However, some work would be performed adjacent to the Amtrak property line. An Amtrak representative was contacted to discuss the project. Based on email correspondence, we understand that a Permit to Enter application may be required by the contractor prior to beginning clearing work adjacent to the Amtrak property. The permit application is available online. Discussion with Amtrak should be continued during the design phase to confirm specific Amtrak requirements prior to issuing bidding documents.

Conclusions and Summary

Construction Approach

Based on the information collected during preliminary design and subsequent discussions with Waterford staff, a reasonable approach to construction of this project would include the following. This work is illustrated on the conceptual plans in **Appendix E**. The conceptual plans include the information obtained from the survey and topography obtained from online sources.

- Cut trees and woody vegetation to a 20-ft width within the sewer easement.
- Remove/grind stumps within the 20-ft easement to near grade to improve accessibility.
- Selectively remove tree roots within wetlands to keep total soil disturbance under 5,000 sf.
- Smooth the grade and reseed to establish a grassed accessway.
- Clear trees and vegetation as required for permanent entry points to the interceptor. at Jordan Cemetery, 79 Rope Ferry Road, High School, and Evergreen Pump Station.

Many sections of the sewer easement will be difficult to traverse due to the wet conditions. Although the work will be planned for the dry season, it is expected that construction access mats will be used by the contractor to access the wet sections. Additionally, there are at least three small stream crossings along the path of the sewer. Permanent crossings, or crossings that disturb the wetlands will not be permitted. The contractor will be required to utilize temporary stream crossings. Sediment and erosion control measures will be implemented to the extent practical based on the current 2023 CT DEEP *Guidelines for Soil Erosion & Sediment Control.*

Final Design

The preliminary design should be used as a basis for further discussion with WUC prior to preparing a final design package. The final design package, including drawings and specifications, will be used in solicitating contractor bids for construction of the project.

During the final design and prior to soliciting bids, we recommend the following:

- Discuss with WUC staff to confirm the approach outlined above and make changes as necessary.
- Establish entry/access points to ensure vehicular access to all points along the interceptor.

- We have established preliminary access points at Jordan Cemetery, 79 Rope Ferry Road, Waterford High School, and the Evergreen Pump Station. The entry points at Jordan Cemetery and at 79 Rope Ferry Road may require defining and establishing two new easements. At Jordan Cemetery, access to the sewer easement must be made through their access drive due to the roadway embankment. Additionally, at 79 Rope Ferry Road, access to the sewer easement must be made through private property due to the bridge at Jordan Brook.
- Delineate wetlands in the areas where tree stump removal is planned. This will provide a basis for application to the ACOE for wetland disturbance.
- Apply for the ACOE General Permit 6 (Self-Verification).
- Notify the Town Conservation Commission of the scope of work and provide drawings to demonstrate permit compliance.
- Coordinate with Amtrak for pre-construction planning and preparation for required construction permits.
- Notify all affected property owners of the planned work.

Additional Considerations

In addition, the WUC should consider the following options which could impact the final design and contractor scope of work.

1. The WUC may be able to self-perform some of the restoration work including the removal of smaller trees and vegetation. Performing some work in house would reduce the contractor cost and potentially reduce the overall construction cost.
2. The WUC may want to consider repairing culverts located within the easement and likely contributing to drainage issues and increased ponding along the interceptor. One culvert is located at Great Neck Road, just south of the intersection with Rope Ferry Road. A second culvert crosses Miner Lane. This work could be included as part of the restoration project or in a separate project.
3. The WUC may want to consider combining CCTV inspection of the interceptor in conjunction with the contractor work.
4. Depending on budget requirements, the construction may be split into phases or separate projects. For example, we identified three major sections of the interceptor and each section could represent its own phase or project.

Construction Cost Estimate

A preliminary opinion of probable cost for the proposed construction work is in the range of $250,000-350,000. The construction cost will be revisited with a higher degree of accuracy once the final design is completed, and contractor scope is finalized.

Appendix A – Survey Drawings

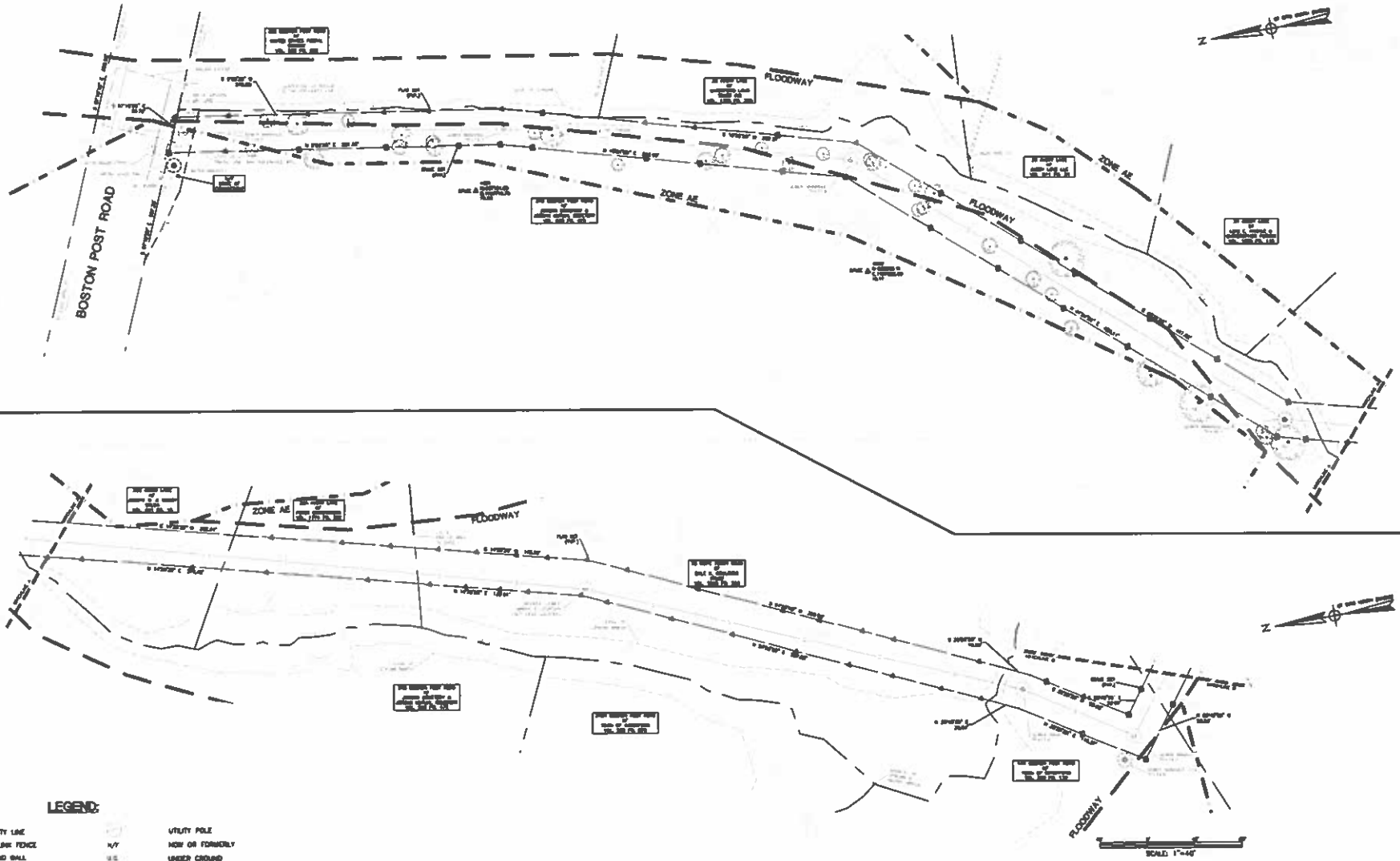
Appendix B - Flood Plain Map

Appendix C – Town Wetlands Permit

Appendix D – Environmental Permitting Report

Appendix E – Conceptual Drawings

Appendix A – Survey Drawings



LEGEND:

- PROPERTY LINE
- CHAIN-LINK FENCE
- RETAINING WALL
- STONE WALL
- BOUNDARY POINT
- IRON PIN, IRON PIPE
- MONUMENT
- GAS GATE, WATER GATE
- TRAFFIC SIGN
- SEWER MANHOLE
- UTILITY POLE
- H/V — HOW OR FORMERLY
- U/G — UNDER GROUND
- DECIDUOUS TREE
- OVERHEAD ELECTRIC LINE
- WATER SHUTOFF
- BOLLARD
- SHRUB

No.	Date	Description
1	08/16/24	DOT STANDARDS NOTATED

CLA Engineers, Inc.
CIVIL • STRUCTURAL • SURVEYING
817 Main Street Norwich, CT 06360
(860) 889-1860 Fax (860) 889-8166

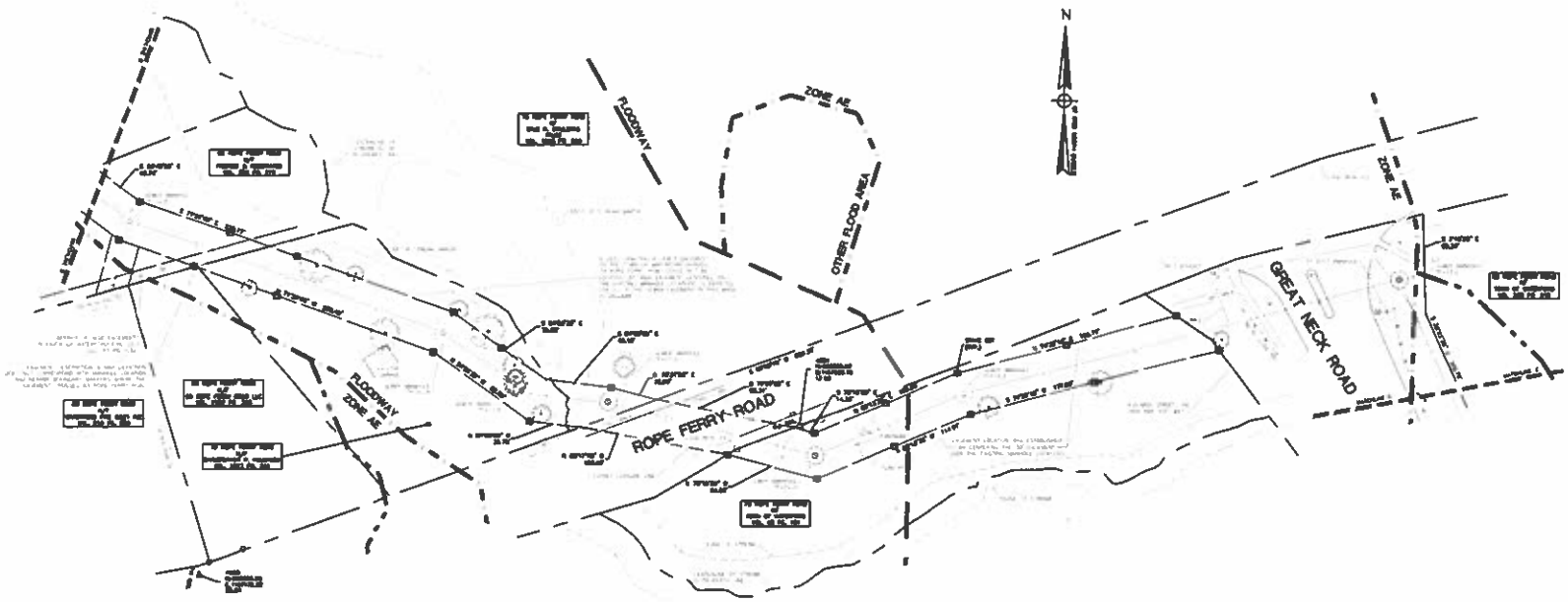
LOCATION SURVEY

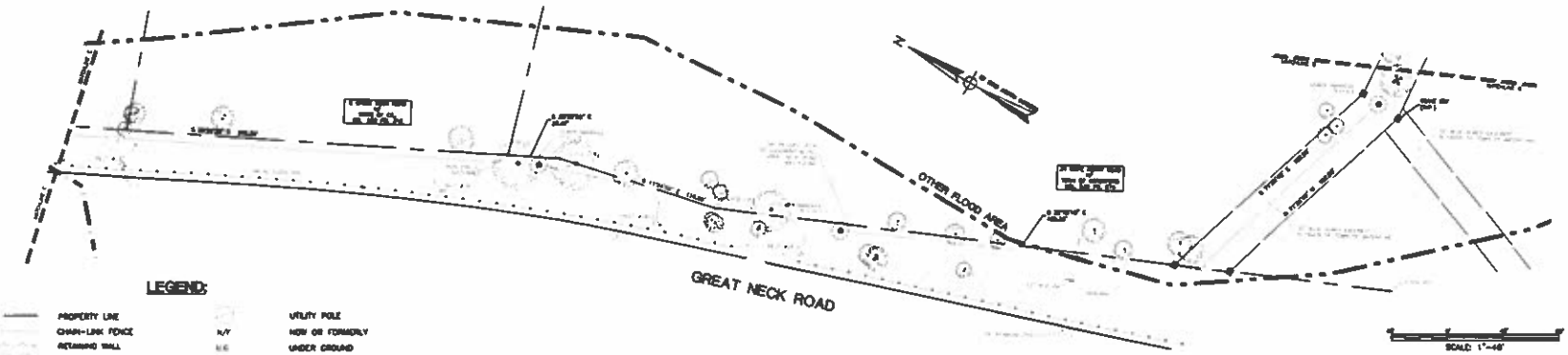
"CONTRACT 1" INTERCEPTOR R.O.W

WATERFORD, CT

Project No. CLA-7819
Proj. Surveyor B.J.C
Date 10/30/23
Sheet No. 1

CLA





LEGEND:

- PROPERTY LINE
- CHAIN-LINK FENCE
- RETAINING WALL
- STONE WALL
- BOUNDARY POINT
- IRON PIN, IRON PIPE
- MONUMENT
- GAS GATE, WATER GATE
- TRAFFIC SIGN
- SEWER MANHOLE
- UTILITY POLE
- N/F NOW OR FORMERLY
- U/G UNDER GROUND
- DECIDUOUS TREE
- OVERHEAD ELECTRIC LINE
- WATER SHUTOFF
- BOLLARD
- SHRUB

SCALE: 1"=40'

CLA Engineers, Inc.
CIVIL • STRUCTURAL • SURVEYING
817 Main Street Norwich, CT 06360
(860) 886-1860 Fax (860) 886-8160

No.	DATE	REVISION

STATE OF CONNECTICUT — LICENSED LAND SURVEYOR

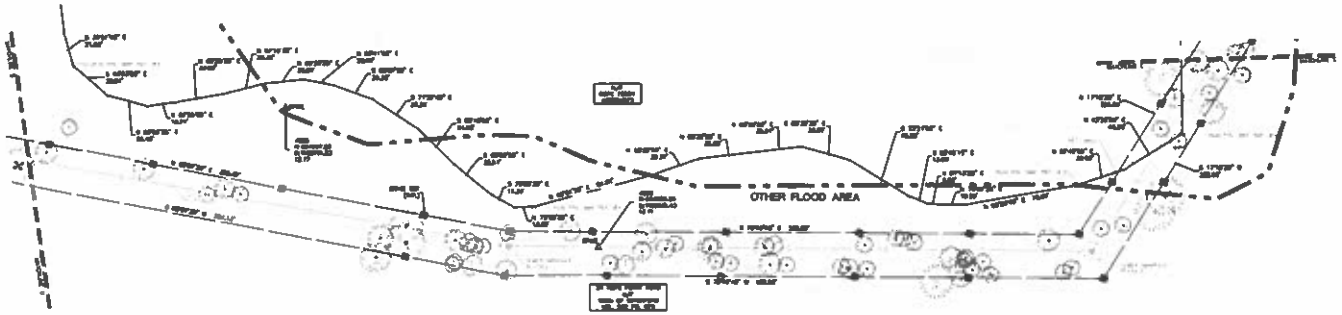
LOCATION SURVEY

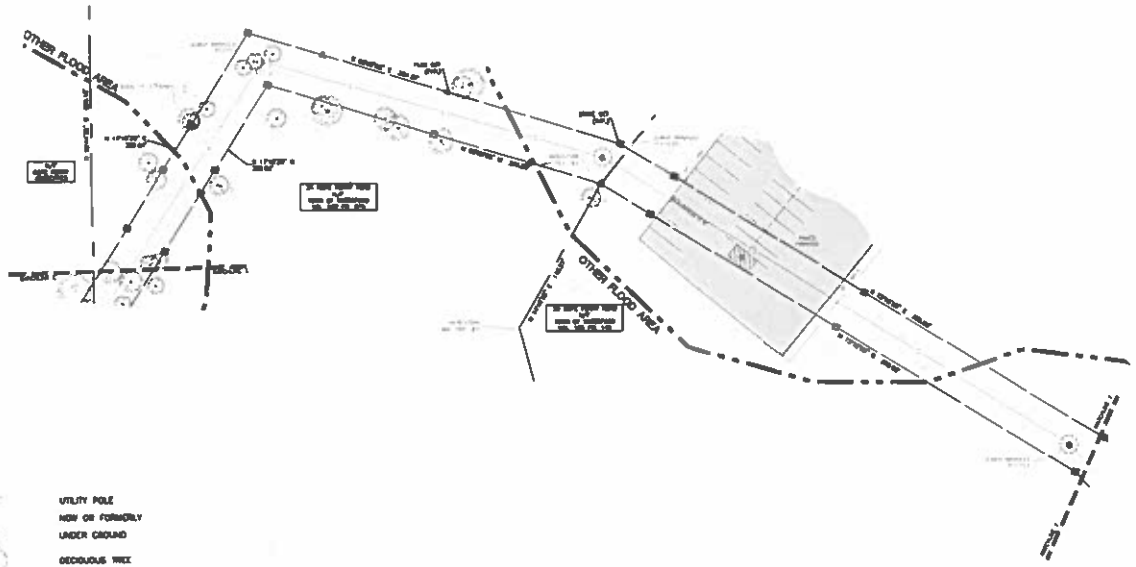
"CONTRACT 1"
INTERCEPTOR R.O.W

WATERFORD, CT

Project No.	CLA-7018
Proj. Manager	E.J.C
Date	12/05/23
Sheet No.	2

CLA





LEGEND:

- PROPERTY LINE
- CHAIN-LINK FENCE
- RETAINING WALL
- STONE WALL
- BOUNDARY POINT
- IRON PIN, IRON PIPE
- MONUMENT
- GAS GATE, WATER GATE
- TRAFFIC SIGN
- SEWER MANHOLE
- UTILITY POLE
- N/F — NOW OR FORMERLY
- U.G. — UNDER GROUND
- DECIDUOUS TREE
- OVERHEAD ELECTRIC LINE
- WATER SHUTOFF
- BOLLARD
- SHRUB

SCALE: 1"=40'

CLA Engineers, Inc.
CIVIL • STRUCTURAL • SURVEYING
117 Main Street Norwich, CT 06360
(860) 886-1906 Fax (860) 886-9184

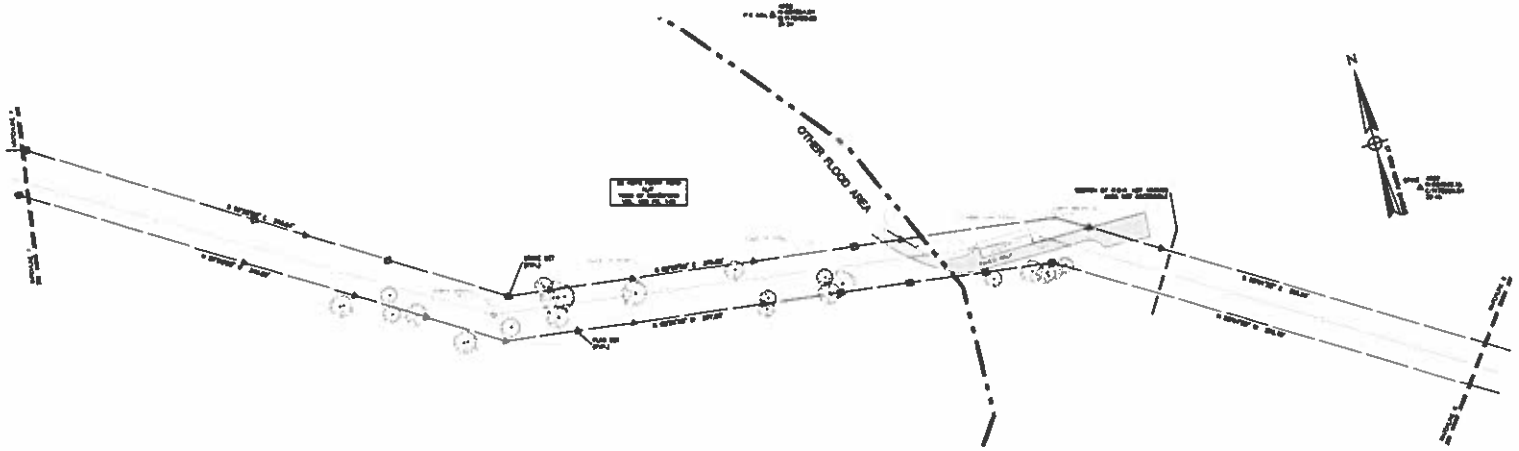
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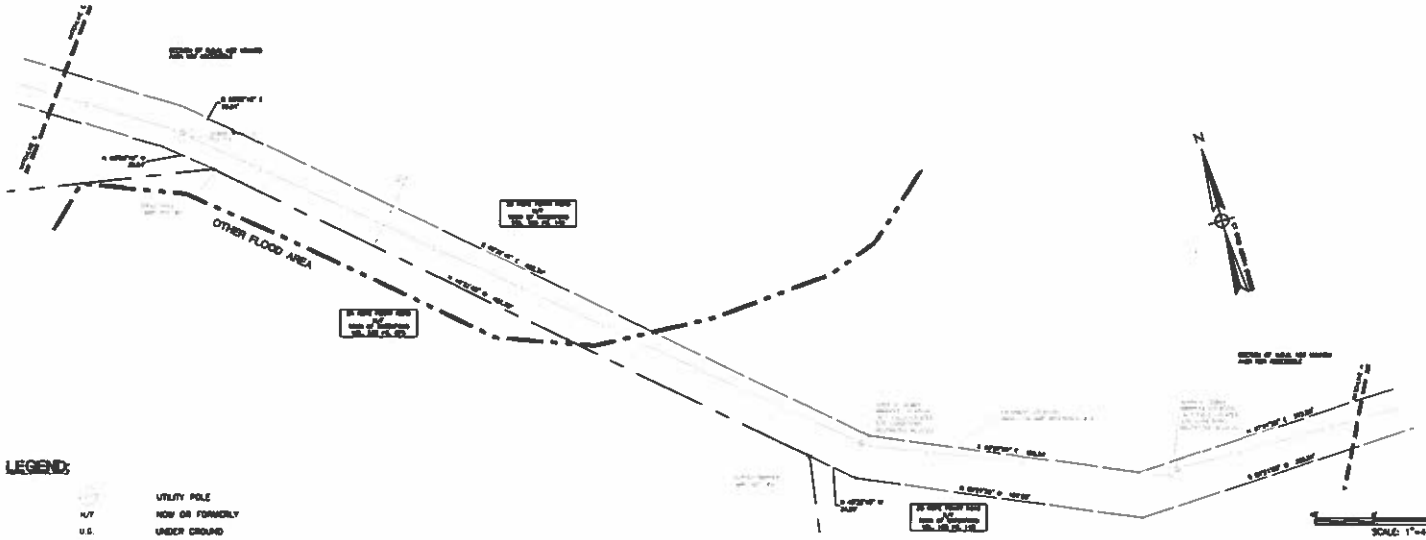
"CONTRACT 1"
INTERCEPTOR R.O.W

WATERFORD, CT

Project No. CLA-7016
Proj. Surveyor R.L.C
Date 12/22/23
Sheet No. 3

CLA





LEGEND:

- PROPERTY LINE
- CHAIN-LINK FENCE
- RETAINING WALL
- STONE WALL
- BOUNDARY POINT
- IRON PIN, IRON PIPE
- MONUMENT
- GAS GATE, WATER GATE
- TRAFFIC SIGN
- SEWER MANHOLE
- U/G — UNDER GROUND
- DECIDUOUS TREE
- OVERHEAD ELECTRIC LINE
- WATER SHUTOFF
- BOLLARD
- SHRUB

SCALE: 1"=40'

CLA

No.	DATE	REVISION

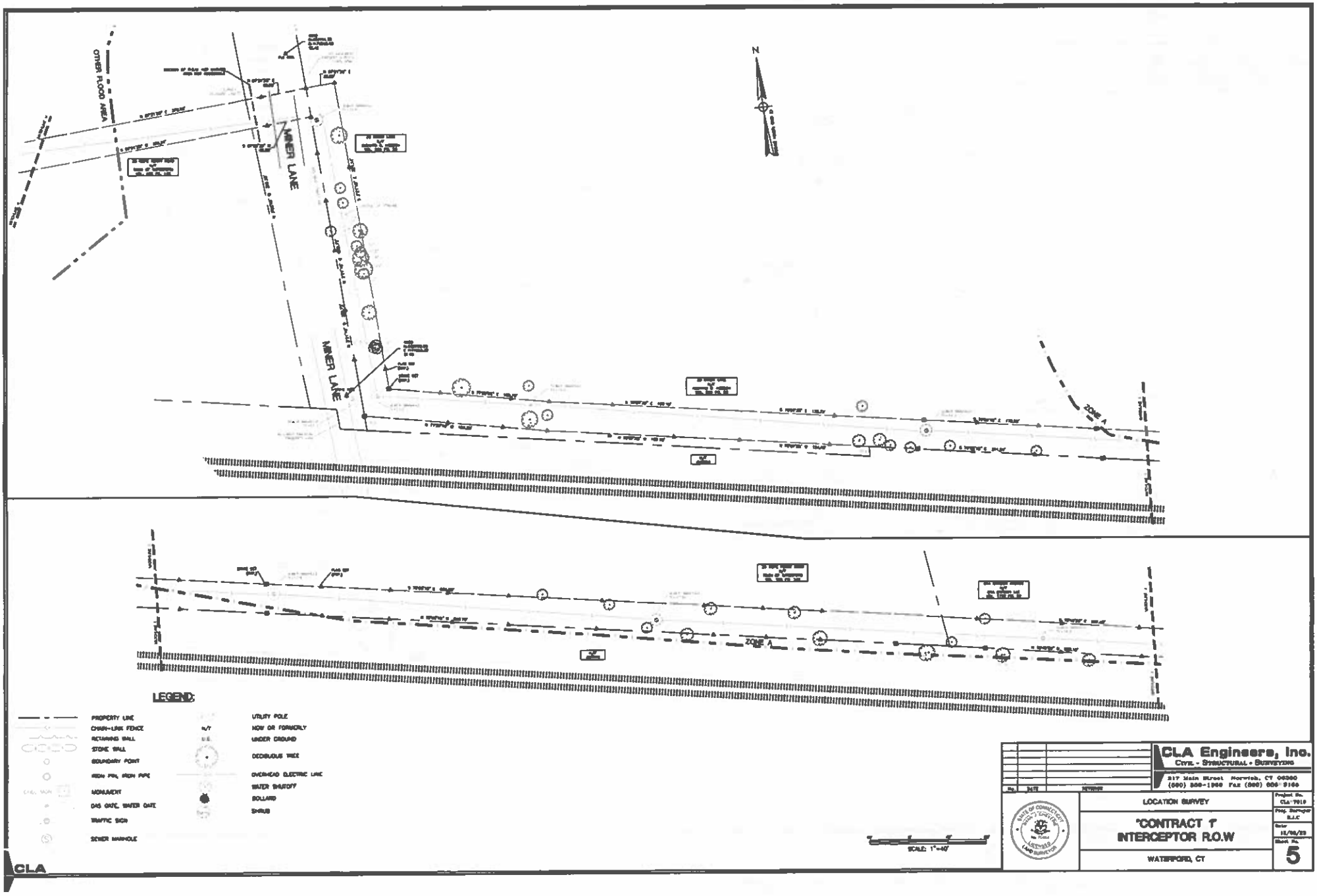
CLA Engineers, Inc.
CIVIL • STRUCTURAL • SURVEYING
317 Main Street Norwich, CT 06360
(860) 886-1900 Fax (860) 886-9146

LOCATION SURVEY

"CONTRACT 1"
INTERCEPTOR R.O.W

WATERFORD, CT

Project No.	CLA-7916
Proj. Surveyor	R.J.C
Date	10/05/21
Sheet No.	4



CLA

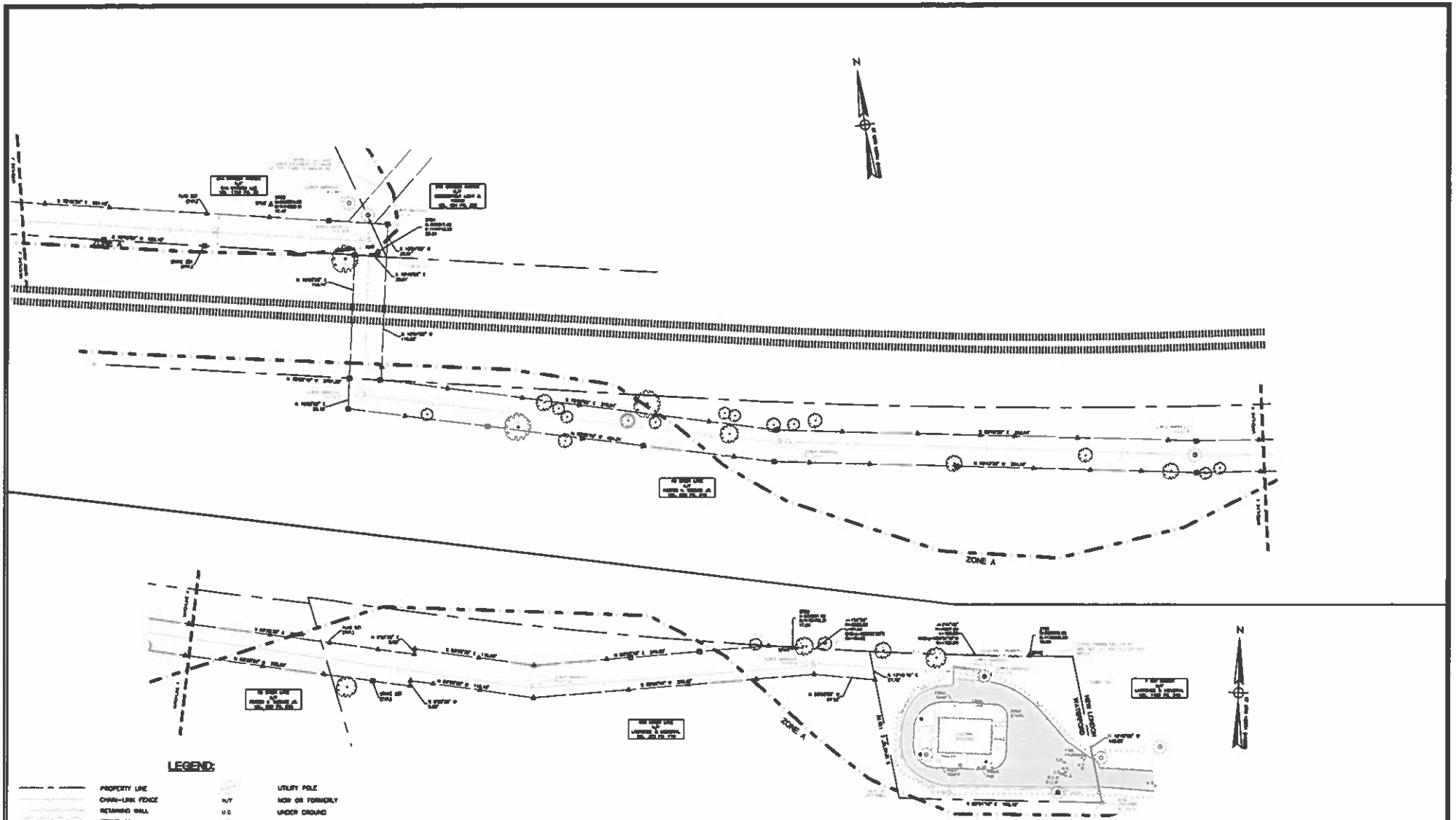
CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
217 Main Street Norwich, CT 06360
(860) 886-1900 Fax (860) 886-9186

LOCATION SURVEY

"CONTRACT T"
INTERCEPTOR R.O.W

WATERFORD, CT

Project No. CLA-7019
Proj. Surveyor R.J.C
Date 11/16/23
Sheet No. 5



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No.	Date	Revision

LOCATION SURVEY

"CONTRACT 1"
INTERCEPTOR R.O.W

WATERFORD, CT

Project No. CLA-7018
Proj. Surveyor BJJC
Date 10/05/22
Sheet No. 6

SURVEY NOTES

1. THIS SURVEY AND MAP HAVE BEEN PREPARED IN ACCORDANCE WITH SECTION 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS FOR STATE AGENCIES "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.
   A. TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY
   B. BOUNDARY DETERMINATION CATEGORY: RESURVEY
   C. HORIZONTAL ACCURACY: A-2
      VERTICAL ACCURACY: V-2
      TOPOGRAPHIC ACCURACY: N/A
   D. INTENT: TO DEPICT THE "CONTRACT 1" INTERCEPTOR R.O.W. AND MANHOLES / RELEVANT FEATURES ALONG IT.
2. DATE OF LATEST FIELD WORK: DECEMBER 2023
3. HORIZONTAL ORIENTATION IS CT NAD83 BASED ON FIELD GPS OBSERVATIONS. COORDINATES, BEARINGS, AND DISTANCES ARE HELD TO GEODETIC GRID, AND TRUE TO THE CT NAD83 COORDINATE SYSTEM.
4. VERTICAL DATUM IS N.A.V.D 88 BASED ON FIELD GPS OBSERVATIONS.
5. BOUNDARY LINES OF ADJOINING PROPERTIES ARE NOT TO BE CONSTRUED AS HAVING BEEN THE RESULT OF A FIELD SURVEY AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY
6. THE WORD "CERTIFY" IS UNDERSTOOD TO BE AN EXPRESSION OF THE PROFESSIONAL OPINION OF THE LAND SURVEYOR TO THE BEST OF THEIR KNOWLEDGE, INFORMATION AND BELIEF.
7. STONE WALLS AND/OR FENCES SHOWN AS BOUNDARIES MAY HAVE IRREGULARITIES BETWEEN POINTS INDICATED ON THE SURVEY.
8. FEMA FLOOD ELEVATION LINES DEPICTED WERE TAKEN FROM FLOOD INSURANCE RATE MAPS NEW LONDON COUNTY, CONNECTICUT ALL JURISDICTIONS PANELS 482, 484, AND 503 OF 554 MAP NUMBERS 09011C0482G, 09011C0484G AND 09011C0503G EFFECTIVE DATES JULY 18, 2011, AUGUST 3, 2013 AND AUGUST 3, 2013
9. A PRINT OR MYLAR OF THIS MAP IS NOT VALID UNLESS IT CONTAINS THE SEAL AND LIVE SIGNATURE OF THE SURVEYOR

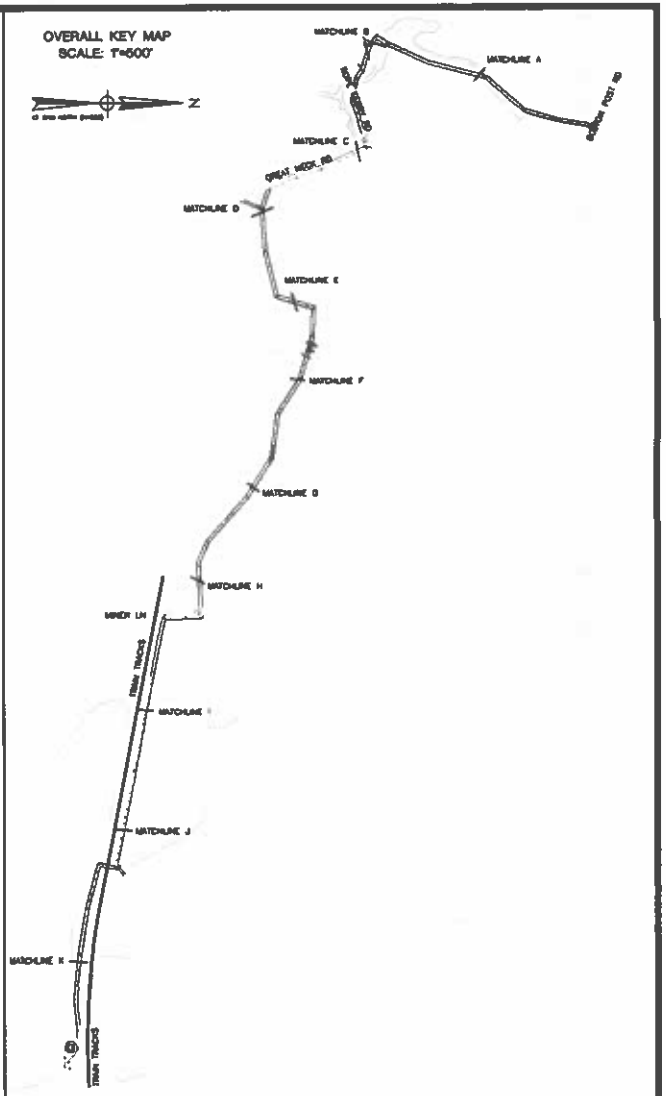
MAP REFERENCES

1. "CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF WATERFORD BOSTON POST ROAD FROM THE HOCK'S HILL ROAD EASTERLY TO WILD ROSE PLACE ROUTE U.S. 1" DATE: MARCH 31, 1931 SCALE 1"=40' NUMBER: 888 SHEET NO. 3 & 4 OF 4
2. "CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF WATERFORD GREAT NECK ROAD FROM THE SHORE ROAD SOUTHERLY ABOUT 4,800 FEET" DATE: MARCH 31, 1939 SCALE: 1"=40' NUMBER: 152-07 SHEET NO. 1 & 2 OF 2
3. "CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF WATERFORD NIANTIC-NEW LONDON ROAD FROM THE FOURTH DISTRICT SCHOOL EASTERLY TO BOSTON POST ROAD ROUTE NO. 156" DATE: MAY 31, 1933 SCALE: 1"=40' NUMBER: 152-01 SHEET NO. 3 OF 3
4. "CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF WATERFORD NIANTIC-NEW LONDON ROAD FROM THE FOURTH DISTRICT SCHOOL EASTERLY TO BOSTON POST ROAD ROUTE NO. 156" DATE: JUNE 2, 1941 NUMBER: 152-08-A SHEET NO. 1 OF 2
5. "TOWN OF WATERFORD MAP SHOWING EASEMENT ACQUIRED FROM THE JORDAN MUTUAL CEMETERY ASSOCIATION, INC. BY THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION REHABILITATION OF BRIDGE NO. 01808 U.S. RTE. 1 OVER NEVINS BROOK" PREPARED BY CLOSE, JENSEN & MILLER DATE: 02/04/2008 SCALE 1CM=2.5M NUMBER: 152-143 SHEET NO. 1 OF 1
6. "SCHEMATIC SHOWING PROPERTY BOUNDARIES AND PROPERTIES ADJACENT TO JORDAN MUTUAL CEMETERY" PREPARED BY: ROBLEY ENGINEERING AND ASSOCIATES DATE: 08/12/84 SCALE: 1"=100' SHEET NO. 1 OF 1
7. "THE TOWN OF WATERFORD SHOWING PORTION OF LAND OF JORDAN MUTUAL CEMETERY TO BE CONVEYED TO THE TOWN OF WATERFORD" PREPARED BY: EDWARD G. STEWARD DATE: DECEMBER 1984 SCALE: 1"=40'
8. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT JORDAN MUTUAL CEMETERY" PREPARED BY: MICHAEL J. GARVIE DATE: MAY 1976 SCALE: 1"=40' DRAWING: C-0883 & 886
9. "BOUNDARY SURVEY PROPERTY OF PRENTICE HALL INC. 24 ROPE FERRY ROAD & GREAT NECK ROAD WATERFORD, CONNECTICUT" PREPARED BY: CLA ENGINEERS, INC. DATE: APRIL 1996 REVISED: 11/18/97 PROJECT NO. CL-96-1487
10. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT PRENTICE-HALL INC." PREPARED BY: MICHAEL J. GARVIE DATE: MAY 1976 SCALE: 1"=40' DRAWING C-678 & 679
11. "PERMANENT SEWER EASEMENT TO BE ACQUIRED FROM PRENTICE HALL, INC. THE TOWN OF WATERFORD WATER POLLUTION CONTROL AUTHORITY CONTRACT 3.3A" PREPARED BY: EDWARD G. STEWARD DATE: 04/24/84 SCALE: 1"=40' DRAWING 3.3A-123B
12. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT CASH & CASSIDY" PREPARED BY: MICHAEL J. GARVIE DATE: DECEMBER 1975 SCALE: 1"=40' DRAWING E-833
13. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT MANAT, GEORGE & GRACE" PREPARED BY: MICHAEL J. GARVIE DATE: JANUARY 1976 SCALE: 1"=40' DRAWING C-841, 842 & 843
14. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT SISTARE, FOSTER" PREPARED BY: MICHAEL J. GARVIE DATE: MAY 1976 SCALE: 1"=40' DRAWING C-845 & 846
15. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT CONN, ISADORE A." PREPARED BY: MICHAEL J. GARVIE DATE: MARCH 1976 SCALE: 1"=40' DRAWING C-856
16. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT GARDNER, HENRY" PREPARED BY: MICHAEL J. GARVIE DATE: APRIL 1976 SCALE: 1"=40' DRAWING C-838 & 839
17. "RIGHT OF WAY AND TRACK MAP, THE NEW YORK, NEW HAVEN, AND HARTFORD RAILROAD COMPANY, OPERATED BY THE NEW YORK, NEW HAVEN AND HARTFORD RAILROAD COMPANY 1917
18. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT ROWE, RICHARD E." PREPARED BY: MICHAEL J. GARVIE, DATE: MAY 1976, SCALE: 1"=40', DRAWING: C-880
19. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT ROSENTHAL, BEATRICE." PREPARED BY: MICHAEL H. GARVIE, DATE: MAY 1976, SCALE 1"=40', DRAWING: C-882 & 883
20. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT ROSE, RAFUEL ESTATE OF." PREPARED BY: MICHAEL J. GARVIE, DATE: MAY 1976, SCALE 1"=40', DRAWING: C-881
21. "TOWN OF WATERFORD SEWER EASEMENT LINES" PREPARED BY: MICHAEL J. GARVIE, DATE: MAY 1976, SCALE: 1"=40', DRAWING: C-704, C-828, C830 & C831
22. "TOWN OF WATERFORD SEWER PROPERTY EASEMENT MANAT, GEORGE & GRACE" PREPARED BY: ANTHONY D. JANOWICZ, DATE: MARCH 1977, SCALE: 1"=40', DRAWING: C-958

MAP REFERENCES CONTINUED

23. "BORRIS B. PEANE 24 AVERY LANE, EXISTING CONDITIONS PLAN," PREPARED BY: CHRISTOPHER C. DANFORTH, DATE: JULY 5 2002, REVISED: 6/6/03, SCALE: 1"=30' DRAWING: S=-2, SHEET 2 OF 5
24. "BOUNDARY STAKE-OUT MAP PROPERTY BELONGING TO GREGORY A. & WENDY A. COCO 99 & 101 ROPE FERRY ROAD AND 4 NORTH ROAD WATERFORD, CONNECTICUT." PREPARED BY: WILLIAM F. KENT, DATE: SEPTEMBER 10 2008, SCALE: 1"=20'
25. "PLAN OF LAND TO BE ACQUIRED BY EDGAR B. RUSS AND DIANA P. RUSS, SOUTH SIDE OF BOSTON POST ROAD WATERFORD, CONNECTICUT" PREPARED BY: CHANDLER, PALMER, AND KING, DATED JANUARY 1976, SCALE: 1"=40'
26. "PROPERTY & TOPOGRAPHIC SURVEY OF NOS. 384 AND 394 VALLETTS AVENUE EXTENSION WATERFORD, CONNECTICUT," PREPARED BY: FRANKLIN SURVEYS. DATE: AUGUST 13, 2020. SCALE: 1"=30', SHEETS 1+2
27. "BORRIS B. PEANE 24 AVERY LANE, PROPERTY LINE PLAN," PREPARED BY: CHRISTOPHER C. DANFORTH, DATE: JULY 5 2002, REVISED: 12/6/02, SCALE: 1"=30', DRAWING: S=-1, SHEET 1 OF 5
28. "BORRIS B PEANE 24 AVERY LANE, SUBDIVISION PLAN," PREPARED BY: CHRISTOPHER C. DANFORTH, DATE: AUGUST 30 2002, REVISED: 6/6/03 SCALE: 1"=30', DRAWING S=-1, SHEET 3 OF 5
29. "PROPERTY/BOUNDARY SURVEY LAND OF MARGARET SHEERS ROSE ZONE C-O 30 AVERY LANE WATERFORD, CT." PREPARED BY: BRIAN E. SITTY LAND SURVEYOR, DATE:APRIL 2000, SCALE: 1"=20', DRAWING: #100-109, SHEET 1 OF 1
30. "PLAN OF PROPERTY OF HENRY GARDINER ROUTE NO 1 WATERFORD, CONNECTICUT" PREPARED BY: CHANDLER & PALMER ENGINEERS, DATE: OCTOBER 28 1969, REVISED: JANUARY 9 1970, SCALE: 1"=100'
31. "PROPERTY SURVEY OF NO. 61A NYROCK AVENUE WATERFORD, CONNECTICUT." PREPARED BY FRANKLIN SURVEYS. DATE: JUNE 4 2022. SCALE: 1"=40'. SHEET 1 OF 1
32. "TOWN OF WATERFORD, MAP SHOWING LAND ACQUIRED FROM THE JORDAN MUTUAL CEMETERY ASSOCIATION, INC. BY THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION REHABILITATION OF BRIDGE NO. 01808 U.S. RTE. 1 OVER NEVINS BROOK," PREPARED BY: CLOSE, JENSEN & MILLER, DATE: APRIL 1986, SCALE: 1CM=2.5M, PROJECT NO: 152-143, SHEET 1 OF 1
33. "SUBDIVISION PLAN OF LAND BELONGING TO FRANK T. BROOKS JORDAN TERRACE WATERFORD,CONN." PREPARED BY: MORRIS G. RUDFF SURVEYOR, DATE: 6-17-58, SCALE: 1"=30'
34. "PLAN OF THE FORMER PROPERTY; NORTH ROAD WATERFORD, CONNECTICUT DATE: NOVEMBER, 1971 SCALE: 1"=40' " PREPARED BY: ELA NORSE CIVIL ENGINEERING & LAND SURVEYING NEW LONDON, CONNECTICUT
35. "NEW LONDON SERVICE CENTER PROPOSED SITE IMPROVEMENTS SITE PLAN WATERFORD, CONNECTICUT NORTHEAST UTILITIES SERVICE CO. FOR CONNECTICUT LIGHT & POWER COMPANY" DATE: 4-12-83, SCALE 1"=40'
36. "PLAN SHOWING PROPERTY OF HENRY GARDINER BOSTON POST ROAD & MINER LANE WATERFORD, CONNECTICUT" SCALE: 1"=40', DATE, OCTOBER 24, 1984 REVISED DECEMBER 20,1984
37. "THE TOWN OF WATERFORD SHOWING LAND OF ALBERT G. PERKINS TO BE CONVEYED TO THE TOWN OF WATERFORD" PREPARED BY: EDWARD G. STEWARD P.E./L.S. SCALE: 1"=40' DATE, DEC 1984 DRAWING 11-2
38. "THE TOWN OF WATERFORD SEWER EASEMENT TO BE ACQUIRED FROM SPRAGUE, MARTHA" PREPARED BY: EDWARD G. STEWARD P.E./L.S SCALE: 1"=40' DATE: JAN. 1978 DRAWING C-1038
39. "TOWN OF WATERFORD MAP SHOWING LAND TRANSFERRED TO DEPT. OF ENVIRONMENTAL PROTECTION FROM THE DEPT. OF TRANSPORTATION GREAT NECK ROAD" PREPARED BY: STANLEY L. ALLEN SCALE: 1"=40' DATE: FEB. 1973
40. "ALTERATIONS AND MODIFICATIONS FOR WATERFORD FIRE ENGINE COMPANY NO.1, INC. ROPE FERRY ROAD, ROUTE 156 LOCATION WATERFORD, CONN. SITE PLAN/FINISHED SCHEDULES SHEET" SCALE: SHOWN, DATE: MAY 30, 1986
41. "PROPERTY OF THE WATERFORD FIRE ENGINE CO NO. 1 INC. SHOWING PROPOSED BOUNDARY LINE REVISION AND EXISTING AND PROPOSED EASEMENTS ROPE FERRY ROAD" WATERFORD, CONN. SCALE: 1"=30', DATE, OCTOBER, 1979 PREPARED BY: EDMOND SITTY LAND SURVEYOR
42. "WATER AND SEWER COMMISSION WATERFORD CONNECTICUT SEWAGE WORKS CONSTRUCTION PROGRAM CONTRACT 1" PREPARED BY: HAYDEN & HARDING. DATE: JAN. 1972. SCALE: 1"=40', DRAWING: 1.1-1.13
43. "CONNECTICUT STATE HIGHWAY DEPARTMENT PLAN FOR CONSTRUCTION OF GREAT NECK ROAD IN THE TOWN OF WATERFORD FROM STA. 0+00 TO STA. 46+94.00" DATE: JULY 15 1959 SCALE: 1"=40'

OVERALL KEY MAP
SCALE: 1"=500'



TO MY KNOWLEDGE AND BELIEF THIS PLAN IS SUBSTANTIALLY CORRECT AS NOTED OR DEPICTED HEREON.

RYAN J. CHEVERE, L.L.S. #70454

No.	DATE	REVISION

CLA Engineers, Inc.
CIVIL • STRUCTURAL • SURVEYING
817 Main Street Newtown, CT 06380
(800) 888-1988 Fax (800) 888-9188

STATE OF CONNECTICUT · RYAN J. CHEVERE · NO. 70454 · LICENSED LAND SURVEYOR

LOCATION SURVEY

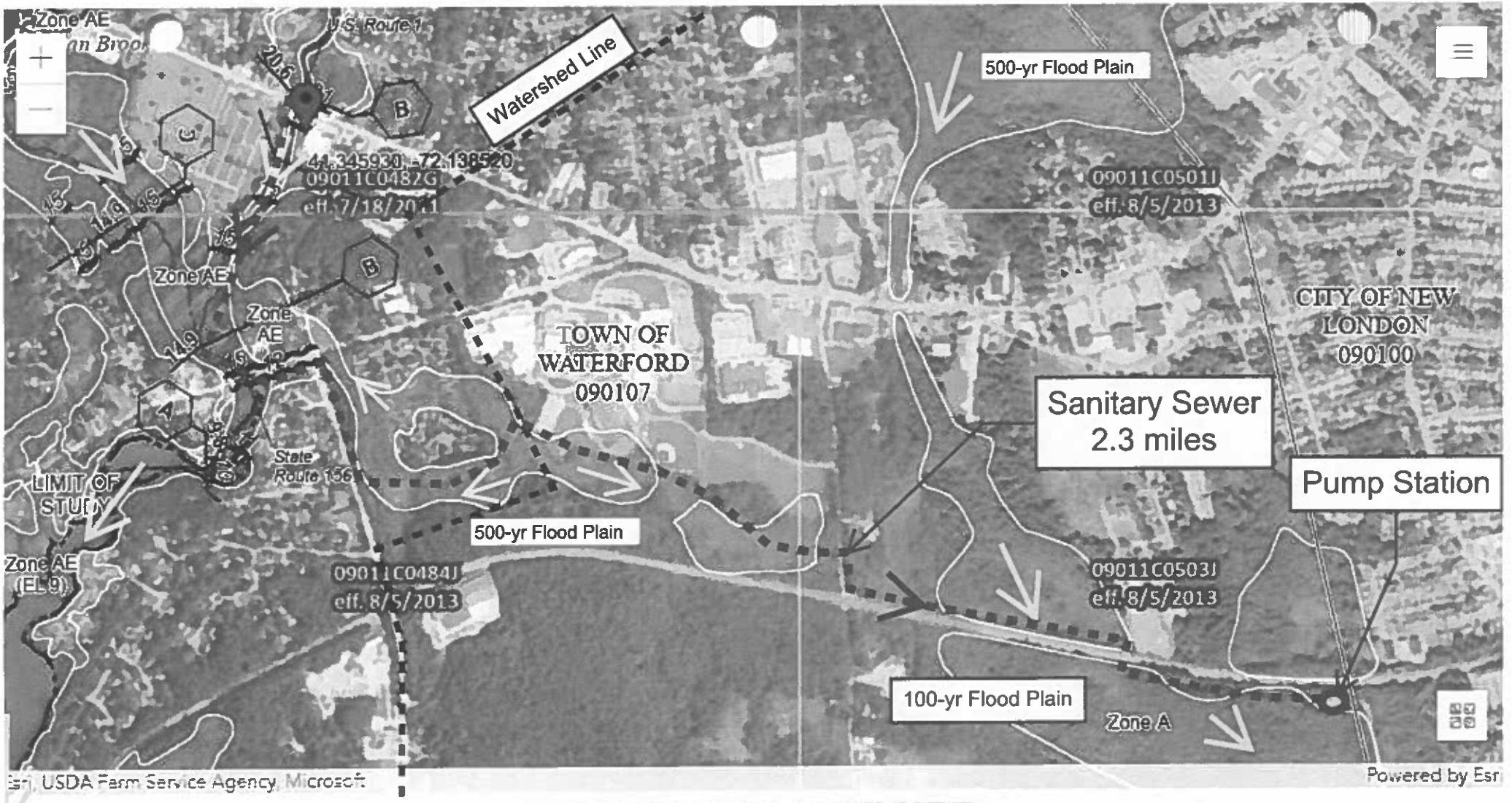
"CONTRACT 1" INTERCEPTOR R.O.W

WATERFORD, CT

Project No. CLA-7010
Proj. Surveyor R.J.C.
Date 10/30/25
Sheet No. 7

CLA

Appendix B - Flood Plain Map



o
Long Island Sound

PIN — Approximate location based on user input and does not represent an authoritative property location

MAP PANELS
- Selected FloodMap Boundary
- Digital Data Available
- No Digital Data Available
- Unmapped

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard
- Effective LOMRs
- Area of Undetermined Flood Hazard
- Otherwise Protected Area
- Coastal Barrier Resource System Area

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE)
- With BFE or Depth
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Flood Risk due to Levee. See Notes.
- Area with Flood Risk due to Levee

OTHER FEATURES
- Cross Sections with 1% Annual Chance
- Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

Appendix C – Town Wetlands Permit

FIFTEEN ROPE FERRY ROAD
WATERFORD, CT 06385-2886

PHONE: 860-442-0553
www.waterfordct.org

WATERFORD CONSERVATION COMMISSION
INLAND WETLANDS & WATERCOURSES PERMIT #23-03
Vegetation Clearing, Inspection & Maintenance of Municipal Sewer Utilities within Easements Issued to the Waterford Utility Commission

The Waterford Conservation Commission, in their capacity as the Town's Inland Wetland Agency, hereby authorizes the Waterford Utility Commission to conduct regulated activities in designated wetland areas of existing sewer utility easements subject to jurisdiction in accordance with CT General Statutes, Section 22a-36 through 22a-45, inclusive, as amended, and the Waterford Inland Wetlands and Watercourses regulations.

Regulated activities authorized include:

1. Cutting of vegetation in wetlands and adjacent upland areas within sewer easement areas to clear a 20 foot wide vehicle access for purposes of inspection and maintenance of the existing municipal sewer. Vegetation to be cut by machine-mounted mowers or manually where flooded conditions do not allow machinery access.

2. Temporary machinery access through and over inland wetlands and watercourses within municipal sewer easement areas to access sewer manholes for inspection and repair.

3. Placement of temporary crossings including temporary plates, timbers, slash, corduroy or mats to minimize disturbance to inland wetlands and watercourses.

4. Minor repair of sewer manholes and utility lines to prevent infiltration of ground and surface water and correct system failures detected during the inspection. Minor repair work includes excavation of soils, installation of temporary erosion and sediment controls and de-watering basins, temporary discharge of sediment-free de-watering waters, and restoration of wetland substrate conditions.

These regulated activities are associated with maintenance practices and repairs for the Town of Waterford municipal sewer system as described in the application dated June 20, 2023. The Conservation Commission attaches the following conditions to minimize impacts to inland wetlands and watercourses associated with the proposed inspection and maintenance activities:

SPECIAL CONDITIONS:

1) All maintenance and repair activities conducted under this authorization shall be reported no later than 7 days prior to the planned initiation of the activity to the Conservation Commission's agent for a determination of consistency with the terms of this permit. Limits of disturbance shall be identified and marked in the field. Erosion and sediment control and de-watering measures, and measures to restore wetland soils, grades and

wetland vegetation shall be identified prior to the start of work in any wetland or watercourse resource.

2) Regulated activities identified to be outside the scope of this authorization will require submission of an individual permit application to the Conservation Commission for approval. The permanent obstruction, diversion or alteration of wetlands and watercourse resources is not herein authorized.

3) In areas of flooded or saturated soil conditions, the use of machinery shall be restricted and vegetation removal conducted manually to protect wetland and surface flow patterns. Where temporary disturbance from machinery access occurs in wetlands or watercourses, the wetland substrate and surface flows are to be restored to pre-existing conditions upon completion of the maintenance activity.

4) The crossing of wetlands and watercourses with machinery shall be temporary and accomplished with minimal disturbance to wetlands and streambed substrates. Use of best management practices for temporary stream crossings, wetland protection and erosion control shall be incorporated into the inspection and maintenance program. These practices shall comply with the State of Connecticut Forest Practices Regulations.

5) Upon completion of machinery access and required repairs to the utility, all temporary wetland and watercourse crossing devices shall be removed, and the wetland and watercourse substrate and surface flows shall be restored to pre-existing grades. The permanent obstruction, diversion or alteration of wetlands and watercourse resources is not herein authorized.

6) A representative of the Utility Commission shall schedule a site inspection with the Commission's agent following completion of the maintenance activity within each sewer easement area to review wetlands and watercourses traversed by the inspection activity. Where required and as directed by the Commission's agent, corrective measures to restore grade, stabilize exposed soils and control potential erosion shall be immediately implemented.

7) The Waterford Utility Commission shall be responsible for ensuring the terms and provisions of this permit are adhered to, including the implementation of pollution prevention and best management practices, installation of erosion and sediment controls and restoration of temporary disturbance areas.

All work and all regulated activities conducted pursuant to this authorization shall be consistent with the terms and conditions of this permit. Any structures, excavation, fill, obstructions, encroachments or regulated activities not specifically identified and authorized herein shall constitute a violation of this permit and may result in permit modification, suspension or revocation.

In the event that any additional wetland or watercourse regulated activities are required as a result of other agency permitting to support the proposed activity, the Waterford Conservation Commission reserves the right to reconsider the proposed regulated activity and may require modifications to minimize the impact to wetland resources.

In evaluating this application, the Commission has relied on information provided by the applicant. If such information subsequently proves to be false, incomplete and/or inaccurate, this permit shall be modified, suspended or revoked.

This permit shall be valid for a period of 5 years. Permit extensions may be authorized in accordance with CT General Statutes § 22a-36 through 22a-45 inclusive. If the regulated activity is not completed within this time frame, the permit may be held to be invalid by the Conservation Commission and the applicant may be required to petition the Commission for an extension or re-issuance of the permit. The Commission may require the applicant to furnish additional information at that time.

The Conservation Commission renders this Summary Ruling in accordance with the Waterford Inland Wetlands and Watercourses Regulations based on the following considerations:

A. The proposed activity is necessary for maintenance and inspection of the public sewer utility lines and protection of surface and groundwater quality.

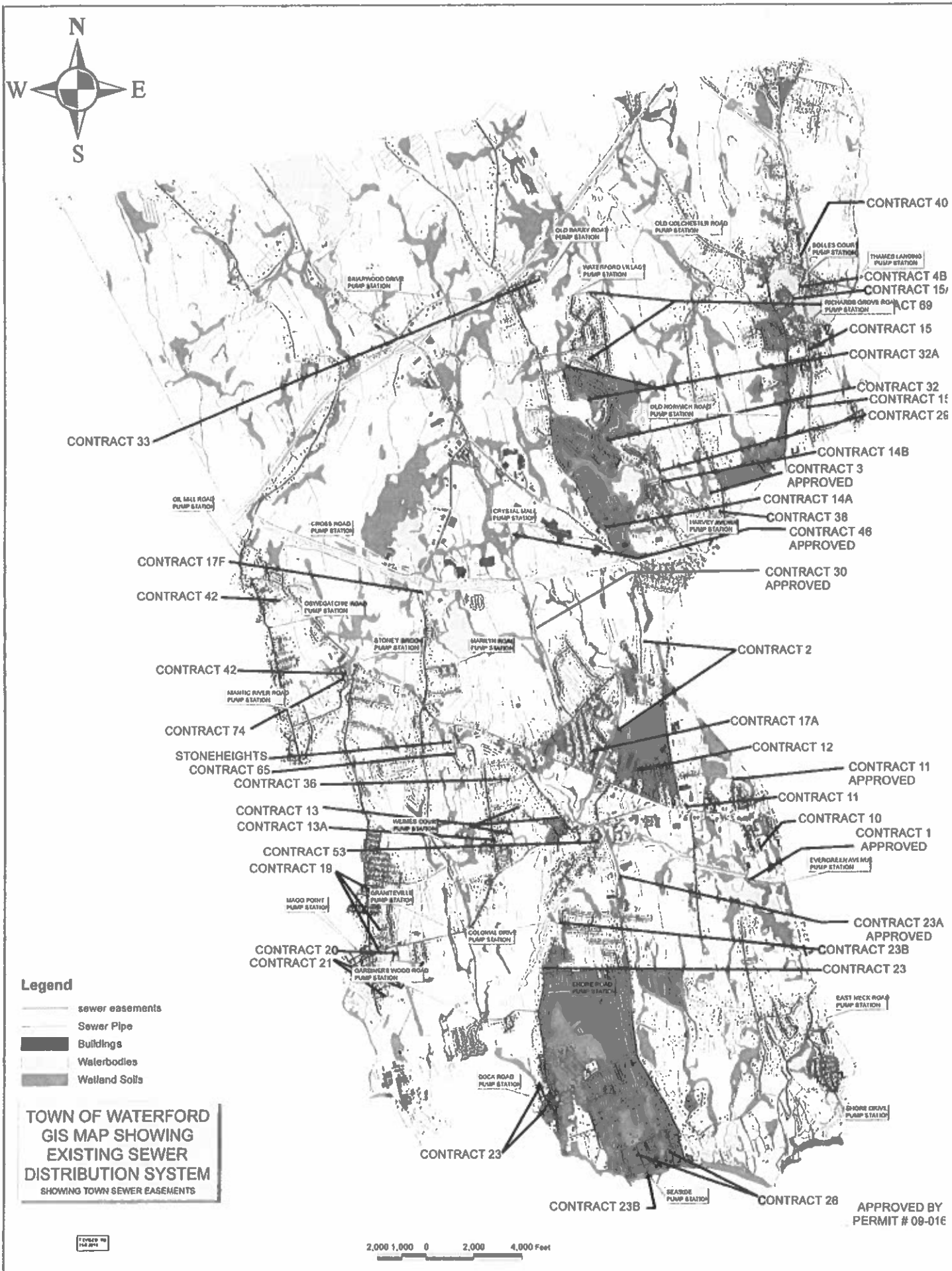
B. The proposed method of vegetation removal and machinery access does not pose long-term adverse impacts to the wetlands and watercourses within or adjacent to the sewer easement. Temporary disturbance to wetland substrates will be restored to grade

C. Strict adherence to the terms and conditions imposed with this permit will protect the quality of wetlands and surface waters on this property.

This permit will be strictly enforced. If the Conservation Commission finds that the applicant has not complied with the permit conditions or has exceeded the scope of this permit as set forth herein, or, if the intended use of the general site is not as represented by the application or the plan of record, the Commission may suspend or revoke this permit, direct the Environmental Officer to issue a cease and desist order, require the applicant to modify, extend or revise the site work, or require the applicant to restore the area to its original condition.

Dated: July 13, 2023

Issued By: _____
Chairman, Richard Muckle
Waterford Conservation Commission


N
W
E
S
CONTRACT 40
CONTRACT 4B
CONTRACT 15
CONTRACT 69
CONTRACT 15
CONTRACT 32A
CONTRACT 32
CONTRACT 33
CONTRACT 14B
CONTRACT 3
APPROVED
CONTRACT 14A
CONTRACT 38
CONTRACT 46
APPROVED
CONTRACT 17F
CONTRACT 30
APPROVED
CONTRACT 42
CONTRACT 2
CONTRACT 42
CONTRACT 74
CONTRACT 17A
STONEHEIGHTS
CONTRACT 65
CONTRACT 12
CONTRACT 11
APPROVED
CONTRACT 36
CONTRACT 11
CONTRACT 13
CONTRACT 13A
CONTRACT 10
CONTRACT 1
APPROVED
CONTRACT 53
CONTRACT 19
CONTRACT 23A
APPROVED
CONTRACT 20
CONTRACT 21
CONTRACT 23B
CONTRACT 23
CONTRACT 23
CONTRACT 23B
CONTRACT 28
APPROVED BY
PERMIT # 09-016
Legend
sewer easements
Sewer Pipe
Buildings
Waterbodies
Wetland Soils
TOWN OF WATERFORD
GIS MAP SHOWING
EXISTING SEWER
DISTRIBUTION SYSTEM
SHOWING TOWN SEWER EASEMENTS
2,000 1,000 0 2,000 4,000 Feet

Appendix D – Environmental Permitting Report

JKB CONSULTING, LLC
ENVIRONMENTAL PERMITTING, PLANNING & COMPLIANCE

JULIE K. BJORKMAN, P.E.
PRINCIPAL

MEMORANDUM

TO: THERLIN MONTGOMERY, WRIGHT-PIERCE
BARRY PARFITT, WRIGHT-PIERCE

FROM: JULIE K. BJORKMAN, P.E., JKB CONSULTING, LLC (JKB)

CC: ROBERT C. RUSSO, CSS, CLA ENGINEERS, INC.

SUBJECT: WATERFORD INTERCEPTOR SEWER RESTORATION – PRELIMINARY PLANS
PRELIMINARY WETLANDS PERMITTING REVIEW

DATE: FEBRUARY 14, 2024

This memorandum provides a preliminary review of potential relevant wetlands (and floodplain) permitting requirements depending on project elements for the maintenance / restoration of the Waterford Interceptor Sewer (Contract 1) in Waterford, CT. The general work area involves the easement area over the underground interceptor sanitary sewer that runs from Route 1 (Boston Post Road) near the U.S. Post Office, south along Nevins Brook to near the confluence with Jordan Brook, east along Rope Ferry Road (Rt 156), then south along Great Neck Road, then east near Waterford High School running on the north side of the Railroad tracks and crossing Miner Lane, then crossing south over the Railroad tracks and continuing east to the Evergreen Pump Station which is adjacent to the town line with New London. The alignment is shown on mapping provided by Wright-Pierce. **Figure 1** provides an overview map.

This evaluation is based on a review of preliminary mapping provided by WP, the Inland Wetland Permit # C-23-03 issued July 13, 2023 to the Waterford Utility Commission, published available mapping resources (e.g., CTECO, etc.), other currently available published information and permitting experience by JKB. JKB also consulted with Mr. Robert C. Russo, CSS, of CLA Engineers who is a soil scientist with extensive experience with wetland delineations and permitting in CT and with the Army Corps of Engineers (ACE). Permitting requirements are dependent on potential wetlands (and floodplain) impacts and dependent on whether or not certain work elements are incorporated into the project. Thresholds, where applicable, are preliminarily identified for various permitting scenarios as noted. As the design progresses and is solidified, pre-application meetings should be held with the appropriate regulatory representatives to review and verify permit requirements. It should be noted that as further detailed project information is provided to regulatory officials or is changed, and depending on the timing of the project, the permit requirements may be subject to change. The need for any land acquisition agreements and/or right-of-way easements is not included in this summary. Currently, it is understood that the project will not receive State funding under CTDEEP's Clean Water Fund.

It should also be noted that this evaluation is based on published and available wetlands mapping resources; however, depending on project elements and permits required, a full wetland delineation, including a wetlands report, will likely be required to more accurately determine wetlands impacts, including distinction between CT and Federal (ACE) jurisdictional limits and impacts.

18 CROWLEY DRIVE, OLD SAYBROOK, CT 06475
PHONE: (860) 395-6654
EMAIL: JULIE_BJORKMAN@YAHOO.COM

Site Conditions:

Note the following characteristics of the proposed work area:

- *APAs*: No work within any Aquifer Protection Areas (APAs) (CTECO map checked 1-29-2024).
- *NDDB*: No work within Natural Diversity Data Base (NDDB) shaded areas (CTECO checked 1-29-2024).
- *FEMA*: Segments of the easement appear to lie within the FEMA mapped floodway from Rt. 1 down along Nevins Brook and east along Rt. 156 to just before the turn south on Great Neck Road (sheets C-3 and C-4). Some portions of this run may lie within the FEMA mapped flood Zone AE (100-year floodplain). The 100-year floodplain base flood elevation (BFE) in this section ranges from 17 ft. NAVD 88 at Rt. 1 to 12 ft. NAVD 88 on the south side of Rope Ferry Road just west of Great Neck Road. Other segments of the easement appear to lie within Zone A (100-year floodplain) (sheets C-7 and C-8). This includes segments running parallel to the railroad tracks, east of Miner Lane. The BFE is not determined in Zone A. Refer to **Figures 2 and 3** attached.
- *Wetlands*: Field wetlands delineations have not been completed; however, Town GIS-mapped wetlands and National Wetlands Inventory (NWI) mapping was used by WP to estimate potential wetlands impacts. CTECO mapping and NWI mapping show substantial segments of the easement lie within wetland areas. The sewer alignment follows Nevins Brook (south of Rt. 1, west of Avery Lane), and other portions run along or within upper tributaries to or marsh area associated with Fenger Brook (both north and south of the RR tracks). Note that Mr. Russo confirmed the project involves only inland wetlands and not tidal / coastal. Refer to **Figure 1** attached for a project overview.
- *Sewer Easement*: The entire sewer easement is approximately 2.3 miles in length and 30 feet in width, for a total area of approximately 364,300 SF (~8.36 acres).

Proposed Work:

It is my understanding that the Town of Waterford is planning to clear the sewer easement to regain access to their main sewer interceptor (built in the 1970s). The 42" and 48" sewer lies within a 30-foot wide easement in favor of the Town. This is the last sewer in Waterford's collection system before it is pumped to New London via the Evergreen Pump Station (PS) located immediately adjacent to the town line with New London. Waterford intends to clear trees and brush to gain access in order to CCTV-inspect the sewer line to determine the condition and need for additional maintenance. There may be the need for several stream crossings as indicated on WP's preliminary plans (sheets C-3 through C-8). Beyond tree / brush clearing, Waterford may want to remove stumps and install a permanent access road or sections with permanent access.

The approximate location of the proposed or potential stream crossings are shown on **Figure 1**. Mr. Russo noted that crossing #2 appears to be in a very wet area and may be difficult to do a crossing at this location. It is recommended, if possible, that access to "Section 1" be from the northern proposed access point (in the cemetery) down to the proposed crossing #2, and the segment further south be accessed from the proposed access point just below at 89 Rope Ferry Road. Of note, there was a possible 5th crossing identified on sheet C-8.

The areal extent of the interceptor sewer in wetlands is summarized in a table in a memorandum prepared by WP in **Attachment A**. This table preliminarily quantifies potential impacts in wetlands under certain project conditions. For example, the estimated SF of wetlands impacts is shown for grubbing (tree removal with stump removal), and estimated impacts shown for wetland/stream crossings, if determined to be required. It should be noted that the level of permitting is dependent on the areal extent of impacts (for Army Corps).

Currently, wetlands have not been delineated and published resources have been used to estimate impacts. It is assumed that CT and Federal wetlands limits are coincident for purposes of this memo; however, a field delineation, including distinction between CT and Army Corps jurisdictional (i.e., Federal) wetlands will likely be needed depending on the proposed work and potential impacts. A full wetlands delineation and development of wetland report may be required, including a description of functions and values, impacts to functions and values, and completion of Army Corps delineation data sheets may be required depending on the level of permitting required.

Waterford Floodplain Permit:

This evaluation does not cover an in-depth analysis of whether the project will require a floodplain permit from the Town of Waterford. It should be noted, however, that no fill or encroachment is allowed within the mapped FEMA floodway. Also, for any fill or encroachment within the 100-year floodplain, floodplain compensatory storage is required per the Town of Waterford Zoning Regulations Section 25.3: Development in Flood Hazard Areas.

Waterford Inland Wetland Permit:

The Waterford Utility Commission received an individual Inland Wetland Permit (IWP) from the Town of Waterford Conservation Commission dated 7/13/2023 and expiring in five (5) years (7/13/2028) for maintenance work. The authorized work involves all temporary wetlands impacts but does *not* authorize *any permanent wetlands impacts*. Also note the following:

- The IWP grants permission to clear a *20-foot wide* vehicle access for purposes of inspection and maintenance of the existing municipal sewer.
- Note, that under "Special Conditions", any proposed maintenance and repair activities must be *submitted* to the Waterford Conservation Commission (CC) for a determination of consistency with the terms of the permit *before this work can be undertaken*. Limits of disturbance also need to be field marked, and a plan submitted for review, including appropriate erosion and sediment (E&S) controls and dewatering measures, and restoration plans.
- Also of note is the requirement to conduct *vegetation removal manually in flooded or saturated soil conditions*. There are also conditions regarding wetland crossings and restoration.

Army Corps of Engineers (ACE or Corps) Permit (and companion CTDEEP 401 WQC):

Methods used for access, clearing and stream crossings will impact the level of permitting required. Temporary wetlands impacts are authorized under the Waterford CC granted IWP. ACE permitting may also be required depending on means and methods of the proposed work and the areal extent of the work within Federally jurisdictional wetlands. If all access can be made on swamp/timber mats and clearing is conducted by cutting or grinding to just above grade,

then it is anticipated that no ACE permit would be required. [Note that the use of swamp/timber mats does not typically count towards the areal extent of wetlands impacts.] Otherwise, this project is anticipated to fall under the Corps' Connecticut General Permits (CT GP) #6: Utilities Including lines, outfall and intake structures and appurtenant features (see **Attachment B**).

WP has stated that Waterford may want to conduct grubbing (i.e., removal of tree stumps and roots) and install permanent access roads in portions of the sewer easement. If any removal of tree stumps with root and soil disturbance is proposed and/or stream crossings that cannot be accomplished with just the use of swamp/timber mats, then some level of ACE permit is anticipated to be required. If the project can be limited to clearing with cutting or grinding to just above grade, the use of swamp/timber mats for the majority of the work, and limit other stream crossing work involving fill (e.g., something more than swamp/timber mats) to <5,000 SF of wetlands impacts, then it is likely the project can qualify for coverage under a Corps CT GP#6 SV (Self-Verification). If the combined areal extent of stump removal work and temporary stream crossings that involve fill work can be limited to <5,000 SF, the work can also be covered under the SV. If permanent access roads are proposed, it is anticipated that, at a minimum, CT GP#6 PCN (Pre-Construction Notification) or a Corps Individual Permit will be required. Note, if an Individual Corps Permit is required, the project will likely require payment of in-lieu fees for wetlands compensatory mitigation which can be a substantial dollar amount depending on the extent of the project's wetlands impacts.

Also, note that for any Corps permit beyond the SV level, a companion permit is required from CTDEEP for a 401 Water Quality Certification (WQC). This can be either a 401 WQC eligibility concurrence approval (if a Corps PCN is required) or an Individual 401 WQC (if a Corps Individual Permit is required).

Provided in **Table 1** below is a summary of potential permitting requirements, including thresholds and other conditions.

TABLE 1: POTENTIAL PERMITS AND CONDITIONS

Agency/Fees/Effort	Impacts	Permit Type	Conditions / Notes
WATERFORD CONSERVATION COMMISSION			
Covered under current permit; no additional Town permit	Temporary wetlands impacts (all)	IWP #C-23-03 issued 7/13/2023; exp. 7/13/2028	Notify prior to conducting work, etc.
Fee likely waived; submit to CC for approval	**Any** permanent wetlands impacts	New Individual Permit	Estimated 2-3 mos. to approve
ARMY CORPS*			
Recommend sending letter for determination of concurrence of no Corps permit required	If no fill, no tree root removal (cut flush above grade), use timber mats, all impacts temporary	None	If no fill, no tree root removal (cut flush above grade), use timber mats, all impacts temporary
No fees; submittal to Corps & CTDEEP; lower labor hour effort	0-5,000 SF of combined temporary & permanent wetlands impacts	CT GP#6 SV (Self-Verification)	106, ESA, GCs Self-implementing Submit 14 days prior to work
No fees; submittal to Corps & CTDEEP; moderate labor hour effort	>5,000 SF & < ½ acre combined temporary & permanent wetlands impacts	CT GP#6 PCN (Pre-Construction Notification)	106, ESA, GCs Submit for review & approval – est. ~60-90 days to approve.
No fees; submittal to Corps & CTDEEP; moderate labor hour effort	> ½ acre combined temporary & permanent wetlands impacts	Individual Permit	106, ESA, GCs In-lieu fees likely required Submit for review & approval – est. ~ 3-6 mos. to approve.
CTDEEP 401 WQC			
No fees; moderate labor hour effort	Required if Corps PCN is required	PCN concurrence	Submit for review & approval – est. ~ 3-6 mos. to approve.
No fees; moderate labor hour effort	Required if Corps Individual Permit is required	Individual 401 WQC	Submit for review & approval – est. ~ 6+ mos. to approve.
WATERFORD FLOODPLAIN REGULATIONS (TYPICALLY P&Z OR TOWN ENGINEER)			
Fee likely waived; typically submit to Town Engineer or P&Z for approval. May need permit & PE certification	• Work in Floodway – no fill or encroachments allowed • Fill or encroachment in 100-year floodplain (Zone A or AE)	Town of Waterford Floodplain Permit	No fill or encroachments allowed in the floodway Floodplain compensatory storage
--	Work in 500-year floodplain (typically Zone X)	None	--

Note the following caveats and conditions apply that could affect the level of permitting or conditions:
*Assumes the project is eligible and meets all conditions of the CT GPs (refer to **Attachment B**).
106: This includes review of the project under the National Historic Preservation Act.
ESA: This includes review of the project under the Endangered Species Act.
GCs: This refers to all of the General Conditions of the Corps CT GPs.

Summary:

Potential work and permitting scenarios are outlined below.

Scenario 1:
To accomplish the initial goal of restoring access and inspecting the sewer interceptor piping with the least permitting effort, the project should preclude tree root removal (i.e., grubbing), include cutting or grinding stumps flush with grade, and accomplish access with only swamp/timber mats, including for stream crossings. A field wetlands delineation would not be required prior to mobilization under this scenario and could be conducted during this data collection phase. This scenario would allow rapid mobilization and the ability to collect data that could be incorporated into a full plan set to include details for necessary repairs/ rehabilitation, crossing(s), and/or permanent access roads, if needed.

- Coverage under the Waterford IWP would apply per that permit's conditions.
- No Army Corps Permit anticipated; however, recommend corresponding with the Corps for written determination of concurrence.

Scenario 2:
The next simplest permitting scenario to accomplish the work would be to use the methods described above regarding tree removal and the use of temporary stream crossings that involve fill while keeping these impacts to <5,000 SF. Alternatively, this scenario could be used if combined impacts for stump removal and temporary stream crossings that involve fill are <5,000 SF. A field delineation would be required.

- Coverage under the Waterford IWP would apply per that permit's conditions.
- Corps CT GP#6 SV coverage, including all applicable permit conditions.

Scenario 3:
For temporary wetlands impacts up to 0.5 acres, including grubbing and/or stream crossing work, a field delineation would be required and the following would be applicable:

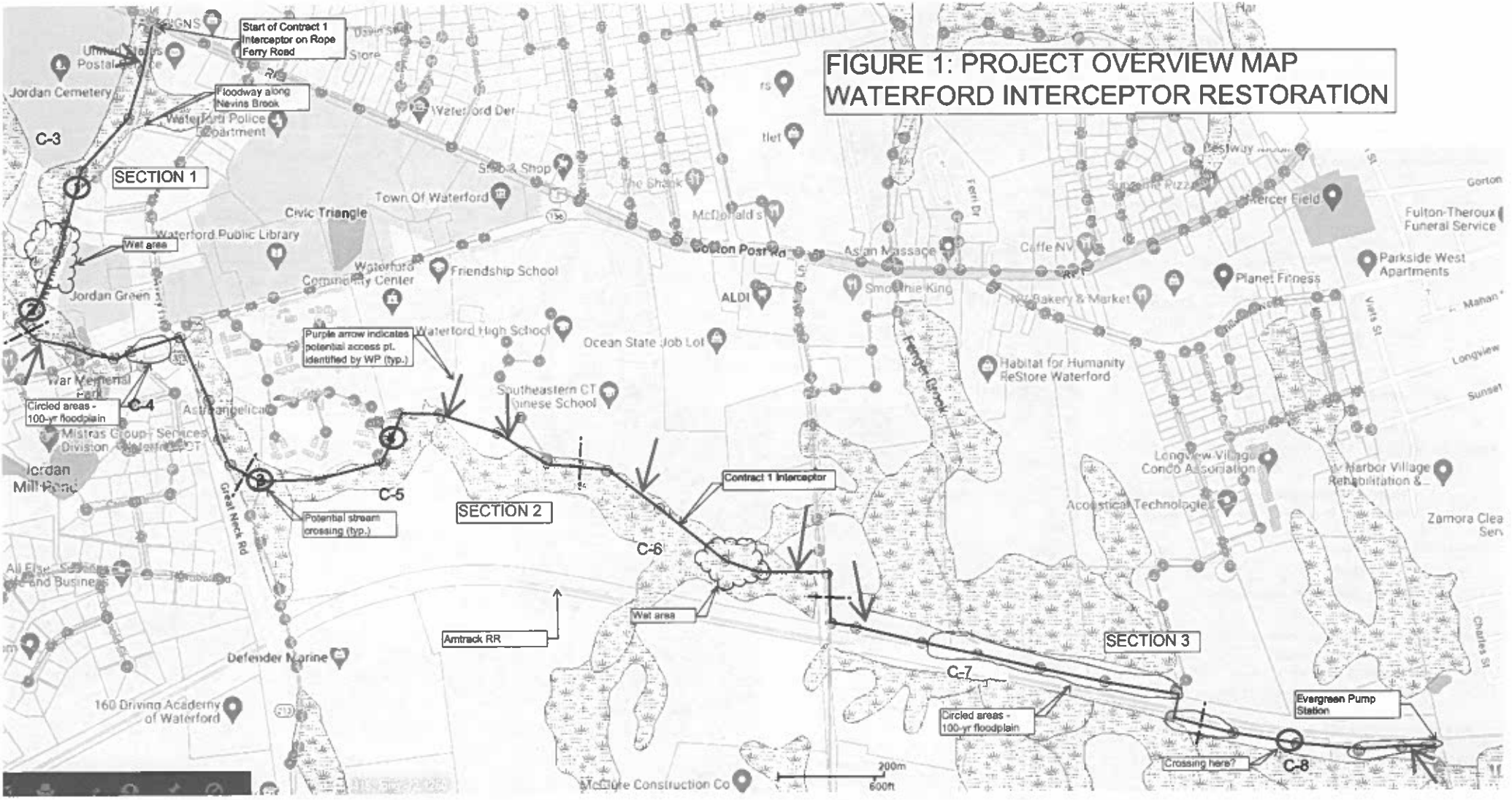
- *Potential* coverage under the Waterford IWP per that permit's conditions; however, *Waterford CC should be consulted* regarding whether grubbing is considered temporary.
- Corps CT GP#6 PCN coverage, including all applicable permit conditions.
- CTDEEP 401 WQC eligibility concurrence (application to CTDEEP).

Scenario 4:
For **permanent** wetlands impacts >0.5 acre for permanent access roads, also covered would be temporary impacts for grubbing and/or stream crossing work, a field delineation would be required and the following would be applicable:

- Coverage under a new Waterford IWP to be obtained.
- Coverage under a Waterford Floodplain Permit with floodplain compensatory storage required for any fill within the 100-year floodplain, and no encroachment or fill in the floodway.
- Corps Individual Permit coverage, including all applicable permit conditions and likely payment of in-lieu fees.
- CTDEEP Individual 401 WQC (application to CTDEEP).

Attachments:

Figure 1: Project Overview Map
Figure 2: FEMA Map – Section 1
Figure 3: FEMA Map – Section 3
A Memorandum from WP
B ACE CT GP #6 Excerpt


FIGURE 1: PROJECT OVERVIEW MAP
WATERFORD INTERCEPTOR RESTORATION
Start of Contract 1 Interceptor on Rope Ferry Road
Floodway along Nevins Brook
C-3
SECTION 1
Wet area
Purple arrow indicates potential access pt. identified by WP (typ.)
Circled areas - 100-yr floodplain
C-4
C-5
Potential stream crossing (typ.)
SECTION 2
Contract 1 Interceptor
C-6
Wet area
Amtrack RR
SECTION 3
C-7
Circled areas - 100-yr floodplain
Evergreen Pump Station
Crossing here?
C-8
200m
600ft
Jordan Cemetery
Waterford Police Department
Civic Triangle
Town Of Waterford
Waterford Public Library
Jordan Green
Waterford Community Center
Friendship School
Waterford High School
Ocean State Job Lot
ALDI
Cotton Post Rd
Asian Massage
Smoothie King
Planet Fitness
Parkside West Apartments
Habitat for Humanity ReStore Waterford
Fenger Brook
Great Neck Rd
Defender Marine
160 Driving Academy of Waterford
McClure Construction Co
Mercer Field
Fulton-Theroux Funeral Service
Longview Village Condo Association
Harbor Village Rehabilitation &...
Acoustical Technologies
Zamora Clea Ser
Charles St
Longview
Sunset

National Flood Hazard Layer FIRMette

FEMA

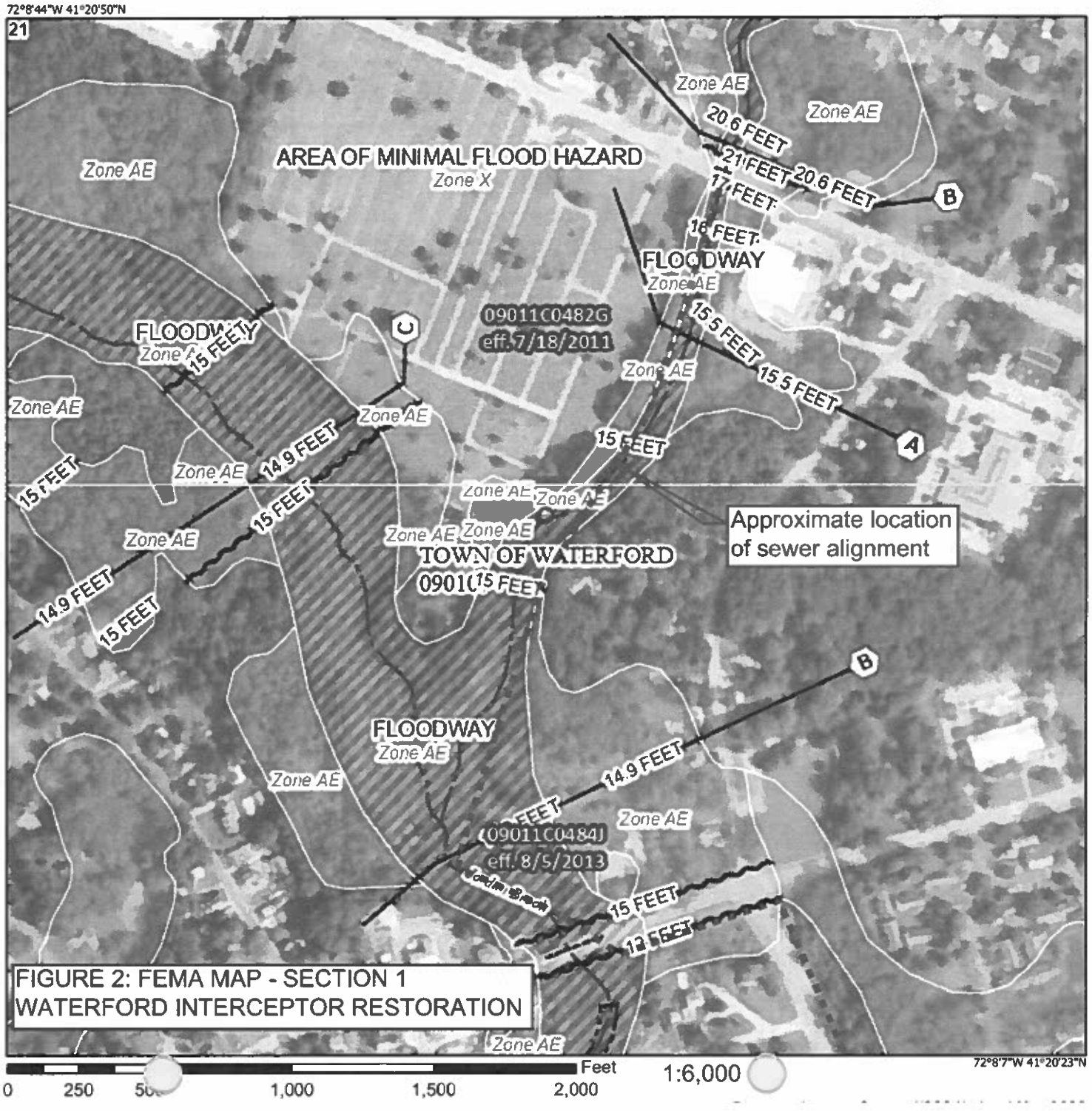


FIGURE 2: FEMA MAP - SECTION 1
WATERFORD INTERCEPTOR RESTORATION

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile Zone
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

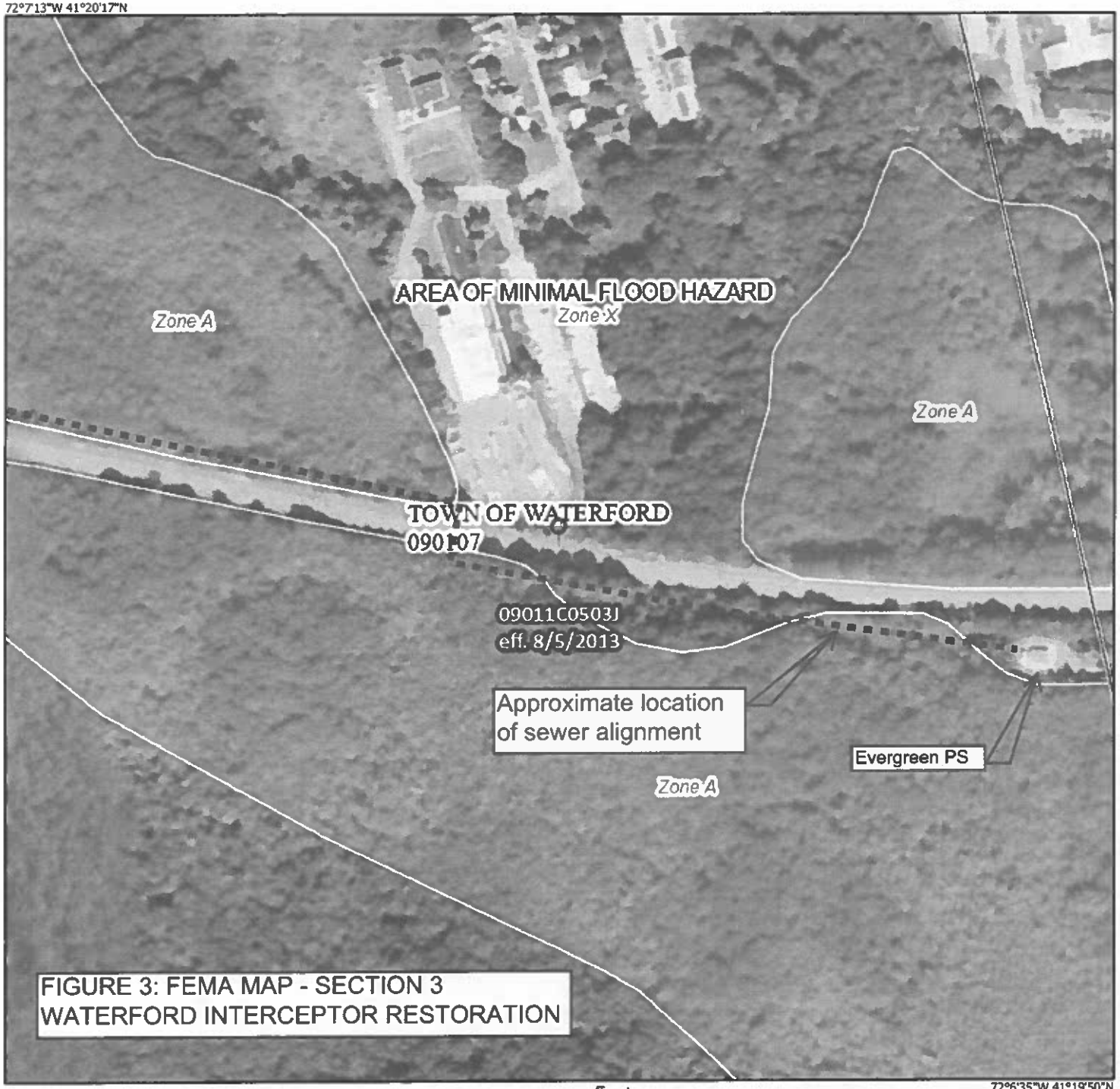
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/9/2024 at 1:51 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

72°7'13"W 41°20'17"N



72°6'35"W 41°19'50"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

FIGURE 3: FEMA MAP - SECTION 3
WATERFORD INTERCEPTOR RESTORATION

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/9/2024 at 1:54 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

ATTACHMENT A: MEMO FROM WRIGHT-PIERCE

Memorandum

Date: **2/14/24**

Project No.: **21580**

To: **Julie Bjorkman - JKB Consulting**

From: **Barry Parfitt - Wright-Pierce**

Subject: **Waterford Contract 1 - Sanitary Sewer Easement Improvements**

	Section 1 Boston Post Rd - Rope Ferry Rd	Section 2 Rope Ferry Rd - Miner Ln	Section 3 Miner Ln - Pump Station	Total
Total Easement Clearing Area (sf) [1]	48,780	83,880	76,160	**208,820**
Clearing Area in Wetlands (sf) [2]	45,700	79,560	42,220	**167,480**
Temporary Stream Crossings	2	2	0	**4**
Total Area of Stream Crossings (sf)	920	1,098	0	**2,018**
Temporary Access Matting (ft) [3]	2,285	3,978	2,111	**8,374**
Wetland Disturbance - Grubbing (sf) [4]	2,156	7,644	784	**10,584**
Additional Disturbance - Grubbing (sf) [5]	0	0	2,254	**2,254**

Notes

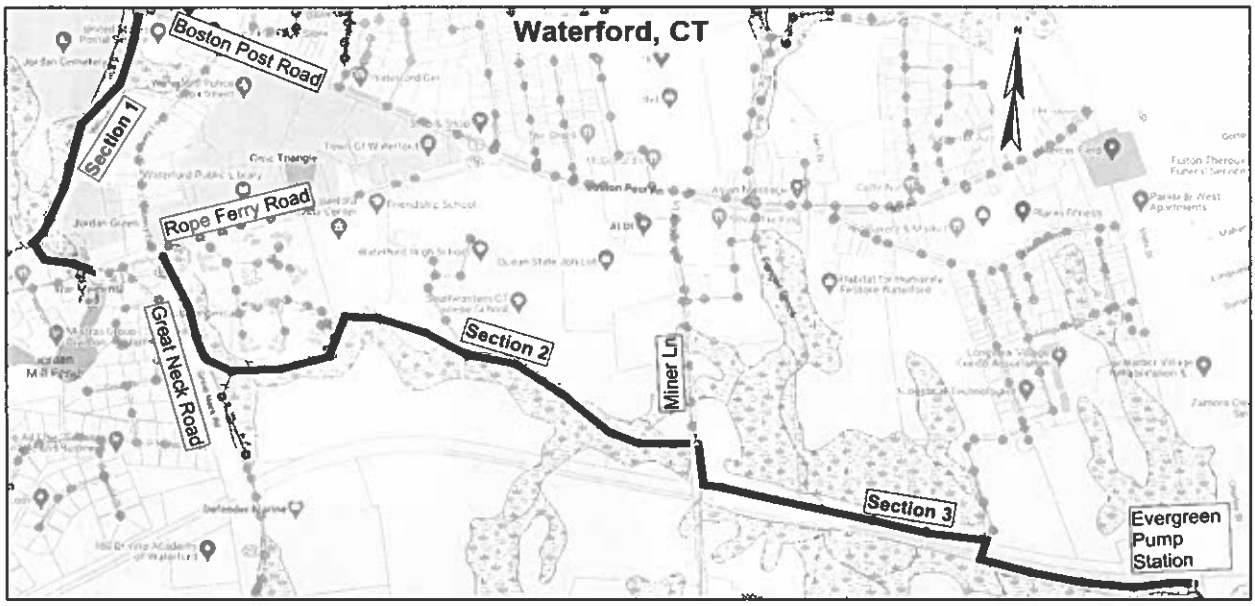
1 Easement Clearing Area based on 20-ft width and excludes existing roadways and open areas.

2 Wetlands have not been delineated. Area estimated based on 20-ft easement width, Town GIS, National Wetland Inventory, and record documents.

3 It is estimated that temporary matting will be placed along the entire 2.3 mile length of the easement length that lies within wetlands.

4 Wetland disturbance due to removal of tree stumps. Only trees greater than 12" in diameter were surveyed. Therefore, the area of disturbance is estimated to be the number of trees greater than 12" in diameter multiplied by an average area of 6' by 6' per tree, multiplied by 2 to account for trees less than 12" in diameter not shown on the survey.

5 Area of grubbing outside of wetlands using the same assumptions as in Note 4.



property is not held by the same owner, USACE may require a letter of no objection from the abutter(s) or require an appropriate buffer if one is needed.		• Boat ramps and marine railways in coastal waters and/or impacting tidal wetlands. • Boat ramps are located within 25 feet of riparian property line extensions unless the properties are owned by the same owner. • Permanent and temporary impacts ≤1/2 acre of waters and wetlands. • Permanent and temporary impacts ≤1000 SF in tidal SAS, other than vegetated shallows. • Impacts ≤100 SF in tidal vegetated shallows.

GP 6. UTILITIES INCLUDING LINES, OUTFALL AND INTAKE STRUCTURES AND APPURTENANT FEATURES (Sections 10 & 404; tidal & non-tidal waters of the U.S.):

Activities required for: (a) The construction, maintenance, relocation, repair, & removal of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for utility lines; (b) The construction, maintenance or expansion of utility line substation facilities associated with a power/utility line in waters of the U.S.*; and (c) The construction and maintenance of foundations for overhead utility line towers, poles, and anchors provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible. This GP authorizes the construction of access roads to facilitate construction of the above activities provided the activity, in combination with all other activities included in one single and complete project, does not cause the permanent loss of greater than 1/2 acre of waters of the U.S. Impacts resulting from mechanized pushing, dragging, temporary side-casting of excavated material or other similar activities that redeposit excavated soil material shall be figured into the area limit determination. Access roads used solely for the construction of the utility project (i.e., not used for maintenance) must be removed upon completion of the work. Utility line activities that are not regulated by USACE, but involve temporary fill within USACE jurisdiction, should be evaluated under GP 21.

	SELF-VERIFICATION (SV)	PRE-CONSTRUCTION NOTIFICATION (PCN
GP 6(A) INLAND An SVNF is required.	Not eligible for SV: • Outfalls. • New riprap beyond the existing previously authorized footprint. • Fill in riffle and pool complexes and non-tidal vegetated shallows with *Vallisneria americana* (also known as water celery, American eelgrass or tapegrass) or a vernal pool depression that is located within waters of the U.S. • Fill in waterways identified as habitat for Atlantic sturgeon and shortnose sturgeon including designated critical habitat, foraging, and over-wintering areas. (See GC 12 for a hyperlink to the NOAA ESA maps) • Unconfined work or silt producing activities in streams with diadromous fish between April 1 and June 30. (See Appendix H) Eligible for SV: • Cumulative permanent and temporary impacts of ≤5,000 SF of fill for each single and complete project (see GC 5) provided none of the individual single and complete linear project impact areas for the entire project exceed the threshold for the SV (≤5,000 SF).	Not eligible for PCN (Individual Permit required): • Permanent and temporary fill >1/2 acre. Eligible for PCN (includes work not eligible for SV): • Permanent and temporary fill ≤1/2 acre. • Utility activities including excavation and trench backfill with impact to riffle and pools or vegetated shallows. • New outfalls and/or intakes. • New riprap armoring for utility-related structures and scour protection. • Temporary utility access roads for construction (see GPs 18 and 19 for permanent maintenance access roads) • Streambed installation of utility lines or mains via open-cut trench excavation in flowing waters or dam and pump diversion. • Temporary fills necessary to conduct the utility work is allowed, provided the utility line activity is within USACE

GP 6A. INLAND (continued) Note: Construction mats of any area necessary to conduct activities do not count towards the impact thresholds and should be removed as soon as work is completed.	• Dry streambed installation of utility lines or mains with bypass diversion that conveys a seasonal minimum flow downstream. See also GC 21 for instream flow maintenance and aquatic connectivity requirements. • No permanent change to preconstruction contour or loss of streambed. • Backfill of the trench over the pipe and to the ground surface shall occur with native materials, to the extent practicable for industry standard, and may not facilitate wetland or waterway drainage below, or on, the ground surface. Trench plugs shall be installed, as needed, to prevent drainage of waters and wetlands. • Activities may not intentionally or unintentionally impound waters, including wetlands. • Intake structures such as dry hydrants, if located within a stream, intake must be equipped with an appropriately sized mesh screen to prevent entrainment and the intake velocity must not exceed 0.5 foot-per-second to prevent impingement of aquatic organisms. • Construction occurs during low (at or below the normal water elevation) or no-flow condition between July 1 and March 31 in streams with diadromous fish (see Appendix H) or work conducted behind a cofferdam at any time. The cofferdam shall be constructed of non-erodible materials (steel sheets, aqua barriers, sandbag, or geotextile liner; earthen cofferdams are not permissible). • Material resulting from trench excavation may be temporarily side cast into waters of the U.S. for no more than 30-days, provided the material is properly stabilized and is not placed in such a manner that it is dispersed by currents or other forces or alters flow and circulation patterns. • Temporary fill, including fill for construction access roads, must be removed upon completion of work and the area shall be completely restored to pre-construction elevation and condition, and re-vegetated with native species as appropriate. • Pad/foundations are the minimum size necessary and are configured as a separate footing for each tower leg (rather than a larger single pad). • Impacts in waters or wetlands resulting from mechanized pushing or dragging, and temporary side cast of excavated material from trenches shall be figured into the <5,000 SF "single and complete" project category threshold.	jurisdiction and the cumulative impact of both permanent and temporary fill for each single and complete project (see **GC 6**) wetland and/or waterway crossing does not exceed the 1/2 acre "single and complete" project threshold for PCN. • Material resulting from trench excavation may be temporarily side cast into waters of the U.S. for no more than three months, provided the material is properly stabilized and not placed in such a manner that it is dispersed by currents or other forces or alters flow and circulation patterns. • Temporary fill, including fill for construction access roads, must be removed upon completion of work and the area shall be completely restored to pre-construction elevation and condition, and re-vegetated with native species as appropriate. • Pad/foundations are the minimum size necessary and is configured as a separate footing for each tower leg (rather than a larger single pad). • Impacts in waters or wetlands resulting from mechanized pushing or dragging, and temporary side cast of excavated material from trenches shall be figured into the 1/2 acre "single and complete" project category threshold.
GP 6(B) COASTAL	These activities are not eligible for SV.	<u>Not eligible for PCN (Individual Permit required):</u> • Permanent and temporary fill >1/2 acre of waters and wetlands.

Appendix E – Conceptual Drawings



DRAWING C-3	WATERFORD UTILITY COMMISSION SEWER INTERCEPTOR CONTRACT 1 WATERFORD, CONNECTICUT SITE PLANS I	WRIGHT-PIERCE 860.343.8297 | www.wright-pierce.com			PROJECT NO. 15169 DESIGNED CAD CHKD CAD CHECKED DATE APPROVED DATE SUBMISSION	NO	REVISIONS	APP'D	DATE

WATERFORD UTILITY COMMISSION
SEWER INTERCEPTOR
CONTRACT 1
WATERFORD, CONNECTICUT

SITE PLANS II

WRIGHT-PIERCE
860.343.8297 | www.wright-pierce.com

DRAWING C-1

Drawing C-5	WATERFORD UTILITY COMMISSION SEWER INTERCEPTOR CONTRACT 1 WATERFORD, CONNECTICUT SITE PLANS III	WRIGHT-PIERCE 860.343.8297 | www.wright-pierce.com 169 MAIN STREET 100 PLAZA MIDDLESEX MIDDLETOWN, CT 06457			PROJECT NO: 15160 DESIGNED CAD COORD CAD CHECKED DATE APPROVED DATE SUBMISSION	NO	REVISIONS	APP'D	DATE



DRAWING C-6	WATERFORD UTILITY COMMISSION SEWER INTERCEPTOR CONTRACT 1 WATERFORD, CONNECTICUT SITE PLANS IV	WRIGHT-PIERCE 860.343.8297 | www.wright-pierce.com	PROJECT NO: 21488 DESIGNED CAD CHECKED CAD CHECKED DATE APPROVED DATE SUBMISSION	NO	REVISIONS	APP'D	DATE

DRAWING C-7	WATERFORD UTILITY COMMISSION SEWER INTERCEPTOR CONTRACT 1 WATERFORD, CONNECTICUT SITE PLANS V	WRIGHT-PIERCE 860.343.8297 | www.wright-pierce.com 104 MAIN STREET 900 PLAZA MIDDLETOWN, CT 06457		PROJECT NO. 11560 DESIGNED CAD CHECKED CAD CHECKED DATE APPROVED DATE SUBMISSION	NO.	REVISIONS	APP'D / DATE



C-8

WATERFORD UTILITY COMMISSION
SEWER INTERCEPTOR
CONTRACT 1
WATERFORD, CONNECTICUT

SITE PLANS VI

WRIGHT-PIERCE
860.343.8297 | www.wright-pierce.com

NO	REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

Exhibit A to Master Services Agreement
Between Town of Waterford, CT and Wright-Pierce
For On-Call Civil Engineering and Surveyor Services
-Template for Task Authorizations-

Town of Waterford ("Owner") entered into a Master Services Agreement with Wright-Pierce ("Consultant" or "W-P") with an effective date of **May 10, 2023**. In accordance with that Master Services Agreement, the following Task Authorization is hereby approved and Consultant is authorized by Owner to proceed with the services as delineated below. This is Consultant's Task Authorization **No. 6 .**

Effective Date of this Task Authorization: 11/13/2024

W-P Project Name: *Final Design Services for Contract 1 Interceptor Easement Restoration*

W-P Project Number: *21580B*

W-P Project Manager: *Therlin Montgomery*

Owner's Project Manager: *Jill Stevens*

Fee Limit for this Task Authorization, if any: $32,800

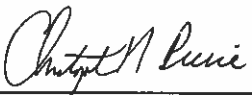
Payment Method: ***[e.g., Time & Expense per hourly billing rates; lump sum]*** *Time and Expense*

Consultant's Scope of Services: *Final Design Services per Wright-Pierce proposal dated September 9, 2024 (attached for reference).*

Approved for Owner By: _____

[insert signature and date of signature]

Type Name and Title of Owner's Approver: *Kimberly Allen, Director of Finance*

Approved for W-P By:  November 13, 2024

[insert signature and date of signature]

Type Name and Title of W-P Approver: *Christopher N. Pierce, Vice President*

WRIGHT-PIERCE
Engineering a Better Environment

169 Main Street, 700 Plaza Middlesex
Middletown, CT 06457
860.343.8297 | www.wright-pierce.com

September 9, 2024

Jill Stevens
Director of Utilities
Town of Waterford
1000 Hartford Turnpike
Waterford, CT 06385

SUBJECT: Proposal for Engineering Design Services
Contract 1 Interceptor Easement Restoration Project (Phase 1)

Dear Jill,

The Waterford Utility Commission (WUC) is planning to regain access through the cross-country easement for the "Contract 1" sewer interceptor that runs from Rope Ferry Road to the Evergreen Pump Station. The WUC desires to re-create access through the sewer easement so they may conduct routine inspection and maintenance, perform rehabilitation of the sewer infrastructure, and to ensure immediate access for unscheduled repairs or emergencies. Access would be provided by way of clearing plant and tree overgrowth.

Previously, Wright-Pierce was contracted by the WUC to prepare a Preliminary Design Report with drawings for this project. Based on the report and follow up discussions with WUC staff, the following project approach was agreed upon:

1) The project will be separated into 2 phases. The first phase will include the restoration of the southern section of the Interceptor from Great Neck Road to the end of the interceptor at Evergreen Pump Station For reference, these segments are identified in the Preliminary Design Report as Section 2 and Section 3. Phase two will occur in the future to include the northern section from Boston Post Road to Great Neck Road (reference segment section 1 in the Preliminary Design Report). Phase two will require sewer easements to be obtained to allow access to the interceptor during the restoration and for WUC staff in the future.
2) Clearing of brush and trees will not include any below grade disturbance (such as pulling stumps). This will prevent the need to apply for additional survey work, wetland delineation or apply for Army Corp permits. All work will be designed to comply with the guidelines of the Waterford Inland Wetlands & Watercourses Permit. #23-03.

The Waterford Utility Commission has requested that Wright-Pierce submit a proposal for final design engineering services for the first phase of the Contract 1 Interceptor Restoration Project. Our proposed scope of services and fee are summarized below for consideration.

Phase 1 Final Design Phase

The final design for Phase 1 will be based on the Preliminary Design Memorandum accepted by the WUC for the Waterford Contract 1 Sewer Interceptor Easement Restoration, dated June 10, 2024, and follow-up meetings with Waterford staff. Restoration work is limited to those segments identified as Section 2 and Section 3 in this memorandum. The scope of the design work will include:

- Cut trees and woody vegetation to a 20-ft width within the 30-ft sewer easement.
- Remove/grind stumps within the 20-ft cleared section to grade.
- Smooth grade and reseed.
- Clear trees and vegetation and entry points at the Waterford High School and Evergreen Pump Station.

During the Final Design phase, Wright-Pierce will:

1. Prepare and submit 90% design plans, specifications, and updated opinion of probable construction cost for review by the WUC. Bidding requirements, contract forms, and conditions of the contract will be based on the Town of Waterford General Bid Specifications. The design plans will include a final design plan of the Interceptor and easement with a background aerial image. The Interceptor profile will not be shown on the design plans but the contractor will have access to the profile record drawings for information only.
2. Attend a meeting with Waterford staff to review the 90% submittal and prepare meeting minutes.
3. Prepare and deliver 100% design plans, specifications, and updated opinion of probable construction cost estimate after receiving 90% design review comments from the WUC. Deliverables will include:
    a. Three full size sets of 100% Design Plans, Specifications and cost estimate
    b. One electronic (PDF) version of each
4. It is understood that the construction will be permitted under the existing Inland Wetlands General Permit #23-03. Therefore, we have not included any permitting assistance with state or federal agencies. Additionally, we have not included any additional survey or wetlands delineation.

<u>Bidding Phase</u>

1. Assist the WUC in advertising for bids. The WUC shall be responsible for advertisement costs and distribution of plans and specifications through their on-line web portal.
2. Prepare for and attend one pre-bid conference.
3. Respond to bidders' questions.
4. Prepare and distribute any required addenda to the bid documents.
5. Review all bids and prepare bid tabulation.
6. Review the qualifications of the apparent low bidder(s) and compliance with other contract requirements. Report on the results of the reviews and provide a Recommendation for Award to the WUC.
7. The length of the Bidding Phase is assumed to be approximately 30 days.

Proposed Fee

Wright-Pierce proposes to complete the above scope of work on a time-charge basis with a not to exceed fee of $32,800. A copy of our estimated engineering fee and associated man-hours to complete the work is also enclosed for your review.

If the proposed scope and fee are acceptable, we can prepare a Task Order under our on-call agreement. We are prepared to begin this work immediately upon WUC authorization.

Should you have any questions or desire additional information, please call.

Sincerely,

WRIGHT-PIERCE

Therlin Montgomery
Project Manager
therlin.montgomery@wright-pierce.com

ESTIMATED STAFF EFFORT (HOURS) AND COSTS
Town of Waterford
Contract 1 Interceptor Clearing Final Design (PHASE 1)

	TASK DESCRIPTIONS	Principal In Charge	Project Manager	QA/QC Manager	Lead Project Engineer	Civil Engineer	CAD Process and Civil	Admin. Assistant	TOTAL HOURS	NON-LABOR	SUBS COST	SUBS Mark-Up	LABOR	TOTAL
1	**Final Design**													
a	Kickoff/Setup project/workplan	1	4	1			0		6	$0	$0	$0	$1,351	$1,351
b	Drawings (4 sheets plus cover, general notes, details =8)		6	2	24	2	60	2	96	$200	$0	$0	$14,394	$14,594
c	Specifications		6	2	32	2		4	46	$100	$0	$0	$8,358	$8,458
d	Meetings and Minutes (1)		8	0	8	0	0	0	16	$0	$0	$0	$3,188	$3,188
	Subtotals	1	24	5	64	4	60	6	164	$300	$0	$0	$27,290	$27,590
2	**Bidding**													
a	Pre-Bid		2		6				8	$0	$0	$0	$1,504	$1,504
b	Addendums and questions		2		4	2	4	2	14	$0	$0	$0	$2,349	$2,349
c	Bid Tabulation, Review and Award Recommendation		2		4			2	8	$0	$0	$0	$1,393	$1,393
	Subtotals	0	6	0	14	2	4	4	30	$0	$0	$0	$5,246	$5,248
	TOTAL PROJECT HOURS	1	30	5	78	6	64	10	194	$300	$0	$0	$32,536	$32,836

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

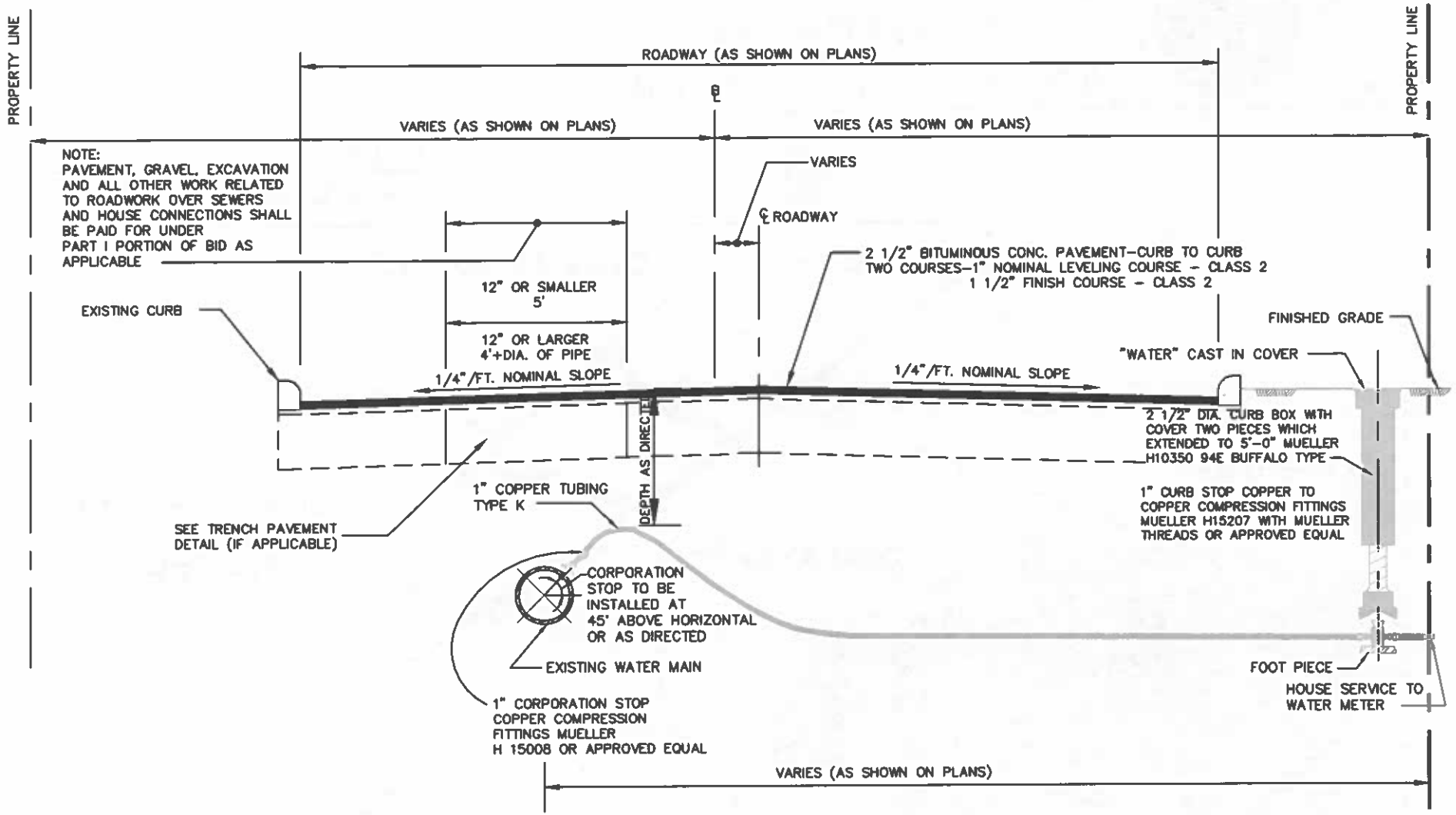
DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Plastic Water Service Replacement Project	**DEPARTMENT PRIORITY** 2

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The goal of this project is to replace all of the plastic water services prior to DPW paving the roads.There are approximately 7900 water services in Town, many of which are plastic and have exceeded their useful life resulting in unaccounted for water loss and degradation to the Town roads. Within the DPW FY26 list of roads scheduled to be paved there are nearly 280 water services that require evaluation, once determined which services are plastic the Utility Commission will replace them with copper service line. A majority of this work is being conducted by Utility Commission staff.
2	**PROJECT STATUS IF IN PROGRESS**
	To date we have replaced 162 service lines totaling 3,416LF of plastic water piping replaced with copper.
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	DPW Roads Paving Project
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	An average cost to replace these lines is $4,100 depending upon length and location.
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital	731,000					
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR	200,000	275,000	225,000	225,000	250,000	250,000
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**931,000**	**275,000**	**225,000**	**225,000**	**250,000**	**250,000**

City of New London
Invoice for Waterford Pipe Replacement Program

					Assumptions	$ 2,850.00	15	$ 183.33	$ 2.58		
Address	Number	Result	Length (ft)	Material	Date	Base Fee	Length over Base	Cost over Base	Copper up charge	Total Charge	
121	Shore Rd	Replaced WTFD	10	3/4 Copper						$ -	
130	Shore Rd	Replaced Veolia	20	1" Copper	6/20/2023	$ 2,850.00	5	$ 916.65	51.6	$ 3,818.25	WUC provided tubing
132A	Shore Rd	Replaced Veolia	21	3/4'Copper	6/20/2023	$ 2,850.00	6	$ 1,099.98		$ 3,949.98	
132	Shore Rd	Replaced Veolia	32	3/4 Copper	6/19/2023	$ 2,850.00	17	$ 3,116.61		$ 5,966.61	
161	Shore Rd	Confirmed Existing Copper								$ -	
165	Shore Rd	Confirmed Existing Copper								$ -	
169	Shore Rd	Replaced Veolia	24	3/4 Copper	6/16/2023	$ 2,850.00	9	$ 1,649.97		$ 4,499.97	
173	Shore Rd	Cut off at tap	32				17	$ 3,116.61		$ 3,116.61	
179	Shore Rd	Replaced Veolia	32	3/4 Copper	6/14/2023	$ 2,850.00	17	$ 3,116.61		$ 5,966.61	
181	Shore Rd	Replaced WTFD								$ -	
184	Shore Rd	Confirmed Existing Copper								$ -	
191	Shore Rd	Confirmed Existing Copper								$ -	
193	Shore Rd	Confirmed Existing Copper								$ -	
194	Shore Rd	Confirmed Existing Copper								$ -	
195	Shore Rd	Confirmed Existing Copper								$ -	
196	Shore Rd	Confirmed Existing Copper								$ -	
198	Shore Rd	Replaced Veolia	22	3/4 Copper	6/6/2023	$ 2,850.00	7	$ 1,283.31		$ 4,133.31	
200	Shore Rd	Replaced Veolia	20	3/4 Copper	6/12/2023	$ 2,850.00	5	$ 916.65		$ 3,766.65	
200 F	Shore Rd	Replaced Veolia	18	3/4 Copper	6/13/2023	$ 2,850.00	3	$ 549.99		$ 3,399.99	
201	Shore Rd	Replaced Veolia	19	1" Copper		$ 2,850.00	4	$ 733.32	49.02	$ 3,632.34	
204 R	Shore Rd	Confirmed Existing Copper								$ -	
205	Shore Rd	Replaced Veolia	23	3/4 Copper	6/8/2023	$ 2,850.00	8	$ 1,466.64		$ 4,316.64	
206	Shore Rd	Confirmed Existing Copper								$ -	
208	Shore Rd	Replaced WTFD								$ -	
209	Shore Rd	Replaced Veolia	30	3/4 Copper	6/9/2023	$ 2,850.00	15	$ 2,749.95		$ 5,599.95	
211	Shore Rd	Replaced Veolia	35	1" Copper	6/12/2023	$ 2,850.00	20	$ 3,666.60	90.3	$ 6,606.90	
212	Shore Rd	Replaced Veolia	15	3/4 Copper	6/5/2023	$ 2,850.00	0			$ 2,850.00	
212 R	Shore Rd	Cut off at tap								$ -	
213	Shore Rd	Replaced Veolia	27	3/4 Copper	6/1/23 ?	$ 2,850.00	12	$ 2,199.96		$ 5,049.96	
214	Shore Rd	Replaced WTFD								$ -	
218	Shore Rd	Replaced WTFD								$ -	
219	Shore Rd	Replaced Veolia	20	3/4 Copper	5/31/2023	$ 2,850.00	5	$ 916.65		$ 3,766.65	
220	Shore Rd	Replaced WTFD								$ -	
222	Shore Rd	Replaced WTFD								$ -	
224	Shore Rd	Replaced Veolia	18	3/4 Copper	5/23/2023	$ 2,850.00	3	$ 549.99		$ 3,399.99	
226	Shore Rd	Replaced Veolia	17	3/4 Copper	5/22/2023	$ 2,850.00	2	$ 366.66		$ 3,216.66	
228	Shore Rd	Replaced Veolia	30	3/4 Copper	5/24/2023	$ 2,850.00	15	$ 2,749.95		$ 5,599.95	
229	Shore Rd	Replaced WTFD								$ -	
230	Shore Rd	Replaced WTFD								$ -	
233	Shore Rd	Replaced Veolia	22	3/4 Copper	5/25/2023	$ 2,850.00	7	$ 1,283.31		$ 4,133.31	
234	Shore Rd	Replaced WTFD									
239	Shore Rd	Replaced WTFD									
		Services Replaced	21					Total		$ 86,790.33	
								Cost/ Service		$ 4,132.87	
								Days		18	
								Service / Day		1.2	



WATER SERVICE CONNECTION DETAIL IN TYPICAL ROADWAY CROSS SECTION

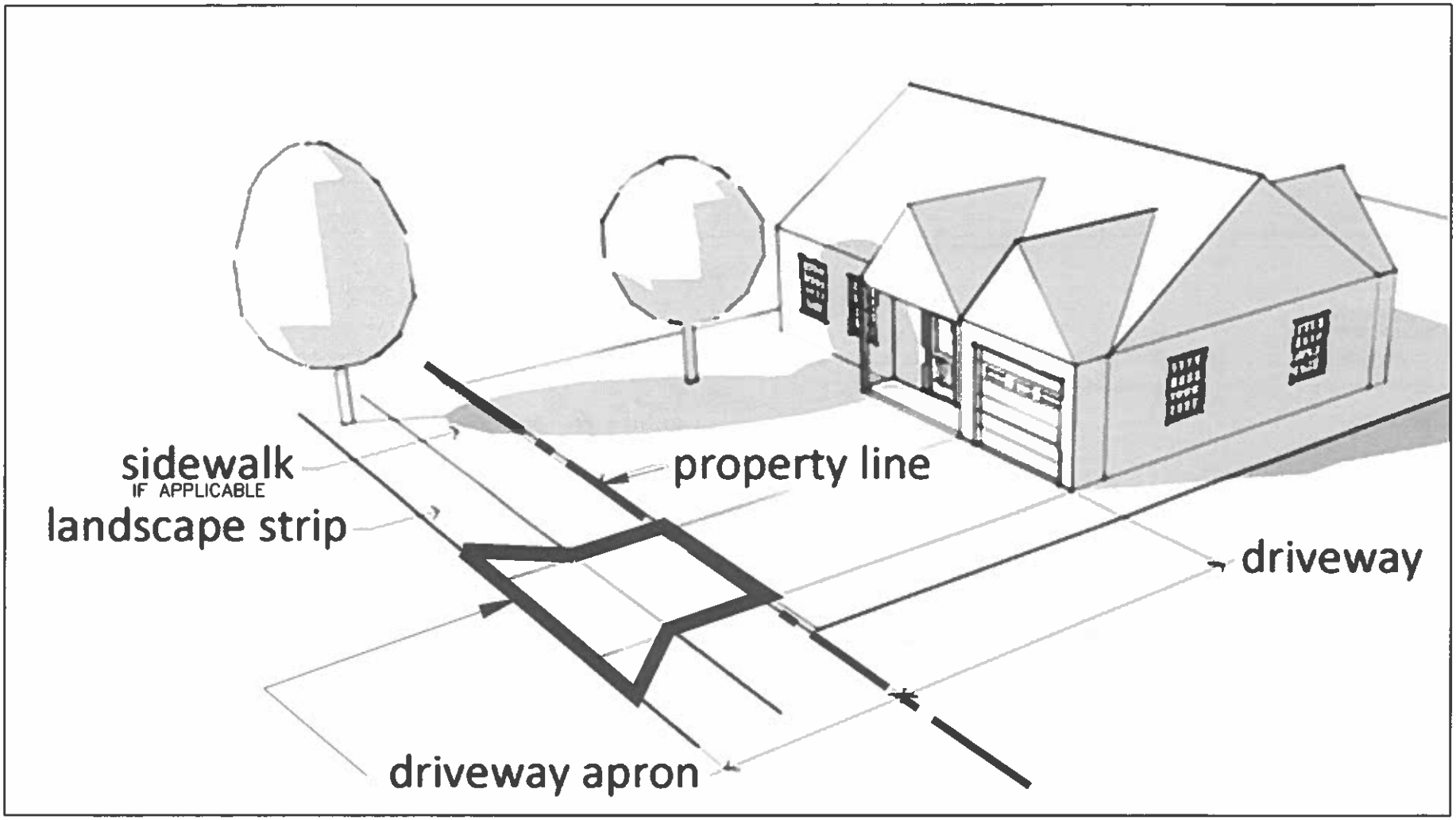
NOT TO SCALE

WATERFORD UTILITY COMMISSION

TOWN OF WATERFORD, CT

DETAIL:

DATE:
MAR 2023



TYPICAL DRIVEWAY APRON SCHEMATIC

NOT TO SCALE

WATERFORD UTILITY COMMISSION

TOWN OF WATERFORD, CT

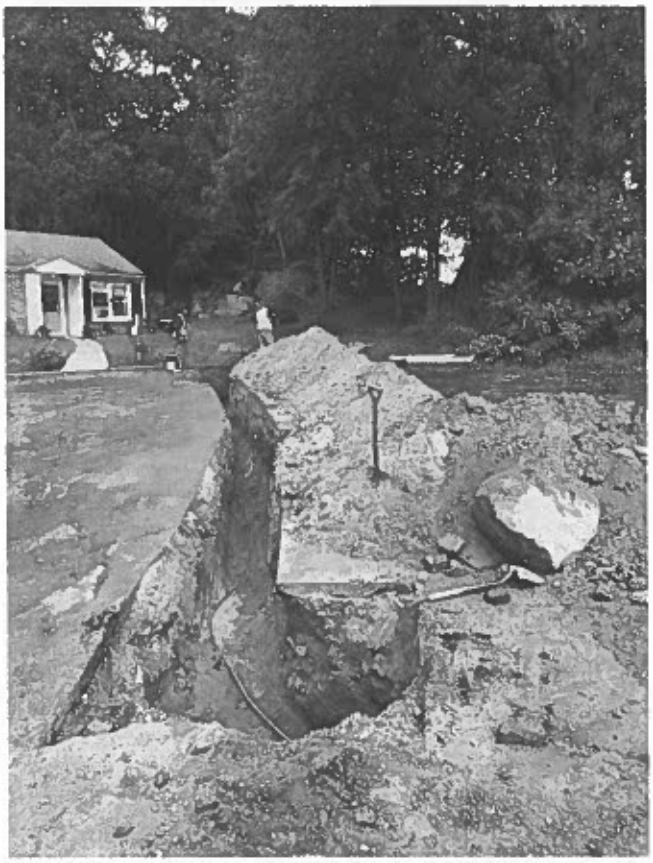
DETAIL:

DATE:

JU 2023



1 Plastic Water Service prior to replacement



2 Plastic Water Service Replaced with Copper Line

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Rt 85 Wastewater Pump Station Power Conversion	**DEPARTMENT PRIORITY** 3

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	This station's electric power and stand by power is provided by the Crystal Mall. It is the intent of the Commission to be responsible for the commercial and standby power to this pumping station in order to assure reliable service from the electrical components and provide proper maintenance of the emergency standby power source and have the electrical capacity to provide for potential upgrades.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	The Wastewater Enterprise fund would be impacted by acquiring the electricity charges and maintenance of a new generator
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	A previous costs evaluation is attached. The estimated costs represented was derived from utilizing the Construction Costs Index
7	**COST/FUNDING SOURCE**

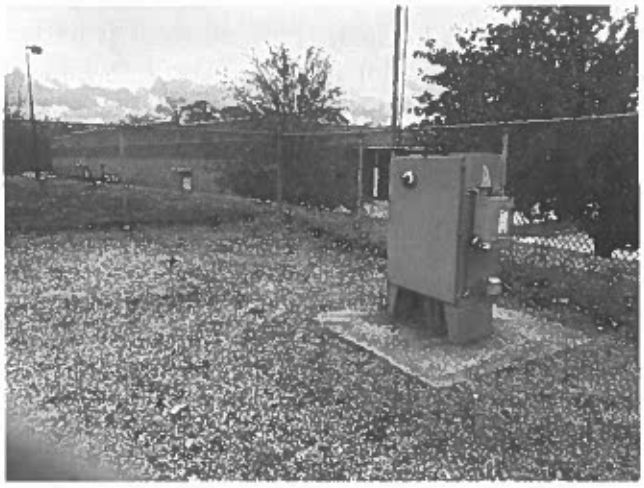
	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital		508,690	508,690			
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**508,690**	**508,690**	**0**	**0**	**0**



Route 85 Wastewater Pump Station



Route 85 Wastewater Pumping Station Manway



Route 85 Wastewater Pump Station power supply cabinet from Crystal Mall to the Station

Wright-Pierce

MEMORANDUM

TO:	Neftali Soto, P.E., Jim Bartelli Waterford Utility Commission	**DATE:**	November 12, 2007
FROM:	Chris Pierce	**PROJECT No.:**	10232Q
SUBJECT:	Crystal Mall Pump Station Improvements		

At the request of the Waterford Utility Commission, Wright-Pierce developed a preliminary project cost for improvements to the Crystal Mall Pump Station. Based on information provided by WUC staff, a proposed mall to be constructed along Route 85 would like to discharge to the Crystal Mall pump station. While the existing pump station has sufficient pumping capacity to handle the additional flow, another of other pump station operation and maintenance issues have been identified. These issues will be aggrevated by the additional flows from the proposed mall. The issues identified by the WUC staff include:

- The existing station receives normal power from the Crystal Mall. No separate service or meter is provided at the pump station.
- The existing station receives emergency power from the Crystal Mall. The emergency generator is owned, operated and maintained by the Crystal Mall.
- The station has problems with grease accumulation in the wetwell. The connection of an additional retail facility with restaurants will likely increase the amount grease discharged to the station.
- The rags and debris that enter the wetwell pass through a manually-cleaned strainer basket. The strainer basket fills with debris quickly and then any additional debris overflows into the wetwell contributing to pump clogging problems. The debris seen is typical for a retail establishment pump station. The addition of more retail flows are expected to increase the amount of debris that reaches the pump station.

Wright-Pierce conducted a site visit to the station on October 22, 2007. A copy of the site visit summary memorandum is attached. Electrical one-line diagrams and a site plan were obtained. However, drawings of the pump station itself are not available at this time. Based on the available information and our site visit, Wright-Pierce has developed a preliminary cost estimate to design and construct improvements to the Crystal Mall Pump Station.

Alternatives

As described in the attached Electrical Evaluation Memorandum, two alternatives were considered for the Crystal Mall Pump Station. The scope of the improvements for each alternative is presented below. Additional information on the two alternatives is provided in the attached electrical evaluation.

Alternative No. 1

The following improvements are recommended as Alternative No. 1:

- New 277/480 volt 3 phase, 4 wire underground electrical service extension from possible SNET pole #163 on Route 85.
- New above grade electrical service equipment pedestal enclosure with the following new electrical equipment:
  - Kilowatt hour meter and meter socket.
  - Main circuit breaker and 277/480 volt, 3 phase, power distribution panel.
  - Automatic transfer switch.
  - Generator circuit breaker.
  - Manual transfer switch and receptacle for portable generator.
  - Small dry-type transformer and lighting panel with lights and receptacle connections.
  - Motor starters and controls for the in-line grinder and wetwell mixer.
  - Outdoor emergency generator with weatherprotective enclosure and integral fuel tank.
- New submersible mixer located on a slide rail system in the existing wetwell including a new above-grade OEM control panel provided by the mixer manufacturer.
- New inlet channel-mounted sewage grinder located in a new manhole on the inlet pipe to the wetwell. At this time, no drawings are available. It was assumed that a new 4'-0" diameter pre-cast concrete manhole would be installed on the existing pipe and that a channel-mounted sewage grinder with submersible motors and OEM control panel would be installed. The control panel would be provided by the manufacturer and installed above grade.

Alternative No. 2

- Same electrical equipment upgrades as for Alternative No. 1.
- Under this alternative the existing pump control panel, currently located in the below grade pump station, would be replaced in its entirety. The new control panel would be located above grade and would include VFD's for the pumps. These VFD's would be located outside of the pump control panel. A small slab on grade building would be provided for housing all electrical equipment including the incoming service equipment. This would be in lieu of the above grade electrical service equipment pedestal recommended in Alternative No. 1. The construction of the building could range from stick built to pre-cast concrete. This would house the following:
  - All incoming electrical service equipment as previously mentioned in Alternative No. 1 that would be normally housed within the electrical service equipment pedestal enclosure.

  - New PLC based control panel and VFD's.
  - New wet well level monitoring system equipment which would include submersible level transducer and back-up float switch control system.
  - Miscellaneous station equipment.
  - The emergency generator would still be provided as an outdoor unit in a weather-protective enclosure as previously recommended for Option 1.
- New submersible mixer located on a slide rail system in the existing wetwell including a new above-grade OEM control panel provided by the mixer manufacturer.
- New inlet channel-mounted sewage grinder located in a new manhole on the inlet pipe to the wetwell. At this time, no drawings are available. It was assumed that a new 4'-0" diameter pre-cast concrete manhole would be installed on the existing pipe and that a channel-mounted sewage grinder with submersible motors and OEM control panel would be installed. The control panel would be provided by the manufacturer and installed above grade.

Conceptual Design Costs

Planning-level project costs have been prepared for the recommended facilities and are presented in the attached tables for the two different alternatives. These planning-level costs were developed using standard cost estimating procedures consistent with industry standards utilizing concept layouts, unit cost information, and information from other recent projects, as necessary. Total project capital costs include an allowance of 48% of the estimated construction costs to account for unaccounted for items, inflation to the mid-point of construction, construction contingency (change orders), design and construction engineering services, materials testing, permitting, as well as financing, administrative and legal expenses. The project cost information presented herein is in current dollars and is based on ENR Index 8092 (November 2007). The total project capital cost is estimated to be $432,000 for Alternative No. 1 and $602,000 for Alternative No. 2.

It should be noted that many factors arise during final design (e.g. foundation conditions, owner selected features and amenities, code issues, etc.) that can not be definitively identified and estimated at this time. These factors are typically covered by the 40% allowance described above; however, this allowance may not be adequate for all circumstances.

ALTERNATIVE NO. 1

PRELIMINARY ASSESSMENT OF PROJECT COSTS

TOWN OF WATERFORD, CT
CRYSTAL MALL PUMP STATION IMPROVEMENTS - OPTION 1
W-P PROJECT NO. 10232Q
CONCEPTUAL DESIGN PHASE
NOVEMBER 2007 (ENR INDEX 8092)
PROJECT COST ESTIMATE

PROJECT COMPONENT		COST
CONSTRUCTION		$360,000
CONSTRUCTION CONTINGENCY	5.0%	$20,000
TECHNICAL SERVICES	15.0%	$50,000
MATERIALS TESTING		$1,500
ASBESTOS & LEAD PAINT ABATEMENT		$0
DIRECT EQUIPMENT PURCHASE		$0
LAND ACQUISITION/ EASEMENTS		$0
LEGAL/ ADMINISTRATIVE		$0
FINANCING	2.0%	$0
ENGINEER'S ESTIMATE OF PROJECT COST		$432,000

TOWN OF WATERFORD, CT
CRYSTAL MALL PUMP STATION IMPROVEMENTS - OPTION 1
W-P PROJECT NO. 10232Q
CONCEPTUAL DESIGN PHASE
NOVEMBER 2007 (ENR INDEX 8092)
CONSTRUCTION COST ESTIMATE

DESCRIPTION		ESTIMATED COST
CIVIL		
SITE WORK (Grinder Manhole Installation / Electrical)		$5,000
SITE PIPING		$0
ARCHITECTURAL		
PRE-CAST CONCRETE BUILDING		$0
PROCESS EQUIPMENT AND PIPING FINISHES		$0
STRUCTURAL		
GENERATOR CONCRETE PADS		$7,500
MISCELLANEOUS STRUCTURAL (Control Panel Supports)		$1,000
PROCESS		
DEMOLITION		$2,000
SUBMERSIBLE MIXER		$20,000
INFLUENT SEWAGE GRINDER		$35,000
HVAC/ PLUMBING		$0
INSTRUMENTATION		
INSTRUMENTATION - GENERAL		$0
SCADA SYSTEM HARDWARE/ SOFTWARE		$0
ELECTRICAL		
NEW ELECTRICAL SERVICE & EQUIPMENT		$80,000
RECONNECTION TO EXISTING PUMP STATION		$10,000
NEW 125 KW GENERATOR W/OUTDOOR ENCLOSURE		$70,000
MISC. ELECTRICAL REQUIREMENTS		$10,000
SPECIALS		
MOBILIZATIONS		$10,000
PROCESS BY-PASS PUMPING		$2,500
SHEETING		$0
PILES		$0
GROUNDWATER DEWATERING (OPEN)		$0
TEMPORARY SLUDGE THICKENING/ DEWATERING		$0
SITE SECURITY		$0
WINTER CONSTRUCTION		$0
SUBTOTAL, CONSTRUCTION		$83,000
GENERAL CONTRACTOR OH&P AND GENERAL CONDITIONS	20.0%	$17,000
SUBTOTAL, SUBCONTRACTORS		$170,000
GENERAL CONTRACTOR MARKUP	5.0%	$9,000
ELECTRICAL/ TELEPHONE ALLOWANCE		$10,000
UNIT PRICE ITEMS	0.0%	$0
SUBTOTAL, CONSTRUCTION COSTS		$289,000
PROJECT MULTIPLIER, DESIGN CONTINGENCY	1.20	
PROJECT MULTIPLIER, INFLATION TO MIDPT CONST.	1.05	
ENGINEERS ESTIMATE OF CONSTRUCTION COST		**$364,000**

ALTERNATIVE 2

PRELIMINARY ASSESSMENT OF PROJECT COSTS

TOWN OF WATERFORD, CT
CRYSTAL MALL PUMP STATION IMPROVEMENTS - OPTION 2
W-P PROJECT NO. 10232Q
CONCEPTUAL DESIGN PHASE
NOVEMBER 2007 (ENR INDEX 8092)
PROJECT COST ESTIMATE

PROJECT COMPONENT		COST
CONSTRUCTION		$510,000
CONSTRUCTION CONTINGENCY	5.0%	$30,000
TECHNICAL SERVICES	12.0%	$60,000
MATERIALS TESTING		$1,500
ASBESTOS & LEAD PAINT ABATEMENT		$0
DIRECT EQUIPMENT PURCHASE		$0
LAND ACQUISITION/ EASEMENTS		$0
LEGAL/ ADMINISTRATIVE		$0
FINANCING	2.0%	$0
ENGINEER'S ESTIMATE OF PROJECT COST		$602,000

TOWN OF WATERFORD, CT
CRYSTAL MALL PUMP STATION IMPROVEMENTS - OPTION 2
W-P PROJECT NO. 10232Q
CONCEPTUAL DESIGN PHASE
NOVEMBER 2007 (ENR INDEX 8092)
CONSTRUCTION COST ESTIMATE

DESCRIPTION		ESTIMATED COST
CIVIL		
SITE WORK (Grinder Manhole Installation / Electrical)		$10,000
SITE PIPING		$0
ARCHITECTURAL		
PRE-CAST CONCRETE BUILDING		$40,000
PROCESS EQUIPMENT AND PIPING FINISHES		$0
STRUCTURAL		
GENERATOR CONCRETE PADS		$7,500
MISCELLANEOUS STRUCTURAL (Control Panel Supports)		$1,000
PROCESS		
DEMOLITION		$2,000
SUBMERSIBLE MIXER		$20,000
INFLUENT SEWAGE GRINDER		$35,000
HVAC/ PLUMBING		$0
INSTRUMENTATION		
INSTRUMENTATION - GENERAL		$0
SCADA SYSTEM HARDWARE/ SOFTWARE		$0
ELECTRICAL		
NEW ELECTRICAL SERVICE & EQUIPMENT		$80,000
NEW 40 HP VARIABLE FREQUENCY DRIVES		$40,000
NEW PLC BASED PUMP CONTROL PANEL		$40,000
RECONNECTION AND RECONFIGURATION OF TELEMETRY PANEL		$5,000
NEW WETWELL LEVEL CONTROL SYSTEM		$10,000
CONNECTION TO EXISTING PUMP STATION		$10,000
NEW 60 KW GENERATOR W/OUTDOOR ENCLOSURE		$35,000
MISC. ELECTRICAL REQUIREMENTS		$10,000
SPECIALS		
MOBILIZATIONS		$10,000
PROCESS BY-PASS PUMPING		$2,500
SHEETING		$0
PILES		$0
GROUNDWATER DEWATERING (OPEN)		$0
TEMPORARY SLUDGE THICKENING/ DEWATERING		$0
SITE SECURITY		$0
WINTER CONSTRUCTION		$0
SUBTOTAL, CONSTRUCTION		$128,000
GENERAL CONTRACTOR OH&P AND GENERAL CONDITIONS	20.0%	$26,000
SUBTOTAL, SUBCONTRACTORS		$230,000
GENERAL CONTRACTOR MARKUP	5.0%	$12,000
ELECTRICAL/ TELEPHONE ALLOWANCE		$10,000
UNIT PRICE ITEMS	0.0%	$0
SUBTOTAL, CONSTRUCTION COSTS		$406,000
PROJECT MULTIPLIER, DESIGN CONTINGENCY	1.20	
PROJECT MULTIPLIER, INFLATION TO MIDPT CONST.	1.05	
ENGINEERS ESTIMATE OF CONSTRUCTION COST		**$512,000**

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Vauxhall Street Water Tank Rehabilitation	**DEPARTMENT PRIORITY** 4

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The Vauxhall Street Water tank, a 300,000 gallon elevated spheroid tank was put into service in 1973 and rehabilitated in 2003, it serves the high service area in Waterford together with the Fargo Road Tank. A recent condition assessment performed by USG Water identified several areas of concern related to the tank coating and structural condition, including a pinhole leak in the fill pipe. Just as the Fargo Road Tank required refurbishment to preserve the Town's significant investment in its infrastructure, the Vauxhall Tank refurbishment should be planned for over the next several years. This work would enable the tank to be enrolled in the Water Tank Asset Managment program to protect its investments.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
	Water Tank Asset Management program, if approved
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None. The tank is operated by the City of New London under the current Inter-local water agreement.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	State Revolving Funds may be available depending upon the project's ranking status
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	A cost estimate and condition assessment are attached.

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital		230,993	230,993	230,993		
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**230,993**	**230,993**	**230,993**	**0**	**0**

2024 Condition Assessment

TOWN OF WATERFORD, CT
VAUXHALL TANK
300000 Gallons Elevated



Inspection Date: May 2, 2024
Water System Consultant: Kevin Martel

USG WATER SOLUTIONS

PROJECT INTENT AND RESULTS

USG Water Solutions - Utility Service Co., Inc. conducted an inspection of the Water Storage Tank based on OSHA, AWWA and local requirements for Sanitary, Safety, Security, Coatings, and the overall condition of the Structure. A summary of the inspection results, including photographs and recommendations, outlining the urgency for any items we feel require addition attention to maintain and preserve the Structure are as follows:

Results SANITARY:

- ☐ Vent
- ■ Leaks, Holes, or Points of Intrusion
- ☐ Water Quality
- ☐ Overflow

Results SAFETY AND SECURITY:

- ☐ Access Hatches, Manways or Doors
- ■ Fences, Gates, Guards or Vandalism
- ■ Ladders, Platforms, Handrails or Stairs
- ☐ Lightning, Alarm Systems or Telecommunications

Results COATING:

- ☐ Exterior
- ☐ Water Chamber
- ☐ Dry Interior

Results STRUCTURE:

- ■ Roof
- ■ Shell
- ☐ Supporting Members
- ■ Appurtenances
- ■ Anchors and Foundation

During the inspection, the following scope of work was performed:

- Visual Inspection of the tank interior and exterior accessible without rigging, to include appurtenances.

Legend of Recommendations

Low Risk
- ■ = Next Inspection Recommended in 12 months
- ☐ = Maintenance or Renovation Work is Recommended to be in the **Planning Stage**

High Risk
- ■ = Maintenance or Renovation is Recommended for **Execution** at Earliest Opportunity

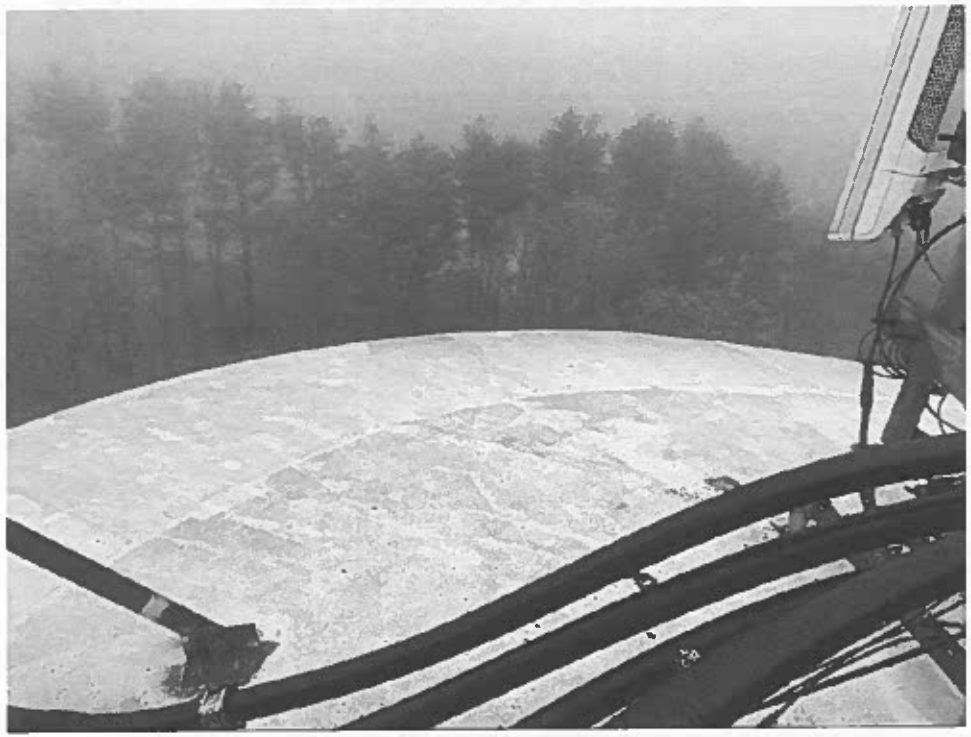
N/A
- ☐ = Not Applicable

SITE INFORMATION
GATES



- [x] SANITARY
- [x] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

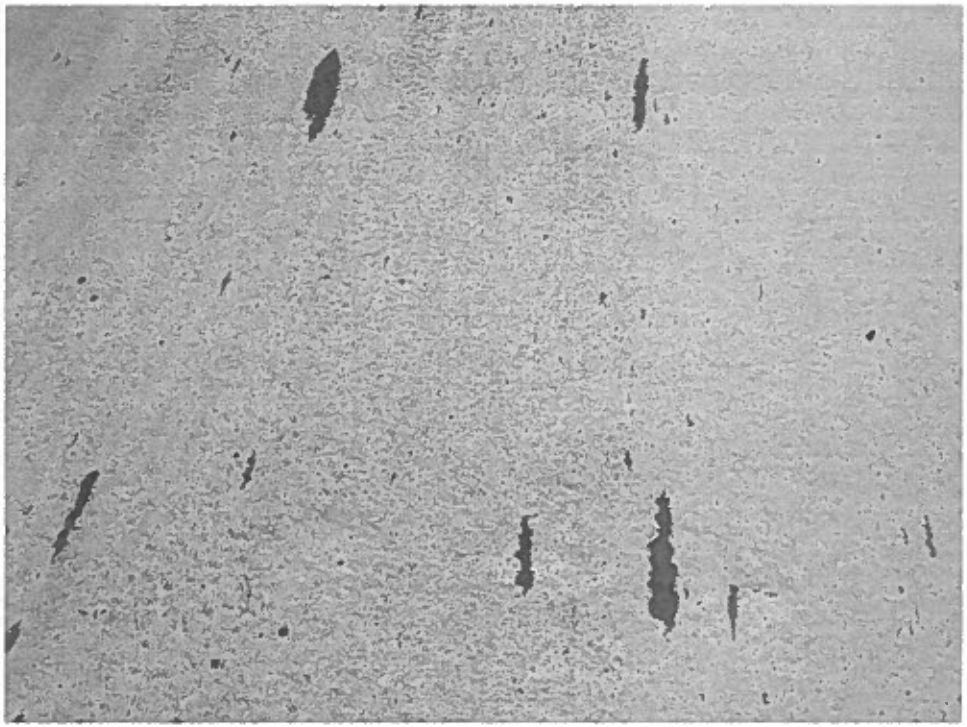
EXTERIOR ROOF

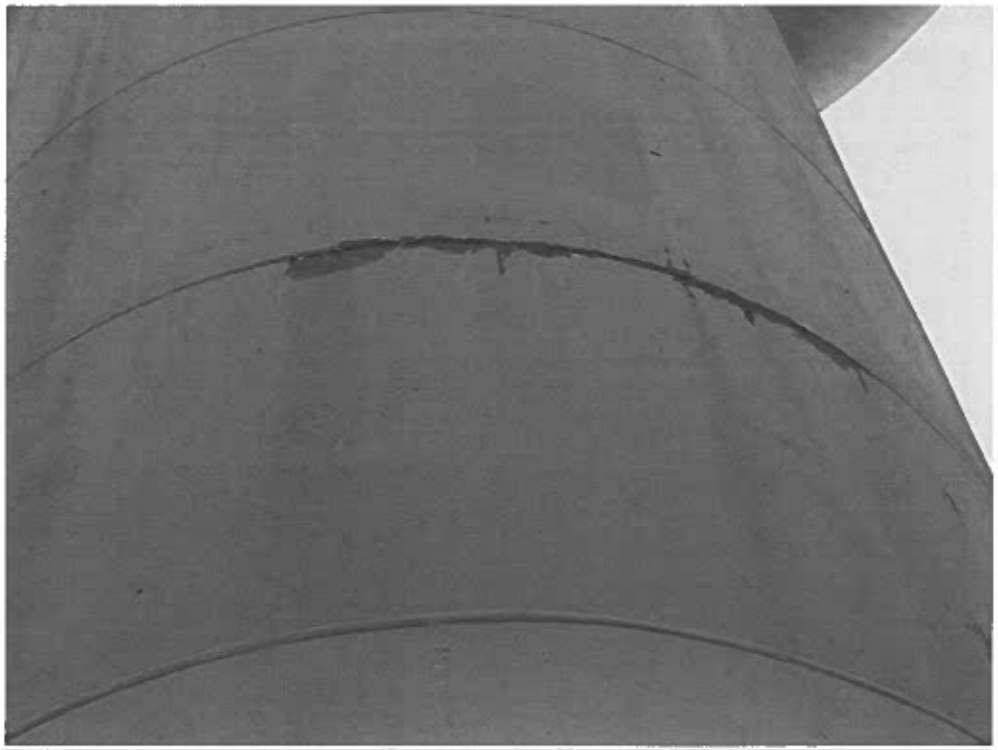




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- [ ] STRUCTURE

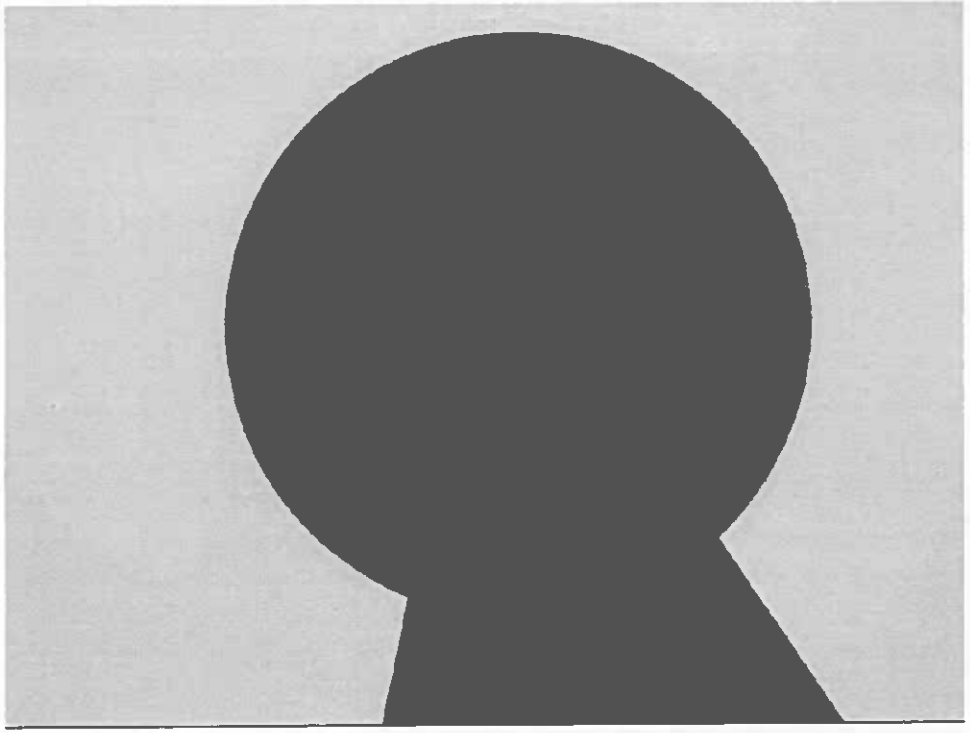
EXTERIOR SHELL





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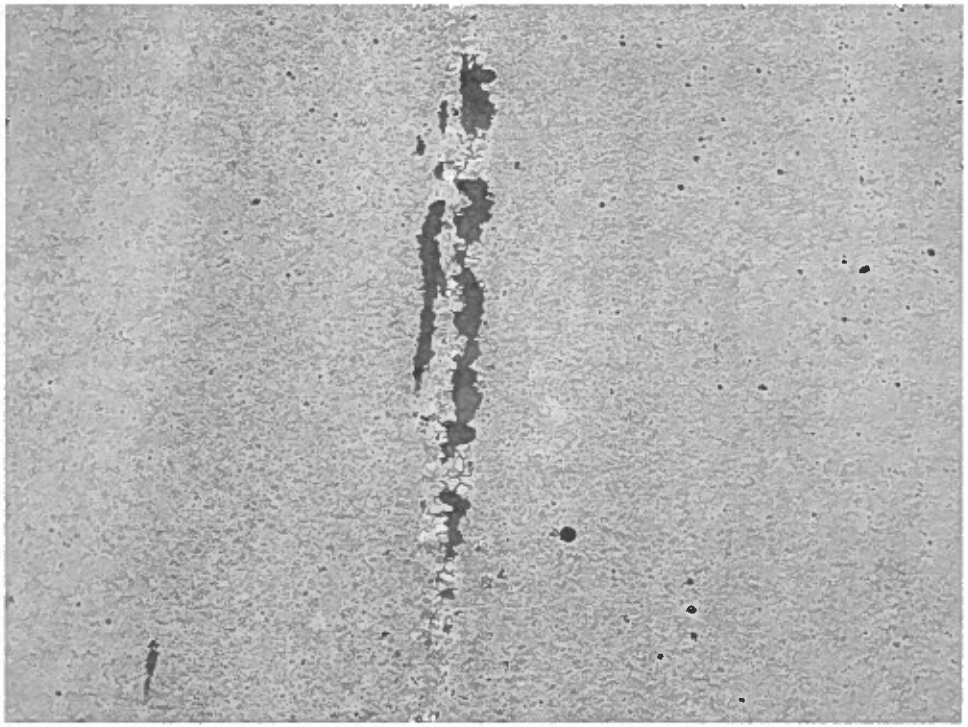
EXTERIOR BOWL AND RISER





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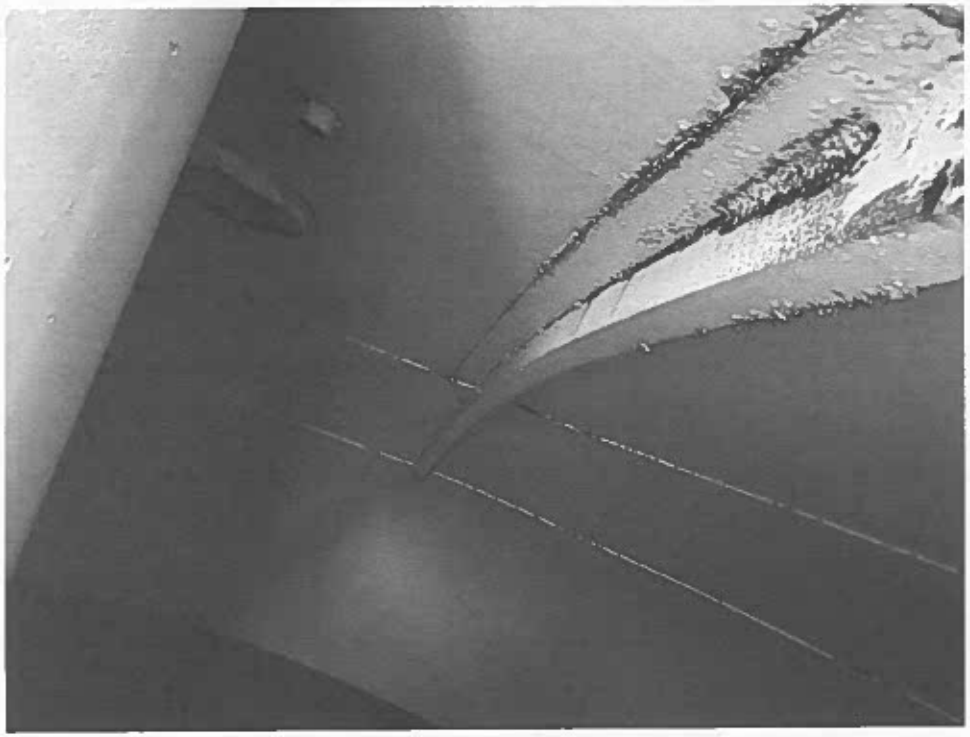
EXTERIOR LEGS/SUPPORT COLUMN
LEG AND SUPPORT COLUMN SURFACES

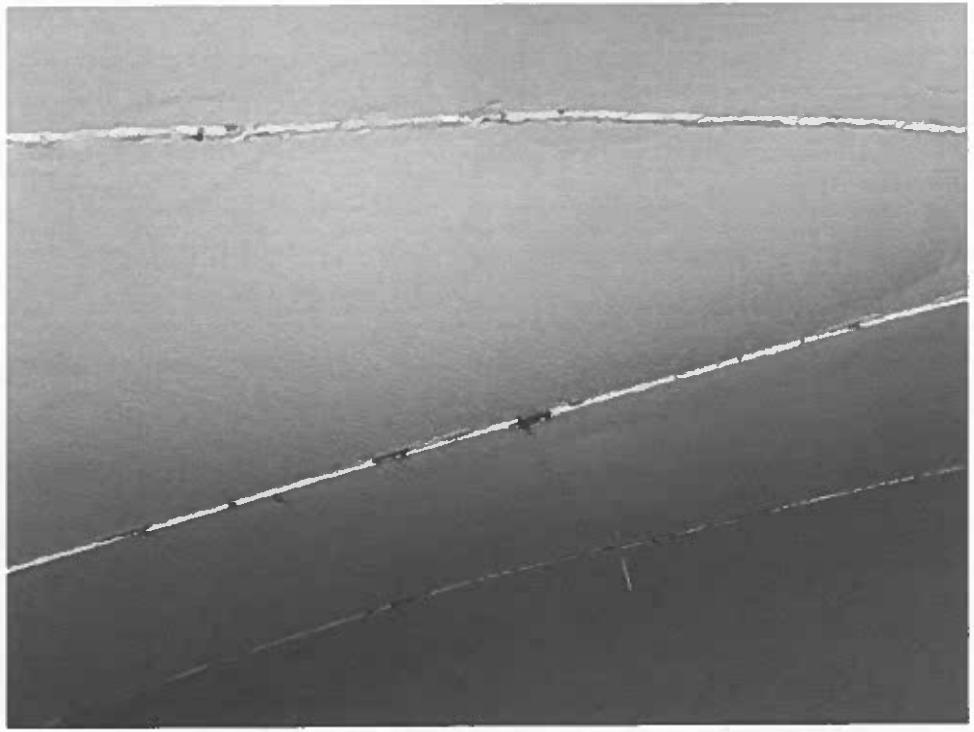




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- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

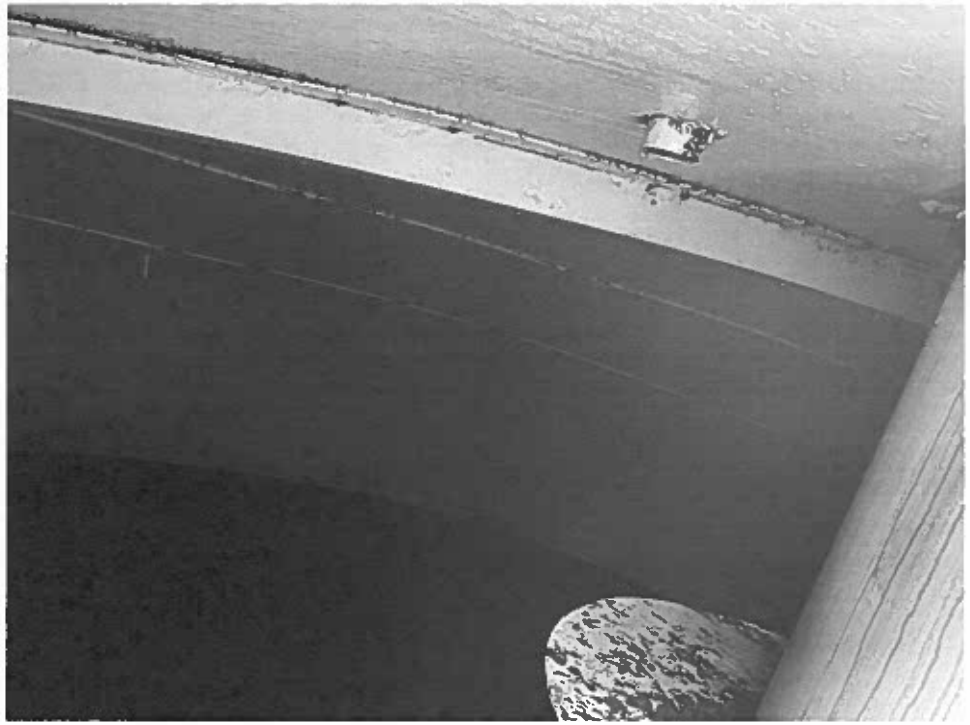
WATER CHAMBER ROOF AND RAFTERS

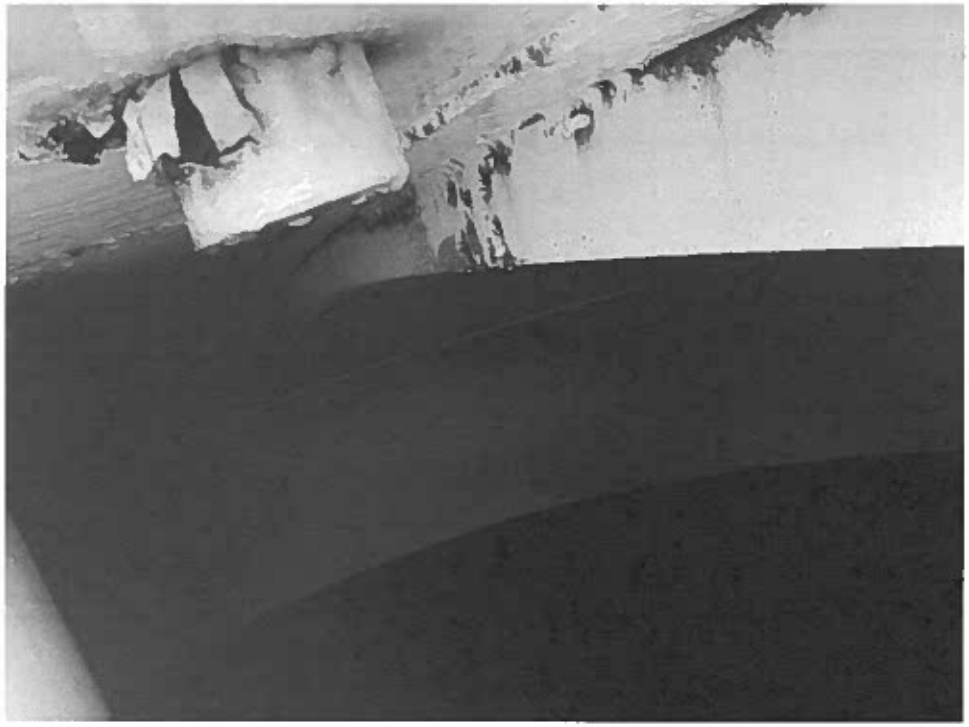




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- [x] COATINGS AND CORROSION
- [ ] STRUCTURE

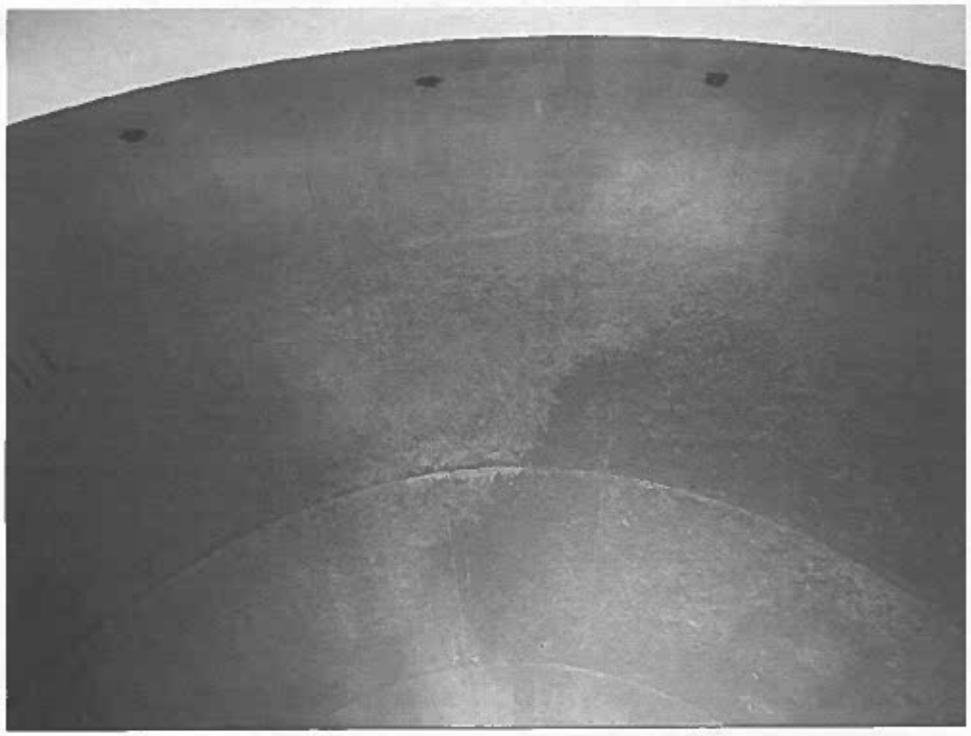
WATER CHAMBER





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- [x] COATINGS AND CORROSION
- [x] STRUCTURE

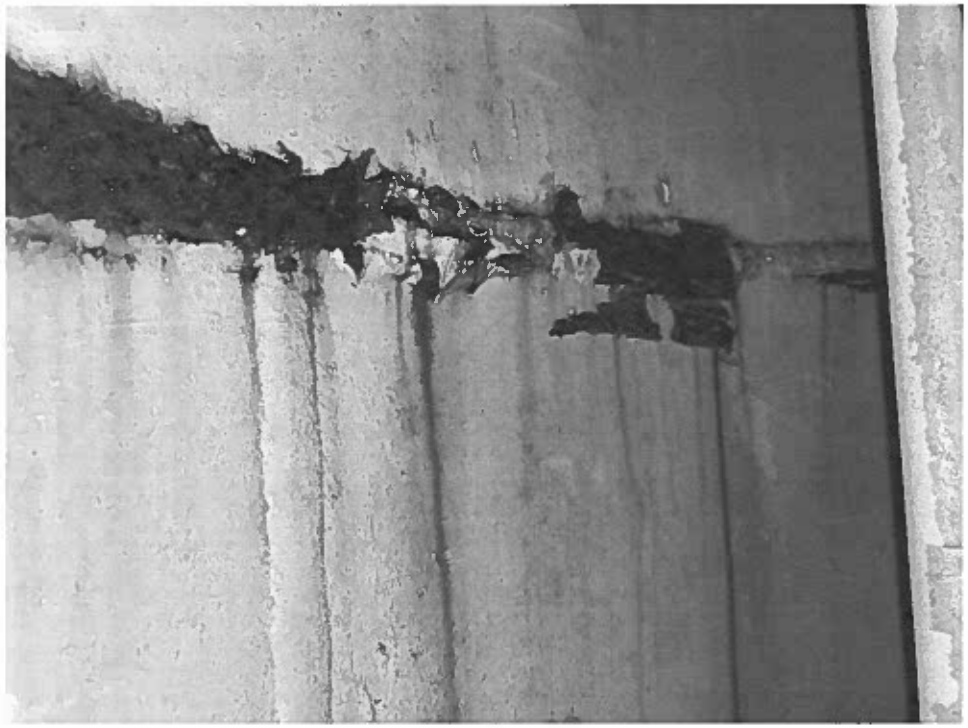
WATER CHAMBER SHELL/BOWL/FLOOR
FLOOR





- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [x] COATINGS AND CORROSION
- [ ] STRUCTURE

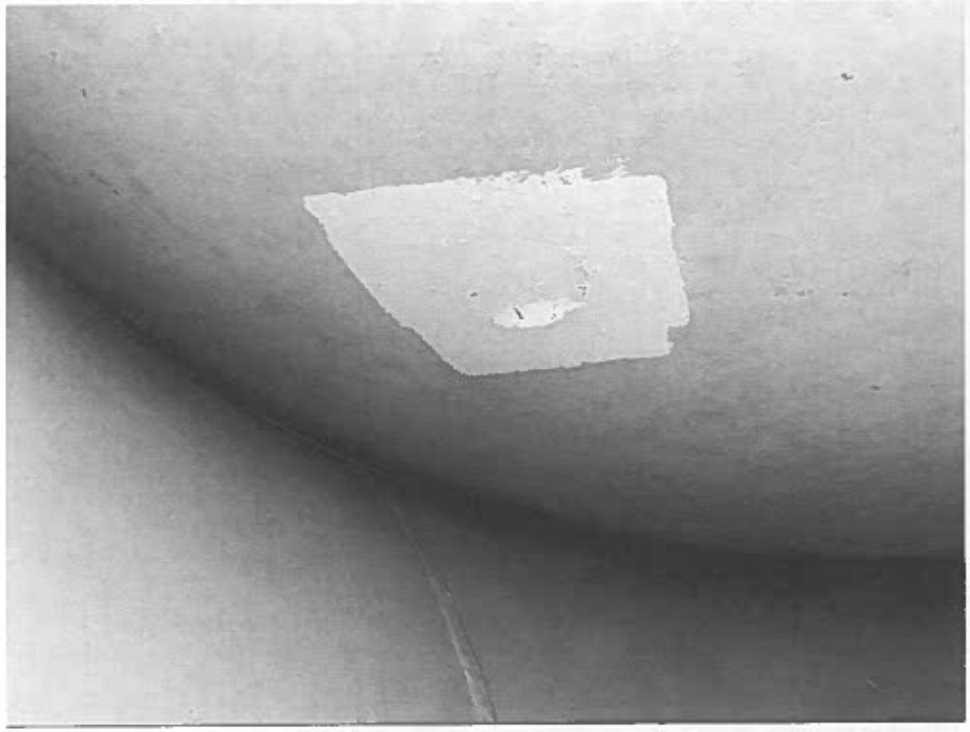
DRY INTERIOR ACCESS TUBE

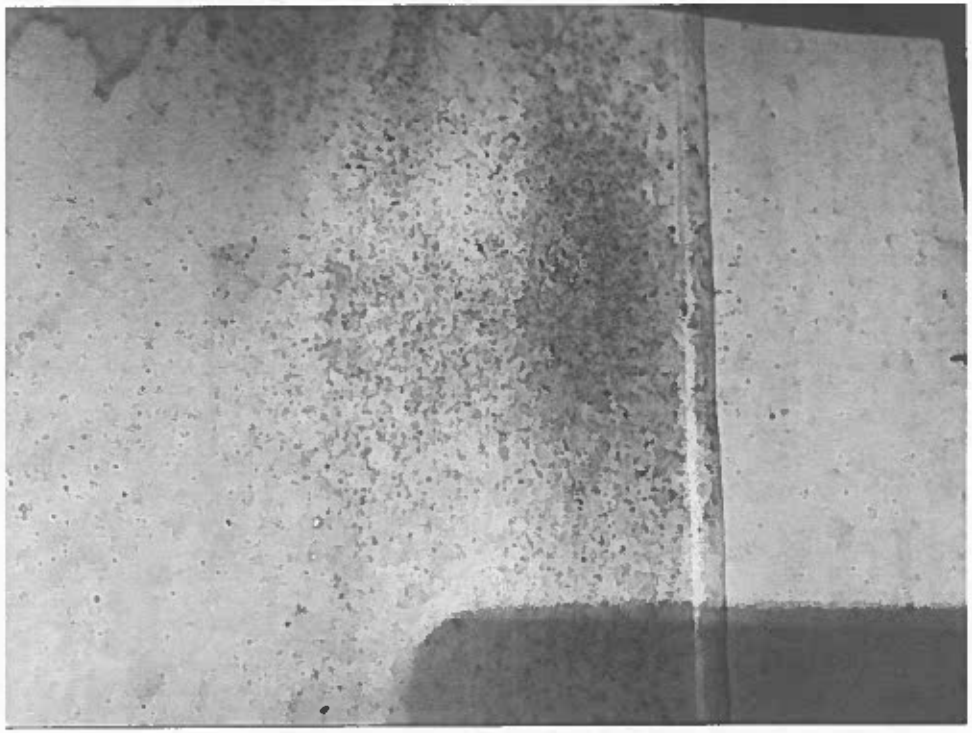




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- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

DRY INTERIOR BOWL

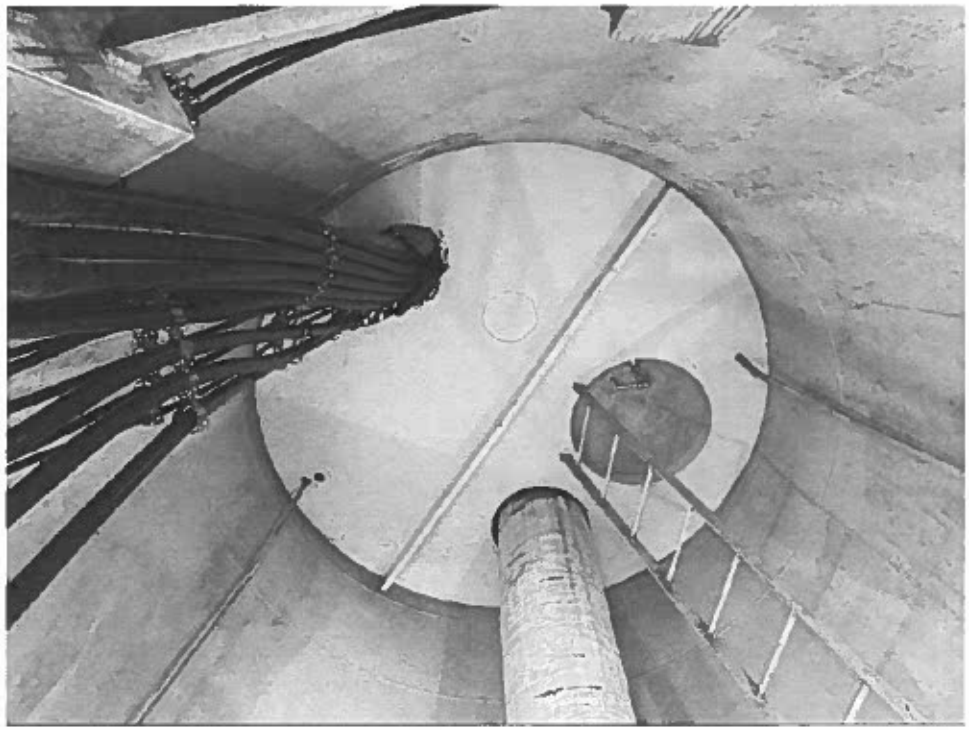




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- [ ] STRUCTURE

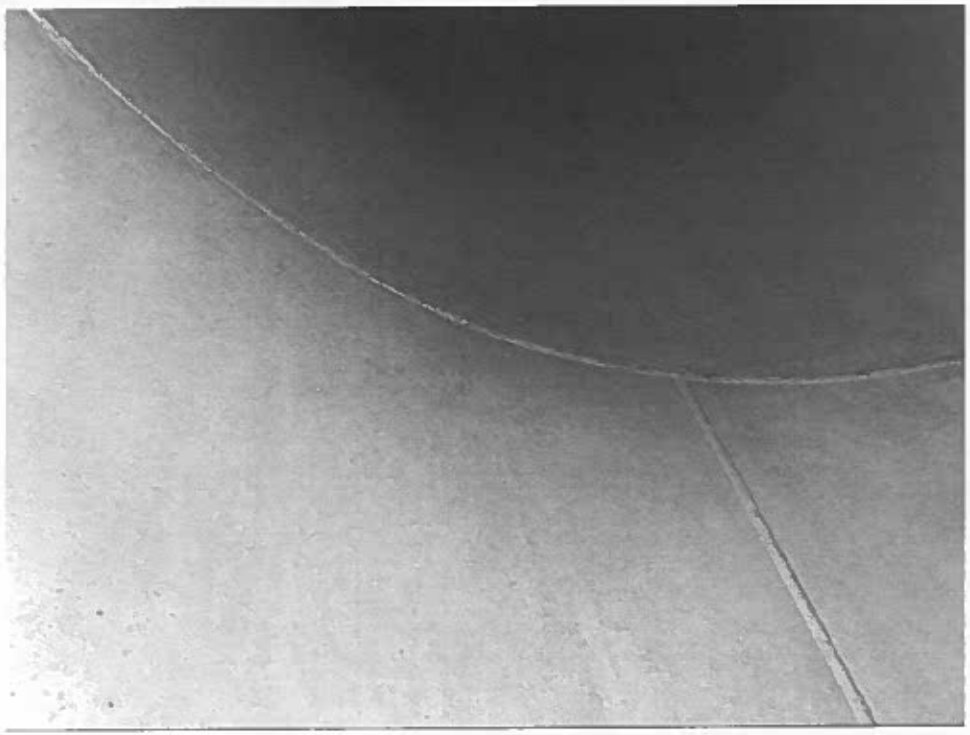
DRY INTERIOR RISER/SUPPORT COLUMN OVERALL AREA





- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

DRY INTERIOR RISER/SUPPORT COLUMN COATING

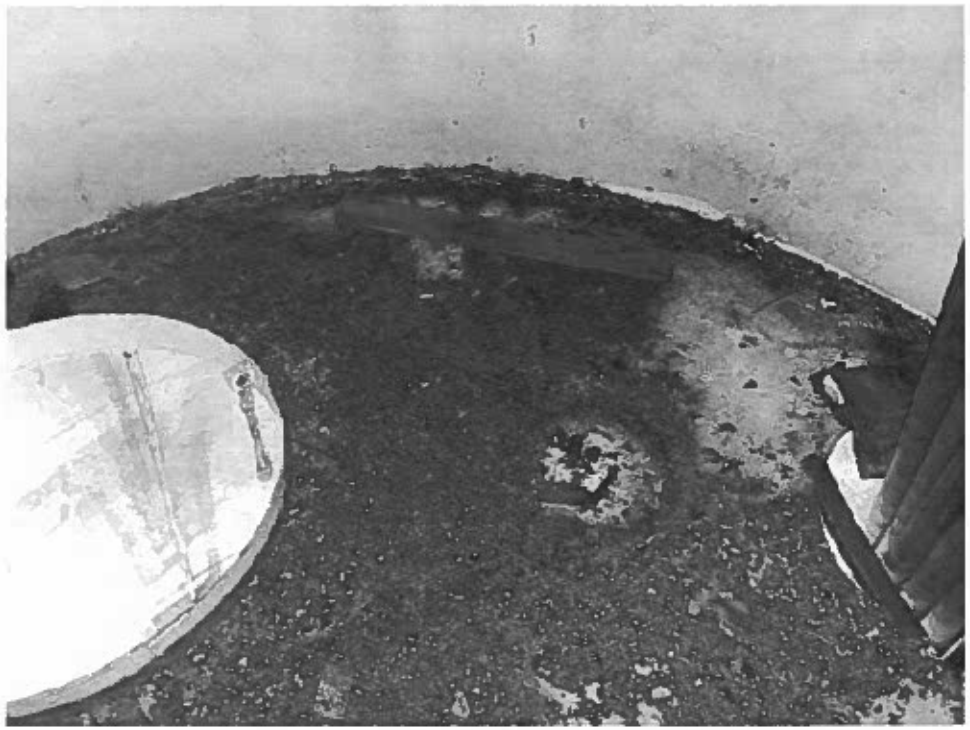




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- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

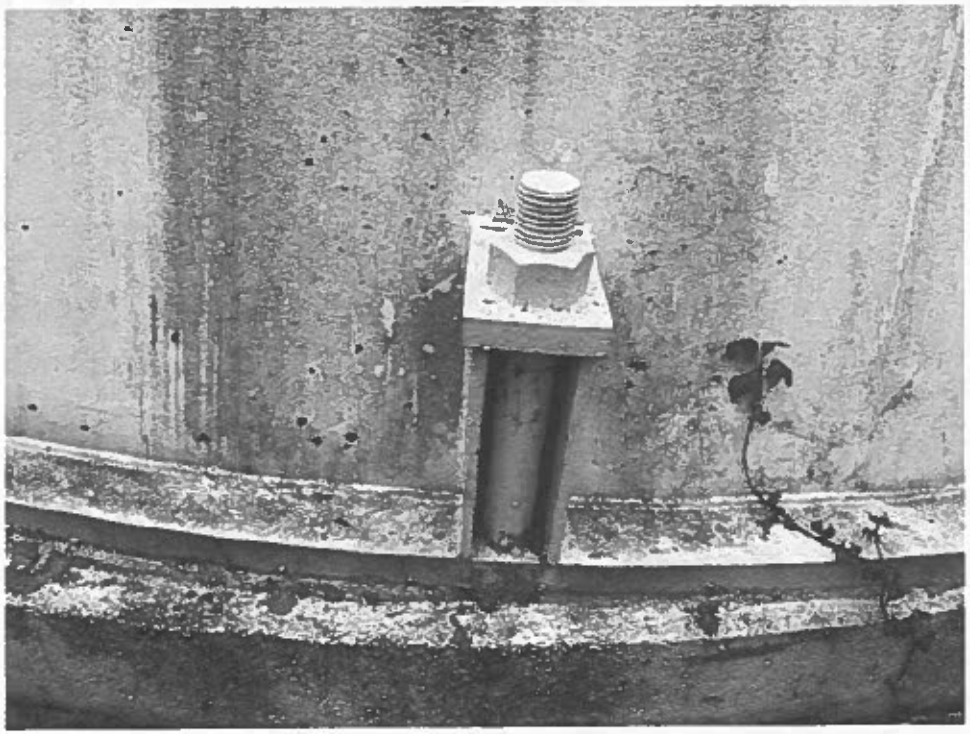
DRY INTERIOR RISER/SUPPORT COLUMN PITTING / SCALING / SECTION LOSS





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- [x] COATINGS AND CORROSION
- [ ] STRUCTURE

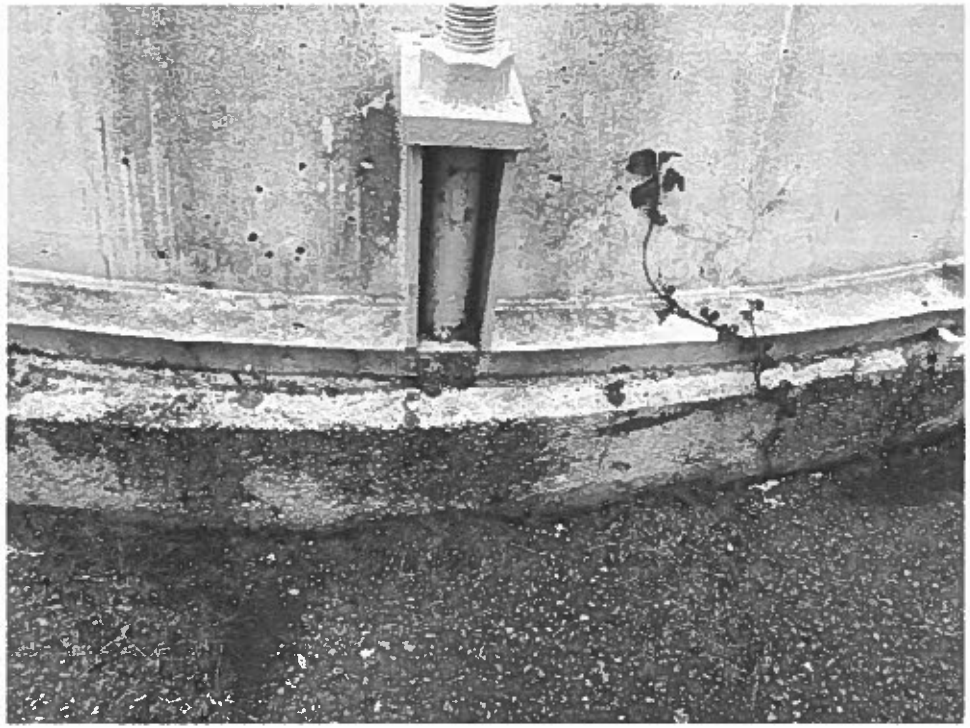
FOUNDATION/BASE ANCHOR BOLTS





- [x] SANITARY
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- [ ] COATINGS AND CORROSION
- [x] STRUCTURE

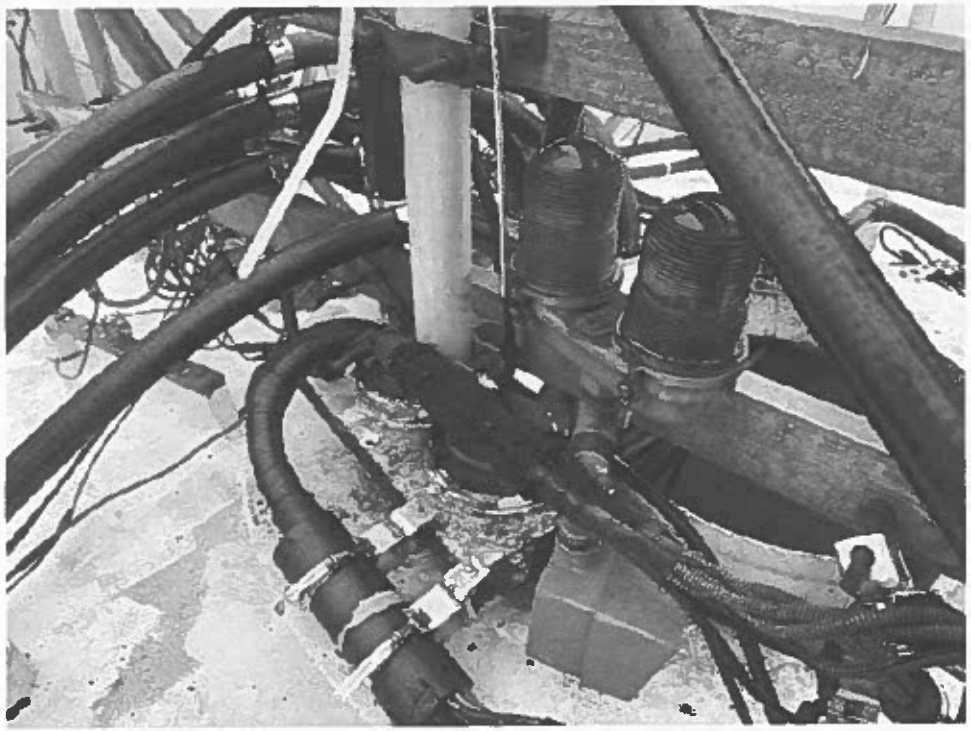
FOUNDATION/BASE
CONCRETE FOUNDATION





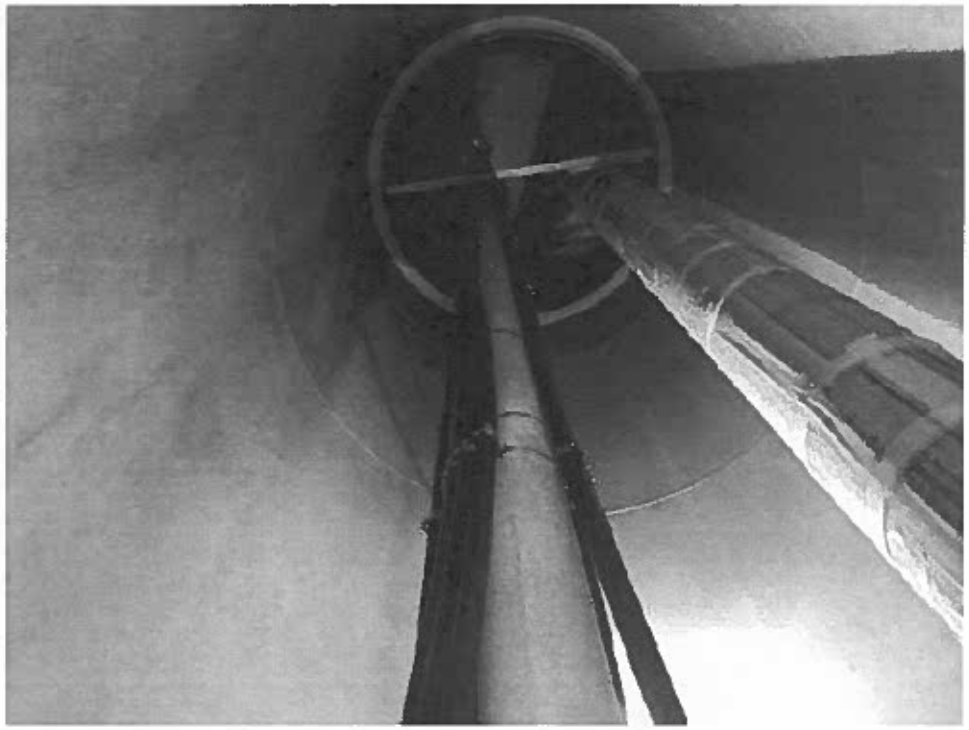
- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [x] STRUCTURE

ADDITIONAL APPURTENANCES LIGHTING AND ELECTRICAL



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- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

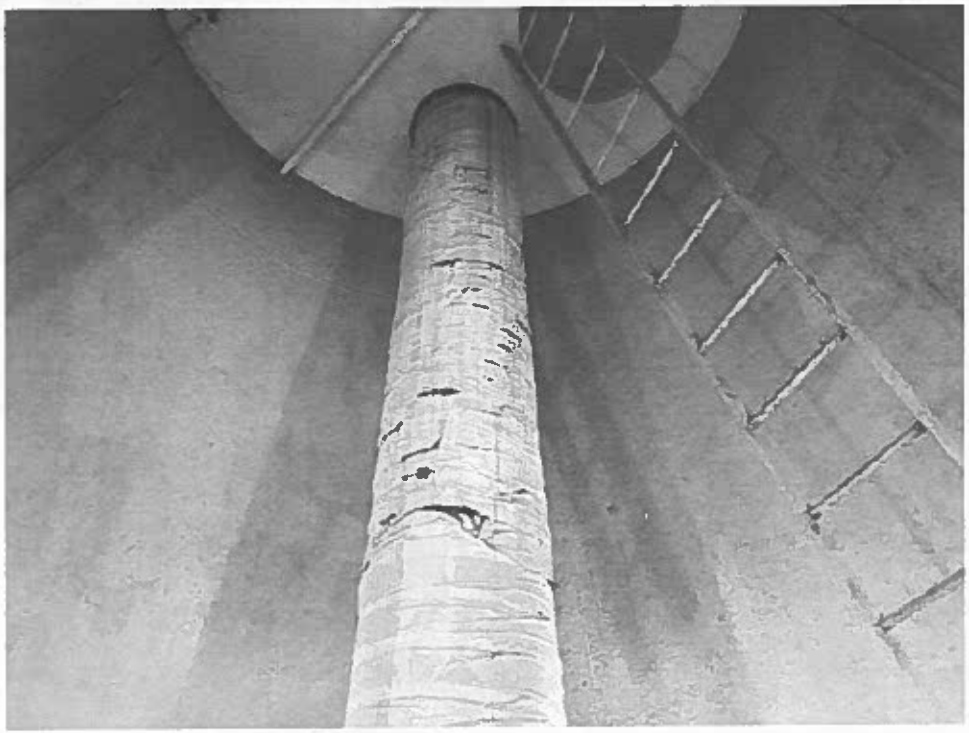
PIPING
OVERFLOW





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- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

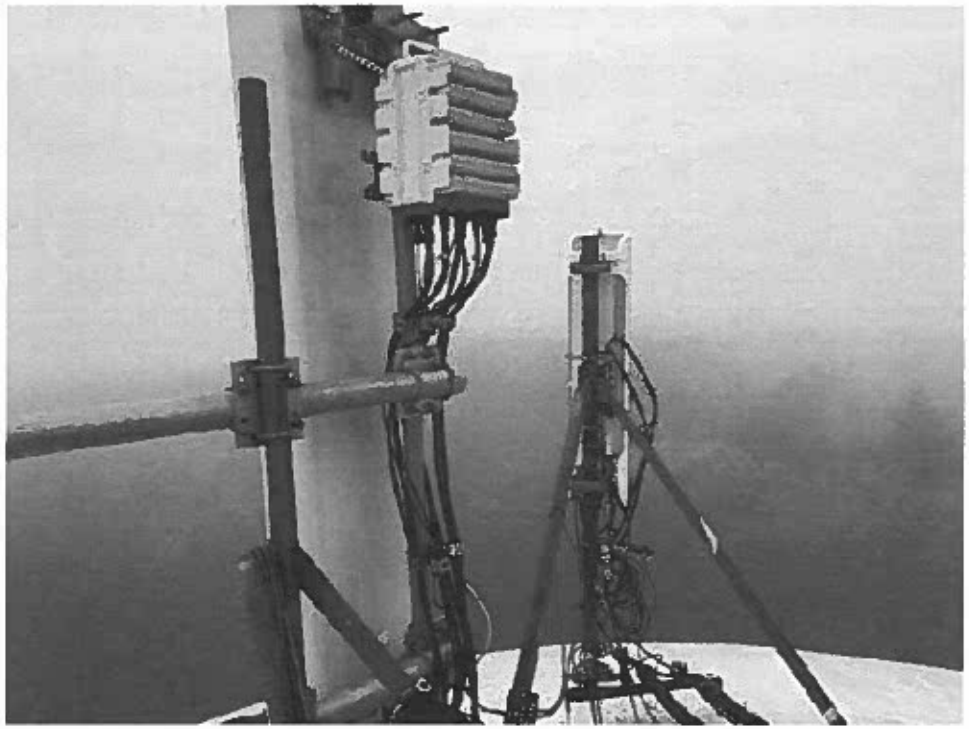
PIPING
INLET/OUTLET PIPING

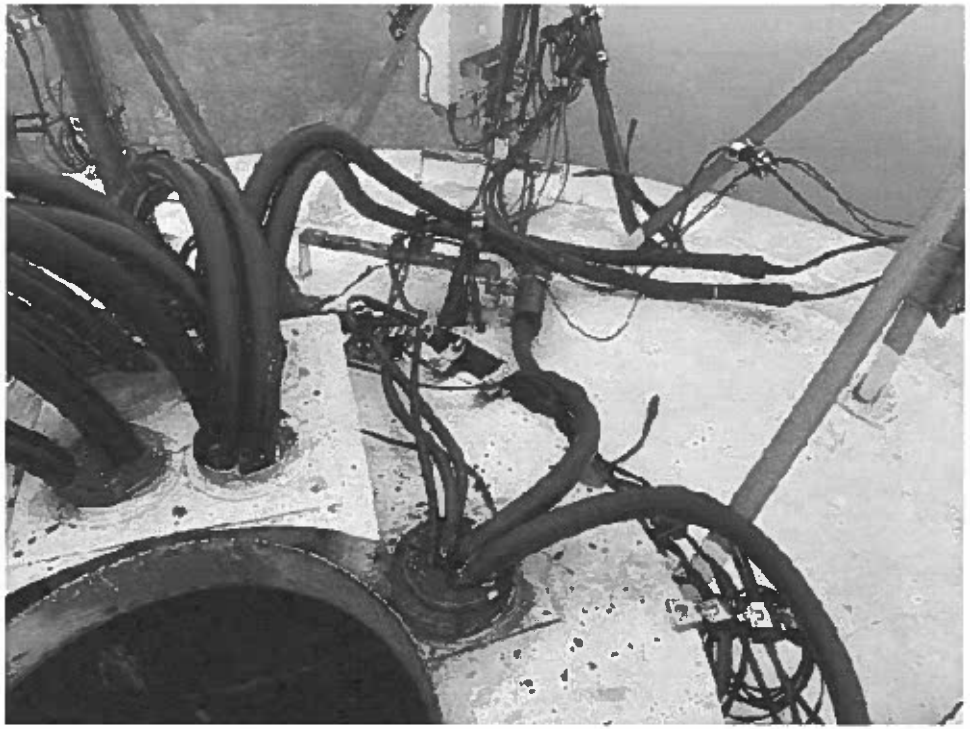




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- [ ] COATINGS AND CORROSION
- [x] STRUCTURE

ANTENNAS AND COAXIAL
ANTENNA/COAXIAL EACH LOCATION





- SANITARY
- SAFETY AND SECURITY
- COATINGS AND CORROSION
- STRUCTURE

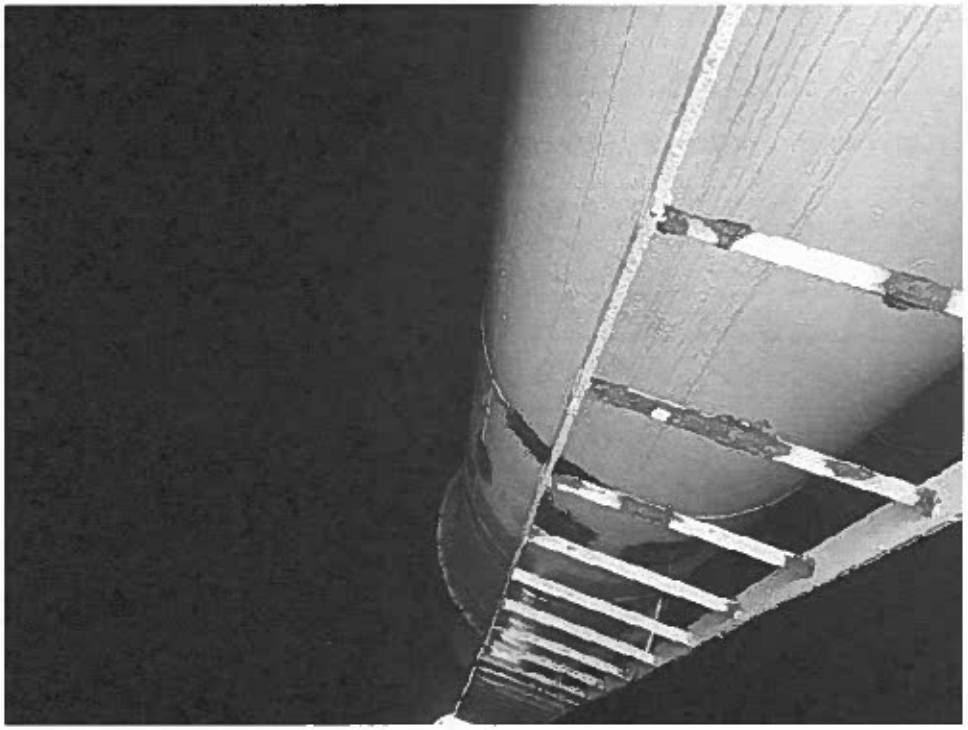
ANTENNAS AND COAXIAL
ANTENNA/COAXIAL EACH LOCATION

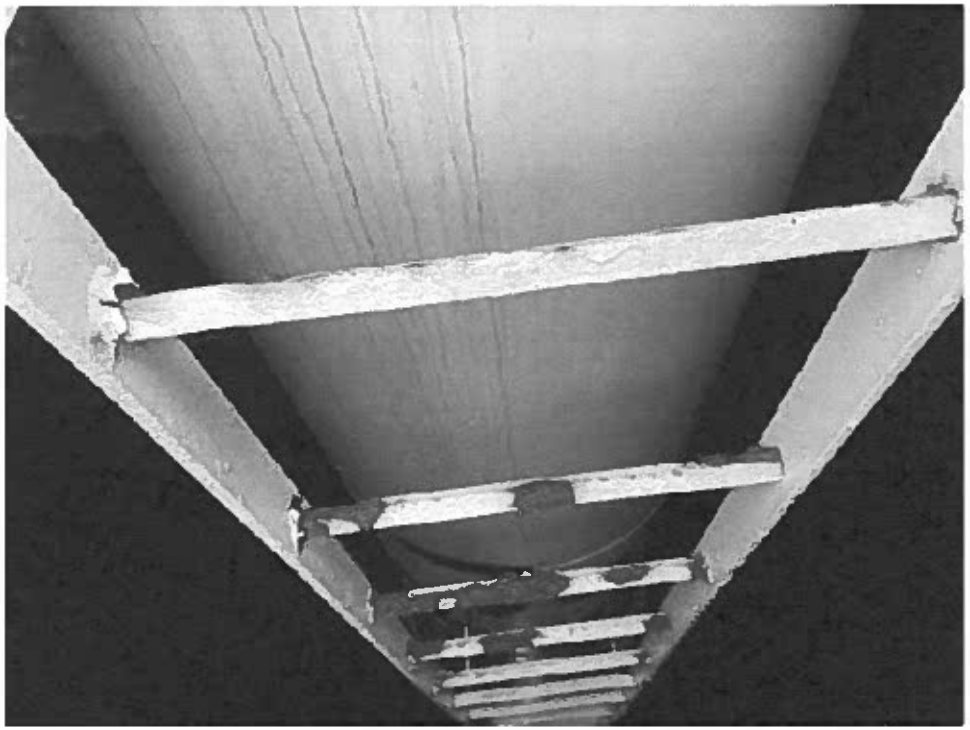




- [ ] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

LADDERS/HANDRAILS/STAIRS/PLATFORMS
LADDERS





- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [x] COATINGS AND CORROSION
- [ ] STRUCTURE

LADDERS/HANDRAILS/STAIRS/PLATFORMS
LADDERS





- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

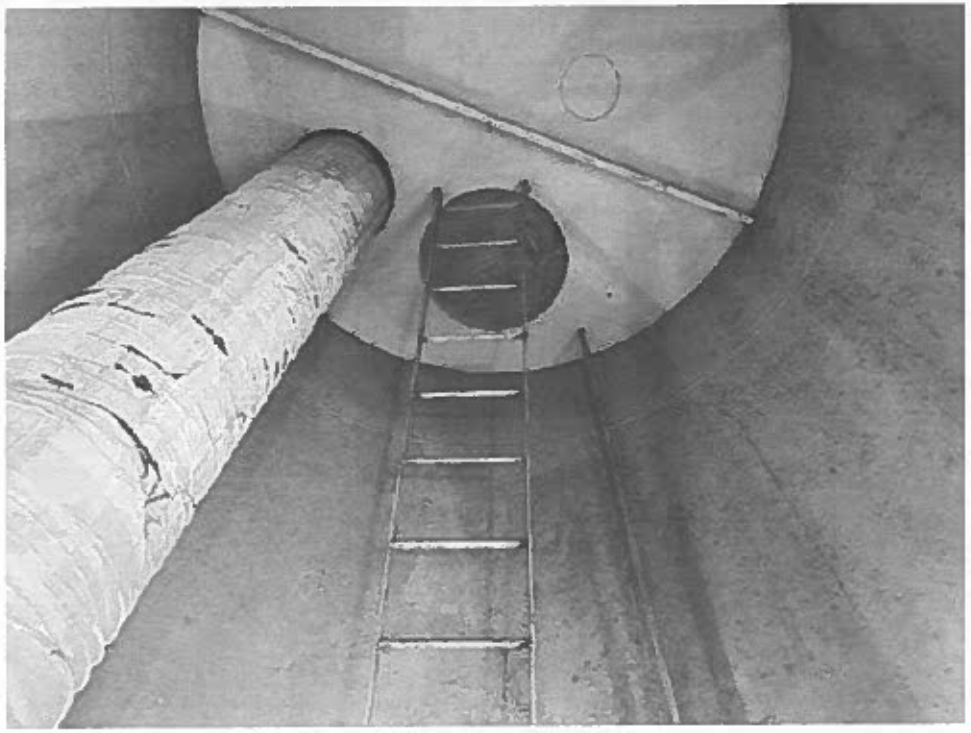
LADDERS/HANDRAILS/STAIRS/PLATFORMS
LADDERS

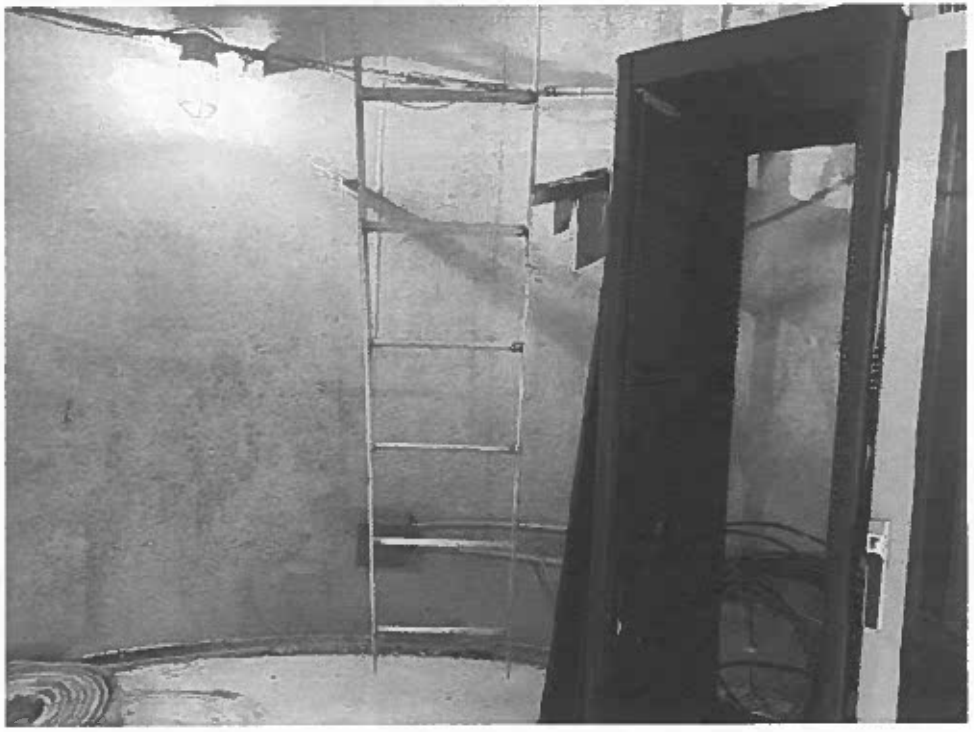




- [ ] SANITARY
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- [x] COATINGS AND CORROSION
- [ ] STRUCTURE

LADDERS/HANDRAILS/STAIRS/PLATFORMS
LADDERS





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- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

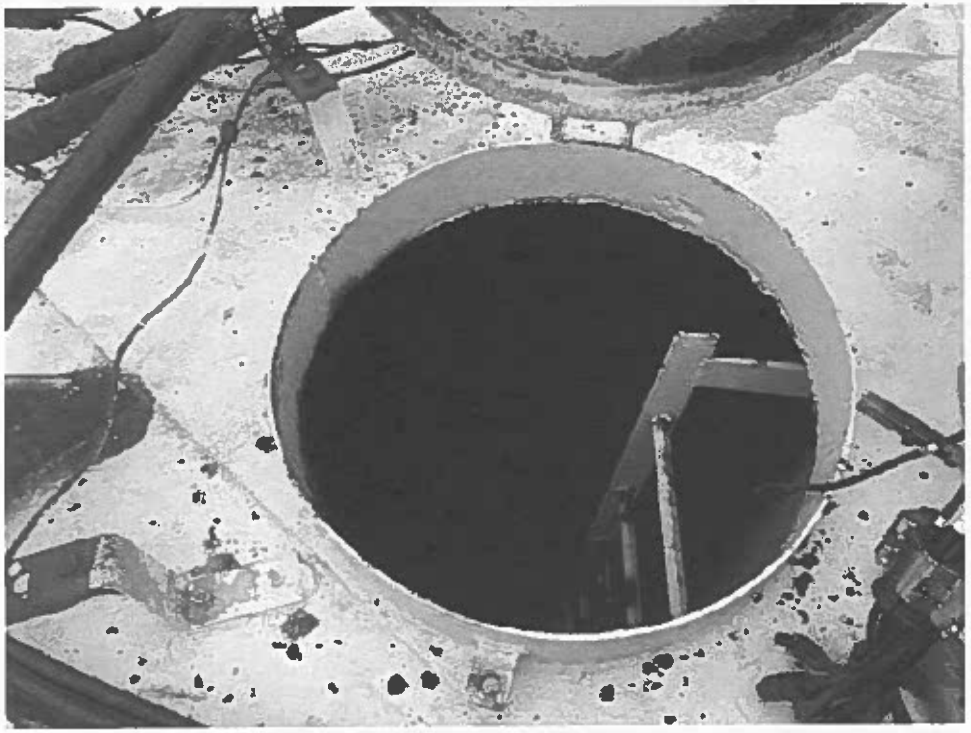
LADDERS/HANDRAILS/STAIRS/PLATFORMS
HANDRAILS/PLATFORMS

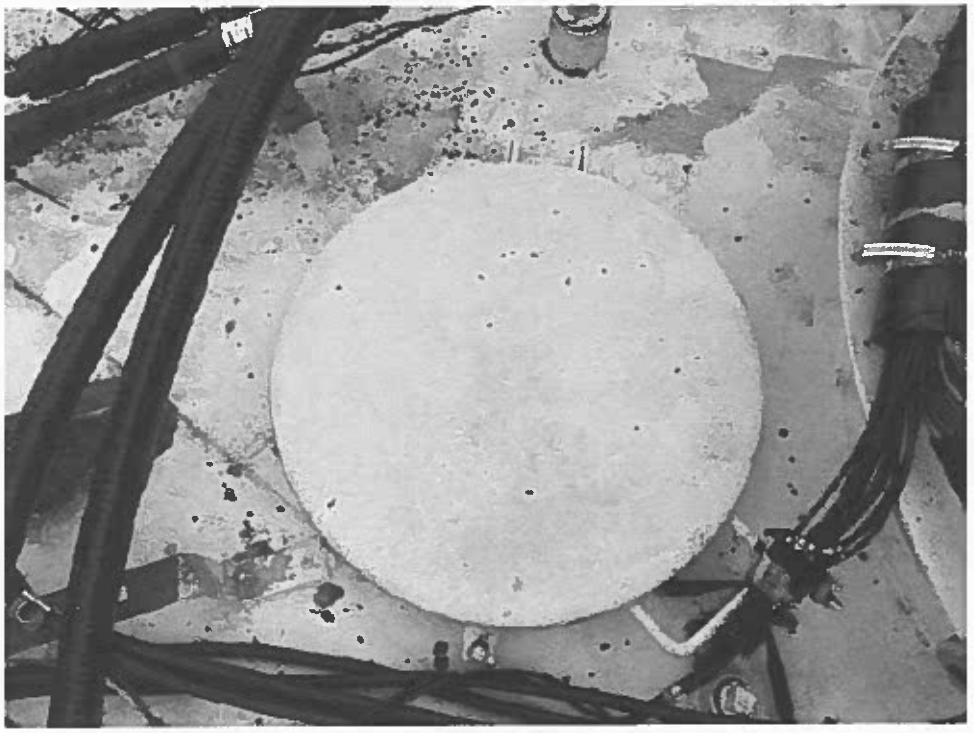




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- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

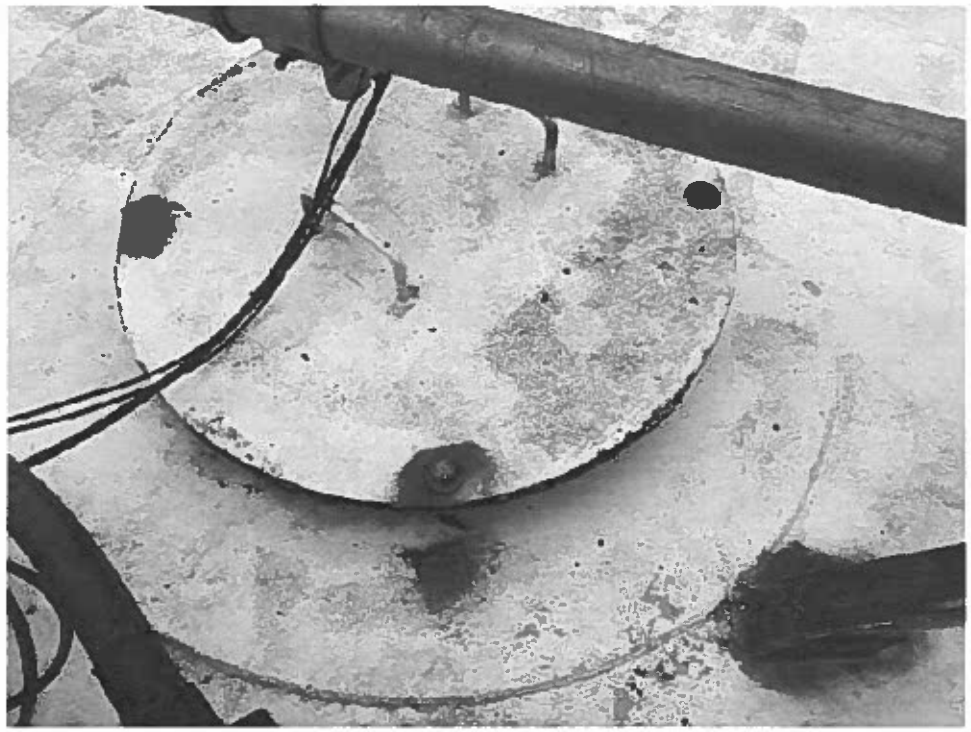
HATCHES/MAN WAYS/DOORS
HATCHES

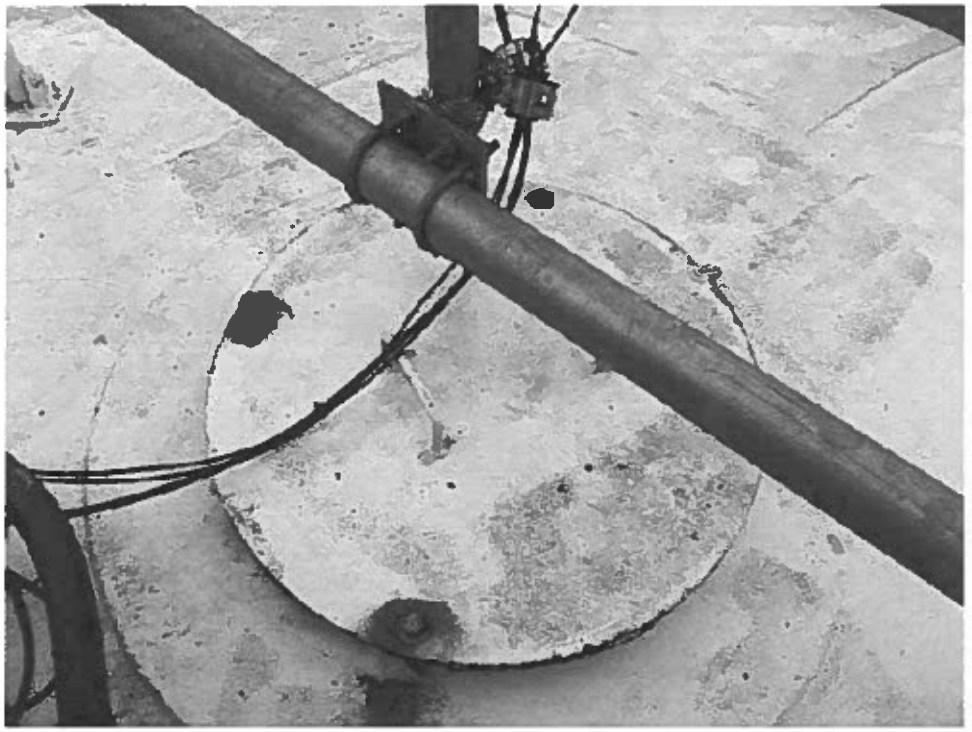




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- [x] COATINGS AND CORROSION
- [ ] STRUCTURE

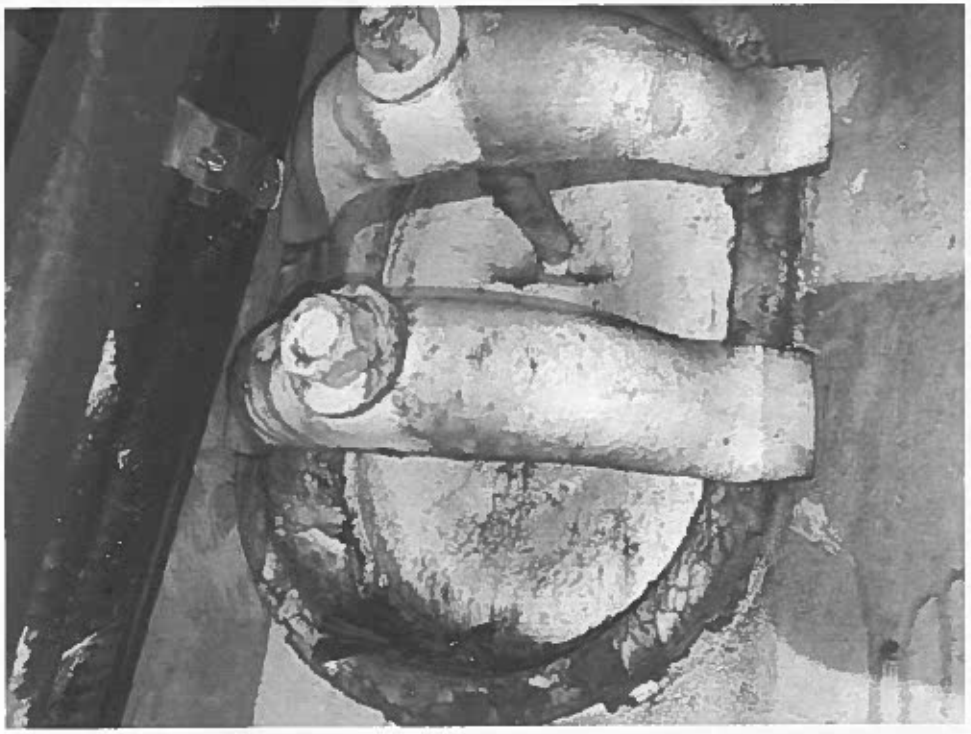
HATCHES/MAN WAYS/DOORS
HATCHES

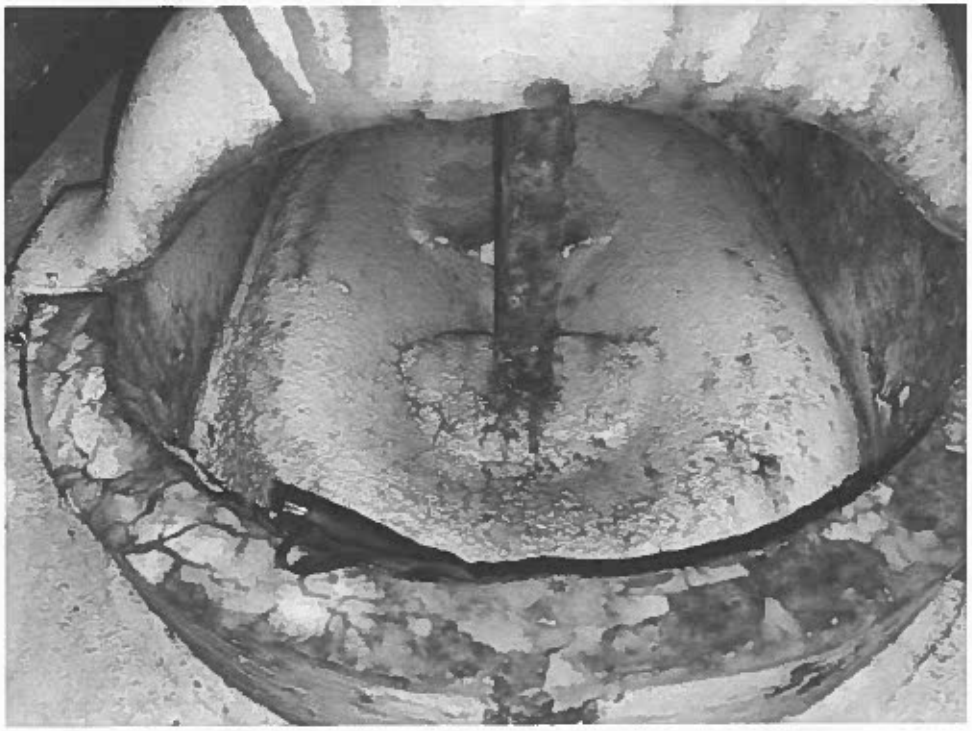




- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [x] STRUCTURE

HATCHES/MAN WAYS/DOORS
MAN WAYS





- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [x] COATINGS AND CORROSION
- [x] STRUCTURE

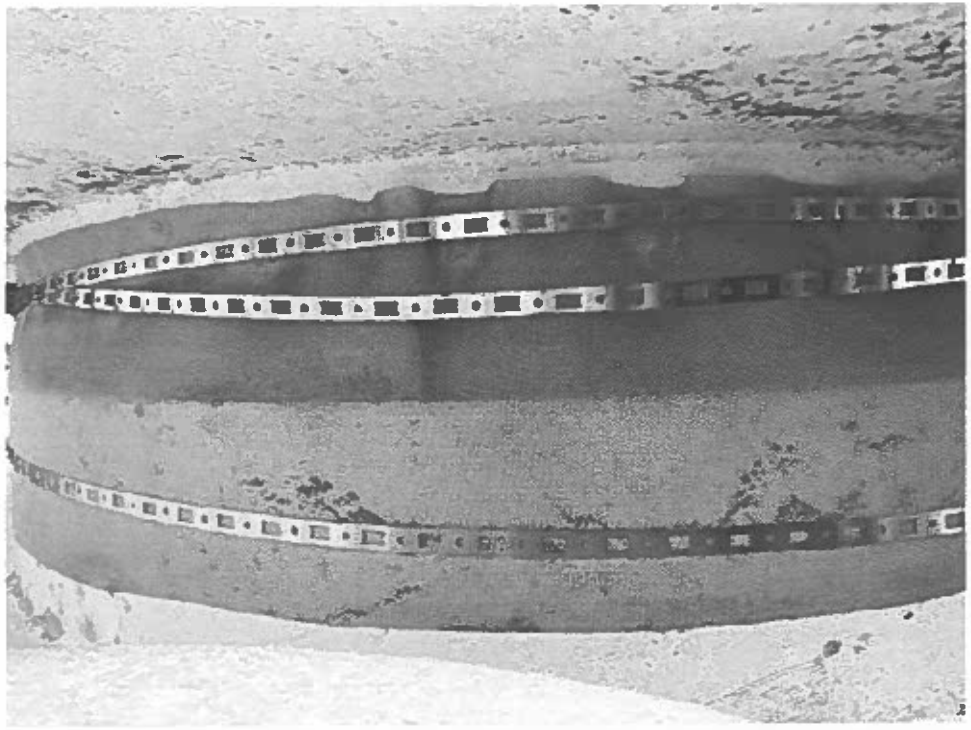
HATCHES/MAN WAYS/DOORS DOORS/ACCESS

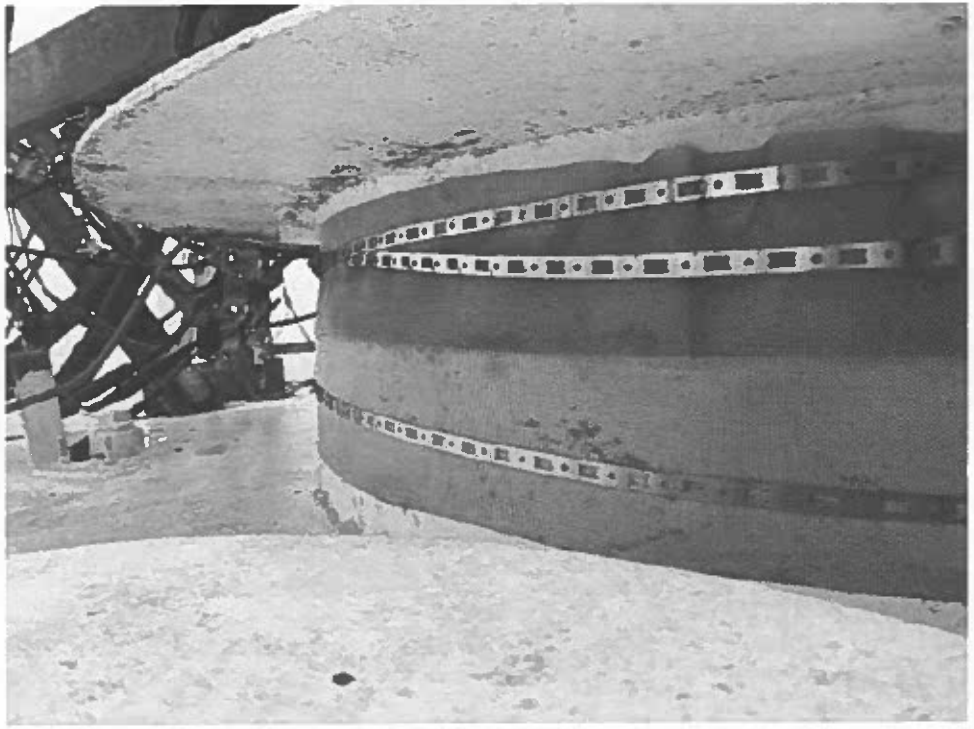




- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [x] STRUCTURE

VENTING
VENT DETAILS





- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [x] STRUCTURE

THANK YOU



USG WATER
SOLUTIONS

Budgetary Pricing - Vauxhall

ear	1	2	3	4	5	6	7	8	9	10
Vork chedule	Full Int/Ext Blast & Paint + Repairs	Visual Inspect	ROV Inspect	Washout	Visual Inspect	ROV Inspect	Visual Inspect	ROV Inspect	Visual Inspect	Washout & Exterior Overcoat
ee	$247,579 (UR + MP)	$247,579 (UR + MP)	$247,579 (UR + MP)	$26,208	$27,136	$28,097	$29,091	$30,121	$31,187	$32,291
ull Coatings and Repairs Warranty for life of contract or until you cancel										

Total UR: $692,978

Install Air gap with flapper mesh screen combo on overflow.
Repair Fill Pipeand replace insulation.
Weld antenna brackets to roof
Weld antenna bracket in interior dry access to keep coax off of ladder.
Remove 92ft of Notched rail
Install 110 ft of flexible cable safety climb
Replace bolts on access tube clamp style man way.
Install a 24" vent neck with a pallet style frost proof vent
Repair c-clamp manway bolts

USG WATER



Tank Asset Management Program

Comprehensive water tank maintenance is more than the rehabilitation of an aging water tank. It's about indefinitely extending the life of critical assets at a cost you can control. No one else offers you the comprehensive range of services – and the peace of mind – that USG Water Solutions delivers.

The challenge

Aging infrastructure

As they age, water tanks present more maintenance and water quality concerns.

Water quality

Buildup of mineralization and biofilm can cause water quality issues.

Limited budgets

Costly tank maintenance is not often included in annual budgets, so related expenses are often paid with funds allocated to other projects.

The USG Water Solutions' Tank Asset Management Program extends service life and optimizes conditions of your storage tank so you can provide high-quality water to your customers.

Learn more on the back.

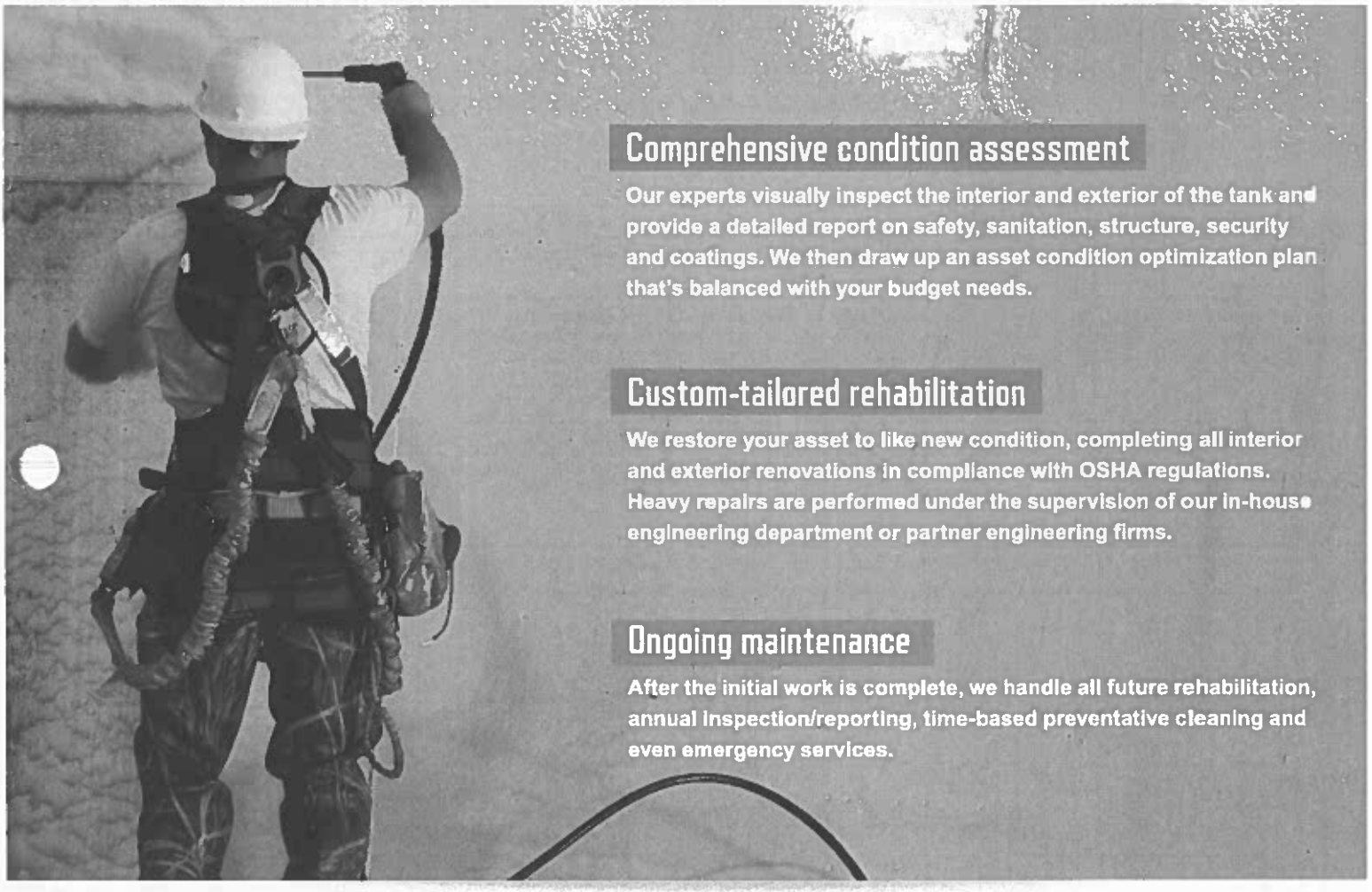
USG WATER SOLUTIONS

Peace-of-mind for you. High-quality water for your customers.

Our Asset Management Program is a comprehensive approach designed to help you maintain your tanks and keep them compliant with safety and sanitary regulations.

The benefits

- **Improve water quality**
- **Comply with regulations**
- **Extend asset life**
- **Predictable budget**



Comprehensive condition assessment

Our experts visually inspect the interior and exterior of the tank and provide a detailed report on safety, sanitation, structure, security and coatings. We then draw up an asset condition optimization plan that's balanced with your budget needs.

Custom-tailored rehabilitation

We restore your asset to like new condition, completing all interior and exterior renovations in compliance with OSHA regulations. Heavy repairs are performed under the supervision of our in-house engineering department or partner engineering firms.

Ongoing maintenance

After the initial work is complete, we handle all future rehabilitation, annual inspection/reporting, time-based preventative cleaning and even emergency services.

The ultimate solution:

USG Water Solutions Asset Management

At USG Water Solutions, we believe you shouldn't have to choose between a capital expense that is beyond your budget and an unpredictable run-to-failure approach. Our Asset Management Program (AMP™) packages the rehabilitation and future maintenance of your assets into a single contract, with USG Water Solutions assuming all maintenance risk for a set annual cost.

Extend tank life.
Call +1 (855) 526-4413 or visit
www.usgwater.com

Utility Service Group Water Solutions

1230 Peachtree Street NE
Suite 1100 | Promenade Building
Atlanta, GA 30309

USG WATER SOLUTIONS

An ISO 9001:2015 Quality Assured Company

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Wiemes Ct & Marilyn Rd Ejector Stations	**DEPARTMENT PRIORITY** 5

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

Wiemes Ct and Marilyn Rd pump stations were designed in 1981. These stations are known as Pneumatic Ejectors. The station itself is a steel cylinder 9' in diameter buried about 18 feet below ground and accessed via a manway. The station houses the pots, compressors and control panel. The stations have exceeded their design life and do not operate efficiently.

2 PROJECT STATUS IF IN PROGRESS

An engineering study was approved and will begin in the spring of 2025 to fully evaluate the stations structural integrity and plan for the station's replacement.

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

Maintain reliability of the stations. Replace or upgrade asset with more efficient pump and controls system.

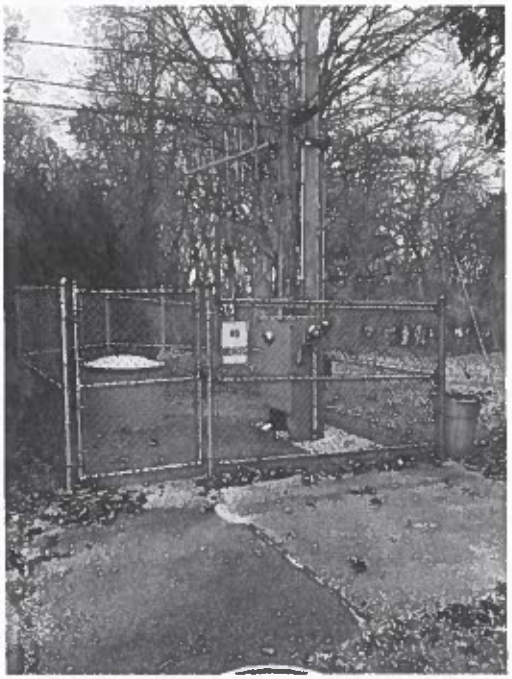
5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

See attached for a probable costs estimate provided by Wright-Pierce

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		560,000	560,000	560,000	560,000	560,000
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**560,000**	**560,000**	**560,000**	**560,000**	**560,000**



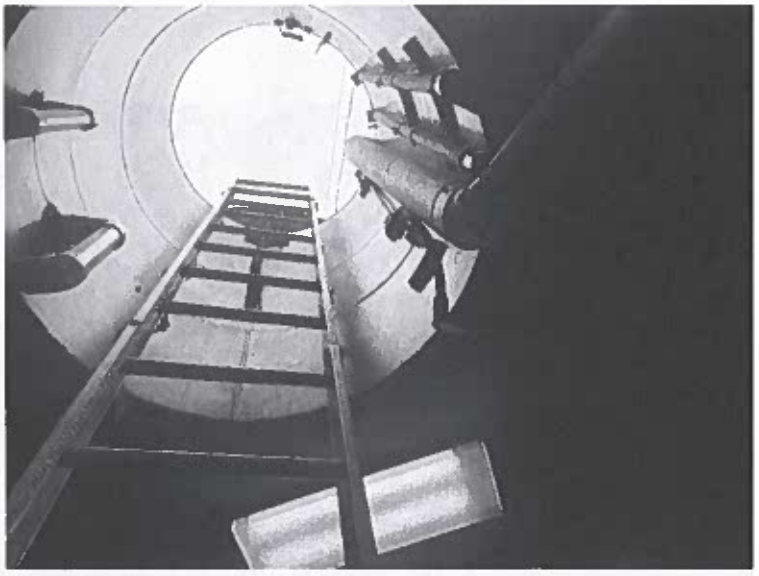
Marilyn Road Pneumatic Ejection Wastewater Station



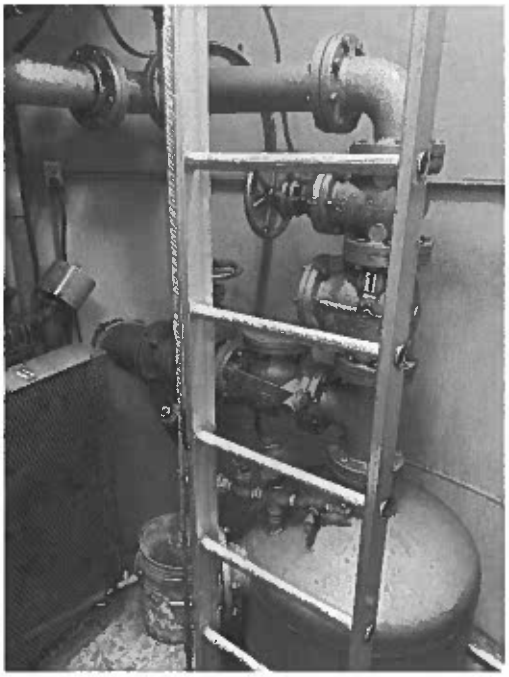
Marilyn Road Station Access Manway – to access below grade station



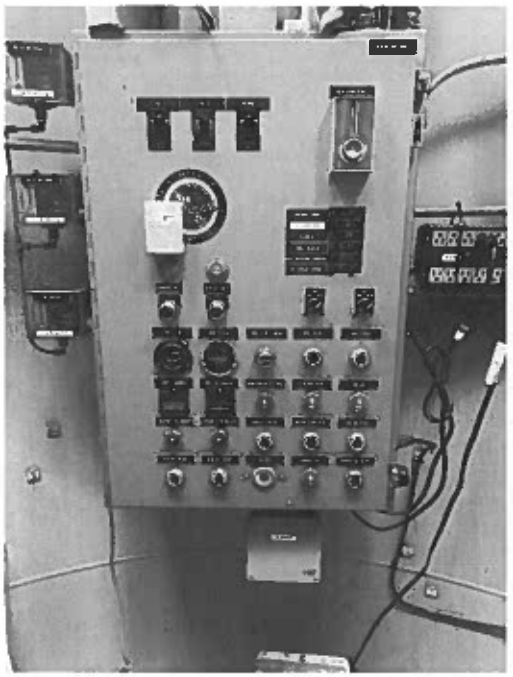
Marilyn Road Station – looking from ground elevation down through the access manway



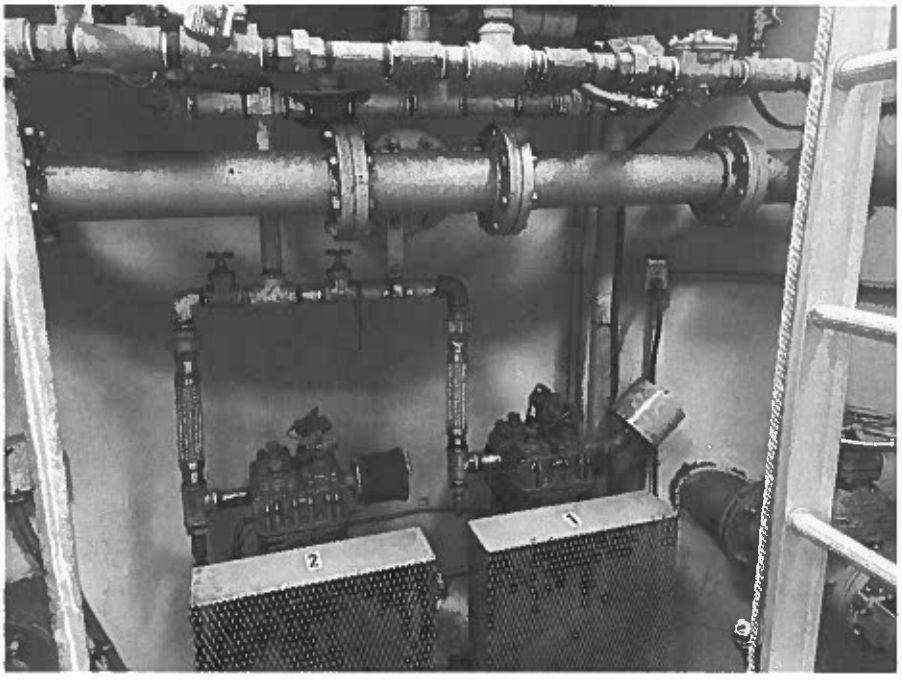
Marilyn Road Station, looking up to ground elevation.



Marilyn Road Station Air Ejector 1



Marilyn Road Station Control Panel



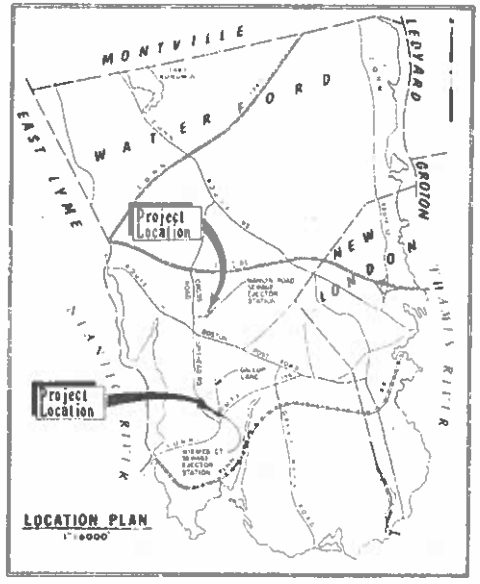
Marilyn Road Station Air Compressors

WATER AND SEWER COMMISSION

TOWN OF WATERFORD CONNECTICUT
SEWAGE WORKS CONSTRUCTION PROGRAM
CONTRACT 13B
CENTRAL WATERFORD LATERAL SEWERS
AND
ROADWAY RECONSTRUCTION

U.S. ENVIRONMENTAL PROTECTION AGENCY
PROJECT C09017401 & C09036501

WIEMES COURT AND MARILYN ROAD EJECTOR STATIONS



BOARD OF SELECTMEN

LAWRENCE J. BETTENCOURT, First Selectman
RALPH N. MADARA
WILLIAM HENDERSON III

WATER AND SEWER COMMISSION

CHARLES N. CORRADO, Chairman
WOLFGANG FISCHER
PAUL J. PARULIS
CHARLES E. ROWLAND
PAUL A. SUPRIN

INDEX OF DRAWINGS

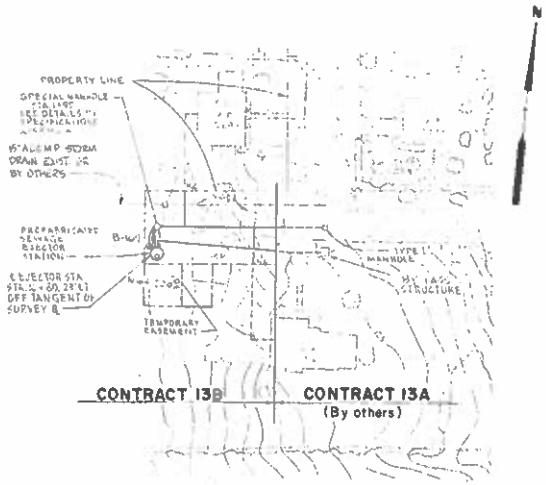
No.	Description
13B-1	GENERAL NOTES, LEGEND & DETAILS
13B-2	MISCELLANEOUS DETAILS
13B-3	WIEMES COURT SEWAGE EJECTOR STATION AND ROAD RECONSTRUCTION
13B-4	MARILYN ROAD SEWAGE EJECTOR STATION
13B-5	ELECTRICAL-GENERAL DETAILS

WATER COMPLIANCE
Dept. of Environmental Protection
RECEIVED
OCT 2 1981

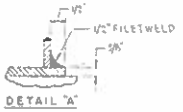
HH&B HAYDEN, HARDING & BUCHANAN, INC.
Consulting Engineers - Boston, Massachusetts

#13B

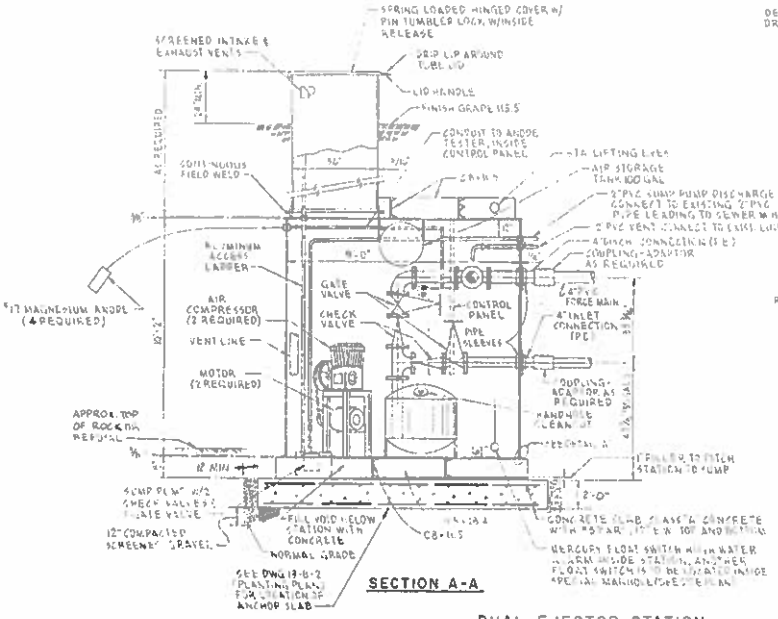
SEPTEMBER, 1981



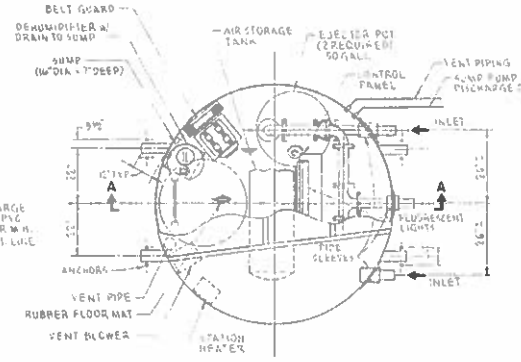
PLAN
SCALE 1"=40'
SEE PROPOSED SITE PLAN



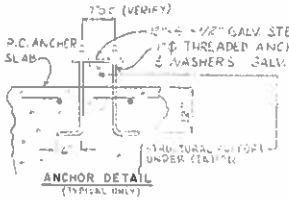
DETAIL "A"



SECTION A-A



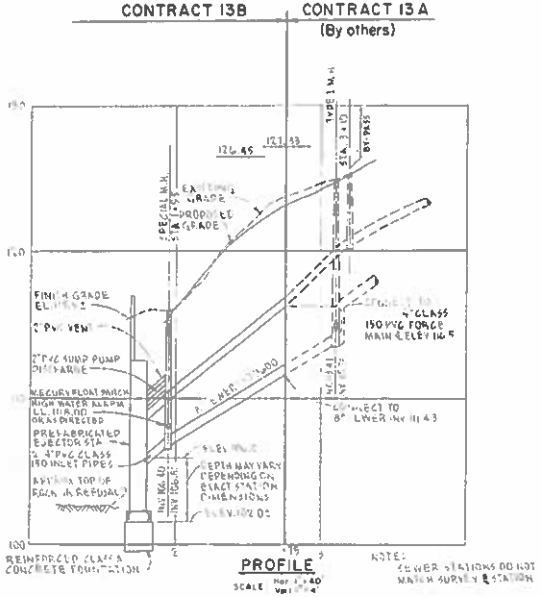
PLAN VIEW



ANCHOR DETAIL
(TYPICAL ONLY)

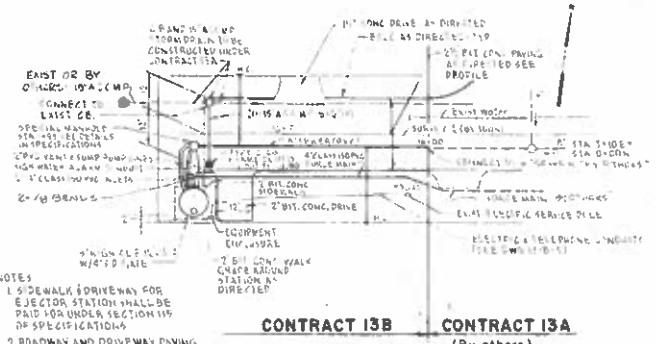
STATION REQUIREMENTS
45 GPM @ 50 TDH
COMPRESSOR MOTOR 1.5 HP
SINGLE PHASE - SEE SPECIFICATIONS.

DUAL EJECTOR STATION
NO SCALE



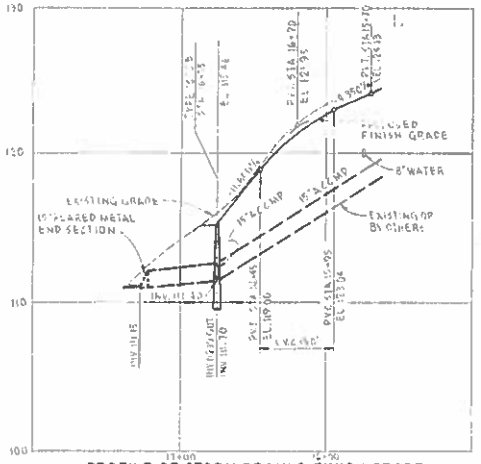
PROFILE
SCALE: Hor. 1"=40' Vert. 1"=4'

NOTE:
SEWER STATIONS DO NOT MATCH SURVEY STATION



NOTES
1. SIDEWALK & DRIVEWAY FOR EJECTOR STATION SHALL BE PAID FOR UNDER SECTION III-5 OF SPECIFICATIONS
2. ROADWAY AND DRIVEWAY PAVING, STORM DRAINS, BASINS AND CURBING LIMITS MAY VARY DUE TO FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.

PROPOSED SITE PLAN
SCALE 1"=20'



PROFILE OF STORM DRAIN & FINISH GRADE
SCALE: Hor. 1"=40' Vert. 1"=4'

No.	DATE	REVISION

DRAWN J.F.W.
DESIGNED M.T.A.
CHECKED M.T.A.
APPROVED W.H.D.

SCALE AS NOTED
DATE JUNE 1981

HAYDEN, HARDING & BUCHANAN, INC.
Consulting Engineers Boston, Massachusetts

WATER AND SEWER COMMISSION
WATERFORD CONNECTICUT
SEWAGE WORKS CONSTRUCTION PROGRAM

CONSTRUCTION CONTRACT 13B
CENTRAL WATERFORD LATERAL SEWERS
WIEMES COURT SEWAGE EJECTOR STATION AND ROAD RECONSTRUCTION

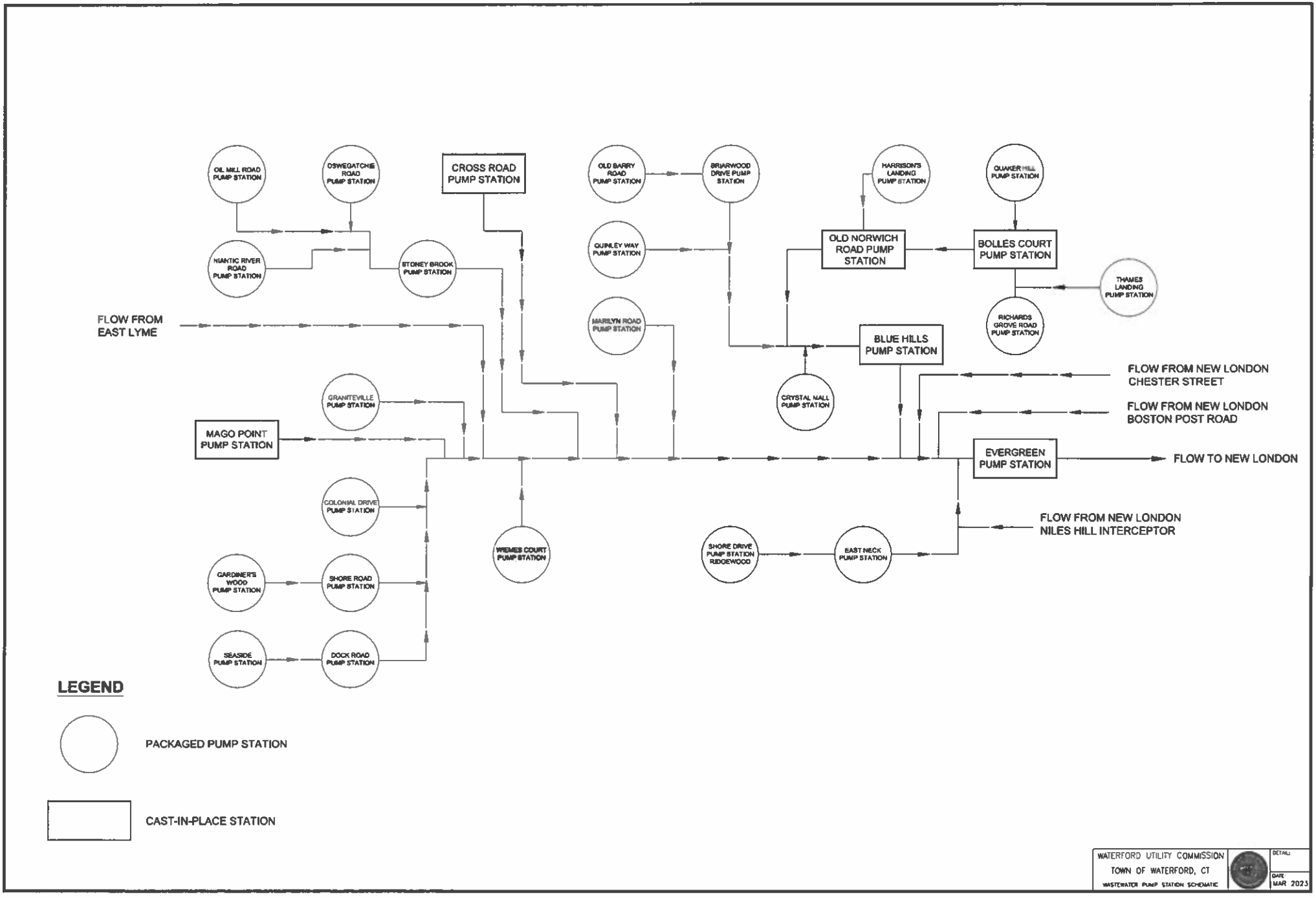
DRAWING NO.
13-B-3
75204

From: Therlin Montgomery
To: Jill Stevens
Subject: Wiemes Court and Marilyn Road Pump Station Upgrades
Date: Wednesday, November 13, 2024 3:39:45 PM

**CAUTION: This email originated from outside of the organization.
Do not click links or open attachments unless you recognize the sender's email address and know the content is safe.**

Hi Jill,
Per your request, a rough budgetary figure to replace both Marilyn Road and Wiemes Court pump stations is $2.8 million (total for both stations) which includes construction and engineering services (design, bidding and support during construction). This would include new emergency generators on each site and overall a similar approach to Quinley Way with new wetwell and valve vaults , new equipment, new electrical. Let me know if you have any questions. Thanks

Therlin Montgomery
Wright-Pierce | Project Manager
direct 860.852.1903 | **cell** 860.604.0034


OIL MILL ROAD PUMP STATION
OSWEGATCHIE ROAD PUMP STATION
CROSS ROAD PUMP STATION
OLD BARRY ROAD PUMP STATION
BRIARWOOD DRIVE PUMP STATION
HARRISON'S LANDING PUMP STATION
QUAKER HILL PUMP STATION
NIANTIC RIVER ROAD PUMP STATION
STONEY BROOK PUMP STATION
QUINLEY WAY PUMP STATION
OLD NORWICH ROAD PUMP STATION
BOLLES COURT PUMP STATION
THAMES LANDING PUMP STATION
FLOW FROM EAST LYME
MARILYN ROAD PUMP STATION
RICHARDS GROVE ROAD PUMP STATION
BLUE HILLS PUMP STATION
FLOW FROM NEW LONDON CHESTER STREET
GRANITEVILLE PUMP STATION
CRYSTAL HALL PUMP STATION
FLOW FROM NEW LONDON BOSTON POST ROAD
MAGO POINT PUMP STATION
EVERGREEN PUMP STATION
FLOW TO NEW LONDON
COLONIAL DRIVE PUMP STATION
FLOW FROM NEW LONDON NILES HILL INTERCEPTOR
WEMES COURT PUMP STATION
SHORE DRIVE PUMP STATION RIDGEWOOD
EAST NECK PUMP STATION
GARDINER'S WOOD PUMP STATION
SHORE ROAD PUMP STATION
SEASIDE PUMP STATION
DOCK ROAD PUMP STATION
LEGEND
PACKAGED PUMP STATION
CAST-IN-PLACE STATION
WATERFORD UTILITY COMMISSION
TOWN OF WATERFORD, CT
WASTEWATER PUMP STATION SCHEMATIC
DETAIL:
DATE:
MAR 2023

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Utility Commission	Jill N. Stevens
PROJECT NAME	**DEPARTMENT PRIORITY**
Water Tank Asset Management Program	6

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	A Water Tank Asset Management Program for these valuable assets would preserve the significant investment the Town has made in water storage tanks by guaranteeing routine inspections and maintenance of the water storage tanks does not fall behind, thus improving the reliability of the system. A sustainable water tank management solution also makes capital budgeting easier as initial repair costs can be spread out over a few years if necessary and all future interior and exterior renovation costs are included in the plan. The intent would be to enroll the Fargo Road & Vauxhall Street tanks first and add Rogers Hill at a later date.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	None, the operational costs are borne by the City of New London through the current Inter-local water agreement.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	See attached tank management program and costs, the costs are based upon a phased roll out of this program starting with Fargo Road and Vauxhall Street tanks in year one and two and adding Rogers Hill in year three
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital		46,222	47,272	95,520	106,267	108,358
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**46,222**	**47,272**	**95,520**	**106,267**	**108,358**

Water Tank Asset Management Program

The Town of Waterford owns three water storage tanks, the 750,000 gallon Fargo Tank, the 300,000 gallon Vauxhall tank and the 1.25 Million gallon Rogers Hill tank. In 2024 the Fargo Road Tank refurbishment project was completed; prior to this renovation, the Fargo Road water tank had its original coat of paint, which had far exceeded its useful life expectancy by approximately 10 years. This work was necessary to preserve the Town's significant investment in its infrastructure and to extend the life of its asset; if routine maintenance of infrastructure is ignored, it turns into an emergency capital investment and typically costs three times that of routine maintenance. If this tank had not undergone the recent rehabilitation, the structural integrity of the tank would have eventually failed, requiring that the tank be replaced at a significant cost to the Town.

Many municipalities do not realize the financial investment they have in their water storage tanks. These key municipal water distribution system components often receive the least attention and yet, they can potentially experience serious issues without proper tank asset management. Contamination from animals or debris, corrosion and other issues can trigger customer complaints, municipal regulatory compliance violations and costly water distribution service disruptions. A Water Tank Management Program for these valuable assets would preserve the significant investment the Town has made in water storage tanks by guaranteeing routine inspections and maintenance of the water storage tanks does not fall behind, thus improving the reliability of the system. A sustainable water tank management solution also makes budgeting easier as initial repair costs can be spread out over a few years if necessary and all future interior and exterior renovation costs are included.

Our request is to initiate a funding schedule that would enroll the three water storage tanks in a Tank Asset Management program progressively, beginning with Fargo Road in FY26, this tank will not require any Upfront Renovation (UR) costs to enroll in the program, only annual Maintenance plan (MP) costs. The Vauxhall Tank does require UR costs, prior to enrollment, those costs have been requested under a separate CIP Project with a Department Priority of 4, upon completion of the UR work, if approved, the tank could be enrolled in the program in FY 28. The Rogers Hill Tank requires UR work as well, again these costs have been requested under a separate CIP Project with a Department Priority of 10, upon completion of the UR work, if approved, the tank could be enrolled in the program in FY31.



Tank Asset Management Program

Comprehensive water tank maintenance is more than the rehabilitation of an aging water tank. It's about indefinitely extending the life of critical assets at a cost you can control. No one else offers you the comprehensive range of services – and the peace of mind – that USG Water Solutions delivers.

The challenge

Aging infrastructure

As they age, water tanks present more maintenance and water quality concerns.

Water quality

Buildup of mineralization and biofilm can cause water quality issues.

Limited budgets

Costly tank maintenance is not often included in annual budgets, so related expenses are often paid with funds allocated to other projects.

The USG Water Solutions' Tank Asset Management Program extends service life and optimizes conditions of your storage tank so you can provide high-quality water to your customers.

Learn more on the back.

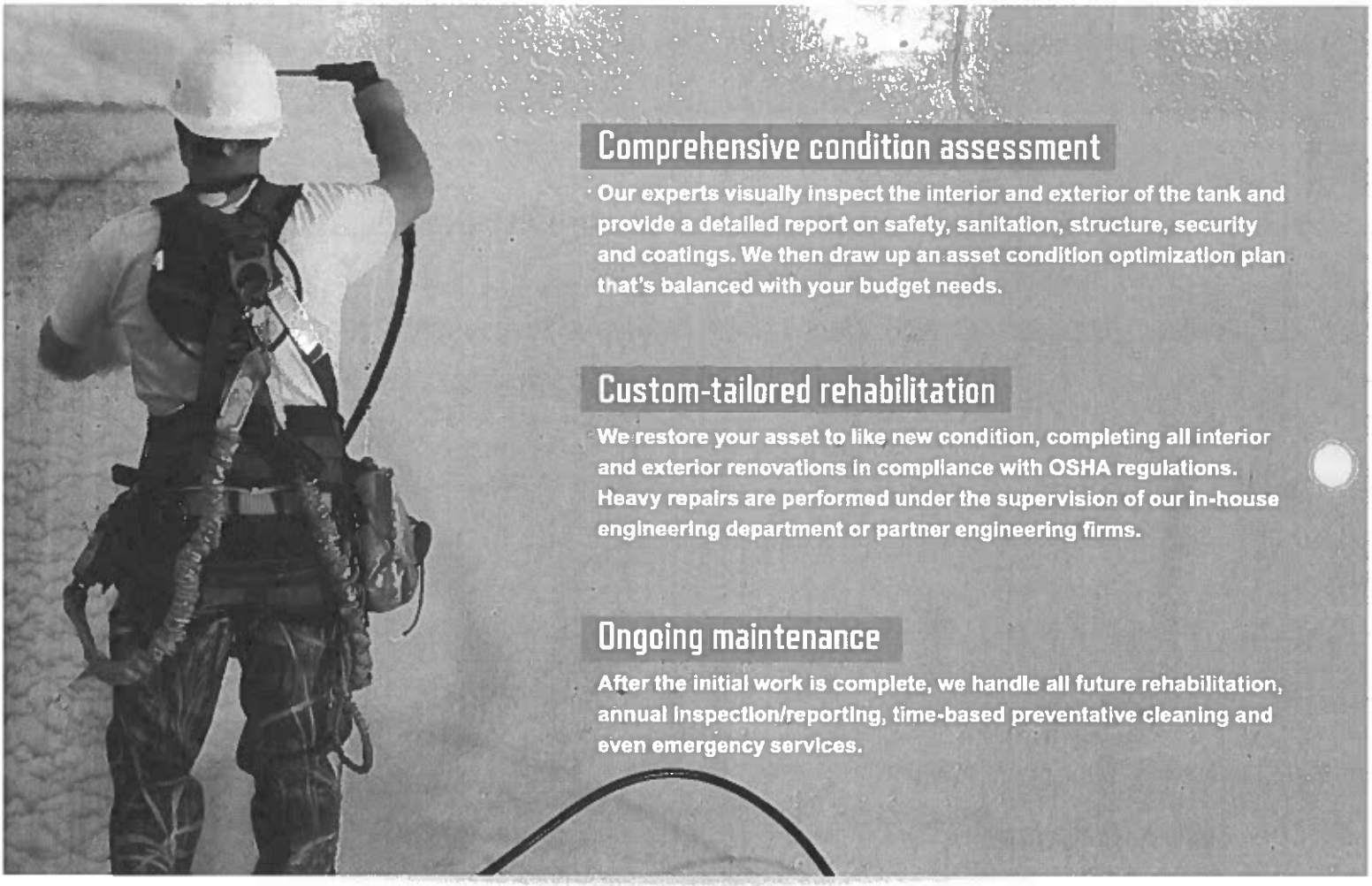
USG WATER SOLUTIONS

Peace-of-mind for you. High-quality water for your customers.

Our Asset Management Program is a comprehensive approach designed to help you maintain your tanks and keep them compliant with safety and sanitary regulations.

The benefits

- **Improve water quality**
- **Comply with regulations**
- **Extend asset life**
- **Predictable budget**



Comprehensive condition assessment

Our experts visually inspect the interior and exterior of the tank and provide a detailed report on safety, sanitation, structure, security and coatings. We then draw up an asset condition optimization plan that's balanced with your budget needs.

Custom-tailored rehabilitation

We restore your asset to like new condition, completing all interior and exterior renovations in compliance with OSHA regulations. Heavy repairs are performed under the supervision of our in-house engineering department or partner engineering firms.

Ongoing maintenance

After the initial work is complete, we handle all future rehabilitation, annual inspection/reporting, time-based preventative cleaning and even emergency services.

The ultimate solution:

USG Water Solutions Asset Management

At USG Water Solutions, we believe you shouldn't have to choose between a capital expense that is beyond your budget and an unpredictable run-to-failure approach. Our Asset Management Program (AMP™) packages the rehabilitation and future maintenance of your assets into a single contract, with USG Water Solutions assuming all maintenance risk for a set annual cost.

Extend tank life.
Call +1 (855) 526-4413 or visit
www.usgwater.com

Utility Service Group Water Solutions

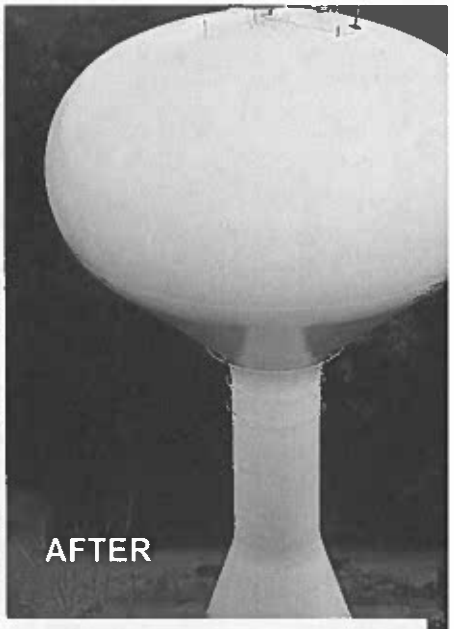
1230 Peachtree Street NE
Suite 1100 | Promenade Building
Atlanta, GA 30309

USG WATER SOLUTIONS

An ISO 9001:2015 Quality Assured Company

USG WATER
SOLUTIONS





Tap In To Your Extended Operations Team

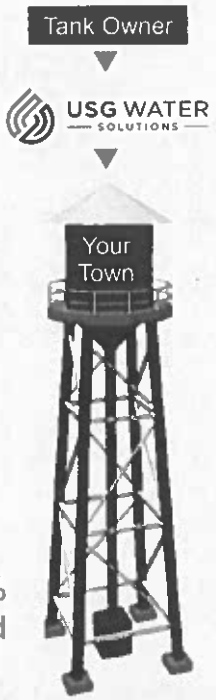
Asset monitoring, maintenance, and management

Who We Are

- USG Water Solutions (formerly Suez/Veolia)
- Leading provider of asset maintenance and rehabilitation services for the municipal water industry in the US
- **Our Service Center is located in Bridgewater, MA**

Why Choose Us

- **Proven:** Over 6,000 tanks on a tank asset management program nationwide.
- **Reliable:** We assume all risk of maintaining the asset to comply with regulations.
- **Low TCO** Ability to spread cost over multiple years on renovation and service for predictable budgeting.
- **Peace of Mind:** Let us take the burden of planning and managing your assets with our **warranty-guaranteed work**



Services

Tank Assets: Protect your large capital assets and the health and safety of your customers.

AMI Asset & Operations: Get the benefits of AMI in small-midsize communities.

Water Quality: Meet municipal water quality standards while reducing CAPEX.

Treatment Plant Rehabilitation: Extend the lifecycle of critical assets, reduce maintenance downtime.

Pipeline Rehabilitation: Extend the life of your pipe network even on a budget.

We provide **one** point of contact and take **100%** responsibility. The right solution, **simplified**



Our tank condition assessments and maintenance plan + budgetary pricing are completely free

Kevin Martel
Local Consultant
Barrington, RI
401-209-8803
Kevin.Martel@usgwater.com
USGWater.com

WATERFORD CT

TANK ASSET MANAGEMENT PROGRAM INTRODUCTION

Kevin Martel
NACE CIP #105784

USG WATER
SOL[illegible]S

Who we are: Utility Service Co. / USG Water



6,000+
Municipal customers

8,000+
Water assets managed

Technical & Financial Solutions

USG WATER

NORTH AMERICAN LEADER IN WATER ASSET MANAGEMENT SOLUTIONS

6,000+
Municipal & industrial customers

8,000+
Water assets managed

1,900+
Renovations in 2022

ISO 9001 Certified
3rd party audited for Quality Assurance



- Corporate Office
- 24 Service Centers
- Water System Consultants

5
lines of business

Tank Asset Management Services
Steel Tanks

Water Quality
TRS, RCS, Mixers

Concrete and Plant Rehabilitation
Concrete Tanks, Filter Plants, MBR

Network Asset Management
SIPP, Pipe Asset Management Plan

Metering Asset Management
AMI

WHAT WE DO DIFFERENTLY

01

SPREAD PRICE OVER MULTIPLE YEARS

02

HELP SMALL UTILITITIES MANAGE THEIR ASSESTS AND WORK WITHIN THEIR BUDGETS.

03

PROVIDE MULTIPLE OPTIONS TO WORK WITH YOU

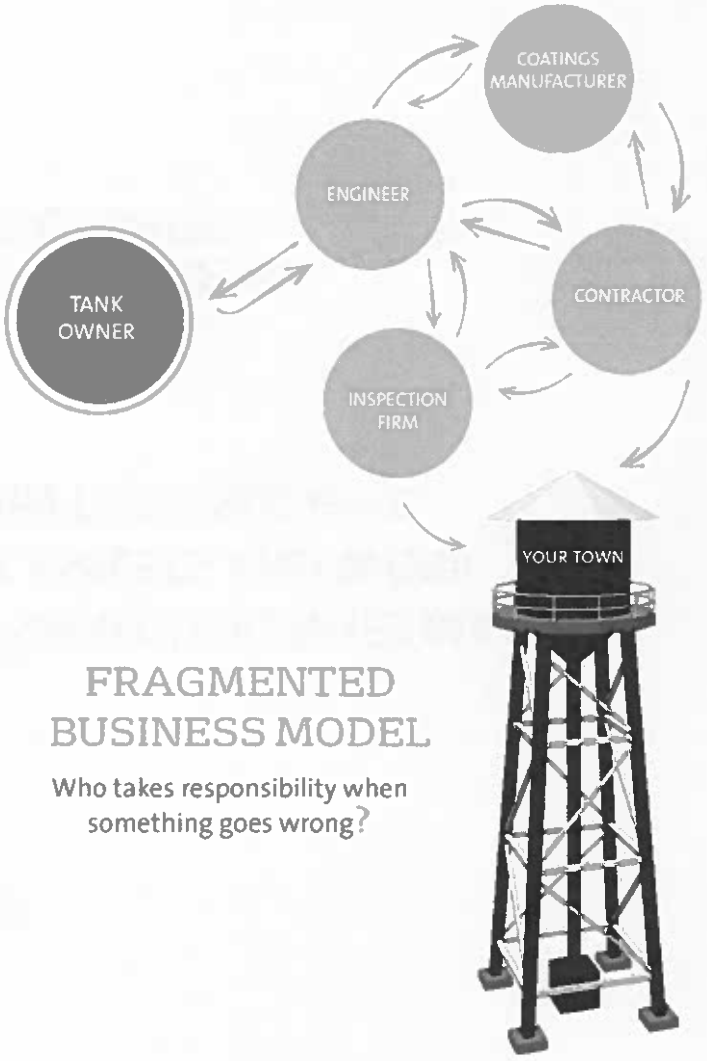
04

BUILD LONG TERM RELATIONSHIPS.

TRADITIONAL APPROACH
BID MODEL

Municipal customers are comfortable with the bid model, believing it's "the law", or the best way to "spend public funds" to minimize tax or water rate increases.

- Reactive and NOT proactive
- Sporadic inspections
- Operation to failure on coatings
- Inconsistent budget for tanks
- Lack of maintenance, repair and cleanings
- Reliance on consulting engineer for recommendations
- **Risks placed fully on City**



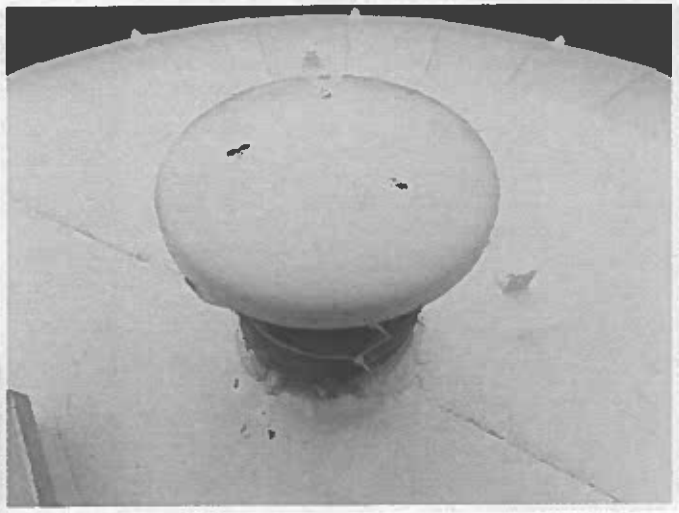
FRAGMENTED BUSINESS MODEL

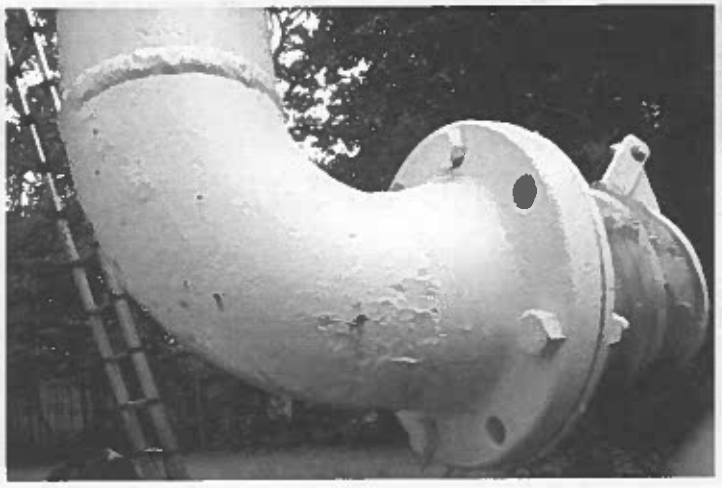
Who takes responsibility when something goes wrong?

Problems with Bid Projects
2019 Standpipe Near Cape Cod

Quality Specification & Oversight

- Expensive Project / Small Water District
- 2018 Rehab
- 2019 Anniversary Inspection
- Exterior Pictures 1 Year After Rehab
- Coatings Over Steel Grit
- Blistered Coatings
- Pinhole Corrosion Started

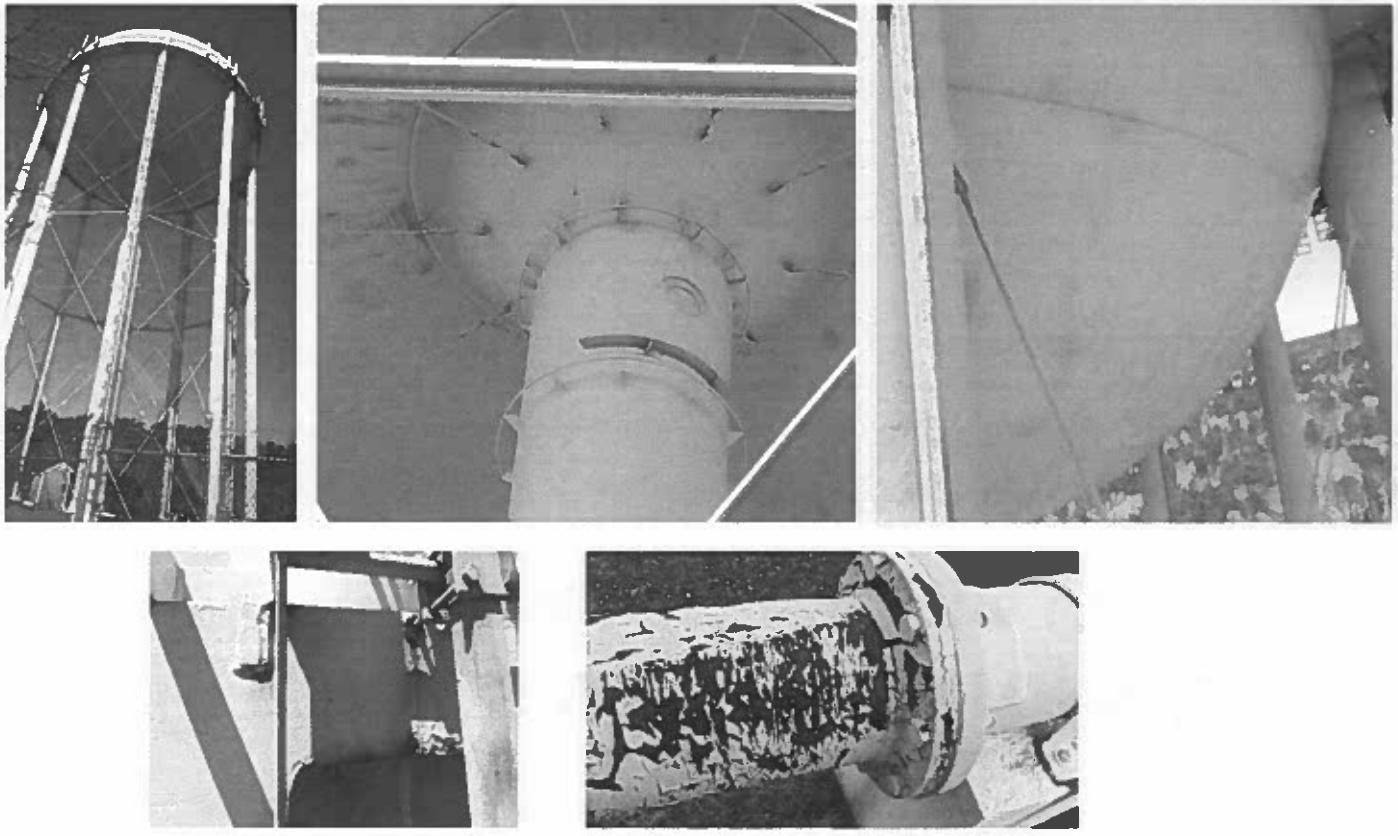




USG WATER

Barnstable County Project

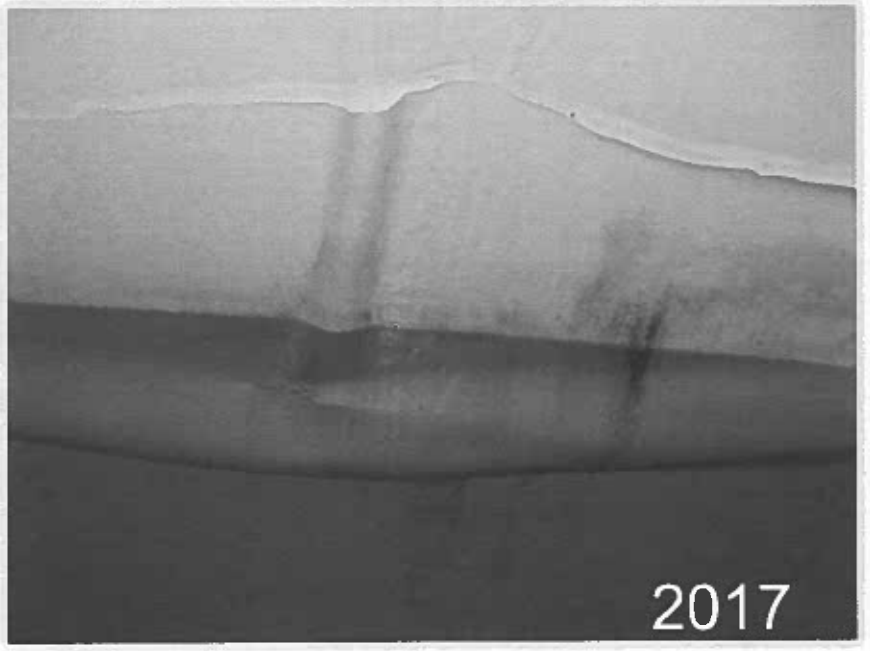
3-4 Years after Full Rehabilitation @ $2M+

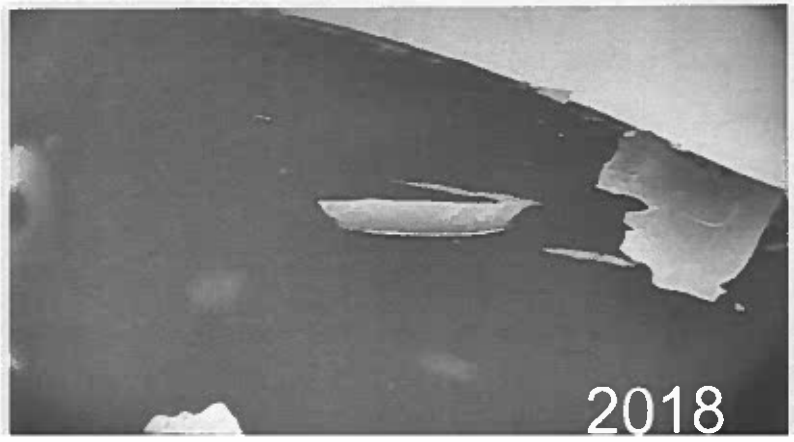


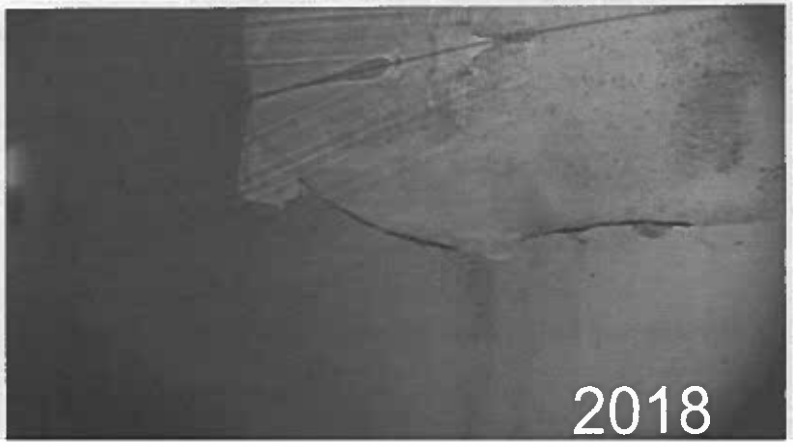
Problems with Bid Projects
2.4MG Ground Storage

Quality Specification, Contractor & Oversight

- 1M+ Project
- 2015 Full Interior/Exterior Rehab
- 2016 Warranty Period Ends, Bonds Released
- 2017 Coatings Begin to Sag / Bubble
  - Suspect Partially Cured Material Sliding Down Walls
- 2018 ROV Picture / Coatings on Floor
- 2019 Continued Annual Inspection to Observe
  - Coatings Continue to Delaminate
  - Full Extent of Damage is Unknown





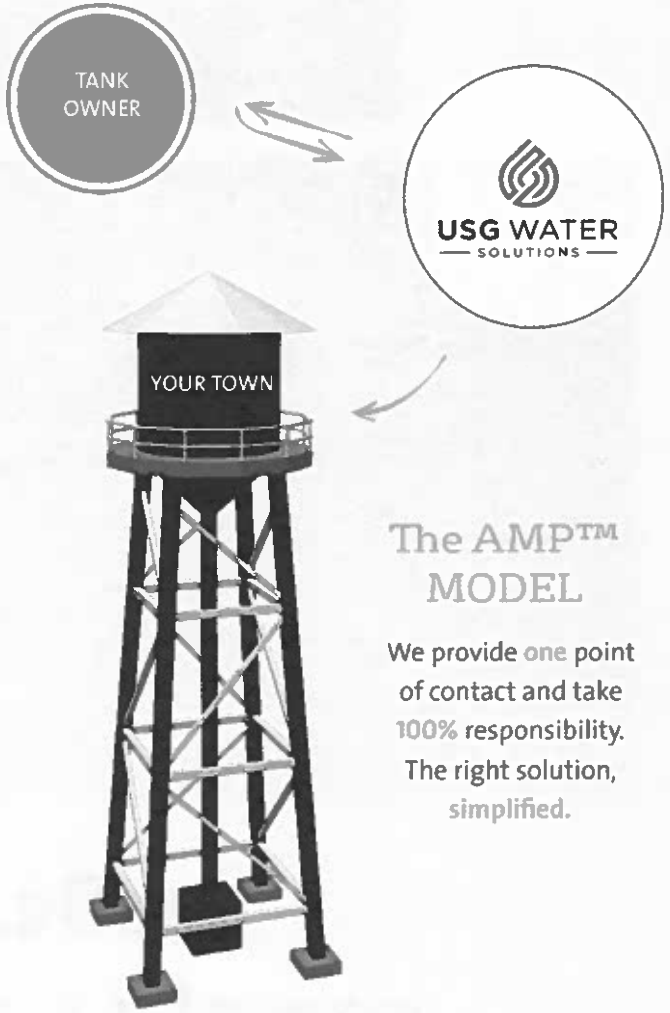


USG WATER SOLUTIONS

NEW APPROACH

High value sustainable solution that ultimately saves the tank owner time and money, and limits most of the aggravation of owning a storage tank.

- Proactive and sustainable
- Annual inspections limit repairs or renovations
- Lifetime warranty on coatings
- Predictable annual fee makes budgeting simple
- Fewer Change Orders
- Save $$$ Long Term and Short Term
- Tank Owner shifts the risk of any future problems to USG, saving money and gaining peace of mind



The AMP™ MODEL

We provide one point of contact and take 100% responsibility. The right solution, simplified.

USG WATER SOLUTIONS





Tank Asset Management Program

Benefits to YOU:



A Partner with Skin in the Game: We are invested in proactive maintenance because your annual fee is capped regardless of the work needed.



Transfer of Risk: The risk of future problems with repairs and coatings is shifted to USG Water, saving you money, time and stress.



Stay in Compliance: Your inspections and cleanings are prescheduled so you never have to worry about them.



Positive Community Response: Your tanks will look great every year with our regularly scheduled power washing, overcoats, and annual inspections/repairs. Your town will know you are investing in their health



Cellular Oversight: We oversee and help coordinate all cell work on your tank to ensure they don't compromise the sanitary, structural, or coatings integrity of the tank. And we have them pay for it.



No Surprises, Easy Budgeting: With everything included in your annual fee, there are no surprises in your budget.

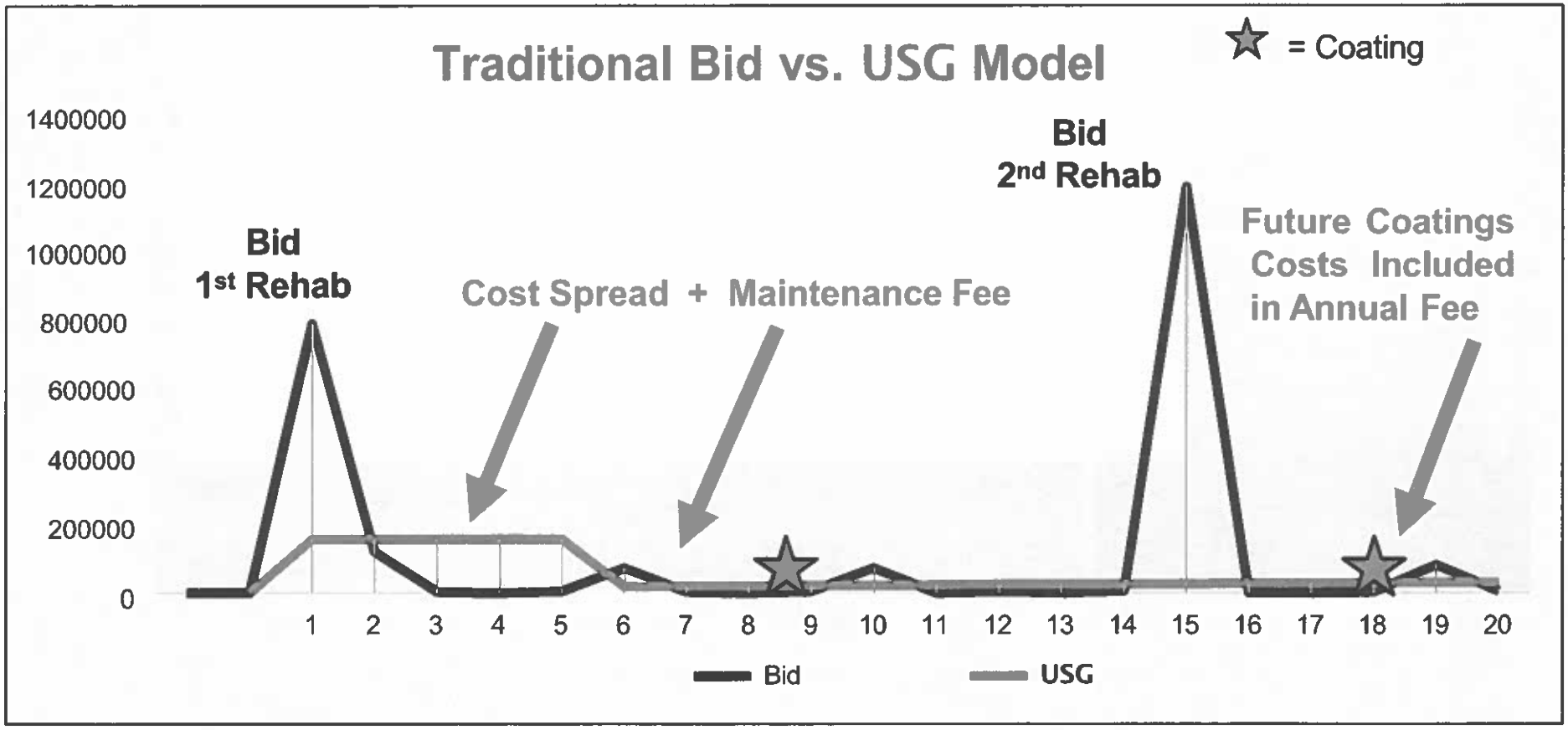


Cancel Anytime: We kick risk out the door. You can cancel at any time,

What is included in your annual fee

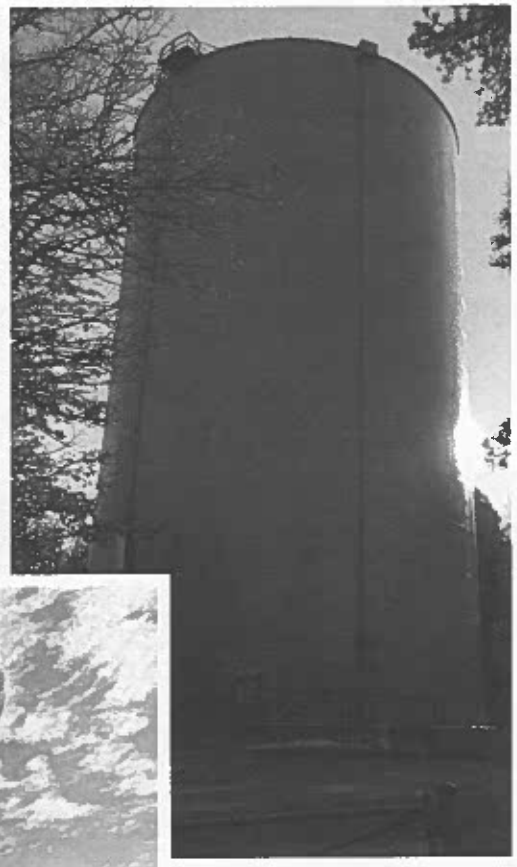
- Annual Inspections & Reports
- Lifetime Warranty on Coatings
- Predictable Annual Fee
- Emergency Repair Response
- Scheduled Powerwashing Scheduled Cleanings
- Fresh overcoat about every 10 years for steel tanks, 7 years for concrete
- Engineer support
- Oversight of Cell

USG Program Financial Stability



UC WATER SOLUTIONS









Who's Utilizing USG Tank Asset Management?

- Over 8,000 Tanks nationwide
- West Springfield MA
- Foxborough MA
- Marlborough MA
- Bedford MA
- Paxton MA
- Millis MA
- Canton MA
- Kingston MA
- Dartmouth MA
- Winthrop ME
- Bar Harbor ME
- Champlain Water District VT
- Shelburne VT
- Newport VT
- Burlington VT
- Quonset RI
- Southington CT
- Connecticut Water Company

Budgetary Pricing - Vauxhall

ear	1	2	3	4	5	6	7	8	9	10
Vork chedule	Full Int/Ext Blast & Paint + Repairs	Visual Inspect	ROV Inspect	Washout	Visual Inspect	ROV Inspect	Visual Inspect	ROV Inspect	Visual Inspect	Washout & Exterior Overcoat
ee	$247,579 (UR + MP)	$247,579 (UR + MP)	$247,579 (UR + MP)	$26,208	$27,136	$28,097	$29,091	$30,121	$31,187	$32,291
ull Coatings and Repairs Warranty for life of contract or until you cancel										

Total UR: $692,978

nstall Air gap with flapper mesh screen combo on overflow.
Repair Fill Pipeand replace insulation.
Weld antenna brackets to roof
Weld antenna bracket in interior dry access to keep coax off of ladder.
Remove 92ft of Notched rail
nstall 110 ft of flexible cable safety climb
Replace bolts on access tube clamp style man way.
nstall a 24" vent neck with a pallet style frost proof vent
Repair c-clamp manway bolts

UC WATER SOLUTIONS

Budgetary Pricing - Rogers

ear	1	2	3	4	5	6	7	8	9	10
Vork chedule	Full Int/Ext Water Jet +Paint + Repairs	Visual Inspect	ROV Inspect	Washout	Visual Inspect & Exterior Power-Wash	Visual	ROV Inspect	Exterior Overcoat & Washout	Visual	Visual
ee	$358,662 (UR + MP)	$358,662 (UR + MP)	$358,662 (UR + MP)	$74,536	$77,175	$79,907	$82,735	$85,664	$88,697	$91,837

ull Coatings and Repairs Warranty for life of contract or until you cancel
nnual Inspection
xterior Powerwash Every 5 Years
xterior Renovation Every 7 Years
nterior Renovation Every 20 Years

Total UR: $934,480

40 LF Crack Repair
0 Sqft Spalling Repair
Remove existing Ladder Cage
nstall Aluminum Ladder Gate

USG WATER

Budgetary Pricing - Fargo

ear	1	2	3	4	5	6	7	8	9	10
Vork chedule	Visual	ROV	Visual	Washout	Visual	ROV	Visual	Washout	Visual	Exterior Overcoat & ROV
ee	$29,636	$30,686	$31,772	$32,897	$34,060	$35,266	$36,515	$37,807	$39,145	$40,531
ull Coatings and Repairs Warranty for life of contract or until you cancel										

Continuous Touchups
Exterior Coating every 10 years
Interior Coating every 20 years

U WATER SOLUTIONS

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Facilities Exterior Improvements	**DEPARTMENT PRIORITY** 7

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The Purpose of this project is to protect the Town's investments by continuing with the scheduled replacement of roofing, siding, driveways, and other exterior items at the Town's 28 wastewater pumping stations.
2	**PROJECT STATUS IF IN PROGRESS**
	Roof replacements have occurred at Shore Road, Dock Road, Bolles Ct, Waterford Village, Sea Side, Niantic River Rd and Mago Pt stations and the exterior siding was replaced at the Waterford Village and Bolles Ct stations and a driveway was installed at East Neck Station
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (Include cost estimate if applicable)**
	There is no impact on the operational budget, however this scheduled replacement work protects the Town's major assets
5	**GRANT FUNDING/OTHER FUNDING, If applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	A majority of this work is conducted by Utility Commission staff with exception to the driveway paving. A Report of the expenditures is attached
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital	100,000	50,000	50,000	50,000		
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR						
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**100,000**	**50,000**	**50,000**	**50,000**	**0**	**0**




Bolles Court Station Before and After New Roof and Siding




Niantic River Road Station Before and After New Roof




Waterford Village Station Before and After New Roof and Siding

Facilities Exterior Improvements Project

Year	Amount	Eff Date	Comment	Ref 2	Check #	Vendor
2022	$ 8,600.00	10/01/2021	Bolles Court Pump Station-Roof	220070	306269	THOMAS GARBATI
2022	$ 7,900.00	11/12/2021	Mago Point Way Pump Station-Re	220339	306669	A.N.A CONTRACTING, LLC - ERIC DONAHUE
2022	$ 15,357.00	12/23/2021	Remove and Replace Driveways-Gardners and Shore P	220411	307309	PETER S TURELLO LLC
2022	$ 1,234.74	06/24/2022	Waterford Village-Siding		309492	AMERICAN BUILDERS & CONTRACTORS SUPPLY CO., INC.
2022	$ 149.95	06/30/2022	Waterford Village-Siding		309635	AMERICAN BUILDERS & CONTRACTORS SUPPLY CO., INC.
2023	$ 6,964.41	10/14/2022	Bolles Court Pump Station -Siding	230301	310973	AMERICAN BUILDERS & CONTRACTORS SUPPLY CO., INC.
2023	$ 4,600.00	10/28/2022	Niantic River RD PS-Roof Replaced	230295	311262	PETER S TURELLO LLC
2023	$ 22.00	10/28/2022	Bolles Ct-Siding		311160	AMERICAN BUILDERS & CONTRACTORS SUPPLY CO., INC.
2023	$ 779.71	11/23/2022	Supplies for Siding/Bolles & Village		311657	HOME DEPOT INC.
2023	$ 237.50	11/23/2022	Waterford Village-Door		311697	RING'S END LUMBER DBA NIANTIC L
2023	$ 92.30	11/23/2022	Waterford Village-Paint for Door		311697	RING'S END LUMBER DBA NIANTIC L
2023	$ 415.66	12/23/2022	Bolles Court Pump Station -Siding		312048	HOME DEPOT INC.
2023	$ 2,878.10	12/23/2022	Dock and Shore Rd-Roof Replaced	230366	312089	PETER S TURELLO LLC
2023	$ 737.50	12/23/2022	Bolles Court Pump Station -Siding		311980	AMERICAN BUILDERS & CONTRACTORS SUPPLY CO., INC.
2023	$ 11.06	12/23/2022	Bolles Court Pump Station -Siding		311980	AMERICAN BUILDERS & CONTRACTORS SUPPLY CO., INC.
2023	$ 5,171.90	12/23/2022	Dock and Shore Rd-Roof Replaced	230366	312089	PETER S TURELLO LLC
2023	$ 57.83	06/30/2023	Brook Pump Station-Fixing siding		314795	AMERICAN BUILDERS & CONTRACTORS SUPPLY CO., INC.
2024	$ 12,477.50	06/20/2024	Evergreen Pump Station-Remove and Replace Roof	240637	319212	PETER S TURELLO LLC
2024	$ 16,900.00	06/21/2024	East Neck Pump Station-Remove and Replace Driveway	240636	319212	PETER S TURELLO LLC

Total: $ 84,587.16

Work Completed by Outside Contractor

Remaining materials for work performed by in-house staff

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Bartlett Corners Water Booster Decommissioning	**DEPARTMENT PRIORITY** 8

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	The purpose of this request is to fund the decommissioning of the Bartlett Corners Water booster station. As a result of other system upgrades,this station was removed from service in 2006 ,however not fully decommissioned. There is no use to the Utility Commission for the building or land. A report was prepared in 2009 which identified options necessary to fully decommission the station, the report is attached.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	There is no impact to the budget, operational costs were borne by the City of New London
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	A costs estimate from a previous report is attached, the funding request was adjusted by utilizing the Construction Costs Index.

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		166,950				
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**166,950**	**0**	**0**	**0**	**0**

PRELIMINARY ENGINEERING REPORT

DECOMMISSIONING OF BARTLETT CORNERS WATER BOOSTER PUMPING STATION

WATERFORD, CONNECTICUT

PREPARED FOR:

TOWN OF WATERFORD UTILITY COMMISSION
WATERFORD, CONNECTICUT

REVISED
NOVEMBER 2009

PREPARED BY:

LENARD ENGINEERING, INC.
STORRS, CONNECTICUT

I) INTRODUCTION

In 2006, the Town of Waterford Utility Commission (WUC) constructed water system improvements that enhanced water pressures and fireflows to the Quaker Hill area of Waterford. Included in this project were a new 2500 gpm capacity water booster pumping station near the intersection of Old Colchester and Old Norwich Roads, and a 1.5 million gallon pre-cast, pre-stressed concrete water storage tank constructed on Rogers Hill, accessed off of South Bartlett Road.

From 1977 up to 2006, the Bartlett Corners Hydropneumatic Station served a small high service area on a hill in the northeast corner of Waterford consisting of approximately 20 residential customers on Lathrop Road, Lower Bartlett Road, Upper Bartlett Road, Pepperidge Road and South Bartlett Road. Once the new Quaker Hill water system improvements were activated, the Bartlett Corners Station was inactivated.

The purpose of this study is to determine what long term measures are needed to permanently disconnect the Bartlett Corner water pumping station from the distribution system, as well as other steps to decommission the building properly.

LEI would like to thank Neftali Soto, Jim Bartelli and members of Veolia Water staff for their assistance with this study.

II) EXISTING CONDITIONS

The Bartlett Corners water pumping station is located an approximate 200' deep by 85' wide Town-owned parcel on the west side of Route 32, approximately 200 feet south of Jerome Road (See **Figure** 1). The structure has approximate dimensions of 26' by 28', and has a ground floor and basement floor levels. The building has an overhanging roof across the entire front eastern face, and along portions of the north and south faces of the building. **(Photo 1, Appendix A).**

Figure 2 shows the mechanical plan for the ground floor level , which includes two 200 gpm capacity electric motor driven domestic water pumps, one 500 gpm electric motor driven fire pump, ductile iron piping and valves, an 80 kW standby diesel generator, two air compressors which provide air for the two hydropneumatic tanks in the basement, and miscellaneous electrical, control and HVAC equipment. **(Photos 2, 3, 4, 5 and 6, Appendix A).**

Immediately outside of the building is a 1000 gallon underground diesel fuel storage tank, with interconnecting piping to a diesel fuel storage day tank inside the building.

Figure 3 shows the mechanical plan for the basement floor level of the station. Two 2500 gallon hydropneumatic tanks, approximately 4.5' in diameter and 18' long, dominate the lower level. Pump station inlet and outlet piping is also present, along with a waste line collecting floor drainage, discharging to a drywell on the rear of the building. Two masonry "knock-out" walls were constructed in the rear wall of the station, which could be removed to assist in tank removal if desired. **(Photos 7, 8 and 9, Appendix A).**

The building has a 208V, 3 phase 400 amp electrical service via overhead wires to the building, along with an overhead telephone service. There are no underground gas or sanitary sewer connections shown on the design plans, or visible inside the building.

Figure 4 shows the water distribution system in the vicinity of the Bartlett Corner pump station. An 8" water main taps off of the existing 24" main adjacent to Route 32, and has an isolation valve on it, which could potentially be closed to isolate the supply side of the station. **Figure 4** also shows an 8" discharge line leaving the station, and connecting to an existing 8" water main left by a previous contract. No exterior isolation valves are shown on the design drawings. Some circular depressions are present in the pump station driveway, which may indicate the presence of a valve on the discharge piping.

Figure 4 also shows the distribution system layout in the vicinity of the station. The 8" discharge line leaving the station crosses Route 32, and continues off-pavement on the east side, northerly to the intersection of Lathrop Road, Record mapping shows the 8" main connected to a short length of existing 12" main, and then back to 8" to feed the five streets in the former isolated high pressure zone. No isolation valves are shown along this length of water main.

Appendix A provides photographs of the pumping station and interior major components.

Figure 1- Existing Site Plan

Figure 2 - Mechanical Plan – Ground Level

Figure 3- Mechanical Plan- Basement Level

Figure 4- Distribution System Layout

III TOWN PLANNING DIRECTOR COMMENTS

The Waterford Utility Commission staff contacted Mr. Thomas Wagner, Planning Director for the Town, to review and comment regarding the potential for re-use of this property, for either Town of Waterford or other parties, assuming the parcel was sold. The following is a summary of his comments:

A) ZONING COMPLIANCE

16 Norwich Road (the site) contains 0.39 acres, or 16,675 square feet +/-. It is located in an RU-120 Zoning District, which has a minimum lot size of 120,000 square feet. The fact that the lot is non-conforming does not prohibit its reuse, it just limits how it may be reused.

According to the available information, the existing building takes up about 1200 square feet ground coverage, or about 7 % of total lot area. The building is set back from Norwich Road (Route 32) 70 feet, whereas the required front yard is 75 feet on a state highway. The building is set back from the side property lines by about 20 feet, whereas the required side yards are 30 feet. The building is set back from the rear property line by 90 feet, whereas the required rear yard setback is 75 feet.

Any expansion of the existing building would have to conform to the required setbacks, which would allow for a 15 foot addition to the rear that is 30 feet from each side property line.

B) ALTERNATIVE USE CONSIDERATIONS

If the building or site were to be converted to an alternative use that would involve human occupancy the biggest issue is the need to install a septic system. If residential use is being considered, consultation with the Ledge Light Health District is suggested, to confirm the site is suitable for a house, and the number of bedrooms it could contain.

It appears the building was constructed in the late 1970's based on the deed and assessor's records. Since the site are is sub-standard in most residential districts, it was probably approved on the basis that it would remain in its current use. There are a number of uses allowed in the district which are contained in section 6 of the Zoning Regulations. Use by another utility might be the easiest depending on the level of occupancy.

Another alternative to be considered is the potential sale of the property to an abutter not as a separate lot but to be combined with their use. This presumes removal of the existing building and improvements.

IV. FUTURE RECOMMENDATIONS

A) POTENTIAL MAJOR SALAVAGEABLE ITEMS INSIDE THE STATION

LEI toured the station with operators from New London's contract operations firm, Veloia Water, and conducted a preliminary assessment of the major mechanical equipment within the station. The following equipment appeared to be in good or excellent condition, and potentially could be sold or reused at another similar facility:

1) 80 kW Standby diesel generator- This generator could be removed from the station with some effort, and providing the sizing and voltage are correct, could be used at another Waterford Utility Commission site. One option would be to install this unit inside a trailer to make it portable. If no existing Waterford building or site seems compatible for this generator, it most likely can be sold.

2) Air compressors and air tanks- These air compressors and tanks maintained the air balance within the two 2500 gallon hydropneumatic tanks, and are in excellent condition. Depending on their capacity and motor size / voltage, they potentially can be used at another Waterford Utility Commission site, or sold.

3) Two- 2500 gallon painted steel hydropneumatic tanks.- These are located in the basement of the structure, and are in excellent condition, especially for their age. There are no signs of visible exterior rusting or paint failures, which is a testament to the HVAC systems effectiveness in the building.

As mentioned earlier, the basement was constructed with two masonry knock-out walls, that could be used if the rear foundation wall were exposed to remove the tanks from the building. These tanks could potentially be used by another entity, utility, farmer, etc as a functioning water storage tank, or sold as scrap.

B) ADDITIONAL NON-SALVAGEABLE MAJOR ITEMS

1) Pumping Equipment - The existing domestic pumps and fire pump, while appearing to still be in acceptable working condition, were designed for this stations specific flow and pressure (head) requirements, and therefore would not be easily transferable to another location, either in the Waterford system, or another utility system. Also, the motor phase and voltage would have to be an exact match to the system where it is installed, making reuse even more difficult.

2) Piping- The existing flanged piping may have some value as scrap, but most likely could not be reused in another active site.

3) Motor Control Center – The existing electrical panels, switchgear, transfer switch, and other items inside the motor control center are over 20 years old, and most likely could not be reused due to wear, code changes, or other factors.

4) Underground Diesel Fuel Storage Tank - The 1000 gallon underground tank is a liability, and needs to be properly emptied, removed and disposed of. Based on its size and use, this tank should have been registered with the Connecticut DEP. As a regulated tank, the abandonment process includes:

a) removal of any remaining fuel in the tank,
b) removal of the tank by a licensed contractor,
c) preparation of a tank removal closure report, with soil samples collected and analyzed for potential contaminants by an environmental consulting firm, and
d) submission of this tank closure report and an updated registration form to the DEP.

If soil of groundwater contamination is detected during the closure report and sampling, then additional remedial steps may be required. No mention of potential tank leakage or contamination has been communicated to LEI.

C) UTILITY DISCONNECTIONS

1) Water – As mentioned earlier, 8" water mains connect to the stations suction and discharge piping to the active water distribution system, and would cause a major problem to the structure if there were a leak inside the building. LEI evaluated the best means to isolate the station from the water distribution system, with the options shown on **Figure 4**.

As discussed earlier, an existing 8" underground gate valve is shown on design plans and is visible near the access gate to the station. This valve should be closed, with a restrained mechanical joint cap and trust block installed between this valve and the station to isolate the suction piping to the building.

Isolating the discharge piping is more challenging. As approximately 300 feet of 8" ductile iron discharge piping is installed from the station to the intersection of Mohegan Parkway (Route 32) and Lathrop Road, it is desirable to take this entire run of dead end piping out of service. This is discussed later in Section D – Additional Considerations.

2) Electric and Telephone- The station is served by an overhead three phase electrical connection, as well as an overhead telephone connection, which extend to a utility pole adjacent to the building. The electrical connection supplies the motor control center, all process pumping and mechanical equipment, as well as unit heaters and HVAC equipment that maintain the heated, ventilated environment.

Disconnecting the existing telephone service to this inactive station should be implemented, to avoid recurring costs with any benefit.

The Town should evaluate the benefits of also disconnecting the electrical service, versus the potential negative effects. Disconnecting the electrical service would definitely save money. The drawbacks to disconnecting electricity is that the structure would no longer be a heated, ventilated, dehumidified space (basement only). Moisture, mold, and gradual deterioration of the structure would likely occur, which over time would require demolition of the structure.

D) ADDITIONAL CONSIDERATIONS

1) Hazardous Materials Inventory - LEI did not include any specific testing for the presence of regulated or hazardous materials within the building, specifically lead paint or asbestos containing materials. Prior to any demolition, renovation or potential property transfer, the Town should complete these investigations, and complete any remedial measures necessary.

2) Looping of Water Distribution System in Lathop Road - The inactivation of approximately 300 feet of existing 8" water main leaving the station may eliminate an existing water distribution system loop between the new 1.5 million gallon water tank and the 24" water main in Route 32 and Lathrop Road. Current Town plans for reconstruction of the Lathrop Road intersection alignment need to also provide a means to replace the looped distribution system. One option to this is shown on **Figure 5**, which is a scan of the most recent design plans for that area, with proposed interconnecting piping shown.

   By installing two tees, one 8" gate valve and approximately 20 feet of new 8" water main on sections of 8" and 24" mains scheduled to be reconstructed, the integrity of the original looped system should be maintained.

   In addition, if during this construction the existing 8" water main could be capped near the intersection, it would take out of service the 300 feet of dead ended water main from the Bartlett Corner discharge piping.

E) PHASED IMPROVEMENT PROGRAM

LEI recommends the Waterford Utility Commission proceed with a two phased improvement program at this site. The first phase would minimize the potential for damage to the structure or liability within an unoccupied building. The second phase provides estimates of major equipment, which would probably be required for transfer or reuse of the building and property.

Phase I – Initial Improvements to Reduce Potential Damage/ Reduce Liability

Improvement	Est. Cost	Discussion
1) Remove Oil Tank	$ 10,000	Eliminates environmental hazard
2) Disconnect Water Distribution System	$ 30,000	Eliminates potential for burst pipes, water damage, eliminates dead ended piping.
3) Disconnect Power, Telephone Services	$ 5,000	Eliminates electrical hazards, recurring costs.

Phase II – Additional Improvements to Prepare Building for Sale / Re-use

Improvement	Est. Cost	Discussion
1) Remove Salvageable Items.	$ 20,000	Potential reuse or resale items
2) Remove remaining Mechanical, electrical Items.	$ 40,000	Empties building for potential re-use.

Figure 5- Lathrop Road Distribution Improvements

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LIST OF APPENDICES

Appendix A	Pump Station Photos

Appendix A

Pump Station Photos



Photo 1 - Front of building.



Photo 2 - Domestic pumps on ground floor level.

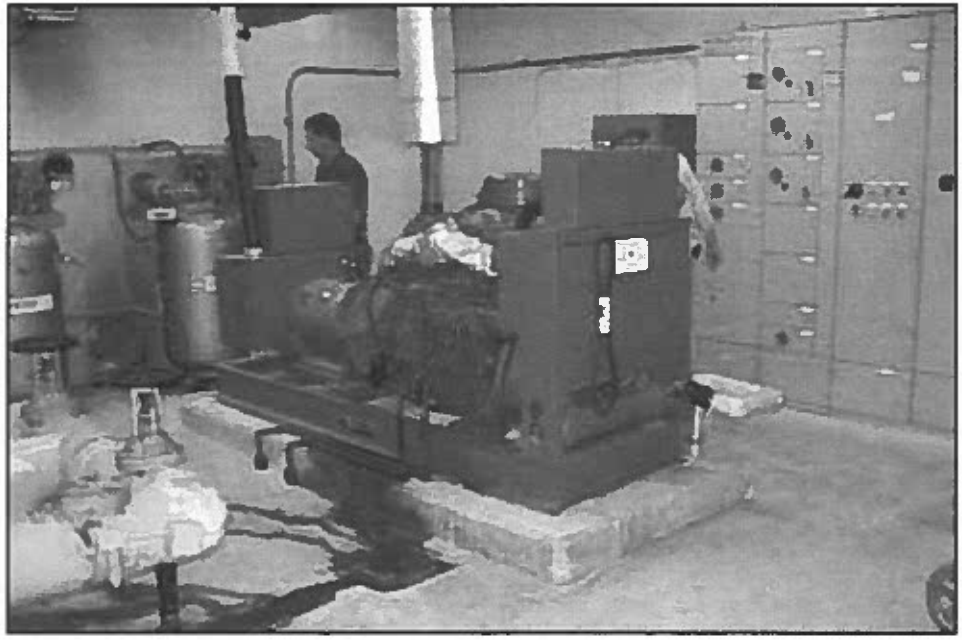


Photo 3 - Diesel engine generator on ground floor level.



Photo 4 - Fire pump on ground floor level.



Photo 5 - Motor control center on ground floor level.



Photo 6 - Air compressors on ground floor level.

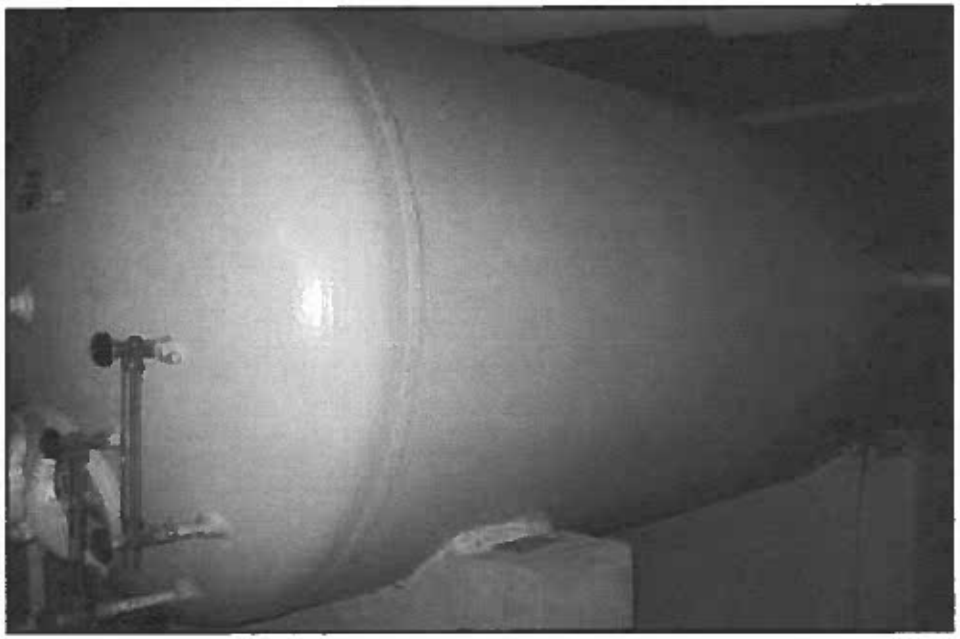


Photo 7 - One of two 2500 gallon pneumatic tanks in basement level.

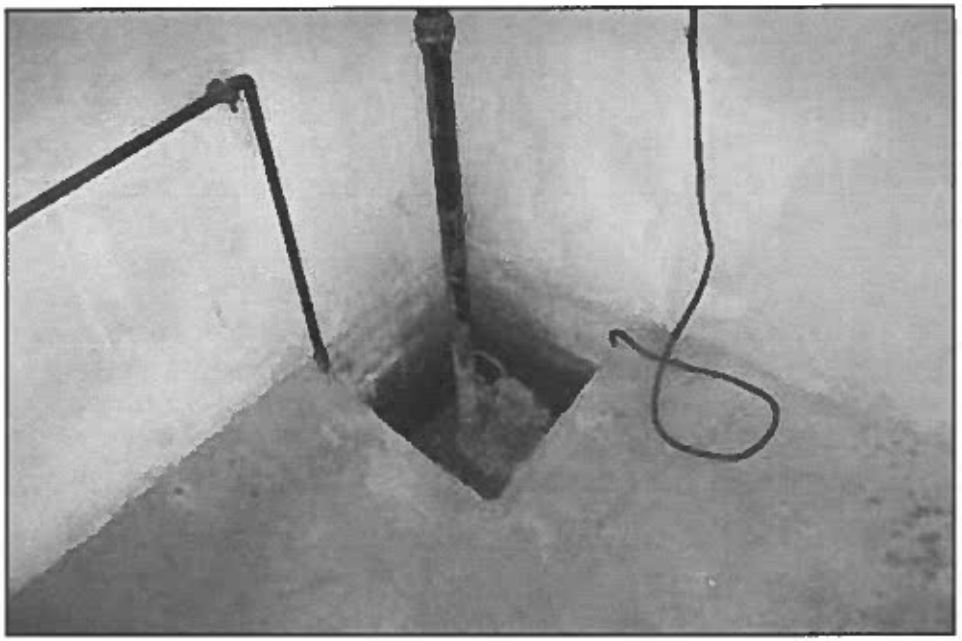


Photo 8 - Existing sump pump in basement level.



Photo 9 - Masonry knock-out wall in basement level,

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY	**CONTACT PERSON**
Utility Commission	Jill N. Stevens
PROJECT NAME	**DEPARTMENT PRIORITY**
Pleasure Beach Area Water Main Replacement	9

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

This funding request is associated with a program that was initiated around 2005 with the intention of replacing water mains in the Pleasure Beach area known as Water Contract #10 which consisted of 20,316 LF of 8" pipe. This contract area has experienced a significant number of main breaks. DPW has held off paving this area to avoid causing more breaks. To date, we have replaced 1,468 feet of main, and 18,848 LF of the old main remain. Funds are being requested for future years to replace approximately 6,300 LF/Yr. at a current average costs of $150/LF . This project will enhance the reliability of the distribution system and create assurances that the roads within the contract area can be repaved without causing a main break and creating an adverse condition to a newly paved road.

2 PROJECT STATUS IF IN PROGRESS

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

The Department of Public Works has been apprehensive to repave the roads within this area due to the likelihood of additional main breaks occurring as a result of the paving process.

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

O&M of the Water system is the responsibility of the City of New London. Waterford is responsible for all Capital Improvements

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

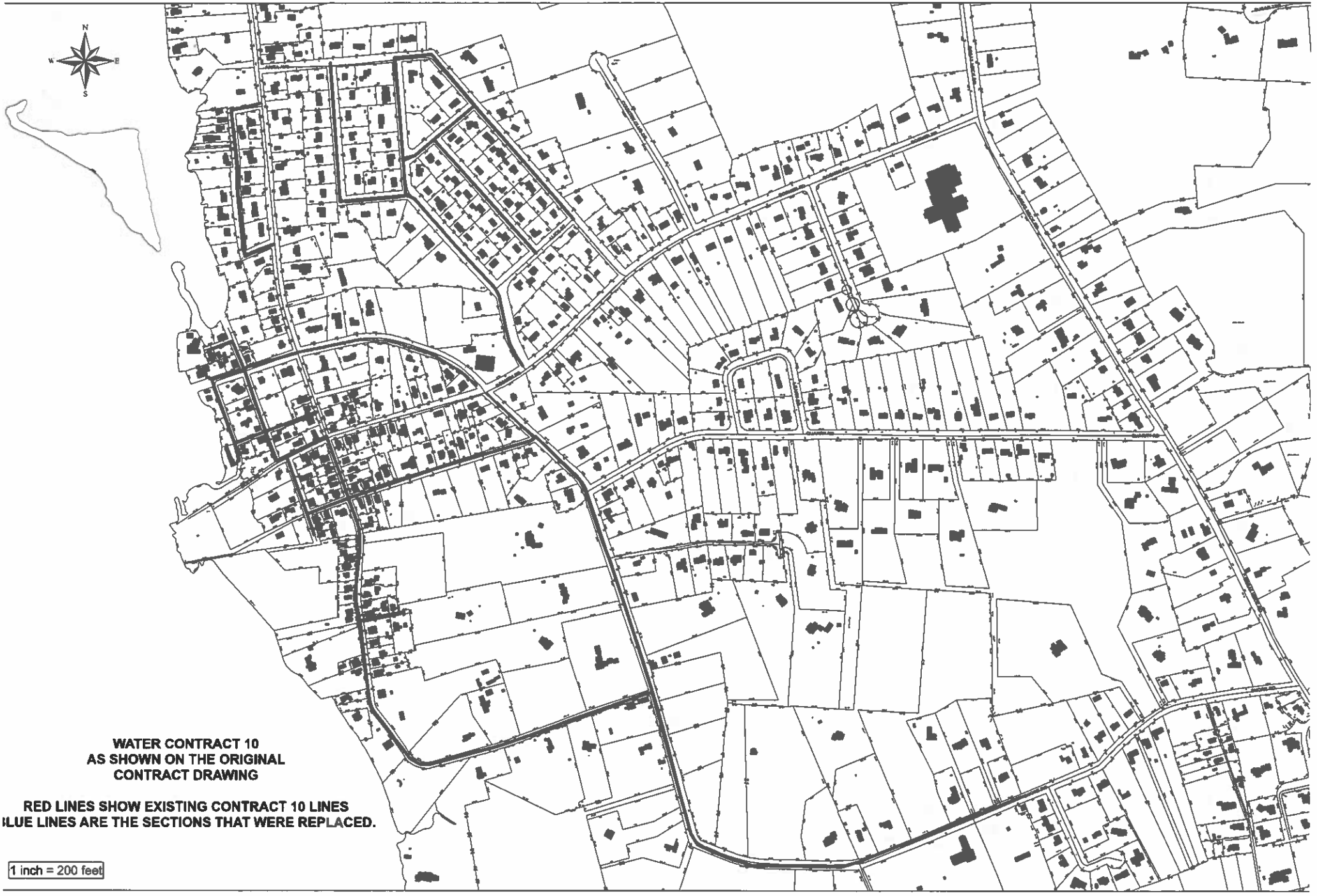
Based on priorities, CT DPH State Revolving Fund Loans.

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

Costs estimate is based upon an regional average construction cost of $150.00/LF

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR		706,800	706,800	706,800	706,800	706,800
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**706,800**	**706,800**	**706,800**	**706,800**	**706,800**


N
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WATER CONTRACT 10
AS SHOWN ON THE ORIGINAL
CONTRACT DRAWING
RED LINES SHOW EXISTING CONTRACT 10 LINES
LUE LINES ARE THE SECTIONS THAT WERE REPLACED.
1 inch = 200 feet

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Rogers Hill Water Tank Refurbishment	**DEPARTMENT PRIORITY** 10

1 DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)

The Rogers Hill water tank, a 1.25 million gallon, pre-cast, pre-stressed concrete water storage tank, was built in 2006 as a part of the Regional Interconnection agreement and provides water service to Quaker Hill. The purpose of this request is to restore the tank to like new conditions as a part of the proposed Water Tank Asset Management program to protect the Town's investment in these critical pieces of water infrastructure.

2 PROJECT STATUS IF IN PROGRESS

3 LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST

Water Tank Asset Management program, if approved

4 DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)

None. The tank is operated by the City of New London under the current Inter-local water agreement.

5 GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)

State Revolving Funds may be available depending upon the project's ranking status

6 ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)

Please see the cost estimate, tank assesment, and tank management program material included

7 COST/FUNDING SOURCE

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR				311,500	311,500	311,500
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**0**	**0**	**311,500**	**311,500**	**311,500**



Tank Asset Management Program

Comprehensive water tank maintenance is more than the rehabilitation of an aging water tank. It's about indefinitely extending the life of critical assets at a cost you can control. No one else offers you the comprehensive range of services – and the peace of mind – that USG Water Solutions delivers.

The challenge

Aging infrastructure

As they age, water tanks present more maintenance and water quality concerns.

Water quality

Buildup of mineralization and biofilm can cause water quality issues.

Limited budgets

Costly tank maintenance is not often included in annual budgets, so related expenses are often paid with funds allocated to other projects.

The USG Water Solutions' Tank Asset Management Program extends service life and optimizes conditions of your storage tank so you can provide high-quality water to your customers.

Learn more on the back.

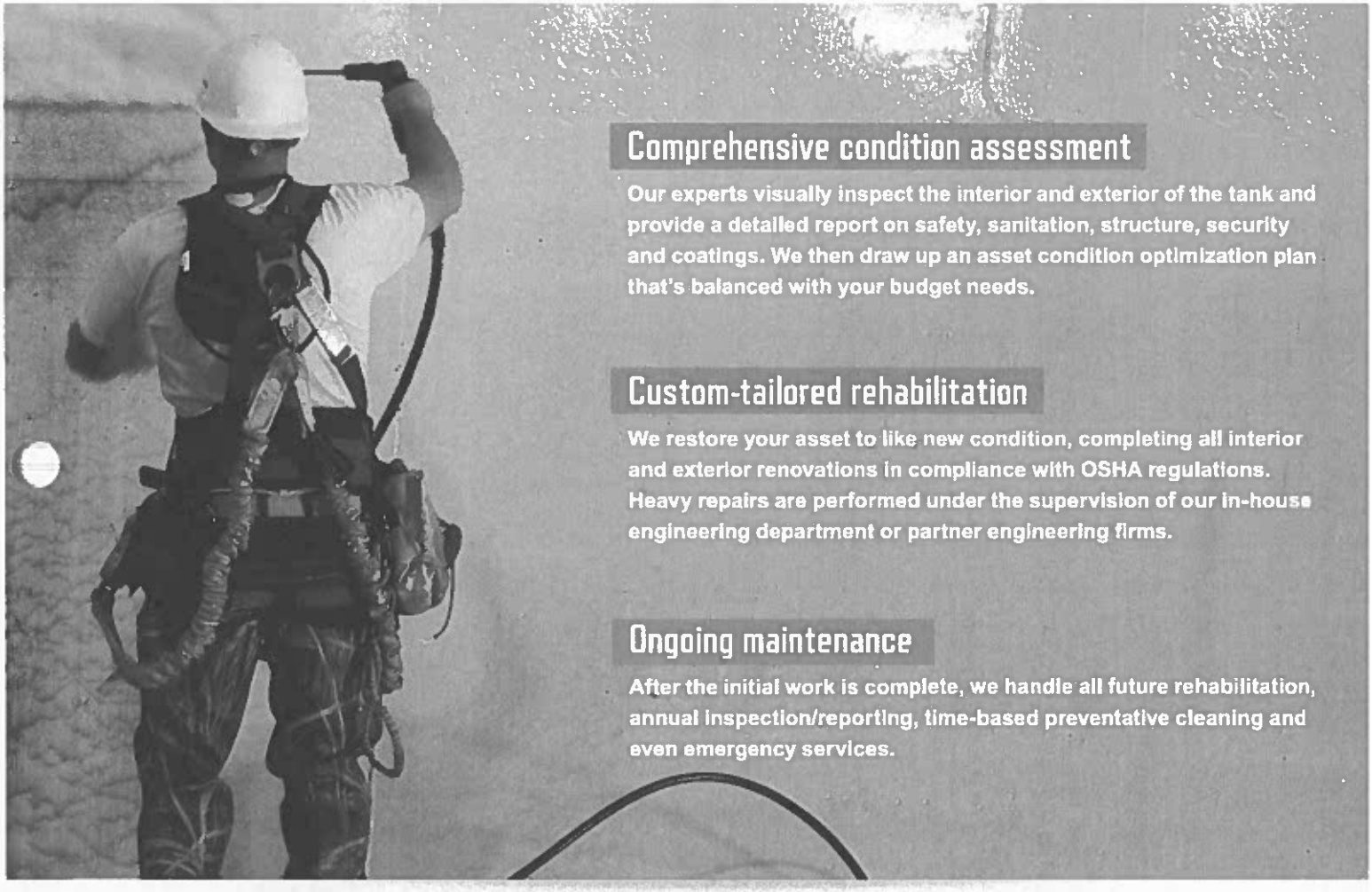
USG WATER SOLUTIONS

Peace-of-mind for you. High-quality water for your customers.

Our Asset Management Program is a comprehensive approach designed to help you maintain your tanks and keep them compliant with safety and sanitary regulations.

The benefits

- **Improve water quality**
- **Comply with regulations**
- **Extend asset life**
- **Predictable budget**



Comprehensive condition assessment

Our experts visually inspect the interior and exterior of the tank and provide a detailed report on safety, sanitation, structure, security and coatings. We then draw up an asset condition optimization plan that's balanced with your budget needs.

Custom-tailored rehabilitation

We restore your asset to like new condition, completing all interior and exterior renovations in compliance with OSHA regulations. Heavy repairs are performed under the supervision of our in-house engineering department or partner engineering firms.

Ongoing maintenance

After the initial work is complete, we handle all future rehabilitation, annual inspection/reporting, time-based preventative cleaning and even emergency services.

The ultimate solution:

USG Water Solutions Asset Management

At USG Water Solutions, we believe you shouldn't have to choose between a capital expense that is beyond your budget and an unpredictable run-to-failure approach. Our Asset Management Program (AMP™) packages the rehabilitation and future maintenance of your assets into a single contract, with USG Water Solutions assuming all maintenance risk for a set annual cost.

Extend tank life.
Call +1 (855) 526-4413 or visit
www.usgwater.com

Utility Service Group Water Solutions

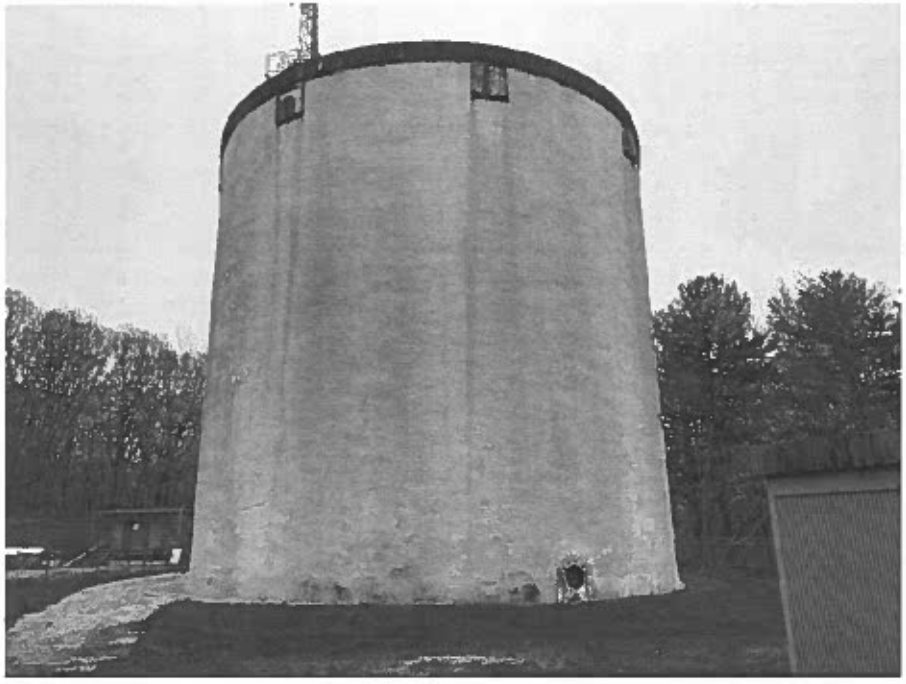
1230 Peachtree Street NE
Suite 1100 | Promenade Building
Atlanta, GA 30309

USG WATER SOLUTIONS

An ISO 9001:2015 Quality Assured Company

2024 Condition Assessment

TOWN OF WATERFORD, CT
ROGERS HILL TANK
2500000 Gallons Ground



Inspection Date: May 2, 2024
Water System Consultant: Kevin Martel

USG WATER SOLUTIONS

PROJECT INTENT AND RESULTS

USG Water Solutions - Utility Service Co., Inc. conducted an inspection of the Water Storage Tank based on OSHA, AWWA and local requirements for Sanitary, Safety, Security, Coatings, and the overall condition of the Structure. A summary of the inspection results, including photographs and recommendations, outlining the urgency for any items we feel require addition attention to maintain and preserve the Structure are as follows:

Results SANITARY:

- ☐ Vent
- ☐ Leaks, Holes, or Points of Intrusion
- ☐ Water Quality
- ☐ Overflow

Results SAFETY AND SECURITY:

- ☐ Access Hatches, Manways or Doors
- ☐ Fences, Gates, Guards or Vandalism
- ☐ Ladders, Platforms, Handrails or Stairs
- ☐ Lightning, Alarm Systems or Telecommunications

Results COATING:

- ☐ Exterior
- ☐ Water Chamber
- ☐ Dry Interior

Results STRUCTURE:

- ☐ Roof
- ☐ Shell
- ☐ Supporting Members
- ☐ Appurtenances
- ☐ Anchors and Foundation

During the inspection, the following scope of work was performed:

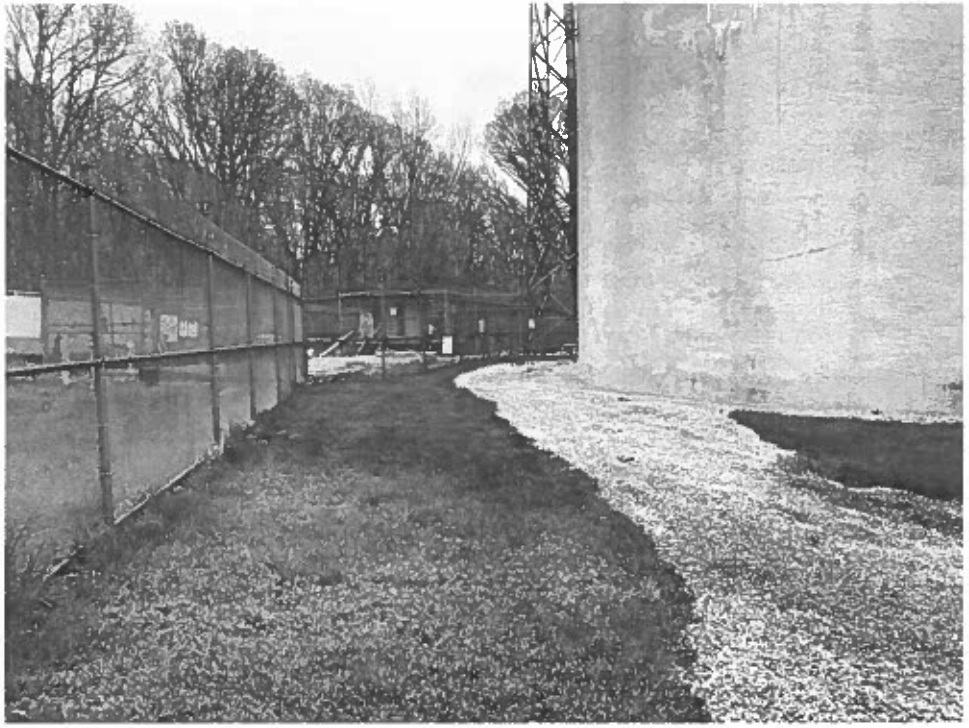
- Visual Inspection of the tank interior and exterior accessible without rigging, to include appurtenances.

Legend of Recommendations

Low Risk ↕ High Risk

- ■ = Next Inspection Recommended in 12 months
- ☐ = Maintenance or Renovation Work is Recommended to be in the **Planning Stage**
- ■ = Maintenance or Renovation is Recommended for **Execution** at Earliest Opportunity
- N/A ☐ = Not Applicable

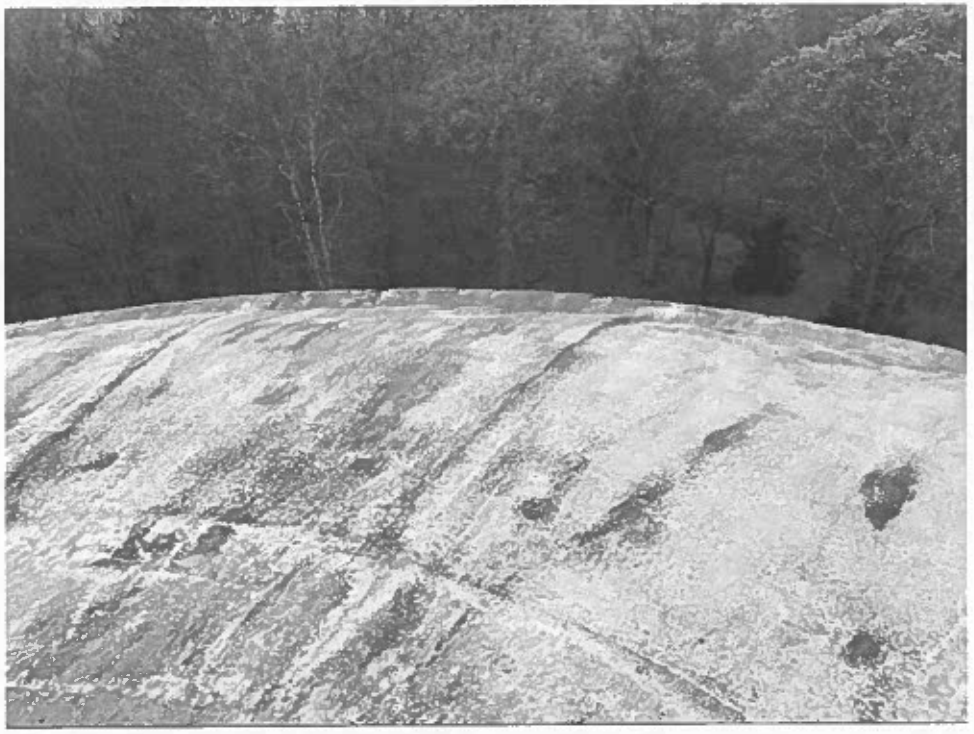
SITE INFORMATION
GATES



- [ ] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

EXTERIOR ROOF





- [x] SANITARY
- [ ] SAFETY AND SECURITY
- [ ] COATINGS AND CORROSION
- [ ] STRUCTURE

EXTERIOR ROOF

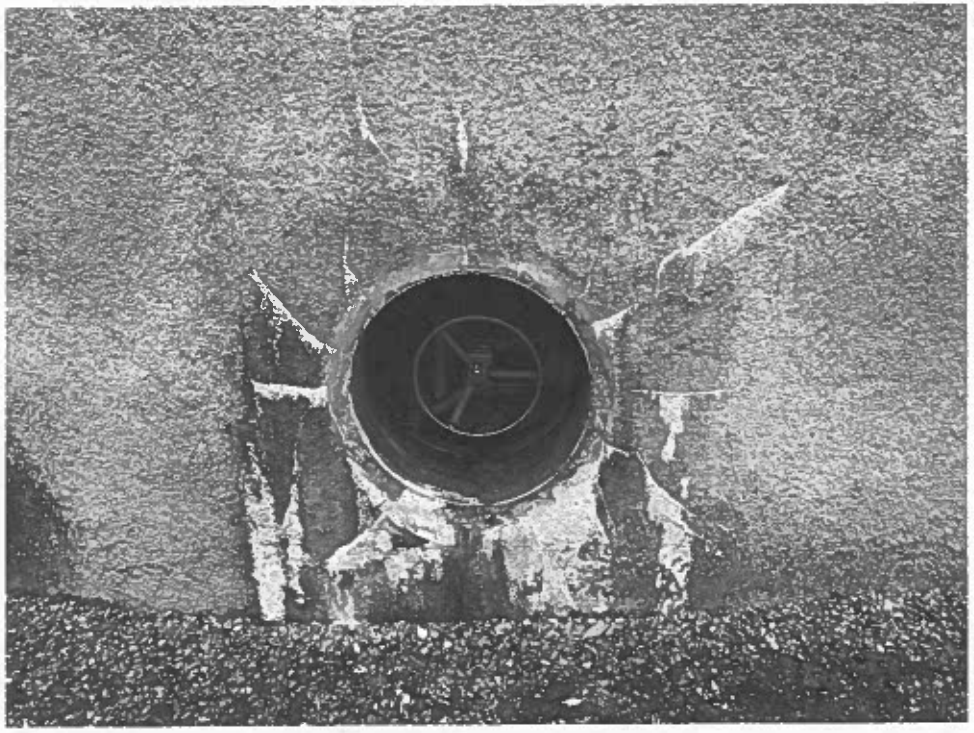




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- [ ] SAFETY AND SECURITY
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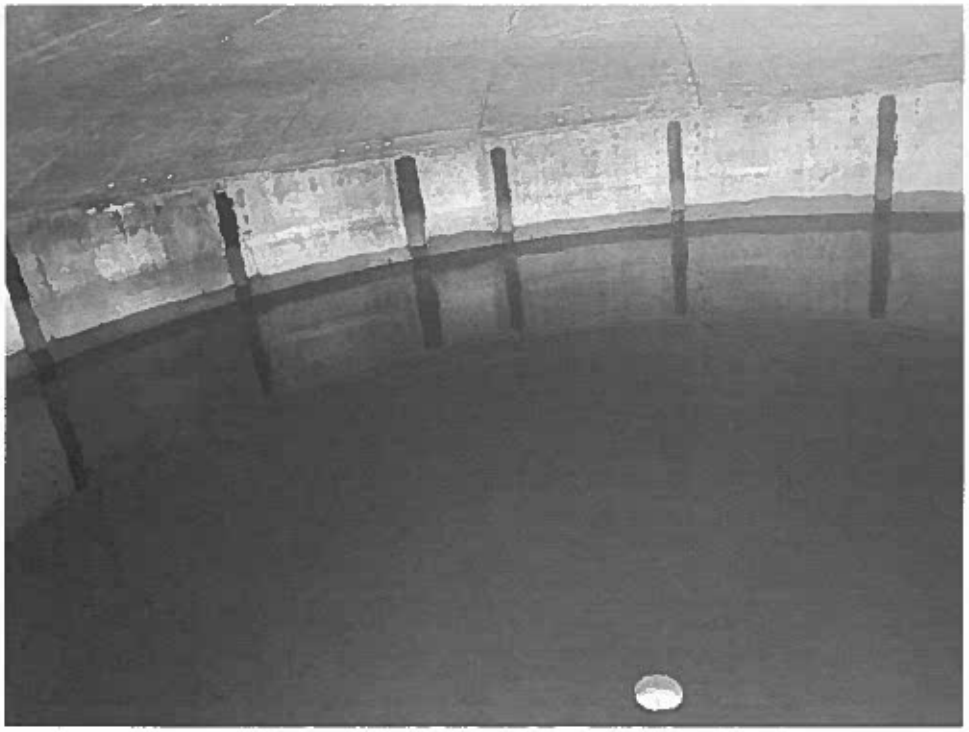
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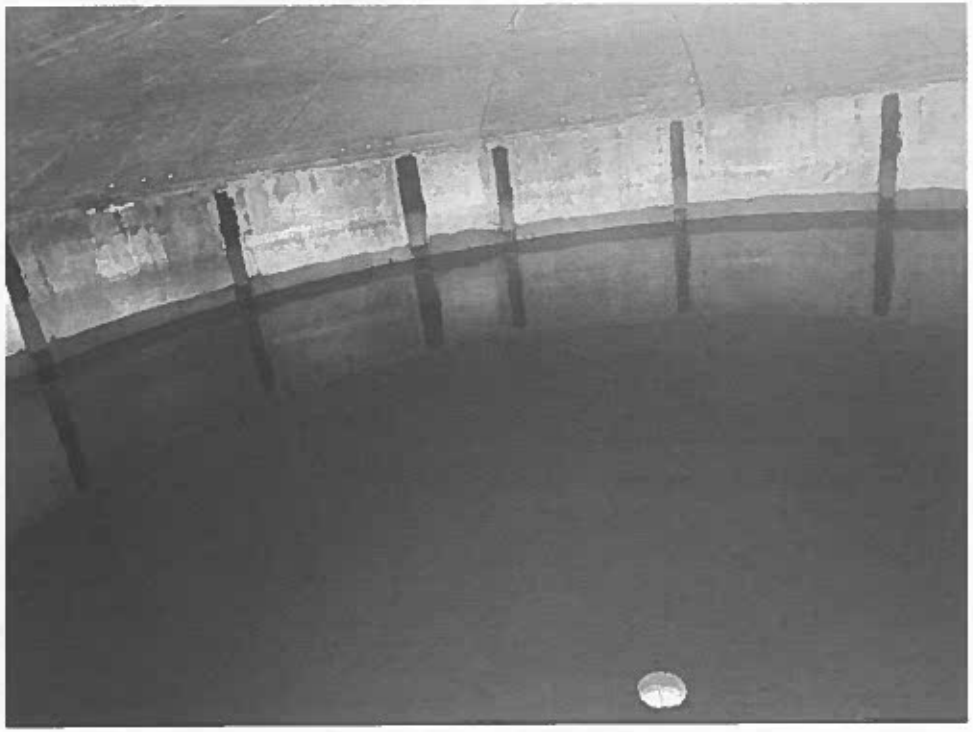




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WATER CHAMBER SHELL/BOWL/FLOOR
SHELL / BOWL





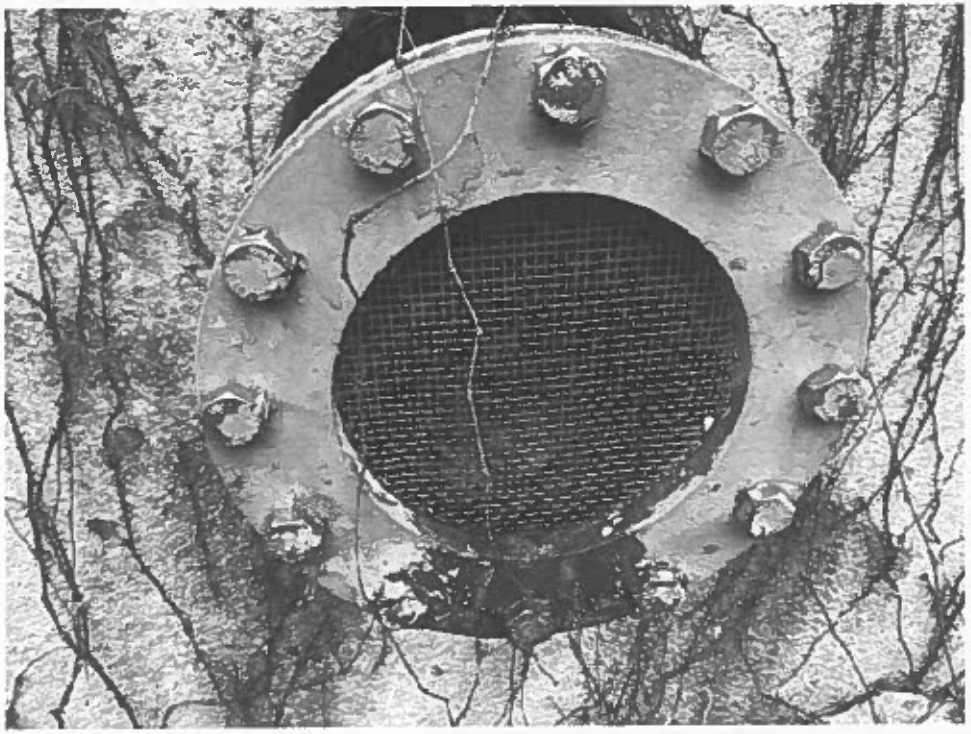
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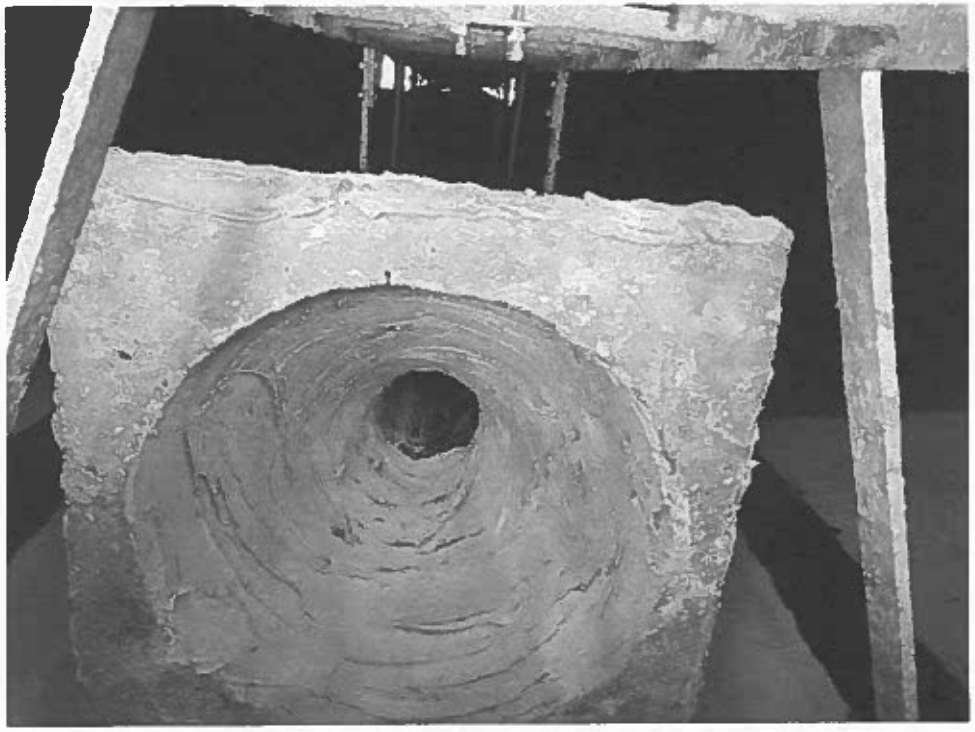
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PIPING
OVERFLOW





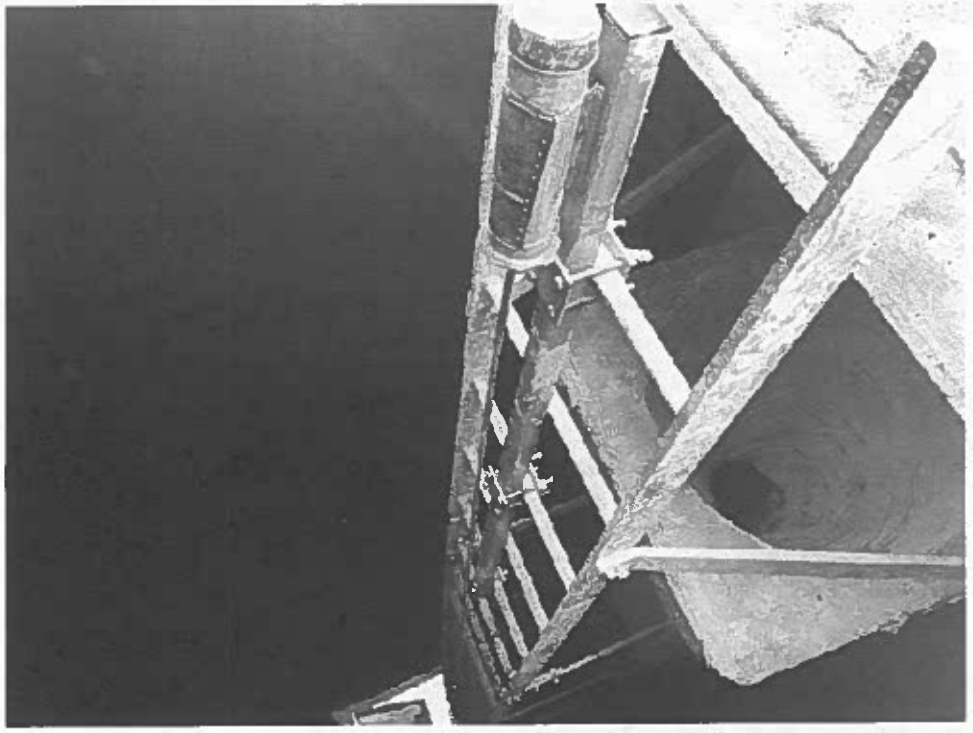
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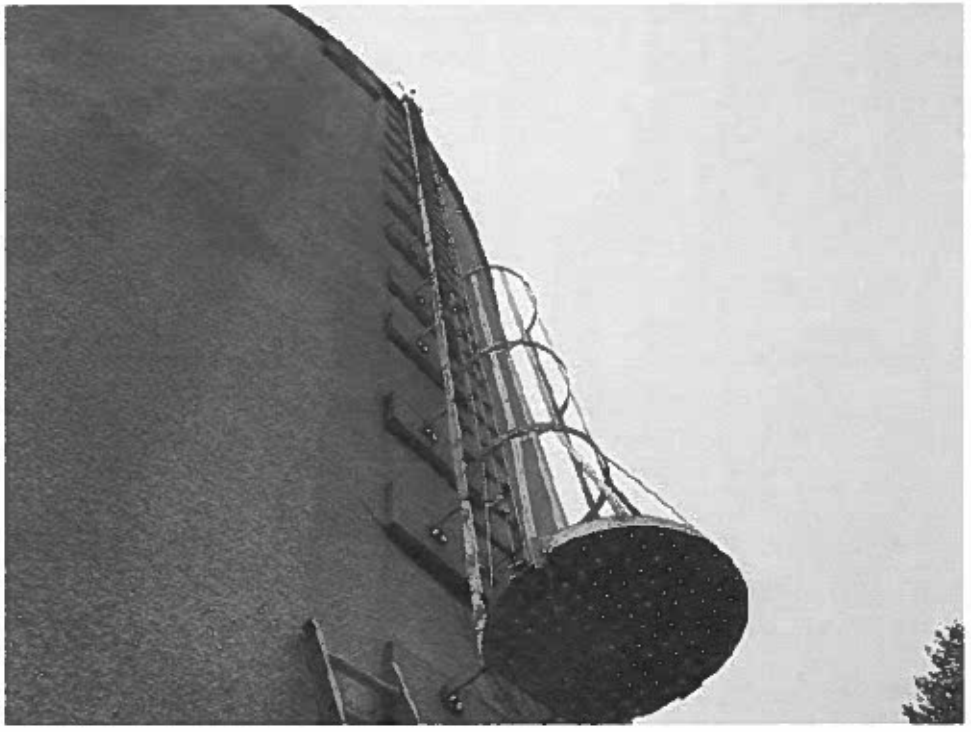
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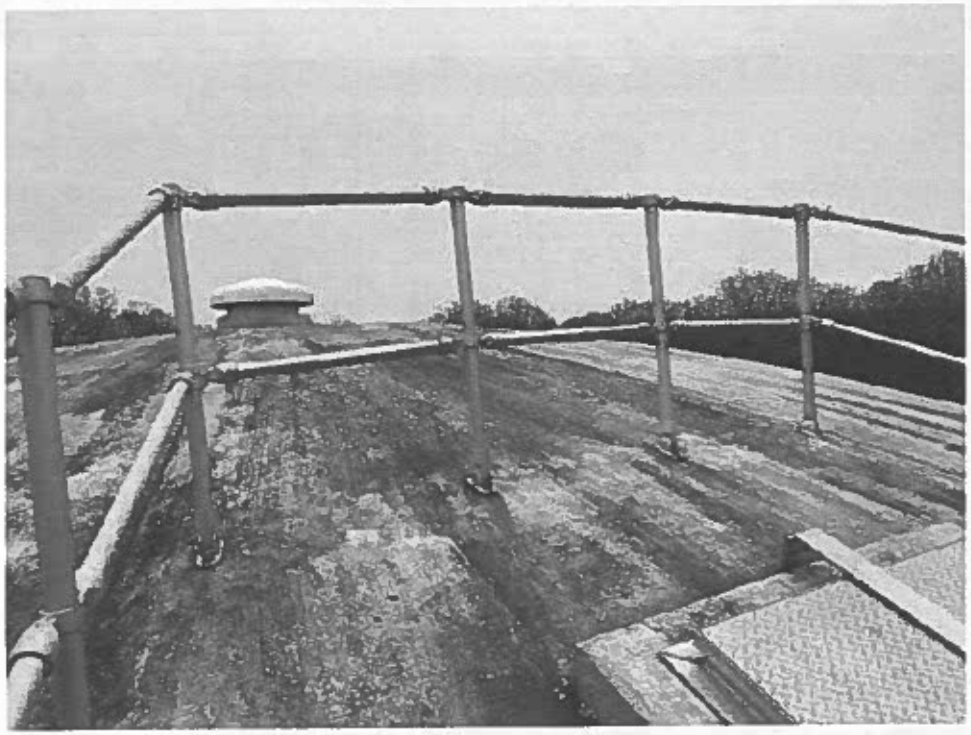
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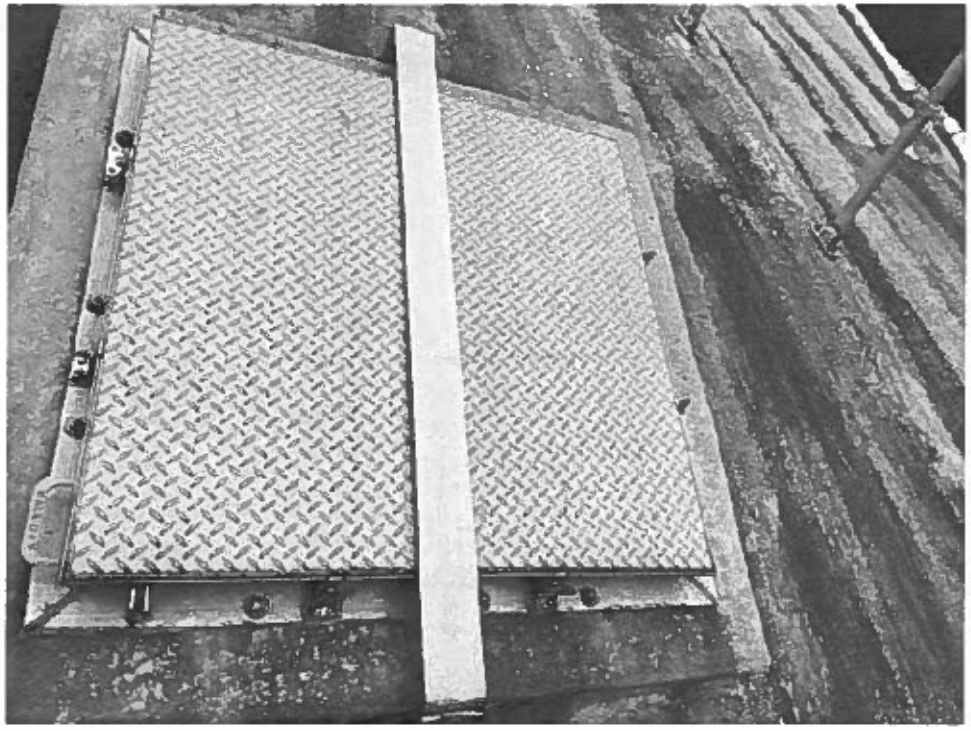
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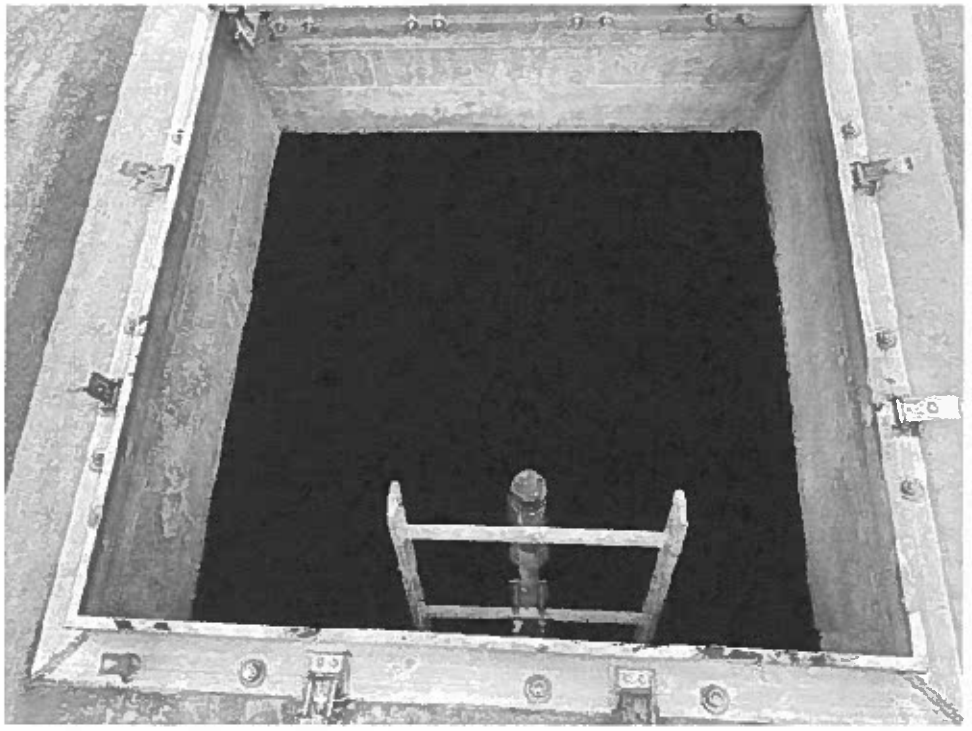




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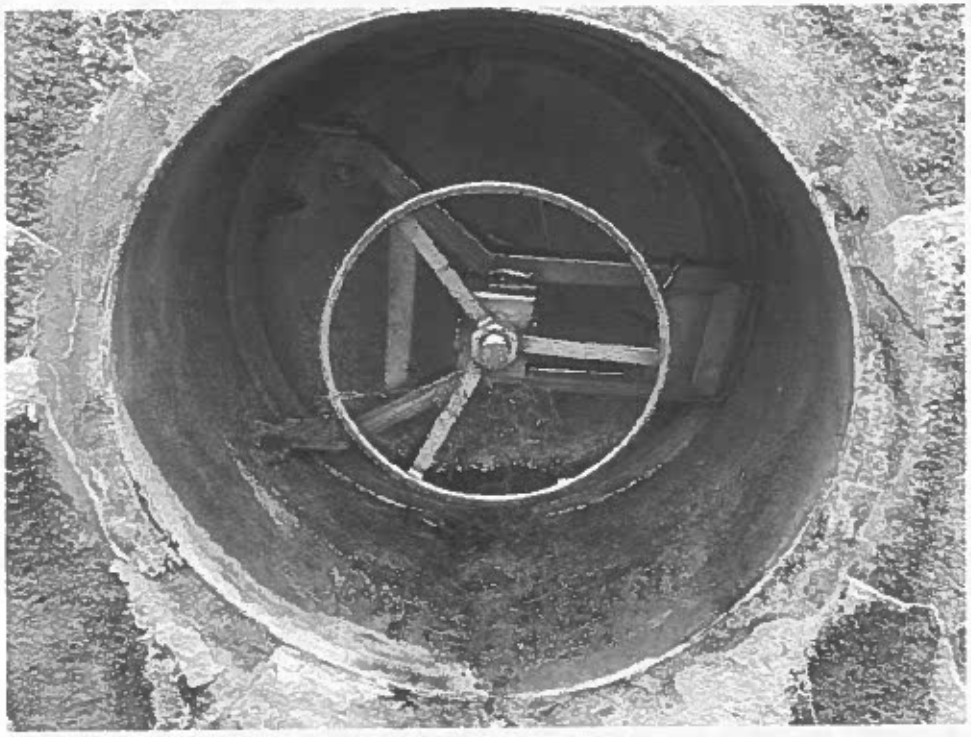
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HATCHES

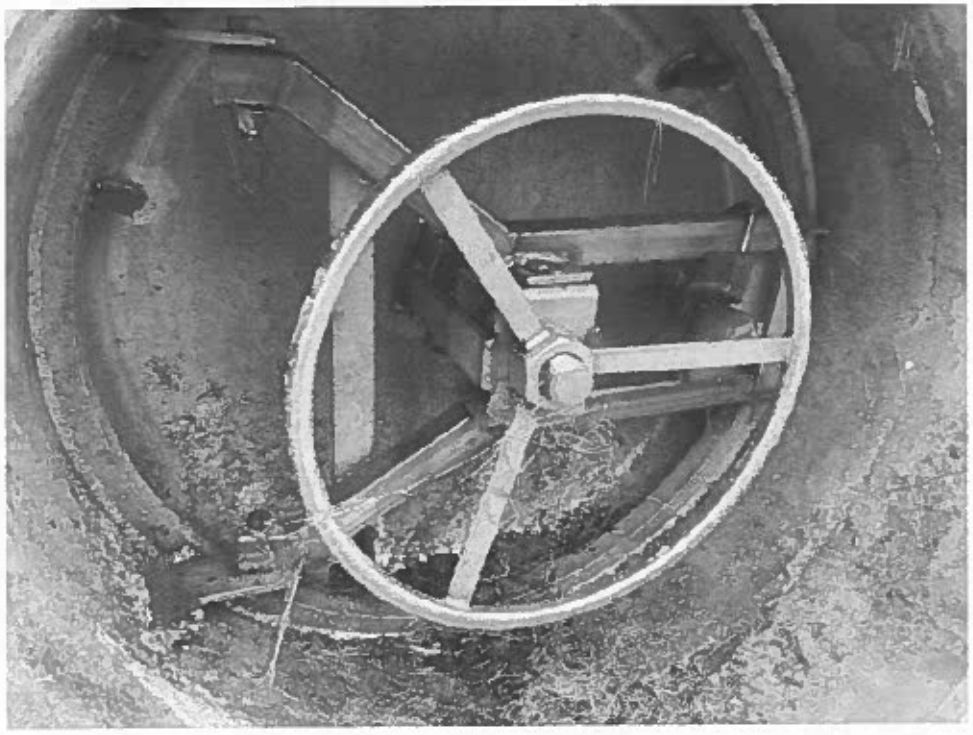




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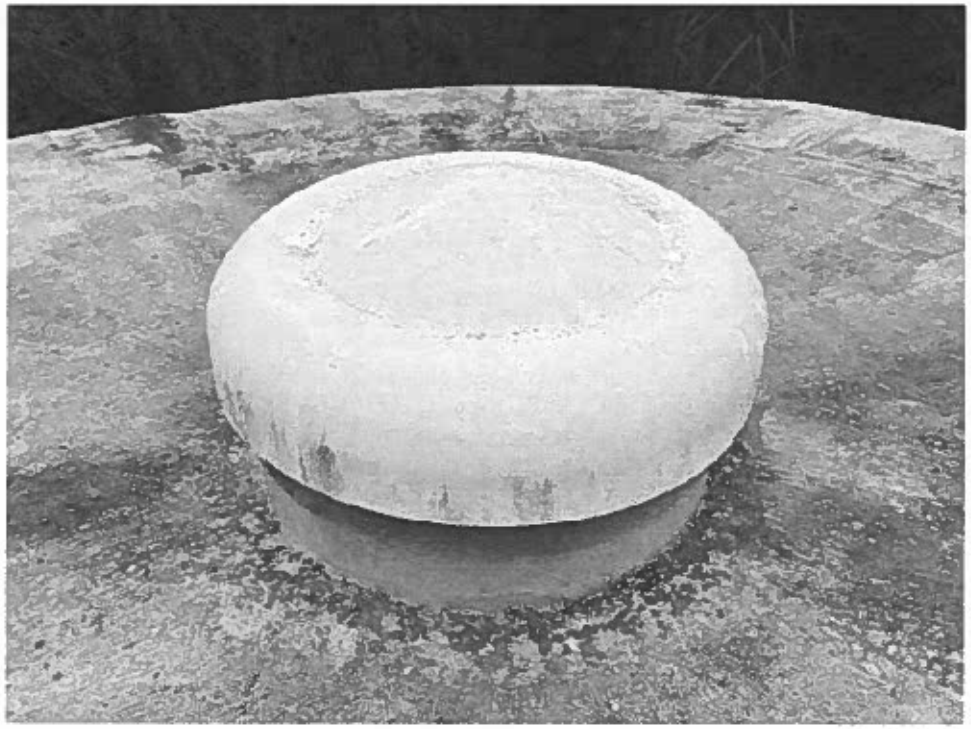
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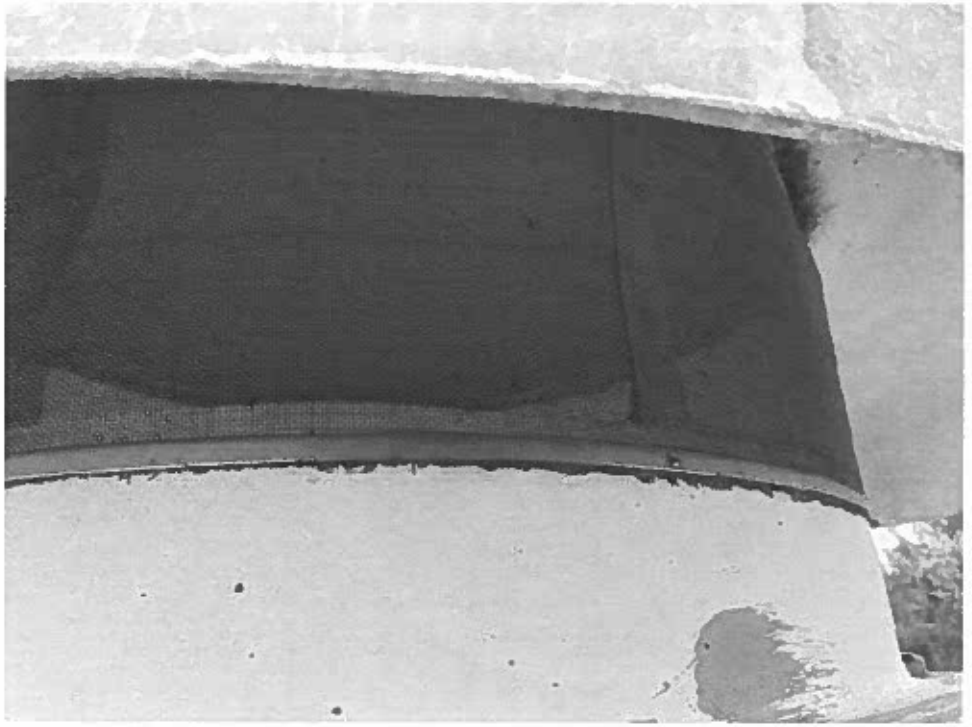




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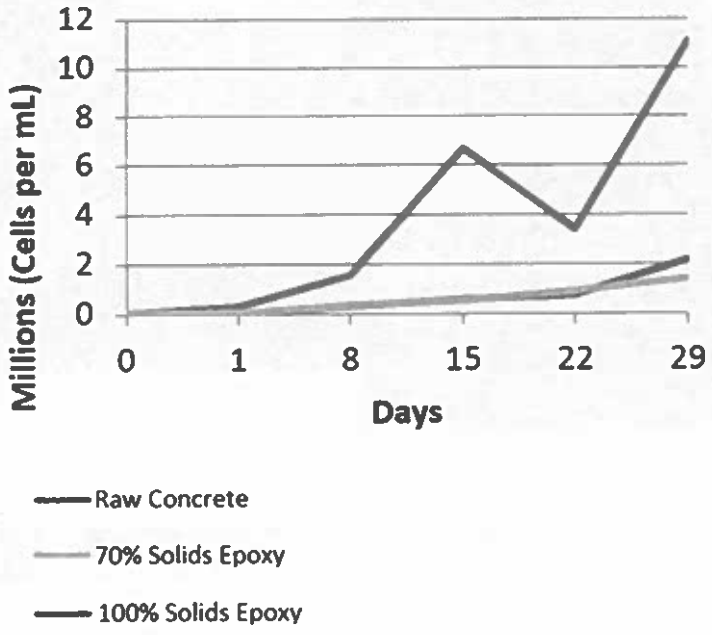


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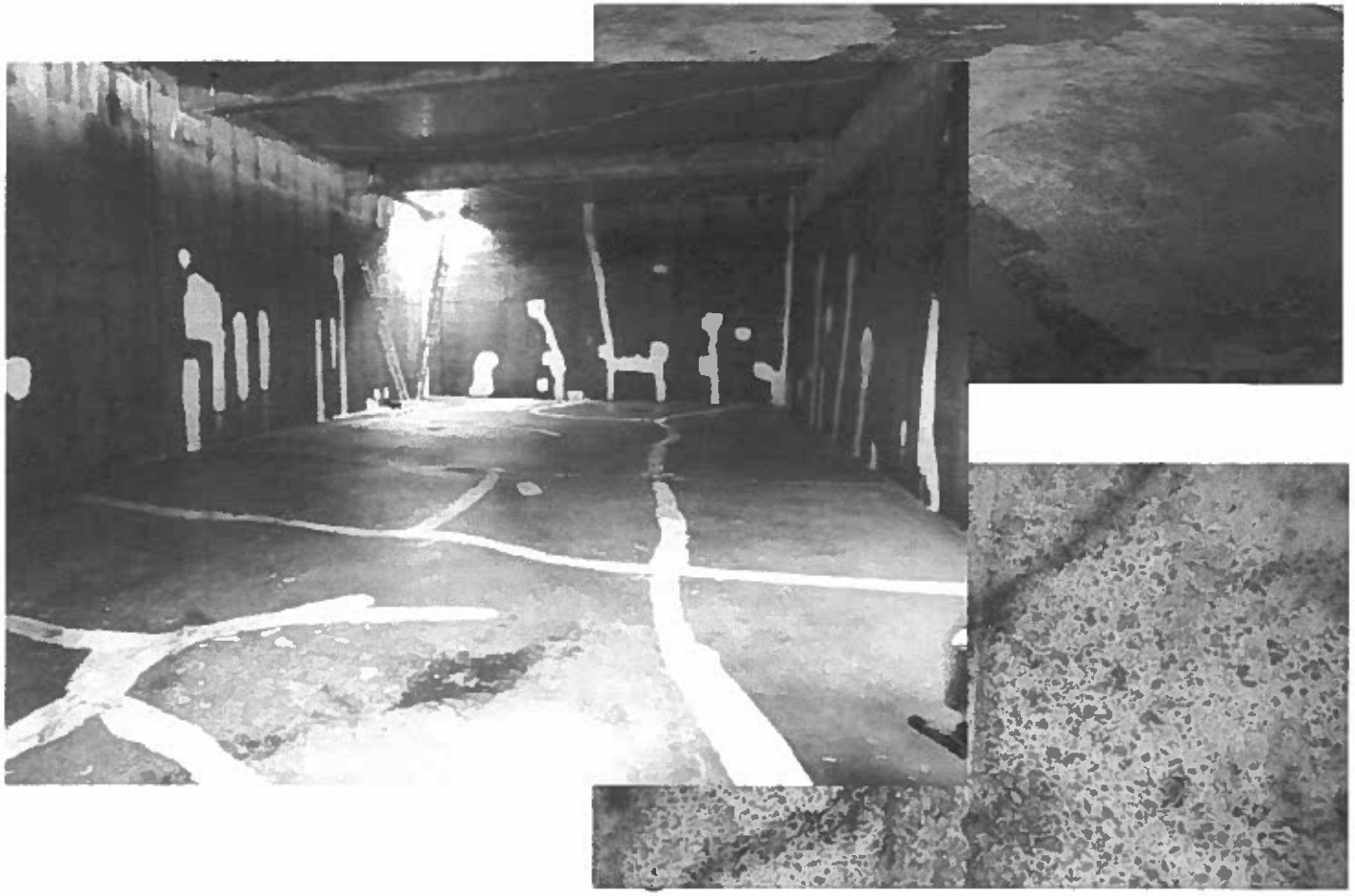
LINING YOUR POTABLE CONCRETE WATER TANK HAS THE FOLLOWING PROVEN BENEFITS:

- Can extend the life of the asset indefinitely
- Ensures community's potable water supply is in contact with NSF certified materials
- Can reduce biofilm concentrations on the concrete tank's surfaces by up to 75%

AVG. ADENOSENE TRIPHOSPHATE (ATP) IRON BY COATING TYPE



Avon, CT: Before

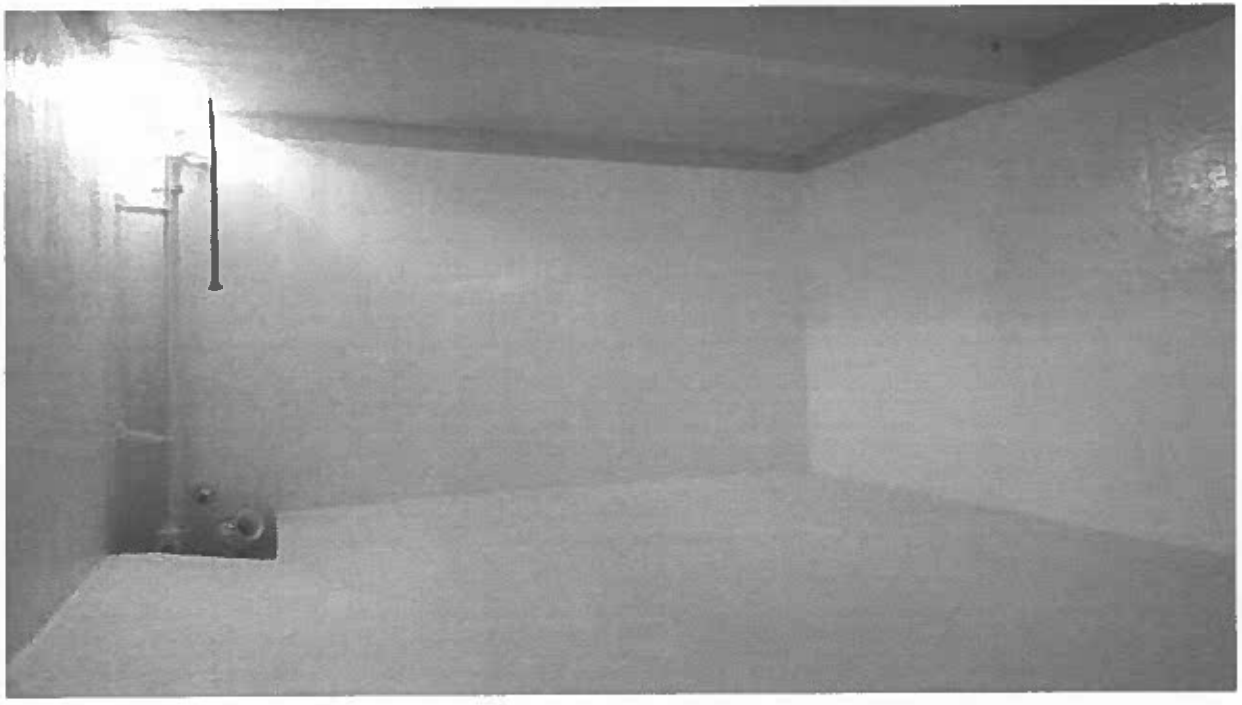


USG WATER SOLUTIONS

Avon, CT: After







USG WATER SOLUTIONS

THANK YOU



USG WATER
SOLUTIONS

Budgetary Pricing - Rogers

ear	1	2	3	4	5	6	7	8	9	10
Vork chedule	Full Int/Ext Water Jet +Paint + Repairs	Visual Inspect	ROV Inspect	Washout	Visual Inspect & Exterior Power-Wash	Visual	ROV Inspect	Exterior Overcoat & Washout	Visual	Visual
ee	$358,662 (UR + MP)	$358,662 (UR + MP)	$358,662 (UR + MP)	$74,536	$77,175	$79,907	$82,735	$85,664	$88,697	$91,837

ull Coatings and Repairs Warranty for life of contract or until you cancel
nnual Inspection
xterior Powerwash Every 5 Years
xterior Renovation Every 7 Years
nterior Renovation Every 20 Years

Total UR: $934,480

40 LF Crack Repair
10 Sqft Spalling Repair
Remove existing Ladder Cage
nstall Aluminum Ladder Gate

USG WATER

TOWN OF WATERFORD
CAPITAL PROJECT REQUEST FORM
2025-2026 FISCAL YEAR REQUEST

DEPARTMENT/AGENCY Utility Commission	**CONTACT PERSON** Jill N. Stevens
PROJECT NAME Bloomingdale Water Pressure Improvements	**DEPARTMENT PRIORITY** 11

1	**DESCRIPTION AND JUSTIFICATION (describe the type, purpose & anticipated accomplishments of the project)**
	Areas of Bloomingdale road have substandard water pressure. The Utility Commission engaged our engineering firm to conduct a study to reevaluate the options identified within a previous engineering report to correct the issue, in effort to achieve a more cost effective solution. The study was completed in September. Costs for previous solutions were updated and ranged from $2.7 million to $5.2 million, the new study proposes an alternate solution not previously explored at a slightly lower cost of $2.16 million.
2	**PROJECT STATUS IF IN PROGRESS**
3	**LIST OTHER PROJECTS WITHIN YOUR DEPARTMENT OR ANOTHER DEPARTMENT THAT WILL BE IMPACTED BY THIS REQUEST**
4	**DESCRIBE THE IMPACT ON DEPARTMENT OPERATING BUDGET (include cost estimate if applicable)**
	This will have no impact on our operating budget. Water system operations are the responsibility of the City of New London.
5	**GRANT FUNDING/OTHER FUNDING, if applicable (detailed explanation of grant/other funding, including the amount, source of funding, status, town match, if any. Attach award letter if available)**
	State Revolving Funds may be available depending upon the project's ranking status
6	**ATTACH PLAN ESTIMATE, SERVICE AREA MAP AND/OR OTHER SUPPORTING DOCUMENTATION (if none, simply state that in the area below)**
	See the attached engineering study completed in September which includes cost estimates.
7	**COST/FUNDING SOURCE**

	FUNDING SOURCE	APPROVED FUNDING TO DATE	FY2026	FY2027	FY2028	FY2029	FY2030
1	Current Year Capital						
2	Utility Budget/Sewer Cap Maint Fund						
3	Transfer to CNR			541,250	541,250	541,250	541,250
4	Short/Long-term Bonds						
5	LoCIP (detail in section 5 above)						
6	CNR Undesignated Fund Balance						
7	Federal/State Grants (detail in section 5)						
8	Other Funding (detail in section 5 above)						
	TOTALS	**0**	**541,250**	**541,250**	**541,250**	**541,250**	**541,250**

Bloomingdale Rd. Water Pressure Improvements

The Connecticut Department of Public Health (CT DPH) regulations require water systems to maintain a minimum pressure of 25 psi in their water distribution system and a minimum of 20 psi during a fire flow event. In 2004, the Waterford Utility Commission received complaints of low pressure from residents on Bloomingdale Road, near the Gallows Lane tank. In a subsequent sanitary survey, CT DPH cited a violation for water pressures below 25 psi and 20 psi at services in this area. In 2006, Lenard Engineering, Inc. completed a Preliminary Engineering Report evaluating options to improve pressures to existing services on Gallows Lane and Bloomingdale Road as well as future services on the northern portion of Bloomingdale Road, which are not connected to the distribution system at this time.

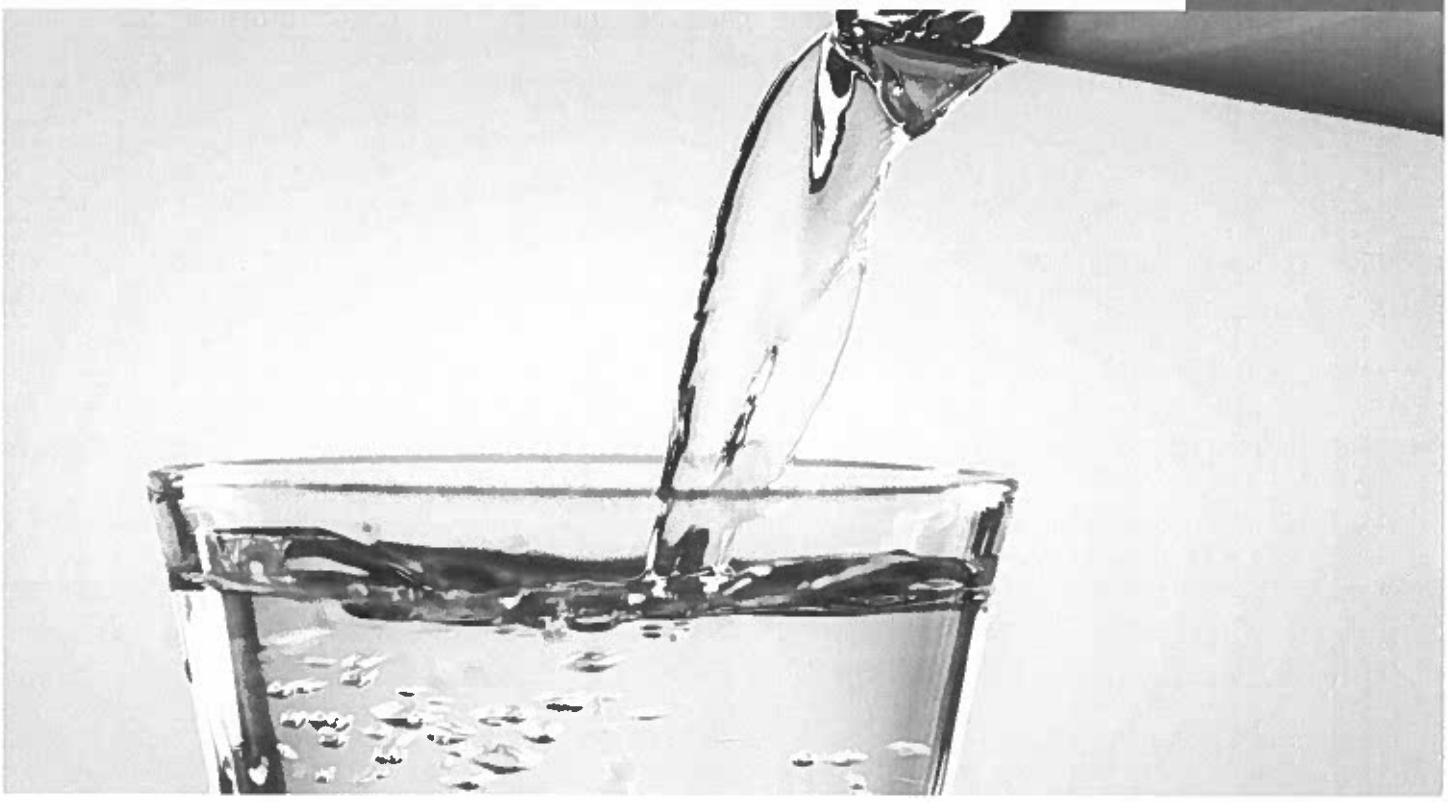
As a result of the significant costs estimate identified within the initial report the Utility Commission engaged our current engineering firm, Wright Pierce, to conduct a study to reevaluate the options identified within a previous engineering report to correct the issue, and update the associated costs. Updated costs ranged from $2.7 million to $5.2 million. As an alternative solution to installing lengthy cross -county water mains and constructing pumping stations, our engineers also evaluated the concept of installing in-Line booster pumps to increase system pressure as a slightly lower cost of $2.16 million Our request is to initiate a four-year funding schedule for infrastructure improvements associated with the need to increase the water pressure at the Gallows Lane/Bloomingdale Rd area.

WATERFORD UTILITY COMMISSION

Preliminary Engineering Report

SEPT 2024

Bloomingdale Road Pressure Zone



WRIGHT-PIERCE
Engineering a Better Environment

Bloomingdale Road Pressure Zone

Waterford Utility Commission

September 2024

Prepared By:

Wright-Pierce
169 Main Street, 700 Plaza Middlesex
Middletown, CT 06457
860.343.8297 | wright-pierce.com

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Appendix B Detailed Cost Estimates

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Section 1 Introduction

The Connecticut Department of Public Health (CT DPH) regulations require water systems to maintain a minimum pressure of 35 pounds per square inch (psi) at service connections in their water distribution system and a minimum of 20 psi during a fire flow event. In 2004, the Waterford Utility Commission (WUC) received complaints of low pressure from residents on Bloomingdale Road, near the Gallows Lane tank (Lenard, 2006). Based on discussions with the WUC, it is our understanding that in a subsequent sanitary survey, CT DPH cited a violation for water pressures below 35 psi and 20 psi at services in this area. In 2006, Lenard Engineering, Inc. (Lenard) completed a Preliminary Engineering Report (PER) evaluating options to improve pressures in this area (see **Appendix A**). This updated PER serves to review the recommendations from the previous study, update construction cost estimates, evaluate additional alternatives, and provide updated recommendations.

1.1 Background

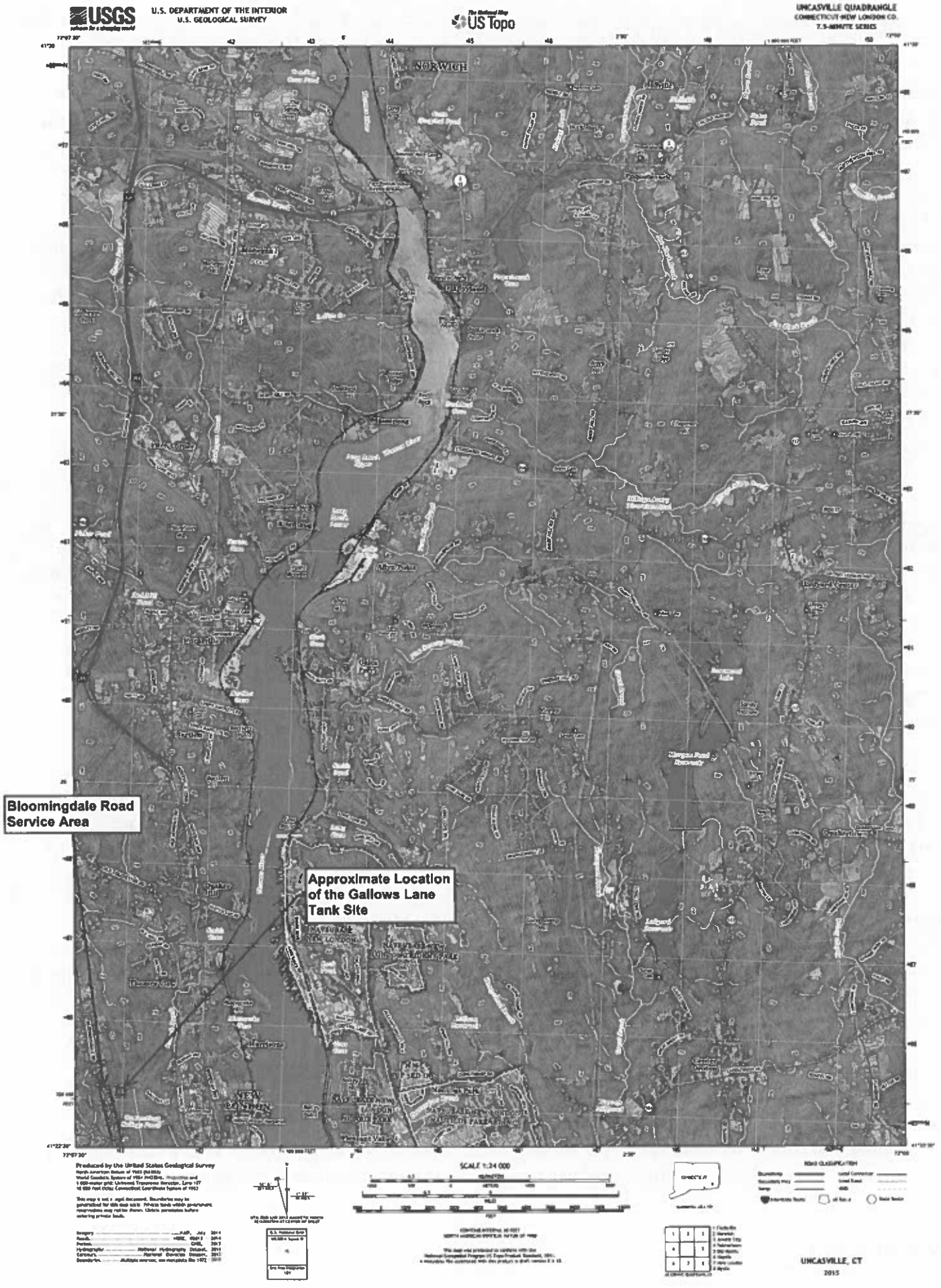
The Gallows Lane tank is a 3.5-million-gallon pre-stressed concrete tank which is fed water through a 16-inch connection to the 20-inch Brandegee Transmission Main originating at the Lake Konomac Water Treatment Plant (Lenard, 2016). The Gallows Lane tank has a finished floor elevation of 219.33 and a maximum water level elevation of 260.0 feet, as shown in the 1970 contract drawing. It has a normal operating level of 250 feet to 260 feet elevation and serves the low-pressure zone in the Town of Waterford including residents on Bloomingdale Road and Gallows Lane (Lenard, 2016). The Gallows Lane tank site and the area on Bloomingdale Road with low water pressure are indicated in **Figure 1-1**.

The 2006 PER evaluated options to improve pressures to existing services on Gallows Lane and Bloomingdale Road as well as future services on the northern portion of Bloomingdale Road which are not connected to the distribution system at this time. To do so, Lenard proposed creating a new high-pressure zone in the Bloomingdale area by increasing the hydraulic gradeline (HGL) from 250 feet to 390 feet. Based on Lenard's analysis, an HGL of 390 feet would be sufficient to provide 35 psi of pressure to the highest potential service in the expanded system on Applewood Drive. This would result in pressures ranging from 95 psi to 74 psi in the existing system on Bloomingdale Road and Gallows Lane. Existing domestic demand was calculated assuming 40 properties with a total estimated peak hour demand of 4,000 gallons or 67 gpm. Lenard proposed installing two 80 gpm pumps to meet domestic demand and one 1,000 gpm to provide fire flow. Options presented in the PER included:

- Option #1A – Construct a pre-fabricated booster pumping station and associated water mains to serve the 40 existing customers at or above elevation 170 feet
- Option #1B – Construct a pre-fabricated booster pumping station and associated water mains to serve the 170 existing and future customers at or above elevation 170
- Option #2A – Extend the high service area distribution system to serve the existing 40 customers with boosted pressure
- Option #2B – Extend the high service area distribution system to serve the existing and future 140 customers with boosted pressure
- Option #3 – Provide individual booster pump systems for each customer

Ultimately, Option #3 was implemented and the WUC installed 34 individual booster pumps in homes on Gallows Lane and Bloomingdale Road in 2008. While this has temporarily improved water pressure at these homes, the WUC would like to find a permanent solution that provides adequate pressure and flows for domestic use and fire protection and satisfies regulatory requirements. Therefore, WUC requested that Wright-Pierce re-evaluate the

Figure 1-1: Project Location Map



options proposed by Lenard in their PER to account for cost increases and inflation since 2006 and evaluate the feasibility of other alternatives to address low pressures in this area. The assumptions made by Lenard to calculate the proposed HGL and required flow rates were re-evaluated in the sections below to verify design parameters.

1.2 Hydraulic Gradeline

The existing and potential future Gallows Lane/Bloomingdale Road service areas, as assumed by Wright-Pierce based on Lenard's PER and ground elevations, are shown in **Figure 1-2**. The new high-pressure zone in the existing service area would include services located at ground elevations between 170 feet and 230 feet on Bloomingdale Road. In the 2006 PER, it appears that the boundary of the service area on the southern part of Bloomingdale Road was based on elevation. The last service included in the pump station service area is at 170 feet. Services at elevations below 170 feet can be provided with 35 psi of water pressure from the existing tank at a hydraulic gradeline of 250 feet. The potential extended service area includes services located at ground elevations between 170 feet located on Bloomingdale Road to 298 feet located on Applewood Lane. The 2006 PER recommends a hydraulic gradeline of 390 feet based on a maximum service elevation of 310 feet on Applewood Lane. The proposed hydraulic gradeline of 390 feet is used in this PER to remain conservative.

1.3 Demand

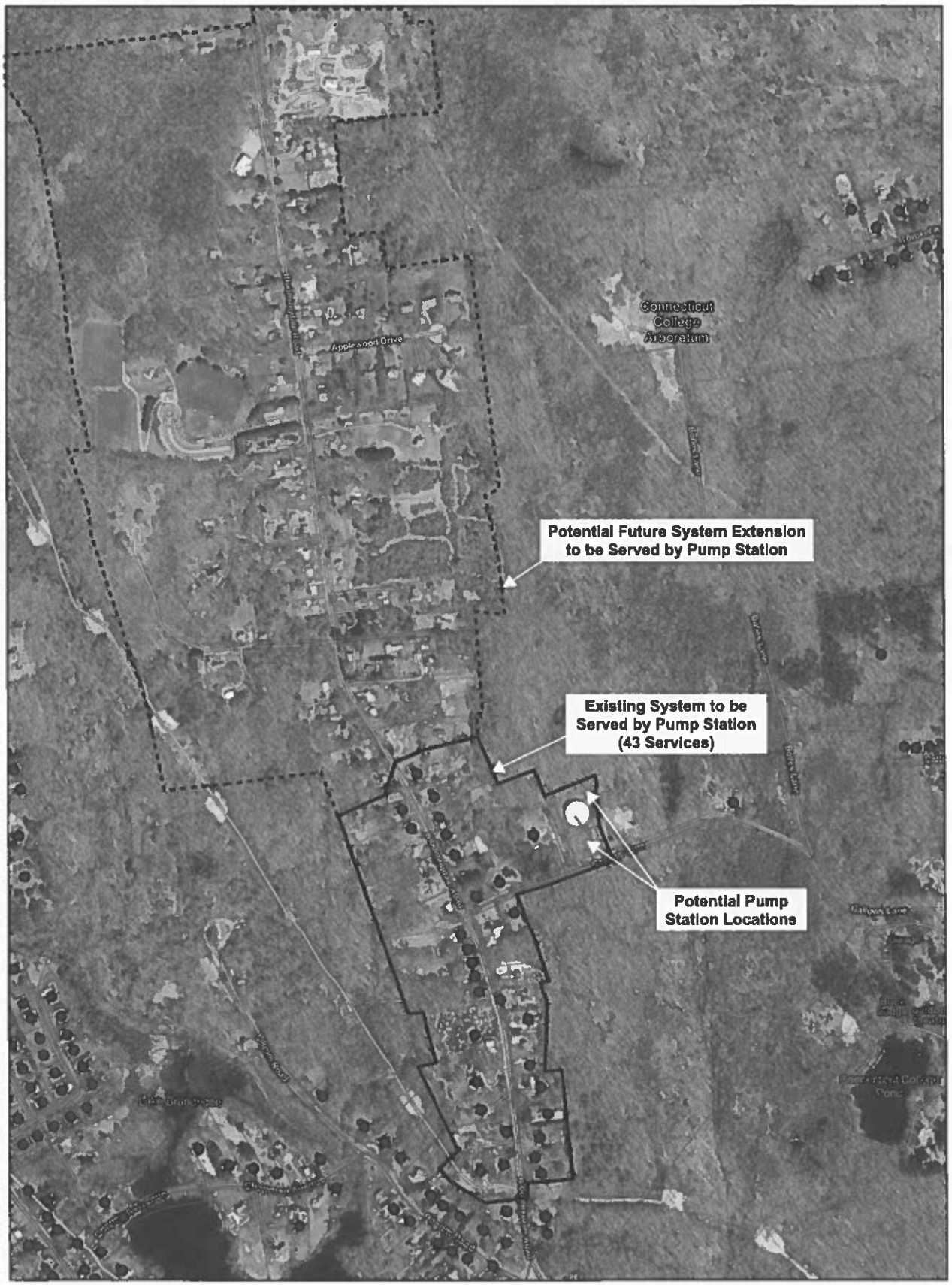
The Bloomingdale Road area is almost entirely residential with one exception being an auto recycling center located within the service area. Estimates for existing and potential future demand were calculated to confirm pump station design parameters. The 2006 PER assumed 40 service connections to calculate demand in the existing service area. There are 43 properties in the new high service area, though WUC GIS data indicates that only 30 of those properties have existing water services. The 2006 PER also conservatively assumed that a total of 140 properties would be in the high service area if the water system was expanded to Applewood Drive. As of 2023, there are approximately 78 additional properties in the expanded high service area, including undeveloped properties. This results in a total of 121 services. The conservative estimate of 140 services is used in this evaluation.

The backup calculations used to estimate demand were not included in the 2006 PER. Therefore, two methods were used to estimate peak hourly demand to confirm the conclusions of the 2006 PER. These estimates are shown in **Table 1-1**. The calculation in each method uses population data for the Town of Waterford (Waterford Town Quick Facts, average persons per household, 2018-2022, census.gov), which indicates an average of 2.38 persons per household.

Method A estimates demand to the service areas based on the 2016 Water Supply Plan (WSP) for the Town of Waterford. Based on this usage data, the typical demand for residential use is 60 gallons per capita per day (gpcd). The typical gpcd is multiplied by the approximate number of residents living in the service area to receive the area's average day demand (ADD). The peak hourly demand (PHD) is then determined by multiplying the ADD by a peaking factor based on population size (CBL Limited, 2011).

Method B uses typical wastewater flow rates to estimate average water usage for residential properties. Wastewater flow rates are based on Metcalf and Eddy Wastewater Engineering and Reuse (2002) guidance. This guidance recommends typical wastewater flow rate of 72 gpd per person for a 2.38-person household and a maximum wastewater flow rate of 77 gpd per person for a 2.38-person household. These values were reduced by 90% for water consumption. The PHD is determined using the peaking factor described in Method A.

Figure 1-2: Proposed Service Areas for Gallows Lane Pump Station



3/19/2024

Water Service
Water Main
6 in
8 in
16 in
20 in
ParcelPolygon

1:8,000
0 0.05 0.1 0.2 mi
0 0.1 0.2 0.4 km

Town of Waterford, MassGIS, UConn/CTDEEP, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri

Method B using the maximum estimated wastewater flow rates resulted in the highest estimated domestic flow rates with an ADD of 6 gpm and a PHD of 45 gpm. Since these calculated demand rates are lower than what was assumed in the 2006 PER and the data used to calculate the demands in the 2006 PER are unknown, the 80 gpm pumps selected for the PER are assumed to be suitable servicing domestic flows in the new high-pressure zone.

The 2006 PER also assumed a fire flow requirement of 1,000 gpm. American Water Works Association guidance indicates that this is considered suitable for single-family dwellings located more than 11 feet away from one another (AWWA, 1991). Wright-Pierce recommends confirming required fire flows in this area with the Town of Waterford Director of Fire Services and/or Fire Marshall.

Table 1-1 Demand Estimates

Description	Approximate Number of Properties Served	Approximate Population Served (1)	Method A [2]				Method B [3] (Typical)				Method B [3] (Maximum)				2006 Preliminary Engineering Report [5]			
			ADD (GPD)	ADD (gpm)	PHD (GPH)	PHD (gpm)	ADD (GPD)	ADD (gpm)	PHD (GPH)	PHD (gpm)	ADD (GPD)	ADD (gpm)	PHD (GPH)	PHD (gpm)	ADD (GPD)	ADD (gpm)	PHD (GPH)	PHD (gpm)
Existing service area	43	103	6,180	4	1,906	32	7,437	5	2,293	38	8,792	6	2,711	45	12,000	8	4,000	67
Service area extended north to Applewood Drive	140	334	20,040	14	4,509	75	24,115	17	5,426	90	28,509	20	6,414	107	42,000	29	14,000	233

Notes:

1. Demand estimates assume 2.38 persons per household (Waterford town Quick Facts, average persons per household, 2018-2022, census.gov)
2. Method A estimates demand based on usage data from 2011 to 2015 provided in the 2016 Water Supply Plan including:
   a. Residential average day demand (ADD) of 60 gallons per capita per day (gpcd)
   b. Peak hour demand (PHD) = f_h x ADD/24, where f_h = 7.40 for a population size of 150 and f_h = 5.40 for population size of 300 (CBCL Limited, 2011).
3. Method B estimates average water usage based on Metcalf & Eddy Wastewater Engineering Treatment and Reuse guidance:
   a. Average wastewater flow rate of 72 gpcd in a 2.38-person household and maximum wastewater flow rate of 172 gpcd in a 2.38-person household. Wastewater flow rates were divided by 90% for water consumption.
4. The 2006 Preliminary Engineering Report (PER) used a design value of 40 existing properties and 140 future properties that would be served by the pump station; however, it is not stated what usage values were used to calculate ADD gpcd and the PHD peaking factor.

Section 2 Conversion of 2006 Preliminary Costs

In the 2006 Preliminary Engineering Report prepared by Lenard Engineering, Inc., multiple alternatives were evaluated to correct the pressure issues experienced by residents on Bloomingdale Road. These alternatives are detailed in the 2006 PER included as **Appendix A**. The costs included for each alternative in the 2006 PER were updated in this PER to account for inflation using the Engineering News-Record (ENR) Construction Cost Indices (CCI). However, recent bids and construction project prices indicate that the costs to construct a pump station and install ductile iron water main have increased beyond the costs calculated using the ENR CCI conversion. Estimated construction costs based on recent bid and construction prices are also included in the **Tables 2-1** through **2-4** below. It is important to note that the costs presented in this section are based on the line items included in the 2006 PER. It is unknown if these line items included general conditions, site work, or electrical and instrumentation work. Therefore, in **Section 3** of this PER, more detailed preliminary opinions of estimated current-day construction cost are developed.

Table 2-1 Alternative 1A – Construct Water Booster Pump Station and New Water Mains to Serve 40 Existing Properties

Line Item	February 2006 Cost (ENR CCI 7690)	ENR March 2024 Conversion (ENR CCI 13532)	Updated Estimated Costs[1]
Construct Pre-Fabricated Water Pumping Station	$300,000	$527,906	$1,220,000 [2]
Construct 2,700 LF of new 8" High Pressure Piping	$337,500 ($125/LF)	$593,895 ($220/LF)	$756,000 ($280/LF) [3]
Install 40 New Service Connections, Main to Curb Stop	$60,000	$105,581	$200,000 ($5,000/service)
Contingency (15%)	$105,000	$185,000	$326,400
Design (10%)	$70,000	$123,000	$217,600
Total	**$872,500**	**$1,535,382**	**$2,720,000**

Notes:

1. Costs for the pre-fabricated pump station construction and ductile iron water main installation have risen beyond the ENR CCI conversion rate. Updated cost estimates were developed based on 2024 project bids to better reflect present-day probable costs for the project, not including General Conditions costs.
2. Costs for a pre-fabricated pump station construction assume an aboveground building as shown in the 2006 PER and includes material and labor costs to construct the foundation and building and install instrumentation and controls and electric.
3. Cost per linear foot of water main includes material and labor costs to lay the pipe, excavate and backfill the trench, temporary paving, permanent paving, connect to the existing distribution system, remove and reset hydrants, testing, and surveying.

Table 2-2 Alternative 1B – Construct Water Booster Pump Station and New Water Mains to Serve 140 Properties

Line Item	February 2006 Cost (ENR CCI 7690)	ENR March 2024 Conversion (ENR CCI 13532)	Updated Estimated Costs[1]
Construct Water Pumping Station	$300,000	$527,906	$1,220,000 [2]
Construct 7,100 LF of new 8" High Pressure Piping	$887,500	$1,561,723 ($220/LF)	$1,988,000 ($280/LF) [3]
Install 140 New Service Connections, Main to Curb Stop	$210,000	$369,534	$700,000 ($5,000/service)
Contingency (15%)	$210,000	$369,534	$586,200
Design and Permitting (10%)	$140,000	$246,356	$390,800
Total	**$1,747,500**	**$3,075,055**	**$4,885,000**

Notes:

1. Costs for the pump station construction and ductile iron water main installation have risen beyond the ENR CCI conversion rate. Updated cost estimates were developed based on 2024 project bids to better reflect present-day probable costs for the project, not including General Conditions costs.
2. Costs for pump station construction assume an aboveground building as shown in the 2006 PER and includes material and labor costs to construct the foundation and building and install instrumentation and controls and electric.
3. Cost per linear foot of water main includes costs to lay the pipe, excavate and backfill the trench, temporary paving, permanent paving, connect to the existing distribution system, remove and reset hydrants, testing, and surveying.

Table 2-3 Alternative 2A – Construct Water Main Extension from High Service Area to Bloomingdale Road to Serve Existing 40 Properties

Line Item	February 2006 Cost (ENR CCI 7690)	ENR March 2024 Conversion (ENR CCI 13532)	Updated Estimated Costs[1]
Construct 1,400 LF of New 12" Water Main on Vauxhall St. Ext.	$210,000	$369,600 ($264/LF)	$490,000 ($350/LF) [2]
Construct 3,000 LF of New 12" Water Main from Vauxhall St. Ext. to Bloomingdale Rd (Cross-Country)	$300,000	$528,000 ($176/LF)	$900,000 ($300/LF)
Construct 1,500 LF of New 8" High Pressure Piping	$187,500	$330,000 ($220/LF)	$420,000 ($280/LF) [2]
Install 40 New Service Connections, Main to Curb Stop	$60,000	$105,581	$200,000 ($5,000/service)
Contingency (15%)	$114,000	$200,604	$301,500
Design and Permitting (10%)	$76,000	$133,736	$201,000
Total	**$947,500**	**$1,666,921**	**$2,512,500**

Notes:

1. Costs for the pump station construction and ductile iron water main installation have risen beyond the ENR CCI conversion rate. Updated cost estimates were developed based on 2024 project bids to better reflect present-day probable costs for the project, not including General Conditions costs.
2. Cost per linear foot of water main includes costs to lay the pipe, excavate and backfill the trench, temporary paving, permanent paving, connect to the existing distribution system, remove and reset hydrants, testing, and surveying.

Table 2-4 Alternative 2B – Construct Water Main Extension from High Service Area to Bloomingdale Road to Serve Existing and Future 140 Properties

Line Item	February 2006 Cost (ENR CCI 7690)	ENR March 2024 Conversion (ENR CCI 13532)	Updated Estimated Costs[1]
Construct 1,400 LF of New 12" Water Main on Vauxhall St. Ext.	$210,000	$369,600 ($264/LF)	$490,000 ($350/LF) [2]
Construct 3,000 LF of New 12" Water Main from Vauxhall St. Ext. to Bloomingdale Rd (Cross-Country)	$300,000	$528,000 ($176/LF)	$900,000 ($300/LF)
Obtain an Easement from Williams Memorial Institute	$0	$0	$50,000
Construct 7,100 LF of New 8" High Pressure Piping	$887,500	$1,100,500 ($155/LF)	$1,988,000 ($280/LF) [2]
Install 140 New Service Connections, Main to Curb Stop	$210,000	$369,534	$700,000 ($5,000/service)
Contingency (15%)	$242,000	$425,844	$619,200
Design and Permitting (10%)	$161,000	$283,310	$412,800
Total	**$2,010,500**	**$3,537,853**	**$5,160,000**

Notes:

1. Costs for the pump station construction and ductile iron water main installation have risen beyond the ENR CCI conversion rate. Updated cost estimates were developed based on 2024 project bids to better reflect present-day probable costs for the project, not including General Conditions costs.
2. Cost per linear foot of water main includes costs to lay the pipe, excavate and backfill the trench, temporary paving, permanent paving, connect to the existing distribution system, remove and reset hydrants, testing, and surveying.

Section 3 Updated Alternatives Cost Analysis

The 2006 PER Alternatives 1A and 1B consisted of a standard pump station while Alternatives 2A and 2B consisted of an extension of an existing high service area. The extension of the existing high service area located on Vauxhall Street Extension is not evaluated further based on discussions with WUC regarding permitting requirements associated with the installation of the proposed cross-country water main through wetlands. Wright-Pierce further evaluated options to create a high-pressure zone to service the Bloomingdale Road/Gallows Lane Area using a booster pump station. Booster pump station options presented below include an in-line booster pump station, a pre-fabricated pump station, and utilizing the existing Williams Street Pump Station.

Based on discussions with WUC, pump station conceptual layouts were developed assuming the following:

- It is unlikely that the existing service area will be extended north to Applewood Drive. The proposed pump station is therefore sized to only accommodate demand for the existing service area.
- Only a receptacle for a portable generator, rather than a permanent standby generator will be needed at the proposed pump station.

3.1 Operational Considerations

With the implementation of the new high-pressure zone, the new pump station will need to maintain a pumped constant pressure and meet the instantaneous demands of the service area. Providing the instantaneous maximum and minimum flows in the service area will require the primary pumps to cycle on and off for low flow conditions at night which is inefficient and causes wear and tear on the pumps.

WP recommends that at least one of the following options be considered to save on operational costs and provide longevity to the primary pumps. The first option includes installing a low-flow jockey pump to provide nighttime and low flows. This will provide sufficient system flow and pressure for off-peak hours. A jockey pump can be included in an in-line pitless booster pump station or in a pre-fabricated pump station. The second alternative involves installing a hydro-pneumatic tank at the pump station to maintain pressure in the zone without continuous pumping. A hydro-pneumatic tank storage system utilizes air pressure within the tank to provide the necessary water pressure within the distribution tank during low demands period. Depending on the style, air is either in direct contact with the water or an internal bladder system is used to separate the water and air. Hydro-pneumatic tanks are not considered active storage and are not suitable for fire protection purposes. For the Gallows Lane pump station, hydro-pneumatic tanks would serve to pressurize the distribution system during the night and other low flow periods. Hydro-pneumatic tanks must be constructed in a heated or buried enclosure to protect from damage and to prevent freezing. Based on the pump curves for the 80 gpm pumps included in Baker Monitor's proposal, a hydropnuematic tank with a capacity of 100 to 200-gallons is recommended. Costs for a hydropneuamtic tank are listed under "Additional Options" in the detailed cost estimates provided in **Appendix B**.

3.2 Electrical Considerations

Eversource has indicated that only single-phase power is available on Bloomingdale Road and Gallows Lane. Phase-converting VFDs will be required to convert the single-phase power source to the 3-phase pump motors. The smaller pumps will require VFDs sized between 15 HP and 20 HP while the 1,000-gpm pump will require a VFD sized between 120 HP and 150 HP. While this is technically feasible, when using a VFD that is greater than 15 HP to convert phases, a waiver from a local electrical inspector and utility is required since startup of these large VFDs

can potentially impact power to nearby homes. Discussions with Eversource and/or a local electrical inspector should be initiated to determine if this will be allowed.

If the inspector or Eversource does not grant the waiver, 3-phase power would need to be brought to the pump station or the high flow pump removed from the design. Currently, the closest 3-phase power source to the Gallows Lane tank site is approximately 2,750 feet away, at the intersection of Pilgrim Road and Bloomingdale Road. The Eversource field engineer for the Town of Waterford indicated that an extension of 3-phase power from this point would require 29 electric service poles. The approximate cost to update each pole with 3-phase power is $4,000. The Eversource field engineer estimated a total project cost of $300,000 to extend 3-phase power. The cost to install 3-phase power at the site is listed under "Additional Options" in the detailed cost estimates provided in **Appendix B**.

Additionally, if the new pump station is built only with a generator receptacle and manual transfer switch, it is important to make sure that WUC has a portable generator that is capable of running the high flow pump and VFD.

3.3 In-line Booster Pump Station

An in-line pitless booster pump station consists of submersible pumps installed below grade within a sealed reservoir tank. This setup can eliminate the need for a building. There appears to be adequate space to construct an in-line booster pump station west or south of the Gallows Lane tank on the same parcel. The pump station can be equipped with a jockey pump, dual domestic pumps and a high flow pump to supply the existing pressure zone and accommodate fire flow needs. The drives and canisters can be upsized during the design such that it can accommodate larger pumps if needed in the future.

Wright-Pierce obtained a proposal from Baker Montior for a quadraplex in-line pitless pump station at the Gallows Lane tank site. Baker Monitor's budgetary cost proposal for the pump station is $223,000 which includes a single 15 gpm jockey pump at 140 feet TDH, dual 80 gpm pumps at 140 feet TDH, a single 1,000 gpm high flow pump at 150 feet TDH, variable frequency drives (VFDs) for all the pumps, electrical equipment and enclosure, a PLC, pressure transducers, and isolation valves. Baker Monitor's costs were used to develop a preliminary opinion of probable construction cost for the pump station and installation of 2,700 feet of 8-inch water main for the new pressure zone on Bloomingdale Road. The total project construction cost is estimated to be $2,165,000 which includes General Conditions, 20% Contingency, 2% Bonds & Insurance, and 2% Allowances but does not include design costs or the 3-phase power extension. A detailed cost estimate is provided in **Appendix B**. The proposal from Baker Monitor and a photo log showing examples of in-line booster pump stations installed by Baker Monitor included in **Appendix C**.

3.4 Pre-Fabricated Booster Pump Station

A pre-fabricated booster pump station follows the traditional route of housing the pump station inside a building. The building is generally fabricated at a manufacturer's site, delivered to the construction site in either one or several large pieces, and installed based on the manufacturer's instructions. Options for site-specific components of the building can be incorporated into the original manufacturer design. Every aspect of the building construction is performed by the manufacturer which allows for the building to be manufactured by one contractor, rather than several. The option also provides several different alternatives for aesthetic and layout design purposes such as finishes, roof type, number of buildings, and component customization. There appears to be sufficient space west or east of the Gallows Lane tank to construct a pre-fabricated pump station.

Wright-Pierce obtained a proposal from Harper Haines for a pre-fabricated booster pump station. The high end of Harper Haines' budgetary cost proposal is $744,000 and includes dual 80 gpm pumps at 150 feet TDH, a single 1,000 gpm high flow pump at 150 feet TDH, VFDs with electrical rectifier, relief and low-flow bypass valves, and electrical equipment. The preliminary pre-fabricated design from Harper Haines includes the following components:

- One spare pump position to accommodate an additional 230 gpm pump should demand increase in the future.
- A separate electrical device (rectifier) will need to be designed into the station to convert the single-phase service onto three phase motor service.
- A manual transfer switch for roll-up emergency power.
- A relief valve and a low-flow bypass valve discharging back to pump suction (and the water storage tank).
- Metal siding and a raised metal roof.
- The estimated footprint of the pump station is 30 feet long and 12 feet wide.

Harper Haines' costs were used to develop a preliminary opinion of probable construction cost for the pump station and installation of 2,700 feet of 8-inch water main for the new pressure zone on Bloomingdale Road. It should be noted that Harper Haines' proposal does not include the pump station foundation and additional pipes or appurtenances to tie into the existing water main. These items are included in the detailed cost estimate as separate line items. The total project construction cost is estimated to be $2,915,000 which includes General Conditions, 20% Contingency, 2% Bonds & Insurance, and 2% Allowances but does not include design costs or the 3-phase power extension. The detailed cost estimate is provided in **Appendix B**.

3.5 Williams Street Pump Station

The Williams Street Pump Station is located at 270 Mohegan Ave in New London, at the intersection of Williams Street and Gallows Lane. This pump station is owned by Connecticut College and operated by Veolia. The pumps were replaced in 2020 with Grundfos pumps designed for 200 gpm at 180 feet TDH. Wright-Pierce was not able to obtain information on the design of this pump station or the service area it was designed for. Therefore, it cannot be determined if the existing pumps have the capacity to serve the Bloomingdale Road area or if the pump station is large enough to support a high flow pump for fire protection.

Approximately 4,760 linear feet of new 8" water main would be needed to create a new high-pressure zone on Bloomingdale Road from the Williams St pump station. Assuming no upgrades to the pump station were made, a preliminary cost estimate for the installation of the water main alone is $1,950,000 which includes General Conditions, 20% Contingency, 2% Bonds & Insurance, and 2% Allowances. The detailed cost estimate is provided in **Appendix B**.

3.6 Water Main Extension from Vauxhall Street Extension

As stated in the 2006 PER, extending the high service zone located on Vauxhall Street Extension to Bloomingdale Road would provide a hydraulic gradeline of 420 feet in the Bloomingdale Road area. To provide a representative comparison, costs for the water main extension from the high service area to serve existing customers were also updated from the previous section to include General Conditions, 20% Contingency, 2% Bonds & Insurance, and 2% Allowances. The preliminary opinion of probable construction costs for this alternative are estimated to be $2,720,000. A detailed cost estimate is provided in **Appendix B**. This alternative will require obtaining easements through private property and environmental permitting for construction and maintenance of the water main through the wetland area between Vauxhall Road and Bloomingdale Road. Easement costs were estimated based

on the assessed value of land on Pilgrim Road. It is noted that the 2006 PER indicated that a sewer easement through this area was previously obtained; however, this easement is not shown on the Town's GIS mapping. Permitting costs are not included in the preliminary opinion of construction costs. Installation of a pressure reducing valve may also be considered for this alternative due to the high pressures of approximately 108 psi at the lowest service elevations on Bloomingdale Road. The cost to install a pressure reducing valve is listed under "Additional Options" in the detailed cost estimate provided in **Appendix B**.

Section 4 Recommendations

A comparison of updated costs for the in-line booster pump station, pre-fabricated booster pump station, and high service area extension to serve existing customers is presented in **Table 4-1**. An in-line pitless booster pump station constructed at the Gallows Lane tank site boost pressures to the Bloomingdale Road area is estimated to be less expensive than a pre-fabricated booster pump station. It is also estimated that costs to construct a pump station may be comparable to the cost to extend the new high-pressure zone from Vauxhall Street Extension. More information is needed to determine the feasibility and costs to utilize the Williams Street Pump Station to boost pressures to Bloomingdale Road.

Table 4-1 Updated Cost Comparison

Alternative	Opinion of Project Construction Costs [1] [2]
In-line Booster Pump Station to Serve Existing Customers	$2,165,000
Pre-fabricated Booster Pump Station to Serve Existing Customers	$2,915,000
Water Main Extension from High Service Area to Serve Existing Customers	$2,720,000

Notes:

1. Construction cost estimate is based on current costs from recent similar projects and vendor price quotes.
2. Cost estimates are AACE Class 3 with an expected accuracy range of -20% to +30%.

Section 5 Project Implementation

Implementation of a booster pump station construction project will require submittals to state and local regulators for review and approval related to the WTP and its associated water mains. The primary regulatory organizations requiring permit applications include the Connecticut Department of Public Health Drinking Water Section and the Connecticut Department of Health Drinking Water State Revolving Fund (DWSRF) program, the Town of Waterford Planning and Zoning Commission. The project site is not within a flood zone or an area of environmental concern; therefore, permitting with the Connecticut Department of Energy and Environmental Protection (CT DEEP) Natural Diversity Database Program (NDDB) or Waterford Conservation Commission is not anticipated. As discussed in **Section 3**, coordination with Eversource will be needed.

The project will be funded through the Connecticut Department of Public Health Drinking Water State Revolving Fund and paid by water users in the Town of Waterford.

The recommended next step to continue this project is to prepare a 30% design for the selected alternative. The following should be completed as part of the 30% design:

- Verify system pressures using a continuous chart pressure recorder on a hydrant in the affected area.
- Confirm the operating range of the Gallows Lane tank with Veolia/New London.
- Confirm fire flow requirements with the Town of Waterford Director of Fire Services and/or Fire Marshall.
- Engage the local electrical inspector and Eversource to determine path forward for powering the VFDs off single phase power source.
- Evaluate options to maintain constant pumped pressure system including installation of a jockey pump or hydropneumatic tanks in the new pump station.
- Evaluate WUC's portable generators to verify if any are capable of powering the new pump station.
- Survey the project site including the tank site, Gallows Lane, and Bloomingdale Road.

Based on the project needs and implementation requirements, a draft schedule has been developed to assist in planning the implementation of the recommendations under a typical project path. The project schedule is highly dependent on acquiring funding. The preliminary schedule is presented as **Table 5-1**.

Table 5-1 Preliminary Project Schedule

Task	Timeline	Estimated Date
Preliminary Design • Survey & Geotechnical • 30% Design Submittal & Review	6 months	09/2024 – 02/2025
Final Design • 60% Design Submittal & Review • 90% Design Submittal & Review • Permitting • 100% Design Submittal	8 months	03/2025 – 11/2025
Bidding Phase • Bid Evaluation • Town Meeting & Referendum • Bid Review and Approval by DPH	3 months	12/2025 – 02/2026
Construction Phase	3 months	2026

Section 6 References

American Water Works Association. *Manual of Water Supply Practices - M31 Distribution System Requirements for Fire Protection.* 1999.

CBCL Limited. Government of Newfoundland and Labrador, 2011, *Study on Water Quality and Demand on Public Water Supplies with Variable Flow Regimes and Water Demand,* https://www.gov.nl.ca/ecc/files/waterres-reports-drinking-water-demand-study-jan-2012.pdf. Accessed Oct. 2022.

Fay, Spofford & Thorndike, Inc. *New London, Connecticut Department of Public Works, Distribution Improvements – 1970, Gallows Lane Water Storage Reservoir Plan and Details.* Dec. 1970.

Lenard Engineering, Inc. *Preliminary Engineering Report, Water Pressure Enhancement Options, Bloomingdale Road/Gallows Lane Area, Waterford, CT.* Feb. 2006.

Lenard Engineering, Inc. *Water Supply Plan, Town of Waterford Utility Commission, Waterford, Connecticut.* Sept. 2016.

Metcalf & Eddy, 2002. *Wastewater Engineering: Treatment and Reuse.*

United States Census Bureau. *QuickFacts Waterford Town, Southeastern Connecticut Planning Region, Connecticut.* www.census.gov/quickfacts/fact/table/waterfordtownsoutheasternconnecticutplanningregionconnecticut/PST045223. Accessed 19 Mar. 2024.

Appendix A
2006 Preliminary Engineering Report by Lenard Engineering

JAB copy

PRELIMINARY ENGINEERING REPORT

WATER PRESSURE ENHANCEMENT OPTIONS BLOOMINGDALE ROAD/GALLOWS LANE AREA

Waterford, Connecticut

Prepared for:

Town of Waterford Utility Commission
Waterford, Connecticut

FEBRUARY 2006

Prepared BY:

LENARD ENGINEERING, INC.
STORRS, CONNECTICUT

UPDATED REPORT 71401 * JMR Copy

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Civil, Environmental and Hydrogeological Consultants

March 12, 2007

Mr. Neftali Soto, P.E., Chief Engineer
Town of Waterford Utility Commission
1000 Hartford Road
Waterford, CT 06385

RE: Updated Individual Booster Pump Cost Estimates, Bloomingdale Road and Gallows Lane areas, Waterford, CT ; LEI Project No. 06-354

Dear Mr. Soto:

As requested, I contacted a pump supplier that Lenard Engineering, Inc. has worked with over the past 10 years, and obtained an updated cost estimate to provide and install an individual booster pump at selected homes near the intersection of Bloomingdale Road and Gallows Lane.

The total cost to install the estimated 31 individual booster pumps in this vicinity is calculated as follows:

Installed Costs - 31 locations X $ 1600 ea. = $49,600

Estimated Permit Fees - 31 locations X $ 150 ea. = $ 4,650

Estimated Total Costs = $ 49,600 + $ 4,650 = $ 54, 250

SAY $ 55,000

I have attached a brochure indicating the type of pump, which operates off of a Variable Frequency Drive controller to provide a constant discharge pressure to the homeowner, without the need for a pressurized water storage tank.

If you or your commission have any questions or comments, I am at your service.

Very truly yours,
Lenard Engineering, Inc.

Jim Ericson

James E. Ericson, P.E.
Vice President

An Equal Opportunity Employer

aqua pump co. inc.

SERVICE ● MANAGEMENT ● MAINTENANCE

RESIDENTIAL ● INDUSTRIAL ● COMMERCIAL WATER TREATMENT SYSTEMS

March 8, 2007

Lenard Engineering
Jim Ericson
1066 Storrs Road
P. O. Box 580
Storrs, CT 06268

Re: Installation individual residential booster systems for the Town of Waterford, CT.

Dear Mr. Ericson:

Aqua Pump Company, Inc., (APC) is pleased to have the opportunity to submit the following proposal for your consideration.

Aqua Pump Co, Inc. (APC) shall install one - ¾ Hp constant booster pump system with an adjustable pressure setting valve parts and labor. $1,525.00 – 1,595.00*
(A 120-volt receptacle source to be supplied and installed by the owner for pump operation.)

Town of Waterford permitting and application fees are estimated to be $200.00 per residence.

* The ¾ Hp pump can be upgraded to a 1 Hp 120 pump volt for an additional $100.00 per unit.

If there are any questions with regards to this proposal, please contact Victor N. Nigro, Jr., at this office. If this quote meets with your approval please sign one copy and return to the office.

Note: Price quoted without viewing jobsite. Price to be within quote barring any unforeseen complications with installation.

Acceptance of Proposal-The above prices, specification and conditions are satisfactory and are hereby accepted. You are authorized to do the work specified. Payment is to be made upon completion or unless other payment arrangements have been agreed upon in writing.

Acceptance Date: _____ Signature: _____

P.O. Box 43, 169 West Stafford Rd., Stafford Springs, CT 06076

(860) 684-5349 (860) 668-4379 (860) 456-3555 (800) 642-0420 (860) 684-1426 FAX

PRELIMINARY ENGINEERING REPORT

WATER PRESSURE ENHANCEMENT OPTIONS BLOOMINGDALE ROAD/GALLOWS LANE AREA

Waterford, Connecticut

Prepared for:

Town of Waterford Utility Commission
Waterford, Connecticut

FEBRUARY 2006

Prepared BY:

LENARD ENGINEERING, INC.
STORRS, CONNECTICUT

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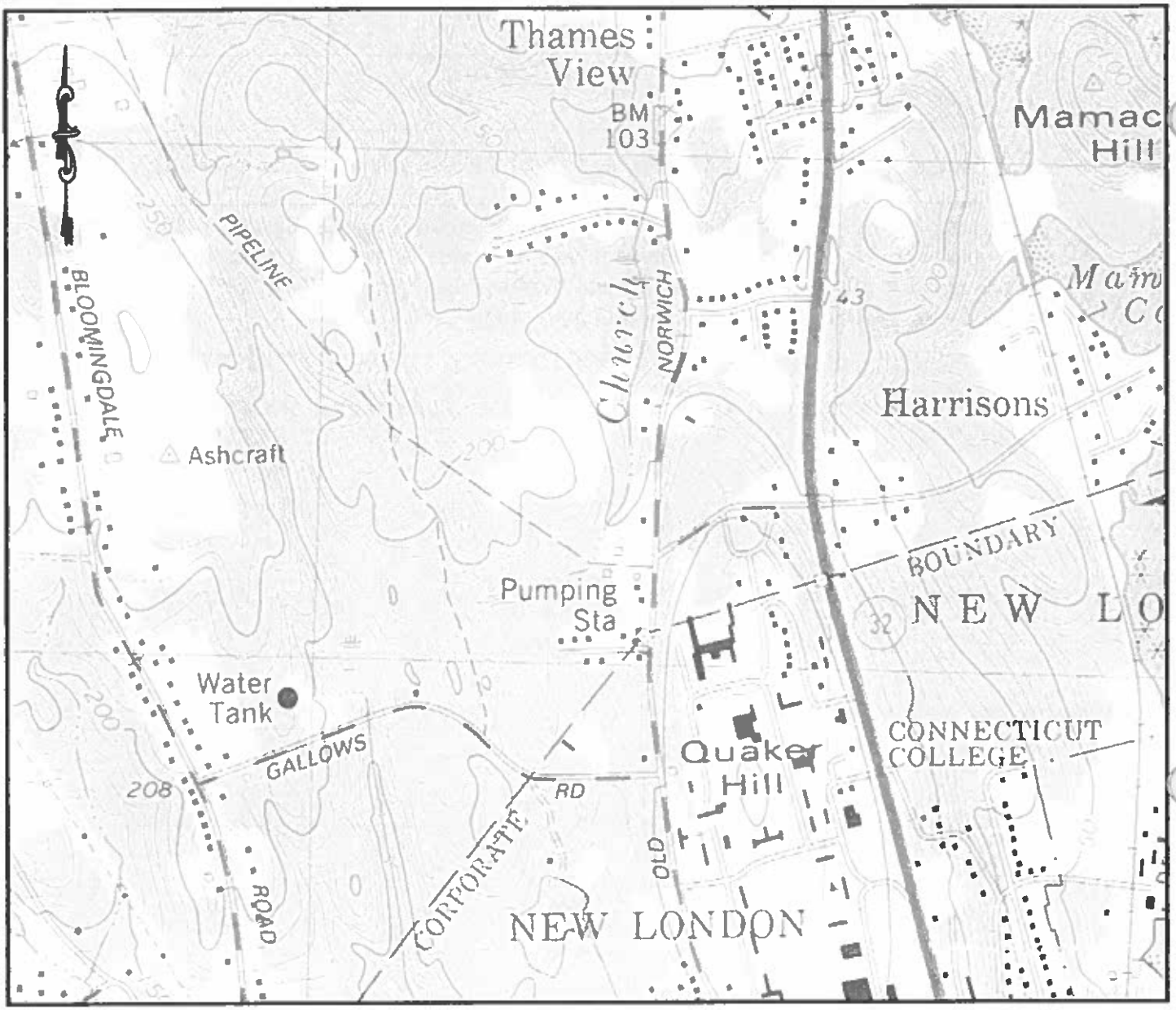
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Appendix A DPH Policy on Individual Booster Pumps

I) INTRODUCTION

In 2004, the Waterford Utility Commission (WUC) received several low water pressure complaints from the Town of Waterford residents on Bloomingdale Road. The Town of Waterford Utility Commission (WUC) retained Lenard Engineering, Inc. (LEI) to conduct the study to determine alternate means of improving water pressure to residents in the vicinity of Bloomingdale Road and Gallows Lane in the Town of Waterford, Connecticut. **Figure 1** shows the approximately study area.

LEI would like to thank Mr. Neftali Soto, P.E. and Mr. James Bartelli for their assistance in this study.



SOURCE: USGS QUADRANGLE MAP
UNCASVILLE, CT – PHOTO REVISED 1984

SCALE: 1" = 1000'

FIGURE No. 1

STUDY AREA LOCATION MAP

BLOOMINGDALE ROOD / GALLOWS LANE AREA
WATERFORD, CONNECTICUT

II) EXISTING CONDITIONS

A) Distribution System Layout

Figure 2 shows the existing water distribution system layout in the vicinity of the Bloomingdale Road/Gallows Lane study area, superimposed on an aerial survey for this portion of Town. This area is presently served off of the City of New London low service pressure gradient. The 3.5 million gallon Gallows Lane water storage tank has an overflow elevation of approximately 263 feet above mean sea level (AMSL), and a normal working water level between elevation 250-260 feet. This tank, along with two other low service area tanks, provides water storage and maintains pressure in the majority of the existing New London/Waterford water distribution system.

A separate high service zone exists in Waterford, with two water booster pumping stations and two elevated spheroid water storage tanks maintaining water pressure in that zone. These tanks have an overflow elevation of 432 feet AMSL and a normal working water level of approximately 420 feet. The limits of the existing high service zone is located approximately 4,300 feet west of Bloomingdale Road, on Vauxhall Street Extension.

As shown on **Figure 2**, a 16-inch water main connects the Gallows Lane water storage tank to 16-inch water mains on both Gallows Lane, and the portion of Bloomingdale Road, south of the Gallows Lane intersection. North of the Gallows Lane intersection, an approximate 700 foot length of 8-inch water main presently serves approximately 14 customers on Bloomingdale Road.

B) Minimum Pressure Requirements

The State of Connecticut Public Health Code section 19-13-B102 (f) requires that "all service connections shall have a water pressure at the main of at least 25 psi under normal service conditions." Normal service conditions are typically interpreted as residual water pressures during typical daily water use, including the peak hourly demand periods, when water use is highest, but does not include fireflows conditions.

In a meeting with the DPH, they indicated that the State of Connecticut Department of Public Utility Control (DPUC) has a minimum pressure requirement of 35 psi for the small water systems they regulate. There is an indication that the minimum pressure requirement listed in the Public Health Code may be increased to 35 psi in the future, to make these regulations consistent.

Therefore, the options evaluated in this report will meet the more stringent 35 psi minimum pressure criteria.

C) Existing Water Service Elevations

LEI obtained aerial mapping for the Town of Waterford, and evaluated water service elevations within the study area. The highest water main elevation presently served is in the northerly end of the 8-inch water main on Bloomingdale Road, with a ground elevation of approximately of 230 feet.

Assuming a normal water level elevation in the Gallows Lane tank of 250 feet, service connections at or above elevation 170 feet would have pressures below 35 psi at the main. Above elevation 190, service connections would have pressures below 25 psi. Therefore, properties at or above elevation 170 should be considered for increased water pressures. The elevation 170 and 190 contours are highlighted on all maps, for reference.

Presently, there are approximately 38 properties with their water main elevation in the street at or above elevation 170 feet. These include 3 properties on Gallows Lane, and 35 located on Bloomingdale Road, located both north and south of the Gallows Lane intersection.

Figure 3 provides a hydraulic grade line diagram for the area, which shows critical water tank and ground elevations, as well as the required pressures.

D) Future Water Service Area Elevations and Number of Customers

In the future, if water mains are extended northerly on Bloomingdale Road, additional customers will require boosted pressure as elevations increase for significant distance to the north. A lot count indicated potentially 74 additional properties at or above elevation 170 feet, bringing the total number to be served to 132. A conservative value of 140 total properties will be used for design purposes. This number could be reduced, if the proposed mid-level pressure zone provided by the Old Colchester Road water pumping station and Rogers Hill tank is extended southerly along Bloomingdale Road, from its intersection with Old Colchester Road.

The highest street elevation north of the existing water service area is located on Applewood Lane, which has a peak elevation approximately 310 feet. As shown on **Figure 3**, the hydraulic grade line diagram, in order to provide a minimum 35 psi at this highest future service elevation, a hydraulic grade line of approximately 390 feet would be required.



LEGEND

EXISTING

Contour

Edge of Pavement

Boundary Line

16" Pipe

12" Pipe

PROPOSED

8" Pipe

GRAPHIC SCALE

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15 Middale Drive, AUBURN, MA (508) 721-7660

WATER DISTRICT MAP

PREPARED FOR

TOWN OF WATERFORD

INTERSECTION OF BLOOMINGDALE & GALLOWS

WATERFORD, CONNECTICUT

Drawing date: 3/10/05

Drawing Scale: 1" = 200'

Rev.	Date	Revision	By

Designed By: JE

Drawn By: CC

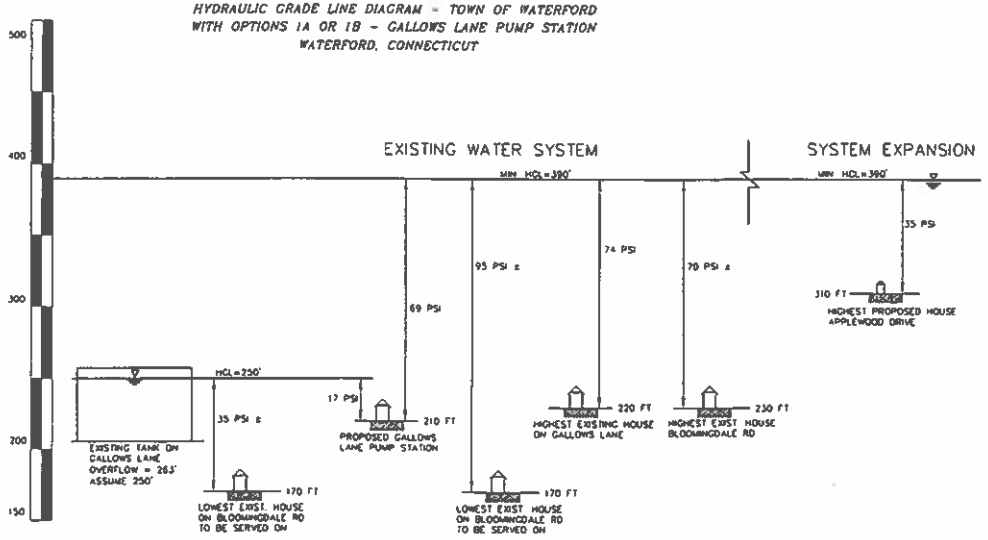
Checked By: JE

CAD File: ADRIALMAPS

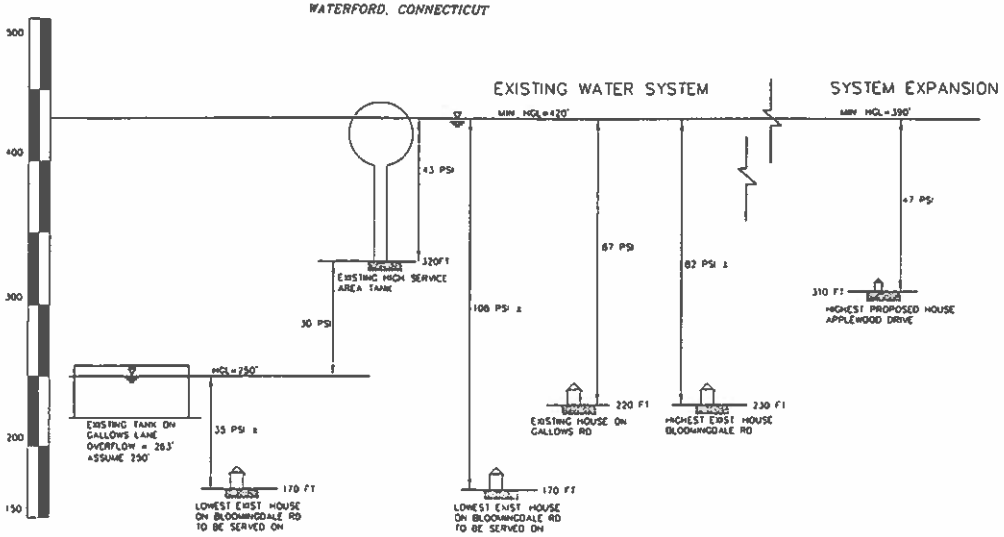
Drawing # 2

Job # 00-304

HYDRAULIC GRADE LINE DIAGRAM - TOWN OF WATERFORD
WITH OPTIONS 1A OR 1B - GALLOWS LANE PUMP STATION
WATERFORD, CONNECTICUT



HYDRAULIC GRADE LINE DIAGRAM - TOWN OF WATERFORD
WITH OPTIONS 2A OR 2B - EXTENSION OF HIGH SERVICE ZONE
WATERFORD, CONNECTICUT



Designed By: JK
Drawn By: DC
Checked By: JK
CAD File: ADMIN-LAPS

Drawing Scale: NOT TO SCALE

No.	Date	Revision

Drawing date: 03/15/05

HYDRAULIC DIAGRAM
PREPARED FOR
TOWN OF WATERFORD
WATERFORD, CONNECTICUT

Lenard Engineering, Inc.
Civil, Environmental and Hydrological Consultants
WORCESTER, MA (508) 791-7680
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Drawing #: 3

Job #: 05-354

III. IMPROVEMENT OPTIONS

A) Option 1A – Construct Booster Pumping Station and Associated Water Mains to Serve the 40 Existing Customers at or above Elevation 170 – **Figure 4** shows the layout for the proposed improvements required for this option. A new booster pumping station, which could be constructed on Town of Waterford owned land at the Gallows Lane tank, would provide boosted water pressure for approximately 40 existing customers.

New 8-inch water mains would be required on the discharge side of the new water pumping station, along Gallows Lane to the intersection of Bloomingdale Road, with the existing 8-inch main serving customers north of Gallows Lane on Bloomingdale Road converted to a new high pressure main. Customers currently connected to the 16" low service area water main on Bloomingdale Road located south of Gallows Lane, would be served by a new parallel high pressure 8-inch main.

Based on a design value of 40 properties, the average daily demand for this new service zone would be approximately 12,000 gallons, per day with an estimated peak hour demand of 4,000 gallons per hour or 67 gallons per minute. Initially, a minimum of two pumps, each rated for 80 gpm would be required.

In addition to providing domestic flows, the pump station would be required to provide fireflows as well, especially in areas along Bloomingdale Road north of Gallows Lane, where a single 8" high pressure water main would provide both domestic and fire protection demands. For planning purposes, we have assumed that a 1000 gpm pump would be adequate for the residential area.

A schematic of the proposed pumping station for Option 1A is provided in **Figure 5**. Two 80 gpm domestic pumps would be installed initially, along with a 1000 gpm high capacity pump, and spaces for two future domestic pumps. We estimate the total project cost for Option 1A to be **$ 875,000**, as described on **Table 1**.

B) Option 1B – Construct Booster Pumping Station and Associated Water Mains to Serve the 140 Existing and Future Customers At or Above Elevation 170 – **Figure 6** shows the layout of proposed improvements required for Option 1B, to account for the full build-out future expansion of the system to the north. Based on the design value of 140 total properties at or above elevation 170 in the study area, an average daily demand of 42,000 gallons per day would be supplied through this pumping station. The estimated peak hourly demand would be 14,000 gallons per hour, or 233 gpm. A third 80 gpm domestic pump, along with a fourth 240 gpm domestic pump, rated at 240 gpm would be added to the station, in addition to the original two pumps proposed in Option 1A, to meet these peak domestic demands. The 1000 gpm capacity pump proposed in Option 1A would remain, to meet the projected fireflow demands.

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Drawing # 4

Job # 05-234

OPTION-1A

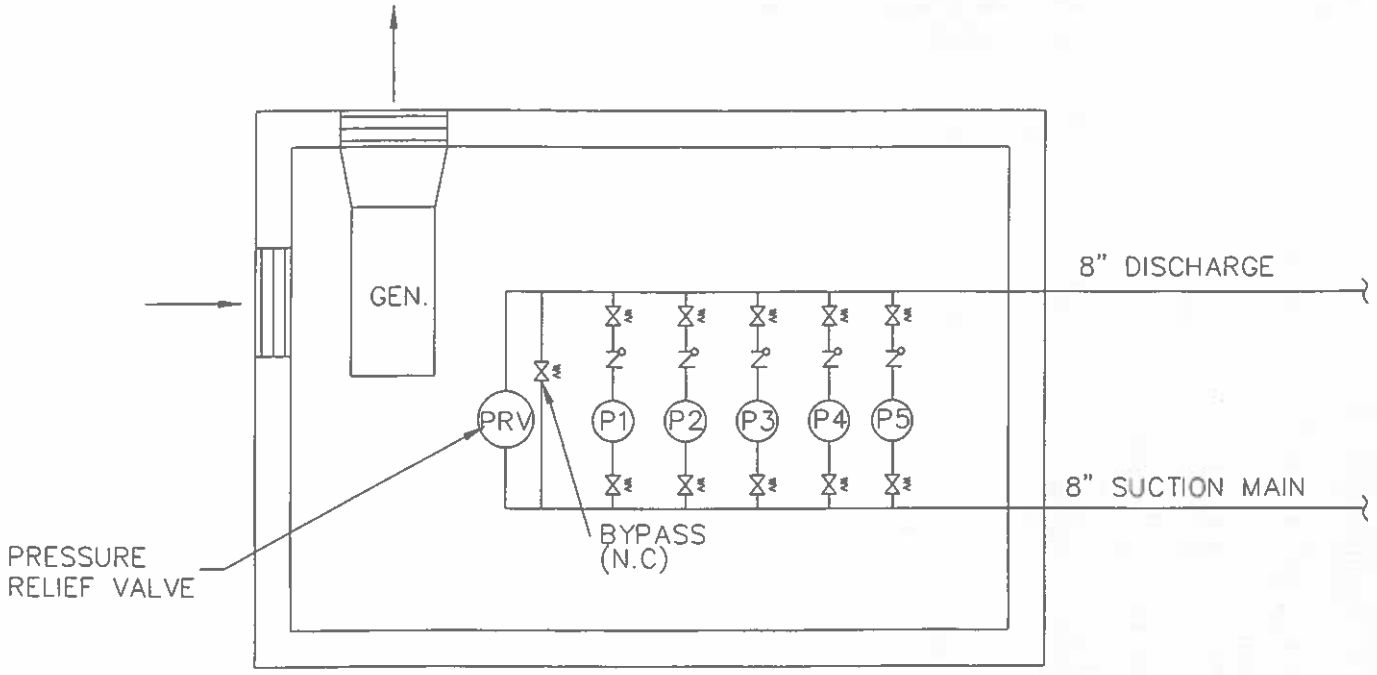
PREPARED FOR
TOWN OF WATERFORD
INTERSECTION OF BLOOMINGDALE & GALLOWS
WATERFORD, CONNECTICUT

No.	Date	Revision	By

Drawing date: 3/10/03
Drawing Scale: 1" = 200'

Designed By: JL
Drawn By: CC
Checked By: JL
CAD File: ADRAWING5

SCHEMATIC PUMP HOUSE LAYOUT
GALLOWS LANE PUMPING STATION
WATERFORD, CONNECTICUT



NOT TO SCALE

PUMP CAPACITIES

P1 = 80 GPM
P2 = 80 GPM
P3 = 80 GPM (FUTURE)
P4 = 240 GPM (FUTURE)
P5 = 1000 GPM

PUMP HOUSE SCHEMATIC LAYOUT
PREPARED FOR
TOWN OF WATERFORD
WATERFORD, CONNECTICUT

Lenard Engineering, Inc.

5

TABLE 1

PRELIMINARY COST ESTIMATE
OPTION 1A – CONSTRUCT WATER BOOSTER PUMP STATION AND NEW WATER MAINS TO SERVE 40 EXISTING PROPERTIES

1)	Construct Water Pumping Station	$ 300,000
2)	Construct 2700 LF of new 8" high pressure piping 2700 LF @ 125/LF	$337,500
3)	Install 40 new service connections, Main to curb stop 40 @ $1,500 ea.	$ 60,000
	Sub-total	$698,000
	Contingency (15%)	$105,000
	Design (10%)	$ 70,000
		$873,000
		SAY $875,000

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Job # 05-334
Drawing # 6

OPTION-1B

TOWN OF WATERFORD
PREPARED FOR
INTERSECTION OF BLOOMINGDALE & GALLOWS
WATERFORD, CONNECTICUT

Item	Date	Revision	By

Drawing date: 3/10/05
Drawing Scale: 1" = 250'

Designed By: JE
Drawn By: CC
Checked By: JE
CAD File: ADRALMAPS

A same schematic of the proposed pumping station for Option 1B is provided in **Figure 5,** as the space reserved to add future pumps in option 1A would be utilized with this option. We estimate the total project cost for Option 1B to be **$1,750,000**, as described on **Table 2**. This option is also shown as a comparison to Option 2B, to compare the ultimate build-out cost for the pump station vs. high service area expansion options.

C) Option 2A – Extend High Service Area Distribution System to Serve the Existing 40 Customers with Boosted Pressure – In 1997, the Town of Waterford WPCA proposed a water main extension from their high service zone piping located on Vauxhall Street Extension, cross country to Bloomingdale Road, to provide customers within the study area with boosted pressure. As shown on **Figure 7,** the route of this proposed main included approximately 1400 feet of new 12" water main on Vauxhall Street Extension, and approximately 3000 feet of new 12" piping cross country, from Vauxhall Street Extension to Bloomingdale Road. This water main was proposed to be installed within a previously obtained 20 foot right-of-way for sewer installation. This plan was not approved, due to significant Conservation Commission concerns regarding the potential crossing of wetlands.

If connected, customers within the study areas would operate off of the high service area hydraulic grade line of 420 feet. Therefore, existing residents at elevation 170 would experience pressures of 108 psi, while the highest customer served by public water would see pressures of 48 psi. If desired, these pressures could be reduced slightly, through the addition of a pressure reducing valve pit, prior to the connection on Bloomingdale Road.

An additional 1400 feet of 8-inch water main would need to be extended on Bloomingdale Road, south of the Gallows Lane, as well as approximately 600 feet of 8 inch piping to serve customers on Gallows Lane.

We estimate the total project cost for Option 2A to be **$ 950,000**, as described on **Table 3**.

D) Option 2B – Extend High Service Area Distribution System to Serve the Existing and Future 140 Customers with Boosted Pressure

This option is identical to Option 2A, but includes expansion of the high service area to all 140 properties at or above elevation 170. (See **Figure 8**). Similar to Option 1B above, this would increase the average daily demand to 42,000 gallons per day, and increase the anticipated peak hour demand to 233 gallons per minute (gpm).

We estimate the total project cost for Option 2B to be **$ 2,010,000**, as described on **Table 4**.

TABLE 2

PRELIMINARY COST ESTIMATE
OPTION 1B – CONSTRUCT WATER BOOSTER PUMP STATION AND NEW WATER MAINS TO SERVE EXISTING AND FUTURE 140 PROPERTIES

1)	Construct Water Pumping Station	$ 300,000
2)	Construct 7100 LF of new 8" high pressure piping 7100 LF @ 125/LF	$ 887,500
3)	Install 140 new service connections, from main to curb stop 140 @ $1,500 ea.	$ 210,000
	Sub-total	$1,398,000
	Contingency (15%)	$ 210,000
	Design and Permitting (10%)	$ 140,000
		$1,748,000
	Say	**$1,750,000**

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Civil, Environmental and Hydrogeological Consultants
Drawing #
7
OPTION-2A
PREPARED FOR
TOWN OF WATERFORD
INTERSECTION OF BLOOMINGDALE & GALLOWS
WATERFORD, CONNECTICUT
Drawing date
03-15-05
Drawing Scale
1" = 200'
Designed By
JE
Drawn By
CC
Checked By
JE
CAD File
ADRIALNPS
LEGEND
EXISTING
PROPOSED
Contour
Edge of Pavement
Boundary Line
16" Pipe
12" Pipe
8" Pipe
GRAPHIC SCALE
EXISTING 3.5 MG GALLOWS LANE TANK OVER FLOW ELEV. = 263 ±
BLOOMINGDALE ROAD
GALLOWS LANE
170 CONTOUR
190 CONTOUR
HOSKINS DRIVE
HOSKINS DRIVE

TABLE 3

PRELIMINARY COST ESTIMATE

Option 2A – CONSTRUCT WATER MAIN EXTENSION FROM HIGH SERVICE AREA TO BLOOMINGDALE ROAD TO SERVE EXISTING 40 PROPERTIES.

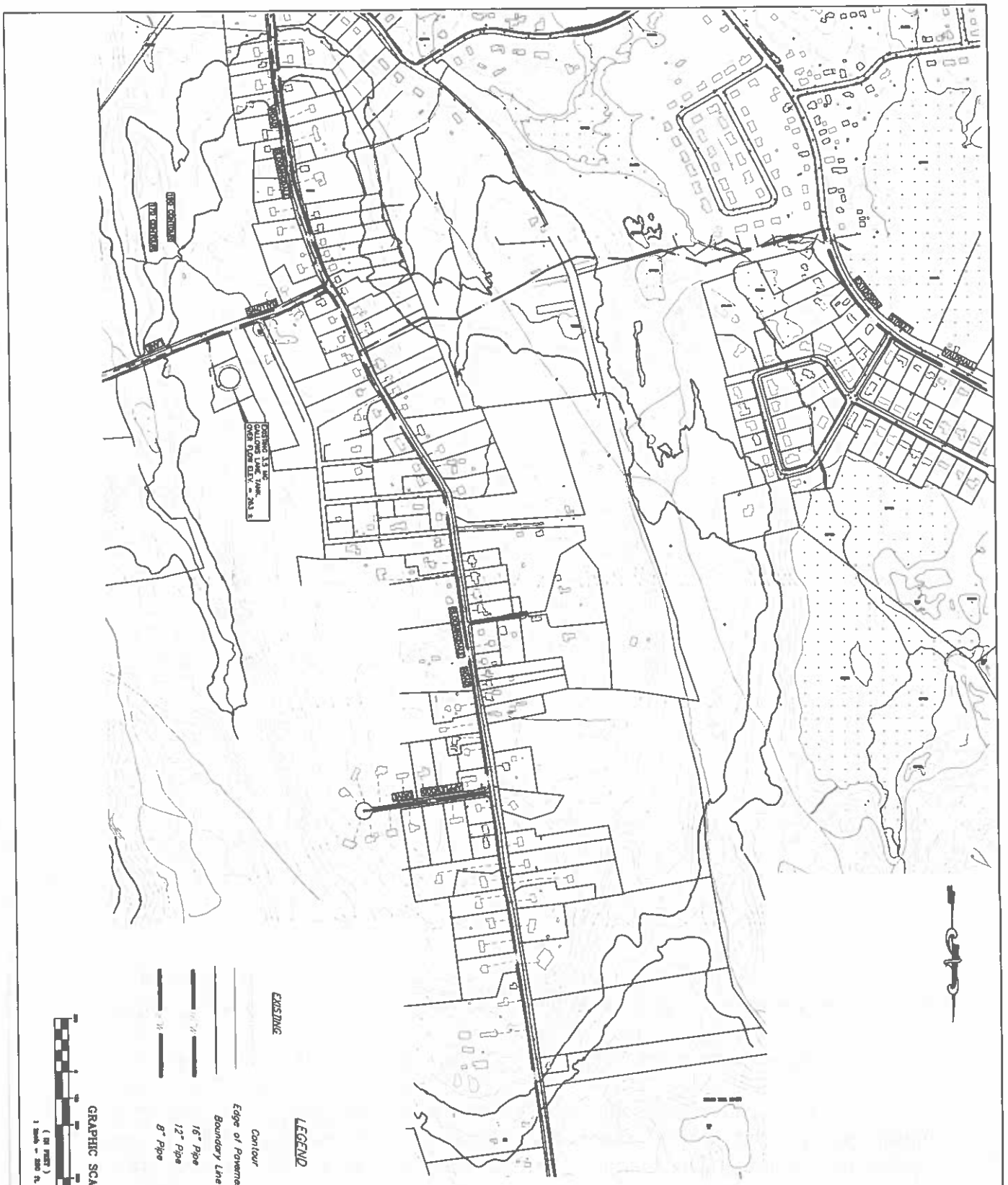
1)	Construct 1400 LF of new 12" Water main on Vauxhall St. Ext. 1400 LF @ 150/LF		$210,000
2)	Construct 3000 LF of new 12" water main cross country, from Vauxhall Street Extension to Bloomingdale Road 3000 LF @ 100/LF		$300,000
3)	Construct 1500 LF of new 8" water main on Bloomingdale Road and Gallows Lane 1500 LF @ 125/LF		$188,000
4)	Install 40 new water service connections, main to curb stop 40 @ 1500 ea,		$ 60,000
	Sub-total		$758,000
	Contingency (15%)		$114,000
	Design and Permitting (10%)		$ 76,000
			$948,000
		Say	**$950,000**

TABLE 4

PRELIMINARY COST ESTIMATE

Option 2B – CONSTRUCT WATER MAIN EXTENSION FROM HIGH SERVICE AREA TO SERVE EXISTING AND FUTURE 140 PROPERTIES.

1)	Construct 1400 LF of new 12" Water main on Vauxhall St. Ext. 1400 LF @ 150/LF	$ 210,000
2)	Construct 3000 LF of new 12" water main cross country, from Vauxhall Street Extension to Bloomingdale Road 3000 LF @ 100/LF	$ 300,000
3)	Construct 7100 LF of new 8" high pressure piping 7100 LF @ 125/LF	$ 888,000
4)	Install 140 new water service connections, from main to curb stop 140 @ 1500 ea,	$ 210,000
	Sub-total	$1,008,000
	Contingency (15%)	$ 241,000
	Design and Permitting (10%)	$ 161,000
		$2,010,000



OPTION-2B

PREPARED FOR

TOWN OF WATERFORD

INTERSECTION OF BLOOMINGDALE & GALLOWS

WATERFORD, CONNECTICUT

Drawing date: 3/10/05

Drawing Scale: 1" = 250'

Rev.	Date	Revision	By

Designed By: JC

Drawn By: GC

Checked By: JC

CAD File: AERIALMAPS

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Drawing # 8

IV. OPTION 3 – INDIVIDUAL BOOSTER PUMPS

LEI also evaluated the installation of individual booster pumps at houses above elevation 170 feet. As mentioned earlier, approximately 40 existing properties would require pumps initially. If the water main was extended in the future, the maximum number of properties that would require booster pumps would increase to 140.

LEI obtained a copy of the State Department of Public Health policy statement regarding use of individual booster pumps (See **Appendix A**). In general, the State will disallow the installation of individual booster pumps, where other feasible options exist.

This option would not provide any increase in available fireflows to the study area.

Table 5 shows the cost of installing these pumps, approximately $60,000 for the initial 40 properties, and approximately $ 241,000 for the 140 total future properties.

TABLE 5

PRELIMINARY COST ESTIMATE

OPTION 3 – INSTALL BETWEEN 40 AND 140 INDIVIDUAL BOOSTER PUMP SYSTEMS TO SERVE 40 EXISTING AND 140 FUTURE PROPERTIES

1)	Phase I- Install approximately 40 individual booster pump systems (pump, bladder tank, electrical and plumbing connections) to increase pressure to existing customers at or above elevation 170 feet-	
	40 @ $ 1500 Ea.	$ 60,000
2)	Phase II- Install approximately 100 additional individual booster pump systems to increase pressure to future properties at or above elevation 170 feet-	
	100 @ $ 1500 Ea.	$ 150,000
	Sub-total	$ 210,000
	Contingency (15%)	$ 31,500
		$ 241,500

V. SUMMARY AND CONCLUSIONS

A) Based upon the anticipated raising of the required minimum water pressure standard in public water supply water mains to 35 psi, approximately 40 properties with water mains at or above elevation 170 feet are presently connected, which will require increased water pressure. In the future, if water mains are extended northerly along Bloomingdale Road, the number of properties above elevation 170 would jump to approximately 140.

B) LEI evaluated two different water pump station options for providing boosted water pressure to the study area. Option 1A was designed to serve the approximate 40 properties presently connected to the system, which consisted of a new water pumping station, and 2,700 feet of new 8" water main. The estimated project cost of Option 1A is $ 875,000.

C) Option 1B provides for the expansion of the pump station and distribution system to serve all 140 properties at or above elevation 170. The pump station would require two additional pumps, and a total of 7,100 feet of new 8" water main. The estimated total project cost for Option 1B is $ 1,750,000.

D) LEI also evaluated extending the existing high service area piping located on Vauxhall Street Extension to Bloomingdale Road, which would eliminate the need to construct a water pumping station. This extension was previously proposed by the Waterford WPCA in 1997, but was not constructed, due to Conservation Commission concerns regarding wetland impacts. Option 2A extends the 12" high service zone piping 1400 feet on Vauxhall Street extension, and 3000 feet cross country within previously obtained sewer easements to Bloomingdale Road, to serve the approximately 40 existing properties presently connected. The estimated project cost for Option 2A is $ 950,000.

E) Option 2B expands Option 2A, by providing an additional 7,100 feet of 8" water main northerly on Bloomingdale Road, to serve the approximate 140 total properties at or above elevation 170 feet. The estimated project cost for this Option is $ 2,010,000.

F) Because the cost of the pump station option (Option 1A) and the high service area extension (Option 2A) are approximately the same ($875,000 versus $950,000), and the pump station option would involve a recurring operation and maintenance cost, we recommend that the Town of Waterford Utility Commission explore the possibility of constructing Option 2A. The following steps are recommended:

1) Arrange preliminary meetings with Town Planning Department and Conservation Commission officials, to determine the likelihood of having this water main extension permitted. Trenchless technologies have been

advanced greatly since the original proposal, which was an open trenching method to our knowledge. If directional drilling could be utilized for the most environmentally sensitive wetlands crossings, this may alleviate some of their original concerns.

2) If these initial meetings are favorable, then an appraiser should be contacted, to determine if the existing sewer easements could be expanded to have both water and sewer installed within them, and the potential costs associated with this.

3) A brief hydraulic study should be conducted, to verify the impact of extending the high service zone on the existing customers in that zone. Previous LEI studies indicated that the Vauxhall Street elevated tank could empty during a combined peak hourly demand and fireflow condition at a school located in that pressure zone. Expanding that zone to serve Bloomingdale Road may further exacerbate this condition.

4) If the result of these preliminary investigations are favorable, then design and permitting of this extension should begin.

5) However, if any of the above three items prove negative, then the Utility Commission should fall back on Option 1A, the pump station option, which should have much fewer permitting constraints.

6) The future expansion of this high pressure zone, proposed in Options 1B and 2B, would be dependent upon the number of requests for public water, once the new high pressure zone was available.

7) Because of the large number of individual booster pumps required by both phases, the DPH is not likely to approve this option, even though it is the most cost effective solution to the low pressure problem. This option would also not provide improved fire flows to the study area.

Appendix B
Detailed Cost Estimates

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Engineering a Better Environment

Waterford Utility Commission
Gallows Lane & Bloomingdale Road, Waterford, CT
In-Line Booster Pump Station to Serve Existing Properties
Preliminary Opinion of Probable Construction Costs
AACE Class 3

			Date	March 2024
			ENR Index	13532
Description	**Quantity**	**Unit**	**Unit Price**	**Extended Total**
General Conditions				
Project Management (6%)	1	LS	$95,000	$95,000
Mobilization/Demobilization (2%)	1	LS	$32,000	$32,000
Traffic Control	27	DAY	$400	$10,800
Cleanup	1	LS	$5,000	$5,000
Pump station startup & testing	1	LS	$5,000	$5,000
Civil				
Site Clearing and Tree Removal	1	LS	$5,000	$5,000
8" Water Main (new pressure zone)	2,700	LF	$160	$432,000
8"x16" Tapping Sleeve and Valve	1	EA	$20,000	$20,000
Service Connections to New Main	43	EA	$5,000	$215,000
Remove and Reset Hydrant	5	EA	$4,000	$20,000
Water Main Testing	2,700	LF	$10	$27,000
Ledge Excavation, Disposal and Replacement Backfill	50	CY	$150	$7,500
Earth Excavation Below Grade and Replacement Backfill	3,000	CY	$30	$90,000
Loam & Seed	600	SY	$20	$12,000
Erosion Control	1,000	LF	$5	$5,000
Temporary Paving	338	TN	$230	$77,625
Permanent Paving	217	TN	$215	$46,682
Chain Link Fence	300	LF	$100	$30,000
As-Built Survey	1	LS	$5,000	$5,000
Process				
Inline Booster Pump Station - Quadplex Booster Station	1	LS	$223,000	$223,000
Inline Booster Pump Station - Installation	1	LS	$200,000	$200,000
Flow Meters	2	EA	$15,000	$30,000
Relief Valve and Valve Vault	1	EA	$20,000	$20,000
Electrical/Instrumentation				
Instrumentation and Controls	1	LS	$60,000	$60,000
Electrical	1	LS	$30,000	$30,000
Utility Allowance	1	LS	$40,000	$40,000
			Subtotal	**$1,744,000**
			Construction Contingency (20%)	**$349,000**
			Bonds & Insurance (2%)	**$34,880**
			Allowances (2%)	**$34,880**
			TOTAL PROJECT CONSTRUCTION COST	**$2,162,760**
Additional Options:				
Furnish and Install Hydropnuematic Tank	1	EA	$17,250	$17,250
Hydropneumatic Tank Vault	6	VF	$5,000	$30,000
3-Phase Extension	1	LS	$300,000	$300,000

Notes:
1. Construction cost estimate is based on current costs from recent similar projects and vendor price quotes.
2. Cost estimates are AACE Class 3 with an expected accuracy range of -20% to +30%.

WRIGHT-PIERCE
Engineering a Better Environment

Waterford Utility Commission
Gallows Lane & Bloomingdale Road, Waterford, CT
Pre-fabricated Booster Pump Station to Serve Existing Properties
Preliminary Opinion of Probable Construction Costs
AACE Class 3

			Date	March 2024
			ENR Index	13532
Description	**Quantity**	**Unit**	**Unit Price**	**Extended Total**
General Conditions				
Project Management (6%)	1	LS	$129,000	$129,000
Mobilization/Demobilization (2%)	1	LS	$43,000	$43,000
Traffic Control	27	DAY	$400	$10,800
Cleanup	1	LS	$5,000	$5,000
Pump station startup & testing	1	LS	$5,000	$5,000
Civil				
Site Clearing and Tree Removal	1	LS	$5,000	$5,000
8" Water Main (new pressure zone)	2,700	LF	$160	$432,000
8"x16" Tapping Sleeve and Valve	1	EA	$20,000	$20,000
Service Connections to New Main	43	EA	$5,000	$215,000
Remove and Reset Hydrant	5	EA	$4,000	$20,000
Water Main Testing	2,700	LF	$10	$27,000
Ledge Excavation, Disposal and Replacement Backfill	50	CY	$150	$7,500
Earth Excavation Below Grade and Replacement Backfill	3,000	CY	$30	$90,000
Loam & Seed	600	SY	$20	$12,000
Erosion Control	1,000	LF	$5	$5,000
Temporary Paving	338	TN	$230	$77,625
Permanent Paving	217	TN	$215	$46,682
Chain Link Fence	300	LF	$100	$30,000
As-Built Survey	1	LS	$5,000	$5,000
Structural				
Concrete Foundation	48	CY	$1,500	$72,667
Pre-Fabricated Pump Station (30 ft x 12 ft with metal siding and raised metal roof, relief valve, low-flow bypass valve, manual transfer switch)	1	LS	$744,000	$744,000
Prefabricated Booster Pump Station - Installation	1	LS	$186,000	$186,000
Flow Meters	2	EA	$15,000	$30,000
Electrical/Instrumentation				
Instrumentation and Controls	1	LS	$60,000	$60,000
Electrical	1	LS	$30,000	$30,000
Utility Allowance	1	LS	$40,000	$40,000
			Subtotal	**$2,349,000**
			Construction Contingency (20%)	**$470,000**
			Bonds & Insurance (2%)	**$46,980**
			Allowances (2%)	**$46,980**
			TOTAL PROJECT CONSTRUCTION COST	**$2,912,960**
Additional Options:				
Furnish and Install Hydropnuematic Tank	1	EA	$17,250	$17,250
3-Phase Extension	1	LS	$300,000	$300,000

Notes:

1. Construction cost estimate is based on current costs from recent similar projects and vendor price quotes.
2. Cost estimates are AACE Class 3 with an expected accuracy range of -20% to +30%.

WRIGHT-PIERCE
Engineering a Better Environment

Waterford Utility Commission
Gallows Lane & Bloomingdale Road, Waterford, CT
Water Main Installation from Williams Street Pump Station
Preliminary Opinion of Probable Construction Costs
AACE Class 3

			Date	March 2024
			ENR Index	13532
Description	**Quantity**	**Unit**	**Unit Price**	**Extended Total**
General Conditions				
Project Management (6%)	1	LS	$87,000	$87,000
Mobilization/Demobilization (2%)	1	LS	$29,000	$29,000
Traffic Control	48	DAY	$400	$19,040
Cleanup	1	LS	$5,000	$5,000
Civil				
8" Water Main (new pressure zone)	4,760	LF	$160	$761,600
Service Connections to New Main	43	EA	$5,000	$215,000
Remove and Reset Hydrant	5	EA	$4,000	$20,000
Water Main Testing	4,760	LF	$10	$47,600
Ledge Excavation, Disposal and Replacement Backfill	50	CY	$150	$7,500
Earth Excavation Below Grade and Replacement Backfill	5,289	CY	$30	$158,667
Temporary Paving	595	TN	$230	$136,850
Permanent Paving	346	TN	$215	$74,363
			Subtotal	**$1,562,000**
			Construction Contingency (20%)	**$312,000**
			Bonds & Insurance (2%)	**$31,240**
			Allowances (2%)	**$31,240**
			TOTAL PROJECT CONSTRUCTION COST	**$1,936,480**

Notes:

1. Construction cost estimate is based on current costs from recent similar projects and vendor price quotes.
2. Cost estimates are AACE Class 3 with an expected accuracy range of -20% to +30%.
3. This cost esimate only includes installation of piping from the Williams Street Pump Station to Bloomingdale Road. It does not include costs to upgrade the pump station. More information is needed to determine the required costs for modifying the pump station to accomodate the Bloomingdale Road service area.

WRIGHT-PIERCE
Engineering a Better Environment

Waterford Utility Commission
Gallows Lane & Bloomingdale Road, Waterford, CT
Water Main Extension from High Service Area to Serve Existing Properties
Preliminary Opinion of Probable Construction Costs
AACE Class 3

			Date	March 2024
			ENR Index	13532
Description	**Quantity**	**Unit**	**Unit Price**	**Extended Total**
General Conditions				
Project Management (6%)	1	LS	$122,000	$122,000
Mobilization/Demobilization (2%)	1	LS	$41,000	$41,000
Traffic Control	29	DAY	$400	$11,600
Cleanup	1	LS	$5,000	$5,000
Civil				
Construct New 12" Water Main on Vauxhall St. Ext.	1,400	LF	$350	$490,000
Construct New 12" Water Main from Vauxhall to Bloomingdale	3,000	LF	$300	$900,000
Construct New 8" High Pressure Piping	1,500	LF	$280	$420,000
Install New Water Service Connection, Main to Curb Stop	40	EA	$5,000	$200,000
Water Main Easements	0.7	ACRE	$7,000	$4,900
			Subtotal	**$2,194,500**
		Construction Contingency (20%)		**$439,000**
			Bonds & Insurance (2%)	**$43,890**
			Allowances (2%)	**$43,890**
	TOTAL PROJECT CONSTRUCTION COST			**$2,721,280**
Additional Options:				
Pressure Reducing Valve	1	EA	$18,400	$18,400
Pressure Reducing Valve Vault	6	VF	$5,000	$30,000

Notes:

1. Construction cost estimate is based on current costs from recent similar projects and vendor price quotes.
2. Cost estimates are AACE Class 3 with an expected accuracy range of -20% to +30%.

Appendix C
In-line Pitless Booster Pump Station Proposal and Examples

BAKER®
WATER SYSTEMS DIVISION
Campbell Monitor MONOFLEX



3/14/2024

Tim Henry
Wright-Pierce | Project Engineer
direct 860.852.1921 | **cell** 203.731.0258

WRIGHT-PIERCE
Engineering a Better Environment

Re: Waterford, CT Booster Station #243132C

Dear Tim,

We are pleased to submit the following Budgetary Quotation for the Waterford CT Booster Station project. To accommodate your design flow of a single 15 JPM Jockey, dual 85 GPM Duty Cycle and a single 1000 GPM we are proposing a Monitor Quadraplex Booster Station. The system will operate from pressure transducers to maintain constant pressure. The pump will run off of VFD and PLC controls. The VFD speed control will ensure that only the required amount of pressure will be produced by adjusting the pump speed for the varying pressures. The Monitor Municipal Controls will maintain a constant pressure setting over a wide range of flow. The exact pressure setting will be established and entered by the operator upon start-up. Our software is specifically designed for boosting applications allowing us to offer smooth transitions in flow and pressure. We ramp the submersible pumps up slowly, virtually eliminating water hammer. The Monitor Booster Station is NSF 61 Certified; UL approved, and includes a one-year warranty.

Quadraplex Booster Station Requirements:

- Provide Single 15 GPM @ 140' TDH
- Provide Dual 85 GPM @ 140' TDH (each pump)
- Provide Single 1000 GPM @ 190' TDH
- Triplex Booster
- Power source: 230V Single Phase
- UL508A Listed Control Panel
- NSF 61 Certified

Monitor Single PS56, Dual PS67 & Single PS1618 Quadraplex Booster Includes:

- ***Monitor Municipal Control System:***
- Quadraplex Water Booster Pumping Control Panel for operation on 230V 1Ø incoming power
- To control 1 .75 HP 3.8 SFA; 2 - 5 hp 17.4 S.L.A. Submersible Booster Pumps & 1 60 HP 183.7 SFA Booster pump.
- **To Include:**
- NEMA Type 4X - Steel 2 Door Enclosure, with back panel & 3 Point Latch
- stands

- Aluminum Dead-front Inner Door(s)
- NEMA 3R cooling fan and thermostat
- Enclosure Outer Door Stop
- Interior Enclosure Light Hoffman 24VDC LED
- Incoming Power Circuit Breaker (HDL) with operator main disconnect
- 2 kVA Control Power Transformer with Primary Fuses
- Control Power Circuit Breaker
- Alarm Power Circuit Breaker
- 1 - 15 Amp 2 Pole HDL Circuit Breaker (XFRMR Primary)
- 2 - 15 Amp 1 Pole Multi9 Circuit Breaker (Accessories)
- 2 - 20 Amp 1 Pole QOU Circuit Breaker (Accessories)
- 1 - Circuit Breaker(HDL) / 150 HP VFD - Sized For Phase Conversion - 60HP Pump (Danfoss FC-202N110)
- 2 - Circuit Breaker(HDL) / 5HP VFD - Sized For Phase Conversion - 5HP Pumps(Danfoss FC-202P3K)
- 1 - Circuit Breaker(HDL) / 1.5HP VFD - Sized For Phase Conversion - .75HP Pumps(Danfoss FC-202P3K)
- 22mm Hand Off Auto Switch
- 4 - 22mm Push-To-Test Run Pilot Light
- 4 - Elapsed Time Meter
- 30mm Power On Pilot Light
- 4 - 22mm Push-to-Test Push-To-Test Drive Fault Pilot Light, and Aux Contact
- 15 Amp GFI Receptacle - Inner door/door mount
- Engraved Nameplates
- 1 - Misc Wire Track, terminals Fasteners
- 1 - Aluminum brackets, Fab & Mounting
- 1 - Allen Bradley Micrologix 1400 PLC w/required I/O, including IF4 analog input, OF4 analog output modules and Ethernet
- configured (PLC and HMI programming by Baker; installed by Primex)
- 1 - Schneider Electric color HMI Ethernet configured
- 1 - Ethernet switch & Cable - Unmanaged
- 2 - 0-300 PSI pressure transducer w/500' cable (suction, discharge pressure) - Kellar Valu-Line – Pressure range may be changed to better reflect field conditions- TBD
- UL Label 508
- Self Laminating Wire Numbers
- Control Relays as required
- Terminal Blocks and Ground Lugs as Required
    - **Line/load reactors are NOT included in quote.**
        - ***Filters are highly recommended for pumps/motors further than 50' from the VFD controls***

- ***Monitor Pitless Booster Units – Qty 1***
    - Monitor **5PS56TBWX11.25F44.54FS** (5' Bury Discharge & Inlet, 5" Diameter by 4.5' Long Tank, 1.25" Drop Pipe, 4" #150 ANSI Flange Discharge & Inlet Connection, Sealed Conduit Connections
        - NSF 61 Certified Cable Glands
            - *Underwater Splice required from Control panel to motors*
                - 1.25" Flomatic Inline Check Valve # 4032DIVFD

- ***Monitor Pitless Booster Units – Qty 2***
  - Monitor **5PS67TBWX12F49.54FES** (5' Bury Discharge & Inlet, 6" Diameter by 9.5' Long Tank, 2" Drop Pipe, 4" #150 ANSI Flange Discharge & Inlet Connection, Sealed Conduit Connections
    - NSF 61 Certified Cable Glands
      - *Underwater Splice required from Control panel to motors*
    - 2" Flomatic Inline Check Valve # 7937VFD
- ***Monitor Pitless Booster Units – Qty 1***
  - Monitor **5PS1618WBWX16F8138FES** (5' Bury Discharge & Inlet, 16" Diameter by 13' Long Tank, 6" Drop Pipe, 8" #150 ANSI Flange Discharge & Inlet Connection, Sealed Conduit Connections
    - NSF 61 Certified Cable Glands
      - *Underwater Splice required from Control panel to motors*
    - 6" Flomatic Inline Check Valve # 4089VFD

- ***Gate Valves – Qty 6***
  - J&S Valve GV-6604– 4" Mechanical Joint x Mechanical Joint - Resilient Gate Valve w/ 2" Square Head ***(Accessories Not Included)***
- ***Gate Valves – Qty 2***
  - J&S Valve GV-6608– 8" Mechanical Joint x Mechanical Joint - Resilient Gate Valve w/ 2" Square Head ***(Accessories Not Included)***

- ***Submersible Pumps – Qty 1 of Each***
  - Franklin 75F93821510–6 Stage Pump with 1.25" NPT discharge
  - Franklin 2345129204GS–.75 HP, 2 pole (3600 RPM), 230V, Three Phase, Submersible Motor (4")
- ***Submersible Pumps – Qty 2 of Each***
  - Franklin 93669013 –13 Stage Pump with 2" NPT discharge
  - Franklin 2347178802G–5 HP, 2 pole (3600 RPM), 230V, Three Phase, Submersible Motor (4")
- ***Submersible Pumps – Qty 1 of Each***
  - Franklin 9FDLC-1C-2BS-06-02-B06-S – 2 Stage Pump with 6" NPT discharge
  - SME 0600-2–60 HP, 2 pole (3600 RPM), 230V, Three Phase, Submersible Motor (8")
    - **Disclaimer- Pump selected based on information provided. Baker Mfg. is not responsible for ensuring accurate line and elevation loss calculations**

- ***On-Site Start-Up Services & Full Training***
  - Verify proper installation
  - Program PLC, HMI, & VFD
  - Commission Pump Station
    - Ensure optimal pump efficiency
  - All Travel Expenses Included
    - *Completion of Pre Startup Checklist Required*

        - *4 week scheduling notice required in advance of startup, longer preferred if possible*

Monitor Quadraplex Booster Station Budgetary Quotation #243132C

- $223,000.00 USD

Lead-time

- 12-16 Weeks to build (from the date of approved submittals)
    - *Purchase Order Required to Initiate Submittal Documents*
        - *Submittal Document lead time is 2 weeks*

Notes / Comments

- Monitor product specifications and engineering documentation.
- Freight – Full Freight Allowed in continental US
- 1 Year Warranty (Monitor Terms of Sale)

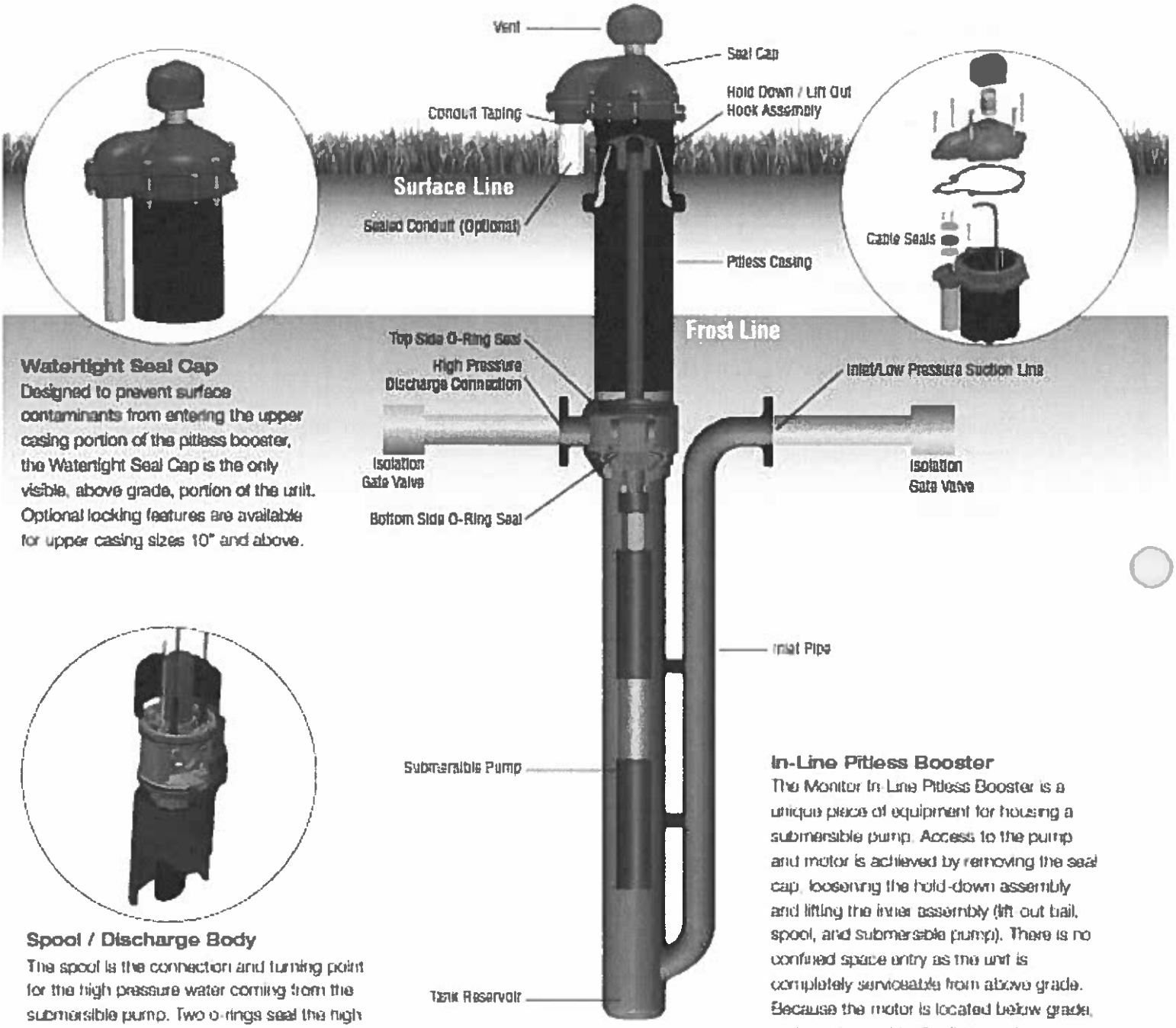
Thank you for your interest in Monitor Booster Stations. If you have any further questions, please contact me at (206) 556-9064.

Cordially,

Jon Klumpp

Baker Manufacturing Company
Monitor Division

PITLESS BOOSTER STATION



Watertight Seal Cap

Designed to prevent surface contaminants from entering the upper casing portion of the pitless booster, the Watertight Seal Cap is the only visible, above grade, portion of the unit. Optional locking features are available for upper casing sizes 10" and above.

Spool / Discharge Body

The spool is the connection and turning point for the high pressure water coming from the submersible pump. Two o-rings seal the high pressure water within finely machined o ring lands. Tappings located on the top side of the spool allow access to the suction and discharge pressure. Pressure transducers, located on the top of the spool, allow for continuous pressure readings in constant pressure applications. Pump wires are sealed using high pressure wire grommets.

In-Line Pitless Booster

The Monitor In-Line Pitless Booster is a unique piece of equipment for housing a submersible pump. Access to the pump and motor is achieved by removing the seal cap, loosening the hold-down assembly and lifting the inner assembly (lift out bail, spool, and submersible pump). There is no confined space entry as the unit is completely serviceable from above grade. Because the motor is located below grade, motor noise is virtually eliminated.

Did You Know? Monitor Water Systems can customize any of our products to adapt to your water system needs

BAKER SALES ORDER
MONITOR AND HAIGHT DIVISION
TERMS OF SALE

All quotations and sales are subject to the following terms and conditions and those contained on the face hereof. Baker's Haight and Monitor Divisions ("Baker") are bargaining for and will do business only on the terms and conditions on this form.

1. ACCEPTANCE AND FILLING OF ORDERS; CONTRARY TERMS; ENTIRE AGREEMENT - All orders for goods and materials are subject to acceptance by Baker at its orders for goods and materials are subject to acceptance by Baker at its applicable Monitor or Haight Division office. **BUYER'S ORDER IS ACCEPTED ONLY ON THE TERMS AND CONDITIONS CONTAINED HEREIN AND THE PROVISIONS OF ANY PURCHASE ORDER OR OTHER WRITING INCONSISTENT HEREWITH SHALL NOT CONSTITUTE A PART OF THE CONTRACT OF SALE.** Baker's acceptance is conditional on Buyer's assent to these terms and conditions and if any of these terms and conditions are not acceptable to Buyer, Baker must be notified promptly. This writing is intended also as a complete and exclusive statement of the terms and conditions thereof and that a contract be formed between the parties. No modification of any term or condition will be valid or binding upon Baker unless approved by Baker in writing by Baker's duly authorized personnel. The authority of Baker's agents is limited to solicitation of orders and collection of debts.

2. PRICES - Prices are F.O.B. factory, except that goods to be shipped outside the United States are F.O.B. destination for the Monitor Division only. Unless specifically held open for a length of time on Baker's Quotation form, all Price Lists, Discount Schedules, other Promotional Programs, and Freight Allowances are subject to change without notice. Any unshipped balances on Buyer's purchase orders will be invoiced to and paid by Buyer at prices in effect at the time of delivery. Orders based on quotations shall specify the quotation number.

3. MINIMUM INVOICE - Unless otherwise agreed, a minimum charge of $50.00 net will be charged on each purchase to cover packing, shipping, order processing, billing and other handling expenses:

4. QUOTATIONS - Quotations are good for 45 days from the date of quotation, unless otherwise stated.

5. PAYMENT TERMS - Terms of sale are as stated in the current applicable Catalogs, Price Lists, Discount Schedules, Promotional Programs, and Special Sales Terms. All orders are subject to approval of Baker's credit department. Baker reserves the right to require payment in advance or C.O.D., or to otherwise modify credit terms. For Monitor Division Buyers, a finance charge of 1.5% per month, which is an annual percentage rate of 18% per year, will be charged on past due accounts.

6. CATALOGS AND PRICE LISTS - Goods and materials reflected in Baker's Catalogs, Price Lists, Discount Schedules and Special Sales Terms are subject to change at any time and may not be kept in stock. Baker shall not be liable for any errors or omissions in its Catalogs, Price Lists, Discount Schedules, and Special Sales Terms.

7. DELIVERY DATES - Shipment, delivery and all other dates are estimates only, and shall be subject to, and contingent upon, strikes, labor difficulties, riot, war, fire, delay or defaults of common carriers, failure or curtailment in Baker's usual sources of supply, governmental decrees or orders, or without limiting the foregoing, any other delays beyond Baker's reasonable control, and Baker shall not be liable for any loss or damage arising therefrom. Any delivery not in dispute shall be paid for regardless of other delivered or undelivered merchandise.

8. CANCELLATION - Orders received and accepted by Baker are firm contracts and Buyer any cancel only with Baker's written consent and upon payment of reasonable cancellation charges, including reimbursement of Baker's direct costs incurred, normal, indirect and overhead charges and a normal profit.

9. RESTOCKING CHARGES - Goods may be returned only when specifically authorized by Baker. Buyer shall be charged a minimum of 15% for restocking or handling charges, plus any further expense incurred in freight or manufacturer return charges. However, the restocking charge will not apply if Baker authorizes the return of goods as defective.

10. IMPROVEMENTS AND SPECIFICATIONS - Manufacturers and Baker are constantly improving the design, construction and quality of their products and Baker accepts no liability for any difference between the catalog illustration and the furnished product to Buyer. All specifications and engineering data provided to Buyer are provided in good faith and Buyer agrees to hold Baker harmless and indemnify Baker for any damages, losses, or expenses arising from specification changes, inaccurate specifications or from functional failures.

11. SHIPPING POLICIES AND CLAIMS - All freight allowances will be in accordance with the applicant freight policy outlined in Baker's Discount Schedules and Freight Allowances. Baker reserves the right to ship via the most economic transportation means, routing of the shipment, and to select the point or origin for the shipment. On goods to be shipped outside the United States, for the Monitor Division only, title shall pass upon delivery at the agreed upon destination. These shipments will be in accordance with the provisions of form AD39, Baker Mfg. Co /Monitor Division Terms, Discounts & Freight Policy. On all other goods delivered by Common Carrier, title shall pass upon delivery to the Carrier, and Baker accepts no liability for breakage, damage, hidden or otherwise, delay or shortage after goods are delivered to the Carrier. On goods delivered by Common Carrier, all claims for shortages or damages must be made directly to the Carrier within seven days following the delivery of goods. On goods delivered by Baker trucks, all claims for shortages or damages must be made to Baker in writing within seven days following the delivery of goods, Baker will not be responsible for material shortage claims for deliveries to unattended sites.

12. FREIGHT CHARGES, FEES , AND TAXES - In addition to the stated prices, Buyer will reimburse Baker for sales tax, use tax or any other tax which Baker must, at any time either pay or be required to collect by reason of the sale of goods and/or services to Buyer. Buyer is also responsible for all freight charges, if applicable, except on goods to be shipped outside the United States. Whenever applicable, taxes or freight charges will be added to the invoice as a separate charge to be paid by the Buyer. Buyer will also pay Baker any collection fees and reasonable attorneys fees incurred by Baker in enforcing this agreement or defending against any claim for breach of this agreement.

13. APPLICABLE FEDERAL LAWS - Baker and Buyer will Comply with all federal laws, and regulations issued pursuant to such laws, which govern Baker's and Buyer's performance hereunder.

14. WARRANTY PROVISIONS - For Haight Division Buyers, Baker warrants the goods manufactured by it to be free from defects in material or workmanship under normal use and service, for a period 90 days from the date of start-up or one year from the date of shipment, whichever comes first. Goods through normal use that become unusable within one year are warranted only as to defaults in material or workmanship for 90 days from the date of startup.

For Monitor Division Buyers, Baker warrants the goods manufactured by it to be free from defects in material or workmanship under normal use or service, for a period of one year form date of shipment.

This warranty does not apply to goods or parts not manufactured by Baker, instead Baker's obligation for these goods or parts is limited to the actual warranty extended to Baker by the manufacturer.

All warranties herein are void and do not apply if: 1) the goods or parts have been altered or repaired by others; 2) the goods have not been installed or used in accordance with any applicable instructions or limitations provided by Baker, or the manufacturer of the good or part; 3) the goods or parts have not been installed or used in accordance with the goods' or parts' normal use and service; or 4) the goods are used in nuclear facility applications.

BAKER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES OF ANY KIND WITH RESPECT TO THE GOODS, PARTS AND MATERIALS, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY AS TO MERCHANTABILITY OR AS TO THE FITNESS OF THE MERCHANDISE FOR A PARTICULAR USE AND SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH MERCHANDISE OR FOR CONSEQUENTIAL DAMAGES.

15. RETURN OF GOODS OR MATERIALS; LIMITATION OF REMEDIES - Baker must be given notice of any rejection of the goods or parts within 7 days of Buyer's receipt of the goods or parts with respect to which the claim is being made, and prior to the goods or parts being returned. As to any warranty claim made after Buyer's acceptance of the goods, Buyer must notify Baker of the warranty claim within seven days of discovery of the claim, and prior to return of the goods or parts. No goods or parts shall be returned without Baker's approval and the authorization number given to Buyer by Baker. All returned goods or parts must be accompanied by necessary warranty information and are subject to inspection by Baker before any repair, replacement or credit, at Baker's option, will be issued. Baker's liability and Buyer's sale and exclusive remedy for any claim against Baker will be limited to repair, replacement and or credit, at Baker's option, with respect to goods returned to Baker at Buyer's expense. Any goods or parts which have been defaced, altered or worked upon in any way, will not be subject to repair, replacement or credit.

16. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES; EXCLUSION OF TORT REMEDIES — BAKER WILL NOT BE LIABLE, UNDER ANY CIRCUMSTANCES FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LABOR COSTS OR LOST PROFITS RESULTING FROM THE USE OF OR INABILITY TO USE THE GOODS OR MATERIALS. This is a commercial; sales transaction. The parties wanted to be governed by Article 2 of the Uniform Commercial Code and related Commercial Legal Principals. **NEITHER PARTY WILL HAVE ANY NEGLIGENCE OR OTHER TORT LIABILITY TO THE OTHER OR TO ANY THIRD PARTY, RISING FROM ANY BREACH OF THIS AGREEMENT.** It is intended by the parties that the exclusion of consequential and incidental damages and tort remedies are separated and distinct from any limitation of remedies provided hereunder.

17. LAW OF AGREEMENT - All disputes under this agreement shall be settled in accordance with the laws of the State Of Wisconsin, including the Uniform Commercial Code.

18. PROPRIETARY DATA - Unless otherwise specifically agreed in writing by an officer of Baker's, neither Buyer nor any other person, shall have any right to examine or audit Baker's books, cost accounts or records of any kind or on any matter, or be entitled to, or have control over, any engineering or production prints, drawings or technical data which Baker in its sole discretion, may consider in whole or in part proprietary to itself.

19. SET OFF - Baker may set off any amount due to Buyer, whether or not under this agreement, against any amount that may become due from Buyer hereunder.

20. CONTROLLING PROVISIONS - These terms and conditions shall supersede any provisions, terms and conditions contained on any order, or other writing the Buyer may give or receive and the rights of the parties shall be governed exclusively by the provisions, terms and conditions hereof. Baker makes no representations or warranties concerning this order except such as are expressly contained herein, and this order may not be changed or modified orally.

21. NON-WAIVER - Failure of Baker to enforce any of these conditions or exercise any right accruing through the default of the Buyer shall not affect or impair Baker's rights in case such default continues or in case of any subsequent default of the Buyer and such failure shall not constitute a waiver of other or future defaults of the Buyer.

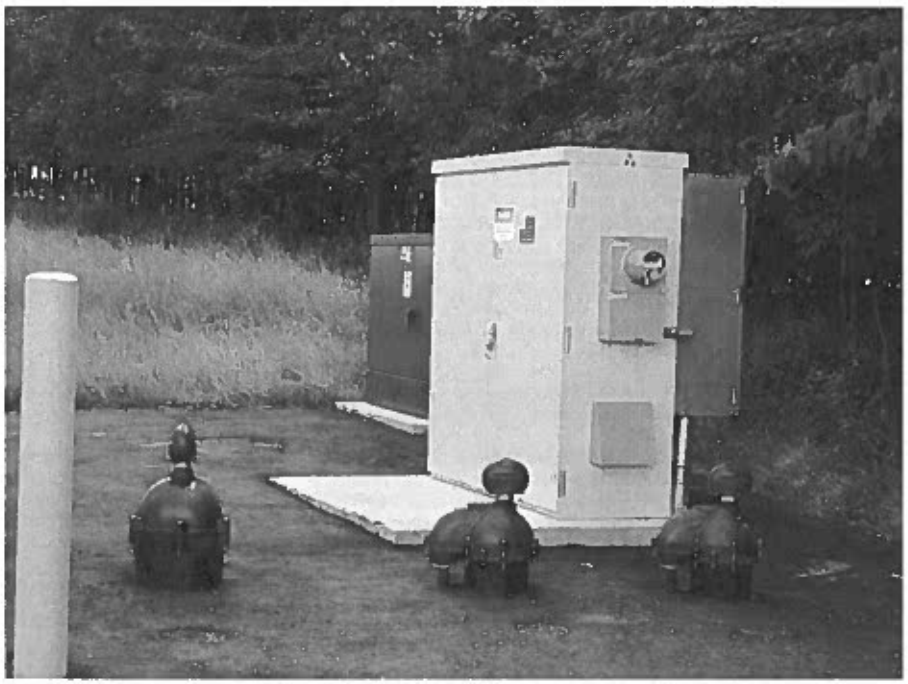
Revised 1-2-03

Briar Cliff Pump Station – Bethel, CT (Designed by W-P and Baker Monitor)

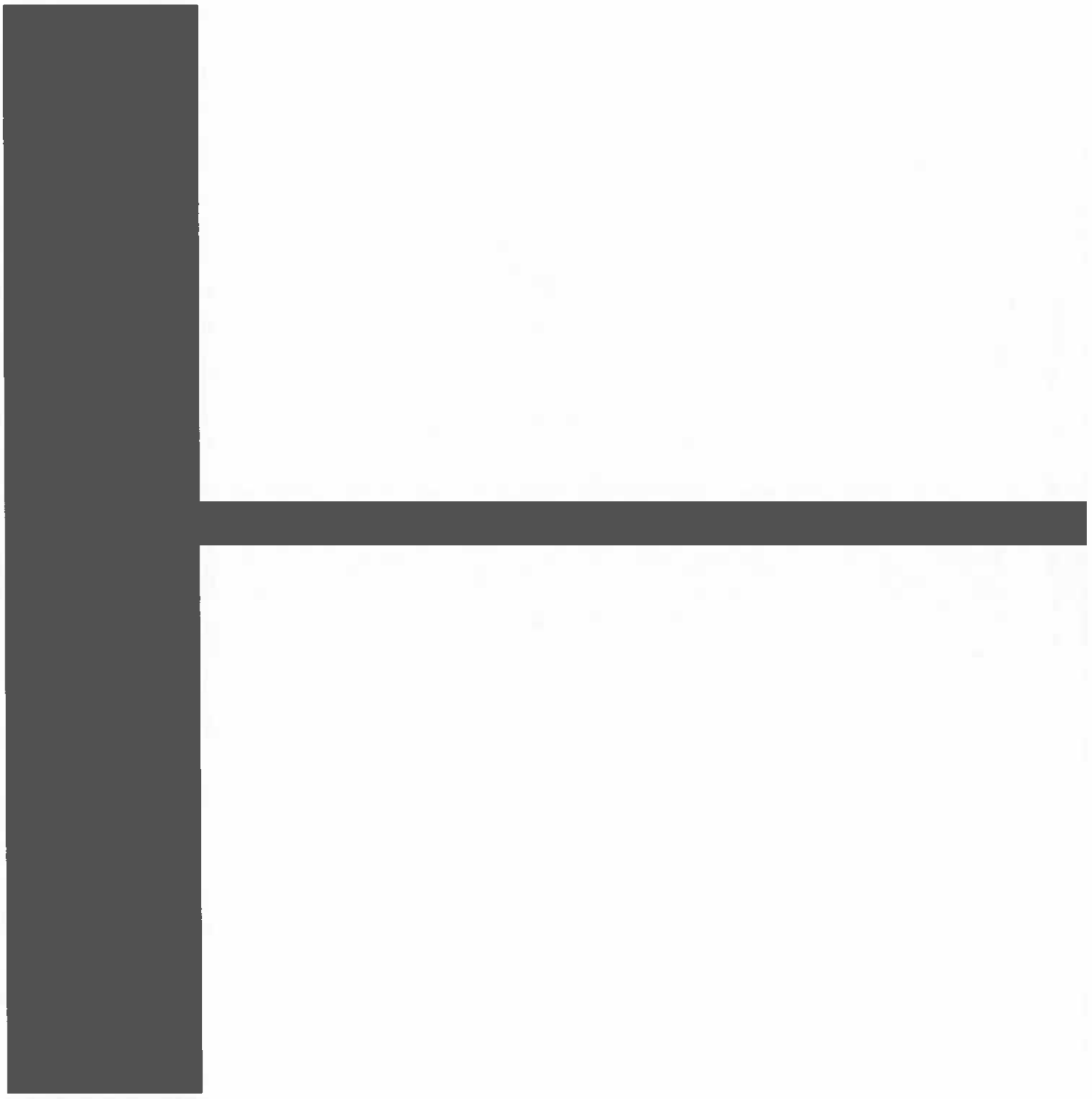


Photograph 1 – Duplex in-line BPS installed in easement at roadway intersection.

Rib Mountain Pump Station – Built by Baker Monitor



Photograph 2 – Example of a triplex in-line BPS (photo provided by Baker Monitor)



WRIGHT-PIERCE
Engineering a Better Environment

169 Main Street, 700 Plaza Middlesex
Middletown, CT 06457
860.343.8297 | wright-pierce.com

TOWN OF WATERFORD
FLEET MANAGEMENT PLAN - VEHICLES
FISCAL YEARS 2026 - 2030

TOTAL NO. OF 152

											Number Vehicles to be Replaced	9	22	12	-	1			
											Total Budget	877,254	3,857,204	3,234,625	-	261,188			
FLEET Asset ID	DO NOT REPL	Agency Name	Vehicle Assigned to:	Repl. Cycle in Years	Class Description	Asset Model Year	In-Service Date	Gross Vehicle Cost	Manuf.	Model	Serial #	2026	2027	2028	2029	2030	Current Mileage For Usage Hours	Total Repair Costs to date	COMMENTS
BOE1		Board of Ed	Maintenance (Kyle Stoddard)	10	PICK UP	2022	07/20/22	$56,324	Ford	F-350	1FDRF3B63NEE25324								
BOE11 (old)		Board of Ed		10					KAWASAKI	MULE OFF ROAD UTILITY VEHICLE	JK1AFDA132B5077						83,927		
BOE12		Board of Ed		5	7-Passenger Mini-Van	2019	06/11/19	$21,743	Dodge	Caravan 4-Wheel Drive Wagon	2C4RDGBGXKR664913						175,258	5,482.42	
BOE13		Board of Ed		5	7-Passenger Mini-Van	2017	01/10/18		Dodge	Caravan 4-Wheel Drive Wagon	2C4RDGBG9HR694588	45,000					93,449	175.55	
BOE14		Board of Ed		5	7-Passenger Mini-Van	2019	02/26/20	$21,394	Dodge	Grand Caravan	2C4RDGBG2KR782860		28,000				55,472		
BOE15		Board of Ed		5	7-Passenger Mini-Van	2020	09/21/21	$28,501	Chrysler	Voyager Van	2C4RC1CGXLR150706			29,000			22,251		Out to bid for FY22
BOE2		Board of Ed	Maintenance (Tom Thurlow)	10	EXPRESS VAN (BOX TRUCK)	2020	11/10/20	$44,445	Chevrolet	Express Van	1HA6GVCGXLN009190						11,851		
BOE3		Board of Ed	Maintenance (Jon Tillinghast)	10	PICK UP	2013	11/04/13	$46,104	GMC	Sierra K3500	1GD322CGXDF166536						87,537	1,295.82	
BOE4		Board of Ed	Maintenance (Bryan Swanson)	10	PICK UP	2012	11/30/12	$42,293	Ford	F350	1FTRF3B66CEB84702						66,907	159.99	
BOE5		Board of Ed	(Kevin VanCleave)	10	VAN	2011	01/20/11	$18,425	Ford	E250 Van	1FTNE2EWXBDA45393		55,000				110,000	1,125.93	
BOE6		Board of Ed	Maintenance (Dan Santos)	10	PICK UP	2018	05/09/18	$48,686	Chevrolet	SILVERADO 4WD CREW CAB	1GC0KYEGXJZ309213			65,000			54,015		
BOE7		Board of Ed	Maintenance (Steve Kowalski)	10	PICK UP	2015	12/31/14	$44,396	Chevrolet	Silverado K350	1GC5KYCG5FZ508430						51,930	3,555.21	
BOE8		Board of Ed	Maintenance (Dan Morris)	15	MEDIUM DUTY DUMP	2012	12/20/12	$32,798	Ford	F350 PICK-UP	1FDRF3H61CEB25642		89,000				62,509		
BOE9		Board of Ed	Maintenance (Dan Kamercia)	10	PICK UP	2015	01/09/15	$46,037	Chevrolet	Silverado K350	1GB0KYEG7FZ510434		69,780				97,647		
W-51		Cohanzie Fire Company		18	1500 GPM PUMPER (FIRE)	2016	04/11/16	$563,200	E-One	Custom Pumper (diesel)	4EN6AAA8XG1009830						30,589 mi/ 2461 hrs	25,888.00	
W-53		Cohanzie Fire Company		25	BRUSH TRUCK (FIRE)	2009	05/12/09	$95,854	Ford	Super Duty F-550 (diesel)	1FDAW57R29EA35364			315,000			10,449m/ 1419 hrs	2,943.00	
W-55		Cohanzie Fire Company		20	LADDER/AERIAL (FIRE)	2004	12/29/04	$650,446	SUTPHEN	Ladder Truck (diesel)	1S9A7LLD442003078	200,000	1,000,000	1,000,000			44,812m/ 4816 hrs	130,590.00	
W-56		Cohanzie Fire Company		15	UTILITY UNIT (FIRE)	2011	10/12/10	$47,426	Ford	F350 (diesel)	1FT8X3BT6BEA81633		73,700				52,224	4,925.00	
W-57		Cohanzie Fire Company		20	SPECIALTY UNIT (FIRE)	2010	10/05/10	$511,983	Ferrara Igniter Custom	Rescue Truck (diesel)	1F9505328AH140755						148,795m/ 2512 hrs	27,764.00	
W-16		Jordan Company		12	UTILITY UNIT (FIRE)	2018	03/01/18	$49,368	Ford	F350 4x4 crew cab	1FT8W3B62JEC10625						22,833m/ 1180 hrs	-	
Car 115 (Q115)		FIRE SERVICES	Fire Inspector (Bauch)	8	SUV	2015	06/19/15	$33,333	Ford	Explorer	1FM5K8AR6FGB52372						37,500	517.00	
Car 55 (Q55)		FIRE SERVICES	Fire Marshall (Dubicki)	10	PICKUP AND JEEP (FIRE)	2013	11/16/12	$31,620	Ford	F150 PICKUP (with cap)	1FTFW1EFXDKD31481						117,000	2,489.00	
Car 85 (Q85)		FIRE SERVICES	Director of Fire Services (Howley)	8	SUV	2016	02/26/16	$43,884	Ford	EXPEDITION	1FMJU1JT9GEF29608	64,000					118,000	3,001.00	
NEW		FIRE SERVICES	Asst Chief of Fire Services	15									65,000				0	-	

TOWN OF WATERFORD
FLEET MANAGEMENT PLAN - VEHICLES
FISCAL YEARS 2026 - 2030

TOTAL NO. OF 152

											Number Vehicles to be Replaced	9	22	12	-	1			
											Total Budget	877,254	3,857,204	3,234,625	-	261,188			
FLEET Asset ID	DO NOT REPL	Agency Name	Vehicle Assigned to:	Repl Cycle in Years	Class Description	Asset Model Year	In-Service Date	Gross Vehicle Cost	Manuf.	Model	Serial #	2026	2027	2028	2029	2030	Current Mileage / or Usage Hours	Total Repair Costs to date	COMMENTS
A1		FIRST SELECTMAN	First Selectman (Brute)	8	SUV	2016	10/30/15	$33,554	Ford	Explorer	1FM5K8AR7GGB19608						93,000	3,322.62	Reassigned from Car20 on 11/16/21
W-31		Goshen Fire Company		18	1500 GPM PUMPER (FIRE)	2014	07/25/13	$486,826	KME Custom	Pumper (diesel)	1K9AF4281EN058620						16,669mi/ 1539 hrs	20,118.00	
W-32		Goshen Fire Company		18	1500 GPM PUMPER (FIRE)	1998	02/23/99	$307,935	Spartan	1,500 GPM Pumper (diesel)	4S7AT419XWC026143						39,230m/ 4295 hrs	46,174.00	
W-34		Goshen Fire Company		20	UTILITY UNIT (FIRE)	2012	03/01/12	$58,114	Ford	F450 (diesel)	1FDUF4HT2CEA51122						9,183 m/ 701hrs	2,478.00	
W-36		Goshen Fire Company		20	UTILITY UNIT (FIRE)	2007	06/29/06	$36,973	Ford	F350 pickup (diesel)	1FTWW31P17EA67953		74,000				53,206m/ 2355 hrs	28,319.00	
W-93		Goshen Fire Company		30	BOAT (FIRE)	2007	06/29/07	$103,334	Lake Assault	24' Landing Craft	LKKGFD93G707						1139mi/ 1028 hrs	11,410.00	
W-94		Goshen Fire Company		20	ATV EMS Utility Unit												218m/ 20 hrs	-	
W-11		Jordan Fire Company		18	1500 GPM PUMPER (FIRE)	2014	12/05/14	$458,400	Typhoon	1,500 GPM Pumper (diesel)	4EN6AAA80E1008750						38,156m/ 3287 hrs	34,021.00	
W-15		Jordan Fire Company		20	TOWER LADDER/AERIAL (FIRE)	2016	07/28/17	$998,854	Pierce	Arrow XT Ladder Truck (diesel)	4P1BCAGF1GA016140						32,844m/ 2866 hrs	63,610.00	
W-41		Oswegatchie Fire Company		18	1500 GPM PUMPER (FIRE)	2018	08/15/18	$537,205	Spartan	Pumper (diesel)	4S7CT2D92JC085317						9,105mi/ 822 hrs	11,901.00	
W-42		Oswegatchie Fire Company		25	1500 GPM PUMPER (FIRE)	2007	05/14/08	$416,793	Seagrave	1,500 Marauder Pumper (diesel)	1F9ES28T97CST2165						437,720 mi/ 4831 hrs	59,195.00	Refurbished in FY2022.
W-43		Oswegatchie Fire Company		25	BRUSH TRUCK (FIRE)	2006	06/06/06	$125,245	Ford	F550 Brush Truck (diesel)	1FDAX57P66ED51762		226,206				12,834mi/ 1294 hrs	13,930.00	
W-46		Oswegatchie Fire Company		12	UTILITY UNIT (FIRE)	2020	12/18/20	$59,841	Ford	F-350 (Gas) Pick-Up	1FT8W3B66LED86628						15,127mi/ 566 hrs	840.00	
ATV 1		POLICE		12	ALL TERRAIN VEHICLE	2007	06/11/08	$5,845	KAWASAKI	MULE OFF ROAD UTILITY VEHICLE	JK1AFEA127B534391							674.73	
ATV 2		POLICE		10	ALL TERRAIN VEHICLE	2017	06/14/17	$6,044	POLARIS	A17SEA57A5 ATV	4XASEA571HA071534							974.52	
ATV 3		POLICE		10	VEHICLE	2017	06/14/17	$6,044	POLARIS	A17SEA57A5 ATV	4XASEA571HA085837		48,022					1,079.93	
CAR 1		POLICE	Patrol	10	SUV	2020	04/06/20	$51,367	Chevrolet	Tahoe	1GNSKDEC3LR376340	86,294					109,990 mi/ 13,309 hr	17,734.24	
CAR 10		POLICE	Patrol	8	SUV	2021	03/11/21	$48,005	FORD	Interceptor Utility	1FM5K8AB4MGA64582						14,062	586.67	
CAR 101	DNR	POLICE	Special Use	0	Do Not Replace	1985	04/29/13	Donated	Humvee	Vehicle (Military Surplus) (diesel)	011418						39,987	1,187.98	Do Not Replace (need military approval under 1033 before surplussing)
CAR 11		POLICE	Patrol	8	SUV	2021	03/11/21	$48,005	FORD	Inceptor Utility	1FM5K8AB6MGA64583						31,917	1,444.64	
CAR 12		POLICE	Patrol	5	CRUISER	2023	10/07/24		Ford	Utility Interceptor AWD (EXPLORER)	1FM5K8AB4PGB99355								
CAR 13		POLICE	Patrol	8	SUV	2021	03/11/21	$48,005	Ford	Inceptor Utility	1FM5K8AB8MGA64584						50,925	728.44	
CAR 14		POLICE	Patrol	5	CRUISER	2023	01/29/24	$62,718	Chevrolet	Tahoe K1500	1GNSKLED4PR276856								
CAR 15		POLICE	Traffic Officer	8	Pick -up Truck	2017	01/25/17	$40,007	Chevrolet	Silverado	3GCUKNEC4HG276068	85,547					69,465 mi/ 5,484 hr	6,823.46	
CAR 16		POLICE	Patrol		SUV	2023	01/29/24	$78,594	Ford	Inceptor Utility	1FM5K8AB8PGA04034								**REPLACEMENT PICK UP DATE 7/19/23**
CAR 17		POLICE	Patrol	8	SUV	2023	08/28/24	$74,267	Ford	Explorer	1FM5K8AB4PGB12053								
CAR 2 (old Car 17)	DNR	POLICE	Patrol (Road Jobs only)	8	SUV	2019	04/25/19	$45,913	Ford	Explorer	1FM5K8AR6KGB14599						72,913 mi/ 10,761hrs	3,819.00	This was the old vehicle Car17- it is now assigned to Car 2 approved on 9/11/24. Old vehicle Car 2 will be surplused

TOWN OF WATERFORD
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CAR 18		POLICE	Patrol	8	CAR	2023	10/07/24		Ford	Utility Interceptor AWD (EXPLORER)	1FM5K8AB1PGB12169								
CAR 19		POLICE	Patrol	8	SUV	2021	03/11/21	$48,005	Ford	Inceptor Utility	1FM5K8ABXMGA64585						33,341	390.33	
CAR 20		POLICE	Chief	8	SUV	2022	10/07/22	$34,149	Ford	Inceptor Utility	1FM5K8AB6NGB76852								New vehicle for PD Chief - old one reassigned to A1. Approved for FY22 purchase on 1/26/22
CAR 4		POLICE	Patrol	8	SUV	2022	07/12/22	$34,685	Ford	Inceptor Utility	1FM5K8AB3NGA27556						70,088m/ 3962hrs	8,902.81	Replacement on Order
CAR 23		POLICE	Investigators	8	CAR	2017	01/31/17	$30,442	Ford	EXPLORER	1FM5K8AR5HGB83275						1084hrs	117.84	
CAR 34	DNR	POLICE	Investigators	8	CAR	2011		$23,975	Ford	Utility Interceptor AWD	1FAHP2HW1BG145602						6177m/ 316hrs		
CAR 25		POLICE	Lieutenants	8	SUV	2023	05/03/23	$47,899	Ford	Utility Interceptor AWD (EXPLORER)	1FM5K8AB4PGA0414								
CAR 26		POLICE	Chief	8	SUV	2022	02/11/22		Ford	Utility Interceptor AWD (EXPLORER)	1FM5K8AB6NGA27373								
CAR 27		POLICE	Investigators	8	SUV	2017	10/17/16	$34,583	Ford	Explorer Police AWD	1FM5K8AR6HGA79474						1656hrs	1,908.48	
CAR 28		POLICE	Investigators	8	SUV	2015	10/07/14	$26,384	Ford	Explorer Police AWD	1FM5K8AR0FGA89060						70,218 mi/ 3230 hrs	3,487.00	
CAR 29		POLICE	Patrol	5	CRUISER	2014	05/13/14	$28,158	Chevrolet	Caprice	6G3NS5R34EL958190	86,294					119,605 mi/ 4,828 hrs	5418.36	
CAR 3		POLICE	Patrol (K9)	8	SUV	2018	04/16/18	$44,562	Ford	Utility Interceptor AWD	1FMK8AR7JGA84866						108,520 mi/ 13,715hrs	5,737.43	
CAR 30		POLICE	Investigators	8	SUV	2018	03/16/18	$35,981	Ford	Utility Interceptor AWD	1FMK8AR9JGA84867						28,054m/ 268hrs	1,012.94	
CAR 31		POLICE	Lieutenants	8	SUV	2016	10/30/15	$33,977	Ford	Explorer Police AWD	1FM5K8AR9GGB19609		60,106				82,625 mi/ 4571hrs	3,507.00	Approved for surplus
CAR 35	DNR	POLICE		10	VAN	2013	11/08/13	$59,035	Ford	Goshen Coach Pass. Bus	1FDEE3FS8DDB28949						91,503		BOS approved reassignment to PD - 9/20/22
CAR 24		POLICE	Detective Sergeants	9	SUV	2020	08/10/20	$33,254	Ford	Explorer	1FM5K8AB5LGB85362						159,028		
CAR 21		POLICE	Patrol Supervisors	8	SUV	2022	03/16/22	$52,962	Ford	Interceptor Utility	1FM5K8AB3NGA27430						100,197m/ 16,860hrs	11,535.81	Replacement Car on Order
CAR 5		POLICE	Patrol	8	SUV	2021	03/11/21	$48,005	Ford	Interceptor Utility	1FM5K8AB2MGA64581						1653hrs	538.85	
CAR 6		POLICE	Patrol Supervisors	8	SUV	2019	10/04/19	$45,372	Chevrolet	Tahoe	1GNSKDEC0KR392402							5,663.34	ON ORDER
CAR 7		POLICE	Patrol (K9)	8	SUV	2023	08/28/24	$72,625	Ford	Explorer Police AWD	1FM5K8AB5PGB12286								
CAR 8		POLICE	Patrol	8	SUV	2020	04/01/20	$55,196	Chevrolet	Tahoe	1GNSKDEC5LR276498	83,294					84,168 mi/ 11,172 hrs	12,465.64	
CAR 9		POLICE	Patrol	5	CRUISER	2023			Ford	Utility Interceptor AWD (EXPLORER)	1FM5K8AB0PGB99641								
CV1	DNR	POLICE	Special Use (Critical Incident)	0	Do Not Replace	1998	08/23/98	$128,999	Ford	E450 Command Vehicle (diesel)	1FDXE40F2WHB92670								
PD2		POLICE		30	Boat (Police)	2012	03/02/12	$453,878	Sea Ark Marine 2810V	Patrol BOAT AND PROPULSION PKG	SAMA2026H111								
A20		BOE	Courier	10	CAR - HYBRID	2012	09/18/12	$27,238	Ford	Fusion Hybrid	3FADP0L31CR322157		26,949				121,479	7,455.42	vehicle reassigned from A1 on 11/16/21
A18	DNR	PUBLIC WORKS	Loaner	0	Do Not Replace	2006		$23,656	Ford	CROWN VICTORIA	2FAHP71W96X122289						75,201	4,397.48	
A8	DNR	PUBLIC WORKS	Asst Director (Matheson)	0	Do Not Replace	2001	12/06/00	$22,523	JEEP	CHEROKEE	1J4FF48S51L565909						100,254	17,980.78	

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A2	DNR	PUBLIC WORKS	Director (Schneider)	0	Do Not Replace	2009	02/11/09	$19,090	Ford	ESCAPE	1FMCU92779KB48866						97,470	5,853.86	
H11		PUBLIC WORKS		14	PICK UP	2019	11/12/19	$40,640	Ford	F-350 4x4	1FTRF3B68KEG24790						31,396	3,236.34	
H12		PUBLIC WORKS		14	PICK UP	2003	01/02/03	$36,000	Ford	F450 4x2	1FDXF46F63EB17892		179,288				55,772 mi	13,162.54	moved out 2 years by committee approval (repaired to extend life), 7/8/21
H13		PUBLIC WORKS		14	PICK UP	2014	12/06/13	$33,569	Chevrolet	Silverado K250	1GC0KVCGXEF154607						62,185	11,701.72	
H14		PUBLIC WORKS		15	MEDIUM DUTY DUMP	2015	02/09/15	$140,270	International	4300 SBA Tarco T2000 S/S	1HTMMAAL8FH734287					261,188	42,884 mi/ 4500hrs	27,196.31	
H15		PUBLIC WORKS		15	MEDIUM DUTY DUMP	2015	03/27/15	$140,270	International	4300 SBA Tarco T2000 S/S	1HTMMAALXFH734288		225,000				37,225	30,383.68	
H16		PUBLIC WORKS		15	MEDIUM DUTY DUMP	2018	04/18/17	$171,927	FREIGHTLINER	114SD DUMP	1FVACWFC5JHJJ7757						21,995	10,871.52	
H17		PUBLIC WORKS		15	MEDIUM DUTY DUMP	2018	04/26/17	$171,927	FREIGHTLINER	114SD DUMP	1FVACWFC3JHJJ7756						24,809	11,747.42	
H18		PUBLIC WORKS		15	MEDIUM DUTY DUMP	2010	06/17/09	$103,117	International	4300 SBA Dump	1HTMMAAL8AH188776						61,3596m/ 5920hrs	56,241.49	
H19		PUBLIC WORKS		14	PICK UP	2012	03/15/12	$31,876	Ford	F250 4X4	1FTBF2B68CEA59387	61,792					136,056	20,694.49	
H24		PUBLIC WORKS		18	SWEEPER	2024	07/31/24	$249,792	Chadwick Baross	Odra MT4H Sweeper	JALE5W161R7306334								
H25		PUBLIC WORKS		18	SWEEPER	2018	03/13/17	$221,772	FREIGHTLINER	M2105 A7 Tornado Sweeper	1FVACXFC9JHJH1578		265,000				15,149	22,346.16	
H30		PUBLIC WORKS		20	5 TON DUMP TRUCK	2018	05/12/17	$173,657	FREIGHTLINER	114SD	1FVAG3FE9JHJH1112						41,640	20,701.56	
H31		PUBLIC WORKS		20	5 TON DUMP TRUCK	2017	08/05/16	$170,945	FREIGHTLINER	114SD	1FVAG3CY3HHJA1291		250,000				45,090	15,783.29	
H32		PUBLIC WORKS		20	5 TON DUMP TRUCK	2017	08/11/16	$170,945	FREIGHTLINER	114SD	1FVAG3CY5HHJA1292			250,000			11,311	14,281.27	
H34		PUBLIC WORKS		20	5 TON DUMP TRUCK	2019	03/21/19	$180,345	FREIGHTLINER	114SD	1FVAG3FE0KHM1621						8,463	4,799.31	
H35		PUBLIC WORKS		20	5 TON DUMP TRUCK	2012	09/28/12	$195,832	International	DUMP/SPREADER WITH CRANE	1HTWDAZR8CH121003						52,192mi/ 5,604hrs	81,542.75	
H36		PUBLIC WORKS		20	5 TON DUMP TRUCK	2014	03/04/14	$140,885	International	7400 SFA 4x2	1HTWDAAR2EH025219						56,85700mi/ 4700hrs	39,690.01	
H37		PUBLIC WORKS		20	5 TON DUMP TRUCK	2014	02/14/14	$140,885	International	7400 SFA 4x2	1HTWDAAR0EH025218		245,000				36,101	26,289.02	
H38		PUBLIC WORKS		20	5 TON DUMP TRUCK	2014	12/24/13	$140,885	International	7400 SFA 4x2 (with Tenco spreader)	1HTWDAAR9EH025220			245,000			36,604	22,712.55	
H39(new)		PUBLIC WORKS		20	5 TON DUMP TRUCK	2025	04/18/24	$258,374	International	HV 507 4X2	3HAEDTAR3SL526911						60,533m/ 5288hrs	105,157.11	
H40		PUBLIC WORKS		20	5 TON DUMP TRUCK	2018	06/13/03	$176,828	FREIGHTLINER	1145SD	1FVAG3FE8JHJX2787						16,575	4,992.61	
H50		PUBLIC WORKS		20	HOOKLIFT CHASSIS	2009	04/30/08	$63,890	International	7400 SBA 4x2 Sewer Vac	1HTWCAAR79J077348						5,524	5,453.84	
H50-1a		PUBLIC WORKS			15 YD BODY SLED	2022	07/28/22			SWAPLOADER SL222 PACKAGE	110565								
H50-1b		PUBLIC WORKS			FLAT BED SLED	2022	07/28/22			SWAPLOADER SL222 PACKAGE	113404								
H50-1c		PUBLIC WORKS			HOOKLIFT SLED	2022	07/28/22			SWAPLOADER SL222 PACKAGE	CH0089								

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H50-1d		PUBLIC WORKS			SANDER SLED	2022	07/28/22		MONROE	SWAPLOADER SL222 PACKAGE	213727								
H50-1e		PUBLIC WORKS			CRANE SLED	2022	07/28/22		FASSI	SWAPLOADER SL222 PACKAGE	F145AZ								
H50-1f		PUBLIC WORKS			16" BODY	2022	07/28/22	$240,100	BEAUROC	SWAPLOADER SL222 PACKAGE	410377								
H50-1g		PUBLIC WORKS			12' MULTI PURPOSE BODY SLED	2022	07/28/22			SWAPLOADER SL222 PACKAGE	410296								
H51		PUBLIC WORKS		18	18-YEAR SPECIALTY UNIT	2010	06/04/10	$180,550	International	Model AL60 Aerial Lift / Hybrid	1HTMMAAR3AH247768			72,967			34,311	12,790.11	
H5		PUBLIC WORKS		14	PICK UP	2019	11/20/19	$40,640	Ford	F350 4X4	1FTRF3B61KEG24789						25,991	1,624.78	
H64		PUBLIC WORKS		20	LOADER	2017	07/20/17	$196,847	VOLVO	L90H LOADER WHEEL	VCE0L90HC0S623984						237	5,615.53	
H65		PUBLIC WORKS		20	LOADER	2004	09/07/04	$115,135	VOLVO	L90E LOADER	L90EV66599			230,000			11,943	35,162.46	
H9		PUBLIC WORKS		15	15-YEAR SPECIALTY UNIT	2011	11/24/10	$76,014	International	4300 SBA 4x2 w/Platform Body	1HTMMAAL9BH388342	165,033					105,980mi/ 8200hrs	16,867.09	
S20		PUBLIC WORKS		7	SIDE LOAD REFUSE	2016	9/11/2015	$250,200	PETERBILT	320 SDE LOADER	3BPZLJ0X2GF100839						88,201mi/ 9,420 hrs	62,199.85	
S21		PUBLIC WORKS		7	SIDE LOAD REFUSE	2016	09/08/15	$250,200	PETERBILT	320 SDE LOADER	3BPZLJ0X9GF100840						80,285 mi/ 10,205 hrs	64,423.25	
S22		PUBLIC WORKS		7	SIDE LOAD REFUSE	2019	03/20/18	$253,542	PETERBILT	McNEILUS SIDE LOADER	3BPDLJ0X5KF102586		412,442				38,295	27,970.18	
S23		PUBLIC WORKS		8	REAR LOAD RAFUSE	2009	09/17/08	$131,557	International	REFUSE PACKER	1HTWGAAT19J093030			35,000			37,307	13,900.69	
S24		PUBLIC WORKS		8	REAR LOAD RAFUSE	2009	09/19/08	$131,557	International	REFUSE PACKER	1HTWGAAT39J093031		350,000				42,932	33,842.78	
S25		PUBLIC WORKS		9	SIDE LOAD REFUSE	2020	09/17/20	$265,737	PETERBILT	McNEILUS SIDE LOADER	3BPDLI0X7F109508						10,957	4,067.05	
S19	DNR	PUBLIC WORKS		9	SIDE LOAD REFUSE	2011	03/03/11	$218,336	PETERBILT	McNEILUS SIDE LOADER	3BPZL50X7BF129186						91,406	112,135.37	used as spare - will not be replaced
S26		PUBLIC WORKS		9	SIDE LOAD REFUSE	2021	12/01/21	$264,747	PETERBILT	MODEL #250	3BPDLJ0X9NF112574						97,036	147,435.79	approved by committee for FY21, 7/8/21
S28		PUBLIC WORKS			DUMPSTER TRUCK														on order - approved by Fleet Ad Hoc 8/20/24
S29		PUBLIC WORKS		15	SIDE LOAD REFUSE	2016	11/30/15	$223,725	PETERBUILT	DUMPSTER TRUCK	3BPZXJ0X2GF102983						93,082	25,480.56	
A10		PZ/BH	Environmental Planner	8	CAR	2011	11/18/10	$18,433	Ford	ESCAPE	1FMCU9C7XBKA75810		26,382				29,565	2,812.32	
A3		PZ/BH	Planning & Zoning	8	CAR	2011	10/06/10	$19,658	Ford	FUSION	3FAHP0JGXBR129270		33,329				46,246	2,887.15	
A6		PZ/BH	Asst Building Official	8	CAR - HYBRID	2012	09/11/12	$27,238	Ford	FUSION HYBRID	3FADP0L38CR322155			33,329			23,972	1,838.10	
A7	DNR	PZ/BH	Building Official	8	CAR - HYBRID	2012	10/13/11	$26,928	Ford	FUSION HYBRID	3FADP0L3XCR187566						81,306	2,805.16	DO NOT REPLACE
A9		PZ/BH	Asst Building Official	8	CAR - HYBRID	2012	10/13/11	$26,928	Ford	FUSION HYBRID	3FADP0L31CR187567			34,329			41,307	2,502.56	
W-21		Quaker Hill Fire Company		25	1500 GPM PUMPER (FIRE)	2006	10/02/06	$396,447	Ferrara	Igniter Custom Pumper (diesel)	1F94047266H140373			925,000			35,488mi/ 3503 hrs	52,483.00	
W-23		Quaker Hill Fire Company		25	BRUSH TRUCK (FIRE)	2006	07/01/06	$125,245	Ford	F550 Brush Truck (diesel)	1FDAX57P86ED51763						8,374mi/ 1329 hrs	15,545.00	

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											Number Vehicles to be Replaced	9	22	12	-	1			
											Total Budget	877,254	3,857,204	3,234,625	-	261,188			
FLEET Asset ID	DO NOT REPL	Agency Name	Vehicle Assigned to:	Repl. Cycle in Years	Class Description	Asset Model Year	In-Service Date	Gross Vehicle Cost	Manuf.	Model	Serial #	2026	2027	2028	2029	2030	Current Mileage / or Usage Hours	Total Repair Costs to date	COMMENTS
W-25		Quaker Hill Fire Company		18	1500 GPM PUMPER (FIRE)	2016	06/17/16	$773,695	Spartan	Gladiator TeleSquirt Pumper (diesel)	4S7AV2E94FC080868						57,450m/ 3539 hrs	24,603.00	
A19		EOC		12	UTILITY UNIT (FIRE)	2006	02/01/06	$44,076	Ford	F350 (diesel)	1FDWW31P76EB60910						54,800m/ 3373 hrs	6,232.00	reassigned from QH Fire Company on 12/20/22
W-26		Quaker Hill Fire Company		15	UTILITY UNIT (FIRE)	2021	08/15/23	$64,000	Ford								2150 mi		
R8		REC/PARKS	Director/Asst Director Shared Vehicle	14	PICK UP	2016	42,569.00	$27,990	Chevrolet	Silverado 1500 PU	1GCNKNEC9GZ302876						38,840 mi	1,432.48	
R9		REC/PARKS		12	PICK UP	2020	2/21/2020	$52,189	Ford	F350 4x4	1FDRF3H6XLEC13931						25,460 mi	1,060.33	
R10		REC/PARKS		14	PICK UP	2014	12/6/2013	$33,570	Chevrolet	Silverado K250	1GC0KVCGXEF155367						73,355 mi	16,493.37	approved for early replacement on 2/12/25
R11		REC/PARKS		14	PICK UP	2015	12/31/2014	$52,824	Chevrolet	346	1GB3KYCG9FF540956		55,000				40,172 mi	10,694.37	
R14 (new)		REC/PARKS		12	MEDIUM DUTY DUMP	2022	10/12/2022	$63,625	Ford	F450 DUMP	1FDUF4HN1NEF07289								
R15		REC/PARKS		12	PICK UP	2020	2/6/2020	$42,013	Ford	F250 4x4 Pickup	1FTBF2B63LEC13911						20,031 mi	1,985.38	
R16		REC/PARKS		12	PICK UP	2020	2/6/2020	$42,013	Ford	F250 4x4 Pickup	1FTBF2B65LEC13912						21,059 mi	1,352.34	
R17		REC/PARKS		12	UTV	2023		$29,473	Defender Pro		3JB7KAX4XPK000455								Ad Hoc Committee Approved purchase in FY24
R30		SRCTZ		10	VAN	2017	09/14/16	$63,020	FORD	Goshen Coach Pass. Bus	1FDEE3FS1HDC04582						33,319		
R4		SRCTZ		10	VAN	2018	10/16/18	$60,897	FORD	TRANSIT	1FDES8PM7JKB31919						7,430		
R5		SRCTZ		10	VAN	2022	07/06/22	$65,023	Ford	Startrans Bus	IFDEE3FN2NDC39895								
S18		PUBLIC WORKS		15	SIDE LOAD REFUSE	2011	03/15/11	$218,336	PETERBUILT	PECCAR 320	3BPZL50X9BF129187						83368	122,577.13	
H10 (OLDT1)	DNR	PUBLIC WORKS	Facilities (Paul Koelle)	14	Do Not Replace	2006	06/20/06	$35,855	Chevrolet	SILVERADO 2500	1GBHK24DX6E251727						163,730		Reassigned from WUC 7/7/20
H39(old)		WUC		20	5 TON DUMP TRUCK	2009	07/23/08	$115,800	International	7400 SFA	1HTWDAAR29J077349						60,533m/ 5288hrs	105,157.11	Reassigned to WUC from PW
CAR 100	DNR	WUC		0	Do Not Replace	1984	02/08/13	Donated	Humvee	1 1/4-ton Utility Vehicle (Military Surplus)	000130						Humvee		Do Not Replace (need military approval under 1033 before surplussing)
C1	DNR	WUC	Chief Engineer (Soto)/Asst Director (Bartell)	8	SUV	2017	08/30/17	$26,771	Ford	EXPLORER	1FM5K8B85HGC17124						53,656	1,378.74	Move replacement to FY27. Est cost based on 2021 MSRP and adjusted 2% per following year. Car to become shared vehicle between Chief Enginner & Asst Director
C2	DNR	WUC	Survey Party Chief (Lathrop)	8	SUV	2011	03/29/11	$26,771	Ford	EXPEDITION XLT 4x4	1FMJU1G51BEF25120						34,116	3,079.61	Move replacement to FY24. Est cost based on 2021 MSRP adjusted for 2% per following year.
C3	DNR	WUC	Sewer Maint Operators	20	20-YEAR SPECIALTY UNIT	2012	03/06/12	$79,818	International	7,500 SBA With Hi-Vac Attach	1HTWNAZB4CJ115205						10,918	11,404.55	

TOWN OF WATERFORD
FLEET MANAGEMENT PLAN - VEHICLES
FISCAL YEARS 2026 - 2030

TOTAL NO. OF 152

										Number Vehicles to be Replaced	9	22	12	-	1			
										Total Budget	877,254	3,857,204	3,234,625	-	261,188			
FLEET Asset ID	DO NOT REPL	Agency Name	Vehicle Assigned to:	Repl Cycle in Years	Class Description	Asset Model Year	In-Service Date	Gross Vehicle Cost	Manuf.	Model	Serial #	2026	2027	2028	2029	2030	Current Mileage / or Usage Hours	Total Repair Costs to date	COMMENTS
C3-A (Mounted on C-3)	DNR	WUC		10	Vac-All Body	2012	03/06/12	$163,857	AQUATECH	HI VAC ATTACHMENT	Model B-10						748.10 hrs		
C4-A (Mounted on C4)	DNR	WUC		20		2012	09/05/12	$128,697	CUES CCTV	SEWER INSPECTION SYSTEM	N/A						CCTV		
C5	DNR	WUC	Asst Director (Bartelli)	8	CRUISER	2010	11/30/09	$19,701	Ford	Taurus	1FAHP2DW1AG112586						107,673	5,704.97	DO NOT REPLACE
T1	DNR	WUC	Foreman (Clark)	14	PICK UP	2020	03/20/20	$58,085	FORD	F350 4x4	1FD8X3B63LEC31088						13,535	75.39	
T2	DNR	WUC	Sewer Tech II (Gerovitz)	14	PICK UP	2011	07/27/11	$55,594	GMC	K-3500 SIERRA 4wd	1GD322CL8BF243396						94,830	12,574.42	cost adjustment based on 2020 cost of T1 adjusted 2%/year to 2027
T3	DNR	WUC	Sewer Maint Operators	14	PICK UP	2018	01/11/18	$54,843	Chevrolet	Silverado 3500HD	1GB5KYCG3JZ174685						42,258	3,816.71	
T4	DNR	WUC	Lead Maint Operator (Williams)	14	PICK UP	2016	09/28/16	$53,749	Chevrolet	Silverado 3500 w/body & equipment	1GB3KYCG4GZ320205						62,040	4,224.31	
T5 (old)	DNR	WUC		14	Do Not Replace	2006	06/20/06	$20,939	Ford	F-150	1FTPX14546NB57564						106,078	6,804.00	
T5	DNR	WUC		14	Pick UP	2020	12/01/20	$45,130	Ford	F-350 4x4	1FTRF3B69LEE89997						9,334	3,734.32	
T6	DNR	WUC		12	Do Not Replace	2006	01/23/06	$44,606	Ford	F350	1FDWW31P96EB60911						106,078	9,201.00	reassigned from Fire Svcs to WUC (was W46)

**Vehicles assigned to the WUC will be moved to Utility Commission Budget*

In replacement process
To be surplussed

TOWN OF WATERFORD
FLEET MANAGEMENT PLAN - EQUIPMENT
FISCAL YEARS 2026 - 2030

TOTAL NO. 60

										Equipment to be Replaced	4	8	5	1	1		
										Total Budget	75,777	582,346	359,104	382,853	271,222		
FLEET Asset ID	DO NOT REPL	Agency Name	Repl. Cycle in Years	Class Description	Asset Model Year	In-Service Date	Gross Vehicle Cost	Manuf.	Model	Serial #	2026	2027	2028	2029	2030	Current Mileage / or Usage Hours	Total Repair Costs to date	COMMENTS
BOE10		Board of Ed	10	SKID STEER LOADER	2007	5/11/2007	$22,000	New Holland	L170 Skid Star Bobcat	N7M455552		$ 34,718						
BOE11 (old)		Board of Ed	0					KAWASAKI	MULE OFF ROAD UTILITY VEHICLE	JK1AFDA132B5077								
BOE11		Board of Ed	10	UTILITY CART	2014	2/12/2014	$25,353	John Deere (w/ spreader and plow)	XUV855DPS	CH3009D250621								
Boat Trailer		Goshen Fire Company	20	TRAILER (FIRE)	2017	6/3/2016	$8,749	Shore Lander	Boat Trailer	1MDAVA121HA609182								
		Goshen Fire Company	20	TRAILER (boat)	2018			Caravan	boat trailer	5KTBS1911JF543838								
H147(NEW)		PUBLIC WORKS	20	TRAILER	2024	6/20/2024	$27,899	KRAFTSMAN	HP-40PS	5E7HP3428RA003264								
H147(OLD)		PUBLIC WORKS	20	TRAILER	1991	6/7/1991	$2,194	ROSCO	3 TON UTILITY TRAILER	1YB411327M1B1T617						N/A	2,435.39	
H27		PUBLIC WORKS	15	TRACTOR	2008	5/20/2008	$82,026	JOHN DEERE	MODEL 5603 TRACTOR	LV5603R268632						6,838 hrs	57,289.14	
H-33		PUBLIC WORKS	15	STUMP GRINDER	2004	11/12/2004	$23,651	CARLTON	7500 - Stump Grinder	1J9G42122C1167474		$ 80,000				247	9,646.47	
H43DT		PUBLIC WORKS	20	TRAILER	2001	9/14/2000	$30,375	FRUEHAUF	DUMP TRAILER	1JJU262F61S737748	45,000					N/A	1,615.75	
H43RO		PUBLIC WORKS	15	15-YEAR SPECIALTY UNIT	2000	11/10/2000	$14,925	BENLEE	TRAILER TA60TC34	1B9A13420YB183504						N/A	13,775.37	amount reduced by committee (rehabbed and not replaced in FY21), 7/8/21
H43T		PUBLIC WORKS	12	LOW BOY TRAILER	2006	10/5/2005	$37,398	TOWMASTER	T-70DTG DUMP TRAILER	4KNFT22276L160354		$ 15,000	$ 15,000			N/A		
H44		PUBLIC WORKS	20	CHIPPER	2005	11/18/2004	$24,000	VERMEER	BC1000XL- CHIPPER	1VRY1119X51005548		$ 45,000	$ 45,000			1,841	5,806.36	
H45		PUBLIC WORKS	25	BACKHOE	2009	3/15/2010	$89,180	VOLVO	BL70 BACKHOE/LOADER	VCEOBL70A00020080						39,534	27,935.97	
H47		PUBLIC WORKS	20	TRACTOR	2008	9/9/2008	$39,900	JOHN DEERE	5603 LOADER/TRACTOR	LV5603R270211			$ 200,000			4,748 hrs	26,121.05	
H48		PUBLIC WORKS	20	ROLLER	2012	4/23/2012	$33,105	HAMM	HD 10VV Asphalt Roller	2001793						306 hrs	1,741.10	
H51		PUBLIC WORKS	18	18-YEAR SPECIALTY UNIT	2010	6/4/2010	$180,550	International	Model AL60 Aerial Lift / Hybrid	1HTMMAAR3AH247768						34,311	12,790.11	
H52		PUBLIC WORKS	15	COMPRESSOR	2004	12/16/2004	$14,420	Ingersoll Rand	P185WJD COMPRESSOR	350036UJ0221					$ 176,350	465 hrs	1,733.87	
H53		PUBLIC WORKS	30	SIDEWALK MACHINE	2004	12/12/2003	$81,897	TRACKLESS	MT5TD SIDEWALK PLOW w/ attachments	MT5TD-2330						13,456	18,501.00	
H54		PUBLIC WORKS	30	COMPACT LOADER	2015	10/16/2015	$86,534	WACKER NEUSON	WL32 COMPACT LOADER W/ATTACHMENTS	3031050						680 hrs	14,822.80	
H55		PUBLIC WORKS	20	CHIPPER	2017	9/8/2017	$36,044	VERMEER CHIPPER	BC1000XL- CHIPPER	1VRY11196H1025266						558 hrs	4,058.92	
H56	DNR	PUBLIC WORKS	0	Do Not Replace	1977	1/1/1977	$2,770	LAYTON	D.550B SUPER PAVER	D7621-K-6						N/A	6,477.66	
H58		PUBLIC WORKS	15	COMPRESSOR	2008	10/14/2008	$16,985	Ingersoll Rand	XP185WJD Port. Compressor	402988UGS222						84 hrs	1,137.71	

TOWN OF WATERFORD
FLEET MANAGEMENT PLAN - EQUIPMENT
FISCAL YEARS 2026 - 2030

TOTAL NO. 60

										Equipment to be Replaced	4	8	5	1	1		
										Total Budget	75,777	582,346	359,104	382,853	271,222		
FLEET Asset ID	DO NOT REPL	Agency Name	Repl. Cycle in Years	Class Description	Asset Model Year	In-Service Date	Gross Vehicle Cost	Manuf.	Model	Serial #	2026	2027	2028	2029	2030	Current Mileage / or Usage Hours	Total Repair Costs to date	COMMENTS
H59		PUBLIC WORKS	20	MINI PAVER	2021		$52,000	SALSCO	TP44-TD	21100400050290500								
H49		PUBLIC WORKS	20	MOWER	2023	8/29/2022	$12,324	TORO	72946 (60" COMMERCIAL ZERO TURN)	412654613								
H77		PUBLIC WORKS	15	UTILITY TRALER	2013	7/24/2013	$3,630	BIG TEX	70TV-12 UTILITY TRAILER	16VUX1220D3E93806						N/A	5,535.67	
H9		PUBLIC WORKS	15	15-YEAR SPECIALTY UNIT	2011	11/24/2010	$76,014	International	4300 SBA 4x2 w/Platform Body	1HTMMAAL9BH388342		130,000				96,186	16,887.09	
S30		PUBLIC WORKS	15	EXCAVATOR	2001	12/28/2001	$87,805	VOLVO	EW170 EXCAVATOR	26289408		225,000		$ 382,853		14,875 hrs	63,122.86	
UT2		PUBLIC WORKS	20	TRAILER	2009	7/27/2009	$11,857	CAM	8CAM824DOTT - Utility Trailer	5JPBU292X9P024572						N/A	831.43	
P95		REC/PARKS	20	TRAILER	1999	11/1/1989	$1,250	Parker	Utility Trailer	13ZSA1014X1000005								
P53		REC/PARKS	10	MOWER, LARGE	2016	10/19/2016	$60,650	TORO	GROUNDSMASTER 4100 (diesel)	316000766						1593 hrs	4,978.40	
P54		REC/PARKS	10	MOWER	2017	11/14/2017	$11,000	Ferris	IS 3200 72" Mower	2017982141		18,000				1225 hrs	3,467.55	
P55		REC/PARKS	10	MOWER, LARGE	2016	10/19/2016	$60,650	TORO	Groundsmaster 4100 (diesel)	316000682			60,650			1125 hrs	3,923.66	
P59		REC/PARKS	15	TRACTOR	2018			KUBOTA	(diesel)	L6060HSTC						1138 hrs	3,957.26	
P60		REC/PARKS	10	MOWER, LARGE	2024	9/12/2024	$70,494	VENTRAC	4520N KUBOTA WG972	4520N - AR09797								
P61		REC/PARKS	15	TRACTOR	2014	9/26/2014	$58,203	KUBOTA	L4760HSTC TRACTOR/LOADER w/attachments (diesel)	30612						2467 hrs	13,739.49	
P62		REC/PARKS	10	MOWER	2024	9/12/2024	$31,671	GROUND MASTER	Groundsmaster 7200 w/ Deck	416935608, 417060836								
P63		REC/PARKS	10	MOWER	2016	10/19/2016	$18,277	TORO	GM7200 - 6' mower (diesel)	316000281	30,777					1691 hrs	4,873.72	
P64		REC/PARKS	10	SEEDER	2006	7/12/2006	$10,628	SEEDA-VATOR	SE-60E	483						n/a		moved to operational
P65		REC/PARKS	8	MOWER, LARGE	2022	1/9/2023	$47,789	VENTRAC	4520Z	4520Z-AR03257						1808 hrs	18,724.99	being replaced in FY23 (approved in FY22)
P74		REC/PARKS	10	TRAP RAKE	2016	6/7/2016	$19,572	TORO	SANDPRO INFIELD PRO 3040	316000434		34628				902 hrs	1,870.48	
P94		REC/PARKS	20	TRAILER	2008	8/12/2008	$3,515			4YMUL18278V194364			15,228					
P90		REC/PARKS	20	TRAILER	2008	10/30/2008	$3,534	Carry-On Trailer Corp.	Heavy Duty Landscape Trailer	4YMUL18289V006081	-		15228					
P92		REC/PARKS	20	TRAILER	1996	1/1/1996	$3,890	Cross Country		1C9FS2227T1432852			7,998					
P91		REC/PARKS	20	TRAILER	2019	11/14/2019	$5,025	BRI-MAR	20 FT Trailer	58CB1EF27LC001480								
		EOC	20	TRAILER	2021	7/1/2022	$4,286	BRAVO	Model SCS85A	542BA0813MB036234								Region 4 purchased
P93		REC/PARKS	20	TRAILER	2019	11/14/2019	$7,998	BRI-MAR	Dump Body Trailer	58CB1DB2OLC001479								
P96		REC/PARKS		ROBO PAINTER	2024	7/24/2024	$44,950	Turf Robotics LLC	SWOZI Cart Pro									
WUC Operating Asset	DNR	WUC	15	EXCAVATOR (and attachments)														Purcahsed by WUC as part of operating expenses.
WUC Operating Asset	DNR	WUC	15	SKID STEER MACHINE														Purcahsed by WUC as part of operating expenses.
C3	DNR	WUC	20	20-YEAR SPECIALTY UNIT	2012	3/6/2012	$79,819	International	7,500 SBA With Hi-Vac Attach	1HTWNAZB4CJ115205						10,918	11,404.55	

TOWN OF WATERFORD
FLEET MANAGEMENT PLAN - EQUIPMENT
FISCAL YEARS 2026 - 2030

TOTAL NO. 60

										Equipment to be Replaced	4	8	5	1	1		
										Total Budget	75,777	582,346	359,104	382,853	271,222		
FLEET Asset ID	DO NOT REPL	Agency Name	Repl. Cycle in Years	Class Description	Asset Model Year	In-Service Date	Gross Vehicle Cost	Manuf.	Model	Serial #	2026	2027	2028	2029	2030	Current Mileage / or Usage Hours	Total Repair Costs to date	COMMENTS
C3-A (Mounted on C-3)	DNR	WUC	10	Vac-All Body	2012	3/6/2012	$163,857	AQUATECH	HI VAC ATTACHMENT	Model B-10						748.10 hrs		
C4	DNR	WUC	20	5 TON DUMP TRUCK	1991	1/2/1991	$104,011	Ford	L-8000	1FDYR82A6MVA06368						20,027	6,564.95	
PG1	DNR	WUC	15	GENERATOR	1982	1/2/1982	$19,125	ONAN	TRAILER	1013131						536 hrs		
PG2	DNR	WUC	15	GENERATOR	1991	1/2/1991	$20,000	ONAN	TRAILER	16MG1067LD017031						306.9 hrs		
PG3	DNR	WUC	15	GENERATOR (mounted on trailer)	2015	5/15/2015	$60,895	CUMMINGS	C100D6R 100KW Portable Generator w/trlr	G140718616					$ 94,872	75.4 hrs		
PP1	DNR	WUC	15	PUMP	1985	1/2/1985	$10,909	GORMAN RUPP	PUMP TRAILER	774243						3.41 hrs		
PP2	DNR	WUC	15	PUMP	1990	1/2/1990	$12,166	GORMAN RUPP	PUMP TRAILER	968976N						149.0 hrs		
PP3	DNR	WUC	15	UTILITY TRAILER	2018	3/8/2019	$68,000	MANSFIELD	UTILITY TRAILER	1M9BU1421JM620572								
PP3 -A (mounted on PP3)	DNR	WUC	15	PUMP	2018	3/8/2019	$68,000	GORMAN RUPP	PUMP	1682771						81.4 hrs		
P50	DNR	WUC	0	Do Not Replace	1980		$10,400	JOHN DEERE	1050 TRACTOR	1D50S003477								transferred April 2020 to WUC

DATE: November 13, 2024

TO: Kim Allen, Director of Finance

FROM: Ryan McNamara, Director of Recreation and Parks

Subject: Fleet Plan and Variation Request

Introduction:

Due to unforeseen mechanical issues and equipment deterioration, it has become necessary to request a variation to the current fleet plan. Specifically, this involves advancing the replacement schedule for a truck and deferring the acquisition of a mower. This adjustment will allow us to allocate resources more effectively and ensure the continued operational efficiency of our fleet.

Request Summary:

1. **Early Replacement of R10:**
    - **Reason:** The truck in question has been experiencing frequent mechanical issues, leading to increased maintenance costs and operational downtime. These persistent issues have significantly impacted our ability to maintain service levels.
    - **Proposed Action:** Expedite the replacement of the truck to ensure reliability and efficiency. The new truck will provide better performance and reduce maintenance expenses.
2. **Deferred Acquisition of P53 from 2025 to 2026:**
    - **Reason:** Given the current condition and usability of our existing mower, it is feasible to extend its operational life for a few more months. This allows us to redirect funds towards more urgent equipment needs.
    - **Proposed Action:** Postpone the purchase of a new mower to a later date. This will enable us to prioritize the replacement of other critical machines and equipment that are in more immediate need of replacement.

The Fleet Plan for Recreation and Parks for FY'26

- Replace asset #TAG Seeda-Vator: P64 quoted attachment for Ventrac **$8,375.22**
- Replace asset #P74 SandPro: quote attached for **$34,627.50**
- Replace asset #R10: quote attached for **$81,456.90**

Variance request:

- Move asset #P63 from 2026 to 2025 (quote attached for **$30,776.62**)
- Move asset #P90 or P94 (identical trailers) from 2027 to 2025 (quote attached for **$15,228**)
- Move P53 out from 2025 to 2026 to offset costs $60,650 secured for P53.

Conclusion:

Adjusting the fleet plan as proposed will optimize our budget and enhance operational efficiency. The early replacement of the truck will resolve ongoing issues and improve service reliability, while deferring the mower acquisition ensures resource allocation to areas of greatest need. Your approval of this request will enable us to maintain a well-functioning fleet and continue delivering high-quality services.

Our total Fleet request for FY'26 is ***$170,464.24*** *with an offset of $60,650 with deferred acquisition.*

We appreciate your consideration of this fleet plan request.

FIFTEEN ROPE FERRY ROAD

WATERFORD, CT 06385-2886

INTER-OFFICE CORRESPONDENCE

DATE: September 19, 2024

TO: Ryan McNamara, Director of Recreation & Parks

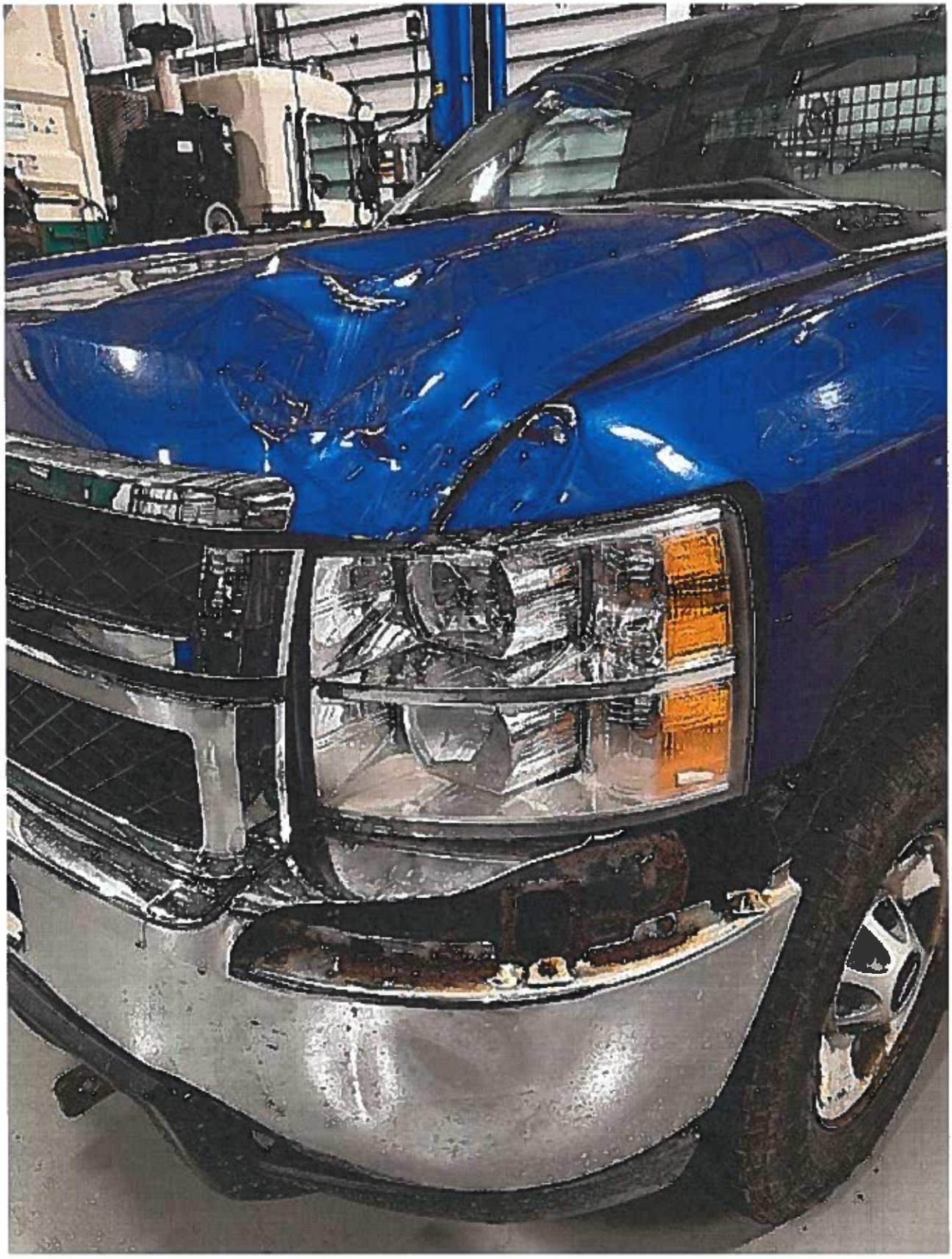
FROM: Garon VanOverloop, Lead Fleet Mechanic

RE: R10

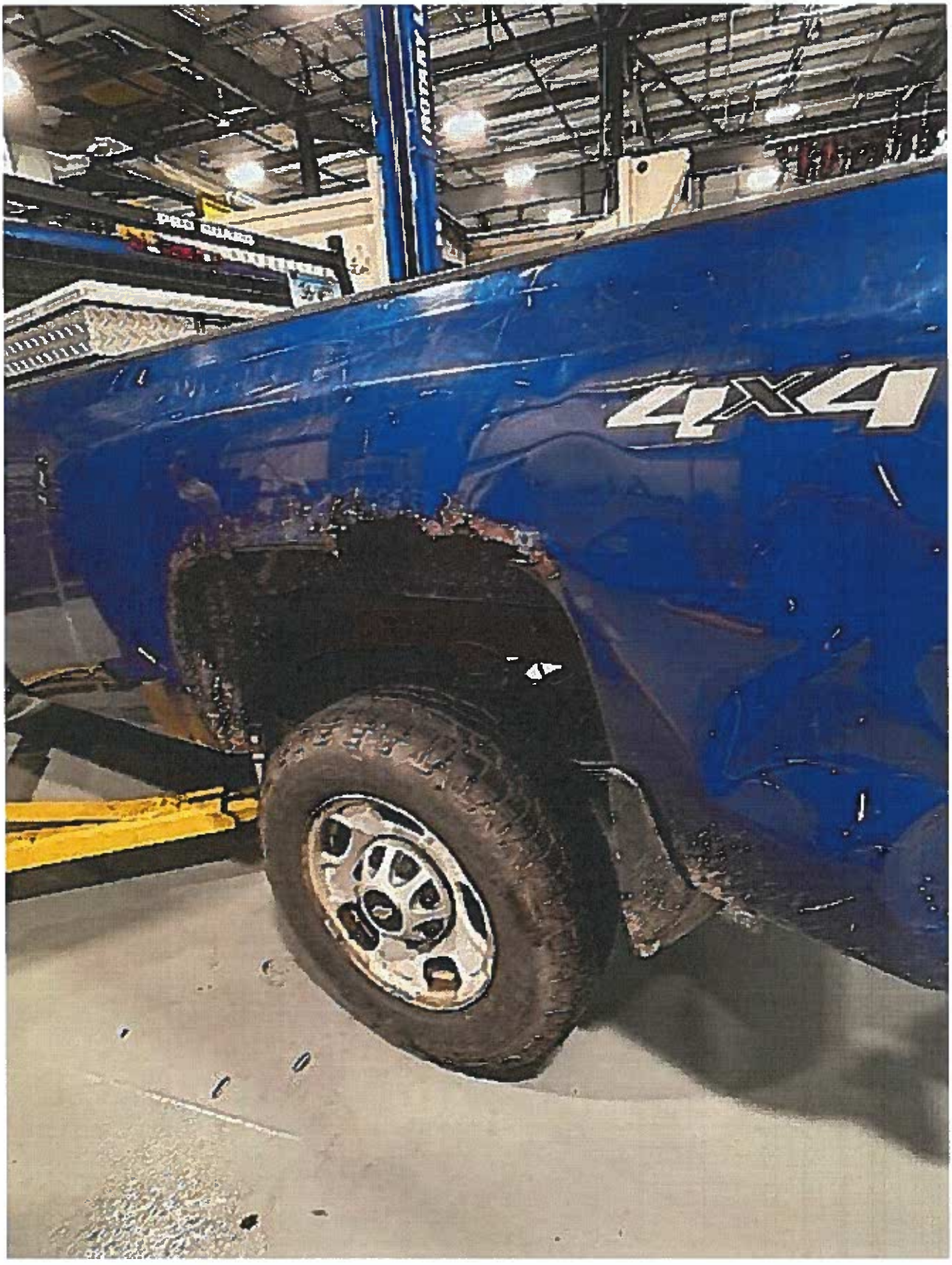
R10 is a 2013 Chevrolet 2500 pickup with 79,940 miles on it. R10 has a recommended replacement cycle of 14 years. This week it was towed in for an electrical fault that prevented it from starting. While it was in the shop, I also performed and inspection on R10. The chassis and engine wiring harnesses are compromised with corrosion and is beyond further repairs. The chassis frame and components itself, are deteriorating quickly. Eventually frame/ suspension components and electrical harnesses will continue to fail and break off. Which is why I am highly recommending that this vehicle is to be replaced this calendar year.

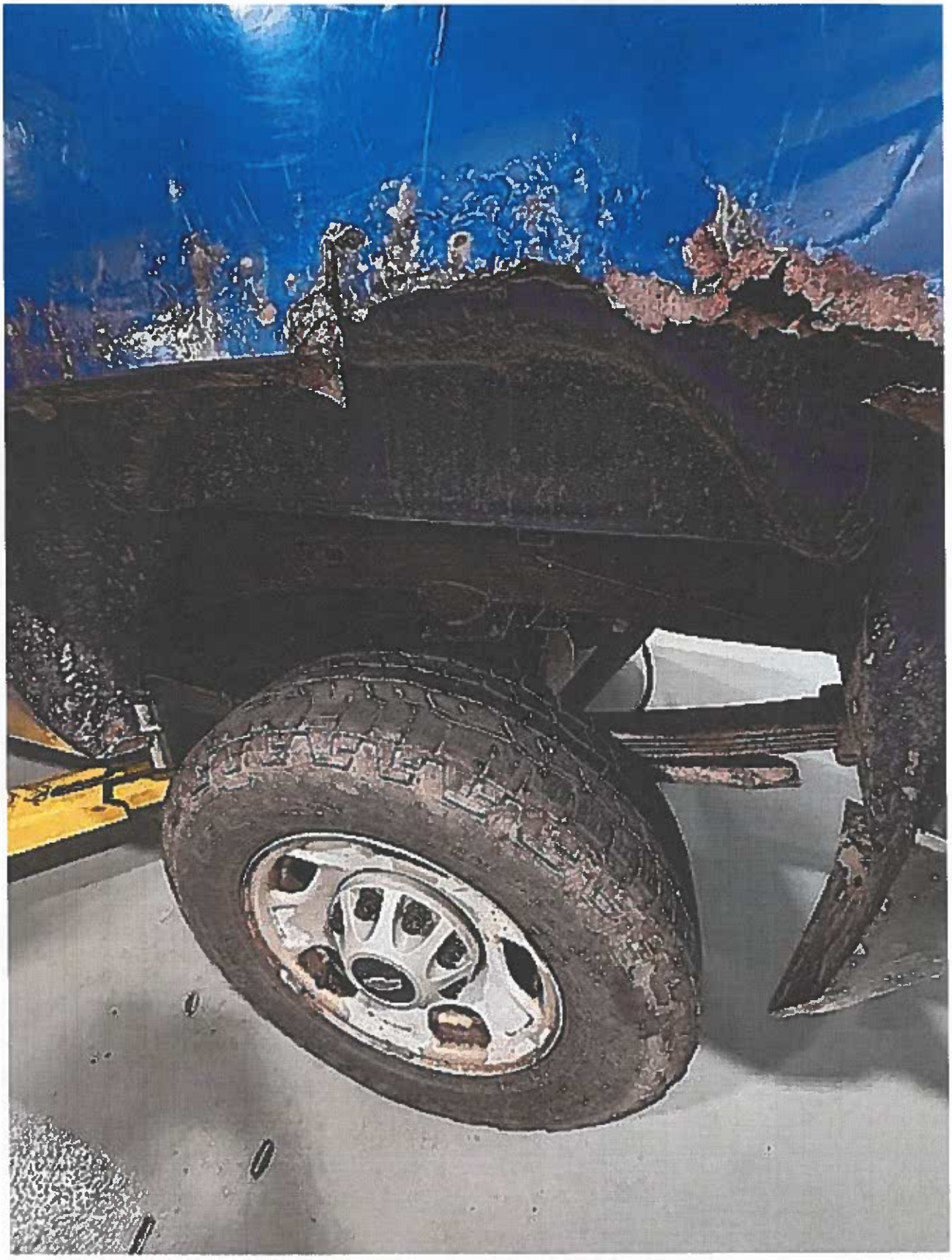
I have included pictures of R10 and lifetime cost report. If you need any more information regarding this matter please let me know.

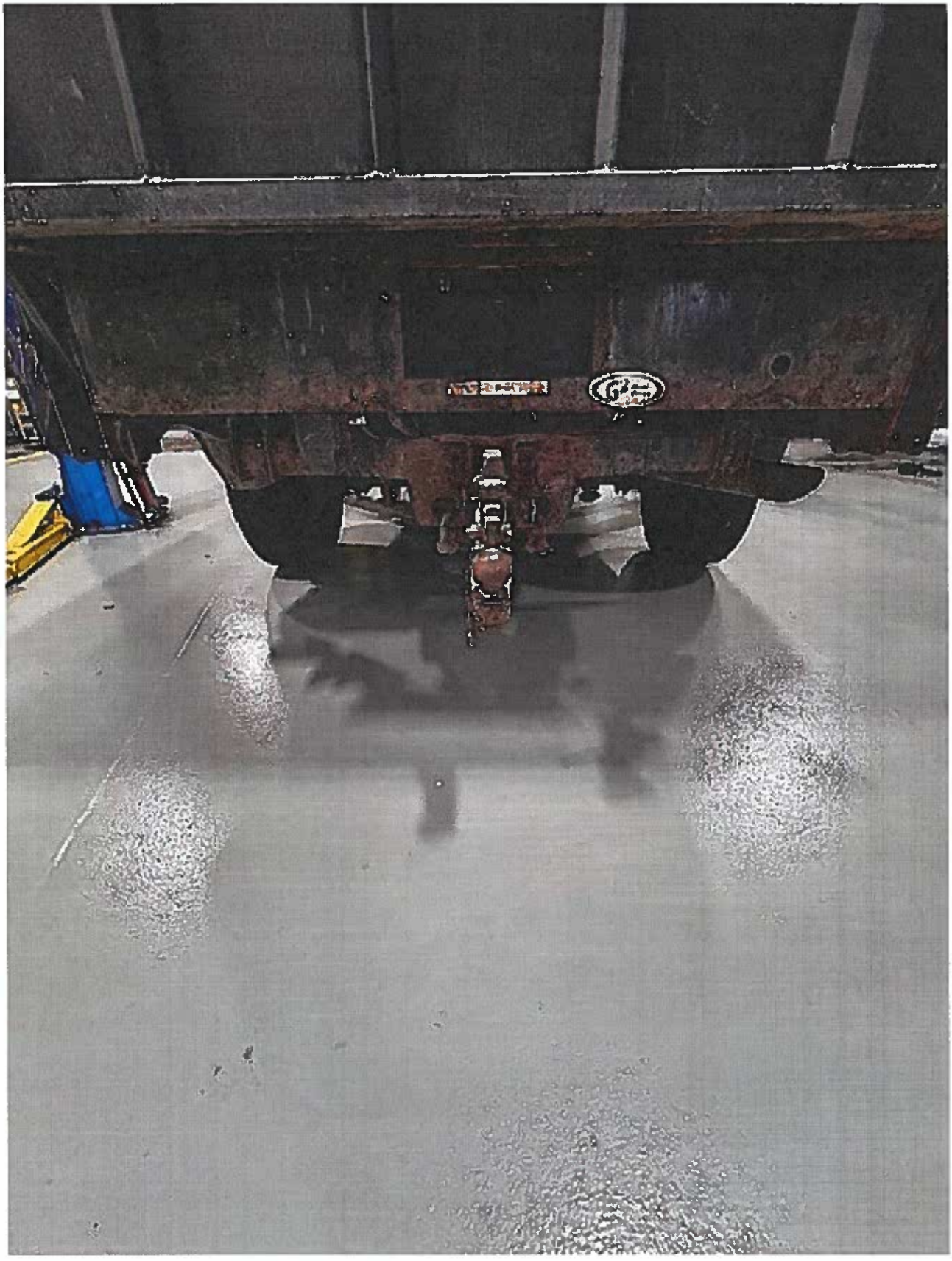
Garon VanOverloop
Lead Fleet Mechanic

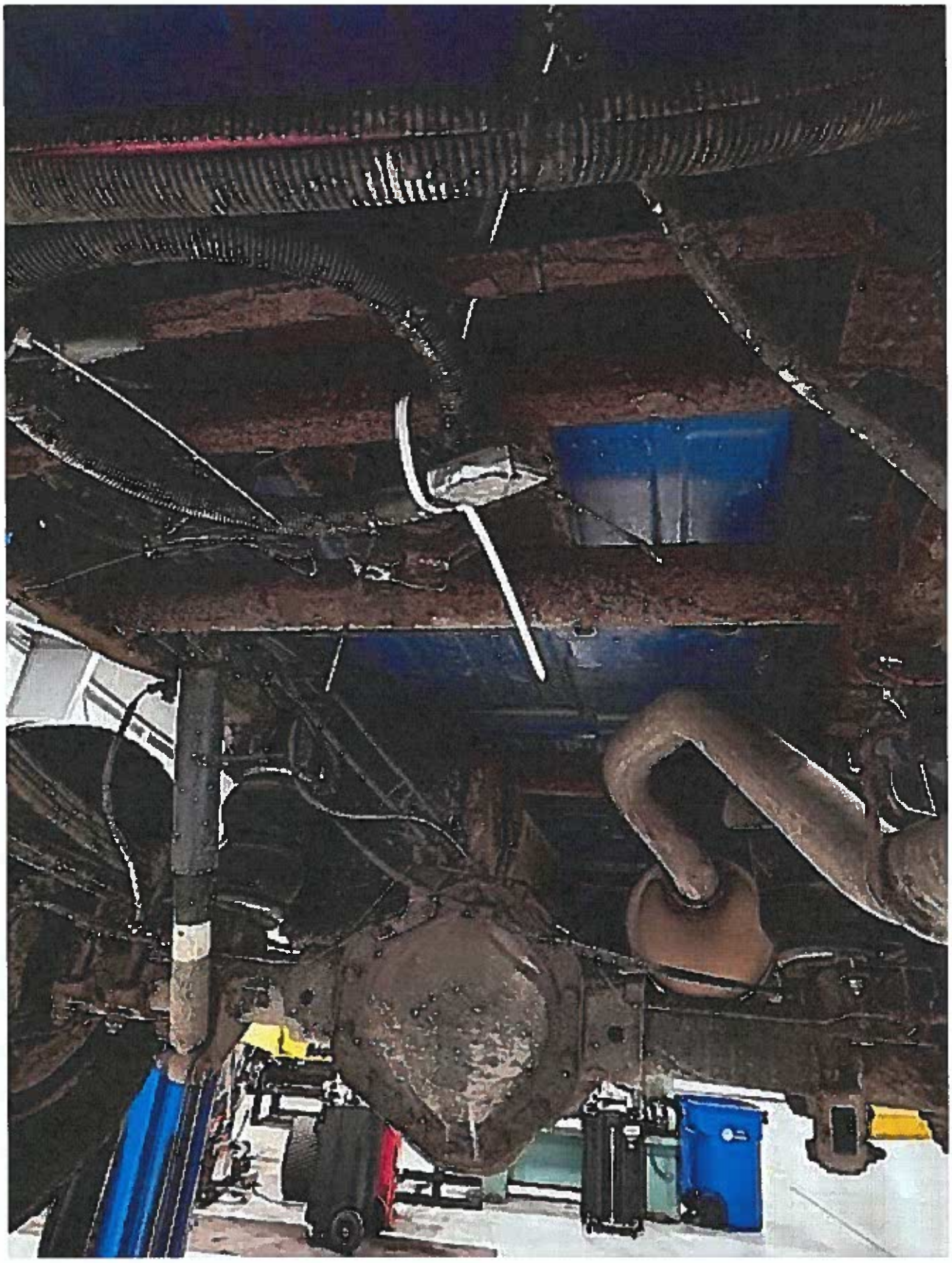


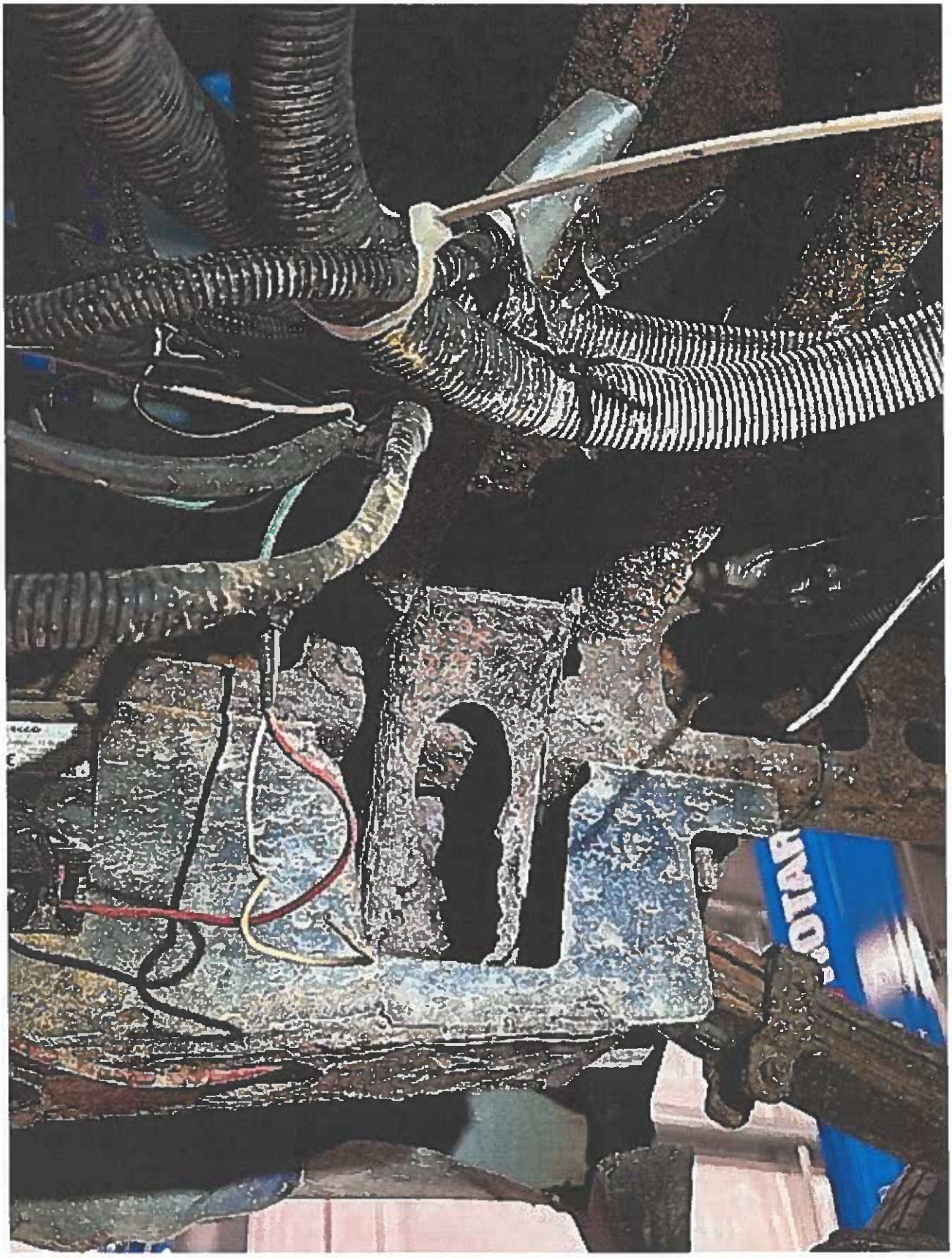

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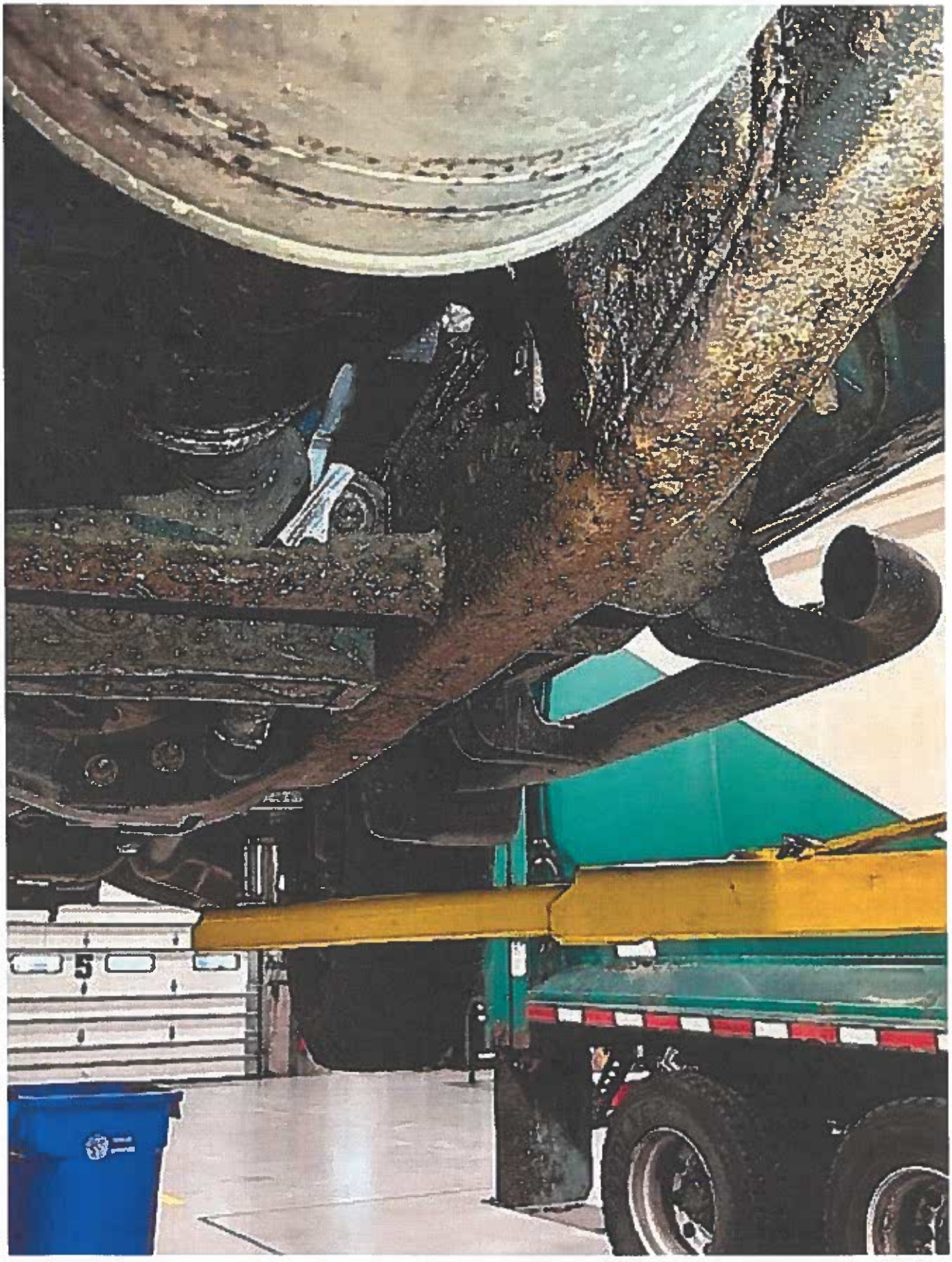











5

DATE: 09/19/2024
TIME: 09:37 a.m.

TOWN OF WATERFORD
VEHICLE REPAIR HISTORY REPORT
FACILITY: 00001

ID: 1-32/RRV PAGE: 1

STARTING VMRS CODE: 000-000-000 DATE: FIRST VEHICLE: r10
ENDING VMRS CODE: 999-999-999 DATE: LAST VEHICLE: r10

METER : STANDARD SUBTOTALS OF VMRS CODES FOR DIVISION > AL PERIOD : LIFE

VMRS Code	QUANTITY	LABOR HRS	LABOR COST	PARTS COST	TOTAL COST	PERCENT	TOT COST /METER
002 CAB/SHEET METALS	1	1.00	33.95	151.29	185.24	0.69 %	0.00263
015 STEERING	1	8.00	302.08	978.04	1280.12	4.80 %	0.01819
016 SUSPENSION	1	5.00	124.40	562.52	686.92	2.58 %	0.00976
017 TIRES,TUBES,LINERS	1	0.50	19.82	11.63	31.45	0.12 %	0.00045
034 LIGHTING SYSTEM	6	40.00	1347.93	368.15	1716.08	6.43 %	0.02438
043 EXHAUST SYSTEM	1	4.00	151.04	693.76	844.80	3.17 %	0.01200
065 HYDRAULIC SYSTEMS	1	4.00	151.04	0.00	151.04	0.57 %	0.00215
066 PREVENTIVE MAINTENANCE	17	126.00	4034.12	4508.60	8542.72	32.03 %	0.12138
099 ROAD CALL TRAVEL TIME	28	150.50	4949.59	8232.61	13182.20	49.43 %	0.18730
150 ROAD TEST	1	2.00	49.76	0.00	49.76	0.19 %	0.00071
TOTALS:	58	341.00	11163.73	15506.60 TOT:	26670.33	100.00 %	0.37895

Service History by Vehicle

Town of Waterford - Public Works

8 records

Report generated on 09/19/2024 10:38 AM by Garon VanOverloop

Filters

Vehicle: R10

Labor Subtotal	Parts Subtotal	Line Item Subtotal
$1,437.84	$5,222.38	$6,660.22

Vehicle

R10

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task	Parts Subtotal	Line Item Subtotal
29606024	09/17/2024 2:00 PM	09/18/2024 10:00 AM	$208.13	$330.71	Towing/Roadside Assistance		$81.72
29606024	09/17/2024 2:00 PM	09/18/2024 10:00 AM	$208.13	$330.71	Starter Motor Replacement	$208.13	$248.99
29605636		09/17/2024	$170.40	$170.40	Towing/Roadside Assistance	$170.40	$170.40
26005550	04/12/2024 12:00 PM	04/16/2024 3:00 PM	$182.00	$563.34	Engine Diagnosis		$381.34
26005550	04/12/2024 12:00 PM	04/16/2024 3:00 PM	$182.00	$563.34	Towing/Roadside Assistance	$182.00	$182.00
25904064	04/03/2024 9:00 AM	04/03/2024 4:00 PM	$28.69	$188.13	Engine Diagnosis		$39.86
25904064	04/03/2024 9:00 AM	04/03/2024 4:00 PM	$28.69	$188.13	Body & Frame (Miscellaneous)		$39.86
25904064	04/03/2024 9:00 AM	04/03/2024 4:00 PM	$28.69	$188.13	Preventative Maintenance	$28.69	$108.41
22532162	01/23/2024 10:30 AM	01/25/2024 1:30 PM	$906.17	$1,218.47	Suspension System (Miscellaneous)	$765.60	$921.75
22532162	01/23/2024 10:30 AM	01/25/2024 1:30 PM	$906.17	$1,218.47	Engine Diagnosis	$46.59	$109.05
22532162	01/23/2024 10:30 AM	01/25/2024 1:30 PM	$906.17	$1,218.47	Front Brakes & Drums	$93.98	$187.67
19910396	09/05/2023 1:00 PM	09/26/2023 8:30 AM	$813.54	$1,132.42	Battery Test	$219.99	$259.85

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task		Parts Subtotal	Line Item Subtotal
19910396	09/05/2023 1:00 PM	09/26/2023 8:30 AM	$813.54	$1,132.42	Charging System Inspect			$19.93
19910396	09/05/2023 1:00 PM	09/26/2023 8:30 AM	$813.54	$1,132.42	Radiator Replacement		$539.66	$659.24
19910396	09/05/2023 1:00 PM	09/26/2023 8:30 AM	$813.54	$1,132.42	Tire Rotation			$19.93
19910396	09/05/2023 1:00 PM	09/26/2023 8:30 AM	$813.54	$1,132.42	Vehicle Multi-Point Inspection			$19.93
19910396	09/05/2023 1:00 PM	09/26/2023 8:30 AM	$813.54	$1,132.42	Engine Oil & Filter Replacement		$53.89	$153.54
16565697	03/02/2023 3:15 PM	03/06/2023 11:23 AM	$88.45	$231.75	Backup Alarm Replacement		$49.99	$71.38
16565697	03/02/2023 3:15 PM	03/06/2023 11:23 AM	$88.45	$231.75	No Service Task			$89.82
16565697	03/02/2023 3:15 PM	03/06/2023 11:23 AM	$88.45	$231.75	Tire Rotation			$10.70
16565697	03/02/2023 3:15 PM	03/06/2023 11:23 AM	$88.45	$231.75	Vehicle Multi-Point Inspection			$21.39
16565697	03/02/2023 3:15 PM	03/06/2023 11:23 AM	$88.45	$231.75	Engine Oil & Filter Replacement		$38.46	$38.46
29603947		03/13/2020	$2,825.00	$2,825.00	Repair Lift Gate		$2,825.00	$2,825.00
						Total Amount	$5,222.38	$6,660.22

R10

F3B	Antimatter	TASCA FORD	250 webster square rd Berlin CT 06037		
	F-350	Waterford	19PSX0161		
	QUOTE		JOHN BRESLIN		
$ 47,325.00		Utility Truck	Fleet Manager		
		Nov 1st	Connecticut/ Rhode island/ Maine.		

	OPTION DESCRIPTION	Upgrades & Options	Option pricing	Upgrade Cost	Sub Total Contract Pricing
					$ 47,325.00
	All Options	$ 1,885.00	$ 113.10	$ 1,771.90	$ 1,771.90
				Total	$ 49,006.90
	Hartford truck upfit				$ 32,450.00
				per vahicle	$81,456.90

OEM discount 6% off of MSRP

Cost plus 5%

R10

CNGP530 VEHICLE ORDER CONFIRMATION 11/01/24 09:47:4
==> Dealer: F1122
2025 F-SERIES SD Page: 1 of
Order No: 0000 Priority: M3 Ord FIN: QS048 Order Type: 5B Price Level: 51
Ord PEP: 610A Cust/Flt Name: WATERFORD PO Number:

		RETAIL	DLR INV			RETAIL	DLR INV
F3B	F350 4X4SDR/CSR	$49395	$46925.00		FRT LICENSE BKT	NC	NC
	142" WHEELBASE			18B	PLAT RUNNING BD	320	291.00
HX	ANTIMATTER BLUE				10900# GVWR PKG		
A	VNYL 40/20/40			425	50 STATE EMISS	NC	NC
S	MED DARK SLATE			473	SNOW PLOW PREP	250	228.00
610A	PREF EQUIP PKG			52B	TRLR BRAKE CONT	300	273.00
	.XL TRIM			592	ROOF CLEAR LGTS	95	87.00
572	.AIR CONDITIONER	NC	NC		JACK		
	.AMFM/MP3/CLK						
64F	.STEEL WHLS-18"			TOTAL	BASE AND OPTIONS	53275	49249.00
99A	.6.8L DEV V8 ENG	NC	NC	TOTAL		53275	49249.00
44F	10-SPD AUTOMATC	NC	NC	*THIS	IS NOT AN INVOICE*		
TCH	.LT275/65BSWAS18						
X3E	3.73 ELOCKING	430	392.00	* MORE	ORDER INFO NEXT PAGE *		
	JOB #1 BUILD				F8=Next		

F1=Help F2=Return to Order F3/F12=Veh Ord Menu
F4=Submit F5=Add to Library
6006 - MORE DATA IS AVAILABLE. QC06048

R10

CNGP530 VEHICLE ORDER CONFIRMATION 11/01/24 09:48:0
==> Dealer: F1122
2025 F-SERIES SD Page: 2 of
Order No: 0000 Priority: M3 Ord FIN: QS048 Order Type: 5B Price Level: 51
Ord PEP: 610A Cust/Flt Name: WATERFORD PO Number:

		RETAIL	DLR INV		RETAIL	DLR INV
66S	UPFITTER SWTCH	$165	$150.00			
67B	410 AMP ALTRNTR	115	104.00			
86M	DUAL BATTERY	210	191.00			
	SP FLT ACCT CR		(1411.00)			
	FUEL CHARGE		24.00			
	DEST AND DELIV	1995	1995.00			
TOTAL BASE AND OPTIONS		53275	49249.00			
TOTAL		53275	49249.00			

THIS IS NOT AN INVOICE

F7=Prev
F1=Help F2=Return to Order F3/F12=Veh Ord Menu
F4=Submit F5=Add to Library
X09 - PRESS F4 TO SUBMIT QC06048

R10

HARTFORD TRUCK EQUIPMENT
95 John Fitch Blvd. South Windsor, CT
860.290.9816 HartfordTruck.com
sales@hartfordtruck.com

QUOTATION

Quote: 110124-SB2
Ref: F350 56" CA SRW
End User:
Date: 11/01/24

Town of Waterford - Garon

We are pleased to quote on the following:
One (1) **Reading Classic II** service body **98ASW** installed on suitable cab-chassis with 56" CA (cab to axle) measurement and ***single rear wheels***, including-

- 98" long x 77.5" wide w/ 14.5" deep compartment, 48.5" x 98" cargo area
- A60 double sided galvanneal steel construction, electrically charged immersion primer
- Adjustable heavy-duty galvanized steel shelves with dividers
- Adjustable door strikers, Heavy duty tailgate with removable knee brace
- Rubber door seals, Hidden hinges, Nitrogen strut door holders, Stainless steel door paddles
- Flush mounted **LED** backup, turn, & brake lights, Factory undercoating
- Aluminum gas fill, free key replacement to original owner
- 6 year limited warranty, Lifetime warranty on cylinder locks

Paint Basecoat Clear Coat Color
Pooched steel bumper, Rear bumper zinc coated to prevent rust
Two (2) rear mud flaps
Back up camera - Mount camera and tie into OEM system
One (1) **Fisher** plow model # **8'6" XV2** w/ handheld controller, including:

- 8'6" long x 31"-38" high. 7'5" (full angled), 7'2" (scooped), 7'8" (full V)
- Blade approximately weighs 957 lbs.
- 14 gauge **STAINLESS STEEL** blade. Black powder coat finish on mounts
- Dual-halogen headlamps with park/turn signals
- "Security Guard" electronically locks the plows hydraulic functions
- 2 year parts and labor warranty

One (1) Backrack BRK15018 installed in rear of cab
One (1) Mini Liberty Whelen Amber lightbar installed on backrack with bracket
Tied to switch in cab
Whelen Four (4) Corner LED Amber Emergency Lights – tied into switch in cab
Pickup Bed & Bumper Trade In Credit
One (1) Fisher electric Poly-Caster sand/salt spreader including:

- 1.8 cu yd. capacity, (1.8 - 660 lbs., 2.5 - 734 lbs.)
- Double wall polyethylene 8' long hopper
- 2'-40' spreading width, 16-3/4" wide pintle chain conveyor
- 2 year parts and labor warranty

Sander loose not installed
Four (4) heavy duty sander tiedown straps (SANDERSTRAP)
7 RV Style Trailer Socket

Installed Municipal Price: $ 32,450.00

Initial : _____ **Vin:**_____ **Date:**_____

Terms: Net Due ETA: TBD.
For additional terms and signature complete 2nd page

Respectfully Submitted: Sean Breslin Hartford Truck Equipment Inc.
REV: 10/4/2024

tpc turf products

QUOTE

157 Moody Road • PO Box 1200 • Enfield, CT 06082
Main Office: (860) 763-3581 • FAX: (860) 763-5550

Prepared For: Ryan McNamara
Waterford Parks and Recreation
24 Rope Ferry Road Waterford, Connecticut
06385 United States

Sourcewell Pricing

Ship To: Waterford Parks
Quote Number: Groundsmaster 7200 11.10.24
Quoted Date: Q171625
Prepared By: **11/10/2024**
Brian Pope
bpope@turfproductscorp.com

Qty	Model #	Description	MSRP	% Disc	Award	Extended
1	**30495**	**Groundsmaster 7200 No Deck**	**$30,351.00**	**22 %**	**$23,673.78**	**$23,673.78**
1	30481	72 Inch Side Discharge Deck	$5,827.00	22 %	$4,545.06	$4,545.06
1	105-7273	Striping Kit (72 Inch SD Deck)	$1,109.20	22 %	$865.18	$865.18
1	30511	Grammer Seat With Air Ride Suspension And Vinyl Cushion	$1,894.00	22 %	$1,477.32	$1,477.32
1	30382	12V Power Port/Electrical Accessory Kit	$276.00	22 %	$215.28	$215.28
1	**08743**	**Sand Pro 3040**	**$26,786.00**	**22 %**	**$20,893.08**	**$20,893.08**
1	08714	Manual Blade (40 Inch)	$2,339.00	22 %	$1,824.42	$1,824.42
1	08735	Carbide Tine Toolbar	$2,081.00	22 %	$1,623.18	$1,623.18
1	08838	Midmount Toolbar System	$2,097.00	22 %	$1,635.66	$1,635.66
1	08757	Steel Drag Mat	$447.00	22 %	$348.66	$348.66
1	08758	Coco Drag Mat	$770.00	22 %	$600.60	$600.60
1	08756	QAS Drag Mat Carrier System	$2,059.00	22 %	$1,606.02	$1,606.02
1	08781	Rear Remote Hydraulic Kit	$3,610.00	22 %	$2,815.80	$2,815.80
1	L10014	QAS Lip Broom	$3,280.08	0 %	$3,280.08	$3,280.08

5% Freight & Set Up Added to Final Quote

Toro Total:	**$62,124.04**
Non – Toro Total:	*$0.00*
Set Up:	*$0.00*
Freight:	*$0.00*
Trade Ins:	*($0.00)*
State Sales Tax:	*$0.00*
Total Price:	**$65,404.12**

tpc turf products
157 Moody Road • PO Box 1200 • Enfield, CT 06082
Main Office: (860) 763-3581 • FAX: (860) 763-5550

COMMERCIAL SALES AGREEMENT

Pricing is valid for 30 days.

tpc turf products
157 Moody Road • PO Box 1200 • Enfield, CT 06082
Main Office: (860) 763-3581 • FAX: (860) 763-5550

COMMERCIAL SALES AGREEMENT

Contact Name: _____ Quote Number: _____

Account Name: _____ Quoted Date: _____

Billing Address: _____ Prepared By: _____

Phone number: _____

Account Number: _____ Salesman Number: _____

Shipping address: _____ Buyer's PO No: _____

_____ Agreement Signing Date: _____

_____ Requested Delivery Date: _____

Financing / Leasing Terms: _____

Setup Instructions: _____

Pricing is valid for 30 days.

BY SIGNING BELOW, THE BUYER AGREES TO PURCHASE THE PRODUCTS AS DESCRIBED IN THE ACCOMPANYING QUOTES AND ACKNOWLEDGES HAVING RECEIVED AND READ A COPY OF THE TERMS AND CONDITIONS OF THIS AGREEMENT AND HEREBY AGREES TO BE BOUND BY THOSE TERMS AND CONDITIONS.

Buyer's Signature _____ Salesperson's Signature: _____

Duly Authorized *Duly Authorized*

Buyer's Printed Name _____ Salesperson's Printed Name _____

Duly Authorized *Duly Authorized*

tpc turf products
157 Moody Road • PO Box 1200 • Enfield, CT 06082
Main Office: (860) 763-3581 • FAX: (860) 763-5550

COMMERCIAL SALES AGREEMENT

TERMS AND CONDITIONS

1. ACCEPTANCE OF ORDER. TURF PRODUCTS, LLC ("Seller") shall accept this sales agreement (the "Order") for certain goods described in name and quantity on Quote attached hereto (the "Goods"). Each of Seller and Buyer may be referred to herein as a "Party" and collectively as the "Parties". By Buyer and Seller's written acceptance of this Order, Buyer and Seller agrees to all the terms and conditions of this Order.

2. PRICING. Prices, terms, and conditions are subject to change by Seller without notice. Seller reserves the right to add applicable taxes to the pricing.

3. CHANGES AND CANCELLATIONS. Changes proposed by Buyer with respect to this Agreement shall be made by submittal by Buyer to Seller of a written request at least fifteen (15) days prior to shipment of Goods pursuant to this Agreement, approval shall be solely at Seller's discretion. In the event that Seller approves any change(s) proposed by Buyer with respect to this Agreement, Seller shall provide a new estimated delivery within a reasonable time. The terms and conditions of this Agreement shall remain in effect in their entirety in the event that Seller fails to approve any changes proposed by Buyer.

4. DELIVERY. Goods shall be sold F.O.B. Delivery Destination as set forth above on the Delivery Date. Seller shall pack all Goods in accordance with customs and practices prevailing in the industry. Risk of loss shall pass to Buyer upon delivery of the Goods at the Delivery Destination if accepted and signed for by the Buyer. Seller shall not be liable for any losses to Buyer arising from any delivery of the Order that is nonconforming or rejected, unless said nonconformance or rejection is a result of Seller's gross negligence or fault. Notification of any such nonconformance or rejection must be provided to Seller within three (3) business days of Buyer's receipt of the Order. Seller shall retain a right to cure within ten (10) business days of receipt of Seller's notice of nonconformance or rejection of the Order or any part thereof without being deemed in breach of the Order or any part or provision thereof. Seller shall, in the event of a delay or threat of delay due to any cause, promptly notify Buyer in writing of the delay. Seller shall not be liable for any damages resulting from failure to make delivery or performance within the time called for by this Order or by any written instructions of the Buyer.

5. RETURNED GOODS AND ERRORS. Goods may not be returned without a Returned Goods Authorization issued by the Seller and any returned Goods are subject to restocking charge. Certain Goods may not be returned including Goods which are found to be defective and or not conforming with the terms of this Agreement. All returns must be in new and clean condition. Goods delivered more than ninety (60) days prior to their attempted return will not be accepted by Seller unless Buyer has obtained prior written approval from the Seller. If permission to return the Goods (or any portion thereof) is granted, any amount of Seller's merchandise credit given to Buyer will be based on the circumstances involved and determined solely at the Seller's discretion. Buyer is responsible for any delivery or shipping charges incurred to return Goods to Seller. Seller shall cure any errors in the shipment of the Goods that are not in conformance with this Agreement and those goods that are defective and under warranty. All claims for shortages in this Agreement must be made within ten (10) calendar days from the shipment date.

6. FINANCE CHARGE. Buyer agrees that each invoice pursuant to this Agreement will be subject to a finance charge of one and a half percent (1.5%) per month or part thereof (equaling an annual percentage rate of eighteen percent (18%) or the maximum rate permitted by law, whichever is higher) if not paid in full after thirty (30) days of the date of the invoice, unless other terms have been agreed upon (ex" leasing). Buyer shall reimburse Seller for any and all costs and expenses (including attorney's fees to the maximum extent permitted by law) incurred by Seller arising from or related to the collection of any Obligation (as defined in Paragraph 7) and/or the enforcement of Seller's rights with regards to any Collateral (as defined in Paragraph 7).

7. SECURITY INTEREST. To secure the payment and performance of each and every debt, liability of every type and description which the Buyer may now or hereafter owe to the Seller (each an "Obligation"), Buyer grants to Seller a security interest in the Goods, and all other goods (as defined in Article 9 of the Uniform Commercial Code, as adopted by the State of Connecticut (the "UCC")) from time-to-time sold by Seller to Buyer, and all products and proceeds of the foregoing property, including, without limitation, all accounts, insurance proceeds and all other rights to payment (the "Collateral"). Buyer authorizes the Seller to prepare and file financing statements covering all or any portion of the above collateral with any filing office selected by Seller. Upon any default of Buyer in respect of Obligation, Seller shall have all rights of a secured creditor under the UCC and under any other applicable law.

8. TERMINATION. This Agreement may not be terminated unless agreed to in writing by Seller and Buyer.

9. REPRESENTATIONS AND WARRANTIES. SELLER PROVIDES THE GOODS, INCLUDING BUT NOT LIMITED TO ANY SPARE PART(S), MANUAL(S) AND/OR INSTRUCTIONAL MATERIAL(S) PURSUANT TO THIS ORDER "AS IS." ANY WARRANTY OR WARRANTIES PROVIDED BY THE MANUFACTURER(S) OF THE GOODS (collectively, the "Manufacturers") IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, NON-INFRINGEMENT, OR ARISING FROM ANY COURSE OF DEALING, USAGE, OR TRADE PRACTICE. Seller shall bear no responsibility for contents or errors in any manuals, instructions or other information supplied to the Seller by the Manufacturers and provided to Buyer by Seller with the Goods.

10. NOTICE. Any notices required or permitted to be given hereunder shall be in writing and shall be deemed to be duly given when received if sent by a recognized overnight carrier to each Party's address as stated on this Order, when delivered by hand, or when transmitted by facsimile transmission if the transmittal report document indicates that the facsimile was sent successfully.

11. REMEDIES. Remedies set forth are exclusive. Neither Party shall be liable for consequential, punitive or exemplary damages, or loss profits or revenue.

12. DISPUTE RESOLUTION AND GOVERNING LAW. The terms of this Order shall be governed by the laws of the State of Connecticut, to the exclusion of its choice of law rules. Seller and Buyer submit to the non-exclusive jurisdiction of any state or federal court located in the State of Connecticut. To the extent permitted by applicable law, any and all actions brought by Buyer against Seller pursuant to the terms of this Agreement shall be commenced within one (1) year of written notice by Buyer to Seller of the dispute(s) that is/are the subject of the action, said written notice to be provided by Buyer to Seller within one hundred eighty (180) days of the shipment date specified herein. THE PARTIES HEREBY WAIVE ANY RIGHTS TO A JURY TRIAL.

13. SEVERABILITY. In the event provision or clause of the Order conflicts with governing laws or if a court of competent jurisdiction holds invalid provision or clause of this Agreement, such provision or clause shall be deemed to be modified to reflect as nearly as possible the Parties' intent. The remainder of this Agreement shall remain in full force and effect so long as the terms of the remainder do not render the Agreement manifestly unjust to either Party.

14. SURVIVAL. The provisions of the Agreement, which by their very nature would continue beyond the termination, cancellation, or expiration of the Order shall continue as valid and enforceable rights and obligations of the Parties and survive termination, cancellation, or expiration of the Order.

15. FORCE MAJEURE. Neither Party shall be liable for a delay in its performance of its obligations and responsibilities under this Agreement due to causes beyond its control, including not limited to war, strikes or lockouts, embargo, national emergency, insurrection or riot, acts of the public enemy, acts of terrorism, fire, flood, other natural disaster, or any and all delays or failures by the Manufacturers or any of Seller's other vendors, provided that said Party has taken reasonable measures to notify the other in writing of the delay.

16. ENTIRE AGREEMENT. This Order and Quote hereto together constitutes the entire agreement between Buyer and Seller, and supersedes all, whether written or oral, communications, representations, negotiations, or agreements pertaining to the Goods. This Agreement may only be amended by a writing signed by both Parties. In the event that any terms of the Agreement conflict with those of any other document, this Agreement's terms shall control.

17. WAIVER. The waiver by Buyer or Seller of any notice requirement or any breach of any requirement or obligation under this Agreement shall not be deemed to be a waiver of any subsequent breach of the same requirement or obligation, or a waiver of any other requirement or obligation stated herein.

Pricing Quote

Quote #: 97065-1001
Contract #: 031121-TTC

Date Quoted: November 11, 2024
Quote Expires: December 11, 2024

Prepared For:

Ryan McNarmara
Waterford Recreation and Park
15 Rope Ferry Road
Waterford, CT 06385
860 444 5881

Prepared By:

Turf Products LLC
Brian Pope
157 Moody Road
Enfield, CT 06082
Phone: 860-395-6936

Customer's Sourcewell Membership ID:

Thank you for the opportunity to quote the following Ventrac product(s) for your review. I have added the items that we feel would best serve your needs. Please feel free to contact me with any questions.

QTY	Model #	Description	Sourcewell	Total
1	EA600 (39.55460)	Attachment: AERA-VATOR EA, EA600 Aera-vator	7,304.80	7,304.80
1	70.4161	Accessory: 12V SWITCH & PLUG Kit, 12V Front 4520/4500	354.20	354.20
1	70.8014	Accessory: Kit, Opt Roller EA	317.40	317.40

Subtotal 7,976.40

CHARGES

Other Charge: FREIGHT & SET UP (5%) +398.82

TOTAL USD $ 8,375.22

Town Of Waterford

Attn: Josh

Kahn Tractor Equipment, Inc.
520 Pond Road
P. O. Box 38
North Franklin, CT 06254
860-642-7596
www.kahntractor.com
State Contract 17PSX0118

11/12/2024

Sales Quote
Peter Bezanson
860-213-1840

Qty	Tag #	Description	List Price	Discount	Less	Total
					0	0.00
1		Bwise EDB28-15 Deck Over Trailer	14,950.00	10%	1495	13,455.00
1		ST235/80R16 Spare Tire	280	10%	28	252.00
1		Spare tire mount	126	10%	12.6	113.40
1		Wood Filled Ramps	294	10%	29.4	264.60
16		D-Rings	640	10%	64	576.00
1		48" underbody tool box	630	10%	63	567.00
			0	10%	0	0.00
			0	10%	0	0.00
			0	10%	0	0.00
				10%	0	0.00
				10%	0	0.00
				10%	0	0.00
				10%	0	0.00
				10%	0	0.00
				10%	0	0.00
		TOTAL				15,228.00

This Order is valid only when signed and accepted by the Dealer.

Buyer:_____ Dealer:_____

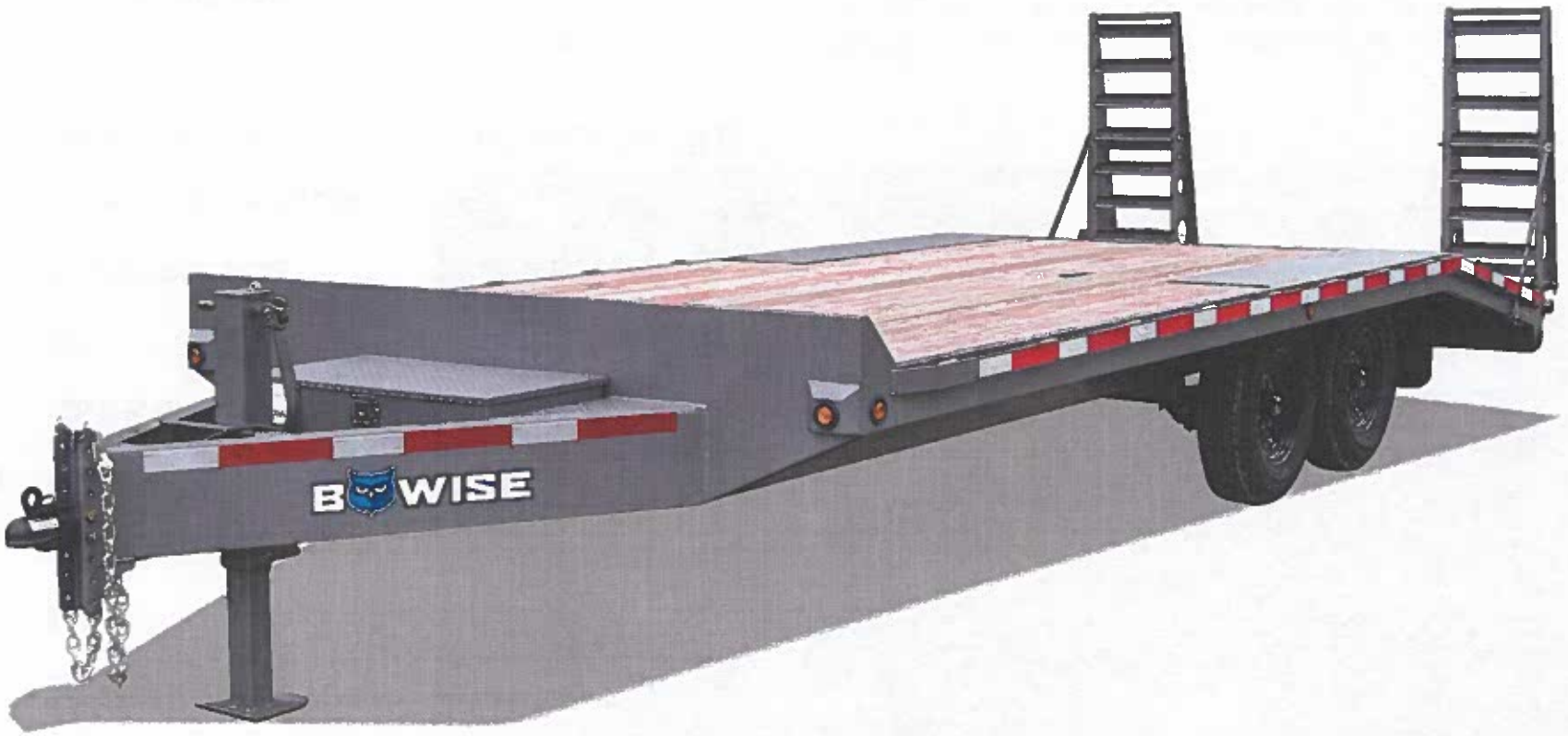
Quote valid until:__12/31/2024_____

BWISE TRAILERS

EHD15

With added deck width and ground clearance, the EHD Channel Frame Deckover Equipment Trailer models are perfect when both added ground clearance and added deck width are needed to haul your cargo.

15.4K Deckover Equipment Trailer



GVWR	LENGTH	DECK/BED WIDTH	COUPLER TYPE
15,400#	20', 24', 28'	102"	2 5/16" Adjustable Coupler

EHD15

15.4K Deckover Equipment Trailer

STANDARD FEATURES

LENGTH	20', 24', 28'
WIDTH	102"
FRAME	10" Channel
CROSSMEMBER	3" Channel
FLOORING	DURA Color Pressure Treated
FENDERS	N/A
RAMPS	5' Lay Flat Wedge Ramps
JACK	12K Spring Loaded Drop Leg Jack
AXLES	7,000 lb. Premium Axles
SUSPENSION	5-Leaf Slipper
TIRES	ST235/80R16 10 ply Radial
TOOLBOX	Lockable Tool Box in Tongue
TAIL	5' Dove Tail



OPTIONAL FEATURES

- 10" Hydraulic Dove
- 5' Pop Up Dove
- Adjustable Pintle Ring
- Aluminum Wheels
- Blackwood Decking
- D Rings
- Electric/Hydraulic Brakes
- Flat Deck
- Full Width Ramps
- G ply Tire Upgrade
- Gooseneck
- No Ramps
- Spare Tire
- Spare Tire Mount
- Split Landscape Ramps
- Underbody Tool Box (24", 36", 48")
- Winch Mount Plate
- Wood Filled Ramps

STANDARD COLORS AVAILABLE

WHITE
BLUE
RED
ORANGE
BLACK
DESERT TAN
HAMMERTONE GRAY
IMPLEMENT YELLOW
IMPLEMENT B...
LIME GREEN
DARK GREEN
YELLOW
HAMMERTONE BLACK

BWISETRAILERS.COM

...ur site for additional specifications

WATERFORD POLICE DEPARTMENT
41 AVERY LANE
WATERFORD, CT 06385-2819

Marc Balestracci
Police Chief

(860) 442-9451 TEL
mbalestracci@waterfordct.org

of 335,160 miles. This is a patrol vehicle and is therefore on a five year replacement interval. The current Fleet Plan doesn't show a replacement date for this vehicle, however in keeping with the five year interval it would be up for replacement in FY 26. At this time we are requesting that this vehicle be replaced in FY 26 in accordance with the replacement interval, as well as due to the mileage, hours and repair costs. The projected cost to replace this vehicle with another Chevrolet Tahoe PPV would be $86,294. The projected cost includes decals, emergency lighting/siren equipment, in-car camera equipment, and the installation of that equipment.

Car #15- An unmarked 2017 Chevrolet Silverado with 5,484 hours, 69,465 miles, and $6,823.46 in repair costs. This vehicle is no longer covered by the factory warranty. This vehicle was originally on the Fleet Plan as being up for replacement in FY 25, however it was pushed out to FY 26. This vehicle doesn't have high miles, however it has high repair costs. At the time of this writing it is having the transmission replaced at a cost of $5,789.76 (not included in above figure). This vehicle is currently assigned to the Traffic Office and is on an eight year replacement interval. This vehicle was originally acquired for transporting/towing equipment and traffic enforcement. With the creation of the new traffic unit, a greater emphasis has been placed on traffic enforcement. We are requesting that this vehicle be replaced with a Chevrolet Silverado PPV, which unlike the current vehicle, is a "Police Purpose Vehicle" that is pursuit rated and better equipped for traffic enforcement. It would also still be able to transport/tow equipment. The projected cost to replace this vehicle with a Chevrolet Silverado PPV is $85,547. The projected cost includes emergency lighting/siren equipment, in-car camera equipment, and the installation of that equipment. Sgt. Farrior, our Fleet Manager for the department, spoke with the Senior Mechanic at the town garage and was advised that if this vehicle were to be replaced, it would be beneficial to replace A18, which is a 2006 Ford Crown Victoria that is used by the mechanics, with this truck. That is a non-replaceable vehicle on the Fleet Plan.

Car #29- An unmarked 2014 Chevrolet Caprice with 4,828 hours, 119,605 miles, and $5,418.36 in repair costs. This vehicle is no longer covered by the factory warranty. This vehicle was originally on the Fleet Plan as being up for replacement in FY 22, however it was pushed out to FY 2026. This vehicle was most recently used by police recruits attending the commuter academy. It will no longer be used for that as we will have a newer vehicle with less miles for the recruits. This replacement will be used as a patrol vehicle for the patrol Sergeants. The patrol Sergeants currently share one vehicle and it runs three shifts per day, seven days per week, 365 days per year. The current supervisor vehicle has only been in service for eight months and has already accumulated over 25,000

WATERFORD POLICE DEPARTMENT
41 AVERY LANE
WATERFORD, CT 06385-2819

Marc Balestracci
Police Chief

(860) 442-9451 TEL
mbalestracci@waterfordct.org

To: Finance Director, Kim Allen
Cc: First Selectman Rob Brule
From: Marc Balestracci, Chief of Police
Date: October 28, 2024
Re: Police Fleet Management Plan Request FY26

The police department is requesting the following vehicles be replaced in FY 2026:

***It should be noted that these vehicles will remain in service for at least twelve more months. During this time patrol vehicles will accumulate approximately 25,000 additional miles and admin vehicles will accumulate approximately 7,000 additional miles. Patrol vehicles are the traditional police vehicles which have multiple officers assigned to them and are driven daily on multiple shifts. Admin vehicles are assigned to one officer and are used by detectives or members of the administration. The factory powertrain warranty for these vehicles is 5 yrs/100,000 miles. The projected replacement costs were determined by using the cost to replace similar vehicles in FY 2025. Three percent was added to the cost to adjust for inflation. The listed repair cost reflects all repairs that were completed as well as preventative maintenance and tires. See attached documents for a detailed cost break down.**

Car #1- An unmarked 2020 Chevrolet Tahoe PPV with 13,409 hours, 109,990 miles, and $17,734.24 in repair costs. This vehicle is no longer covered by the factory warranty. It should be noted that General Motors advises one hour of engine wear is equivalent to approximately 30 miles of driving. Using these figures, this vehicle has the equivalent of 402,270 miles. This is a patrol vehicle and it is therefore on a five year replacement interval. The current Fleet Plan doesn't show a replacement date for this vehicle, however in keeping with the five year interval it would be up for replacement in FY 26. At this time we are requesting that this vehicle be replaced in FY 26 in accordance with the replacement interval, as well as due to the mileage, hours and repair costs. The projected cost to replace this vehicle with another Chevrolet Tahoe PPV would be $86,294. The projected cost includes emergency lighting/siren equipment, in-car camera equipment, and the installation of that equipment.

Car #8- A marked 2020 Chevrolet Tahoe PPV with 11,172 hours, 84,168 miles, and $12,465.64 in repair costs. This vehicle is no longer covered by the factory warranty. It should be noted that General Motors advises one hour of engine wear is equivalent to approximately 30 miles of driving. Using these figures, this vehicle has the equivalent

WATERFORD POLICE DEPARTMENT
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Marc Balestracci
Police Chief

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miles. By designating a second Sergeants vehicle, we would be reducing the wear and tear on one vehicle and dividing the miles over two vehicles. This would ensure that the vehicles remain in service for the duration of the five year replacement interval with less maintenance required. The projected cost to replace this vehicle with a Chevrolet Tahoe PPV is $86,294. It would be replaced with a Tahoe as the Caprice is no longer in production. The projected cost includes the decals, emergency lighting/siren equipment, in-car camera equipment, and the installation of that equipment.

Thank you for any consideration.

Thank you,

Marc Balestracci
Chief of Police
Waterford Police Department

COST BREAKDOWN FY '26

CHEVROLET TAHOE PPV PATROL VEHICLE (CAR #'s 1,8,29)

CAR-	$53,000
EQUIPMENT-	$18,217
INSTALL-	$5,495
LETTERING-	$725
IN-CAR CAMERA-	$6,343
TOTAL –	$83,780
ADJUSTED 3% FOR INFLATION-	$86,294

*Amounts obtained from the cost to purchase/equip/build patrol vehicles in summer of 2024

CHEVROLET SILVERADO PPV PATROL VEHICLE (CAR #15)

CAR-	$53,000
EQUIPMENT-	$18,217
INSTALL-	$5,495
IN-CAR CAMERA-	$6,343
TOTAL-	$83,055
ADJUSTED 3% FOR INFLATION-	$85,547

* Amounts obtained from the cost to purchase/equip/build patrol vehicles in summer of 2024

*At of the time of this writing Chevrolet hasn't released pricing for the 2025 models. I consulted with the dealer that we obtain our Chevrolets from (Northwest Hills) and he stated a safe price, which he characterized as a high projection, would be $53,000.

EJT
J-5

TOWN OF WATERFORD

VEHICLE REPAIR HISTORY REPORT

FACILITY 00001

DATE 10/2 /2024 02 22 p m

STARTING VMRS CODE 000-000-000
ENDING VMRS CODE 999-999-999

DATE FIRST
DATE LAST

VEHICLE car15
VEHICLE car15

METER: STANDARD — SUBTOTALS OF VMRS CODES FOR DIVISION > AL — PERIOD: LIFE

VMRS	CODE	QUANTITY	LABOR HRS	LABOR COST	PARTS COST		TOTAL COST	PERCENT	TOT COST / METER
001	A/C, HEAT, VENTILATION	1	0 00	0.00	260.46		260.46	5.66%	0 00498
032	CRANKING SYSTEM	1	1.00	37.76	295.01		332.77	7.24%	0.00636
042	COOLING SYSTEM	1	0.00	0.00	358.33		358.33	7.79%	0.00685
066	PREVENTIVE MAINTENANCE	11	37.50	1129.59	2061.60		3191.19	69.41%	0.06102
099	ROAD CALL TRAVEL TIME	5	14.00	390.94	64.20		455.14	9.90%	0.00870
	TOTALS:	19	52.50	1558.29	3039.60	TOT:	4597.89	100 00%	0.08791

* Repair Costs for Car #15 which occurred prior to the implementation of Fleetio

3039.60
+ 1633.38 → Fleetio
2150.48

TOTAL → 6,823.46

TOWN OF WATERFORD

VEHICLE REPAIR HISTORY REPORT

FACILITY: 00001

1-32/RRV PAGE: 1

DATE: 10/23/2024 07:32 a.m.

STARTING VMRS CODE: 000-000-000
ENDING VMRS CODE: 999-999-999

DATE: FIRST
DATE: LAST

VEHICLE:: CAR8
VEHICLE: CAR8

METER: STANDARD				SUBTOTALS OF VMRS CODES FOR DIVISION > AL			PERIOD: LIFE		
VMRS CODE		QUANTITY	LABOR HRS	LABOR COST	PARTS COST		TOTAL COST	PERCENT	TOT COST /METER
013	BRAKES	1	1.00	39.64	447.42		487.06	7.88%	0.01098
015	STEERING	1	0.00	0.00	0.00		0.00	0.00%	0.00000
017	TIRES,TUBES,LINERS	4	2.00	58.19	787.62		845.81	13.68%	0.01907
034	LIGHTING SYSTEM	2	1.30	38.28	502.62		540.90	8.75%	0.01219
052	ELECTRICAL ACCESSRES	1	0.50	13.48	0.00		13.48	0.22%	0.00030
066	PREVENTIVE MAINTENANCE	11	32.00	1013.77	3082.18		4095.95	66.24%	0.09234
099	ROAD CALL TRAVEL TIME	2	3.00	71.40	129.01		200.41	3.24%	0.00452
	TOTALS:	22	39.80	1234.76	4948.85	TOT:	6183.61	100.00%	0.13941

Repair costs for Car 8 pre 2022

4948.85
+ 861.75
4442.56
2212.48

Fleetio

TOTAL → $12,465.64

TOWN OF WATERFORD

VEHICLE REPAIR HISTORY REPORT

FACILITY: 00001

STARTING VMRS CODE: 000-000-000
ENDING VMRS CODE: 999-999-999

DATE: FIRST
DATE: LAST

VEHICLE:: CAR1
VEHICLE: CAR1

METER: STANDARD — SUBTOTALS OF VMRS CODES FOR DIVISION > AL — PERIOD: LIFE

VMRS CODE		QUANTITY	LABOR HRS	LABOR COST	PARTS COST		TOTAL COST	PERCENT	TOT COST / METER
013	BRAKES	2	2.50	59.50	273.37		332.87	4.68%	0.00567
017	TIRES,TUBES,LINERS	4	3.50	96.42	1032.08		1128.50	15.85%	0.01923
018	WHEELS RIMS,HUBS,BEARI	1	2.50	59.50	63.88		123.38	1.73%	0.00210
034	LIGHTING SYSTEM	2	1.30	49.65	24.88		74.53	1.05%	0.00127
042	COOLING SYSTEM	3	10.00	269.68	580.48		850.16	11.94%	0.01449
051	GENERAL ACCESSORIES	1	0.00	0.00	0.00		0.00	0.00%	0.00000
066	PREVENTIVE MAINTENANCE	17	43.50	1337.02	3072.52		4409.54	61.94%	0.07515
099	ROAD CALL TRAVEL TIME	1	3.00	71.40	129.01		200.41	2.81%	0.00342
	TOTALS:	31	66.30	1943.17	5176.22	TOT:	7119.39	100.00%	0.12134

Repair costs for Car 1 pre 2022

5176.22
+ 1412.50
3952.37
7193.15

TOTAL → $17,734.24

Fleetio

TOWN OF WATERFORD

VEHICLE REPAIR HISTORY REPORT

FACILITY: 00001

DATE: 10/23/2024 07:30 a.m.

STARTING VMRS CODE: 000-000-000
ENDING VMRS CODE: 999-999-999

DATE: FIRST
DATE: LAST

VEHICLE: CAR29
VEHICLE: CAR29

METER: STANDARD		SUBTOTALS OF VMRS CODES FOR DIVISION > AL				PERIOD: LIFE		
VMRS CODE		QUANTITY	LABOR HRS	LABOR COST	PARTS COST	TOTAL COST	PERCENT	TOT COST /METER
001	A/C, HEAT, VENTILATION	1	0.00	0.00	150.90	150.90	2.98%	0.00143
022	AXLE DRVN REAR	1	0.50	13.18	67.34	80.52	1.59%	0.00076
051	GENERAL ACCESSORIES	1	1.00	26.36	26.30	52.66	1.04%	0.00050
066	PREVENTIVE MAINTENANCE	18	51.00	1339.95	2169.45	3509.40	69.27%	0.03325
099	ROAD CALL TRAVEL TIME	3	10.00	269.50	1003.40	1272.90	25.12%	0.01206
	TOTALS:	24	62.50	1648.99	3417.39	TOT: 5066.38	100.00%	0.04801

Repair costs for Car 29 pre 2022

3417.39
+ 1879.99
120.98

TOTAL → $5,418.36

Total Cost Trend

Town of Waterford - Public Works

42 records

Report generated on 10/07/2024 9:23 PM by Andrew Farrior

Filters

Time Frame: Aug 1, 2015 - Oct 7, 2024 Vehicle Groups: Police

- 2015: $0.00
- 2016: $0.00
- 2017: $0.00
- 2018: $0.00
- 2019: $0.00
- 2020: $0.00
- 2021: $0.00
- 2022: $7,963.17
- 2023: $73,155.23
- 2024: $58,960.96

Repair costs in Fleetio
(software the town started using in 2022)

Vehicle	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ATV1	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$283.72	$0.00
ATV2	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
ATV3	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
CAR1	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,412.50	$3,952.37	$7,193.15
CAR10	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$608.41	$3,995.44	$3,276.93
CAR11	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$306.33	$3,149.67	$2,300.38
CAR12	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
CAR13	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$585.62	$5,890.09	$2,428.90
CAR14	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$241.16
CAR15	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,633.38	$2,150.48

Vehicle	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CAR16	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$432.91
CAR17	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$149.96
CAR18	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3,031.49	$5,117.84
CAR19	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$4,965.01	$2,259.13
CAR2	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$4,389.28	$1,540.12
CAR20	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$185.17	$198.44
CAR21	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$39.65	$403.70	$696.94
CAR22	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$9,991.56	$897.59
CAR23	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$276.04	$523.16
CAR24	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$317.45	$895.52
CAR25	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$191.77
CAR26	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$145.31	$191.24
CAR27	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$165.10	$147.05	$352.30
CAR28	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$280.61	$202.60	$1,126.84
CAR29	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,879.99	$120.98
CAR3	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$915.27	$1,630.97	$8,750.53
CAR30	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$293.79	$315.39	$613.28
CAR31	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$2,215.45	$404.29
CAR34	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$820.40	$730.20
CAR4	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$382.53	$2,646.34	$2,916.56
CAR5	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$220.31	$2,939.25	$1,140.03
CAR6	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$2,952.55
CAR7	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

Vehicle	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CAR8	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$861.75	$4,442.56	$2,212.48
CAR9	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$391.31	$3,310.49	$2,746.30
CP1	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$261.82
OLD CAR12	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$657.10	$3,766.19	$1,821.28
OLD CAR2	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$870.50	$492.33
OLD CAR7	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$842.89	$5,184.38	$1,492.76
PD1	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PD2	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
PD800	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$173.99	$140.81

GATES GMC - NISSAN

143 Boston Post Rd.
P.O. BOX 130
NORTH WINDHAM, CT 06256
(860) 456-0055
(860) 456-4855 DIRECT LINE
Home of the "Wholesale Parts Express"
TOLL FREE: (800) 913-3030
FAX: (860) 465-2718
Email: parts@gatesgmcnissan.com
www.gatesgmcnissan.com

OEC repairlink

CCC Parts

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GMC

NISSAN

GATES GETS IT !!

SOLD TO
TOWN OF WATERFORD

ATT: ROSEANN (860) 444-5842
PHONE: (860) 444-5867 **INV# Q00404**
QUOTE ONLY **CHARGE**
WATERFORD CT 06385 NAD# 001287 M69 53 CI
PO# QUOTE MF404/389 W74 10/09/24
ROUTE 52 TAX# 054!599-000 269 15:39:36

PART NUMBER	DESCRIPTION	QTY	LIST	SELL	BIN	EXT SELL
000019431764	REMFG-REMAN	1	4401.56	3725.00	TRL4	3725.00
000015077362	SEAL	1	17.75	13.31	27P	13.31
000015035747	SEAL	1	19.70	14.78	27I	14.78
000015032594	NUT	6	6.00	4.50	73A	27.00
000086816628	GASKET	1	12.89	9.67	88A	9.67
040019431764	REMFG-CORE	1	2000.00	2000.00	NONSTK	2000.00

Pending Transmission Repair
for Car #15

SUBTOTAL 5789.76
TAX .00
TOTAL LINES 6 **QUOTE ONLY** 5789.76
*** PLEASE CORES MUST BE DRAINED & RETURNED IN ORIGINAL BOX
SPECIAL ORDERS SUBJECT TO RETURN FEE NO OPEN OR DEFACED PKG EXCEPT
PAGE 001 OF 001 YOUR ORDER WAS FILLED BY **ARIANNA A IZZO**

PLEASE INSPECT ALL ITEMS. NO DAMAGE CLAIMS AFTER DELIVERY.

TERMS
NO RETURNS ON SPECIAL ORDER OR ELECTRICAL PARTS
NO PARTS MAY BE RETURNED 10 DAYS AFTER DATE OF PURCHASE
35% HANDLING CHARGE ON RETURNED PARTS
NO REFUNDS WITHOUT THIS INVOICE
COPY OF ORIGINAL INVOICE REQUIRED
ALL BUMPER COVERS MUST BE INSPECTED AT THE TIME OF PICKUP/DELIVERY. NO DEALER RETURNS ON BUMPER COVERS.

X _____
RECEIVED BY

CUSTOMER

ON LINE COMPUTER INVOICING BY IADS

critical
SIGNS AND MORE
www.Critical-Signs.com

tel. 860.443.7446
fax. 860.437.7444
1068 Hartford Turnpike
Waterford, CT 06385

Date	Invoice #
1/30/2024	30638

Waterford Police Department
41 Avery Lane
Waterford CT 06385

P.O. No.

Due Date
2/29/2024

Quantity	Description	Rate	Amount
5	Ford Explorer vehicle to have complete police lettering package- no wrapping #9 #7 #12 #17 #18	725.00	3,625.00

* Vehicle lettering
@ 725 per vehicle

Subtotal	$3,625.00
Sales Tax (6.35%)	$0.00
Total	$3,625.00
Payments/Credits	$0.00
Balance Due	$3,625.00

I/we agree to a service charge of 2% per month on all accounts in default and to maxium legal interest until paid

Phone: 860-443-7446
Fax: 860-437-7444

QUOTE-2786574

MOTOROLA SOLUTIONS







WATERFORD POLICE DEPT

09/11/2024

The design, technical, pricing, and other information ("Information") furnished with this submission is confidential proprietary information of Motorola Solutions, Inc. or the Motorola Solutions entity providing this quote ("Motorola") and is submitted with the restriction that it is to be used for evaluation purposes only. To the fullest extent allowed by applicable law, the Information is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the Information without the express written permission of Motorola.
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In Car Camera Equip - $6,343 per vehicle

MOTOROLA SOLUTIONS

QUOTE-2786574

09/11/2024

WATERFORD POLICE DEPT
41 AVERY LN
Waterford, CT 06385

Dear Andrew Farrior,

Motorola Solutions is pleased to present WATERFORD POLICE DEPT with this quote for quality communications equipment and services. The development of this quote provided us the opportunity to evaluate your requirements and propose a solution to best fulfill your communications needs.

This information is provided to assist you in your evaluation process. Our goal is to provide WATERFORD POLICE DEPT with the best products and services available in the communications industry. Please direct any questions to Christopher Drake at Christopher.Drake@motorolasolutions.com.

We thank you for the opportunity to provide you with premier communications and look forward to your review and feedback regarding this quote.

Sincerely,

Christopher Drake
Regional Sales Manager

MOTOROLA SOLUTIONS

QUOTE-2786574

WATERFORD POLICE DEPT
41 AVERY LN
Waterford, CT 06385
US

WATERFORD POLICE DEPT
41 AVERY LN
Waterford, CT 06385
US

09/11/2024
12/10/2024

Christopher Drake
Regional Sales Manager
Christopher.Drake@
motorolasolutions.com
603-205-1845

WATERFORD POLICE DEPT
Andrew Farrior
afarrior@waterfordct.org
(860) 442-9451 ext 2392

Summary:

Any sales transaction resulting from Motorola's quote is based on and subject to the applicable Motorola Standard Terms and Conditions, notwithstanding terms and conditions on purchase orders or other Customer ordering documents. Motorola Standard Terms and Conditions are found at www.motorolasolutions.com/product-terms.

	M500				
1	WGB-0189A	MTIK CONF KIT,802.11AC,M500POE,5GHZANT	1	$328.00	$328.00
2	WGP02225-130-KIT2	BRKT4RE DISP/VISTA/CAMVR POST 2020+EXPL	1	Included	Included
3	WGB-0703A	M500 ICV SYSTEM, V300 WIFI DOCK, SPS	1	$6,015.00	$6,015.00
					$7,928.75
					$1,585.75
					$6,343.00(USD)

- Unless otherwise noted, this quote excludes sales tax or other applicable taxes (such as Goods and Services Tax, sales tax, Value Added Tax and other taxes of a similar nature). Any tax the customer is subject to will be added to invoices.
- Unless otherwise noted in this quote / order, installation of equipment is not included.

Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the ""Underlying Agreement"") that authorizes Customer to purchase equipment and/or services or license software (collectively ""Products""). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.

M500 In-Car Video System Solution Description

The M500 In-Car Video System is the first AI-enabled in-car video solution for law enforcement. It combines Motorola's powerful camera technology with our industry-leading digital evidence management software, VideoManager, to deliver high-quality digital evidence and real-time analytics.



The M500 offers the following benefits:

- Delivers exceptionally clear, evidence-grade video, from inside and outside the vehicle
- The M500 has three high-definition cameras, mounted on the front and rear windshield and in the cabin. The front camera has a 4K sensor, with an ultra high-definition recording resolution that captures both wide-angle and focused video streams. The cabin camera's infrared illumination allows backseat recording in total darkness, and a built-in microphone captures audio in the vehicle during recording.
- Works reliably, even in challenging situations
- The cameras and processor are small, rugged devices, easily and securely installed where they do not hinder any line of sight. They are tamper proof and built to withstand significant impact and severe weather conditions. Even if a vehicle is in a serious collision, the Uninterruptible Power Supply automatically kicks in to continue capturing evidence for those critical extra seconds.
- Protects video data, whether in transit or at rest
- The powerful core processor, with a 1 terabyte drive, securely stores all video footage, encrypting the data to prevent cyber threats.
- Provides users a reliable, easy-to-learn system
- Ease of use is at the heart of the M500. The interface is highly intuitive, and any feature can be accessed with no more than three touches of the control panel. Users can start a recording manually or program sensors to activate a recording when triggered – such as a siren, blue lights, vehicle speed, crash detection, wireless microphones, and more. After the recording starts and is categorized, everything is automated, including the uploading of footage to the system's evidence management software, VideoManager. There, recordings are easily managed, redacted, organized, and shared with all authorized parties, including first responders, fleet managers, investigative officers, supervisors, prosecutors, and legal teams.
- Increases efficiency
- The system's software makes it easy to search and analyze video footage, which can save countless hours for users and minimize human error.
- Promotes trust
- By providing a clear record of incidents that occur while officers are on duty, the M500 promotes trust between public safety agents and the communities they serve.
- Integrates seamlessly with other Motorola technologies
- The M500 offers additional benefits when working in conjunction with Motorola's V700 Body-Worn Camera or L5M License Plate Recognition camera and VehicleManager.
  - When used with the V700, the M500 in-car video system triggers the V700 to record at the same time. Officers can focus on the situation at hand, while the cameras – working together as a seamless system – capture synchronized recording from multiple vantage points. The footage is uploaded to and can be reviewed on the same system.

Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the ""Underlying Agreement"") that authorizes Customer to purchase equipment and/or services or license software (collectively ""Products""). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.

- When used with the L5M, both the LPR camera and the M500 feed their collected license plate data into Vigilant VehicleManager and display the information on a single interface. Working together, the systems increase coverage while maintaining ease of use through a shared user interface and database.

The M500 is a reliable and comprehensive mobile video solution that will enhance safety, promote accountability, and improve efficiency. It ensures that you always have the critical information needed for smarter, faster decisions to help keep officers and the communities they serve safe.

Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the ""Underlying Agreement"") that authorizes Customer to purchase equipment and/or services or license software (collectively ""Products""). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.

Motorola Solutions, Inc.
Chris Drake
Date 9/11/2024

Re: QUOTE-2786574

Agency: WATERFORD POLICE DEPT
Total Cost: 6343.00
Contract Reference:

Please be advised that the WATERFORD POLICE DEPT will purchase the goods and/or services offered in your Quote QUOTE-2786574 dated 9/11/2024 2:50 PM. This constitutes a purchase pursuant to the terms of the specified contract below, including any applicable addenda. Terms are NET 30 unless otherwise agreed upon.

Specified Contract: Master Customer Agreement and attached addenda, signed concurrently herewith.

Agency affirms that a purchase order or notice to proceed is not required for contract performance or for subsequent years of service, and acknowledges that pursuant to , the funds for this purchase has been authorized. Customer agrees to appropriate funding in accordance with the contract.

Invoices shall be according to the milestone schedule included in the quote and services agreement, should reference 'QUOTE-2786574 ' and be sent to:

WATERFORD POLICE DEPT
Attn:

The equipment will be shipped to the customer at the following address, and the ultimate destination where the equipment will be delivered to the customer is:

WATERFORD POLICE DEPT
Attn:

Sincerely,

Signature:

Name:

Title:

Email:

Online Terms Acknowledgement

This Online Terms Acknowledgement (this "**Acknowledgement**") is entered into between Motorola Solutions, Inc.("**Motorola**") and the entity set forth in the signature block below ("**Customer**").

1. Online Terms Acknowledgement. The Parties acknowledge and agree that the applicable terms available at https://www.motorolasolutions.com/product-terms are incorporated in and form part of the Parties' agreement as it relates to any Products or Services sold or provided to Customer. By signing the signature block below, Customer certifies that it has read and agrees to the provisions set forth and linked on-line in this Acknowledgement. To the extent Customer is unable to access the above referenced online terms for any reason, Customer may request a paper copy from Motorola. The signatory to this Acknowledgement represents and warrants that he or she has the requisite authority to bind Customer to this Acknowledgement and referenced online terms.

2. Entire Agreement. This Acknowledgement supplements any and all applicable and existing agreements, and supersedes any contrary terms as it relates Customer's purchase of products and services. This Acknowledgement and referenced terms constitutes the entire agreement of the Parties regarding the subject matter hereof and as set out in the referenced terms, and supersedes all previous agreements, proposals, and understandings, whether written or oral, relating to this subject matter.

3. Execution and Amendments. This Acknowledgement may be executed in multiple counterparts, and will have the same legal force and effect as if the Parties had executed it as a single document. The Parties may sign in writing or by electronic signature. An electronic signature, facsimile copy, or computer image of a signature, will be treated, and will have the same effect as an original signature, and will have the same effect, as an original signed copy of this document. This Acknowledgement may be amended or modified only by a written instrument signed by authorized representatives of both Parties.

4. Upon signature, Customer authorizes Motorola to proceed with all deliverables of this order for an order value of 6343.00

5. Purchase Order Requirements (Customer check one only)

☐ Purchase Order is issued and attached.

☐ No Purchase Order is required. Customer affirms that this ordering document is the only notice to proceed required, no further purchase orders will be issued against this order, and that funding has been encumbered for this order in its entirety.

6. Ship to, bill to and Ultimate Destination addresses are provided on the quote , attached to this letter or included on the Purchase Order.

The Parties hereby enter into this Acknowledgement as of the last signature date below.

Motorola Solutions, Inc.	**Customer:** WATERFORD POLICE DEPT
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:

Invoice

COMPETITIVE SERVICE SOLUTIONS LLC.
1265 John Fitch Blvd.
Suite 4 & 5
South Windsor, CT. 06074

Phone: 860-372-4695 Fax: 860-436-3988

Date	Invoice #
8/28/2024	4428

P.O. No.

Remit Address:
21 Concord Circle
Wethersfield CT. 06109

Bill To

Waterford Police Department
41 Avery Lane.
Waterford, CT 06385

Service Date	Item	Description	Qty	Rate	Amount
	Labor-Non Tax ...	Labor Non Tax 2024 Rate Installation of car K9-7, 9,12,17, and 18.To include transfer of (2) LPR systems.	230	95.00	21,850.00
	Shop Supplies	Hardware, connectors, wire, loom, fuses, fuse holders, fabricated material, etc.	5	200.00	1,000.00
	304326	25' ANTENNA CABLE W/CONNECTOR	5	45.00	225.00
	VF4	12volt relay	10	6.00	60.00
	5032BLUESEA	Split Fuse Block	10	75.00	750.00
	5026Bluesea	Blue Sea 12 circuit with neg ground block	1	75.00	75.00
	420639	740-870 low profile antenna	5	54.94	274.70
	C-AP-0325-1	3" ACCESSORY POCKET, 2.5" DEEP	5	53.82	269.10
	CEM16	WeCanX 16 OUTPUT EXPANSION MOD	10	205.92	2,059.20
	60CREGCS	6" ROUND INTERIOR COMPARTMENT DOME LIGHT	5	181.44	907.20

27,470.20 ÷ 5

= $5,494.04
Per Vehicle for
Installation of
Emergency Equipment

Thank you for choosing Competitive Service Solutions LLC. We are committed to providing excellent products and services to our customers. Warranty on all labor provided is covered for (90) ninety days from date work is completed. All material is covered by the manufacturer's warranty.

WWW.COMPETITIVESERVICESOLUTIONS.COM

Subtotal	$27,470.20
Sales Tax (6.35%)	$0.00
Total	$27,470.20

Purchase & Sales Agreement

Emergency Lighting / Siren / Weapon Storage
$ 18,216.33 per vehicle

750 Newfield St.
Middletown, CT 06457
P: 860-788-6816

CUSTOMER

Company/Dept:	Waterford Police Department	Date:	February 7, 2024
Contact:	Sgt. Andrew Farrior	Valid for:	60 Days*
Street Address:	41 Avery Lane	Customer #:	
City, State, Zip:	Waterford, CT	Contract:	22PSX0133
Phone:	860-442-9451 ext 2392	Sales Rep:	Marc Sheehan
E-Mail:			
Job Description:	2023 Ford PIU Patrol Parts Order x 4 SUV's		

PART NUMBER	VEHICLE LINE DESCRIPTION	UNIT PRICE	QTY.	EXTENDED PRICE
MCRNTB	Micron, Blue	$95.77	4	$383.08
MCRNTR	Micron, Red	$95.77	4	$383.08
IONR	ION, Red	$106.14	8	$849.12
IONB	ION, Blue	$106.14	8	$849.12
IONK1B	ION Mounting Bracket	$26.84	16	$429.44
SFIONR	Spitfire ION, Red	$138.47	4	$553.88
SFIONB	Spitfire ION, Blue	$138.47	4	$553.88
MBFX20	Mirror Beams	$295.85	4	$1,183.40
MBI2J	Duo IONS for Mirror Beams	$18.91	8	$151.28
VTX609R	Vertex, Red	$81.60	12	$979.20
VTX609C	Vertex, White	$81.60	8	$652.80
VTX609B	Vertex, Blue	$81.60	4	$326.40
IB2DEDE	54" Liberty II Lightbar	$3,495.00	4	$13,980.00
SA315P	Siren Speaker	$248.83	4	$995.32
SAK66D	Siren Speaker Mounting Bracket	$20.00	4	$80.00
C399	CORE Light/Siren Controller	$843.63	4	$3,374.52
C399K4	OBDII Canport	$37.82	4	$151.28
CV2V	Vehicle to Vehicle Synch Module	$221.43	4	$885.72
CCTL6	Rotary Knob Control Head	$282.43	4	$1,129.72
TLMIR	Mini T-ION, Red	$93.94	4	$375.76
TLMIB	Mini T-ION, Blue	$93.94	4	$375.76
60CREGCS	6" Red/White Dome Light	$153.72	4	$614.88
				$0.00
75458	Streamlight Stinger DS Flashlight	$235.49	4	$941.96
				$0.00
TM1133INUT	Tremco Anti Theft Device	$183.75	4	$735.00
				$0.00
T-FDEXRM1-20N-PS-LT	Single Drawer w/Lift Syste & Pushbutton Combo Lock	$3,225.00	4	$12,900.00
				$0.00
PB450L4	Setina Four Light Pushbumper	$973.53	4	$3,894.12
				$0.00
P1000UINT20A	Progard Half Cage System	$2,945.84	4	$11,783.36

				$0.00
CMCB	Mic Clip Bracket	$13.68	8	$109.44
MMSU1	Magnetic Mic Clips	$37.00	8	$296.00
CVS102INUT	Console	$433.44	4	$1,733.76
CADP110	Screen Adapter	$29.52	4	$118.08
CUSB3	Dual USB Charger	$78.62	4	$314.48
CMD119	11' Slide Out	$264.24	4	$1,056.96
CKBM201	Rugged Keyboard Mount and Adapter Combo	$98.64	4	$394.56
CHDM214	Telescoping Pole	$132.48	4	$529.92
CUP21001	Cup Holder	$51.69	4	$206.76
CGX	Charge Guard	$77.04	4	$308.16
CARM108	Arm Rest	$197.74	4	$790.96
CUMM103	Havis Mount	$84.96	4	$339.84
CEB40CCS1P	Mounting Bracket	$26.64	4	$106.56
CAP0645L	Storage Pocket	$129.60	4	$518.40
CEB30XG21P	Radio Bracket	$23.76	4	$95.04
KB-105	Havis Keyboard	$532.80	4	$2,131.20
LPS103	Power Supply	$187.92	4	$751.68
DSPAN12012	Docking Station	$846.00	4	$3,384.00
				$0.00
GK10271UHK	Setina T-Rail Mount W/Universal Lock	$338.43	4	$1,353.72
GK0068E	Setina Blac Rac Weapons Mount w/undersized AR Post	$703.83	4	$2,815.32
				$0.00
				$0.00
				$0.00
			Vehicle Total:	$72,865.32

÷ 4
= 18,216.33
per vehicle

TERMS AND CONDITIONS

Deferrals and Cancellations of Sales Orders In all cases where vehicles, products, and labor are purchased against government and public contracts, the terms and conditions of that contract shall prevail and bind McGovern MHQ. In cases where contract terms on deferral and/or cancellation are not defined, and for non- contract sales, the following McGovern MHQ policy shall prevail.

Deferrals

For this discussion, "deferral" refers to a customer-initiated action to delay the delivery of purchased items* beyond the delivery date confirmed to the customer in writing (Purchase Order confirmation). All deferral requests must be communicated to McGovern MHQ in writing.
McGovern MHQ, at their sole discretion, reserves the right to accept or reject deferral requests. Once the subject item has started the production / fabrication process, delivery deferrals are not allowed - the item will be built, shipped, and billed upon completion. For deferral requests on items not yet in production, McGovern MHQ shall negotiate deferral terms with the customer's purchasing or sourcing authority (not the requisitioner). Consequences of order deferrals may include, but not be limited to, loss of scheduled production timeslot and reallocation of vehicles and/or materials to other active jobs or other customers.

Special Order and Non-Cancellable/Non-Returnable Items (NCNR)

Certain items and material are categorized as "Special Order" or "NCNR." Attempts to cancel shall be handled on an individual basis.
Depending on the stage of production of a special-order item, and the suppliers involved, special order items may incur cancellation charges based on supplier purchase liabilities. McGovern MHQ shall always act in the interest of our customers to minimize or eliminate cancellation charges whenever possible. Special Order items will be identified as such at the time of quoting and order acceptance to assure an understanding of risk to the customer.
NCNR items are not cancellable with our suppliers. McGovern MHQ will make a reasonable attempt to minimize the financial impact of cancelling NCNR items, but no assurance is offered that the customer's purchase liability for these item types can be reduced in any way. NCNR items will be identified as such at the time of quoting and order acceptance to assure an understanding of risk to the customer.

Cancellations

For this discussion, "cancellation" refers to a customer-initiated action to cancel a customer committed order** or any part thereof. All cancellation requests must be communicated to McGovern MHQ in writing. Cancellations will be accepted, without penalty, until the point in time where material has been ordered to support production of the ordered item(s). Once components or material is ordered against a committed customer order, cancellation charges may apply based on supplier purchase liabilities. McGovern MHQ shall always act in the interest of our customers to minimize or eliminate cancellation charges whenever possible. Depending on the type of material/components and the suppliers involved, the range of customer purchase liability can range from complete release of purchase liability, up to and including full liability of the original material cost.

Supplier Failure to Perform

McGovern MHQ shall be held harmless in cases where their suppliers fail to source, build, or deliver quoted or ordered products required to satisfy customer committed orders. McGovern MHQ shall also be held harmless in cases where a supplier discontinues availability of a product, places a product on allocation, or delivery times extend beyond their normal quoted delivery times such that the subject product becomes unavailable, or experiences extended delivery times. In these cases, McGovern MHQ shall offer alternatives, where commercially available, to the customer for consideration as acceptable substitutes.

***Purchased Items**

"Purchased Items" is defined as any item, component, or material required to fulfill a committed customer order.

****Customer Committed Order**

"Customer Committed Order" is defined as any acceptable form of communication that directs McGovern MHQ to produce and sell an item to their customer. Acceptable forms of communication are customer Purchase Orders, quotes that are signed and dated by a customer purchasing authority, Letters of Intent or Letters of Commitment that are signed and dated by a customer purchasing authority, or similar instruments that communicate an intent to purchase.

ORDER ACKNOWLEDGEMENT

By signing this document you are agreeing to the above terms and conditions of this order from McGovern MHQ, Inc.

x

_____

PRINT NAME

x

_____

TITLE

x

_____

SIGNATURE

Andrew Farrior

From: Warren Ford <warren.ford@sullivanautomotive.com>
Sent: Wednesday, September 11, 2024 9:47 AM
To: Andrew Farrior
Subject: Re: Tahoes

CAUTION: This email originated from outside of the organization.
Do not click links or open attachments unless you recognize the sender's email address and know the content is safe.

Good Morning Andrew, Hope all is well. Andrew pricing should be posted middle to end of next week. If you are looking for a number, I would use 53000.00 as a high number. Andrew I do have a couple of Silverado's PPV's in stock in black. That is a full pursuit crew cab short bed pickup.

Warren Ford Jr
Fleet and Municipal Manager
Northwest Hills Dealerships
2065 East Main St
Torrington Ct 06790
203-528-6674

* Chevy Price Projection

From: Andrew Farrior <AFarrior@waterfordct.org>
Sent: Tuesday, September 10, 2024 6:02 PM
To: Warren Ford <warren.ford@sullivanautomotive.com>
Subject: RE: Tahoes

CAUTION: This email originated outside of the organization.
DO NOT click links or open attachments unless you recognize the sender and know the content is safe.

Is the pricing out for the '25 Tahoes yet? If not, how much were the '24's? I'm just trying to do some planning ahead. I'm going to need three next year.

Sergeant Andrew Farrior #S18
Waterford Police Department
41 Avery Lane, Waterford, CT
Office- (860) 442-9451 ext 2392
Fax- (860) 443-3953

From: Andrew Farrior
Sent: Monday, January 22, 2024 5:24 PM
To: 'Warren Ford' <warren.ford@sullivanautomotive.com>
Subject: RE: Tahoes

Nope. I should be good for a bit… knock on wood.

Sergeant Andrew Farrior #S18

FIFTEEN ROPE FERRY ROAD
WATERFORD, CT 06385-2886

PHONE: 860-442-0553
www.waterfordct.org

To: Robert Brule, First Selectman

From: Gary J. Schneider, Director of Public Works

Date: November 15, 2024

Re: FY26 Fleet Replacement Request

The Department has completed the review of the vehicles identified for replacement per the most recent RTM approved plan. Each vehicle due for replacement was reviewed for operational need, maintenance history and planned replacement year.

For FY26, the Department is requesting 6 vehicles at an estimated replacement cost of $1,106,125.

The attached memorandum dated October 30, 2024 from Garon VanOverloop, Lead Mechanic discusses each vehicle the Department is requesting replacement for in FY26 (Attachment 1). I fully support his assessment.

	Quote	Fleet Plan
H12- Mechanics Truck	**$179,288**	$183,795
H14 – International Dump/Plow Truck	**$261,188**	$235,640
H9 - Multi-Purpose Truck	**$165,033**	$150,528
H19 – Pickup Truck	**$61,792**	$65,000
S22 - Refuse Truck	**$412,442**	$350,000
A10 – Ford Escape	**$26,382**	$33,329
Total	**1,106,125**	**$1,018,292**

P12

Please note that although H43DT (Dump Trailer) and H47 (Tractor) are due for replacement in 2026, the Department is recommending that these be moved out an additional year on the replacement schedule.

FIFTEEN ROPE FERRY ROAD WATERFORD, CT 06385-2886

INTER-OFFICE CORRESPONDENCE

DATE: October 30, 2024

TO: Gary Schneider, Director of Public Works

FROM: Garon VanOverloop, Lead Fleet Mechanic

RE: FY26 Fleet Replacement

The Public Works assets listed below are due for replacement in FY26, some being denied replacement in FY23, FY24 & FY25. It is imperative that the town continues to follow the approved fleet replacement plan, and/or all recommendations set forth from myself, in regards to whether an asset can be moved into an upcoming fiscal year for replacement.

The purchasing timeline of vehicles and equipment today has grown substantially. From when a budget proposal is submitted for approval, to when a purchase order is issued and delivery of the vehicle, the average lead time is 2 ½ to 3 years. A refuse truck has a replacement cycle of 7 years. By the time a replacement is delivered, the truck is 10+ yrs. old, well past the effective repair cost timeline. The purchasing timeline of a highway dump/plow truck also mirrors a similar build timeframe as a refuse truck.

H12 is a 2003 FORD F450 ROAD SIDE MECHANICS TRUCK VIN-1FDXF46F63EB1 7892 with 57,426mi, engine hours unavailable. The truck serves the needs of the maintenance shop for performing repairs to remote locations to include road side. H12 has always been garaged with minimal winter storm usage, resulting in less deteriorating than the other trucks in our fleet. We have been able to substitute its replacement for many years so that higher importance trucks could be replaced. Parts are now becoming more and more difficult to locate for this truck, the corrosion to the frame and growing rot/deterioration of the utility body.

H14 is a 2015 INTERNATIONAL 4300 DUMP/PLOW TRUCK, VIN-1HTMMAAL8FH734287 with 46,560 & 5024hrs. Due to the increasing age and deteriorating physical condition, this vehicle needs to remain on the current replacement schedule for FY26 since it was passed over in FY25

H9 is a 2011 INTERNATIONAL 4300 MULTI PURPOSE STAKE BODY, VIN-1HTMMAAL9BH388342 with 106,000mi and 8,200hrs. Due to the increasing age and

deteriorating physical condition, this vehicle needs to remain on the current replacement schedule for FY26 as it was passed over in FY25

S22 is a 2019 PETERBILT 520, REFUSE TRUCK, VIN- 3BPDLJ0X5KF102586 currently with 80,285mi, 10,205hrs. S22 follows the SEVEN year replacement plan with continued deterioration of its physical and mechanical condition. S22 is a daily use refuse vehicle.

H19 is a 2012 FORD F250, PICKUP TRUCK, VIN- 1FTBF2B68CEA59387 with 159,000 miles and 9800 engine hours. This truck is a daily use vehicle for the Public Works Dept. This truck also has the ability to assist in snow removal operations. The body and chassis is severely rusting due to its age and years of winter use.

A10 is a 2011 FORD ESCAPE, midsize SUV, VIN- 1FMCU9C7XBKA75810 with approx. 35,000 miles. With the amount of rust and corrosion to the body and chassis of this vehicle, it could easily be mistaken as a plow truck.

Garon VanOverloop
Lead Fleet Mechanic

DATE: 10/29/2024
TIME: 02:17 p.m.

TOWN OF WATERFORD
VEHICLE REPAIR HISTORY REPORT
FACILITY: 00001

ID: 1-32/RRV PAGE: 1

STARTING VMRS CODE: 000-000-000 DATE: FIRST VEHICLE:: H12
ENDING VMRS CODE: 999-999-999 DATE: LAST VEHICLE: H12

VMRS Code	METER : STANDARD QUANTITY	SUBTOTALS OF VMRS CODES FOR DIVISION > AL LABOR HRS	LABOR COST	PARTS COST	PERIOD : LIFE TOTAL COST	PERCENT	TOT COST /METER
013 BRAKES	1	10.00	238.00	401.51	639.51	5.18 %	0.01186
018 WHEELS,RIMS,HUBS,BEARI	1	0.00	0.00	0.00	0.00	0.00 %	0.00000
024 DRIVE SHAFT(S)	1	6.00	201.84	44.78	246.62	2.00 %	0.00458
032 CRANKING SYSTEM	1	1.00	36.92	254.59	291.51	2.36 %	0.00541
034 LIGHTING SYSTEM	1	0.80	29.08	85.29	114.37	0.93 %	0.00212
053 EXPENDABLE ITEMS	1	2.00	40.94	142.44	183.38	1.49 %	0.00340
066 PREVENTIVE MAINTENANCE	12	61.50	1584.87	1121.53	2706.40	21.93 %	0.05021
071 BODY	1	25.00	793.75	50.00	843.75	6.84 %	0.01565
099 ROAD CALL TRAVEL TIME	35	149.00	3718.14	3595.79	7313.93	59.27 %	0.13568
TOTALS:	54	255.30	6643.54	5695.93 TOT:	12339.47	100.00 %	0.22891

Service History by Vehicle

Town of Waterford - Public Works

2 records

Report generated on 10/29/2024 2:40 PM by Garon VanOverloop

Filters

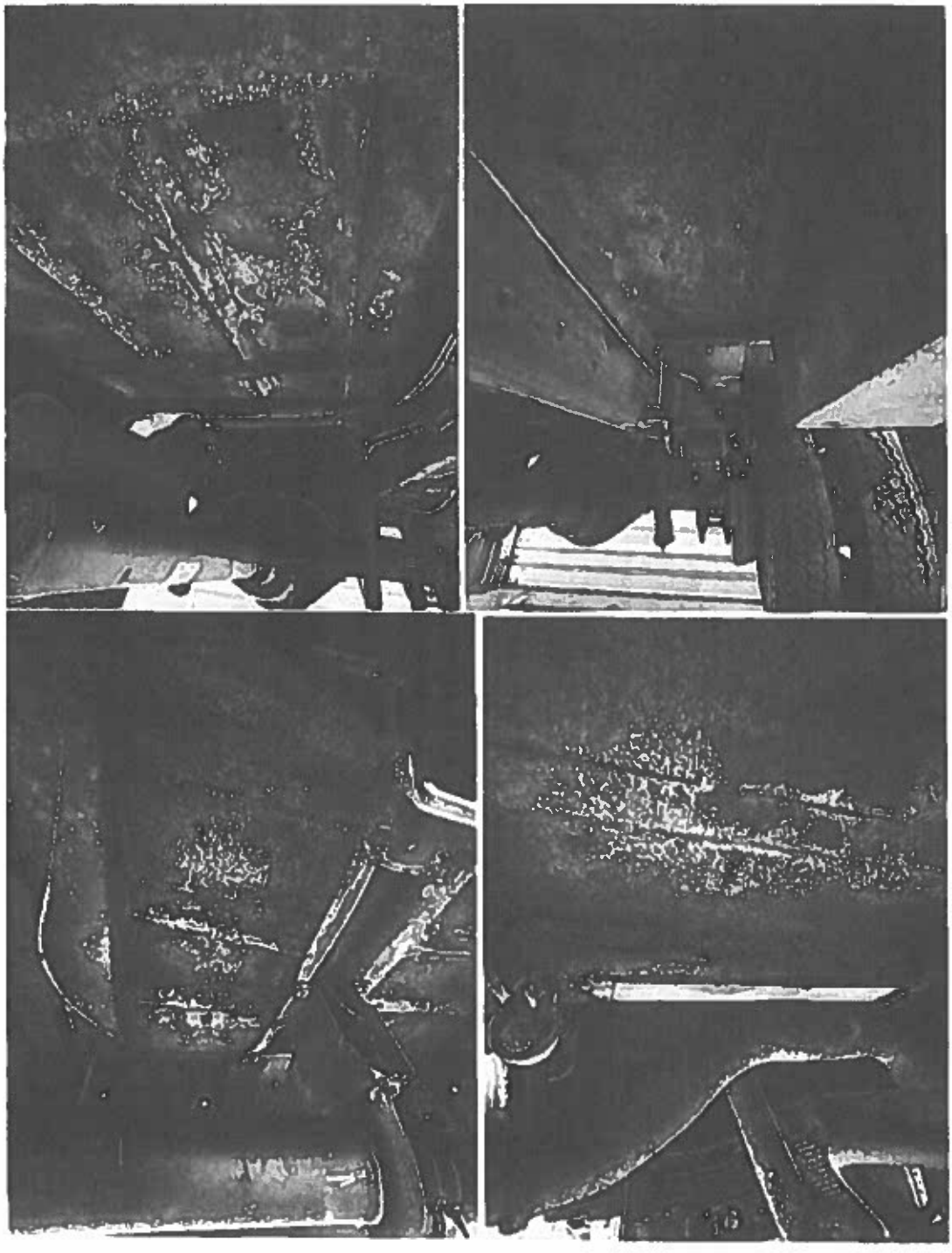
Time Frame: Oct 1, 2022 - Oct 29, 2024 Vehicle: H12

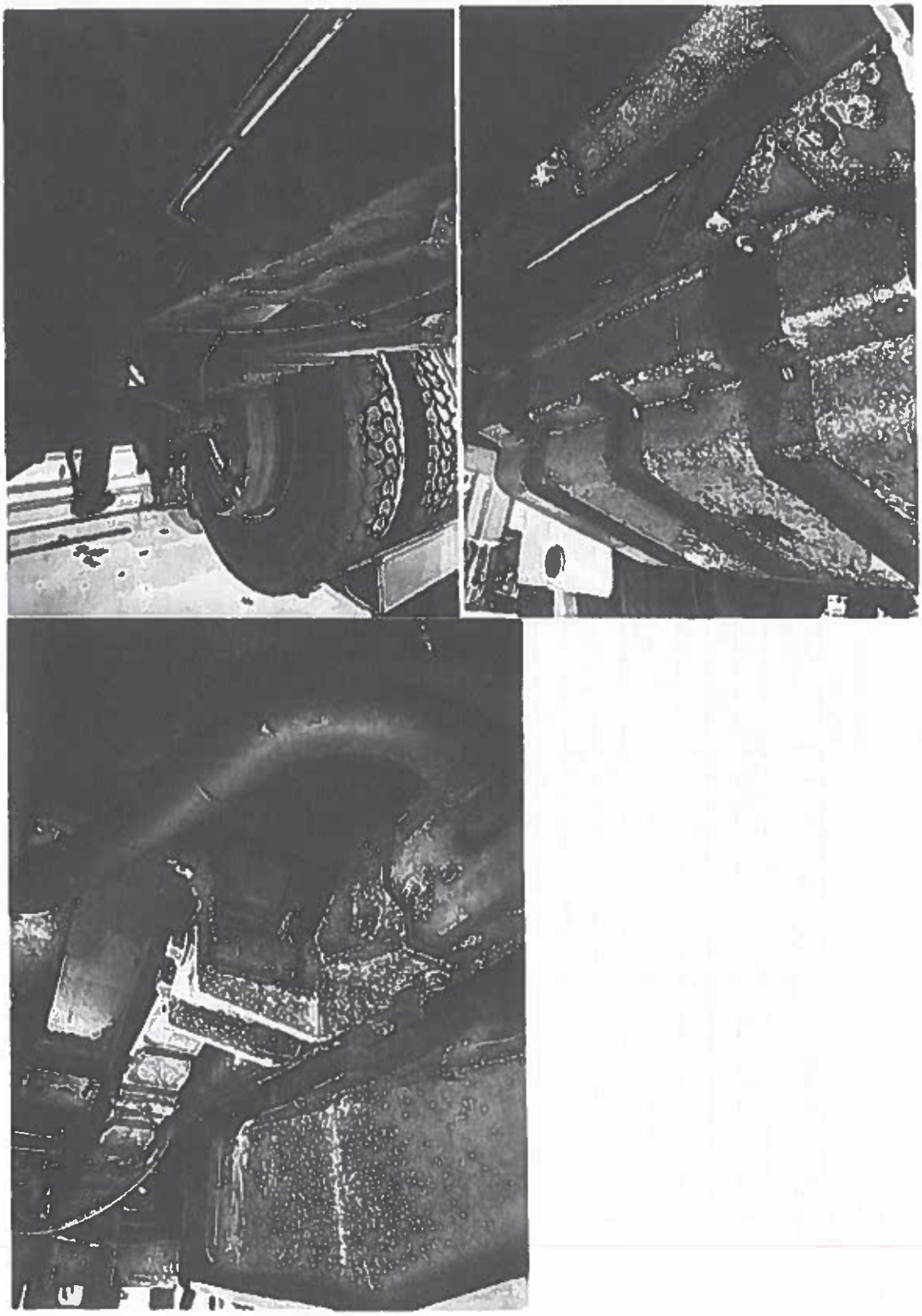
Labor Subtotal	Parts Subtotal	Line Item Subtotal
$528.04	$14.58	$542.62

Vehicle

H12

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task		Parts Subtotal	Line Item Subtotal
19837964	09/15/2023	09/19/2023	$14.58	$106.86	Diagnostics (Unspecified)		$14.58	$106.86
16006653	01/31/2023	02/02/2023	$0.00	$435.76	Welding & Fabrication			$435.76
						Total Amount	$14.58	$542.62





H12

			TASCA FORD	**250 webster square rd Berlin CT 06037**	
F5H	**white**		**Waterford**	**19PSX0161**	
	F-550 4x4			**JOHN BRESLIN**	
	QUOTE		**Cab Chassis**	**Fleet Manager**	
$ 56,673.00			**Nov 1st**	**Connecticut/ Rhode island/ Maine.**	
	OPTION DESCRIPTION	**Upgrades & Options**	**Option pricing**	**Upgrade Cost**	**Sub Total Contract Pricing**
					$ 56,673.00
	All Options	**$ 4,165.00**	**$ 249.90**	**$ 3,915.10**	**$ 3,915.10**
				Total	**$ 60,588.10**
	Hartford truck upfit				**$ 118,700.00**
				per vahicle	**$179,288.10**

OEM discount 6% off of MSRP

Cost plus 5%

H12

CNGP530 VEHICLE ORDER CONFIRMATION 11/01/24 09:18:5
==> Dealer: F1122
2025 F-SERIES SD Page: 1 of
Order No: 0000 Priority: M3 Ord FIN: QS048 Order Type: 5B Price Level: 51
Ord PEP: 660A Cust/Flt Name: WATERFORD PO Number:

		RETAIL	DLR INV			RETAIL	DLR INV
F5H	F550 4X4 CHAS/C	$59420	$56449.00		18000# GVWR PKG		
	169" WHEELBASE			425	50 STATE EMISS	NC	NC
Z1	OXFORD WHITE			43K	PRO POWER ONBRD	985	897.00
A	VNYL 40/20/40			473	SNOW PLOW PREP	250	228.00
S	MED DARK SLATE			512	SPARE TIRE/WHL2	350	319.00
660A	PREF EQUIP PKG			52B	TRLR BRAKE CONT	300	273.00
	.XL TRIM			61J	JACK	NC	NC
572	.AIR CONDITIONER	NC	NC	65Z	AFT AXLE TANK	NC	NC
	.AMFM/MP3/CLK						
99N	.7.3L DEV V8 ENG			TOTAL	BASE AND OPTIONS	65580	60510.00
44G	10-SPD AUTOMATC	NC	NC	TOTAL		65580	60510.00
TGK	225 MAX TRAC	215	195.00	*THIS IS NOT AN INVOICE*			
X8L	4.88 LTD SLIP	395	360.00				
	FRT LICENSE BKT	NC	NC	* MORE ORDER INFO NEXT PAGE *			
18B	PLAT RUNNING BD	320	291.00				

F8=Next
F1=Help F2=Return to Order F3/F12=Veh Ord Menu
F4=Submit F5=Add to Library
6006 - MORE DATA IS AVAILABLE. QC06048

1+12

CNGP530 VEHICLE ORDER CONFIRMATION 11/01/24 09:22:1:
==>
Dealer: F112
2025 F-SERIES SD Page: 2 of
Order No: 0000 Priority: M3 Ord FIN: QS048 Order Type: 5B Price Level: 51
Ord PEP: 660A Cust/Flt Name: WATERFORD PO Number:

		RETAIL	DLR INV		RETAIL	DLR INV
86M	DUAL BATTERY	$210	$191.00			
872	RR CAM & PREP K	415	377.00			
945	SS WHEEL COVERS	500	455.00			
96V	XL CHROME PKG	225	205.00			
	.FOG LAMPS					
	.REMOTE START					
	SP FLT ACCT CR		(1749.00)			
	FUEL CHARGE		24.00			
	DEST AND DELIV	1995	1995.00			
TOTAL BASE AND OPTIONS		65580	60510.00			
TOTAL		65580	60510.00			

THIS IS NOT AN INVOICE

F7=Prev
F1=Help F2=Return to Order F3/F12=Veh Ord Menu
F4=Submit F5=Add to Library
5099 - PRESS F4 TO SUBMIT QC06048

H12

HARTFORD TRUCK EQUIPMENT
95 John Fitch Blvd. South Windsor, CT
860.290.9818 HartfordTruck.com
sales@hartfordtruck.com

QUOTATION

Quote: 090924-SB5
Ref: 24 F550 84" CA DRW
End User:
Date: 09/09/24

Town of Waterford – Garon

We are pleased to quote on the following

One (1) Reading Master Mechanic RM45 crane body including;
- Crane reinforcement curbside rear
- 60" high front roadside & curbside compartments
- 2nd curbside front, set up for O/A
- **(no compartment lighting in body with O/A set up)**
- Welder drawer in curbside first compartment
- Both front roadside compartments with 5-drawer storage unit
- 46" high rear curbside & roadside compartments
- Bolt bin in roadside horizontal compartment
- Master Locking slide bar system
- Four (4) exterior work lights
- Six (6) integrated tie-downs in cargo area
- Non-skid application in cargo area, top & back of compartments, tail skirt,
- 20" work bench bumper

Hydraulic outrigger
- Body is painted white
- 97db back up alarm, two (2) rear mud flaps, FMVSS lights & reflectors

Central Hydraulic Set Up

One (1) VanAir RS45 Compressor installed on top of C/S compartment

One (1) Liftmoore 6040DX WP crane including; **wireless control**, Hydraulic Crane
- boom rest, extra leaf springs, 6000lbs at 6', power rotation, elevation
- & extension to 16' (manual to 20')

One (1) Full size LED Amber lightbar mounted to the roof
- Tied to switch in cab

Four (4) Corner LED Amber Lights installed two in grill, two in rear of body
- Tied to switch in cab

One (1) **Fisher** plow model **9' Heavy Contractor** w/ hand held controller, including:
- 9' long x 34" high. Blade approximately weighs 1,100 lbs.

Installed Municipal Budgetary Price: $ 118,700.00

Options:

Liftgate custom fit, remove tailgate and bumper	*5,500.00*

Initial : _____ **Vin:**_____ **Date:**_____

**NOTE: Hartford Truck Equipment will accept dealer purchase orders for pool chassis without a plant date on a "subject to change" basis only. If the chassis does not have a plant date when the dealer PO is issued and our body/equipment manufacturer announces a price change that would affect the items on your PO, a revised PO will be required reflecting these price changes.

Terms: NET DUE ETA: TBD
for additional terms and signature complete 2nd page

Respectfully Submitted: Sean Breslin Hartford Truck Equipment Inc.
REV: F 3/28/2022

DATE: 10/29/2024
TIME: 02:17 p.m.

TOWN OF WATERFORD
VEHICLE REPAIR HISTORY REPORT
FACILITY: 00001

ID: 1-32/RRV PAGE: 1

STARTING VMRS CODE: 000-000-000 DATE: FIRST VEHICLE:: H14
ENDING VMRS CODE: 999-999-999 DATE: LAST VEHICLE: H14

VMRS Code	METER : STANDARD QUANTITY	SUBTOTALS OF VMRS CODES FOR DIVISION > LABOR HRS	LABOR COST	AL PARTS COST	PERIOD : LIFE TOTAL COST	PERCENT	TOT COST /METER
002 CAB/SHEET METALS	1	1.50	37.32	0.00	37.32	0.11 %	0.00095
013 BRAKES	5	25.50	777.94	3031.96	3809.90	11.52 %	0.09684
017 TIRES,TUBES,LINERS	2	4.50	128.20	1177.28	1305.48	3.95 %	0.03318
022 AXLE DRVN REAR	1	8.00	317.12	2609.59	2926.71	8.85 %	0.07439
027 TRANSMISSION AUTOMATIC	2	64.00	2262.12	321.93	2584.05	7.82 %	0.06568
032 CRANKING SYSTEM	2	2.00	53.90	200.00	253.90	0.77 %	0.00645
034 LIGHTING SYSTEM	6	9.50	316.34	31.00	347.34	1.05 %	0.00883
042 COOLING SYSTEM	1	1.00	36.92	10.27	47.19	0.14 %	0.00120
043 EXHAUST SYSTEM	1	1.00	33.95	37.43	71.38	0.22 %	0.00181
051 GENERAL ACCESSORIES	2	2.30	80.46	87.16	167.62	0.51 %	0.00426
052 ELECTRICAL ACCESSRES	5	19.00	622.40	505.38	1127.78	3.41 %	0.02866
056 POWER TAKE OFF	1	4.00	141.28	109.44	250.72	0.76 %	0.00637
065 HYDRAULIC SYSTEMS	9	46.50	1297.56	514.35	1811.91	5.48 %	0.04605
066 PREVENTIVE MAINTENANCE	11	85.50	2770.33	2523.49	5293.82	16.01 %	0.13455
071 BODY	1	1.50	40.43	0.00	40.43	0.12 %	0.00103
099 ROAD CALL TRAVEL TIME	47	206.50	6699.27	6288.76	12988.03	39.28 %	0.33011
TOTALS:	97	482.30	15615.54	17448.04 TOT:	33063.58	100.00 %	0.84037

Service History by Vehicle

Town of Waterford - Public Works

11 records

Report generated on 10/29/2024 2:42 PM by Garon VanOverloop

Filters

Time Frame: Oct 1, 2022 - Oct 29, 2024 Vehicle: H14

Labor Subtota	Parts Subtotal	Line Item Subtotal
$1,846.96	$6,477.94	$8,324.90

Vehicle

H14

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task	Parts Subtotal	Line Item Subtotal
29103961	08/28/2024 8:15 AM	08/28/2024 8:50 AM	$0.01	$16.02	Tire Replacement	$0.01	$16.02
26532743	05/17/2024 11:09 AM	05/17/2024 3:00 PM	$285.26	$410.18	Preventative Maintenance	$285.26	$410.18
24661487	02/26/2024 2:15 PM	03/08/2024 3:26 PM	$5,455.11	$6,625.78	Engine Diagnosis	$4,764.37	$5,716.37
24661487	02/26/2024 2:15 PM	03/08/2024 3:26 PM	$5,455.11	$6,625.78	Tire Replacement	$527.96	$572.59
24661487	02/26/2024 2:15 PM	03/08/2024 3:26 PM	$5,455.11	$6,625.78	Tire/Wheel (Miscellaneous)	$104.18	$193.43
24661487	02/26/2024 2:15 PM	03/08/2024 3:26 PM	$5,455.11	$6,625.78	Body (Miscellaneous)		$19.34
24661487	02/26/2024 2:15 PM	03/08/2024 3:26 PM	$5,455.11	$6,625.78	Body grease points		
24661487	02/26/2024 2:15 PM	03/08/2024 3:26 PM	$5,455.11	$6,625.78	Hydraulic Oil Add	$58.60	$64.55
24661487	02/26/2024 2:15 PM	03/08/2024 3:26 PM	$5,455.11	$6,625.78	Welding & Fabrication		$59.50
22370520	01/19/2024	01/19/2024	$52.58	$64.12	Headlamp Bulb Replacement	$52.58	$64.12
21631894	12/04/2023 10:28 AM	12/04/2023 11:45 AM	$9.35	$48.39	Undercoating	$9.35	$48.39
20529364	10/20/2023 10:31 AM	10/25/2023 1:41 PM	$362.44	$448.32	Preventative Maintenance	$315.07	$338.49

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task	Parts Subtotal	Line Item Subtotal
20529364	10/20/2023 10 31 AM	10/25/2023 1:41 PM	$362.44	$448.32	Winter Equipment Inspection	$47.37	$109.83
20190090	08/25/2023	08/28/2023	$0.00	$249.84	Electrical System (Miscellaneous)		$249.84
16587091	03/14/2023 4:30 PM	03/14/2023 4:30 PM	$8.76	$18.46	Headlamp Bulb Replacement	$8.76	$18.46
16181550	02/21/2023 10:50 AM	02/21/2023 10:54 AM	$13 17	$51.97	No Service Task	$13.17	$51.97
16110026	02/14/2023	02/14/2023	$0 00	$33.52	Towing/Roadside Assistance		$33 52
15153714	11/14/2022	11/14/2022	$291 26	$358.30	Towing/Roadside Assistance	$210.00	$243.52
15153714	11/14/2022	11/14/2022	$291.26	$358.30	Cameras/Alarms/Safety (Miscellaneous) (Archived)	$81.26	$114.78
					Total Amount	$6,477 94	$8,324.90



INTERNATIONAL

H14

Sourcewell
Awarded Contract
Contract # 032824-NVS

International Motors, LLC is pleased to provide you with this proposal compliant with all terms of the Sourcewell Vehicles and Chassis Contract #032824-NVS awarded fromerly to Navistar, Inc now International Motors, LLC for new International truck(s). If you have any questions regarding enrollment in Sourcewell or detailed contract terms and conditions, please see your local International Dealer sales representative.

	PROPOSAL PREPARED FOR:	PROPOSAL PREPARED BY:
Sourcewell Member:	Town of Waterford	Allegiance Trucks
Contact:	Garon VanOverloop	Marc Palumbo
Address:	15 Rope Ferry Rd	
City/State/Zip:	Waterford, CT 06385	
Phone:	860-444-5867	
Email:	gvanoverloop@waterfordct.org	

Proposal Number	18668-1
Date	11/7/2024
Quantity of this Specification	1
Single Sourcewell Transaction Total Volume	1

Chassis			
New 2026 International MV607 Chassis			$ 146,476.00
Base Chassis List	$ 113,929.00		
Options List	$ 32,547.00		
Sourcewell Contract Discount		30.3%	$ (44,410.26)
Volume Incentive			$ -
Material Price Increases			$ -
Net Sourcewell Chassis Price			$ 102,065.74
Sourcewell Partner Body			
ES Body Install			$ 151,442.00
			$ -
Handling Fee			$ -
Non-Sourcewell Dealer Supplied Body			
			$ -
			$ -
Handling Fee		5.00%	$ -
Additional Post Build Work			
			$ -
			$ -
			$ -
Handling Fee		5.00%	$ -
Service Contracts			
40YYJ CMS ENG/AFTR (Cummins) To 60-Month/100,000 Miles			$ 3,380.00
40XUJ EXT VEH COVERAGE (Navistar) To 60-Month/100,000 Miles			$ 2,250.00
			$ -
Additional Freight			
Transportation to Body company (Round Trip)			$ 250.00
			$ -
Additional Floorplan			
Floorplan Charges			$ 1,800.00
			$ -
Additional Fees & Taxes			
			$ -
			$ -
			$ -
Final Sourcewell Per Vehicle Price FOB Waterford			$ 261,187.74
Final Sourcewell Total Vehicle(s) Price			$ 261,187.74

Additional Sourcewell Qualified Content	
Silver Package Award	$1,200

Terms:

Stock unit in dealer's inventory, dealer will accept a final purchase order using the current Sourcewell pricing quoted above.

Dealer placing a new orders for the Sourcewell Member, the purchase order cannot be firmed up until the unit is slotted to build with a firm build date or tpreset.
Once a firm build date has been established, dealer will provide the Sourcewell Member approved pricing and a final purchase order can be accepted with firm pricing.
Dealer cannot guarantee bodies and/or equipment pricing added to the chassis for a turnkey sale until chassis is tpreset.



MV607 SBA

Sales Proposal For:

TOWN OF WATERFORD

Presented By:

ALLEGIANCE TRUCKS

INTERNATIONAL

Financial Summary
2025 MV607 SBA (MV607)

November 07, 2024

(US DOLLAR)

Description		Price
Net Sales Price:		$261,187.74
Memo Item(s):		
Body/Allied Equipment:	$151,442.00	See Sourwell Proposal

Note: Memo item(s) shown here are included in the above Net Sales Price.

Please feel free to contact me regarding these specifications should your interests or needs change. Proposal is priced using Sourcewell pricing. Please note pricing IS NOT guaranteed until the order is lineset by the manufacturer.

Approved by Seller:

Official Title and Date

Authorized Signature

ALLEGIANCE TRUCKS
130 BRAINARD RD
HARTFORD CT 06114 -
(860)249-8635

Accepted by Purchaser:

Firm or Business Name

Authorized Signature and Date

This proposal is not binding upon the seller without Seller's Authorized Signature

Official Title and Date

The TOPS FET calculation is an estimate for reference purposes only. The seller or retailer is responsible for calculating and reporting/paying appropriate FET to the IRS.

The limited warranties applicable to the vehicles described herein are Navistar, Inc.'s standard printed warranties which are incorporated herein by reference and to which you have been provided a copy and hereby agree to their terms and conditions.

Prepared For:
TOWN OF WATERFORD
Garon VanOverloop
15 ROPE FERRY RD.
WATERFORD, CT 06385-
(860)444 - 5867
Reference ID: N/A

Presented By:
ALLEGIANCE TRUCKS
Marc Palumbo
130 BRAINARD RD
HARTFORD CT 06114 -
(860)249-8635

Thank you for the opportunity to provide you with the following quotation on a new International truck. I am sure the following detailed specification will meet your operational requirements, and I look forward to serving your business needs.

Model Profile
2025 MV607 SBA (MV607)

AXLE CONFIG:	4X2
APPLICATION:	Landscape Dump
MISSION:	Requested GVWR: 25500. Calc. GVWR: 25999. Calc. GCWR: 50000 Calc. Start / Grade Ability: 57.65% / 3.12% @ 55 MPH Calc. Geared Speed: 72.8 MPH
DIMENSION:	Wheelbase: 163.00, CA: 95.90, Axle to Frame: 61.00
ENGINE, DIESEL:	(Cummins B6.7 300) EPA 2024, 300HP @ 2600 RPM, 660 lb-ft Torque @ 1600 RPM, 2600 RPM Governed Speed, 300 Peak HP (Max)
TRANSMISSION, AUTOMATIC:	(Allison 3500 RDS) 6th Generation Controls, Wide Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor, with 80,000-lb GVW and GCW Max, On/Off Highway
CLUTCH:	Omit Item (Clutch & Control)
AXLE, FRONT NON-DRIVING:	(Meritor MFS-12-122A) I-Beam Type, 12,000-lb Capacity
AXLE, REAR, SINGLE:	(Meritor MS-21-14X-3DCL) Single Reduction, 21,000-lb Capacity, Driver Controlled Locking Differential, 190 Wheel Ends Gear Ratio: 5.29
CAB:	Conventional, Day Cab
TIRE, FRONT:	(2) 245/70R19.5 Load Range H R238 (BRIDGESTONE), 623 rev/mile, 75 MPH, All-Position
TIRE, REAR:	(4) 245/70R19.5 Load Range H R238 (BRIDGESTONE), 623 rev/mile, 75 MPH, All-Position
SUSPENSION, REAR, SINGLE:	23,600-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs
PAINT:	Cab schematic 100WP Location 1: 5047, Green (Prem) Chassis schematic N/A

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
MV60700	Base Chassis, Model MV607 SBA with 163.00 Wheelbase, 95.90 CA, and 61.00 Axle to Frame.	5381/3069	8450
AXLE CONFIGURATION			
1ANA	AXLE CONFIGURATION 4x2	0/0	0
	Notes : Pricing may change if axle configuration is changed.		
ENGINE			
12EXX	ENGINE, DIESEL (Cummins B6.7 300) EPA 2024, 300HP @ 2600 RPM, 660 lb-ft Torque @ 1600 RPM, 2600 RPM Governed Speed, 300 Peak HP (Max)	0/0	0
12VJR	EMISSION, CALENDAR YEAR (Cummins B6.7) EPA, OBD and GHG Certified for Calendar Year 2024	0/0	0
12XCS	CARB EMISSION WARR COMPLIANCE Does Not Comply with CARB Emission Warranty	0/0	0
12WZE	CARB IDLE COMPLIANCE Does Not Comply with California Clean Air Idle Regulations	0/0	0
12WVG	EPA IDLE COMPLIANCE Low NOx Idle Engine, Complies with EPA Clean Air Regulations; Includes "Certified Clean Idle" Decal on Hood	0/0	0
10UAV	VEHICLE REGISTRATION IDENTITY ID for Non CARB Omnibus/Non ACT Adopting State or Exempt Vehicle << Contains non-mitigated legacy engine & must be registered outside the States of CA/MA/OR unless exempt.You may be held liable under CA/MA/OR law for failure to properly register/otherwise failing to follow CA/MA/OR law>>	0/0	0
	Notes : CANNOT BE REGISTERED IN CA, MA, OR. For vehicles that will be registered in States other than CA, MA, OR.		
12XCE	RADIATOR Aluminum, 3-Row, Down Flow, Front to Back System, 738 Sqin Louvered, with 477 Sqin Charge Air Cooler, Includes In-Tank Oil Cooler	0/0	0
12TSY	FAN DRIVE (Borg-Warner SA85) Viscous Type, Screw On	0/0	0
	Includes : FAN Nylon		
12VCE	AIR CLEANER Single Element, Fire Retardant Media	0/0	0
12703	ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection	0/0	0
12849	BLOCK HEATER, ENGINE 120V/1000W, for Cummins ISB/B6.7/ISL/L9 Engines	3/0	3
	Includes : BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door		
12VYP	ENGINE CONTROL, REMOTE MOUNTED No Provision for Remote Mounted Engine Control	0/0	0
12WPV	OIL PAN 15 Quart Capacity, For Cummins ISB/B6.7 Engines	0/0	0
12VXT	THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel	0/0	0

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
12EMZ	VENDOR WARRANTY, ENGINE {Cummins} B6.7 Engine, 3-Year Unlimited Miles Standard Warranty	0/0	0
TRANSMISSION			
13BDR	TRANSMISSION, AUTOMATIC {Allison 3500 RDS} 6th Generation Controls, Wide Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor, with 80,000-lb GVW and GCW Max, On/Off Highway	215/68	283
13WYH	TRANSMISSION TCM LOCATION Located Inside Cab	0/0	0
13WUC	ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS) and Regional Haul Series (RHS), General Purpose Trucks, Construction, Package Number 223	0/0	0
13WVV	NEUTRAL AT STOP Allison Transmission Shifts to Neutral When Service Brake is Depressed and Vehicle is at Stop; Remains in Neutral Until Service Brake is Released	0/0	0
13XAL	PTO LOCATION Customer Intends to Install PTO at Left Side of Transmission	0/0	0
13WYU	SHIFT CONTROL PARAMETERS {Allison} 3000 or 4000 Series Transmissions, Performance Programming	0/0	0
13WLP	TRANSMISSION OIL Synthetic; 29 thru 42 Pints	0/0	0
13WET	TRANSMISSION SHIFT CONTROL Column Mounted Stalk Shifter, Not for Use with Allison 1000 & 2000 Series Transmission	1/0	1
CLUTCH			
11001	CLUTCH Omit Item (Clutch & Control)	0/0	0
REAR AXLES, SUSPENSIONS			
14APL	AXLE, REAR, SINGLE {Meritor MS-21-14X-3DCL} Single Reduction, 21,000-lb Capacity, Driver Controlled Locking Differential, 190 Wheel Ends . Gear Ratio: 5.29	0/233	233
14VAH	SUSPENSION, REAR, SINGLE 23,500-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs	0/117	117
14WMG	AXLE, REAR, LUBE {EmGard FE-75W-90} Synthetic Oil; 30 thru 39.99 Pints	0/0	0
14WAP	SHOCK ABSORBERS, REAR (2)	0/45	45
FRONT AXLES			
2ASC	AXLE, FRONT NON-DRIVING {Meritor MFS-12-122A} I-Beam Type, 12,000-lb Capacity	42/0	42
FRONT SUSPENSIONS			
3ADC	SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 12,000-lb Capacity, with Shock Absorbers Includes : SPRING PINS Rubber Bushings, Maintenance-Free Notes : In combinations where chassis component weights may cause a chassis lean, a spring is used in front left spring pack to offset this imbalance & provide a level chassis, within 3/8", with body installed.	36/0	36

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
CABS, COWLS, BODIES			
16030	CAB Conventional, Day Cab	0/0	0
	Includes : CLEARANCE/MARKER LIGHTS (5) Flush Mounted		
16ZJA	ACCESS, CAB Aluminum, Self-Cleaning, Open and Serrated Design, Driver & Passenger Sides, Two Steps per Door, for use with Day Cab, Extended Cab or Sleeper Cab	-1/0	-1
16BAM	AIR CONDITIONER with Integral Heater and Defroster	56/0	56
16WBY	ARM REST, RIGHT, DRIVER SEAT	3/0	3
16VKB	CAB INTERIOR TRIM Classic, for Day Cab	0/0	0
	Includes : CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger : DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted : SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap		
16VLM	CAB REAR SUSPENSION Rubber Suspension, for Low Cab Height	0/0	0
16WEE	CAB SOUND INSULATION Includes Dash Insulator and Engine Cover Insulator	8/0	8
16ZPH	FLOOR, COATING LINE-X, Applied to Interior Cab Floor	0/0	0
16WLS	FRESH AIR FILTER Attached to Air Intake Cover on Cowl Tray in Front of Windshield Under Hood	1/0	1
16GED	GAUGE CLUSTER Base Level; English with English Electronic Speedometer	0/0	0
	Includes : GAUGE CLUSTER DISPLAY: Base Level (3" Monochromatic Display), Premium Level (5" LCD Color Display); Odometer, Voltmeter, Diagnostic Messages, Gear Indicator, Trip Odometer, Total Engine Hours, Trip Hours, MPG, Distance to Empty/ Refill for : GAUGE CLUSTER Speedometer, Tachometer, Engine Coolant Temp, Fuel Gauge, DEF Gauge, Oil Pressure Gauge, Primary and Secondary Air Pressure or Auxiliary Air Pressure (if Air Equipped) : WARNING SYSTEM Low Fuel, Low DEF, Low Oil Pressure, High Engine Coolant Temp, Low Battery Voltage (Visual and Audible), Low Air Pressure, Primary and Secondary (if Air Equipped)		
16HHE	GAUGE, AIR CLEANER RESTRICTION (Filter-Minder) Mounted in Instrument Panel	2/0	2
16HGH	GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission	1/0	1
16XJN	INSTRUMENT PANEL Flat Panel	0/0	0
16HKT	IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster	0/0	0
16WSE	LOW WASHER FLUID INDICATOR	1/0	1
16SSU	MIRRORS (2) C-Loop, Power Adjust, Heated, Turn Signals, LED Clearance Lights, Bright Heads and Arms, 7" x 14.5" Flat Glass, Includes 8" x 6" Convex Mirrors, for 102" Load Width	0/0	0

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
	Notes : Mirror Dimensions are Rounded to the Nearest 0.5"		
16SSE	MIRROR, CONVEX, HOOD MOUNTED (2) Right and Left Sides, Breakaway, Bright, Heated	0/0	0
16JNT	SEAT, DRIVER (National 2000) Air Suspension, High Back with Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, with 2 Position Front Cushion Adjust, -3 to +14 Degree Angle Back Adjust	-13/-5	-18
16LUM	SEAT, PASSENGER (National) Non Suspension, High Back with Integral Headrest, Vinyl, with Fixed Back, with Under Seat Storage	32/13	45
16WJU	WINDOW, POWER (2) and Power Door Locks, Left and Right Doors, Includes Express Down Feature	5/0	5
16VSL	WINDSHIELD Heated, Single Piece	0/0	0
FRAMES			
1CAG	FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 10.250" x 3.610" x 0.375" (260.4mm x 91.7mm x 9.5mm); 456.0" (11582mm) Maximum OAL	113/276	389
1LSE	BUMPER, FRONT Swept Back, Steel, Painted Gray, Heavy Duty	50/-7	43
1WDS	FRAME EXTENSION, FRONT Integral; 20" In Front of Grille	141/-36	105
1570	TOW HOOK, FRONT (2) Frame Mounted	8/0	8
1WEH	WHEELBASE RANGE 134" (340cm) Through and Including 197" (500cm)	75/-75	0
BRAKES			
4091	BRAKE SYSTEM, AIR Dual System for Straight Truck Applications	0/0	0
	Includes : BRAKE LINES Color and Size Coded Nylon : DRAIN VALVE Twist-Type : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel : PARKING BRAKE VALVE For Truck : QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4 : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/6x6		
4AZJ	AIR BRAKE ABS (Bendix AntiLock Brake System) 4-Channel (4 Sensor/4 Modulator) Full Vehicle Wheel Control System, with Automatic Traction Control	0/0	0
4GBM	BRAKE, PARKING Manual Push-Pull Pneumatic Parking Brake	0/0	0
4XDD	BRAKES, FRONT (Meritor 15X5 Q-PLUS CAST) Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 15" X 5", 13,200-lb Capacity	44/0	44
4EXP	BRAKE CHAMBERS, FRONT AXLE (Bendix) 20 Sqin	16/0	16
4LAG	SLACK ADJUSTERS, FRONT (Gunite) Automatic	14/0	14
4XDU	BRAKES, REAR (Meritor 15X8.625 Q-PLUS CAST) Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 15" X 8.625", 21,000-lb Capacity per Axle	0/3	3

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
4EXS	BRAKE CHAMBERS, REAR AXLE (Bendix EverSure) 24/30 Sqin Spring Brake	0/35	35
4LGG	SLACK ADJUSTERS, REAR (Gunite) Automatic	0/14	14
4SPA	AIR COMPRESSOR (Cummins) 18.7 CFM	37/1	38
4EDN	AIR DRYER (Bendix AD-9SI) with Heater, Includes Safety Valve	19/-2	17
4VLE	AIR DRYER LOCATION Mounted Inside Engine Compartment, Right Side	0/0	0
4VGN	AIR TANK Painted Aluminum, with Straight Thread O-Ring Ports	-12/-3	-15
4VKH	AIR TANK LOCATION (2) Mounted Under Battery Box, Outside Right Rail, Under Cab	37/14	51
4732	DRAIN VALVE (Berg) with Pull Chain, for Air Tank	0/0	0
STEERING			
5PSA	STEERING GEAR (Sheppard M100) Power	28/-6	22
5708	STEERING COLUMN Tilting	14/2	16
5CAW	STEERING WHEEL 4-Spoke; 18" Dia., Black	0/0	0
DRIVELINES			
6DGA	DRIVELINE SYSTEM (Dana Spicer) SPL100, for 4x2/6x2	0/0	0
EXHAUST SYSTEMS			
7BMJ	EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Under Right Rail Back of Cab, for Single Vertical Tail Pipe, Frame Mounted Right Side Back of Cab	75/48	123
7SCP	ENGINE EXHAUST BRAKE for Cummins ISB/B6.7/ISL/L9 Engine with Variable Vane Turbo Charger	0/0	0
7WDM	EXHAUST HEIGHT 10'	15/12	27
7WBS	MUFFLER/TAIL PIPE GUARD (1) Bright Stainless Steel	13/11	24
7WBA	TAIL PIPE (1) Turnback Type, Bright	5/4	9
ELECTRICAL SYSTEMS			
8000	ELECTRICAL SYSTEM 12-Volt, Standard Equipment Includes : DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab : HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light : STARTER SWITCH Electric, Key Operated : STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector : TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature : TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever	0/0	0

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
	: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted : WIRING, CHASSIS Color Coded and Continuously Numbered		
12VYL	ACCESSORY WIRING, SPECIAL for Road Speed Wire Coiled Under Instrument Panel for Customer Use	0/0	0
8GXD	ALTERNATOR (Leece-Neville AVI160P2013) Brush Type, 12 Volt, 160 Amp Capacity, Pad Mount, with Remote Sense	0/0	0
8RPP	ANTENNA Shark Fin, Roof Mounted	1/0	1
8THJ	AUXILIARY HARNESS 3.0' for Auxiliary Front Head Lights and Turn Signals for Front Plow Applications	2/0	2
8THB	BACK-UP ALARM Electric, 102 dBA	0/3	3
8VUX	BATTERY BOX Steel, with Plastic Cover, 25" Wide, 2-3 Battery Capacity, Mounted Right Side Under Cab	0/0	0
8MJT	BATTERY SYSTEM (Fleetrite) Maintenance-Free, (2) 12-Volt 1900CCA Total, Top Threaded Stud	7/7	14
8HAU	BODY BUILDER WIRING INSIDE CAB; Includes Sealed Connectors for Tail/ Amber, Turn/Marker/Backup/Accessory, Power/Ground, and Stop/Turn	1/0	1
8XAH	CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses	0/0	0
8518	CIGAR LIGHTER Includes Ash Cup	1/0	1
8WPH	CLEARANCE/MARKER LIGHTS (5) (Truck Lite) Amber LED Lights, Flush Mounted on Cab or Sunshade	1/0	1
8HAH	ELECTRIC TRAILER BRAKE/LIGHTS Accommodation Package to Rear of Frame; for Combined Trailer Stop, Tail, Turn, Marker Light Circuits; Includes Electric Trailer Brake Accommodation Package with Cab Connections for Mounting Customer Installed Electric Brake Unit, Less Trailer Socket	0/2	2
8WXB	HEADLIGHT WARNING BUZZER Sounds When Head Light Switch is on and Ignition Switch is in "Off" Position	0/0	0
8XNZ	HEADLIGHTS Halogen, with Daytime Running Lights	0/0	0
8WRB	HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn On if Windshield Wipers are Turned On	0/0	0
8XHN	HORN, AIR Single Trumpet, Black, with Lanyard Pull Cord	3/0	3
8VBE	HORN, ELECTRIC (1) Trumpet Style	0/0	0
8WWJ	INDICATOR, LOW COOLANT LEVEL with Audible Alarm	0/0	0
8WBW	JUMP START STUD 12V, Remote Mounted	2/0	2
	Includes : JUMP START STUD Mounted to Battery Box		
8718	POWER SOURCE Cigar Type Receptacle without Plug and Cord	1/0	1
8XPK	POWER SOURCE, ADDITIONAL Auxiliary Power Outlet (APO) with USB-A Port and USB-C Port, Located in the Instrument Panel	0/0	0
8RPS	RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input	3/0	3
8RMV	SPEAKERS (2) 6.5" Dual Cone Mounted in Doors	5/0	5

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
8XKL	STARTING MOTOR (Mitsubishi Electric Automotive America 90P47) 12-Volt, with Soft-Start	0/0	0
8VTV	STOP-LIGHT WIRING MODIFIED Stop-Lights Turned on When Engine Compression Brake, Exhaust Brake or Retarder is Activated	0/0	0
8WPZ	TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights	0/0	0
8WGL	WINDSHIELD WIPER SPD CONTROL Force Wipers to Slowest Intermittent Speed When Park Brake Set and Wipers Left on for a Predetermined Time	0/0	0
FRONT END			
9WBW	FRONT END Tilting, Fiberglass, with Three Piece Construction, Dual Air Intakes	0/0	0
9WBN	FENDER EXTENSIONS Painted	0/0	0
9HCX	GRILLE Stationary, Molded in Black	0/0	0
9HBN	INSULATION, SPLASH PANELS for Sound Abatement	2/0	2
9HAN	INSULATION, UNDER HOOD for Sound Abatement	10/0	10
9AAB	LOGOS EXTERIOR Model Badges	0/0	0
9AAE	LOGOS EXTERIOR, ENGINE Badges	0/0	0
SPEEDOMETER, TOOLS, MISC			
10021	CHASSIS COATING Corrosion Resistant E-Coat Primer Coating for Single Frame Rails	0/0	0
10AGB	COMMUNICATIONS MODULE Telematics Device with Over the Air Programming, Includes Five Year Data Plan and International 360	0/0	0
10060	PAINT SCHEMATIC, PT-1 Single Color, Design 100	0/0	0
	Includes : PAINT SCHEMATIC ID LETTERS "WP"		
10761	PAINT TYPE Base Coat/Clear Coat, 1-2 Tone	0/0	0
10WGD	SPECIAL RATING, GVWR Limited to 25,999-lb GVWR	0/0	0
10769	PAINT CLASS Premium Color	0/0	0
FUEL TANKS			
15SWU	FUEL TANK Top Draw, Non-Polished Aluminum, D-Style, 16" Tank Depth, 40 US Gal (151L), Mounted Left Side, Under Cab	0/0	0
15WDG	DEF TANK 7 US Gal (26L) Capacity, Frame Mounted Outside Left Rail, Under Cab	0/0	0
15924	FUEL TANK STRAPS Bright Finish Stainless Steel	0/0	0
15LMR	FUEL/WATER SEPARATOR (Racor 400 Series,) with Primer Pump, Includes Water-in-Fuel Sensor	0/0	0
15LRE	LOCATION FUEL/WATER SEPARATOR Mounted Under Hood, Left Side, Above Front Axle	0/0	0
WHEELS, TIRES - FRONT			

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
27DTS	WHEELS, FRONT (Accuride 29195) DISC; 19.5x7.50 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs	-14/0	-14
7689459061	(2) TIRE, FRONT 245/70R19.5 Load Range H R238 (BRIDGESTONE), 623 rev/ mile, 75 MPH, All-Position	-24/0	-24
WHEELS, TIRES - REAR			
28DTS	WHEELS, REAR (Accuride 29195) DUAL DISC; 19.5x7.50 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs	0/-28	-28
7689459061	(4) TIRE, REAR 245/70R19.5 Load Range H R238 (BRIDGESTONE), 623 rev/ mile, 75 MPH, All-Position	0/-48	-48
BODY INTEGRATION			
60AAG	BDY INTG, REMOTE POWER MODULE Mounted Inside Cab Behind Driver Seat, Up to 6 Outputs & 6 Inputs, Max 20 amp per Channel, Max 80 amp Total; Includes 1 Switch Pack with Latched Switches	0/0	0
60AKY	BDY INTG, DASH IND LT TRICOLOR (1) for Optional Usage Customer to Program	0/0	0
60AJK	BDY INTG, INDICATOR LIGHTS (2) 1 for Body Up, 1 for Gate Open, Includes Audible Alarm, Programmable Mode for Various Switch Actions. (Requires 2 Remote Power Module Inputs)	0/0	0
60ABE	BDY INTG, PTO ACCOMMODATION for Electric over Hydraulic PTO, Does Not Include Solenoids, with Latched Switch Mounted on Dash Includes Audible Alarm and Indicator Light in Gauge Cluster (Requires 1 Remote Power Module input & 1 output)	0/0	0
60ACS	BDY INTG, SWITCH MOMNTRY 3POS Rocker, Backlit, with "ON" Indicator Mounted on Dash, Latching Software, for 1; Auxiliary Load 20 amp. Maximum; Power Available Only in "Ignition" or "Accessory" Position, Output Also Controlled by a Customer Remote Mounted Switch (requires 1 Remote Power Module input & 1 output)	0/0	0
	Services Section:		
WARRANTY			
40129	WARRANTY Standard for MV Series, Effective with Vehicles Built July 1, 2017 or Later, CTS-2020A	0/0	0
	Total Component Weight:	**6466/3767 (lbs)**	**10233 (lbs)**
2	Equip Spec. - Body Equip (see quote)	0/0	0
	Total Body Allied:	**0/0 (lbs)**	**0 (lbs)**
	Navistar Surcharge	0/0	0
	Total Goods Purchased:	**0/0**	**0**

The weight calculations included in this proposal are an estimate of future vehicle weight. The actual weight as manufactured may be different from the estimated weight. Navistar, Inc. shall not be liable for any consequences resulting from any differences between the estimated weight of a vehicle and the actual weight.

EQUIPMENT SPECIALISTS

180 Roberts Street, East Hartford CT 06108 Tel: (860) 296-7000 • www.ES-CT.com

NUTMEG IH
ATTN: Marc Palumbo

October 10, 2024

TARCO T2000-10-SS EQUIPMENT PKG

REF: WATERFORD

CHASSIS REQUIREMENTS

- ❖ Chassis MUST HAVE Clear Frame Rail Behind Cab (as much as Possible) for Valve and Tank Mounting. Relocating of Components Interfering in Installation will be Billed at Shop Rate of $193.00 per Hour

- ❖ Chassis Must Have factory option switches, 6-Minimum preferred, in working order when chassis is delivered
- ❖ Minimum 25,000 GVW Six (6) Wheel Cab & Chassis
- ❖ 96" – 98" CA measurement
- ❖ Allison 3000 or Higher Transmission
- ❖ Three (3) indicator lights for body up, gate open and low oil, in working order when chassis delivered
- ❖ Snow Plow Prep Package for Plow Lights, in working order when chassis delivered
- ❖ Electric to Rear
- ❖ Electric Trailer Brake Prep Package in cab, taped to dash and in working order when chassis delivered
- ❖ Ground speed output from transmission for electronic sander control, in working order when chassis delivered
- ❖ PTO switch in dash and wired to right side of transmission for Chelsea electric shift PTO, in working order when chassis delivered
- ❖ All Wires Must be Tagged for Use

ADDITIONAL CHARGES WILL APPLY FOR ITEMS NOT SUPPLIED ON CHASSIS

Acknowledged_____ Date_____

Equipment Package to include the following:

Body:

- ➢ Tarco Model T-2000-SS-10 Combination 304# STAINLESS STEEL dump body and material spreader
- ➢ 10' Length. Outside width: 95"
- ➢ Body is constructed of 10-gauge STAINLESS steel throughout,
- ➢ Body side height – 16", tailgate height – 30"
- ➢ 304# STAINLESS STEEL Body sides are supported by front and rear corner posts with additional vertical side supports.
- ➢ 304# STAINLESS STEEL Formed body top rail with sideboard pockets
- ➢ 304# STAINLESS STEEL Body sides are dirt shedder design

- 10 gauge 304# STAINLESS STEEL ½ Cab Shield
- **3/16" HARDOX 450 205,000 PSI FLOOR**
- AIR tailgate latching mechanism.
- STAINLESS STEEL Coal Door
- Rear Bolt-on Asphalt Apron
- **AUGER SENSOR ON GEARBOX FOR CLOSED LOOP**
- Conveyor system for ice and snow control is constructed of **7 gauge type 304 stainless steel with a ¼" thick poly wear plate**
- 304# STAINLESS STEEL Front mounted spinner assembly with POLY chute
- 14" diameter poly spinner.
- ACCESS STEP OVER AUGER BOX
- REAR DRIVERSIDE SS SWING-UP LADDER
- Conveyor chain is 14" in width and Chevron design.
- Conveyor drive through 20:1gear box with hydraulic motor.
- Front hoist cylinder is telescopic – NTEA rated Class 20
- Side tip cylinders are 5" x 16" double-acting.
- Continuous side tip floor hinge pin is stainless steel equipped with grease lines for remote lubrication.
- Body up light indicator for cab. Dump hoist safety prop. Side Tip safety prop.
- Conspicuity & Safety Tape
- Full Length Flap to protect Brake Chambers
- Front & Rear Mud Flaps

Plow Frame:

- Plow Frame shall Utilize Integral Front Frame Extensions & Allow Tilt Hood
- Plow Frame With 4" X 10" Da Lift Cylinder
- Multiple Push Point
- TWO (2) Shovel/broom Holders (round) On PLOW FRAME- (for long handle)
- Plow Relief Circuit For Ease Of Plow Disconnect

Plow:

- EVEREST RM120TML36SH Power Angle Plow
- Reversing Cylinders With Cushion Valve
- (MBOX CUT UNAVAIL ON THIS MODEL)
- Rubber Shield
- Parking Jack
- 30.5 Pin-in Swivel Bar
- Cable Lift
- 5/8" Cutting Edge
- Right Hand Curb Guard
- Marker Sticks

Hydraulic System:

- 37 Gallon Hydraulic Reservoir With Sight/Temp Gauge
- Hydraulic Filter With Indicator
- Low Oil Alert Light
- 2" Ball Valve Shut-Offs

- Suction Line Strainer
- 92cc Variable Displacement Pump
- Hot-Shift Wet-Spline PTO Via Allison 3000 Series & Chassis-Supplied Switch
- Force America Five (5) Bank ADD-A-FOLD Load Sense Valve System
- FORCE AMERICA PATROL COMMANDER Controls For Body, Load Cover, And Plow Functions, Mounted On Custom Reinforced Tower
- Stainless Steel Valve Enclosure
- Force America SSC6100 GEN 5 Spreader Control ILO 5100 EX as Previously Quoted System Capable up to Three (3) Cameras
- 10" High Resolution LCD Monitor
- CAN Bus Central Processing
- AVL/GPS Integration Built-in
- Wireless Technology
- Stainless Steel Hydraulic Manifold & ½" Stainless Steel Piping Throughout Utilizing Short Lengths Of Hose & Swivel Fittings

Electrical:

- Body LED ICC Lighting
- LED Spinner Light With In Cab Switch
- LED Load Light With In Cab Switch
- Heated LED Plow Lights Mounted On Stainless Steel Brackets Utilizing Chassis Plow Light Circuitry
- SOUND OFF System FOUR (4) Strobes with Two Front and One Each Side of Cabshield
- Three light rear cluster in Rear Corner Posts. STROBE; S/T/T/; REV
- TWO (2) CAMERAS
- Precise Temp System
- Allied Lighting To Be Tied Into Factory Aux Switches
- PTO To Be Switch To Be Chassis-Supplied

Load Cover & Pintle Assembly:

- ALC Hydraulic Load Cover
- ¼" Rear Plate With 20 Ton Pintle, Gladhands, And 7 Way Rv Electrical Plug
- Electric Brake Controller

Miscellaneous:

- Poly Fenders
- BAWER 24" x 18" x 18" SS Toolbox
- Body NATURAL SS
- Black Enamel Applied To Plow Frame, Pintle Assy, & Body Understructure
- ARMOURSEAL BODY AND CHASSIS (UNDER)
- Complete Package Installed & Operational On Chassis With Front Frame Extension And 96-98" CA

FOB: E. HARTFORD, CT..... **$ 151,442.00**

OPTIONS:

A. DUAL LED REAR LIGHTS..... $ 580.00
B. COMPLETE BODY GREASE MANIFOLD..... $ 1600.00
C. MONROE MODEL DTS-120-24-304 24" SIDES 30" GATE 4.5 YD
304# SS WITH AR450 FLOOR. I-BEAM LONGMEMBERS.
BOLT-IN SS CONVEYOR SPEED SENSOR ON 18" CONVEYOR
24" CABSHIELD SWING-UP SS LADDER SS SPINNER CHUTE SS
POLY-LINED POLY SPINNER GREASE MANIFOLD..... $ 3800.00

QUOTE VALID: 30 DAYS

Respectfully Submitted,

Glenn Slade
Sales Consultant
Equipment Specialists

DATE: 10/29/2024
TIME: 02:18 p.m.

TOWN OF WATERFORD
VEHICLE REPAIR HISTORY REPORT
FACILITY: 00001

ID: 1-32/RRV PAGE: 1

STARTING VMRS CODE: 000-000-000 DATE: FIRST VEHICLE:: H9
ENDING VMRS CODE: 999-999-999 DATE: LAST VEHICLE: H9

VMRS Code	METER : STANDARD QUANTITY	SUBTOTALS OF VMRS CODES FOR DIVISION > AL LABOR HRS	LABOR COST	PARTS COST	PERIOD : LIFE TOTAL COST	PERCENT	TOT COST /METER
001 A/C, HEAT, VENTILATION	1	9.00	285.75	22.93	308.68	1.40 %	0.00307
013 BRAKES	1	6.00	216.66	603.45	820.11	3.71 %	0.00814
017 TIRES,TUBES,LINERS	1	1.00	28.61	0.00	28.61	0.13 %	0.00028
031 CHARGING SYSTEM	1	3.00	116.82	159.00	275.82	1.25 %	0.00274
032 CRANKING SYSTEM	2	2.50	76.52	343.38	419.90	1.90 %	0.00417
034 LIGHTING SYSTEM	2	7.00	240.45	161.82	402.27	1.82 %	0.00400
042 COOLING SYSTEM	1	1.00	39.81	7.69	47.50	0.21 %	0.00047
044 FUEL SYSTEM	1	2.00	49.76	17.34	67.10	0.30 %	0.00067
045 POWER PLANT/ENGINE	1	5.00	188.80	455.97	644.77	2.92 %	0.00640
051 GENERAL ACCESSORIES	1	6.00	192.24	211.28	403.52	1.82 %	0.00401
052 ELECTRICAL ACCESSRES	4	19.00	581.82	76.70	658.52	2.98 %	0.00654
055 CARGO HANDLING,LIFT	2	8.50	247.08	476.68	723.76	3.27 %	0.00719
066 PREVENTIVE MAINTENANCE	18	132.00	4207.19	3802.49	8009.68	36.22 %	0.07955
077 FRAME AND SUPPORT	1	15.00	566.40	261.13	827.53	3.74 %	0.00822
099 ROAD CALL TRAVEL TIME	41	194.25	6126.61	2323.37	8449.98	38.21 %	0.08392
730 HOUSEKEEPING	1	1.00	20.47	4.48	24.95	0.11 %	0.00025
TOTALS:	79	412.25	13184.99	8927.71 TOT:	22112.70	100.00 %	0.21961

Service History by Vehicle

Town of Waterford - Public Works

7 records

Report generated on 10/29/2024 2:43 PM by Garon VanOverloop

Filters

Time Frame: Oct 1, 2022 - Oct 29, 2024 Vehicle: H9

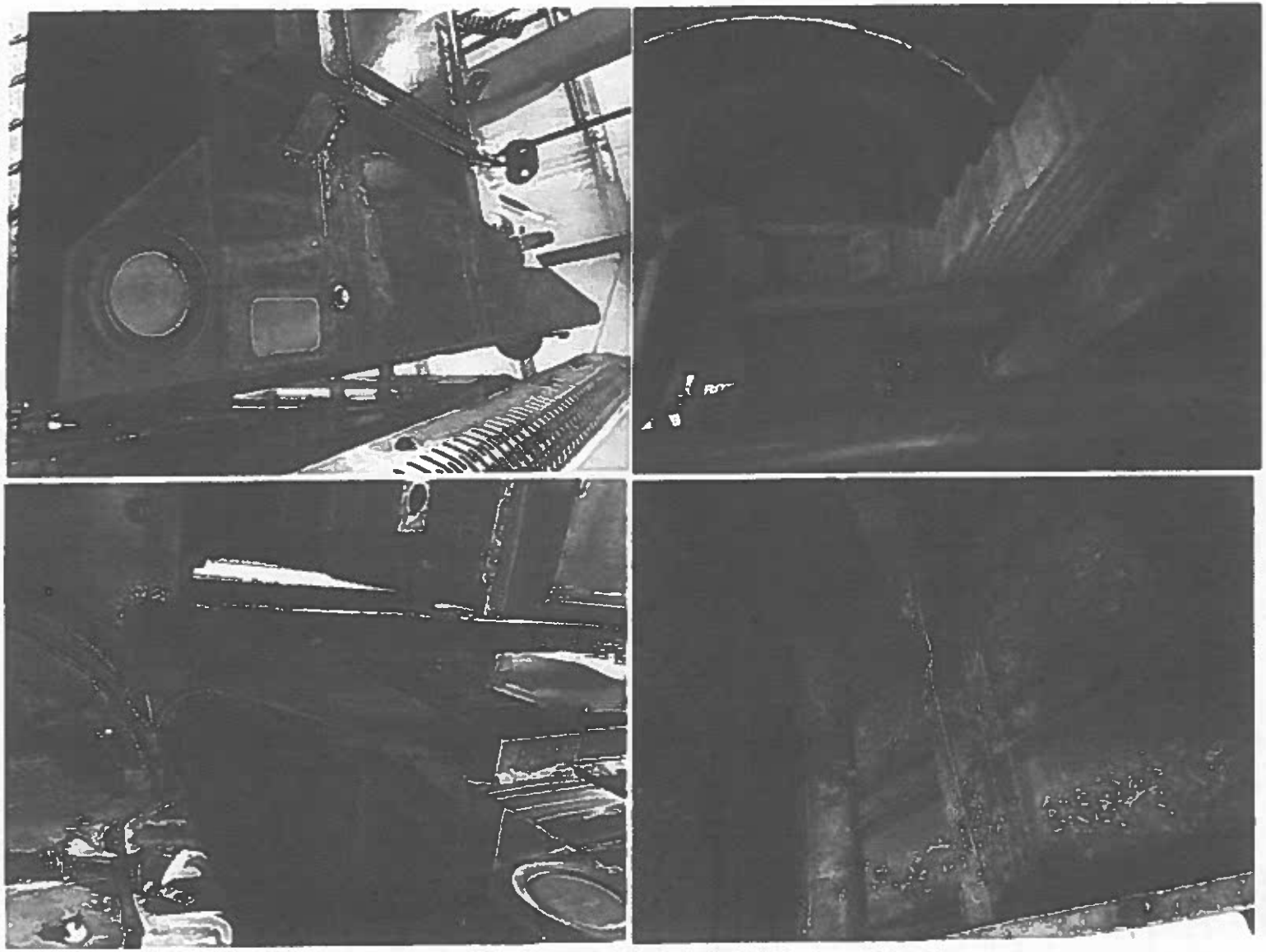
Labor Subtotal	Parts Subtotal	Line Item Subtotal
$2,257.14	$6,344.71	$8,601.85

Vehicle

H9

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task	Parts Subtotal	Line Item Subtotal
28958433	07/25/2024 7:51 AM	08/21/2024 11:37 AM	$165.43	$549.67	Electrical System (Miscellaneous)	$165.43	$549.67
21691539	12/06/2023 11:30 AM	12/06/2023 3:00 PM	$272.92	$335.38	Preventative Maintenance	$272.92	$335.38
19411302	08/24/2023 11:30 AM	08/29/2023 3:30 PM	$1,068.82	$1,207.24	Engine Diagnosis		$46.14
19411302	08/24/2023 11:30 AM	08/29/2023 3:30 PM	$1,068.82	$1,207.24	Fuel Injector Replacement	$1,068.82	$1,161.10
17033423	03/29/2023	03/30/2023	$89.15	$223.23	Air Injection System Inspect	$89.15	$223.23
16179330	02/08/2023	02/17/2023 1:00 PM	$1,495.45	$1,495.45	Wheel Spindle & Hub Replacement	$1,495.45	$1,495.45
16565968	02/01/2023 9:31 AM	02/03/2023	$2,580.20	$3,904.24	Preventative Maintenance	$178.74	$446.90
16565968	02/01/2023 9:31 AM	02/03/2023	$2,580.20	$3,904.24	Engine (Miscellaneous)	$971.48	$1,792.72
16565968	02/01/2023 9:31 AM	02/03/2023	$2,580.20	$3,904.24	Front Suspension System Inspect	$585.72	$736.56
16565968	02/01/2023 9:31 AM	02/03/2023	$2,580.20	$3,904.24	Accessories/Upfitting (Miscellaneous)	$31.02	$81.30
16565968	02/01/2023 9:31 AM	02/03/2023	$2,580.20	$3,904.24	Tires (Miscellaneous)	$813.24	$846.76
15892371	01/26/2023	01/31/2023 2:10 PM	$672.74	$886.64	Re-inspection		$42.78

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task		Parts Subtotal	Line Item Subtotal
15892371	01/26/2023	01/31/2023 2:10 PM	$672.74	$886.64	Tire Replacement		$406.62	$449.40
15892371	01/26/2023	01/31/2023 2:10 PM	$672.74	$886.64	Wheel Bearing Replacement		$266.12	$394.46
						Total Amount	$6,344.71	$8,601.85



H9

Sourcewell Awarded Contract
Contract #060920-NVS

International Trucks is pleased to provide you with this proposal compliant with all terms of the Sourcewell Vehicles and Chassis Contract #060920-NVS awarded to Navistar, Inc for new International Trucks. If you have any questions regarding enrollment in Sourcewell or detailed contract terms and conditions, please see your International Truck sales representative.

	PROPOSAL PREPARED FOR:	PROPOSAL PREPARED BY:
Sourcewell Member:	Town of Waterford	773283-000
Contact:	Garon VanOverloop	Marc Palumbo
Address.		860-208-8732
City/State/Zip.		Mpalumbo@allegiancetrucks.com
Phone:		
Email:		

Proposal Number	18687-2
Date	9/18/2024
Quantity of this Specification	1
Single Sourcewell Transaction Total Volume	1

Chassis				
New 2026 International MV607 Chassis			$	138,959.00
	Base Chassis List	$ 113,929.00		
	Options List	$ 25,030.00		
	Sourcewell Contract Discount	30.3%	$	(42,131.17)
	Volume Incentive		$	-
	Meterial Price Increases		$	-
	Net Sourcewell Chassis Price		$	96,827.83
Sourcewell Partner Body				
			$	-
			$	-
Handling Fee		4.00%	$	-
Non-Sourcewell Dealer Supplied Body				
			$	-
			$	-
Handling Fee		5.00%	$	-
Additional Post Build Work				
Prep and Programming			$	1,500.00
			$	-
			$	-
Handling Fee		5.00%	$	75.00
Service Contracts				
Extended Vehicle Coverage - 40XUJ 60M/100K			$	2,250.00
Cummins PP1 Engine/Aftertreatment 60M/100K			$	3,380.00
			$	-
Additional Freight				
Transportation from Body Company			$	500.00
			$	-
Additional Floorplan				
Floorplan Charges			$	2,000.00
			$	-
Additional Fees & Taxes				
			$	-
			$	-
			$	-
Final Sourcewell Per Vehicle Price FOB Franklin			$	106,532.83
Final Sourcewell Total Vehicle(s) Price			$	106,532.83

Additional Sourcewell Qualified Content	
Customer Parts Credit - Fleet Charge only	$200
A26 Incremental Parts Credit - Fleet Charge only	$200
Silver Package Award	$1,200

Terms:

Stock unit in dealer's inventory, dealer will accept a final purchase order using the current Sourcewell pricing quoted above.

Dealer placing a new orders for the Sourcewell Member, the purchase order cannot be firmed up until the unit is slotted to build with a firm build date or lineset.
Once a firm build date has been established, dealer will provide the Sourcewell Member approved pricing and a final purchase order can be accepted with firm pricing.
Dealer cannot guarantee bodies and/or equipment pricing added to the chassis for a turnkey sale until chassis is lineset.



MV607 SBA

Sales Proposal For:

TOWN OF WATERFORD

Presented By:

ALLEGIANCE TRUCKS

Financial Summary
2026 MV607 SBA (MV607)

(US DOLLAR)

Description		Price
Net Sales Price:		$106,532.83
Memo Item(s):		
Body/Allied Equipment:	$0.00	Priced with Sourcewell Contract # 032824-NVS
Note: Memo item(s) shown here are included in the above Net Sales Price.		

Please feel free to contact me regarding these specifications should your interests or needs change. I am confident you will be pleased with the quality and service of an International vehicle.

Approved by Seller:

Official Title and Date

Authorized Signature

ALLEGIANCE TRUCKS
130 BRAINARD RD
HARTFORD CT 06114 -
(860)249-8635

This proposal is not binding upon the seller without Seller's Authorized Signature

Accepted by Purchaser:

Firm or Business Name

Authorized Signature and Date

Official Title and Date

The TOPS FET calculation is an estimate for reference purposes only. The seller or retailer is responsible for calculating and reporting/paying appropriate FET to the IRS.

The limited warranties applicable to the vehicles described herein are Navistar, Inc.'s standard printed warranties which are incorporated herein by reference and to which you have been provided a copy and hereby agree to their terms and conditions.

Prepared For:
TOWN OF WATERFORD
Garon VanOverloop
15 ROPE FERRY RD.
WATERFORD, CT 06385-
(860)444 - 5867
Reference ID: N/A

Presented By:
ALLEGIANCE TRUCKS
Marc Palumbo
130 BRAINARD RD
HARTFORD CT 06114 -
(860)249-8635

Thank you for the opportunity to provide you with the following quotation on a new International truck. I am sure the following detailed specification will meet your operational requirements, and I look forward to serving your business needs.

Model Profile
2026 MV607 SBA (MV607)

AXLE CONFIG:	4X2
APPLICATION:	Stake Flat
MISSION:	Requested GVWR: 25500. Calc. GVWR: 25999. Calc. GCWR: 33000 Calc. Start / Grade Ability: 35.48% / 2.77% @ 55 MPH Calc. Geared Speed: 80 9 MPH
DIMENSION:	Wheelbase: 183.00, CA: 95.90, Axle to Frame. 49.00
ENGINE, DIESEL:	(Cummins B6.7 280) EPA 2024, 280HP @ 2400 RPM, 660 lb-ft Torque @ 1600 RPM, 2600 RPM Governed Speed, 280 Peak HP (Max)
TRANSMISSION, AUTOMATIC:	(Allison 2500 RDS) 6th Generation Controls, Wide Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, with 33,000-lb GVW and GCW Max
CLUTCH:	Omit Item (Clutch & Control)
AXLE, FRONT NON-DRIVING:	(Dana Spicer D-800F) I-Beam Type, 8,000-lb Capacity
AXLE, REAR, SINGLE:	(Meritor RS-21-160) Single Reduction, 21,000-lb Capacity, 200 Wheel Ends Gear Ratio: 6.14
CAB:	Conventional, Day Cab
TIRE, FRONT:	(2) 11R22.5 Load Range H HSR 3 (CONTINENTAL), 494 rev/mile, 75 MPH, All-Position
TIRE, REAR:	(4) 11R22.5 Load Range G HDR2+ (CONTINENTAL), 491 rev/mile, 75 MPH, Drive
SUSPENSION, REAR, SINGLE:	23,500-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs
PAINT:	Cab schematic 100WP Location 1: 5047, Green (Prem) Chassis schematic N/A

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
MV60700	Base Chassis, Model MV607 SBA with 163.00 Wheelbase, 95 90 CA, and 49.00 Axle to Frame.	5381/3069	8450
AXLE CONFIGURATION			
1ANA	AXLE CONFIGURATION (Navistar) 4x2	0/0	0
	Notes : Pricing may change if axle configuration is changed.		
ENGINE			
12EXW	ENGINE, DIESEL (Cummins B6.7 280) EPA 2024, 280HP @ 2400 RPM, 660 lb-ft Torque @ 1600 RPM, 2600 RPM Governed Speed, 280 Peak HP (Max)	0/0	0
12VJR	EMISSION, CALENDAR YEAR (Cummins B6.7) EPA, OBD and GHG Certified for Calendar Year 2024	0/0	0
12XCS	CARB EMISSION WARR COMPLIANCE Does Not Comply with CARB Emission Warranty	0/0	0
12WZE	CARB IDLE COMPLIANCE Does Not Comply with California Clean Air Idle Regulations	0/0	0
12WVG	EPA IDLE COMPLIANCE Low NOx Idle Engine, Complies with EPA Clean Air Regulations; Includes "Certified Clean Idle" Decal on Hood	0/0	0
10UAV	VEHICLE REGISTRATION IDENTITY ID for Non CARB Omnibus/Non ACT Adopting State or Exempt Vehicle << Contains non-mitigated legacy engine & must be registered outside the States of CA/MA/OR unless exempt. You may be held liable under CA/MA/OR law for failure to properly register/otherwise failing to follow CA/MA/OR law>>	0/0	0
	Notes : CANNOT BE REGISTERED IN CA, OR, MA. For vehicles that will be registered in States other than CA, OR, MA.		
12XCE	RADIATOR Aluminum, 3-Row, Down Flow, Front to Back System, 738 Sqin Louvered, with 477 Sqin Charge Air Cooler, Includes In-Tank Oil Cooler	0/0	0
12TSY	FAN DRIVE (Borg-Warner SA85) Viscous Type, Screw On	0/0	0
	Includes : FAN Nylon		
12VCE	AIR CLEANER Single Element, Fire Retardant Media	0/0	0
12703	ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection	0/0	0
12WUL	BLOCK HEATER, ENGINE (Phillips) 120V/1000W, with "Y" Cord for Dealer Installed 120V/300W Oil Pan Heater	3/0	3
	Includes : BLOCK HEATER SOCKET Receptacle Type; Mounted below Drivers Door		
12VYP	ENGINE CONTROL, REMOTE MOUNTED No Provision for Remote Mounted Engine Control	0/0	0
12WPV	OIL PAN 15 Quart Capacity, For Cummins ISB/B6.7 Engines	0/0	0
12VXT	THROTTLE, HAND CONTROL Engine Speed Control; Electronic, Stationary, Variable Speed; Mounted on Steering Wheel	0/0	0

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
12EMZ	VENDOR WARRANTY, ENGINE (Cummins) B6.7 Engine, 3-Year Unlimited Miles Standard Warranty	0/0	0
TRANSMISSION			
13BBK	TRANSMISSION, AUTOMATIC (Allison 2500 RDS) 6th Generation Controls, Wide Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, with 33,000-lb GVW and GCW Max	0/0	0
13WYH	TRANSMISSION TCM LOCATION Located Inside Cab	0/0	0
13WVV	NEUTRAL AT STOP Allison Transmission Shifts to Neutral When Service Brake is Depressed and Vehicle is at Stop; Remains in Neutral Until Service Brake is Released	0/0	0
13XAL	PTO LOCATION Customer Intends to Install PTO at Left Side of Transmission	0/0	0
13WYY	SHIFT CONTROL PARAMETERS (Allison) 1000 or 2000 Series Transmissions, Performance Programming	0/0	0
13WEV	TRANSMISSION FEATURE EFFECTS for Allison, Disable Aftertreatment Regeneration When in PTO Mode	0/0	0
13WLN	TRANSMISSION OIL Synthetic; 20 thru 28 Pints	0/0	0
13WVS	TRANSMISSION SHIFT CONTROL T-Handle	0/0	0
CLUTCH			
11001	CLUTCH Omit Item (Clutch & Control)	0/0	0
REAR AXLES, SUSPENSIONS			
14ATE	AXLE, REAR, SINGLE (Meritor RS-21-160) Single Reduction, 21,000-lb Capacity, 200 Wheel Ends . Gear Ratio: 6.14 Notes : Axle Lead Time is 30 Days Standard, 90 Days w/no Spin Option	0/402	402
14VAH	SUSPENSION, REAR, SINGLE 23,500-lb Capacity, Vari-Rate Springs, with 4500-lb Capacity Auxiliary Rubber Springs	0/66	66
14WMG	AXLE, REAR, LUBE (EmGard FE-75W-90) Synthetic Oil; 30 thru 39.99 Pints	0/0	0
14WAP	SHOCK ABSORBERS, REAR (2)	0/45	45
FRONT AXLES			
2AEM	AXLE, FRONT NON-DRIVING (Dana Spicer D-800F) I-Beam Type, 8,000-lb Capacity	-12/0	-12
FRONT SUSPENSIONS			
3ADA	SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 8,000-lb Capacity, with Shock Absorbers Includes : SPRING PINS Rubber Bushings, Maintenance-Free Notes	0/0	0

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
	: In combinations where chassis component weights may cause a chassis lean, a spring is used in front left spring pack to offset this imbalance & provide a level chassis, within 3/8", with body installed.		
CABS, COWLS, BODIES			
16030	CAB Conventional, Day Cab	0/0	0
	Includes : CLEARANCE/MARKER LIGHTS (5) Flush Mounted		
16ZJA	ACCESS, CAB Aluminum, Self-Cleaning, Open and Serrated Design, Driver & Passenger Sides, Two Steps per Door, for use with Day Cab, Extended Cab or Sleeper Cab	-1/0	-1
16BAM	AIR CONDITIONER with Integral Heater and Defroster	56/0	56
16WBY	ARM REST, RIGHT, DRIVER SEAT	3/0	3
16VKB	CAB INTERIOR TRIM Classic, for Day Cab	0/0	0
	Includes : CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket, Located Above Driver and Passenger : DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted : SUN VISOR (2) Padded Vinyl, 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap		
16VLK	CAB REAR SUSPENSION Air Suspension, for Mid Cab Height	42/0	42
16WEE	CAB SOUND INSULATION Includes Dash Insulator and Engine Cover Insulator	8/0	8
16WLS	FRESH AIR FILTER Attached to Air Intake Cover on Cowl Tray in Front of Windshield Under Hood	1/0	1
16GEG	GAUGE CLUSTER Premium Level; English with English Electronic Speedometer	0/0	0
	Includes : GAUGE CLUSTER DISPLAY: Base Level (3" Monochromatic Display), Premium Level (5" LCD Color Display); Odometer, Voltmeter, Diagnostic Messages, Gear Indicator, Trip Odometer, Total Engine Hours, Trip Hours, MPG, Distance to Empty/ Refill for : GAUGE CLUSTER Speedometer, Tachometer, Engine Coolant Temp, Fuel Gauge, DEF Gauge, Oil Pressure Gauge, Primary and Secondary Air Pressure or Auxiliary Air Pressure (if Air Equipped) : WARNING SYSTEM Low Fuel, Low DEF, Low Oil Pressure, High Engine Coolant Temp, Low Battery Voltage (Visual and Audible), Low Air Pressure, Primary and Secondary (if Air Equipped)		
16HHE	GAUGE, AIR CLEANER RESTRICTION (Filter-Minder) Mounted in Instrument Panel	2/0	2
16HGH	GAUGE, OIL TEMP, AUTO TRANS for Allison Transmission	1/0	1
16XJN	INSTRUMENT PANEL Flat Panel	0/0	0
16HKT	IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster	0/0	0
16WSE	LOW WASHER FLUID INDICATOR	1/0	1

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
16SNM	MIRRORS (2) C-Loop, Heated, Black Heads and Arms, 7.5" x 14" Flat Glass, Includes 7 5" x 7" Convex Mirrors, for 102" Load Width	-2/0	-2
	Notes : Mirror Dimensions are Rounded to the Nearest 0.5"		
16SSB	MIRROR, CONVEX, HOOD MOUNTED (2) Right and Left Sides, Breakaway, Black	0/0	0
16JNT	SEAT, DRIVER (National 2000) Air Suspension, High Back with Integral Headrest, Vinyl, Isolator, 1 Chamber Lumbar, with 2 Position Front Cushion Adjust, -3 to +14 Degree Angle Back Adjust	-13/-5	-18
16SMH	SEAT, TWO-MAN PASSENGER (National) Fixed Back, Integrated Headrest in Both Occupant Positions, Vinyl, with Under Seat Storage Compartment	36/35	71
16WJU	WINDOW, POWER (2) and Power Door Locks, Left and Right Doors, Includes Express Down Feature	5/0	5
FRAMES			
1CAD	FRAME RAILS High Strength Low Alloy Steel (80,000 PSI Yield); 10.250" x 3.092" x 0.375" (260.4mm x 78.5mm x 9.5mm); 455.0" (11557mm) Maximum OAL	109/163	272
1LNN	BUMPER, FRONT Contoured, Steel, Chrome Plated	0/0	0
1570	TOW HOOK, FRONT (2) Frame Mounted	8/0	8
1LEG	LICENSE PLATE HOLDER Includes Upper & Lower Mounting Plate Hardware, Mounted in Existing Holes in Front Bumper	3/0	3
1WEH	WHEELBASE RANGE 134" (340cm) Through and Including 197" (500cm)	75/-75	0
BRAKES			
4091	BRAKE SYSTEM, AIR Dual System for Straight Truck Applications	0/0	0
	Includes : BRAKE LINES Color and Size Coded Nylon : DRAIN VALVE Twist-Type : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel : PARKING BRAKE VALVE For Truck : QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4 : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6		
4AZJ	AIR BRAKE ABS (Bendix AntiLock Brake System) 4-Channel (4 Sensor/4 Modulator) Full Vehicle Wheel Control System, with Automatic Traction Control	0/0	0
4GBM	BRAKE, PARKING Manual Push-Pull Pneumatic Parking Brake	0/0	0
4XDC	BRAKES, FRONT (Meritor 15X4 Q-PLUS CAST) Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 15" X 4", 13,200-lb Capacity	0/0	0
4ESX	BRAKE CHAMBERS, FRONT AXLE (Haldex) 20 Sqin	13/0	13
4LAG	SLACK ADJUSTERS, FRONT (Gunite) Automatic	14/0	14
4WBX	DUST SHIELDS, FRONT BRAKE for Air Cam Brakes	10/0	10

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
4XDR	BRAKES, REAR (Meritor 16.5X7 Q-PLUS CAST) Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 16.5" X 7", 23,000-lb Capacity per Axle	0/0	0
4EXU	BRAKE CHAMBERS, REAR AXLE (Bendix EverSure) 30/30 Sqin Spring Brake	0/39	39
4LGG	SLACK ADJUSTERS, REAR (Gunite) Automatic	0/14	14
4WDM	DUST SHIELDS, REAR BRAKE for Air Cam Brakes	0/10	10
4LGR	SLACK ADJUSTER PINS Stainless Steel Slack Adjuster Pins/Cotter Pins on Front and Rear	0/0	0
4SPA	AIR COMPRESSOR (Cummins) 18.7 CFM	37/1	38
4EDN	AIR DRYER (Bendix AD-9SI) with Heater, Includes Safety Valve	19/-2	17
4VLE	AIR DRYER LOCATION Mounted Inside Engine Compartment, Right Side	0/0	0
4EYD	AIR DRYER SHIELD to Protect from Debris	2/0	2
4VGM	AIR TANK Polished Aluminum, with Straight Thread O-Ring Ports	-12/-3	-15
4VKH	AIR TANK LOCATION (2) Mounted Under Battery Box, Outside Right Rail, Under Cab	37/14	51
4732	DRAIN VALVE (Berg) with Pull Chain, for Air Tank	0/0	0
STEERING			
5PRG	STEERING GEAR (TRW (Ross) TAS40) Power	0/0	0
5708	STEERING COLUMN Tilting	14/2	16
5CAW	STEERING WHEEL 4-Spoke; 18" Dia., Black	0/0	0
DRIVELINES			
6DGA	DRIVELINE SYSTEM (Dana Spicer) SPL100, for 4x2/6x2	0/0	0
EXHAUST SYSTEMS			
7BMJ	EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Under Right Rail Back of Cab, for Single Vertical Tail Pipe, Frame Mounted Right Side Back of Cab	75/48	123
7SCP	ENGINE EXHAUST BRAKE for Cummins ISB/B6.7/ISL/L9 Engine with Variable Vane Turbo Charger	0/0	0
7WDM	EXHAUST HEIGHT 10'	15/12	27
7WBS	MUFFLER/TAIL PIPE GUARD (1) Bright Stainless Steel	13/11	24
7WBA	TAIL PIPE (1) Turnback Type, Bright	5/4	9
ELECTRICAL SYSTEMS			
8000	ELECTRICAL SYSTEM 12-Volt, Standard Equipment Includes : DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab : HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever	0/0	0

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
	: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light : STARTER SWITCH Electric, Key Operated : STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector : TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature : TURN SIGNALS, FRONT Includes Reflectors and Auxiliary Side Turn Signals, Solid State Flashers; Flush Mounted : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever : WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted : WIRING, CHASSIS Color Coded and Continuously Numbered		
8WXD	ALARM, PARKING BRAKE Electric Horn Sounds in Repetitive Manner When Vehicle Park Brake is "NOT" Set, with Ignition "OFF" and any Door Opened	0/0	0
8GHP	ALTERNATOR (Delco Remy 28SI) Brush Type, 12 Volt, 160 Amp Capacity, Pad Mount, with Remote Sense	-1/0	-1
8RPP	ANTENNA Shark Fin, Roof Mounted	1/0	1
8THB	BACK-UP ALARM Electric, 102 dBA	0/3	3
8VUX	BATTERY BOX Steel, with Plastic Cover, 25" Wide, 2-3 Battery Capacity, Mounted Right Side Under Cab	0/0	0
8MSG	BATTERY SYSTEM (Fleetrite) Maintenance-Free, (3) 12-Volt 1980CCA Total, Top Threaded Stud	25/28	53
8HAB	BODY BUILDER WIRING Back of Day Cab at Left Frame or Under Sleeper, Extended or Crew Cab at Left Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/ Turn	2/0	2
8RGA	2-WAY RADIO Wiring Effects; Wiring with 20 Amp Fuse Protection, Includes Ignition Wire with 5 Amp Fuse, Wire Ends Heat Shrink and Routed to Center of Header Console in Cab	1/0	1
8XAH	CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses	0/0	0
8518	CIGAR LIGHTER Includes Ash Cup	1/0	1
8WPH	CLEARANCE/MARKER LIGHTS (5) (Truck Lite) Amber LED Lights, Flush Mounted on Cab or Sunshade	1/0	1
8XHA	CRUISE DISABLED W/WIPERS Cruise Control will Automatically be Disabled if Windshield Wipers are Turned on when Vehicle Speed Exceeds 25 MPH	0/0	0
8XNZ	HEADLIGHTS Halogen, with Daytime Running Lights	0/0	0
8WRB	HEADLIGHTS ON W/WIPERS Headlights Will Automatically Turn On if Windshield Wipers are Turned On	0/0	0
8XHN	HORN, AIR Single Trumpet, Black, with Lanyard Pull Cord	3/0	3
8540	HORN, ELECTRIC (2) Trumpet Style	1/0	1
8WWJ	INDICATOR, LOW COOLANT LEVEL with Audible Alarm	0/0	0
8XPK	POWER SOURCE, ADDITIONAL Auxiliary Power Outlet (APO) with USB-A Port and USB-C Port, Located in the Instrument Panel	0/0	0
8RPS	RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input	3/0	3

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
8RMZ	SPEAKERS (2) 6.5" Dual Cone Mounted in Both Doors, (2) 5.25" Dual Cone Mounted in Both B-Pillars	7/1	8
8WTK	STARTING MOTOR (Delco Remy 38MT Type 300) 12 Volt, Less Thermal Over-Crank Protection	8/0	8
8TKJ	STOP, TURN, TAIL & B/U LIGHTS (Truck Lite) Super 44, with LED Lights for Stop, Turn, Tail and Backup Lights, with Power Module, "International" Termination and Less Junction Box, Includes License Plate Light	0/2	2
8VTV	STOP-LIGHT WIRING MODIFIED Stop-Lights Turned on When Engine Compression Brake, Exhaust Brake or Retarder is Activated	0/0	0
8WMA	SWITCH, TOGGLE, FOR WORK LIGHT Lighted; on Instrument Panel and Wiring Effects for Customer Furnished Back of Cab Light	2/1	3
8WPZ	TEST EXTERIOR LIGHTS Pre-Trip Inspection will Cycle all Exterior Lamps Except Back-up Lights	0/0	0
FRONT END			
9WBW	FRONT END Tilting, Fiberglass, with Three Piece Construction, Dual Air Intakes	0/0	0
9WBN	FENDER EXTENSIONS Painted	0/0	0
9HCY	GRILLE Molded in Black, with Chrome Surround	0/0	0
9HBN	INSULATION, SPLASH PANELS for Sound Abatement	2/0	2
9HAN	INSULATION, UNDER HOOD for Sound Abatement	10/0	10
9AAB	LOGOS EXTERIOR Model Badges	0/0	0
9AAE	LOGOS EXTERIOR, ENGINE Badges	0/0	0
SPEEDOMETER, TOOLS, MISC			
10021	CHASSIS COATING Corrosion Resistant E-Coat Primer Coating for Single Frame Rails	0/0	0
10AGB	COMMUNICATIONS MODULE Telematics Device with Over the Air Programming; Includes Five Year Data Plan and International 360	0/0	0
10XAN	FIRE EXTINGUISHER 5 lb Class A B C	8/2	10
10XAP	FIRE EXTINGUISHER BRACKET Mounted Left Side Driver Seat	1/0	1
10WBS	KEYS - ALL ALIKE, ADDITIONAL 2 Keys	0/0	0
10WUE	MUD FLAPS, FRONT WHEELS (2) Rubber, Mounted on Fender Extension	12/0	12
10060	PAINT SCHEMATIC, PT-1 Single Color, Design 100 Includes : PAINT SCHEMATIC ID LETTERS "WP"	0/0	0
10761	PAINT TYPE Base Coat/Clear Coat, 1-2 Tone	0/0	0
10SLV	PROMOTIONAL PACKAGE Government Silver Package	0/0	0
10WCY	SAFETY TRIANGLES	6/0	6
10WGD	SPECIAL RATING, GVWR Limited to 25,999-lb GVWR	0/0	0
10769	PAINT CLASS Premium Color	0/0	0

Code	Description	F/R Wt (lbs)	Tot Wt (lbs)
FUEL TANKS			
15SGJ	FUEL TANK Top Draw, Non-Polished Aluminum, D-Style, 16" Tank Depth, 50 US Gal (189L), Mounted Left Side, Under Cab	23/3	26
15WDG	DEF TANK 7 US Gal (26L) Capacity, Frame Mounted Outside Left Rail, Under Cab	0/0	0
15BAA	DEF TANK COVER Stainless Steel	2/0	2
15924	FUEL TANK STRAPS Bright Finish Stainless Steel	0/0	0
15LMN	FUEL/WATER SEPARATOR (Racor 400 Series,) 12 VDC Electric Heater, Includes Pre-Heater, with Primer Pump, Includes Water-in-Fuel Sensor	-3/0	-3
15LRE	LOCATION FUEL/WATER SEPARATOR Mounted Under Hood, Left Side, Above Front Axle	0/0	0
WHEELS, TIRES - FRONT			
27DTU	WHEELS, FRONT (Accuride 29001) DISC; 22.5x7.50 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs	0/0	0
7382135439	(2) TIRE, FRONT 11R22.5 Load Range H HSR 3 (CONTINENTAL), 494 rev/mile, 75 MPH, All-Position	78/0	78
WHEELS, TIRES - REAR			
28DTU	WHEELS, REAR (Accuride 29001) DUAL DISC; 22.5x7.50 Rims, Powder Coat Steel, 5-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs	0/0	0
7372135444	(4) TIRE, REAR 11R22.5 Load Range G HDR2+ (CONTINENTAL), 491 rev/mile, 75 MPH, Drive	0/168	168
WHEELS, SPARE			
26DTU	WHEEL, SPARE, DISC (Accuride 29001) 22.5x7.50 Rims, Powder Coat Steel, 5-Hand Hole 10-Stud, 285.75mm BC, Hub-Piloted	0/72	72
WHEELS MISC OPTIONS			
29WLK	WHEEL BEARING, FRONT, LUBE (EmGard FE-75W-90) Synthetic Oil	0/0	0
	Services Section:		
WARRANTY			
40129	WARRANTY Standard for MV Series, Effective with Vehicles Built July 1, 2017 or Later, CTS-2020A	0/0	0
	Total Component Weight:	**6141/4130 (lbs)**	**10271 (lbs)**
		(lbs)	**(lbs)**
	40XUJ Ext Vehicle 60/100	0/0	0
	Cummins PP1 YYJ 60/100	0/0	0
	Total Goods Purchased:	**0/0**	**0**

The weight calculations included in this proposal are an estimate of future vehicle weight The actual weight as manufactured may be different from the estimated weight. Navistar, Inc shall not be liable for any consequences resulting from any differences between the estimated weight of a vehicle and the actual weight.

EQUIPMENT SPECIALISTS

180 Roberts Street, East Hartford CT 06108 Tel: (860) 296-7000 • www.ES-CT.com

Town of Waterford

November 8, 2024

Public Works

Waterford, CT.

IROQUOIS 14FT RACK BODY

ATTN: Garon

BUDGET ONLY

- Chassis MUST HAVE Clear Right-Side Frame Rail Behind Cab (as much as Possible). Relocating of Components Interfering in Installation will be Billed at Shop Rate of $165 per Hour

- Chassis Must Have factory option switches, 6-Minimum preferred
- Minimum 26,000 GVW Six (6) Wheel Cab & Chassis
- ***106" CA with Spring Suspension- (Need to confirm)***
- Allison 3000 or Higher Transmission
- Air and Electric to Rear
- Electric Trailer Brake Prep Package in cab

Additional charges may apply for items not supplied on chassis

We are Pleased to Quote the Following One (1) New Iroquois Custom Built Flatbed INSTALLED ON IH MV 26,000 GVW WITH 106" CA:

BODY:

- IROQUOIS STAKE/PLATFORM BODY
- LENGTH: 14' 4" WIDTH: 96"
- ¼" STEEL DIAMOND PLATE FLOOR & RAILS, TWO (2) PIECE STYLE
- 4" STRUCTURAL CHANNEL CROSSMEMBERS ON 16" CENTERS
- 6" STRUCTURAL CHANNEL LONGSILLS
- 60" HIGH 10 GA SMOOTH STEEL HEADBOARD BRACED WITH 3" STRUCTURAL CHANNEL
- VERTICAL SUPPORTS, BOXED TOP RAIL WITH FULL WIDTH TRIPPLE WIDE INTERGRATED SCREEN WINDOW, BRACED FORWARD
- INSTALL PIPE STYLE WINCH BAR HOLDER AT FRONT SIDE OF HEADBOARD
- RAIL STAKE POCKET HOLES AT THE SIDES & REAR
- 42" HIGH WOODED SLATTED SIDES
- FIVE (5) WOODED SLATTS
- WESTERN STYLE RACK CONNECTORS, ALL REMOVABLE

- LED CLEARANCE LIGHTS & REFLECTORS

RAILGATE:

- Thiemen Model AATVLR-20-9036+6 All Aluminum Railgate
- 2000 Lb Capacity
- Weld-On Aluminum Rails
- One Piece Aluminum Platform
- 90" X 36" Loading Platform With 6" Tapered Ramp
- Toggle Switch Control With In-Cab Shut-Off
- Gravity Down
- Manual Close Platform / Torsion Assist
- Sliders With Top & Bottom Rollers
- 96" Wide Body Required
- Platform To Store Approx. 32" Above Floor
- 54" Rails
- Outside Width Rail-To-Rail 95"
- Inside Width 86.63"
- Bed Height 33"-51"
- Led Tailight Kit
- Remote Pendant

TOOLBOXES:

- Two (2) Bawer 24" X 24" X 60" STAINLESS STEEL Underbody Boxes with Double Doors
- Two (2) Bawer 24" X 24" X 60" STAINLESS STEEL Boxes with Double Doors Mounted on outside edges of Flatbed Body

LIGHTING:

- WHELEN 60" LIGHT BAR (Chassis must have reinforcements)
- Front Strobes: 2 @ SOUND-OFF GREEN/AMBER Recessed In Grill
- Dual Beacons: SOUND-OFF GREEN AMBER on Headboard
- Rear Strobes: 2 @ SOUND-OFF GREEN/AMBER Mounted In Boxes at Top Sides of Railgate
- Two (2) Led Spots – Location TBD
- Icc Required Led Lighting on Body

TOW PLATE:

- 5/8"" Towplate Mounted W/ Gussetts, 2 D-Rings, 7 Flat Rv Pin & 6 Round Trailer Plugs, 2-5/16" Pintle Ball Combo (19" To Top of Ball) Bolted To Towplate W/ 3 Different Height Hole Sets
- Custom ICC Bar

MISC:

- Cone Holders Front Bumper
- Poly Fenders
- Varitech 150 Gallon Tank mounted to Headboard
- Misc Tool Holders

- Access Ladder on Rear Side of Body
- Wheel Chock Holder
- Back-Up Alarm
- Fully Installed on Chasis with 106" CA And Six (6) Aux Switches

BUDGET.....	**$ 58,500.00**

OPTIONS:

A. REARVIEW CAMERA.....	**$ 950.00**
B. RACK BODY WITH 102" ILO 96".....	**$ 1600.00**

QUOTE VALID: 30 DAYS

DELIVERY: 90 DAYS AROC

Respectfully Submitted,

Glenn Slade - Sales Consultant

Equipment Specialists

DATE: 10/29/2024
TIME: 02:17 p.m.

TOWN OF WATERFORD
VEHICLE REPAIR HISTORY REPORT
FACILITY: 00001

ID: 1-32/RRV PAGE: 1

STARTING VMRS CODE: 000-000-000 DATE: FIRST VEHICLE:: S22
ENDING VMRS CODE: 999-999-999 DATE: LAST VEHICLE: S22

VMRS Code	METER : STANDARD QUANTITY	SUBTOTALS OF VMRS CODES FOR DIVISION > AL LABOR HRS	LABOR COST	PARTS COST	PERIOD : LIFE TOTAL COST	PERCENT	TOT COST /METER
001 A/C, HEAT, VENTILATION	3	10.00	335.60	340.49	676.09	1.59 %	0.01418
013 BRAKES	11	37.50	1188.48	1578.11	2766.59	6.52 %	0.05801
017 TIRES,TUBES,LINERS	11	12.50	432.59	4662.63	5095.22	12.01 %	0.10684
031 CHARGING SYSTEM	1	0.00	0.00	0.00	0.00	0.00 %	0.00000
033 IGNITION SYSTEM	2	8.00	302.08	238.38	540.46	1.27 %	0.01133
034 LIGHTING SYSTEM	8	13.00	473.58	64.45	538.03	1.27 %	0.01128
042 COOLING SYSTEM	8	28.00	964.85	441.54	1406.39	3.32 %	0.02949
043 EXHAUST SYSTEM	1	3.00	118.92	104.89	223.81	0.53 %	0.00469
044 FUEL SYSTEM	1	10.00	330.24	139.34	469.58	1.11 %	0.00985
045 POWER PLANT/ENGINE	1	1.00	29.33	0.00	29.33	0.07 %	0.00062
052 ELECTRICAL ACCESSRES	3	4.00	140.70	39.18	179.88	0.42 %	0.00377
053 EXPENDABLE ITEMS	2	2.00	61.34	195.46	256.80	0.61 %	0.00538
065 HYDRAULIC SYSTEMS	3	3.00	88.29	159.05	247.34	0.58 %	0.00519
066 PREVENTIVE MAINTENANCE	9	153.50	4848.05	8310.96	13159.01	31.02 %	0.27593
071 BODY	1	5.00	146.65	75.00	221.65	0.52 %	0.00465
099 ROAD CALL TRAVEL TIME	44	203.50	6502.21	10029.54	16531.75	38.97 %	0.34666
730 HOUSEKEEPING	1	3.00	79.08	0.00	79.08	0.19 %	0.00166
TOTALS:	110	497.00	16041.99	26379.02 TOT:	42421.01	100.00 %	0.88953

Service History by Vehicle

Town of Waterford - Public Works

20 records

Report generated on 10/29/2024 2:36 PM by Garon VanOverloop

Filters

Time Frame: Oct 1, 2022 - Oct 29, 2024 Vehicle: S22

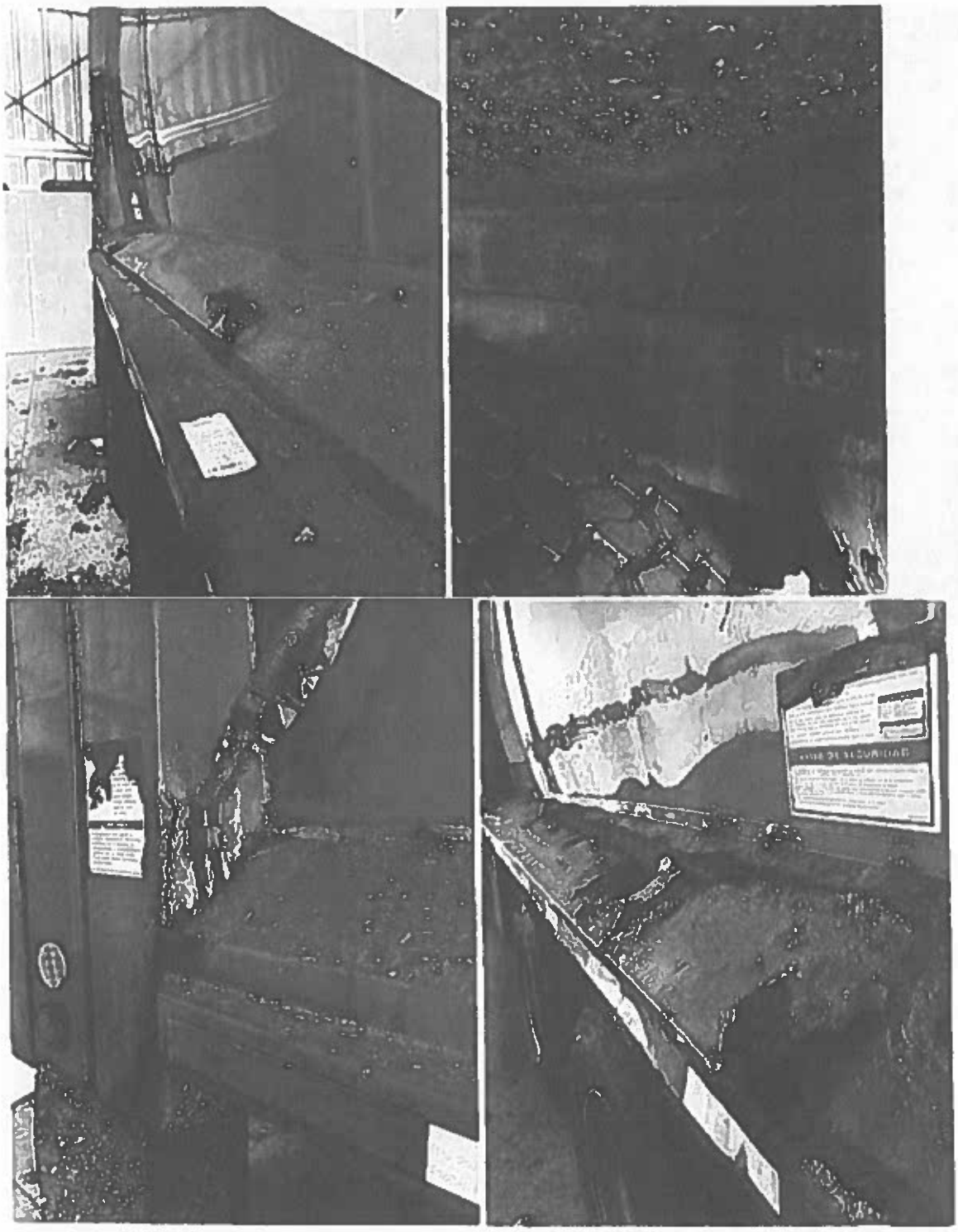
Labor Subtotal	Parts Subtotal	Line Item Subtotal
$7,609.68	$26,377.92	$33,987.60

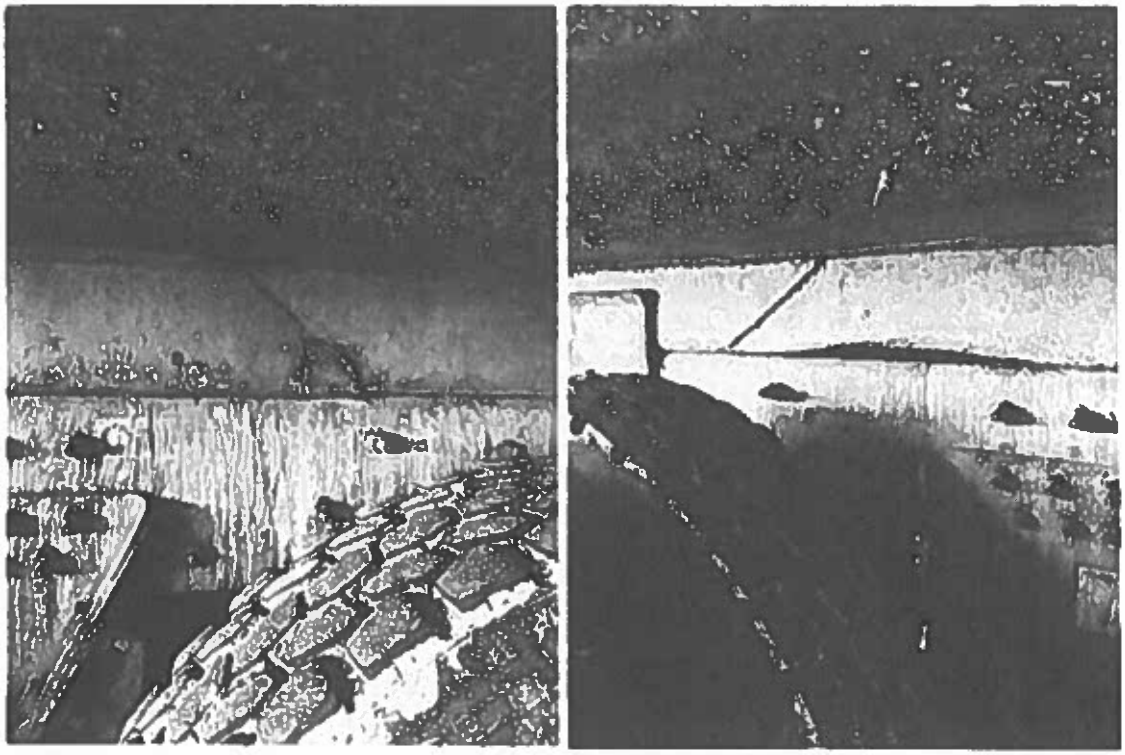
Vehicle

S22

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task	Parts Subtotal	Line Item Subtotal
28761726	08/01/2024 10:00 AM	08/12/2024 7:44 AM	$4,497.93	$5,018.26	Preventative Maintenance	$269.54	$397.62
28761726	08/01/2024 10:00 AM	08/12/2024 7:44 AM	$4,497.93	$5,018.26	Tire Replacement	$1,119.00	$1,143.02
28761726	08/01/2024 10:00 AM	08/12/2024 7:44 AM	$4,497.93	$5,018.26	Brake Shoes Replacement	$1,600.64	$1,696.70
28761726	08/01/2024 10:00 AM	08/12/2024 7:44 AM	$4,497.93	$5,018.26	Diagnose Hydraulics	$294.00	$358.04
28761726	08/01/2024 10:00 AM	08/12/2024 7:44 AM	$4,497.93	$5,018.26	Backup Alarm Replacement	$89.69	$105.70
28761726	08/01/2024 10:00 AM	08/12/2024 7:44 AM	$4,497.93	$5,018.26	Hydraulic System Service	$934.76	$966.78
28761726	08/01/2024 10:00 AM	08/12/2024 7:44 AM	$4,497.93	$5,018.26	Collection Arm Repair	$190.30	$350.40
27550909	07/03/2024 8:30 AM	07/03/2024 10:45 AM	$1,050.00	$1,098.03	Tire Replacement	$1,050.00	$1,098.03
26044165	04/19/2024 7:30 AM	04/19/2024 8:00 AM	$31.43	$47.05	Collection Arm Repair	$31.43	$47.05
25593699	04/01/2024 7:32 AM	04/01/2024 7:32 AM	$9.54	$9.54	Headlamp Bulb Replacement	$9.54	$9.54
24697954	03/11/2024 2:30 PM	03/11/2024 3:30 PM	$52.04	$91.90	door hinge replacement	$52.04	$91.90
24803360	03/09/2024 8:30 AM	03/09/2024 10:30 AM	$769.78	$832.24	Hydraulic cylinder replacement	$769.78	$832.24

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task	Parts Subtotal	Line Item Subtotal
22221306	01/08/2024 3:00 PM	01/08/2024 3:48 PM	$152.93	$176.35	Collection Arm Repair	$152.93	$176.35
23197839	01/08/2024 8:00 AM	01/08/2024 9:00 AM	$152.92	$184.15	Collection Arm Repair	$152.92	$184.15
22153281	01/04/2024 8:00 AM	01/05/2024 9:53 AM	$266.53	$453 91	Preventative Maintenance	$266.53	$453.91
21776337	12/11/2023 11:05 AM	12/11/2023 1:30 PM	$0.01	$23.08	Rear Tail Light Replacement	$0 01	$23.08
19926977	09/26/2023	09/26/2023	$186.15	$278.43	Diagnostics (Unspecified)	$186.15	$278.43
19412089	08/21/2023 11:00 AM	08/30/2023 8:17 AM	$8,046.96	$8,507.60	Preventative Maintenance	$480.46	$605.38
19412089	08/21/2023 11:00 AM	08/30/2023 8:17 AM	$8,046.96	$8,507.60	Brake Adjustment	$242.27	$304.73
19412089	08/21/2023 11:00 AM	08/30/2023 8:17 AM	$8,046 96	$8,507.60	packing cylinder replacement	$6,906.97	$7,094.35
19412089	08/21/2023 11:00 AM	08/30/2023 8.17 AM	$8,046.96	$8,507.60	Automatic Transmission (Miscellaneous)	$390 00	$413.42
19412089	08/21/2023 11:00 AM	08/30/2023 8:17 AM	$8,046.96	$8,507.60	Electrical diagnostics	$27.26	$89.72
18535110	07/10/2023	07/10/2023	$356.00	$418.46	Towing/Roadside Assistance	$356.00	$418.46
18513237	07/07/2023 11:00 AM	07/07/2023 12:30 PM	$1,021.08	$1,067.93	Tire Replacement	$1,021.08	$1,067.93
17435729	05/02/2023	05/02/2023 4:00 AM	$276.10	$367 30	Preventative Maintenance	$276.10	$367.30
17135686	04/10/2023 10:02 AM	04/10/2023 10:03 AM	$288 70	$379.90	Air Actuator Cylinder Replacement	$186.15	$246.95
17135686	04/10/2023 10:02 AM	04/10/2023 10:03 AM	$288.70	$379.90	Hydraulic Oil Add	$102.55	$132.95
16227158	01/18/2023 11:02 AM	02/22/2023 2.10 PM	$4,000.98	$8,501.78	No Service Task	$4,000.98	$8,501.78
16227158	01/18/2023 11:02 AM	02/22/2023 2:10 PM	$4,000.98	$8,501.78	Collection Arm Rebuild/ Replace		
16152936	01/26/2023 7:30 AM	01/30/2023 11:24 AM	$186 15	$806 95	No Service Task	$186.15	$806.95
15411504	12/09/2022 8:00 AM	12/13/2022 9:38 AM	$2,375.62	$3,028.02	crankscase breather		$10.70
15411504	12/09/2022 8:00 AM	12/13/2022 9:38 AM	$2,375.62	$3,028.02	No Service Task	$2,054.26	$2,054.26
15411504	12/09/2022 8:00 AM	12/13/2022 9:38 AM	$2,375.62	$3,028.02	Engine Oil & Filter Replacement	$321.36	$963.06
15077384	11/10/2022 8:00 AM	11/10/2022 9:00 AM	$2,657.07	$2,696.72	Tire Replacement	$2,657.07	$2,696.72
					Total Amount	$26,377.92	$33,987.60





S22

Peterbilt Store- Hartford (H845)
206 Meadow Lane
Berlin, Connecticut 06037

John Martin
Cell Phone: 860-839-8003
Office Phone: 860-828-4125
Email: john.martin@thepetestore.com

Town Of Waterford
1000 Hartford Road
Waterford, Connecticut 06385
United States of America

Garon VanOverloop
Cell Phone: 860-625-0837
Office Phone: 860-444-5864
Email: gvanoverloop@waterfordct.org

Vehicle Summary

Unit	
Model:	Model 520
Type:	Full Truck
Description 1:	520 SIDE LOADER 2026
Description 2:	Clone of Chassis 755410 Model 520
Application	
Intended Serv.:	Refuse/On-Highway
Commodity:	Refuse, Scrap, Recycling
Body	
Type:	Curbside Recycler
Length (ft):	24
Height (ft):	13.5
Max Laden Weight (lbs):	1000
Trailer	
No. of Trailer Axles:	0
Type:	
Length (ft):	0
Height (ft):	0
Kingpin Inset (in):	0
Corner Radius (in):	0
Restrictions	
Length (ft):	40
Width (in):	102
Height (ft):	13.5

Chassis	
Fr Axle Load (lbs):	20000
Rr Axle Load (lbs):	46000
G.C.W. (lbs):	66000
Road Conditions:	
Class A (Highway)	100
Class B (Hwy/Mtn)	0
Class C (Off-Hwy)	0
Class D (Off-Road)	0
Maximum Grade:	6
Wheelbase (in):	221
Overhang (in):	75
Fr Axle to BOC (in):	0.1
Cab to Axle (in):	220.9
Cab to EOF (in):	295.9
Overall Comb. Length (in):	353.3

Special Req.

Approved by: _____ **Date:** _____

Note: All sales are F.O.B. designated plant of manufacture.

Sales Code	Std/ Opt	Description	$ List	Weight
Base Model				
0005201	S	**Model 520** Peterbilt's Model 520 is built to withstand the harsh demands of the refuse industry. The rugged, aluminum cab delivers best-in-class durability for increased uptime and lap seam construction on a zinc-coated steel sub-frame for corrosion resistance. Bulkhead-style doors provide years of watertight performance. This low-cab forward vehicle adds a new dimension of productivity and versatility. An industry-leading, 65-degree cab tilt enhances maintenance and serviceability. Body installation is cost effective and efficient and the center console provides convenient access to body control integration points.	224,932	16,475
0091180	S	**Refuse, Scrap, Recycling**	0	0
0093035	S	**Refuse/On-Highway** Truck or tractor which hauls refuse, recycled material, etc. Includes roll-on/roll-off container movement, as well as hauling refuse from transfer stations to, but not into, landfills.	0	0
0095240	S	**Curbside Recycler** A lift-equipped truck used to load residential recycling bins into the truck body. Recycling material is removed by the body by hydraulic tilt.	0	0
0098170	S	**United States Registry** Canadian Registry PackageRequires Air Conditioning Excise Tax Canada, Speedometer to be KPH ipo MPH, Daytime Running Lights and Rubber Battery Pad in Bottom of Battery Box.	0	0
Configuration				
0200700	S	**Not Applicable** Secondary Manufacturer	0	0
Frame & Equipment				
0514170	O	**10-3/4" Steel Rails 343-450"** 10.75x3.5x.375 Dimension, 2,136,000 RBM; Yield Strength: 120,000 psi. Section Modulus: 17.8 cubic inches. Weight: 1.74 lbs/inch pair	1,311	251
0601500	O	**Full Steel Inner Liner**	1,016	713
0611330	O	**Zinc Coated Anti Corrosion Treated Frame Rails** Requires Frame Rail Code. Zinc Phosphate coating will replace the standard frame rail primer and provide added corrosion prevention for your customer's operating in severe conditions or in climates where vehicle rust is common.	394	4
0620110	O	**FEPTO Provision 9in Bumper Extension** Includes 1350 Series Front Drive PTO Attachment Provision, Radiator with PTO Cut-Out in Grille, Radiator Protection Sleeve, and Bumper Extension	1,687	42
0620500	O	**Frame Components Bolted IPO Huck Fastened**	91	0
0644020	O	**EOF Square with Steel Crossmember**	199	64

Sales Code	Std/ Opt	Description	$ List	Weight
0651090	S	**Omit Rear Mudflaps and Hangers**	0	0
Front Axle & Equipment				
1011360	O	**Dana Spicer D2000F 20,000 lb, 3.5 in. Drop** Factory front axle alignment to improve handling & reduce tire wear. Zerk fittings on tie rod ends, king pins, & draglink ball joints for ease of maintenance & help extend service life of components. Cognis EMGARD® FE 75W-90 synthetic axle lube provides over 1% fuel economy improvement. Reduces wear & extends maintenance intervals, resulting in increased uptime. Provides improved fluid flow to protect components in extreme cold conditions & withstand the stress from high temperatures, extending component life.	179	0
1114030	S	**Taper Leaf Springs, Shocks 20,000 lb** Standard with Heavy Resistance Shocks.	0	0
1243010	S	**Power Steering Sheppard M100 Dual Gear** For use with 16,000 to 20,000 lb. axle ratings. Glidekote splines on steering shaft extend service life of components.	0	0
1354840	O	**PHP10 Iron PreSet PLUS Hubs** PHP10 iron PreSet PLUS hubs have a fully integrated spindle nut design, an optimized wheel spacer, magnetic fill plug on drive and trailer hubs for inspection of metal particles in lubricant, with a long life oil seal and bearings are pre-adjusted. Use with Front Axle.	-569	84
1380230	O	**Dana Spicer 5" Drop IPO 3.5", Front Axle** 5" drop (127 MM) provides lower chassis suspension and profile. Offers maximum maneuverability and the light weight solution. Available for a variety of brakes.	0	0
1380240	O	**Dana Spicer Wide Track IPO Standard** Dana Spicer wide track front axles offer added stability and deliver greater turn angles. 71in KPI IPO 69in for E1202, E1322, E1462, D2000F front axles.	62	15
1380280	O	**Bendix Air Cam Front Drum Brakes 16.5x7** For use with 16,000 lbs to 23,000 lbs steer axles or front drive axles. Includes automatic slack adjusters & outboard mounted brake drums.	606	0
1390540	O	**Dust Shields, Cam Brakes, Front Axle**	33	4
1391410	O	**Gusseted Cam Brackets, Steer Axle**	28	0
1392970	O	**Heavy Duty Cam Bushings, Steer Axle**	46	0
Rear Axle & Equipment				
1523440	S	**Dana Spicer D46-172 46,000 LBS** Dana Spicer D46-172 46,000 lbs tandem drive axles offer efficiency improvement, axle weight reduction and reduced lube quantity.	0	0
1616300	O	**PHP10 Iron PreSet PLUS Hubs**	-614	0
1660000	O	**Dust Shields For Cam Brakes, Drive Axle(s)**	72	4
1672630	O	**Differential Lock Both Axles** Air Rocker Switch Occupies the Space of One Gauge	2,061	60

Sales Code	Std/ Opt	Description	$ List	Weight
1680440	O	**Refuse Service Brakes, Steer And Drive Axles** Designed for heavy-duty applications for refuse industry, providing long brake life, safety and performance.	0	0
1680450	O	**Rear Brake Camshaft Reinforcement** Rear brake camshaft reinforcement helps guard against wear and corrosion.	73	9
1680460	O	**Heavy Wall, Drive Axle(s)**	1,040	88
1680470	O	**Lube Pump, Drive Axle(s)** Used to circulate oil within the axle housing. Recommended for use on 46,000 or greater axles used in refuse or severe service applications.	533	36
1680480	O	**Wide Track, Single & Tandem Drive Axle(s)** Wide track offers added stability. Rear width may exceed 102 inches. Verify operating restrictions and body installation.	1,858	29
1680490	O	**Gusseted Cam Brackets, Drive Axle(s)**	72	2
1680500	S	**SBM Valve** Full trucks require a spring brake modulation (SBM) system for emergency braking application. This system requires an SBM valve and a relay valve with spring brakes on the rear axles. The SBM valve allows the foot valve to operate the rear axle spring brakes if a failure exists in the rear air system.	0	0
1682710	O	**Anti-Lock Braking System (ABS) 6S6M** ABS-6. Includes air braking system.	493	35
1684200	S	**Synthetic Axle Lubricant All Axles** Peterbilt heavy duty models include Fuel Efficient Cognis EMGARD FE75W-90 which provides customers performance advantages over current synthetic lubricants with reduced gear wear and extended maintenance intervals, resulting in increased uptime. In addition, the lubricant provides improved fluid flow to protect gears in extreme cold conditions and withstand the stress from high temperatures, extending component life.	0	0
1687020	O	**Bendix Air Cam Rear Drum Brakes 16.5x8.6** Bendix Air Cam Rear Drum Brakes to fit all heavy haul, contruction, refuse and highway truck and tractor applications. Includes Automatic Slack Adjusters & Outboard Mounted Brake Drums. Refer to TSB 11-57 for more information.	-284	0
1688110	O	**Heavy Duty Cam Bushings, Drive Axle(s)**	91	0
1705380	O	**Ratio 5.38 Rear Axle**	0	0
1824410	O	**Hendrickson HMX EX 460 46,000 LBS., 54"** Haulmaax, 70K Creep Rating. Includes Traax Rod as standard, option 1920905 is not needed or available. Progressive load spring system easily adjusts to the load for an enhanced combination of empty-ride quality and loaded stability.	1,586	-67
1922600	O	**Heavy Duty Suspension Package** For High Rear Axle Loads. Suggested for concrete pumpers or natural gas trucks that have a fuel tanks located at the rear of the chassis or body. These shocks are more rigid, to provide a smoother ride when	190	0

Sales Code	Std/ Opt	Description	$ List	Weight
		there is a lot of weight at the rear of the chassis. Requires the follow option to complete the package: Hendrickson HMX400 or HMX460 suspension,16.5 Saddle Height, option 1921370, HD Shock Absorbers, Hendrickson option 1922610, Dana Spicer D2000F 20,000 Lb Front Axle with 23,000 lbs Taper Leaf Springs.		
1922615	O	**HD Shock Absorbers, Hendrickson HMX EX**	535	0
Engine & Equipment				
2074808	S	**PACCAR PX-9 360@2000 GOV@2200 1150@1200** Productivity (2024 Emissions) N21350 C121 64....Maximum Accelerator Pedal Ve N21370 C126 64....Maximum Cruise Speed (P059) N21460 C132 1400..Max PTO Speed (P046) N21520 C133 5.....Timer Setting (P030) N21610 C188 39....Low Ambient Temperature Thre N21620 C189 60....Intermediate Ambient Tempera N21630 C190 80....High Ambient Temperature Thr N21550 C206 35....Engine Load Threshold (P516) N21340 C209 120...Hard Maximum Speed Limit (P1 N21510 C225 YES...Enable Idle Shutdown Park Br N21450 C231 NO....Gear Down Protection (P026) N21570 C233 NO....Idle Shutdown Manual Overrul N21440 C234 NO....Engine Protection Shutdown (N21480 C238 NO....Auto Engine Brake in Cruise N21470 C239 NO....Cruise Control Auto Resume (N21430 C333 0.....Reserve Speed Limit Offset (N21410 C334 0.....Maximum Cycle Distance (N202 N21590 C382 YES...Enable Hot Ambient Automatic N21500 C395 0.....Expiration Distance (N209) N21530 C396 YES...Enable Impending Shutdown Wa N21540 C397 60....Timer For Impending Shutdown N21320 C399 120...Standard Maximum Speed Limit N21400 C400 252...Reserve Speed Function Reset N21420 C401 10....Maximum Active Distance (N20 N21330 C402 0.....Expiration Distance (N207)	0	0
2091120	S	**EMUX Electronics Architecture**	0	0
2091305	O	**Engine Idle Shutdown Timer Enabled**	0	0
2091315	O	**Enable EIST Ambient Temp Overrule**	0	0
2091372		**Eff EIST NA Expiration Miles**	0	0
2091640		**Effective VSL Setting NA**	0	0
2092016	O	**Typical Operating Speed 62 MPH**	0	0
2092033	O	**Powertrain Optimized for Balance**	0	0

Sales Code	Std/ Opt	Description	$ List	Weight
		Best analysis for vehicles where service includes frequent start and stop cycles.		
2140450	O	**Remote PTO/Throttle, 12-Pin** Eng Bay Remote Control Provision	110	0
2140670	O	**EPA Emission Warranty**	0	0
2140700	S	**EPA Engine Idling Compliance**	0	0
2147460	S	**Bed Plate for PX-9, L9N Engines** Designed to increase engine longevity by incorporating a stiffener bracket on the bottom side of the engine, inside the oil pan, for additional reinforcement. Required for all PX-9/L9N refuse applications and recommended for other high load 9-liter applications.	0	0
2513060	S	**PACCAR 160 Amp Alternator, Brushed** PACCAR 160 AMP alternator, brushed producing 160 Amps at road speed and 100 Amps at idle.	0	0
2521090	O	**Immersion Type Block Heater 110-120V** Standard location is left-hand under cab, Model 520 is in bumper, and for Model 220 it is at the driver step. Plug includes a weather-proof cover that protects the receptacle. This pre-heater keeps the coolant in the engine block from freezing when the engine is not running.	91	2
2522110	O	**PACCAR 12V Starter, N/A PACCAR MX Engines** PACCAR 12-volt electrical system. With centralized power distribution incorporating plug-in style relays. Circuit protection for serviceability, 12-volt light system w/circuit protection circuits number & color coded.	0	0
2538040	S	**3 PACCAR Premium 12V Dual Purpose Batt 2190 CCA** Threaded stud type terminal. Stranded copper battery cables are double aught (00) or larger to reduce resistance.	0	0
2539740	O	**Kissling Battery Disconnect Switch 300AMP** Dual Tab Mounted on Battery Box	163	3
2621000	S	**2-Speed Fan Clutch For Frequent Start/Stops** A 2-speed fan clutch is ideal for vocational applications where the fan clutch engagement time exceeds 10% of the engine run time. When the fan clutch is disengaged, the fan still rotates at 15-25% of the engine RPM. This fan rotation provides crucial airflow to the engine and draws virtually no horsepower.	0	0
2723210	S	**18.7 CFM Air Compressor** N/A X15. Furnished on engine. Teflon lined stainless steel braided compressor discharge line.	0	0
2812140	O	**C-Brake By Jacobs, PX-9** Features a dedicated cam lobe design for optimum power and three-stage engine brake operation.	2,690	90
2921110	S	**PACCAR Fuel/Water Separator Standard Service** PACCAR Fuel/Water separator standard service intervals. High efficiency media protects critical engine components.	0	0
2921210	S	**No Fluid Heat Option for Fuel Filter**	0	0
2921310	S	**No Electric Heat Option for Fuel Filter**	0	0
3010400	O	**Engine Protection Shutdown w/ Label**	10	0

Sales Code	Std/ Opt	Description	$ List	Weight
		Includes oil pressure, oil temperature, coolant temperature, and intake manifold temperature.		
3114270	S	**High Efficiency Cooling System** Cooling module is a combination of steel and aluminum components, with aluminum connections to maximize performance and cooling capability. Silicone radiator & heater hoses enhance value, durability, & reliability. Constant tension band clamps reduce leaks. Chevron Delo Extended Life Coolant (NOAT) extends maintenance intervals reducing maintenance costs. Anti-freeze effective to -30 degrees F helps protect the engine. Low coolant level sensor warns of low coolant condition to prevent engine damage. Radiator Size by Model: 520 1202 sq in, 579 1456.9 sq in, 535/536/537/548 949.3 sq in, 537/548 VOC 1000.3 sq in, 389 HH 1604 sq in, 567 1379 sq in.	0	0
3120320	O	**Bugscreen**	140	0
3120450	S	**Stainless Steel Grille**	0	0
3261980	S	**Heavy Duty Air Cleaner** Molded rubber air intake connections with lined stainless steel clamps seal to prevent contaminants in air intake.	0	0
3367200	S	**Exhaust Vertical LH DPF/SCR** LH Back of Cab Vertical, Single Module	0	0
3381770	O	**Curved Tip Standpipe(s)**	43	1
3387870	S	**24" Ht, 5" Dia Chrome, Clear Coat Standpipe(s)**	0	0
Transmission & Equipment				
4052970	O	**Allison 4500 RDS-P Transmission, Gen 6** Rugged Duty Series	18,423	390
4210190	O	**1810 HD Driveline, 1 Midship Bearing** 4.5in x .180 wall tubing	-391	15
4216590	O	**1710 Driveline Interaxle** For tandem rear axles	-101	-5
4250470	U	**Allison RDS, Pkg 225**	0	0
4252890	O	**Allison FuelSense Not Desired** Dynamic Shift Sensing	-131	0
4252950	O	**Omit Allison Neutral At Stop**	0	0
4256020	S	**Console Mounted Push Button Shifter**	0	0
4256740	O	**Allison 6-Speed Configuration, Wide Ratio Gears** Allison 4500 transmission only	0	0
4256870	O	**Allison Output Function S Neutral Indicator** Allison output function S Neutral Indicator for PTO. Required on Refuse Packer Applications. With this configuration NEUTRAL only, PTO engagement is permitted only when the transmission is in Neutral. Once the transmission is in Neutral, the PTO is automatically engaged and	0	0

Sales Code	Std/ Opt	Description	$ List	Weight
		fast idle is initiated when the PTO switch is on. In addition with this configuration Pack-on-the-fly, the PTO is automatically engaged and fast idle is initiated when the PTO switch is On concurrently with shifting of the transmission to Neutral.		
Air & Trailer Equipment				
4510210	S	**Bendix AD-HF EP Air Dryer, Heater** Coalescing filter, extended purge. Bendix AD-HF air filters protects the life of your engine system and components. Proven PuraGuard oil coalescing technonigy in the the air dryer catridge. This oil coalescing filter ensures the removal of oil and oil aerosols before they can contaminate the moisture removing desiccant.	0	0
4540420	S	**Nylon Chassis Hose**	0	0
4543320	S	**Steel Painted Air Tanks** All air tanks are steel with painted finish except when Code 4543330 Polish Aluminum Air Tanks is also selected (then exposed air tanks outside the frame rails will be polished aluminum). Peterbilt will determine the optimal size and location of required air tanks. Narratives requesting a specific air tank size or location will not be accepted for factory installation. See ECAT to determine number or location of air tanks installed.	0	0
Tires & Wheels				
5058970	O	**FF: MN 20ply 315/80R22.5 XZUS2** Efficiency Rating: Fair All-position, wide base single designed for significant weight and fuel savings in urban regional applications. Diameter = 42.9 inches; SLR = 19.8 inches. Compares to Goodyear G289 WHA and Bridestone M860 tread.	345	0
5156510	O	**RR: MN 20ply 315/80R22.5 X Works Z** Efficiency Rating: Fair Diameter= 42.9 inches; SLR= 19.8 inches	4,340	384
5190008	S	**Code-rear Tire Qty 08**	0	0
5220520	O	**FF: Alcoa 89U637 22.5 X 9.00 High Polish** Aluminum, Ultra ONE technology that saves more than 50 lbs. versus a comparable steel wheel. Built for refuse, logging, mining and other heavy haul applications that demand a tough wheel. Each wheel offers a 10,000 lbs. load rating.	320	-110
5320530	O	**RR: Alcoa 89U647 22.5X9.00 High Polish** Aluminum. Ultra ONE wheels with MagnaForce alloy.	1,788	-216
5390008	S	**Code-rear Rim Qty 08**	0	0
5400100	O	**Alligator V2B Double Sealing Valve Caps On Tire** Valve stems. Inflate thru valve.	33	0
Fuel Tanks				

Sales Code	Std/ Opt	Description	$ List	Weight
5556130	O	**26" Aluminum 80 Gallon Fuel Tank LH BOC** Paddle handle filler cap with threadless filler neck. Top draw fuel plumbing reduces chance of introducing air into the fuel system during low fuel level conditions due to the central placement of fuel pickup tube. Wire braid fuel lines increase durability & reduce potential for leaks.	182	13
5604080	O	**Location LH BOC 80 Gallon**	0	0
5650160	O	**Fuel Tank Fill Forward** Not available on under cab fuel tanks	0	0
5650490	S	**Fuel Cooler** Required with single fuel tank	0	0
5651720	O	**Locate BOC Fuel Tank(s) Rearward As Far** As possible	0	0
5652890	S	**DEF Tank Mounted LH BOC** Models 220 and 520 mounted left hand back-of-cab.	0	0
5652980	S	**DEF To Fuel Ratio Between 1:1 And 2:1**	0	0
5655069	S	**DEF Tank 520, 7.3 Gal**	0	0
Battery Box & Bumper				
6010460	O	**Aluminum Space Saver Battery Box LH Back Of Cab**	219	-11
6030360	O	**Mount Space Saver Battery Box Top Of Box 8"** Below top of frame	722	0
6121700	S	**Steel Bumper Channel Painted** Includes two front tow eyes with pins	0	0
6132400	O	**Notched Top Flange Of Bumper** Does not include fepto provisions	50	0
6132900	O	**Screen Over Air Intake Opening In Bumper**	12	2
Cab & Equipment				
6501090	O	**53" LCF ProBilt Cab RH Drive** Use with auto-trans. Includes steel frames with aluminum and fiberglass panels, all aluminum doors, dual door stops, door locks, tinted safety glass thru-out, cab and door mounted entry grab handles, 65 degree hydraulic tilt, stainless steel grille, dual rear cab fenders, service module BOC (cab tilt pump, oil fill and dipstick, coolant fill and check, fluid fill and dipstick for auto trans), door mounted armrests, power windows, doghouse full insulation, rubber floor mats, ergonomic center control console, removable instrument panel, Driver Information Display, LED backlit gauges, adjustable side flip-down interior sunvisor, 16" steering wheel with integrated horn button, tilt/telescopic adjustable column, over-door storage, driver and passenger side cup holders, USB charging port and 12VDC charging outlet, header includes HVAC controls, rear cab corner windows, 18" bolt-on step on each side, self-canceling turn signals and Front Directional and Side Mounted Turn Signals.	1,361	0

Sales Code	Std/ Opt	Description	$ List	Weight
6540160	S	**Thermal Insulation Package in Cab** The thermal insulation package is designed to make the cab thermally efficient in extreme temperatures. The model 520 adds insulation surrounding the doghouse to reduce engine heat transmitted to the cab.	0	0
6800500	S	**4.5" Rubber Flares On Cab** And wheel well fenders	0	0
6914160	O	**Sears C2 Plus Premium Driver Seat** Enhanced for operator comfort with a 1" thicker foam cushion with flat bolsters for greater surface area coverage. Countoured metal seat and back pans add to overall ergonomic design with air lumbar supprt. Comes with quick attach seat and back cushions for ease of service and replacement.	329	0
6921720	S	**Peterbilt Passenger Seat**	0	0
6931120	O	**Seat Belt Color Orange IPO Standard Black**	10	0
6939400	O	**Air Ride Driver**	394	43
6939430	O	**Mid Back Driver**	76	0
6939460	O	**Fabric Driver**	51	0
6939510	S	**Non-Air Ride Passenger**	0	0
6939540	S	**Low Back Passenger**	0	0
6939570	S	**Vinyl Passenger**	0	0
7000000	S	**Gray Interior Color** Includes ABS Gray Headliner & Rear Cab Panel, Gray Vinyl Engine Tunnel Cover. For LH, RH, and Dual Steer Dual Seated Power Windows are standard on both doors. For Dual Steer RH stand-up the LH Window is Power and the RH Window is a Manual Sliding window.	0	0
7001520	S	**Adjustable Steering Column - Tilt/Telescope**	0	0
7001620	S	**Steering Wheel With Peterbilt Logo** Steering Wheel with embossed Peterbilt logo over horn button.	0	0
7040020	O	**Diamond Plate Floor Covering on Driver side floor** in place of Rubber Mat. In Dual Steer application RH Diamond Plate covering is standard. Single drive applications the Diamond Plate is optional.	46	6
7110680	S	**Exterior Cab Entry Grabhandle** Textured; NFPA compliant. Available on Day Cab specifications only.	0	0
7220130	S	**Rear Window Back of Cab Standard Tint** 18.5in X 54in	0	0
7230350	S	**2-Piece Flat Windshield**	0	0
7322010	S	**Combo Fresh Air Heater/Air Conditioner**	0	0

Sales Code	Std/ Opt	Description	$ List	Weight
		With radiator mounted condenser, dedicated side window defrosters, Bi-Level Heater/Defroster Controls, 54,500 BTU/HR, and silicone heater hoses.		
7410040	O	**Outside Sunvisor - Stainless Steel** Not available with 2.1M high roof sleeper.	370	4
7560100	O	**Mirrors SSTL Each Side Heated and Motorized** with Switch on Door.	-29	-7
7561450	O	**(4) Convex 8 Inch SSTL Mirrors; (2) Center** These optional convex mirrors provide enhanced rearward visibility by allowing the driver to see the operation of front-end loader arms or other obstacles that may interfere with operation in refuse services. The mirrors have an off-center mounting that maximizes adjustability for field of view. Dual door stops are included with these mirrors for added protection to the mirrors during cab entry and exit. Includes 4 convexed 8" stainless steel mirrors and 2 center mounted under (heated) and 2 center mounted over mirror bracket (non-heated). Includes dual door stops.	133	4
7620620	O	**(2) Air Horns 24.5" Chrome - Round w/Horn Shields**	530	8
7722120	O	**ConcertClass, AM/FM, Weatherband, 3.5 Aux**	473	10
7725740	O	**Midlevel Speaker Package For Cab** (4) Speakers	138	6
7728030	O	**Radio Mute When In Reverse** For automatic or automated transmission	0	0
7728040	O	**Bluetooth Phone and Audio Requires USB Port**	62	0
7728050	O	**USB Port**	62	0
7788335	O	**Global Telematics Hardware**	0	0
7851330	O	**Cab Tilt Pump Air Assist**	512	0
7851870	O	**Rain Gutters Over Driver and Passenger Doors**	81	8
7852150	S	**Peterbilt Pantograph Windshield Wipers** With intermittent feature.	0	0
7900090	O	**Triangle Reflector Kit, Ship Loose** Florescent triangle emergency road flares are designed to meet and exceed all DOT standards.	39	13
7900270	O	**Fire Extinguisher, Cab Mounted** Hazmat approved UL listed/rated ABC	75	12
7900970	S	**Backup Alarm Wiring To EOF**	0	0
8011850	S	**Transmission Oil Temperature (Main)** Located in Digital Cluster Display.	0	0
8021315	S	**Air Restriction Indicator** Mounted on exhaust stanchion	0	0

Sales Code	Std/ Opt	Description	$ List	Weight
8021800	U	**Air Filter Restriction Pressure Gauge**	0	0
8021810	O	**Brake Application Air Pressure (Tractor)** Located in Digital Cluster Display.	0	0
8041200	O	**Dual Scale Speedometer MPH Over KPH**	0	0
8070390	O	**Engine Hourmeter Gauge** Located in Digital Cluster Display	0	0
8070450	O	**Engine PTO Hourmeter Gauge** Located in Digital Cluster Display	0	0
8070810	O	**Engine Manifold Pressure (Turbo Boost)** Located in Digital Cluster Display	0	0
8070820	O	**Engine Percent Torque** Located in Digital Cluster Display	0	0
8070860	O	**Main Instrumentation Panel** Digital Cluster 7" Display includes: Physical (Analog) - Speedometer, Tachometer, Oil Pressure, Coolant Temp and Display Gauges - Fuel Level, DEF Level, DPF Filter Status, Fuel Economy, Volts Telltale, OAT and Primary Air Pressure, Secondary Air Pressure for air brake trucks.	0	0
8070940	O	**Voltmeter Gauge (MD/520 Only)** Located in Digital Cluster Display	0	0
8110090	S	**Headlights Single Rectangular Halogen**	0	0
8120570	S	**(5) LED Clearance With (2) LED Marker Lights** Includes (5) lights mounted on roof of cab and (1) cab side marker light mounted in front of each cab door	0	0
8133900	S	**None Furnished Stop/Tail/Backup Lights** Available with full truck only, not available with tractor	0	0
8134160	O	**Self-Canceling Turn Signal**	0	0
8140690	O	**Brake Lights Activated by Park Brake**	54	0
Paint				
8530770	O	**(1) Color Axalta Two Stage - Cab/Hood** Base Coat/Clear Coat N85020 A - L6035EY GREEN N85700 BUMPER L0001EA BLACK N85500 CAB ROOF L6035EY GREEN N85200 FRAME L0001EA BLACK	0	0
Shipping Destination				
Options Not Subject To Discount				
9400090	S	**Peterbilt Class 8 Standard Coverage** 1 year/100,000 Miles (160,000 km)	0	0
9400094	S	**PACCAR PX-9 Standard Coverage** 2 yrs/250,000 mi (402,336 km)/6,250 hrs	0	0

Sales Code	Std/ Opt	Description	$ List	Weight
9407147	O	Fuel Price Index Factor $72 NET	72	0
9408558	O	Prognostic Connection Fee	100	0
9408634	O	SmartLINQ RD - 5YR Sub PACCAR PX Engines	799	0
9408703	O	Base Warr: Emissions 5YR/100K MI-EPA Engine	0	0
9408936	O	Frame Layout Identical to Previous Chassis	550	0

Miscellaneous

9409057	O	State Of Registry: Connecticut	0	0
9409749	O	2024 Series Emissions Engine	0	0

Promotions

Special Requirements

Special Requirement 1 0098170
Special Requirement 2
Special Requirement 3
Special Requirement 4

Order Comments

Total Weight (lbs)	**18,513**

Prices and Specifications Subject to Change Without Notice.

Unpublished options may require review/approval.
Dimensional and performance data for unpublished options may vary from that displayed in CRM.

PRICING DISCLAIMER

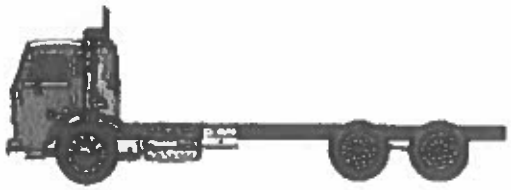
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Shipping Destinations

Intermediate Destination: NONE

Final Destinations	Quantity
Labrie Equipment Co. 175 Route Marie-Victorin Levis, Quebec G7A 2T3	1

FRAME RAKE

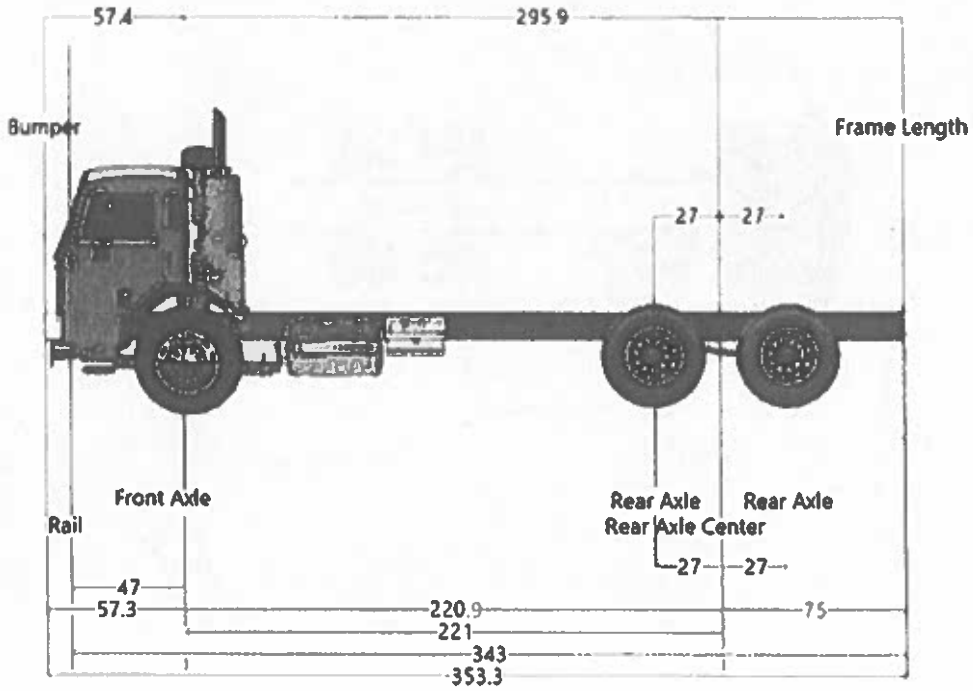


The listed heights should be considered approximations due to variations which may occur in component manufacturing processes, spring set and the way in which the vehicle is loaded.

Component	Sales Code	Description	Laden	Unladen
Frame	0514170	10-3/4" Steel Rails 343-450"	10.8	10.8
Front Spring	1114030	Taper Leaf Springs, Shocks 20,000 lb	7.4	9.7
Front Axle Drop 3.5""	1011360	Dana Spicer D2000F 20,000 lb, 3.5 in. Drop	-1.5	-1.5
Height Adj.		25mm Front Spring Spacer Blocks	1.0	1.0
Front Tires	5058970	FF: MN 20ply 315/80R22.5 XZUS2	19.6	20.4
		Front Frame Height	**37.2**	**40.4**
Frame	0514170	10-3/4" Steel Rails 343-450"	10.8	10.8
Subframe				
Suspension	1824410	Hendrickson HMX EX 460 46,000 LBS., 54"	11.5	13.6
Rear Tires	5156510	RR: MN 20ply 315/80R22.5 X Works Z	19.8	21.2
		Rear Frame Height	**42.1**	**45.5**
		Frame Rake	**4.9**	**5.1**
		Frame Rake Slope (%)	**2.2**	**2.3**

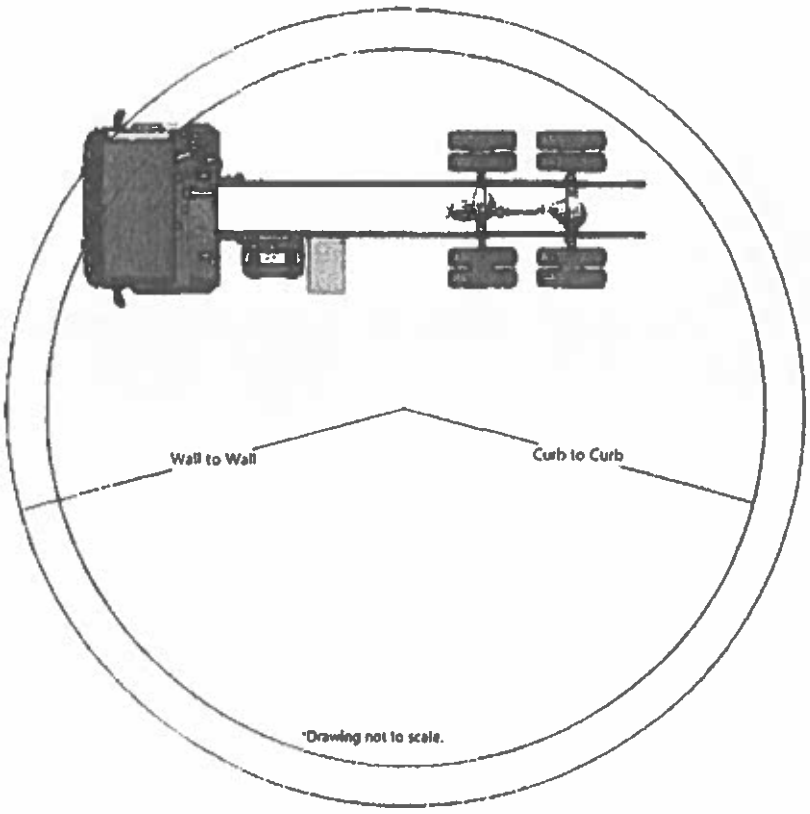
These characteristics are considered to be out of standard range
Laden rake more than 1% of wheelbase from level (positive or negative)

HORIZONTAL DIMENSIONS



Dimension	Measurement	Start	End
Axle Spacing	54	194	248
Bumper to Back of Cab	57.4	-57.3	0.1
Bumper to Front Axle	57.3	-57.3	0
Bumper to Front Frame	10.3	-57.3	-47
Cab to End of Frame	295.9	0.1	296
Cab to Rear Axle	220.9	0.1	221
Effective Bumper to Back Of Cab	57.4	-57.3	0.1
Frame Length	343	-47	296
Front Axle to Back of Cab	0.1	0	0.1
Front of Frame to Axle	47	-47	0
Load Space	295.9	0.1	296
Overall Length	353.3	-57.3	296
Overhang	75	221	296
Pusher Offset #1	0	194	221
Pusher Offset #2	0	194	221
Pusher Offset #3	0	194	221
Tag Offset	0	221	248
Wheelbase	221	0	221

TURNING RADIUS



Curb to Curb	30.9	**Curb to Curb**	31.8
Wall to Wall	33.8	**Wall to Wall**	34.6

Truck	Model S20 / Full Truck	**Wheelbase**	221
Axle	Dana Spicer D2000F 20,000 lb, 3.5 in. Drop	**Weight**	16513
Tire	FF: MN 20ply 315/80R22.5 XZUS2		
Wheel	FF: Alcoa 89U637 22.5 X 9.00 High Polish		

VEHICLE WEIGHT RATING

Component	Sales Code	Description	Ratings
Axle	1011360	Dana Spicer D2000F 20,000 lb, 3 5 in Drop	20,000
Springs	1114030	Taper Leaf Springs, Shocks 20,000 lb	20,000
Power Steering	1243010	Power Steering Sheppard M100 Dual Gear	20,000
Hubs, Drums	1354840	PHP10 Iron PreSet PLUS Hubs	23,000
Brakes			
Tires	5058970	FF. MN 20ply 315/80R22.5 XZUS2	20,000
Wheels	5220520	FF: Alcoa 89U637 22 5 X 9.00 High Polish	20,000

Requested F ont (lbs): 0
Minimum: 11,000
Maximum. 20,000

The front axle weight rating cannot exceed 20000

Component	Sales Code	Description	Ratings
Axle	1523440	Dana Spicer D46 172 46,000 LBS	46,000
Hubs, Drums	1616300	PHP10 Iron PreSet PLUS Hubs	78,000
Service Brakes			
Spring Brakes			0
Suspension	1824410	Hendrickson HMX EX 460 46,000 LBS . 54 '	46,000
Tires	5156510	RR MN 20ply 315/80R22.5 X Works Z	66,160
Wheels	5320530	RR. Alcoa 89U647 22 5X9.00 High Polish	80,000

Requested Rear (lbs): 0
Minimum: 20,000
Maximum: 46,000

The rear axle weight rating cannot exceed 46000

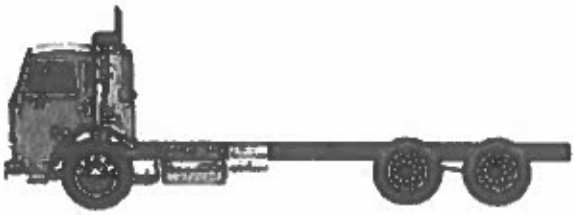
GCWR (lbs)	66,000
Min	66,000
Max	66,000

The Gross Combination Weight Rating rating cannot exceed 66000

WEIGHT DISTRIBUTION

Model: 520

Actual performance of a specific unit can be affected by your operating conditions. The performance calculations should only be used as a guideline.



Recommended payload center of gravity to achieve specified ground loads, measured from centerline of drive axles .37 in. from the centerline of the drive axle(s).

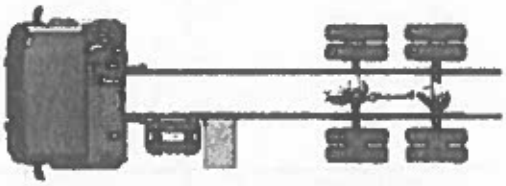
Weight (lbs)	Front	Rear	Total
Chassis	11283	7230	18513
Tools/Driver	417	-42	375
Fuel & DEF	481	163	644
Max Payload	7819	38649	46468
Auxiliary Payload	0	0	0
Total	20000	46000	66000
Specify Ground Load	20000	46000	

Auxiliary Payload

Item	Location from FA CL	Weight	Point Description
Load Point #1	0	0	
Load Point #2	0	0	
Load Point #3	0	0	
Component(s)	-	0	Composite Totals

Fifth wheel slide length is 0 inches
Selected crossmember setting is 0 inches
Wheelbase measurement: 231 inches
Overhang measurement: 75 inches

FRAME LAYOUT



Note: The image displayed is representative only. It should not be construed as a layout diagram. Dimensions and components are not to scale

Selected Options (Wheelbase: 221)

Sales Code	Description	Length	Side
5655069	DEF Tank 520, 7.1 Gal	25	Left
5556130	26" Aluminum 80 Gallon Fuel Tank LH BOC	40.95	Left
6010460	Aluminum Space Saver Battery Box LH Back Of Cab	25.1	Left

Sanitary Equipment Company Inc. Source Well #112014-LEG

"Do It Right The First Time"

Date: September 12, 2024

25 Industry Drive / PO Box 26006
West Haven, CT. 06516
Phone 203-933-9599 Fax 203-933-4271
www.sanitaryequipment.com

Scott Black (30)
Phone 203 927-9070
scott@sanitaryequipment.com
Ref #

Quote for:
Mr. Garon VanOverloop
Town of Waterford

Waterford, CT

Subject:
Labrie Right Hand

Line	QTY	DESCRIPTION	AMOUNT
1.)	1.00	Labrie Right Hand 33 Yard Automated Refuse Body	$178,480.00
2.)		with The Following Equipment:	Included
3.)	1.00	Electric over Hydraulic Valve	Included
4.)		Work at Idle (900) RPM with Seven Second Cycle Time	Included
5.)	1.00	Hydraulic oil heater	Included
6.)	1.00	Amber strobe lights front of body	Included
7.)	1.00	Amber srtobe lights mounted on upper tailgate	Included
8.)	1.00	Spill Shield Behind Grabber	Included
9.)		Multi Cycle Packing 3 to 6 Strokes	Included
10.)		Front Mount Denison Hydraulic Piston Pump	Included
11.)		80 Gallon Aluminum Hydraulic Oil Tank with Sight and Temp Gage	Included
12.)		Ergonomic Arm Rest with Air Joy Stick Controls	Included
13.)	1.00	Crusher Panel	Included
14.)	1.00	Hardox Hopper Floor Liner Hardox 450 Steel	Included
15.)		High Mount and Low Mount Rear Lighting FMVSS Standards	Included
16.)		Auto Lock And Unlock Hydraulic Tail Gate	Included
17.)		Body Grit Blasted / Painted with chrome yellow Imron 5000 Paint Including	Included
18.)	1.00	Clean Out Shovel and Broom with Brackets	Included
19.)	1.00	20 lb Fire Extinguisher	Included
20.)	1.00	All LED Lights instead of Standard Body Lighting Including Mid B	Included
21.)		All Fuses Replaced By Auto-Reset Circuit Breakers	Included
22.)	1.00	Grabber Counter	Included
23.)	1.00	Triple 3rd eye Camera System	Included
24.)			
	QTY	OPTIONS AVAILABLE *Unless a QTY is entered on the left, the items below are an ADDITIONAL COST*	
25.)	1.00	Heavy Duty Arm with 6x6 Laced Chain	
26.)	1.00	Ziebart Undercoating	$2,200.00
27.)	1.00	Stainless Toolbox 24x18x18	$1,700.00
28.)	1.00	OnSpots Installed by SECI	$2,780.00
29.)	1.00	Work Light Curbside over arm LED	

SUBTOTAL w/ SELECTED OPTIONS	$	185,160.00
TAX RATE		
SALES TAX	$	-
12% FET TAX	$	-
FREIGHT	$	2,350.00
TOTAL	$	187,510.00

QUOTE NOTES:

Source Well Contract Number 112014-LEG

Single Color Body Paint Code L663ET

Thank You for the Opportunity to Quote our Products and Services

This proposal may be withdrawn by S.E.C.I if not accepted with a deposit > Sat - 10/12/24

PAYMENT TERMS: Balance Due at Time of Delivery unless otherwise noted. Equipment and Materials remain the property of S.E.C.I. until paid in full.

Accepted By _____ Company: _____ Date _____

Thank you, for the opportunity to quote you on your service needs

STARTING VMRS CODE: 000-000-000 DATE: FIRST VEHICLE:: H19
ENDING VMRS CODE: 999-999-999 DATE: LAST VEHICLE: H19

VMRS Code	METER : STANDARD QUANTITY	SUBTOTALS OF VMRS CODES FOR DIVISION > AL LABOR HRS	LABOR COST	PARTS COST	PERIOD : LIFE TOTAL COST	PERCENT	TOT COST /METER
001 A/C, HEAT, VENTILATION	1	13.00	381.29	109.78	491.07	2.20 %	0.00355
002 CAB/SHEET METALS	1	2.00	47.60	30.62	78.22	0.35 %	0.00057
015 STEERING	2	7.50	162.36	257.04	419.40	1.88 %	0.00304
016 SUSPENSION	2	17.00	427.64	1484.38	1912.02	8.57 %	0.01384
017 TIRES,TUBES,LINERS	7	8.00	250.10	1246.86	1496.96	6.71 %	0.01084
034 LIGHTING SYSTEM	5	7.00	256.18	754.14	1010.32	4.53 %	0.00731
051 GENERAL ACCESSORIES	6	11.00	343.05	93.92	436.97	1.96 %	0.00316
052 ELECTRICAL ACCESSRES	1	2.00	55.48	0.00	55.48	0.25 %	0.00040
065 HYDRAULIC SYSTEMS	2	11.50	235.41	277.90	513.31	2.30 %	0.00372
066 PREVENTIVE MAINTENANCE	30	182.00	5350.04	4766.40	10116.44	45.35 %	0.07323
099 ROAD CALL TRAVEL TIME	44	113.00	3116.57	2618.34	5734.91	25.71 %	0.04151
730 HOUSEKEEPING	1	2.00	40.94	0.00	40.94	0.18 %	0.00030
TOTALS:	102	376.00	10666.66	11639.38 TOT:	22306.04	100.00 %	0.16146

Service History by Vehicle

Town of Waterford - Public Works

4 records

Report generated on 10/29/2024 2:23 PM by Garon VanOverloop

Filters

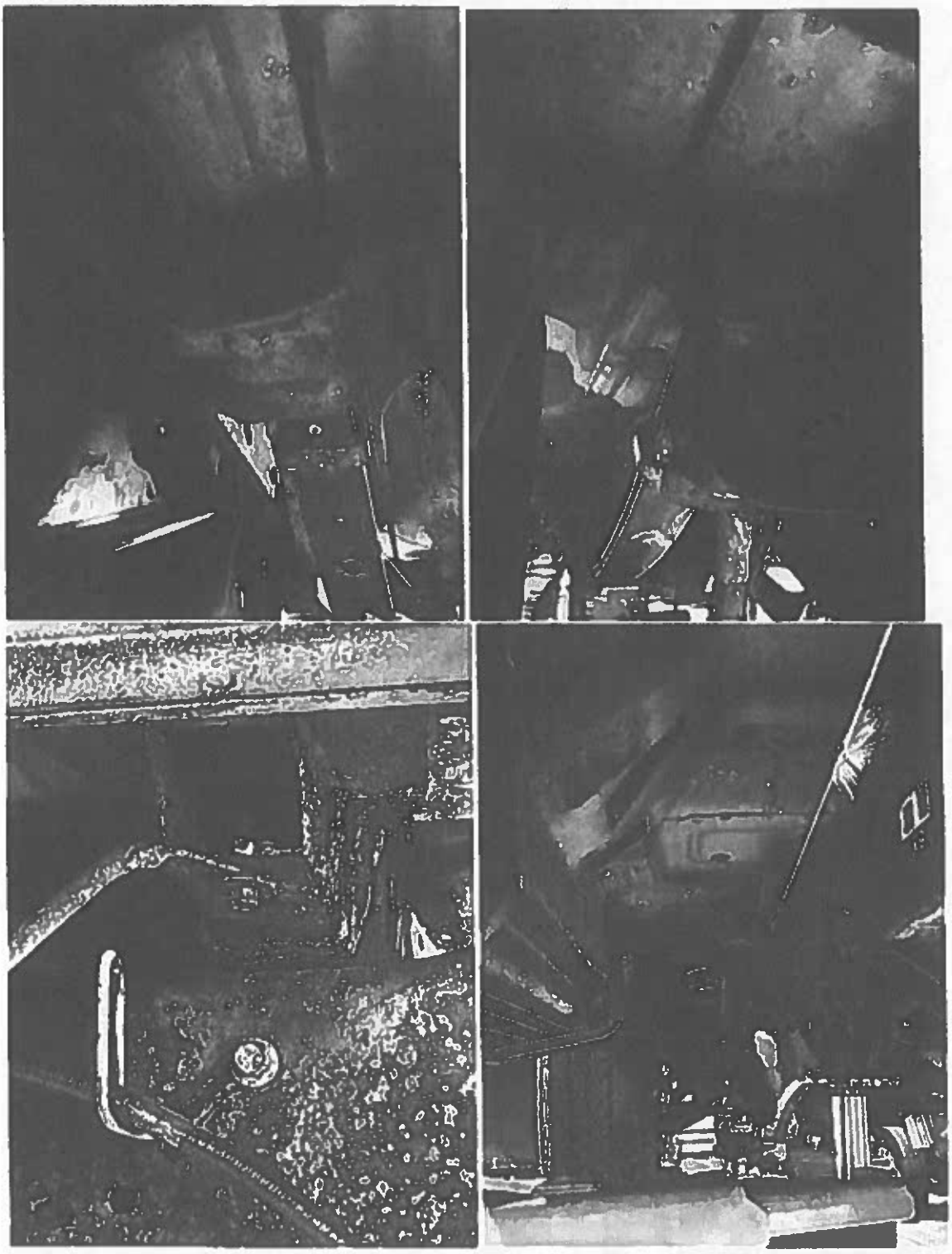
Time Frame: Oct 1, 2022 - Oct 29, 2024 Vehicle: H19

Labor Subtotal	Parts Subtotal	Line Item Subtotal
$451.56	$986.62	$1,438.18

Vehicle

H19

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task	Parts Subtotal	Line Item Subtotal
29854088	09/26/2024 11:30 AM	09/26/2024 3:30 PM	$75.24	$238.68	Preventative Maintenance	$41.11	$163.69
29854088	09/26/2024 11:30 AM	09/26/2024 3:30 PM	$75.24	$238.68	Windshield Washer System Inspect	$34.13	$74.99
22184692	01/08/2024 12:47 PM	01/08/2024 2:30 PM	$50.40	$109.90	Engine Diagnosis	$50.40	$109.90
21633137	12/04/2023 10:00 AM	12/04/2023 10:00 AM	$659.69	$694.31	Tire Rotation	$632.00	$643.54
21633137	12/04/2023 10:00 AM	12/04/2023 10:00 AM	$659 69	$694.31	Engine Oil & Filter Replacement	$27.69	$39.23
21633137	12/04/2023 10:00 AM	12/04/2023 10:00 AM	$659.69	$694.31	Vehicle Multi-Point Inspection		$11.54
16577140	03/09/2023 9:00 AM	03/13/2023 3:30 PM	$201.29	$395.29	Tire Rotation		$19.40
16577140	03/09/2023 9:00 AM	03/13/2023 3:30 PM	$201.29	$395.29	Vehicle Multi-Point Inspection		$19.40
16577140	03/09/2023 9:00 AM	03/13/2023 3:30 PM	$201 29	$395.29	Engine Oil & Filter Replacement	$201.29	$356.49
					Total Amount	$986.62	$1,438.18



H19

F3B	Green	TASCA FORD	250 webster square rd Berlin CT 06037		
	F-350	Waterford	19PSX0161		
	QUOTE		JOHN BRESLIN		
$ 47,325.00		Pickup	Fleet Manager		
		Nov 1st	Connecticut/ Rhode island/ Maine.		

	OPTION DESCRIPTION	Upgrades & Options	Option pricing	Upgrade Cost	Sub Total Contract Pricing
					$ 47,325.00
	All Options	$ 2,545.00	$ 152.70	$ 2,392.30	$ 2,392.30
				Total	$ 49,627.30
	Hartford truck upfit				$ 12,165.00
				per vahicle	$61,792.30

OEM discount 6% off of MSRP

Cost plus 5%

H19

CNGP530 VEHICLE ORDER CONFIRMATION 11/01/24 09:42:3(
==> Dealer: F1122
2025 F-SERIES SD Page: 1 of
Order No: 0000 Priority: M3 Ord FIN: QS048 Order Type: SB Price Level: 51
Ord PEP: 610A Cust/Flt Name: WATERFORD PO Number:

		RETAIL	DLR INV			RETAIL	DLR INV
F3B	F350 4X4SDR/CSR	$49395	$46925.00		FRT LICENSE BKT	NC	NC
	142" WHEELBASE			18B	PLAT RUNNING BD	320	291.00
W6	GREEN GEM	660	600.00		10900# GVWR PKG		
A	VNYL 40/20/40			425	50 STATE EMISS	NC	NC
S	MED DARK SLATE			473	SNOW PLOW PREP	250	228.00
510A	PREF EQUIP PKG			52B	TRLR BRAKE CONT	300	273.00
	.XL TRIM			592	ROOF CLEAR LGTS	95	87.00
572	.AIR CONDITIONER	NC	NC		JACK		
	.AMFM/MP3/CLK						
64F	.STEEL WHLS-18"			TOTAL	BASE AND OPTIONS	53935	49831.00
99A	.6.8L DEV V8 ENG	NC	NC	TOTAL		53935	49831.00
44F	10-SPD AUTOMATC	NC	NC	*THIS	IS NOT AN INVOICE*		
TCH	.LT275/65BSWAS18						
X3E	3.73 ELOCKING	430	392.00	* MORE	ORDER INFO NEXT PAGE *		
	JOB #1 BUILD				F8=Next		

F1=Help F2=Return to Order F3/F12=Veh Ord Menu
F4=Submit F5=Add to Library
5006 - MORE DATA IS AVAILABLE. QC06048

H19

CNGP530 VEHICLE ORDER CONFIRMATION 11/01/24 09:42:4
==> Dealer: F1122
2025 F-SERIES SD Page: 2 of
Order No: 0000 Priority: M3 Ord FIN: QS048 Order Type: 5B Price Level: 51
Ord PEP: 610A Cust/Flt Name: WATERFORD PO Number:

		RETAIL	DLR INV		RETAIL	DLR INV
66S	UPFITTER SWTCH	$165	$150.00			
67B	410 AMP ALTRNTR	115	104.00			
86M	DUAL BATTERY	210	191.00			
	SP FLT ACCT CR		(1429.00)			
	FUEL CHARGE		24.00			
	DEST AND DELIV	1995	1995.00			
TOTAL BASE AND OPTIONS		53935	49831.00			
TOTAL		53935	49831.00			

THIS IS NOT AN INVOICE

F7=Prev
F1=Help F2=Return to Order F3/F12=Veh Ord Menu
F4=Submit F5=Add to Library
,099 - PRESS F4 TO SUBMIT QC06048

1414

HARTFORD TRUCK EQUIPMENT
83 John Fitch Blvd. South Windsor, CT
860.290.9818 HartfordTruck.com
sales@hartfordtruck.com

QUOTATION

Quote: 110124-SB1
Ref: F350 Pickup
End User:
Date: 11/01/24

Town of Waterford - Garon

We are pleased to quote on the following:

One (1) **Fisher** plow model # **8'6" XV2** w/ handheld controller, including:
- 8'6" long x 31"-38" high. 7'5" (full angled), 7'2" (scooped), 7'6" (full V)
- Blade approximately weighs 957 lbs.
- 14 gauge **STAINLESS STEEL** blade. Black powder coat finish on mounts
- 1 1/4" steel center pin for added strength and rigidity
- 4 vertical ribs & 8 x-bracing ribs for torsional strength to eliminate blade twisting
- Trip-edge design w/ 4 trip springs allows for only the bottom edge to trip keeping blade upright
- This design uses compression-type springs that never require adjustment and will not wear out
- T-Frame provides optimum strength to weight ratio. Allows for adjustment of blade for even wear
- Double acting cylinders lock wings to use V-plow or straight blade with single button control
- Center deflector to prevent snow from going over blade
- Lift ram is 1 ¾" diameter for more lifting power and durability while in use
- "Minute Mount II" mounting system allows for easy on & off
- 70-degree attack angle provides enhanced scraping and back dragging ideal for ice & hard snow
- 6" steel cutting edge provides increased wear resistance and a clean scrape
- Dual-halogen headlamps with park/turn signals
- "Security Guard" electronically locks the plows hydraulic functions
- 2 year parts and labor warranty

One (1) Backrack BRK15018 installed in rear of cab
One (1) Mini Liberty Whelen Amber lightbar installed on backrack with bracket
- Tied to switch in cab

Whelen Four (4) Corner LED Amber Emergency Lights – tied into switch in cab

Installed Municipal Price: $ 12,165.00

OPTIONS: (Circle Desired Add-Ons)

NEW *Intensifire* LED Headlamps w/ Edgeview Technology	(ADD) $ 350.00
Dash Mount Joystick in lieu of Handheld	N/C
Cupholder Mount Kit for Hand-Held (82006)	59.00
10" Rubber Deflector (41812-1)(18" (41813-1) ADD $182.00)	407.00

Initial : _____ **Vin:** _____ **Date:** _____

Terms: Net Due ETA: TBD.
For additional terms and signature complete 2nd page

Respectfully Submitted: Sean Breslin Hartford Truck Equipment Inc.
REV: P 9/17/2024

STARTING VMRS CODE: 000-000-000 DATE: FIRST VEHICLE:: A10
ENDING VMRS CODE: 999-999-999 DATE: LAST VEHICLE: A10

VMRS Code	METER : STANDARD QUANTITY	SUBTOTALS OF VMRS CODES FOR DIVISION > AL LABOR HRS	LABOR COST	PARTS COST	PERIOD : LIFE TOTAL COST	PERCENT	TOT COST /METER
066 PREVENTIVE MAINTENANCE	11	39.50	1177.67	1789.32	2966.99	96.77 %	0.10497
099 ROAD CALL TRAVEL TIME	2	4.50	99.05	0.00	99.05	3.23 %	0.00350
TOTALS:	13	44.00	1276.72	1789.32	TOT: 3066.04	100.00 %	0.10847

Service History by Vehicle

Town of Waterford - Public Works

2 records

Report generated on 10/29/2024 2:22 PM by Garon VanOverloop

Filters

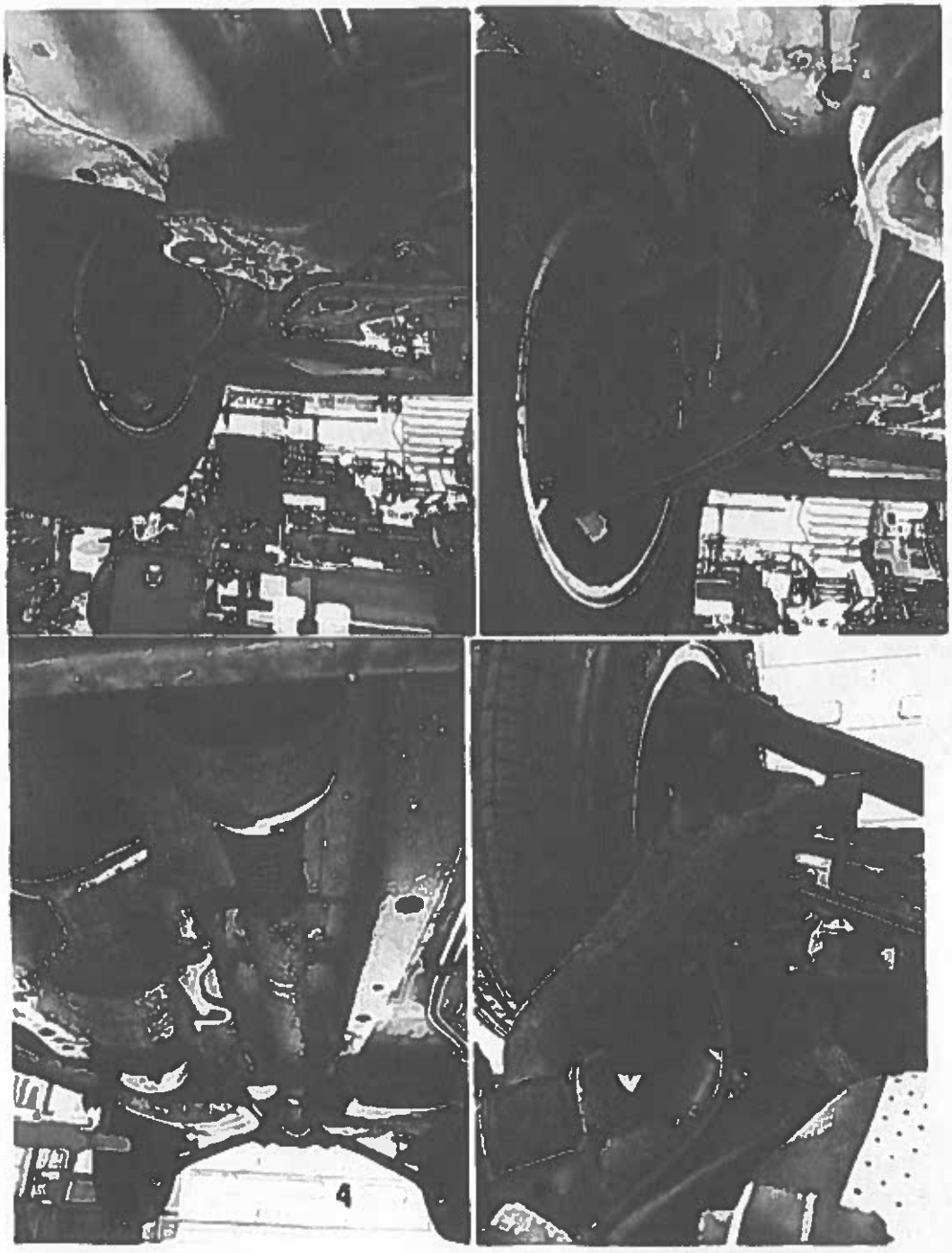
Time Frame: Oct 1, 2022 - Oct 29, 2024 Vehicle: A10

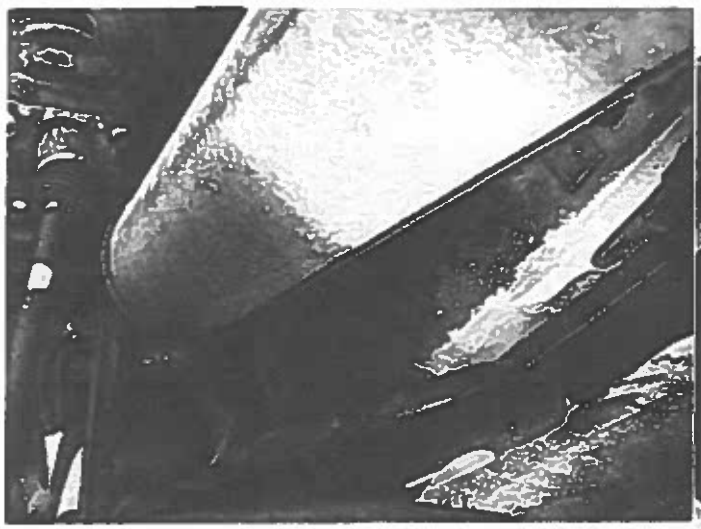
Labor Subtotal	Parts Subtotal	Line Item Subtotal
$169.14	$212.45	$381.59

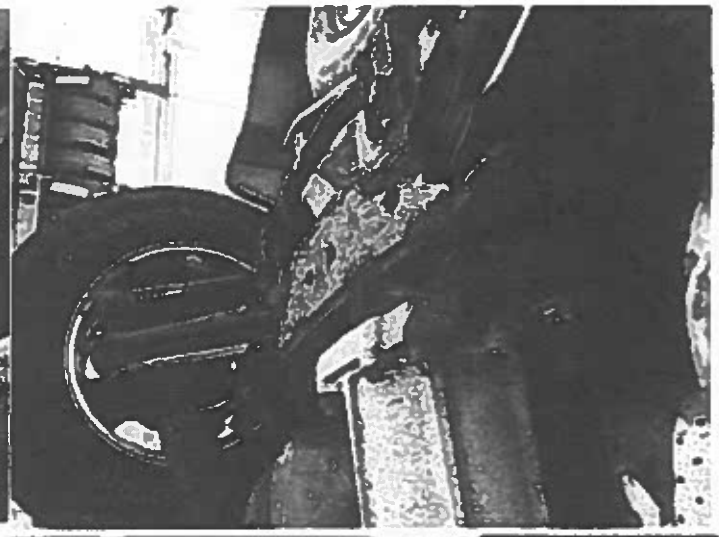
Vehicle

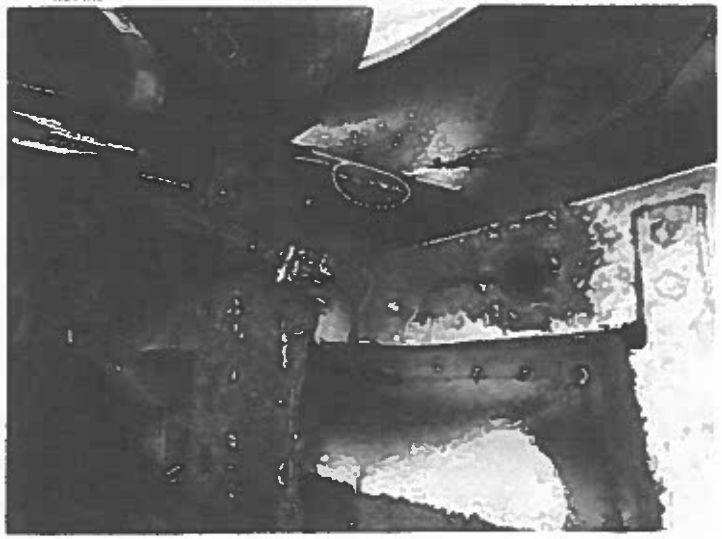
A10

Service Entry	Start Date	Completion Date	Parts	Total cost	Service Task	Parts Subtotal	Line Item Subtotal
20365021	10/13/2023 3:00 PM	10/18/2023 9:00 AM	$188.47	$347.91	Vehicle Multi-Point Inspection		$19.93
20365021	10/13/2023 3:00 PM	10/18/2023 9:00 AM	$188.47	$347.91	Engine Oil & Filter Replacement	$67.59	$147.31
20365021	10/13/2023 3:00 PM	10/18/2023 9:00 AM	$188.47	$347.91	Engine Drive Belt Replacement	$120.88	$160.74
20365021	10/13/2023 3:00 PM	10/18/2023 9:00 AM	$188.47	$347.91	Tire Rotation		$19.93
15479873	12/21/2022 1:50 PM	12/21/2022 2:00 PM	$23.98	$33.68	Windshield Wiper Blade Replacement		$9.70
15479873	12/21/2022 1:50 PM	12/21/2022 2:00 PM	$23.98	$33.68	No Service Task	$23.98	$23.98
					Total Amount	$212.45	$381.59









A10

		TASCA FORD		250 webster square rd Berlin CT 06037	
U9G	white	Waterford		24psx0110	
	AWD escape active			JOHN BRESLIN	
	QUOTE			Fleet Manager	
$ 25,075.00		Nov 1st		Connecticut/ Rhode island/ Maine.	
	OPTION DESCRIPTION	Upgrades & Options	Option pricing	Upgrade Cost	Sub Total Contract Pricing
					$ 25,075.00
19H	cold package	$ 995.00	$ 59.70	$ 935.30	$ 935.30
47B	cargo shade	$ 135.00	$ 8.10	$ 126.90	$ 126.90
50C	floor liners	$ 160.00	$ 9.60	$ 150.40	$ 150.40
50Q	cargo mat	$ 100.00	$ 6.00	$ 94.00	$ 94.00
	3rd key	N/C			
				Total	$ 26,381.60
				per vahicle	$26,381.60

OEM discount 6% off of MSRP

Cost plus 5%

A10

CNGP530 VEHICLE ORDER CONFIRMATION 10/29/24 09:28:0
==> _____ Dealer: F1122
2025 ESCAPE Page: 1 of
Order No: 0000 Priority: A1 Ord FIN: QS048 Order Type: SB Price Level: 52
Ord Code: 200A Cust/Flt Name: STATE CT DOT PO Number:

		RETAIL	DLR INV
U9G	ACTIVE AWD	$29550	$28368.00
	.106.7" WB		
YZ	OXFORD WHITE		
C	CLOTH BUCKETS		
W	SPACE GRAY		
200A	EQUIP GRP		
99N	.1.5L ECO ENGINE	NC	NC
448	.8-SPD AUTOTRANS	NC	NC
	225/65R17 TIRES		
19H	COLD WTHR PKG	995	935.00
	.HEATED STG WHL		
	.MIR PWR/HT		
	.REMOTE START		
	.HTD FRNT STS		
47B	CARGO SHADE	135	127.00

		RETAIL	DLR INV
50C	FLR LNR W/O MTS	$160	$150.00
50Q	CARGO MAT	100	94.00
59H	SUPPL HEATER	NC	NC
	17" ALUM WHEEL		
153	FRT LICENSE BKT	NC	NC
	SP FLT ACCT CR		(851.00)
	FUEL CHARGE		6.00
	DEST AND DELIV	1495	1495.00
TOTAL	BASE AND OPTIONS	32435	30324.00
TOTAL		32435	30324.00

THIS IS NOT AN INVOICE

F1=Help F2=Return to Order F3/F12=Veh Ord Menu
F4=Submit F5=Add to Library
5099 - PRESS F4 TO SUBMIT QC06048

TOWN OF WATERFORD
FLEET MANAGEMENT PLAN - VEHICLES
FISCAL YEARS 2025 - 2029

TOTAL NO. OF VEHICLES 158

RTM Approved 5/15/24

														10	21	11	
														1,461,546	4,090,560	1,660,109	2,:
FLEET Asset ID	TOWN Asset ID	License Plate No.	DO NOT REPL	Agency Code	Agency Name	Vehicle Assigned to:	Class Code	Repl. Cycle in Years	Class Description	Asset Model Year	In-Service Date	Gross Vehicle Cost	Manuf.	2025	2026	2027	2
BOE1	008900	24WFD			Board of Ed	Maintenance (Kyle Stoddard)	PCK-F	10	PICK UP	2022	7/20/2022	$56,324	Ford				
BOE11 (old)				60	Board of Ed		Mule 4x4	10					KAWASAKI				
BOE12	500168	AG56629		60	Board of Ed		VAN-MINI	5	7-Passenger Mini-Van	2019	6/11/2019	$21,743	Dodge	27,000			
BOE13	500135	S2085S		60	Board of Ed		VAN-MINI	5	7-Passenger Mini-Van	2017	1/10/2018		Dodge		45,000		
BOE14	500204	AE4880		60	Board of Ed		Van-Mini	5	7-Passenger Mini-Van	2019	2/26/2020	$21,394	Dodge			47,000	
BOE15		S3164S		60	Board of Ed		VAN-MINI	5	7-Passenger Mini-Van	2020	9/21/2021	$28,501	Chrysler				
BOE2 (old)	005877		DNR	60	Board of Ed		VAN-DPW	10	VAN	2005	4/21/2005	$29,056	Ford				
BOE2	BOE2	23WFD		60	Board of Ed	Maintenance (Tom Thurlow)	VAN	10	EXPRESS VAN (BOX TRUCK)	2020	11/10/2020	$44,445	Chevrolet				
BOE3	500009	25WFD		60	Board of Ed	Maintenance (Jon Tilinghast)	PCK-F	10	PICK UP	2013	11/4/2013	$46,104	GMC	69,000			
BOE4	008923	26WFD		60	Board of Ed	Maintenance (Bryan Swanson)	PCK-F	10	PICK UP	2012	11/30/2012	$42,293	Ford				
BOE5	008850	27WFD		60	Board of Ed	(Kevin VanCleave)	VAN-DPW	10	VAN	2011	1/20/2011	$18,425	Ford		65,000		
BOE6	500132	28WFD		60	Board of Ed	Maintenance (Dan Santos)	CK35903	10	PICK UP	2018	5/9/2018	$48,686	Chevrolet				
BOE7	500038	29WFD		60	Board of Ed	Maintenance (Steve Kowalski)	PCK-F	10	PICK UP	2015	12/31/2014	$44,396	Chevrolet	75,000			
BOE8	008922	30WFD		60	Board of Ed	Maintenance (Dan Morris)	MDD-DPW	15	MEDIUM DUTY DUMP	2012	12/20/2012	$32,798	Ford		89,000		
BOE9	500039	117WFD		60	Board of Ed	Maintenance (Dan Kamercia)	PCK-F	10	PICK UP	2015	1/9/2015	$46,037	Chevrolet			92,000	