

Schedule 2
CAPITAL IMPROVEMENTS PROGRAM
MAJOR PROJECTS

No	Department	Project Description	Funding Source	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Back-up on pp	ing Board recommen
1	Fire	South Fire Station (\$3,105,000)	R Fire Station CRF (South)	-	-	-	200,000	-	-	-	1	
			R Bond	-	-	-	2,195,000	-	-	-		
			R Private Donation	-	-	-	650,000	-	-	-		
2	Admin/Engineering	Bridge Replacement - Bean Road (\$1,600,000)	R Road Infrastructure CRF	320,000	-	-	-	-	-	-	2-3	
			R State Funding	1,280,000	-	-	-	-	-	-		
3	Admin/Engineering	Bridge Replacement - Bedford Rd./Baboosic Brook (\$2,727,500)	R Road Infrastructure CRF	-	545,500	-	-	-	-	-	4-5	
			R State Funding	-	2,182,000	-	-	-	-	-		
4	Admin/Engineering	Bridge Replacement - US 3 (DW Highway)/Baboosic Brook (\$2,520,000)	R Road Infrastructure CRF	-	-	-	504,000	-	-	-	6-7	
			R State Funding	-	-	-	2,016,000	-	-	-		
5	Admin/Engineering	Stormwater Drainage Improvements (\$100,000/\$200,000)	R Road Infrastructure CRF	100,000	100,000	200,000	200,000	200,000	200,000	200,000	8-9	
6	Admin/Engineering	Paving - Infrastructure Improvements (goal \$1,000,000)	R Road Improvement (Registration Fee)	125,000	125,000	125,000	125,000	125,000	125,000	125,000	10-12	
			R Budget	625,000	625,000	625,000	625,000	625,000	625,000	625,000		
7	Admin/Engineering	Paving - Infrastructure Improvements (\$100,000) Gravel Roads	R Road Infrastructure CRF	-	-	100,000	100,000	100,000	-	-	13-14	
8	Admin/Engineering	Paving - DW Highway (\$400,000)	R DW Highway CRF	400,000	-	-	-	-	-	-	15	
9	Admin/Engineering	Paving - Infrastructure Improvements Executive Park Drive (\$150,000)	R Road Infrastructure CRF	-	-	150,000	-	-	-	-	16-17	
10	Highway	Highway Garage Renovation & Replacement (\$3,300,000)	R Bond	-	-	3,300,000	-	-	-	-	18-19	
11	Admin/Engineering	Wire Road Intersection Improvements (\$500,000)	R Road Infrastructure CRF	-	-	-	500,000	-	-	-	20-21	
12	Admin/Engineering	Griffin Street Boat Ramp Access Improvement (\$67,000)	R Road Infrastructure CRF	-	-	67,000	-	-	-	-	22-23	
13	Admin/Engineering	Seaverns Bridge Canoe Launch Ramp Access Improvement (\$50,000)	R Road Infrastructure CRF	-	-	50,000	-	-	-	-	24-25	
			R Federal Grant	-	150,000	-	-	-	-	-		
14	Admin/Engineering	Souhegan River Trail (\$586,000)	R Bond	-	436,000	-	-	-	-	-	26-27	
15	Admin/Engineering	Sewer Line Extensions (Mayflower and McQuestion Sewer Basins)	R Bond	-	-	-	-	2,360,000	-	-	28-29	
16	Library	Parking Lot Repaving/Walkway	R Library Maintenance CRF	-	45,000	-	-	-	-	-	30	
17	Library	Passcards & Security Camera	N Library Budget	-	-	75,000	-	-	-	-	31	
18	Library	HVAC	R Library Maintenance CRF	-	-	-	-	-	-	100,000	32	
19	Library	Sprinkler System	R Library Maintenance CRF	-	-	-	-	-	-	100,000	33	
20	Library	New Library (place holder)	R Bond	-	-	-	-	-	-	6,000,000		
			R Bond	-	-	-	-	-	-	2,000,000		
21	Parks & Recreation	New Athletic Fields (place holder)	A Bond	-	-	-	-	-	-	-		
TOTAL GENERAL FUND				2,850,000	4,208,500	4,692,000	7,115,000	3,410,000	950,000	9,150,000		
1	Wastewater	Executive Park Drive Pump Station	N User Fees State Loan SRF	-	-	-	-	-	1,040,000	-	34-35	
			R User Fees State Loan SRF	-	-	-	180,000	-	-	-		
			R User Fees State Loan SRF	-	-	-	-	9,996,000	-	-		
2	Wastewater	Sawdust Storage Pole Barn	R User Fees State Loan SRF	-	-	-	-	-	-	-	36-37	
			R User Fees State Loan SRF	-	-	-	-	-	-	-		
3	Wastewater	Wastewater Treatment Plant Phase III and Pump Station Upgrades	R User Fees State Loan SRF	-	-	-	-	9,996,000	-	-	38-40	
TOTAL SEWER FUND				-	-	-	180,000	9,996,000	1,040,000	-		
			CRF	820,000	840,500	567,000	1,504,000	300,000	200,000	400,000		
			Funded through Budget	625,000	625,000	700,000	625,000	625,000	625,000	625,000		
			Bonds	-	-	3,300,000	2,195,000	2,360,000	-	8,000,000		
			Road Improvement (RSA261:153)	125,000	125,000	125,000	125,000	125,000	125,000	125,000		
			Private Donation	-	-	-	650,000	-	-	-		
			State Aid	1,280,000	2,618,000	-	2,016,000	-	-	-		
			User Fees/Bonds	-	-	-	180,000	9,996,000	1,040,000	-		
				2,850,000	4,208,500	4,692,000	7,295,000	13,406,000	1,990,000	9,150,000		

**Capital Improvements Program
PROJECT REQUEST FORM**

1. Description of Project: NEW SOUTH FIRE STATION PROJECT

Based on recommendations from an outside study for Fire/EMS/Rescue/Emergency Management needs, construction of an emergency station to house ambulance, rescue and fire apparatus if needed on property identified in the study. This is the replacement for the South Fire Station.

2a. Was this same project reflected in the prior CIP? Yes

2b. If 2a = yes, indicate areas of significant changes reflected in this Project Request Form and briefly explain why the changes have been made: cost ; year ; scope ; none
(check all that apply)

Explanation:

The replacement of this station is urgent, the fire department will be looking to have an outside engineering firm provide a facilities study of all the stations and develop along with the fire department a needs assessment, and location assessment based on response activities types throughout the community. From this study recommendations will be outlined to meet the needs of the town.

3. Expected Useful Life: 50+ years with proper maintenance and care

4. Explanation of Need:

The South Fire Station originally constructed in 1973 as a two bay garage to house only fire apparatus. With the need for increased emergency protection within the South section of the community, the addition of living areas were added to the station in 1987, which would allow full time career emergency personnel to occupy the structure meeting the emergent needs of the growing community as industrial/commercial growth continues in the community, with the Chelsea Outlet Mall and future build out of the surrounding areas.

Continued residential and commercial development, especially on the 101A corridor, Industrial Interchange, Daniel Webster Highway south and homes throughout the area the need to relocate and provide additional space to accommodate apparatus and personnel is considered necessary. The process of upgrading or replacing the South Fire Station has been in the works for the last 16 plus years. During this time and budget restraints have limited the spending of monies to upgrade the structure in anticipation of the construction of a new building. The building is currently in need of major repair from deterioration due to its age including insufficient space for emergency training, administrative activities and proper storage of apparatus and equipment. The facility currently does not meet the need of ADA, an equal opportunity employer, (as it has no accommodations for female employees) and a very limited fire protection system.

The construction of a new station project is currently not projecting additional fire personnel, although the projected growth of the southern corridor commercial/industrial and the completion of the airport access road will increase the need for additional emergency services throughout the community.

5. Estimated Cost:

Design	60,000
Engineering	85,000
Construction	2,310,000
Equipment	650,000
Bond issue costs	-
Temporary housing	-
Total	3,105,000

6. Financing:

Federal/State Grant	-
Private Grant	650,000
User Fees (Sewer/Water)	-
Sale of Replaced Asset	-
Capital Reserve Fund	260,000
Bond Proceeds	2,195,000
Property Tax	-
Total	3,105,000

7. Impact on Operating Budget:

Personnel	37,000
Maintenance	3,000
Insurance	2,500
Utilities	6,500
Total	49,000

8. Project Period:

2014-15	60,000
2015-16	-
2016-17	-
2017-18	-
2018-19	3,045,000
2019-20	-
2020-21	-
Total	3,105,000

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Bridge Replacement - BeanRoad @ Baboosic Brook

Project same as reflected in prior CIP? Yes: No:

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet.

Estimated Cost:

Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits	160,000
Construction	1,440,000
Equipment	
Trade-In Allowance	
Total	1,600,000

Financing:

Federal/State Grant (80% State Bridge Aid)	1,280,000
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund (20%)	320,000
Bond Proceeds	
Property Tax	
Total	1,600,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	1,600,000
2016-17	
2017-18	
2018-19	
2019-20	
2020-21	
2020-22	
Total	1,600,000

Bridge Replacement – Bean Road

Bean Road bridge over Baboosic Brook (072/115) was constructed in 1981. The bridge is a multi-plate steel arch bridge with a span of 21 feet and a width of 27 feet.

Recently the Bean Road Bridge over the Baboosic Brooke was inspected by the NHDOT and was down graded to a posted weight limit of 10 tons due to corrosion at the water line.

NHDOT has moved this bridge up in the State Aid bridge program due to its condition. Design is expected to begin fall of 2014 with construction anticipated for 2015/2016. NHDOT will reimburse 80% of design and construction costs under the State Aid bridge program.



Bean Road looking east.



View of inlet from above.



Inside pipe arch – note corrosion at spring line.

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Bridge Replacement - Bedford Road @ Baboosic Brook

Project same as reflected in prior CIP? Yes: No:

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet.

Estimated Cost:

Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits	272,750
Construction	2,454,750
Equipment	
Trade-In Allowance	
Total	2,727,500

Financing:

Federal/State Grant (80% State Bridge Aid)	2,182,000
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund (20%)	545,500
Bond Proceeds	
Property Tax	
Total	2,727,500

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	
2016-17	2,727,500
2017-18	
2018-19	
2019-20	
2020-21	
2020-22	
Total	2,727,500

BRIDGE REPLACEMENT – BEDFORD ROAD

Bedford Road bridge over Baboosic Brook (113/159) was constructed in 1984. The multi-plate arch steel pipe has a 21 foot span.

This bridge is in the State Bridge Aid Program in which NHDOT pays for 80% of the construction cost of the project, while the Municipality pays the remaining 20%.

This bridge is showing moderate deterioration to the steel at the flow line of the brook. Replacement of this structure, along with proposed roadwork will eliminate the flooding that has closed Bedford Road just west of the bridge. The engineering study for the bridge is complete. Final design will progress moving forward with an anticipated construction date of 2016/2017.

The 2014 AADT (Average Annual Daily Traffic) for this bridge is 6300.



View of Bridge from Down Stream.



May 2006 Flood.



May 2006 Flood.

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Bridge Replacement - US 3 (DW Highway) @ Baboosic Brook

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

NEW PROJECT

Explanation and Need: See attached information sheet.

Estimated Cost:	
Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits	252,000
Construction	2,268,000
Equipment	
Trade-In Allowance	
Total	2,520,000
Financing:	
Federal/State Grant (80% State Bridge Aid)	2,016,000
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund (20%)	504,000
Bond Proceeds	
Property Tax	
Total	2,520,000
Impact on Operating Budget:	
Personnel	
Maintenance	
Insurance	
Utilities	
Total	0
Project Period:	
2015-16	
2016-17	
2017-18	
2018-19	2,520,000
2019-20	
2020-21	
2021-22	
Total	2,520,000

Bridge Replacement – US 3 (DW Highway)

US 3 bridge over Baboosic Brook (118/135) was constructed in 1933. The concrete arch bridge has a 20 foot span. The US 3 bridge currently has a Federal Sufficiency Rating of 50.9% and a National Bridge Inventory Status of *structurally deficient*.

The bridge will be in the State Bridge Aid Program in which NHDOT pays for 80% of the cost of the project, while the Municipality pays the remaining 20%.

This bridge is the final road crossing of Baboosic Brook prior to its convergence with the Souhegan River. Hydraulic analysis of the brook performed by the Town's bridge consultant shows that the current structure constricts flow, causing higher 50 and 100 year storm elevations upstream. Replacement of this structure will improve safety along the US 3 corridor by having a wider road and sidewalks, and will have the added benefit of allowing the McGaw Bridge Road and Bedford Road bridges to be constructed at lower elevations due to the reduced flood elevation.

The 2010 AADT (Average Annual Daily Traffic) for this bridge is 12,455. The predicted AADT for 2032 is 18,433. Construction is expected to occur in 2018/2019.



US 3 looking north.



US 3 bridge, downstream side.



Bank erosion from high velocity flows through current structure..

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Stormwater Drainage Improvements

Project same as reflected in prior CIP? Yes: No:

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet.

Estimated Cost:

Design	30,000
Engineering - including wetlands mitigation, ROW acquisitions, permits	
Construction	170,000
Equipment	
Trade-In Allowance	
Total	200,000

Financing: (ANNUAL)

Federal/State Grant	
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund	200,000
Bond Proceeds	
Property Tax	
Total	200,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	100,000
2016-17	100,000
2017-18	200,000
2018-19	200,000
2019-20	200,000
2020-21	200,000
2021-22	200,000
Total	1,200,000

STORMWATER DRAINAGE IMPROVEMENTS

The Public Works Department maintains a prioritized list of drainage improvement projects. The list is updated twice each year. Projects are scored based on criteria in 4 subject areas – Public Health and Safety; Private Property Impacts; Public Property Impacts; and Secondary Factors. Projects are also classified as a Highway Division project, a Contractor project, or a combination of the two.

Anticipated projects for the FY 15/16 construction season are:

- Jo Ellen Drive
- Amherst Road
- Brenda Lane
- Wilson Hill Road
- Waterville Drive
- Thornton Road West
- Town wide Basin Repairs



Roadway & Driveway Damage.



Street Flooding.



Sink Holes.

**Capital Improvements Program
PROJECT REQUEST FORM**

Paving - Infrastructure Improvements

Project same as reflected in prior CIP? Yes: No:

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet. See Sunset Shores Project

Estimated Cost:

Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits	
Construction	750,000
Equipment	
Trade-In Allowance	
Total	

Financing: (ANNUAL)

Federal/State Grant	
Private Grant	
User Fees (Road Improvement Registration Fee)	125,000
Sale of Replaced Asset	
Capital Reserve Fund	
Bond Proceeds	
Property Tax	625,000
Total	750,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	750,000
2016-17	750,000
2017-18	750,000
2018-19	750,000
2019-20	750,000
2020-21	750,000
2021-22	750,000
Total	5,250,000

PAVING / INFRASTRUCTURE IMPROVEMENTS

The Public Works Department maintains over 475 roads totaling approximately 180 centerline miles. The Department uses a pavement management database in which physical road distresses for each road are tabulated to derive a PCI (Pavement Condition Index) for each public road. This data, along with traffic volumes, drainage/sewer projects, funding, and other factors are used to develop the paving/infrastructure improvement program for the year.

All or part of the following roads were paved during the past five years:

2015 – DW Highway, Baboosic Lake road, Wire Road, Danforth Road, Hassell Road, Hutchinson Road, Cummings Road, Cowin Road, School Street, McElwain Street, Bishop Street, Hadley Road, Trowbridge Road, Ash Lane, Atherton Road, John Lane, Wildcat Falls Road, Edward Lane, Christopher Road, Fearon Road, Cavalier Country Lane, Mary Paul Lane, Valleyview Drive, Hancock Lane, Courtland Drive, Fairview Terrace, Ingham Road, Morningside Avenue, Sunset Drive, Dawn Avenue, Highnoon Road.

2014 – Hillside Terrace, Majestic Lane, Old Kings Road, Regal Drive, Caron Street, Herrick Street, King Street, Bryce Drive, Berry Lane, Mitchell Street, Danforth Road, Hassel Road, Hutchinson Road, Cummings Road, Cowin Road, Seaverns Bridge Road, Coles Rock Road, Cramer Hill Road.



Paving Binder on Reclaimed Base.



New Lane Lines on Pavement.



Alligator Cracked Roadway.

Paving Continued

2013 – Patten Road, Wilson Hill Road, Turkey Hill Road, Henry Clay Drive, John Tyler Road, Drouin Way, Leblanc Lane, Davidson Avenue, Piedmont Avenue, Riverside Drive, Mast Road.

2012 – Reeds Ferry Way, Paige Drive, Level Street, Lyons Road, Merrill Road, Bates Road, Marty Drive, Linden Way, Stonedge Way, Lamson Drive, Sands Terrace, Winchester Drive, Westborn Drive, May Drive, Lawrence Road, McQuestion Road, Joppa Road.

2011 - DW Highway, Continental Boulevard, Amherst Road, Baboosic Lake Road, Railroad Avenue, Beaverbrook Drive, King Henry Court, Samuel J Drive, Naticook Road, Currier Road, Souhegan Drive, Birch Street, Fir Street, Hemlock Street, Tiffany Lane, Pinehaven Drive.

2010 - Palmeri Drive, Gerard Drive, Rushmore Court, Royal Court, Eden Street, Park Avenue, Forsythia Lane, DW Drive, Island Drive, Tennis Court, Liberty Lane, Bristol Street, Matthew Drive, Woodridge Road, Brewster Street, Audubon Circle, Allen Road, Hilton Drive, Butternut Lane, Hickory Lane, Baboosic Lake Road, Bean Road, Peaslee Road, Boston Post Road, Thornton Road West, Turkey Hill Road.

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Paving - Gravel Roads

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: X Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet.

Estimated Cost:

Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits	
Construction	300,000
Equipment	
Trade-In Allowance	
Total	300,000

Financing:

Federal/State Grant	
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund (DW Highway Infrastructure Account)	300,000
Bond Proceeds	
Property Tax	
Total	300,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	
2016-17	
2017-18	100,000
2018-19	100,000
2019-20	100,000
2020-21	
2021-22	
Total	300,000

PAVING / INFRASTRUCTURE IMPROVEMENTS – GRAVEL ROADS

Merrimack has 19 gravel roads. Grading and reshaping the gravel roads uses approximately 300-400 man hours each year. Public Works proposes to systematically pave the gravel roads starting with the longer, higher traffic volume roads to reduce the maintenance burden. By constructing the paved roads with proper ditchlines, the effect of the added impervious area will be mitigated by treating the stormwater. The paved road has the added benefit of not being susceptible to erosion that contributes to silty runoff into neighboring waterbodies.

A secondary goal of this program is to eliminate the need to replace the motor grader. Currently, the existing 1997 grader is scheduled to be replaced in 2022 at an estimated cost of \$250,000.

The roads initially targeted in this program are:

- Greens Pond Road
- Lester Drive
- Fuller Mill Road

Current development projects are improving from gravel to paved on Old Blood Road and Tomasian Drive (completed in 2015).



Greens Pond Road – note erosion to the right



Lester Road – will include realigning the “Y” intersection to a “T” intersection

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Paving - DW Highway

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet.

Estimated Cost:	
Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits	
Construction	
Equipment	
Trade-In Allowance	
Total	400,000
Financing:	
Federal/State Grant	
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund (DW Highway Infrastructure Account)	0
Bond Proceeds	
Property Tax	
Total	0
Impact on Operating Budget:	
Personnel	
Maintenance	
Insurance	
Utilities	
Total	0
Project Period:	
2015-16	400,000
2016-17	
2017-18	
2018-19	
2019-20	
2020-21	
2021-22	
Total	400,000

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Paving - Executive Park Drive

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet.

Estimated Cost:

Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits	
Construction	150,000
Equipment	
Trade-In Allowance	
Total	150,000

Financing:

Federal/State Grant	
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund (DW Highway Infrastructure Account)	150,000
Bond Proceeds	
Property Tax	
Total	150,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	
2016-17	
2017-18	150,000
2018-19	
2019-20	
2019-21	
2021-22	
Total	150,000

PAVING / INFRASTRUCTURE – EXECUTIVE PARK DRIVE

DRIVE

Executive Park Drive was constructed in 1979 as a parkway with 25-26' travel ways and medians resulting in a road width of approximately 66 feet. The road has a current PCI of 54.

Executive Park Drive is wider than necessary for the traffic volumes carried. The medians, though installed to enhance the appearance of the road, have become an eyesore and a maintenance burden. The large impervious area contributes runoff to Naticook Brook which flows into Horseshoe Pond, both of which are on the NHDES list of impaired or threatened waters.

Public Works' plan is to remove the medians and narrow the pavement to a 12' travel way with 8' shoulders. Doing so will accomplish the following:

- Reduce impervious area by nearly 50,000 SF
- Allow for grass ditchlines to treat stormwater prior to entering the closed system that outfalls to Naticook Brook
- Maintain sufficient width for parallel parking for local businesses
- Reduce pavement overlay cost by 35%
- Move traffic away from double catch basin grates



Executive Park Drive looking north toward Cinemagic



Double CB grates.

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Highway Garage Renovations/Replacement

Project same as reflected in prior CIP? Yes: No:

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet.

Estimated Cost:	
Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits (10%)	330,000
Construction	2,970,000
Equipment	-
Trade-In Allowance	
Total	3,300,000
Financing:	
Federal/State Grant	
Private Grant	
User Fees (Unearned Impact Fees)	
Sale of Replaced Asset	
Capital Reserve Fund	
Bond Proceeds	3,300,000
Property Tax	
Total	3,300,000
Impact on Operating Budget:	
Personnel	
Maintenance	
Insurance	
Utilities	5,000
Total	5,000
Project Period:	
2015-16	
2016-17	
2017-18	3,300,000
2018-19	
2019-20	
2019-21	
2021-22	
Total	3,300,000

HIGHWAY GARAGE

This project will involve the rehabilitation of the existing garage that is inadequate in size and function and is code deficient. In addition, new facilities will include a larger, safer, and more efficient fleet maintenance garage, health/hygiene and efficiency upgrades to personnel spaces, as well as increased vehicle storage and staging areas for improved emergency response and equipment life.

The Highway garage complex will remain at the existing site on Turkey Hill Road.

The Town hired a consultant to develop a needs analysis that was completed in 2013.

The project bond proposal will go to Town ballot in the spring of 2017.



Highway Garage Exterior



Sign Shop/locker Room



Fuel Pumps

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Wire Road Intersection Improvements

Project same as reflected in prior CIP? Yes: No:

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

Explanation and Need: See attached information sheet.

Estimated Cost:

Design	
Engineering - including wetlands mitigation, ROW acquisitions, permits	100,000
Construction	400,000
Equipment	-
Trade-In Allowance	
Total	500,000

Financing:

Federal/State Grant	
Private Grant	
User Fees (Unearned Impact Fees) (Reeds Ferry Crossing)	0
Sale of Replaced Asset	
Capital Reserve Fund	500,000
Bond Proceeds	
Property Tax	
Total	500,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	
2016-17	
2017-18	
2018-19	500,000
2019-20	
2020-21	
2021-22	
Total	500,000

WIRE ROAD INTERSECTION IMPROVEMENTS

The Wire Road intersection with Daniel Webster Highway is poorly aligned. This project will improve safety by realigning the intersection.

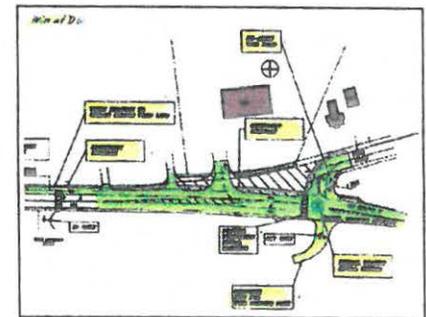
There have been 19 accidents at the existing intersection from the period of January 1, 2006 to September 18, 2012. Of those, fourteen involved property damage, four resulted in personal injury, one involved a school bus, and one was uninvestigated.

Two options are being considered: Sharp curve to align Wire road at a 90 degree angle to Daniel Webster Highway with traffic signals or stop sign (depending on the signal warrant study), or a roundabout intersection. Both options would include a new point of ingress/egress to the Twin Bridge Park/Bise Field/MYA Building facilities that would improve safety versus the existing drive across from Church Street.

Public Works contracted with VHB, Inc. in September 2013 to perform the traffic study to determine the best option for the intersection. Construction of the intersection is scheduled for 2018/2019 at the same time as the US3 bridge.



Aerial View of Wire Road/DW Highway Intersection.



Signalized Intersection.



Roundabout Intersection.

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Griffin Street Boat ramp Access Improvement

Project same as reflected in prior CIP? Yes: No:

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

New Project.

Explanation and Need: See attached information sheet.

Estimated Cost:	
Design (Complete)	0
Engineering - including wetlands mitigation, ROW acquisitions, permits	2,000
Construction	65,000
Equipment	
Trade-In Allowance	
Total	67,000

Financing:	
Federal/State Grant	
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund	67,000
Bond Proceeds	
Property Tax	
Total	67,000

Impact on Operating Budget:	
Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:	
2015-16	
2016-17	
2017-18	67,000
2018-19	
2019-20	
2020-21	
2021-22	
Total	67,000

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Seaverns Bridge Canoe Launch Ramp and Access Improvement

Project same as reflected in prior CIP? Yes: No:

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

New Project.

Explanation and Need: See attached information sheet.

Estimated Cost:

Design (Complete)	
Engineering - including wetlands mitigation, ROW acquisitions, permits	2,000
Construction	48,000
Equipment	
Trade-In Allowance	
Total	50,000

Financing:

Federal/State Grant	
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund	50,000
Bond Proceeds	
Property Tax	
Total	

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	
2016-17	
2017-18	50,000
2018-19	
2019-20	
2020-21	
2021-22	
Total	50,000

SEAVERNS BRIDGE CANOE LAUNCH

The canoe launch at Seaverns Road has experienced significant erosion of the Souhegan River bank, making it difficult for people to access the river with their canoes.

The project would seek to improve drainage in the area to prevent future problems, make parking access easier, and repair the river bank in a manner that allows access to the river by canoeists.

The project would be done in coordination with the Souhegan River Local Advisory Committee (SoRLAC).



View from Seaverns Bridge road looking west.



View from Seaverns Bridge looking east.



One of the large eroded areas.

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Souhegan River Trail

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

New Project.

Explanation and Need: See attached information sheet.

Estimated Cost:

Design (Complete)	
Engineering - including wetlands mitigation, ROW acquisitions, permits	
Construction	586,000
Equipment	
Trade-In Allowance	
Total	586,000

Financing:

Federal/State Grant	436,000
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund	150,000
Bond Proceeds	
Property Tax	
Total	586,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	
2016-17	586,000
2017-18	
2018-19	
2019-20	
2020-21	
2021-22	
Total	586,000

SOUHEGAN RIVER TRAIL

The Town of Merrimack was awarded a grant opportunity through FHWA/NHDOT to construct a multi use trail that will connect Watson Park to the pedestrian bridge over the Souhegan River that is adjacent the Everett Turnpike bridge. The trail is proposed to run under the Chamberlain Bridge through the sluiceway and along the north side of the river.

Included in the project will be repairs to the failed sidewalk on the northeast end of the Chamberlain Bridge, repair of the mortar joints and addition of carved granite block identifying the bridge.

Preliminary design will begin late 2015 with construction expected for 2017.



Failing mortar joints.



Cantilever sidewalk looking south.



Steel plates on sidewalk at north end of bridge.

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Sewer Line Ext.

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: Year: Scope: None: (Check all that apply).

New Project.

Explanation and Need: See attached information sheet.

Estimated Cost:

Design (Complete)	
Engineering - including wetlands mitigation, ROW acquisitions, permits	
Construction	
Equipment	
Trade-In Allowance	
Total	2,360,000

Financing:

Federal/State Grant	
Private Grant	
User Fees (Sewer/Water)	
Sale of Replaced Asset	
Capital Reserve Fund	
Bond Proceeds	2,360,000
Property Tax	
Total	2,360,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	
2016-17	
2017-18	
2018-19	
2019-20	2,360,000
2020-21	
2021-22	
Total	2,360,000

SEWER EXTENSION PROJECT – MASTER PLAN

The Town commissioned an updated sewer master plan in 2013. This plan replaced previous plans that were created in 1977 and 1990. The top priority project (*Naticook Lake East Collector Sewers*) was completed in 2015.



Naticook Lake East Collector.

The Master Plan ranks projects based on a number of factors including impediments to onsite sewage treatment, access to existing collection system, environmental concerns, consistency with community master plan and unit costs:



Mayflower Drive Collector.

The *Mayflower Drive Collector Sewers* project (MP Priority #3) would allow for approximately 43 homes to hook up to sewer. The project involves constructing approximately 2,400 linear feet of 8 inch diameter collector sewer. The roads in the area are in poor condition (Powderhouse and Minuteman – PCI of 31; Pilgrim and Mayflower – PCI of 54 and 54).



McQuestion Road Collector.

The *McQuestion Road North Collector Sewers* project (MP Priority #2) would allow for approximately 44 homes to hook up to sewer. The project involves constructing approximately 6,400 linear feet of 8 inch diameter collector sewer in parts of McQuestion Road, Meadow View Lane and Merrymeeting Drive.

**Capital Improvements Program
PROJECT REQUEST FORM**

1. Description of Project: Repaving of Library Parking Lot

2a. Was this same project reflected in the prior CIP? No

2b. If 2a = yes, indicate areas of significant changes reflected in this Project Request Form and briefly explain why the changes have been made: cost __; year __; scope __; none __
(check all that apply)

Explanation: Library lot has many potholes and major cracks that can no longer simply be sealed, according to the vendors we spoke with when calling to schedule a sealing.

3. Expected Useful Life:

4. Explanation of Need: The Library lot has many potholes and major cracks that can no longer simply be sealed. We are thankful for the help that the DPW has provided to do minor repairs so far, but realize that this is a temporary solution until the lot can be properly repaved.

5. Estimated Cost:	45,000
Design	-
Engineering	-
Construction	-
Equipment	-
Bond issue costs	-
Temporary housing	-
Total	-

6. Financing:	
Federal/State Grant	-
Private Grant	-
User Fees (Sewer/Water)	-
Sale of Replaced Asset	-
Capital Reserve Fund	45,000
Bond Proceeds	-
Property Tax	-
Total	45,000

7. Impact on Operating Budget:	
Personnel	-
Maintenance	-
Insurance	-
Utilities	-
Total	-

8. Project Period:	
2014-15	-
2015-16	-
2016-17	45,000
2017-18	-
2018-19	-
2019-20	-
2020-21	-
Total	45,000

**Capital Improvements Program
PROJECT REQUEST FORM**

1. Description of Project: Library Install Passcard Locks & Installation of Security Cameras throughout public spaces in the building.

2a. Was this same project reflected in the prior CIP? No

2b. If 2a = yes, indicate areas of significant changes reflected in this Project Request Form and briefly explain why the changes have been made: cost __; year __; scope __; none __
(check all that apply)

Explanation: Install Passcard Lock system for internal doors and external staff door. Installation of security camera system throughout public spaces in the building.

3. Expected Useful Life:

4. Explanation of Need: Due to increased security issues at the library, the installation of passcard locking system on internal doors would allow staff to move between public and staff areas while allowing these staff areas to remain secure

5. Estimated Cost:	75,000
Design	-
Engineering	-
Construction	-
Equipment	-
Bond issue costs	-
Temporary housing	-
Total	-

6. Financing:	
Federal/State Grant	-
Private Grant	-
User Fees (Sewer/Water)	-
Sale of Replaced Asset	-
Capital Reserve Fund	-
Bond Proceeds	-
Property Tax	75,000
Total	75,000

7. Impact on Operating Budget:	
Personnel	-
Maintenance	-
Insurance	-
Utilities	-
Total	-

8. Project Period:	
2015-16	-
2016-17	75,000
2017-18	-
2018-19	-
2019-20	-
2020-21	-
Total	75,000

**Capital Improvements Program
PROJECT REQUEST FORM**

1. Description of Project: HVAC Upgrade

2a. Was this same project reflected in the prior CIP? No

2b. If 2a = yes, indicate areas of significant changes reflected in this Project Request Form and briefly explain why the changes have been made: cost __; year __; scope __; none __
(check all that apply)

Explanation: HVAC system upgrade to accommodate changing technology in that system

3. Expected Useful Life:

4. Explanation of Need: HVAC system runs on older and outdated technology; spot repairs are expensive as current fixtures are not fitted with the HVAC technology that exists in that field.

5. Estimated Cost:	100,000
Design	-
Engineering	-
Construction	-
Equipment	-
Bond issue costs	-
Temporary housing	-
Total	-

6. Financing:	
Federal/State Grant	-
Private Grant	-
User Fees (Sewer/Water)	-
Sale of Replaced Asset	-
Capital Reserve Fund	100,000
Bond Proceeds	-
Property Tax	-
Total	100,000

7. Impact on Operating Budget:	
Personnel	-
Maintenance	-
Insurance	-
Utilities	-
Total	-

8. Project Period:	
2014-15	-
2015-16	-
2016-17	-
2017-18	-
2018-19	-
2019-20	-
2020-21	100,000
Total	100,000

**Capital Improvements Program
PROJECT REQUEST FORM**

1. Description of Project: Dry Fire Sprinkler System Upgrade

2a. Was this same project reflected in the prior CIP? No

2b. If 2a = yes, indicate areas of significant changes reflected in this Project Request Form and briefly explain why the changes have been made: cost __; year __; scope __; none __
(check all that apply)

Explanation: Dry Fire Sprinkler system is older technology and leaks.

3. Expected Useful Life:

4. Explanation of Need: Dry Fire Sprinkler system runs on older and outdated technology; spot repairs are expensive as leaks are common and unpredictable.

5. Estimated Cost:	100,000
Design	-
Engineering	-
Construction	-
Equipment	-
Bond issue costs	-
Temporary housing	-
Total	-

6. Financing:	
Federal/State Grant	-
Private Grant	-
User Fees (Sewer/Water)	-
Sale of Replaced Asset	-
Capital Reserve Fund	100,000
Bond Proceeds	-
Property Tax	-
Total	100,000

7. Impact on Operating Budget:	
Personnel	-
Maintenance	-
Insurance	-
Utilities	-
Total	-

8. Project Period:	
2014-15	-
2015-16	-
2016-17	-
2017-18	-
2018-19	-
2019-20	-
2020-21	100,000
Total	100,000

**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Executive Park Dr. pump station

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: X Year: FY 20/21 Scope:

Explanation and Need: See attached information sheet

Estimated Cost:	
Design	156,000
Engineering -	156,000
Construction	624,000
Contingency	<u>104,000</u>
Trade-In Allowance	
Total	1,040,000
Financing:	
Federal/State Grant	
Private Grant	
User Fees (Sewer/Water) State Revolving Loan Fund or Bond	1,040,000
Sale of Replaced Asset	
Capital Reserve Fund	
Bond Proceeds	
Property Tax	
Total	1,040,000
Impact on Operating Budget:	
Personnel	0
Maintenance	2,500
Insurance	500
Utilities	4,000
Total	7,000
Project Period:	
2015-16	
2016-17	
2017-18	
2018-19	
2019-20	
2020-21	1,040,000
2021-22	
Total	1,040,000

Executive Park Drive Pump Station

This is a new pump station that will replace an inaccessible section of cross country sewer that was installed in the 1980's as a temporary solution to sewer the Executive Park Drive area as well as the sewer system located on Turkey Hill Rd.(Olympic Village), Bon Ave., JoEleen Dr., Forsythia Ln., and Bigwood Dr. The sewer in question runs under the F.E. Everett Turnpike to the Rt. 3 sewer near King Kone Ice Cream. Flow would be pumped to the 24" sewer line on Continental Blvd. This pump station is recommended in the Sewer Master Plan.

In addition, the existing pipe capacity would be exceeded if Projects 27, 29, 30 and 34 were built as recommended in the Sewer Master Plan.

The estimated cost for this station including engineering is \$1,040,000.

PWD proposes to have this project funded in FY 2020-21.



**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Sawdust

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: X Year: FY 18/19 Scope:

Explanation and Need: See attached information sheet

Estimated Cost:

Design	
Engineering -	
Construction	
Contingency	
Trade-In Allowance	
Total	180,000

Financing:

Federal/State Grant	
Private Grant	
User Fees (Sewer/Water) State Revolving Loan Fund or Bond	180,000
Sale of Replaced Asset	
Capital Reserve Fund	
Bond Proceeds	
Property Tax	
Total	180,000

Impact on Operating Budget:

Personnel	
Maintenance	
Insurance	
Utilities	
Total	0

Project Period:

2015-16	
2016-17	
2017-18	
2018-19	180,000
2019-20	
2020-21	
2021-22	
Total	180,000

Sawdust Storage Building

This is a new pole barn building to replace the existing, 30 year old pole barn that was built in 1985. The purpose of this building is to store dry sawdust from the weather. Sawdust moisture is critical in the composting process and to ensure that the end product is dry enough to screen and then to market as a useable product.



The existing pole barn has sustained damage from wind and snow loads over the years and appears to be leaning slightly.

The estimated cost is \$180,000 and would be a turn key project by the successful bidder.

PWD proposes to have this project funded in FY 18-19.



**Capital Improvements Program
PROJECT REQUEST FORM**

Project: Phase III plant and TF and Souhgan pump station improvements

Project same as reflected in prior CIP? Yes: No: X

If No, indicate area of significant change reflected and briefly explain why the changes have been made: Cost: X Year: FY 19/20 Scope: Added TF and Souhegan pump station projects and adjusted costs for project.

Explanation and Need: See attached information sheet

Estimated Cost:	
Design Preliminary and Final	856,855
Engineering -	641,855
Construction	8,104,107
Contingency	393,183
Trade-In Allowance	
Total	9,996,000
Financing:	
Federal/State Grant	
Private Grant	
User Fees (Sewer/Water) State Revolving Loan Fund or Bond	9,996,000
Sale of Replaced Asset	
Capital Reserve Fund	
Bond Proceeds	
Property Tax	
Total	9,996,000
Impact on Operating Budget:	
Personnel	0
Maintenance	-10,000
Insurance	0
Utilities	-10,000
Total	-20,000
Project Period:	
2015-16	
2016-17	
2017-18	
2018-19	
2019-20	9,781,000
2020-21	
2021-22	
Total	9,996,000

PHASE III WASTEWATER FACILITY IMPROVEMENTS

The Phase III Upgrade will replace the remaining 44-year-old equipment at the Wastewater Treatment Facility (after Phase II is completed) that has reached the end of its useful life. Loans for the Interceptor Rehabilitation and Dewatering Projects will be retired prior to the start of payments for this project.

Improvements to the Wastewater Treatment Facility in Phase III include: replacement of collectors on the secondary clarifiers, complete rehabilitation of the Main Pump Station (new pumps, motors, controls, MCC replacement, coatings, lighting, and ancillary support systems) including a new raw wastewater screening plant and wash press to replace the original raw wastewater grinder, sludge pump and controls and piping replacement for primary sludge, emergency backup generator replacements, waste activated sludge pumps, and diversion tank upgrades.

Recommendations and costs were developed in the 2010 Facilities Study. Project scope and costs will be refined in the Preliminary Design Report (PDR) conducted in FY 18/19. Estimated cost is \$7,196,000 including engineering.

PWD proposes to have this project funded in FY 2019-20 in conjunction with the Phase III project.



Original Raw Wastewater Solids Grinder



Main Pump Station



One of 3 Secondary Clarifiers (1970)

THORNTON'S FERRY & SOUHEGAN PUMP STATION IMPROVEMENTS

The Thornton's Ferry and Souhegan pump stations are the two largest pump stations in the sewer collection system. They pump approximately 75% of all residential and commercial wastewater to the treatment facility. Both stations are 43 years old. These stations are identical in appearance and construction with larger pumps located in the Thornton's Ferry station. Estimated cost of these improvements is \$2,800,000.

Improvements include: new pumps, motors, and controls, new solids grinders, new flow meters, replace piping and valves, dry pit recoating and painting, wet well coating and painting, replacement of doors and frames, replacement of force mains or lining to gravity sewer, HVAC upgrades, bypass pumping, code related improvements.

Failures at either station would cause loss of service and environmental and health risks as well as potential fines by both NHDES and EPA.

Recommendations and costs were developed in the 2010 Facilities Study and will be updated in the Preliminary Design Report (PDR) in FY 18/19.

PWD proposes to have this project funded in FY 2019-20 in conjunction with the Phase III project,



Souhegan pump station



Pump motors to be replaced



Pumps to be replaced