



Department of Public Works  
 6 North Main St Suite 1  
 Barre, VT 05641

## Capital Improvement Plan – DPW 01-11-22

DPW has many capital needs that should be placed in an inventory. Inventory is the initial step so prioritization can follow as a crucial component of implementation. The listing. While DPW commonly integrates utility upgrades with street reconstruction, the list will be created separately for each division. The inventory is also separated by funding source as assets are divided between enterprise functions and general funds

### DPW-wide

New facility for Streets, Water Distribution and Sewer Div.	2024	\$5-8M
Communication Systems replacement and integration Telemetry Receiving Stations –Water at WTP, handhelds and DPW Campus	2022	\$65K
Wood, Bulky Waste and Metals Collection Site/Capacity	2022	\$65K
Granular Materials Sources/processing capacity	2023	\$35k

### Streets Division

Guard Rail Improvements		
Belvidere, Cable, Civic Ctr, Prospect, Orange, Lunde etc	2022-8	\$75K
Signs and sign posts	2022-4	\$40K
Replace fixed post with Breakaway St signs	2022-8	\$20K
Neighborhood signs	2022-3	\$8k

## Speed Enforcement Zone

### Traffic signals

Full Event programming as alternate event routes	2024-5	\$30K
Replace and upgrade controllers and equipment	2024-30	\$250K

### Traffic Calming

Bulbouts (est. 36)	2024-30	\$150K
Cadence and serpentine path deployments	2022-	\$15K

### Intersection ADA improvements

16 Tactile waring pads /yr. improvement	2022-	\$8k/yr
See Streets Rehab Program	2022-	\$12K/yr

### Intersection improvements (non-VTrans)

Sight Distance Improvement	2022-	\$9K
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### Sidewalk reconstruction

Ayers St. 100 feet  
Maple Ave. both sides – mostly entire length 2200 feet  
Brook St. 2400 feet  
Granite St. from Main St. to bridge 1600 feet  
Seminary St. 2350 feet  
S. Main to Merchants Row 200 feet  
Warren St. 960 feet  
Summer St.  
So Main St  
No Main St

### Paving

See Streets Rehab Program

### Bridges

Replace 1927 bridge on Brook St. at Maple Ave. 205  
Refurbish Rte. 302 Bridge between GMP and Beverage Baron

### Stormwater system improvements

Nelson St. – replace headwall, restore low flow culvert	2027	\$175K
Replace stone culvert under Washington St. at Waterman	2028	\$200K
Replace stone culvert under Rte. 302 at Phelps Place	2028	\$200K

Review culvert survey by CVRPC 2014 select priority fixes  
 Eliminate storm water surcharge above Spaulding St under Washington  
 Replace from VTrans project at Hope to Gunner Brook **2028 \$130K**  
 Breach 2 Dams (Mill St., Jockey Hollow)  
 Replace aluminized Storm water pipe from Hooker Ave. to Burnham St.

Retaining Wall repairs		
Metal Bin Wall replacement River St	<b>2026</b>	<b>\$550k</b>
New wall at 129 River St	<b>2026</b>	<b>\$450K</b>
Radio system upgrades	<b>2022</b>	<b>\$65k</b>
Trash Rack improvements		
All locations racks, hydraulic stability	<b>2028</b>	<b>\$45K</b>
Geotechnical hazards (sinkholes, slides and settlements)		
Orange St	<b>2035</b>	<b>\$350K</b>
Berlin St	<b>2035</b>	<b>\$450K</b>
Gunner Brook (Snow Dump/Hope)	<b>2035</b>	<b>\$600K</b>
Cleveland Ave environs –unnamed trib	<b>2030</b>	<b>\$35K</b>
Bike Path – drainage erosion at MM1.3+/-	<b>2028</b>	<b>\$7K</b>
Parkside Development	<b>2029</b>	<b>35K</b>
Tremont St.	<b>2031</b>	<b>40K</b>

## **Water Distribution Division**

Hydrant replacements to breakaway units	<b>2022-2027</b>	<b>\$500K</b>
Estimated 180 units		
Repair breakaway with excessive heights		
Hydrant Density improvement est 200 + hydrants	<b>2022-2032</b>	<b>\$750K</b>
500' max hose req't		
Valve replacements and control point design	<b>2024-34</b>	<b>\$300K</b>
Remote control automated valves on all pipe > 12 inch	<b>2028</b>	<b>\$210K</b>
Valve Box Access Program and new risers w seals		
Auto valve actuatiest. 750 valves		

4-inch water main replacements (below minimum size)

Hale St. 280 feet  
 Ayers St. 2,040 feet  
 Hill St. 880 feet  
 Spaulding St. 360 feet  
 Liberty St. 320 feet  
 Willey St. 720 feet  
 Oliver St. 180 feet  
 Brook St. 960 feet  
 Farwell St. 480 feet  
 Pleasant St. 560 feet  
 East St. 760 feet  
 Averill St. 560 feet  
 Church St. 660 feet  
 Park St. 480 feet  
 Bassett St. 480 feet  
 Vine St. 420 feet  
 Center St. 600 feet

Network Piping improvements (new legs, upsizing and balancing)

Integrated Telemetry (all DPW divisions)

SCADA compatibility  
 Sewer trunk line/problem line telemetry for coordination

Transmission line redundancy and risk mitigation

US302 piping and PRV	<b>2030</b>	<b>\$3.5M</b>
Replacement 110 to US 302 crossing (outside of flood zone)	<b>2027</b>	<b>\$35K</b>
Replacement US 302-plant		
Recondition decommissioned piping for emergency drought service – Jail Branch transfer		

## Water Treatment Division

Water Source Protection Plan (vehicles, vandals and natural hazards)

Dix Reservoir Dam upgrades	Phase 1	Overflow	<b>2028</b>	<b>750K</b>
	Phase 2	Dam upgrades	<b>2030</b>	<b>2.5M</b>
Dredge silt dam, reservoir entry settlement zones				
Armor shoreline at Dix				

Repair failed shot Crete at Dix  
Install 14-inch screen at Large Orange Gate House  
Replace failing 4-foot wooden slide gate at silt dam

WTP upgrades for continuing service or new technologies  
Replace freeze dry bed concrete loader pads  
Replace communication radio at remote sites (7)  
Replace membrane roof at Main Building and Pump Station  
Add generators for FD#8 and Cobble Hill Meadows pump stations  
Upgrade SCADA System  
Rebuild back wash pumps  
Replace (2) generator transfer switch's  
Replace moisture removal system for Facility air compressors  
Replace (3) 6,000-gallon bulk tanks

Floating Solar Array

Drought Response Plan and Capacity

Water Shed Protection Plan and access roads in City property

Spill Response Capacity (joint FD)

## **Sewer Division**

Manhole Replacements  
Small diameter collection pipe repair/replacement  
Trunk Line replacement and capacity increases  
Supplemental manholes and cleanouts  
MANHOLE hardware upgrades  
Elimination of bottlenecks

## **Wastewater Treatment Divisions**