



City of Keene, New Hampshire



Capital Improvement
Program
2015/2016-
2020/2021



CITY OF KEENE, NEW HAMPSHIRE

2016-2021 Capital Improvement Program

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City of Keene

New Hampshire

January 15, 2015

The Honorable Mayor Lane and members of the Keene City Council:

I am pleased to present this year's proposed Capital Improvement Plan (CIP) that spans the next six years along with the proposed budget for FY 2016 CIP projects. It is in large part a continuation of prior years' projects with updated estimates and adjusted schedules to fit with the availability of projected funding. It also reflects a few new projects that came forward as a result of specific needs and possible funding opportunities that may now exist.

Of course City staff has been careful to see that all newly identified projects are deemed important to the realization of the goals and objectives of the City of Keene, Comprehensive Master Plan. Such projects are highlighted in the narrative portion of this message under DISCUSSION AND FUTURE INITIATIVES. And I am particularly pleased that the City Staff once again have been able to find ways to meet fiscal objectives, while crafting this budget.

Thus the proposed CIP is modest when viewed in the context of actual use of property tax dollars. With a reliance on grants, capital campaigns, and other revenue sources to offset city property taxes, much has been accomplished. These next few years show that same adherence to frugality while new projects are not discouraged. Whether it is improvements to the Library, which are currently in the pre planning stage, or a new Ice Skating Rink that is slated to be built in 2015, improvements to the utility system, storm water system, sidewalks and roads, airport obstruction clearing, city parks; this year's CIP includes them all.

In a Geocentric world, Keene competes for investment, jobs, and resultant tax base with everyone else. Quality of life is huge in helping the City to remain competitive. The right balance between expenditures and affordability help to ensure the City will remain an attractive place to live, work, play and learn.

The following information helps to explain the details embedded in this approach to this important Goal.

CAPITAL IMPROVEMENT PLAN:

The focus of the CIP process is planning for our City's future. The foundation of that planning effort seeks to advance Comprehensive Master Plan (CMP) vision through its focus areas including; a quality built environment, unique natural environment, a vibrant economy, strong citizenship and proactive leadership, a creative and learning culture, and healthy community.

Guided by fiscal policy, each year anticipated capital expenditures are identified in a six-year Capital Improvement Program. It forecasts projects anticipated within that time period with an estimated cost in excess of \$20,000, and anticipated useful life of at least five years. Individual project requests are consolidated into a capital program combined with revenue and operating cost projections to provide estimated rate impacts. This capital planning process allows projects in its first year to be fully considered in context of the community's vision, values, and goals, along with impact on property taxes, water rates, and sewer rates. Following a review and public hearing process, the adopted program's first year is included in the next operating budget proposal as the capital budget.

This CIP document includes capital expenditures planned for the six-year period starting July 1, 2015, and ending June 30, 2021. This program is fluid and changes from time to time upon action of the City Council. It is a planning document that does not serve to preclude advancement of a viable project not timely in the program schedule or identified within it. It also does not bind any public body to undertaking any project. It provides the City with a tool to identify and schedule needed improvements, and to forecast and plan for the impact of those improvements.

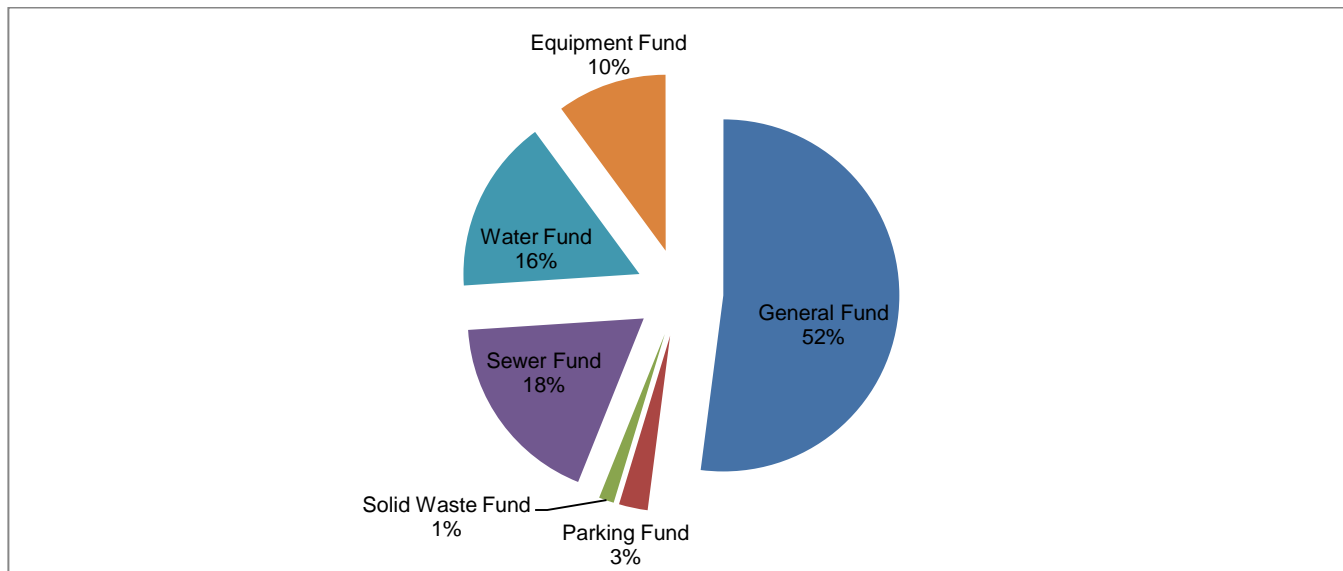
In accordance with past practice when developing projections, no growth (or reduction) in property assessments has been factored in to any year within this program. While the City's motor vehicle registrations revenue numbers continue to improve, overall non-tax revenue growth is projected to remain constrained in the next operating budget cycle. Non-property tax revenues are projected with annual increases that range from .5% to 1.8%, while departmental expenditures (exclusive of costs mandated by the NH Retirement System) are adjusted through application of historical averages, by portfolio, and range between 1.8% and 2.77%. Contributions from Keene State College to support city emergency operations and the negotiated Payment in Lieu of Taxes with Cheshire Medical Center are included in these projections. No restoration of shared revenues from the State of NH has been factored into any year of this program. Continuation of the State's distribution of the Rooms & Meals Tax has been included along with distribution of highway funds derived from the Gas Tax, and reflect recent legislation changes which are projected to increase the distribution modestly. Budgeted use of General Fund balance is forecasted in during each year of this program. In future years, it is projected conservatively as the City will need to be attentive to this component of the financing plan ensuring General Fund unassigned fund balance is retained at levels established by fiscal policy between 7-10% of the total of the City's General Fund Budget plus the tax assessments supporting education and the county. Projections anticipate continued scrutiny of open positions and alternatives to accomplish required tasks. The further refinement of budget projections for years included in the Capital Budget and Capital Plan will take place before the Operating Budget is presented in May 2015.

In accordance with recommendations contained within a water and sewer user charges rate study presented to City Council in the summer of 2005, an annual review to ensure the financial health of these utilities has been incorporated into our operating practices. This CIP anticipates that the rates will continue to change each year of this six-year program. Since that report was presented, revised rates have been brought before the City Council annually in order to ensure the financial health of these operations.

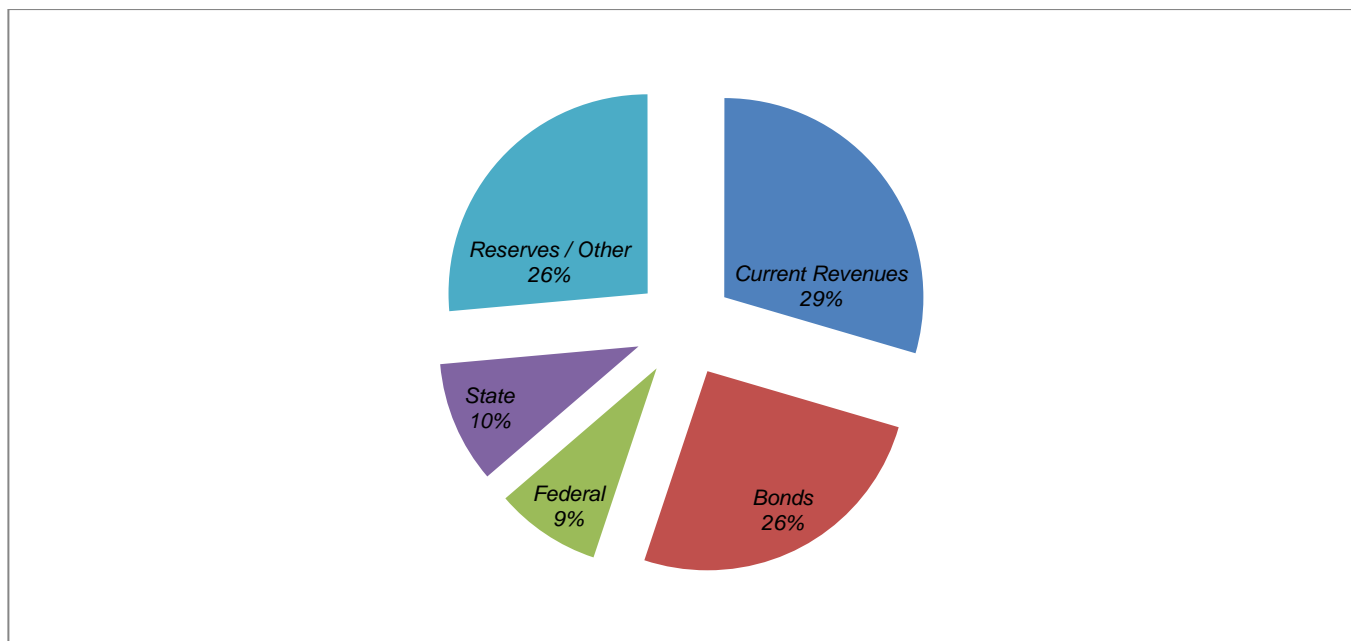
The sale of bonds is a significant part of the CIP, representing 26% of its funding source, over the six-year schedule. Long term borrowing is used to finance projects that have a significant cost and are of a lasting nature. While projects are often bundled together into one annual sale in order to minimize bond issuance costs, the time over which the bonds are repaid (the term) varies based on the financed improvement's expected useful life. The City's past practice to issue bonds with a term that is significantly less than the project's useful life in order to speed the payoff, and to reduce interest costs, is viewed favorably when the City goes to market.

To move community vision forward, as envisioned by the CMP, a philosophy of seeking opportunity for strategic investments that leverage other resources and partnerships has become embedded in our organization. Our engagement with the leadership of our employer base, through the Mayor's Presidents' Court, informs our organization's identification of priorities. Emphasis on contract management, aimed at both efficiency and effectiveness, will also assist the organization as it strives to advance community priorities. Building a Spirit of Place, a Community Development Program launched as part of the FY13 budget message has stimulated new partners in our effort to make our City the best in America resulting in achievement of City priorities, completing projects, and adding to our sense of community.

HIGHLIGHTS OF THE CAPITAL IMPROVEMENTS PROGRAM (CIP):



Capital Improvements Program By Fund



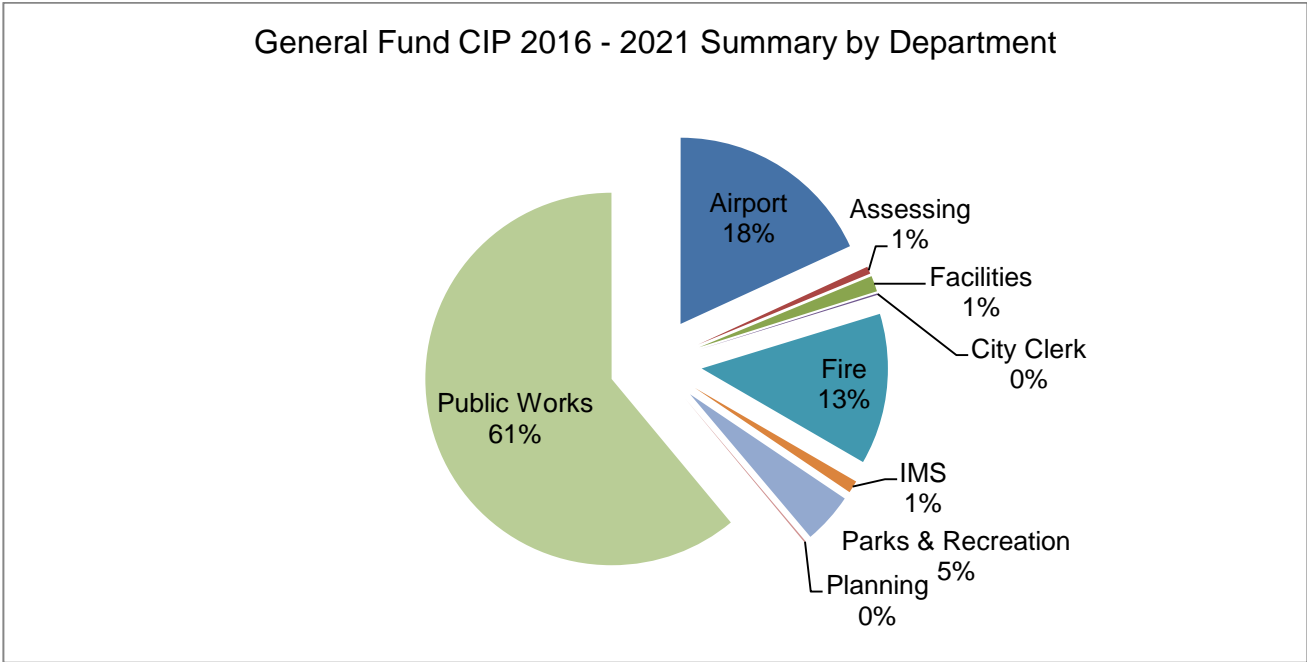
Capital Improvements Program by Funding Source

Total City infrastructure and equipment investment, over the course of the next six years is approximately \$74 million with funding comprised of taxes, user fees, bonds, federal and state grants, capital reserves, and other miscellaneous sources.

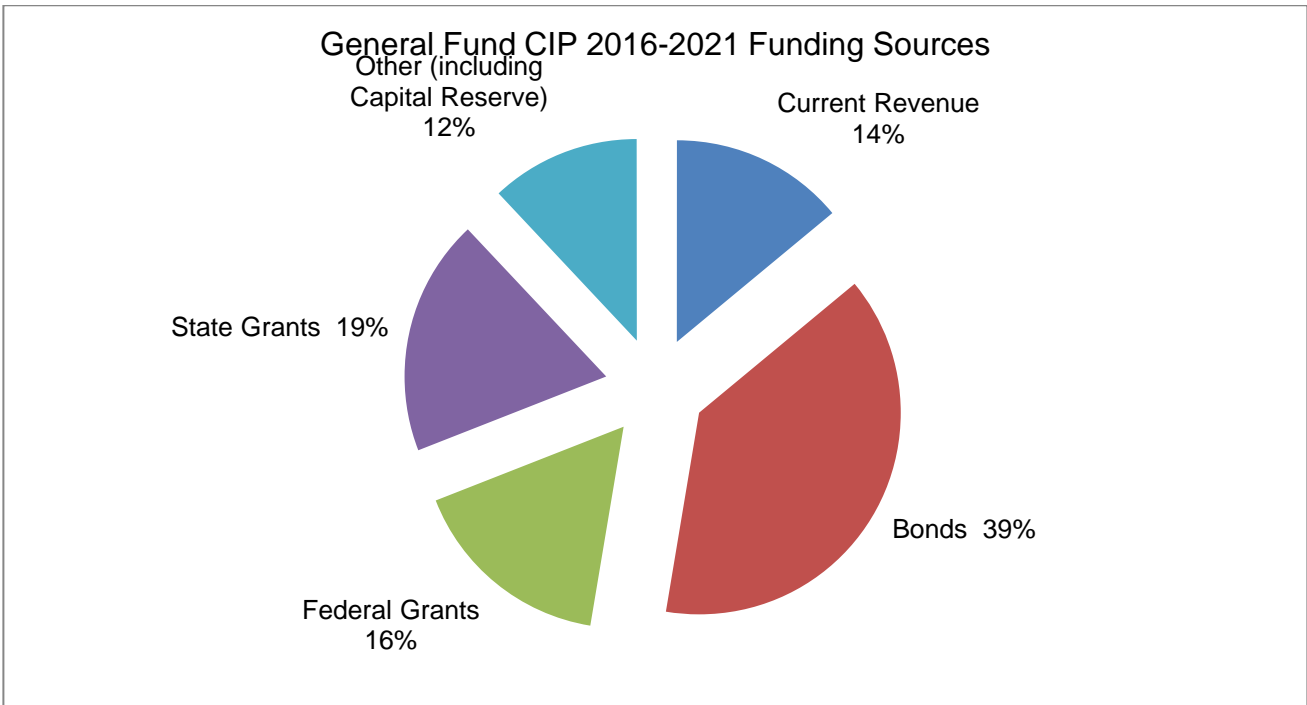
About 34% of that investment – approximately \$24.8 million – relates to the City’s sewer collection and treatment systems and the water treatment and distribution systems and is funded through user fees. With upgrades at the wastewater treatment advancing discharge standards established by the EPA nearly complete, projects scheduled over the next six years include replacement of three major sewer lines (the Silent Way-Edgewood interceptor, the Perham Street main, and Colony Court main), as well as several smaller water and sewer mains. Other projects of note include the Headworks Treatment project at Martell Court, a significant program to clean and line water mains, rehabilitation / reconstruction of the Woodward and Babbidge water supply dams, and ongoing replacement or refurbishing of equipment and

technologies installed when the facility was built in 1985. In addition, several new projects have been programmed as an outcome of the Tighe and Bond review of the City's water infrastructure. These include examinations of the City's major water tanks and a study to determine if the West Street Well Field should be replaced or rehabilitated.

The General Fund includes several departments with requests over the span of the CIP totaling nearly \$38.5 million, or 52% of the proposed CIP.



General Fund Capital Improvements Program by Department



General Fund Capital Improvements Program Funding by Source

With planned investment of \$23.5 million, the single largest component of the CIP relates to the Public Works highway infrastructure, primarily roads and bridges. A major project, scheduled in fiscal years 2017 and 2018, is the Winchester Street reconstruction from Route 101 to the Winchester Street bridge. The project is largely funded by the State of New Hampshire, and includes construction of a pedestrian bridge over Route 101 which will add to the City's multiuse trail system. The proposed Public Works CIP also includes improvements to the Goose Pond Dam, and major programs to address storm water related issues, road resurfacing, and the replacement of four bridges: Main Street / Route 12 bridge over Beaver Brook, the Winchester Street / Route 10 bridge, the Roxbury Street bridge over Beaver Brook, and the Island Street bridge (as a component of the state bypass project on Winchester Street).

Furthermore, the Public Works CIP request includes a proposed study of downtown infrastructure (drainage, parking, landscaping, sidewalks, and streets) and aesthetics to include significant public input to develop plans for beautifying and revitalizing the downtown. The last major downtown revitalization project took place in 1988, over 25 years ago.

Finally, the Public Works Department has advanced a project designed to remediate hazardous materials at 560 Main Street, a former waste disposal site. The cleanup is anticipated to be funded through grants and proceeds from the sale of the property, and is not anticipated to require local property tax funding.

Other projects of note included in the General Fund CIP request include:

- a. Rebuilding Runway 14/32 and relocating Taxiway A at the Airport.
- b. The Revaluation project advanced by the Assessing Department.
- c. The Municipal Buildings Improvements program developed by Facilities as a result of the Building Conditions Assessment project funded through a prior CIP.
- d. The replacement of four pieces of Fire Department apparatus and two ambulances.
- e. Improvements in Wheelock Park (funded through a sale of property to Public Service of New Hampshire) and at Carpenter Field, construction of a skate park (to be funded through a capital campaign), and Phase 3 of resurfacing and improvements to the Cheshire Rail Trail north.
- f. A "Climate Adaptation and Vulnerability" study advanced by the Planning Department.

Equipment Fund activity represents approximately 10% of the program, and consists of equipment replacement related activity. The Parking Fund and Solid Waste Funds, each comprising approximately 3% and 1% of the proposed CIP, relate primarily to maintenance and improvement of facilities.

DISCUSSION AND FUTURE INITIATIVES

The proposed CIP includes several projects and programs designed to mitigate the impact of more frequent and severe storm events. These programs range from the broadly focused Climate Vulnerability Assessment, to the more area locally focused Beaver Brook Hydrologic and Hydraulic Study and Storm Water System Management studies. Also included are programs to address ongoing maintenance and repair issues in the drainage system. A major new program has been developed to address specific areas in the community that have experienced repetitive flooding and pooling problems. To advance broader programs, partnerships with residents, property owners, government agencies, state and federal officials will be required. As costs for mitigating storm water issues rise in coming years, the concept of developing a storm water utility fund as a mechanism to fund such activity will be explored.

With accelerated ARRA investment in highway infrastructure completed, this CIP continues to advance rehabilitation and other repair strategies maximizing the impact of the City's investment during this planning period rather than complete reconstruction of roads. This strategy, advanced to the City Council in November of 2013, incorporates an evaluation and ranking of City streets that considers condition, traffic volume, and proximity of other work when prioritizing road improvements. Responding to funding constraints and the competitiveness of the NHDOT Municipal Bridge Program, prioritization of bridge projects is also incorporated into this CIP.

General Fund financial projections include allowances (for planning purposes) for debt service over 20 years for two projects. The first is the ice rink project advancing at the Marlboro Street municipal facility, which is not included in the CIP. The second is the library campus project being developed by the Library Trustees and Trustees of Trust Funds. This project is included in the CIP with no cost attached, and serves as a placeholder for the project. The financial allowance is designed to cover specific improvements to be included in those projects that relate to City activities. Such costs are not specifically identified at this time, and will be brought to Council separately or through a future CIP.

The General Fund CIP request also includes a project for Council Chambers and Data Center improvements. No funding allowance is included in the CIP for the project. As design advances and alternatives are developed, along with associated costs, information will be brought to the Council for consideration.

A parking deck and intermodal transportation facility is also under consideration at the site of the current Gilbo Avenue parking lot. The project remains in the conceptual stage, pending further development in the Wells Street Parking Structure & Infrastructure Improvement Tax Increment Financing District, and investigation of additional funding opportunities including grants and new market tax credits. This project, when it is advanced through City Council, will form a significant component of downtown revitalization efforts.

Recently two concepts have been advanced to the City and are under review. The first is a potential partnership between the City Parks and Recreation Department and the Keene Senior Center. The partnership would address issues related to serving an aging population, and would be led by a Mayor's Task Force on Aging. The second is an idea known as Gigabit Keene. Gigabit Keene will explore economic development opportunities that would be enhanced through access to dependable high speed internet throughout the Keene City limits, the technologies and strategies to develop a high speed internet system within the City, and research and develop a sustainable business plan for such a system.

FINANCIAL INFORMATION & PROJECT REQUESTS:

Organization of the CIP follows the City's fund structure and includes sections for the General Fund, Special Revenue Funds (Parking & Solid Waste), Enterprise Funds (Water & Sewer) and the Equipment Internal Service Fund. For each fund, the presentation begins with a summary that includes multi-year projections of both operating and capital revenues and expenditures. For the General Fund and Enterprise Funds, projected tax rates, water and sewer rates are developed. These projections are followed by a summary of the fund's capital program projects requests and overall financial plan. Debt summaries, detailing current obligations and the impact of projects financed by new issues during this CIP cycle, are a portion of the financial presentation. Following the fund financial summary provided, are the project request worksheets providing supporting for each project request.

Considering priorities identified in the Comprehensive Master Plan, a department master plan, public demand for services or facilities or by operational needs, project requests are developed by City departments. Requests, in addition to articulating scope, justification, a financial plan and schedule, are aligned to a Master Plan focus area, strategy, and the values articulated by V.O.I.C.E.

When developing a project's financial plan the funding mechanisms proposed consider the capacity of its source, or fund, as well as timing relative to other projects. Projects identified as funded by long-term debt are repaid at a term that considers the anticipated useful life of that project. An amount appearing in the "Prior" column of the Financial Plan section of a request indicates amounts available from appropriations or other sources that have been determined to be available for future years' work. An estimate of the anticipated impact of a project on a department's operating budget and project status is part of each project request.

The remaining steps to be taken in the CIP process are:

- Thursday, January 15, 2015 Documents distributed to City Council, Planning Board
- Thursday, January 22, 2015 Finance, Organization & Personnel (FOP) Committee review
- Thursday, February 12, 2015 FOP Committee review
- Thursday, February 26, 2015 FOP Committee review
- Thursday, March 5, 2015 Public Hearing
- Thursday, March 15, 2015 FOP Committee develops recommendation
- Thursday, March 19, 2015 Council vote

The Planning Board will conduct its independent review at its February 2015 meeting, and will report the result of their review directly to the City Council.

Thank you for your careful consideration of this document.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "John A. MacLean". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

John A. MacLean
City Manager

Note: Special thanks and recognition to our Finance Director Steve Thornton and his staff for his and their dedication to the accuracy and content development of this document.

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CITY OF KEENE, NEW HAMPSHIRE

Capital Improvement Program Summary

<u>General Fund</u>	<u>2015/2016</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>TOTAL</u>
Airport	\$ 1,434,666	\$ 2,270,215	\$ 2,554,444	\$ 74,000	\$ 54,000	\$ 596,000	\$ 6,983,325
Assessing	138,000	107,000	-	-	-	-	245,000
Facilities	128,000	46,500	50,000	100,000	100,000	100,000	524,500
Finance	-	24,500	24,500	-	-	-	49,000
Fire	1,044,705	499,205	1,102,000	597,000	1,377,000	425,000	5,044,910
IMS	25,000	98,000	138,000	72,343	74,800	3,000	411,143
Parks & Rec.	784,000	783,376	125,074	-	-	-	1,692,450
Planning	-	50,000	-	-	-	-	50,000
Public Works	3,702,126	5,749,156	5,161,477	4,410,726	2,501,285	1,970,263	23,495,033
<u>Other Funds</u>							
Parking	1,013,000	230,209	200,000	174,014	200,000	150,000	1,967,223
Solid Waste	252,828	122,244	45,000	461,750	45,000	101,000	1,027,822
Sewer	2,161,597	2,616,535	1,140,451	2,594,149	2,141,805	2,574,734	13,229,271
Water	1,025,292	2,962,013	1,442,558	1,600,519	2,886,971	1,679,568	11,596,921
Equipment	872,461	1,395,451	1,418,521	1,294,256	1,376,170	1,108,752	7,465,611
Totals	\$ 12,581,675	\$ 16,954,404	\$ 13,402,025	\$ 11,378,757	\$ 10,757,031	\$ 8,708,317	\$ 73,782,209
<u>Funding Type</u>							
Current Revenues	\$ 2,869,846	\$ 3,773,622	\$ 3,895,618	\$ 3,657,613	\$ 3,768,014	\$ 3,835,987	\$ 21,800,700
Bonds	2,021,428	2,348,355	2,709,341	4,193,310	4,353,643	3,250,837	18,876,914
Federal	1,579,800	1,999,995	2,254,000	-	-	486,000	6,319,795
State	1,589,433	2,375,110	2,208,422	1,089,600	-	27,000	7,289,565
Other	4,521,168	6,457,322	2,334,645	2,438,234	2,635,374	1,108,493	19,495,236
Totals	\$ 12,581,675	\$ 16,954,404	\$ 13,402,025	\$ 11,378,757	\$ 10,757,031	\$ 8,708,317	\$ 73,782,209

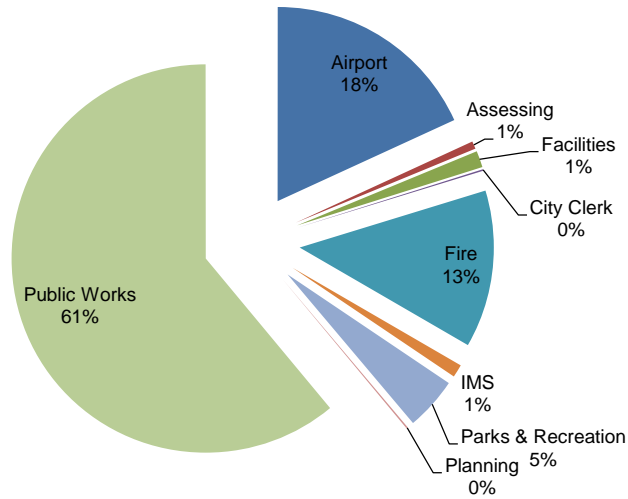
**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY16 - FY21
General Fund Multi-Year Projections**

	ACTUAL FY 13/14	BUDGET FY 14/15	PROJECTED FY 15/16	PROJECTED FY 16/17	PROJECTED FY 17/18	PROJECTED FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21
REVENUES								
Property Tax	\$22,470,718	\$23,333,781	\$24,256,558	\$25,141,755	\$26,032,090	\$26,740,042	\$27,483,910	\$28,197,744
Other Local Taxes	411,265	386,555	388,488	390,430	392,383	394,345	396,316	398,298
Tax Increment Financing	74,870	72,614	68,414	66,109	62,156	0	0	0
Licenses, Permits & Fees	3,072,270	3,152,275	3,231,555	3,280,028	3,329,229	3,379,167	3,429,855	3,481,303
Intergovernmental	2,237,596	2,358,429	2,475,812	2,519,381	2,545,976	2,572,771	2,599,767	2,619,265
Charges for Services	1,592,836	1,556,853	1,584,409	1,612,453	1,640,993	1,670,039	1,699,599	1,729,682
Fines & Forfeits	151,366	184,742	186,589	188,455	190,340	192,243	194,166	196,107
Miscellaneous	1,400,014	1,460,308	1,432,610	1,439,773	1,446,972	1,454,207	1,461,478	1,468,785
Other Financing Sources	2,586,708	2,249,351	2,260,598	2,271,901	2,283,260	2,294,677	2,306,150	2,317,681
Use of Fund Balance	0	924,991	975,000	750,000	750,000	375,000	500,000	225,000
Use of Fund Balance - appropriations carried forward	0	333,216	0	0	0	0	0	0
SUBTOTAL - current revenues	\$33,997,642	\$36,013,115	\$36,860,033	\$37,660,286	\$38,673,399	\$39,072,490	\$40,071,240	\$40,633,864
Sale of Bonds	\$1,325,000	2,280,000	\$1,813,600	\$2,348,355	\$2,709,341	\$2,884,000	\$3,331,618	\$1,795,325
TOTAL REVENUES & OTHER FIN SOURCES	\$35,322,642	\$38,293,115	\$38,673,633	\$40,008,641	\$41,382,740	\$41,956,490	\$43,402,858	\$42,429,189
EXPENDITURES								
ELECTED/APPOINTED OFFICIALS:								
Mayor & City Council	\$88,760	\$134,353	\$136,781	\$139,253	\$141,769	\$144,331	\$146,939	\$149,594
City Manager	246,119	241,682	246,049	250,495	255,022	259,630	264,321	269,098
City Clerk & Elections	499,544	536,943	546,646	556,524	566,580	576,818	587,241	597,853
City Attorney	347,015	325,328	331,207	337,192	343,285	349,488	355,803	362,233
Outside Agencies	207,000	220,000	220,000	223,975	228,023	232,143	236,338	240,608
Unclassified	110,133	120,883	123,067	125,291	127,555	129,860	132,206	134,595
Employee Benefits	274,501	679,250	923,774	959,717	1,160,809	1,193,335	1,398,648	1,435,472
Risk Management	228,011	243,576	247,977	252,458	257,020	261,664	266,392	271,206
Total Elected/Appointed Officials	\$2,001,085	\$2,502,015	\$2,775,501	\$2,844,905	\$3,080,062	\$3,147,269	\$3,387,890	\$3,460,659
ADMINISTRATIVE SERVICES:								
Assessment	395,956	416,089	425,384	434,887	444,602	454,535	464,689	475,070
Finance	1,292,955	1,471,047	1,494,658	1,528,049	1,562,185	1,597,084	1,632,763	1,669,239
Human Resources	292,963	313,188	314,276	321,297	328,475	335,813	343,315	350,985
IMS	1,153,421	1,212,017	1,213,308	1,240,413	1,268,124	1,296,454	1,325,417	1,355,027
Total Administrative Services	\$3,135,296	\$3,412,341	\$3,447,626	\$3,524,646	\$3,603,387	\$3,683,886	\$3,766,184	\$3,850,321
COMMUNITY SERVICES:								
Fire & Ambulance	6,015,941	6,221,049	6,392,251	6,569,125	6,750,892	6,937,689	7,129,655	7,326,933
Human Services	634,359	721,311	741,270	761,781	782,859	804,521	826,782	849,659
Library	1,262,326	1,280,446	1,315,876	1,352,286	1,389,704	1,428,157	1,467,674	1,508,285
Parks, Recreation & Facilities	2,845,117	2,921,089	2,934,432	3,015,628	3,099,070	3,184,821	3,272,945	3,363,508
Police	6,294,098	6,681,610	6,866,491	7,056,487	7,251,740	7,452,395	7,658,603	7,870,517
Youth Services	105,655	126,361	129,857	133,450	137,143	140,937	144,845	148,845
Total Community Services	\$17,157,497	\$17,951,866	\$18,380,177	\$18,888,756	\$19,411,408	\$19,948,522	\$20,500,498	\$21,067,746

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY16 - FY21
General Fund Multi-Year Projections**

	ACTUAL FY 13/14	BUDGET FY 14/15	PROJECTED FY 15/16	PROJECTED FY 16/17	PROJECTED FY 17/18	PROJECTED FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21
MUNICIPAL DEVELOPMENT SERVICES:								
Airport	551,662	563,016	573,668	584,522	595,581	606,849	618,331	630,030
Health & Code Enforcement	869,332	972,956	1,015,691	1,034,908	1,054,488	1,074,439	1,094,768	1,115,481
Planning	398,865	426,164	459,545	468,240	477,099	486,125	495,323	504,694
Public Works	3,807,931	4,295,141	4,199,422	4,278,875	4,359,831	4,442,319	4,526,368	4,612,007
Total Mun. Development Services	\$5,627,790	\$6,257,277	\$6,248,326	\$6,366,544	\$6,486,999	\$6,609,733	\$6,734,790	\$6,862,212
CAPITAL:								
Debt Service (including repayment of interfund loan)	4,697,376	4,737,779	5,271,739	4,834,425	4,896,879	4,905,011	4,906,411	4,696,988
CAPITAL PROJECTS (funded by current revenues)	866,364	1,151,837	736,664	1,201,009	1,194,664	778,069	775,467	695,938
Total Capital	\$5,563,740	\$5,889,616	\$6,008,403	\$6,035,434	\$6,091,543	\$5,683,080	\$5,681,878	\$5,392,926
SUBTOTAL - current expenditures	\$33,485,407	\$36,013,115	\$36,860,033	\$37,660,285	\$38,673,399	\$39,072,491	\$40,071,239	\$40,633,864
CAPITAL PROJECTS (funded by bonds)	\$1,325,000	\$2,280,000	\$1,813,600	\$2,348,355	\$2,709,341	\$2,884,000	\$3,331,618	\$1,795,325
TOTAL EXPENDITURES	\$34,810,407	\$38,293,115	\$38,673,633	\$40,008,640	\$41,382,740	\$41,956,491	\$43,402,857	\$42,429,189
CITY PROPERTY TAX REVENUE INCREASE			\$ 922,777	\$ 885,197	\$ 890,335	\$ 707,952	\$ 743,868	\$ 713,834
CITY PROPERTY TAX REVENUE INCREASE (%)			3.95%	3.65%	3.54%	2.72%	2.78%	2.60%
Assessments (trended 0% per year)			1,847,044.1	1,847,044.1	1,847,044.1	1,847,044.1	1,847,044.1	1,847,044.1
ADD: Overlay		\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
ADD: War Service Credits		\$243,425	\$270,000	\$270,000	\$270,000	\$270,000	\$270,000	\$270,000
Property Tax Rate - City share		\$12.93	\$13.44	\$13.92	\$14.40	\$14.79	\$15.19	\$15.58
city tax rate increase (decrease)			3.94%	3.57%	3.45%	2.71%	2.70%	2.57%
CAPITAL (current) & DEBT AS % OF BUDGET		16.3%	16.3%	16.0%	15.7%	14.5%	14.1%	13.2%
GENERAL FUND INCREASE (Excluding bonds)			2.4%	2.2%	2.7%	1.0%	2.6%	1.4%
GENERAL FUND INCREASE (Including bonds)			1.0%	3.5%	3.4%	1.4%	3.4%	-2.2%

General Fund CIP 2016 - 2021 Summary by Department



<u>Department</u>	<u>2015/2016</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>TOTAL</u>
Airport	1,434,666	2,270,215	2,554,444	74,000	54,000	596,000	\$ 6,983,325
Assessing	138,000	107,000	-	-	-	-	\$ 245,000
Facilities	128,000	46,500	50,000	100,000	100,000	100,000	\$ 524,500
City Clerk	-	24,500	24,500	-	-	-	\$ 49,000
Fire	1,044,705	499,205	1,102,000	597,000	1,377,000	425,000	\$ 5,044,910
IMS	25,000	98,000	138,000	72,343	74,800	3,000	\$ 411,143
Parks & Recreation	784,000	783,376	125,074	-	-	-	\$ 1,692,450
Planning	-	50,000	-	-	-	-	\$ 50,000
Public Works	3,702,126	5,749,156	5,161,477	4,410,726	2,501,285	1,970,263	\$ 23,495,033
Total	\$ 7,256,497	\$ 9,627,952	\$ 9,155,495	\$ 5,254,069	\$ 4,107,085	\$ 3,094,263	\$38,495,361

CITY OF KEENE, NEW HAMPSHIRE

General Fund 2016 - 2021 Capital Improvement Program Summary

Dept.	Project Name	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	TOTAL
Airport	Fuel Farm	-	-	-	-	-	540,000	540,000
Airport	Obstruction Removal	666,666	166,665	-	-	-	-	833,331
Airport	Pavement Maintenance	46,000	48,000	50,000	52,000	54,000	56,000	306,000
Airport	Pavement Marking	-	-	-	22,000	-	-	22,000
Airport	Runway 14/32 Reconstruction	-	2,055,550	-	-	-	-	2,055,550
Airport	Runway 20 PAPI Replacement	-	-	60,000	-	-	-	60,000
Airport	Snow Removal Equipment	722,000	-	-	-	-	-	722,000
Airport	Taxiway A Relocation	-	-	2,444,444	-	-	-	2,444,444
	TOTAL AIRPORT	\$ 1,434,666	\$ 2,270,215	\$ 2,554,444	\$ 74,000	\$ 54,000	\$ 596,000	\$ 6,983,325
Assessing	Revaluation	138,000	107,000	-	-	-	-	245,000
	TOTAL ASSESSING	\$ 138,000	\$ 107,000	\$ -	\$ -	\$ -	\$ -	\$ 245,000
Facilities	City Hall Boiler and Oil Tank	100,000	-	-	-	-	-	100,000
Facilities	Council Chambers Renovations (tbd)	-	-	-	-	-	-	-
Facilities	Library Campus Project (tbd)	-	-	-	-	-	-	-
Facilities	Municipal Buildings Improvements	28,000	46,500	50,000	100,000	100,000	100,000	424,500
	TOTAL FACILITIES	\$ 128,000	\$ 46,500	\$ 50,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 524,500
City Clerk	Mobile Shelving	-	24,500	24,500	-	-	-	49,000
	TOTAL CITY CLERK	\$ -	\$ 24,500	\$ 24,500	\$ -	\$ -	\$ -	\$ 49,000
Fire	Ambulance Replacement	215,000	-	-	230,000	-	-	445,000
Fire	Apparatus Replacement	450,000	-	710,000	-	-	90,000	1,250,000
Fire	Apparatus Replacement - Ladder 1	-	-	-	-	1,000,000	-	1,000,000
Fire	Capital Reserve Ambulance Replacement	70,000	70,000	70,000	80,000	90,000	90,000	470,000
Fire	Capital Reserve Apparatus Replacement	220,000	260,000	260,000	245,000	245,000	245,000	1,475,000
Fire	Defibrillator Replacement	66,205	66,205	-	-	-	-	132,410
Fire	Fire Alarm System Infrastructure	-	50,000	-	-	-	-	50,000
Fire	Mobile Radio Replacement	23,500	23,000	-	-	-	-	46,500
Fire	Portable Radio Replacement	-	30,000	42,000	42,000	42,000	-	156,000
Fire	West Keene Fire Station Study	-	-	20,000	-	-	-	20,000
	TOTAL FIRE	\$ 1,044,705	\$ 499,205	\$ 1,102,000	\$ 597,000	\$ 1,377,000	\$ 425,000	\$ 5,044,910
IMS	Network Equipment Replacement	-	-	55,000	18,000	44,800	-	117,800
IMS	Oracle Database Software	-	86,000	-	-	-	-	86,000
IMS	Server Replacement	25,000	12,000	3,000	54,343	30,000	3,000	127,343
IMS	Storage Area Network	-	-	80,000	-	-	-	80,000
	TOTAL IMS	\$ 25,000	\$ 98,000	\$ 138,000	\$ 72,343	\$ 74,800	\$ 3,000	\$ 411,143
Parks & Rec.	Carpenter Field Improvements	-	-	102,937	-	-	-	102,937
Parks & Rec.	Cemetery Roads Repaving	-	36,410	22,137	-	-	-	58,547
Parks & Rec.	Cheshire Trail - Phase 3	410,000	-	-	-	-	-	410,000
Parks & Rec.	Robin Hood Splash Pad	-	86,966	-	-	-	-	86,966
Parks & Rec.	Skate Park	-	350,000	-	-	-	-	350,000
Parks & Rec.	Wheelock Park Improvements	374,000	310,000	-	-	-	-	684,000
	TOTAL PARKS & RECREATION	\$ 784,000	\$ 783,376	\$ 125,074	\$ -	\$ -	\$ -	\$ 1,692,450
Planning	Climate Adaptation Vulnerability Assessment	-	50,000	-	-	-	-	50,000
	TOTAL PLANNING	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
Public Works	560 Main Street Assessment	-	1,000,000	-	-	-	-	1,000,000
Public Works	Beaver brook Hydrologic / Hydraulic Study	-	-	150,000	-	-	-	150,000
Public Works	Bridge Program	1,900,000	-	138,000	1,362,000	-	-	3,400,000
Public Works	Curb Installation	58,177	60,121	61,720	63,571	65,478	68,752	377,819
Public Works	Downtown Revitalization Study	-	45,000	30,000	-	-	-	75,000
Public Works	Flood Management	292,936	-	861,380	577,380	712,500	300,000	2,744,196
Public Works	Goose Pond Dam Improvements	-	106,389	-	879,400	-	-	985,789
Public Works	Road Rehabilitation	1,179,928	1,220,799	1,169,601	1,236,507	1,422,684	1,290,379	7,519,898
Public Works	Sidewalks - New	-	208,927	-	-	-	-	208,927
Public Works	Sidewalks - Replacement/Repair	58,177	59,922	61,720	63,571	65,478	68,752	377,620
Public Works	State By-Pass Projects	-	2,830,000	2,466,000	-	-	-	5,296,000
Public Works	Storm Drainage Cleaning	104,731	106,506	108,291	110,090	113,392	116,974	659,984
Public Works	Stormwater Drainage Spot Repair Program	58,177	59,992	61,720	63,571	65,478	67,442	376,380
Public Works	Stormwater System Management	50,000	51,500	53,045	54,636	56,275	57,964	323,420
	TOTAL PUBLIC WORKS	\$ 3,702,126	\$ 5,749,156	\$ 5,161,477	\$ 4,410,726	\$ 2,501,285	\$ 1,970,263	\$ 23,495,033
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 7,256,497	\$ 9,627,952	\$ 9,155,495	\$ 5,254,069	\$ 4,107,085	\$ 3,094,263	\$ 38,495,361

General Fund 2016 Capital Improvement Program Detail

<u>Dept.</u>	<u>Project Name</u>	<u>cur rev</u>	<u>bonds</u>	<u>federal</u>	<u>state</u>	<u>other</u>	<u>TOTAL</u> <u>2015/2016</u>
Airport	Pavement Maintenance	46,000	-	-	-	-	46,000
Airport	Runway 20 Obstruction Removal	33,333	-	600,000	33,333	-	666,666
Airport	Snow Removal Equipment	36,100	-	649,800	36,100	-	722,000
Assessing	Revaluation	100,000	-	-	-	38,000	138,000
Facilities	City Hall Boiler and Oil Tank	-	100,000	-	-	-	100,000
Facilities	Municipal Buildings Improvements	28,000	-	-	-	-	28,000
Fire	Ambulance Replacement	-	-	-	-	\$ 215,000	215,000
Fire	Apparatus Replacement	-	-	-	-	450,000	450,000
Fire	Capital Reserve Ambulance Replacement	70,000	-	-	-	-	70,000
Fire	Capital Reserve Apparatus Replacement	220,000	-	-	-	-	220,000
Fire	Defibulator Replacement	-	66,205	-	-	-	66,205
Fire	Mobile Radio Replacement	23,500	-	-	-	-	23,500
IMS	Server Replacement	25,000	-	-	-	-	25,000
Parks & Rec.	Cheshire Trail - Phase 3	-	-	330,000	-	80,000	410,000
Parks & Rec.	Wheelock Park Improvements	-	-	-	-	374,000	374,000
Public Works	Bridge Program	-	-	-	1,520,000	380,000	1,900,000
Public Works	Curb Installation	-	58,177	-	-	-	58,177
Public Works	Flood management	-	292,936	-	-	-	292,936
Public Works	Road Rehabilitation	-	1,179,928	-	-	-	1,179,928
Public Works	Sidewalks - Replacement/Repair	-	58,177	-	-	-	58,177
Public Works	Storm Drainage Cleaning	104,731	-	-	-	-	104,731
Public Works	Stormwater Drainage Spot Repair Program	-	58,177	-	-	-	58,177
Public Works	Stormwater System Management	50,000	-	-	-	-	50,000
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 736,664	\$ 1,813,600	\$ 1,579,800	\$ 1,589,433	\$ 1,537,000	\$ 7,256,497

General Fund 2017 Capital Improvement Program Detail

<u>Dept.</u>	<u>Project Name</u>	<u>cur rev</u>	<u>bonds</u>	<u>federal</u>	<u>state</u>	<u>other</u>	<u>TOTAL</u> <u>2016/2017</u>
Airport	Pavement Maintenance	48,000	-	-	-	-	48,000
Airport	Runway 14/32 Reconstruction	102,777	-	1,849,996	102,777	-	2,055,550
Airport	Runway 20 Obstruction Removal	8,333	-	149,999	8,333	-	166,665
Assessing	Tax Parcel Boundary Correction	107,000	-	-	-	-	107,000
Facilities	Municipal Buildings Improvements	46,500	-	-	-	-	46,500
City Clerk	Mobile Shelving	24,500	-	-	-	-	24,500
Fire	Capital Reserve Ambulance Replacement	70,000	-	-	-	-	70,000
Fire	Capital Reserve Apparatus Replacement	260,000	-	-	-	-	260,000
Fire	Defibrillator Replacement	-	66,205	-	-	-	66,205
Fire	Fire Alarm System Infrastructure	50,000	-	-	-	-	50,000
Fire	Mobile Radio Replacement	23,000	-	-	-	-	23,000
Fire	Portable Radio Replacement	30,000	-	-	-	-	30,000
IMS	Oracle Database Software	86,000	-	-	-	-	86,000
IMS	Server Replacement	12,000	-	-	-	-	12,000
Parks & Rec.	Cemetery Roads Repaving	36,410	-	-	-	-	36,410
Parks & Rec.	Robin Hood Splash Pad	43,483	-	-	-	43,483	86,966
Parks & Rec.	Skate Park	-	-	-	-	350,000	350,000
Parks & Rec.	Wheelock Park Improvements	-	-	-	-	310,000	310,000
Planning	Climate Adaptation Vulnerability Assessment	50,000	-	-	-	-	50,000
Public Works	560 Main Street Assessment	-	-	-	-	1,000,000	1,000,000
Public Works	Curb Installation	-	60,121	-	-	-	60,121
Public Works	Downtown Revitalization Study	45,000	-	-	-	-	45,000
Public Works	Goose Pond Dam Improvements	-	106,389	-	-	-	106,389
Public Works	Road Rehabilitation	-	1,220,799	-	-	-	1,220,799
Public Works	Sidewalks - New	-	208,927	-	-	-	208,927
Public Works	Sidewalks - Replacement/Repair	-	59,922	-	-	-	59,922
Public Works	State By-Pass Projects	-	566,000	-	2,264,000	-	2,830,000
Public Works	Storm Drainage Cleaning	106,506	-	-	-	-	106,506
Public Works	Stormwater Drainage Spot Repair Program	-	59,992	-	-	-	59,992
Public Works	Stormwater System Management	51,500	-	-	-	-	51,500
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 1,201,009	\$ 2,348,355	\$ 1,999,995	\$ 2,375,110	\$ 1,703,483	\$ 9,627,952

General Fund 2018 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	TOTAL 2017/2018
Airport	Pavement Maintenance	50,000	-	-	-	-	50,000
Airport	Runway 20 PAPI Replacement	3,000	-	54,000	3,000	-	60,000
Airport	Taxiway A Relocation	122,222	-	2,200,000	122,222	-	2,444,444
Facilities	Municipal Buildings Improvements	50,000	-	-	-	-	50,000
City Clerk	Mobile Shelving	24,500	-	-	-	-	24,500
Fire	Apparatus Replacement	-	-	-	-	710,000	\$ 710,000
Fire	Capital Reserve Ambulance Replacement	70,000	-	-	-	-	70,000
Fire	Capital Reserve Apparatus Replacement	260,000	-	-	-	-	260,000
Fire	Portable Radio Replacement	42,000	-	-	-	-	42,000
Fire	West Keene Fire Station Study	20,000	-	-	-	-	20,000
IMS	Network Equipment Replacement	55,000	-	-	-	-	55,000
IMS	Server Replacement	3,000	-	-	-	-	3,000
IMS	Storage Area Network	80,000	-	-	-	-	80,000
Parks & Rec.	Carpenter Field Improvements	51,469	-	-	-	51,469	102,937
Parks & Rec.	Cemetery Roads Repaving	22,137	-	-	-	-	22,137
Public Works	Beaver brook Hydrologic / Hydraulic	150,000	-	-	-	-	150,000
Public Works	Bridge Program	-	-	-	110,400	27,600	138,000
Public Works	Curb Installation	-	61,720	-	-	-	61,720
Public Works	Downtown Revitalization Study	30,000	-	-	-	-	30,000
Public Works	Flood management	-	861,380	-	-	-	861,380
Public Works	Road Rehabilitation	-	1,169,601	-	-	-	1,169,601
Public Works	Sidewalks - Replacement/Repair	-	61,720	-	-	-	61,720
Public Works	State By-Pass Projects	-	493,200	-	1,972,800	-	2,466,000
Public Works	Storm Drainage Cleaning	108,291	-	-	-	-	108,291
Public Works	Stormwater Drainage Spot Repair Program	-	61,720	-	-	-	61,720
Public Works	Stormwater System Management	53,045	-	-	-	-	53,045
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 1,194,664	\$ 2,709,341	\$ 2,254,000	\$ 2,208,422	\$ 789,069	\$ 9,155,495

General Fund 2019 Capital Improvement Program Detail

Dept.	Project Name	cur rev	bonds	federal	state	other	TOTAL 2018/2019
Airport	Pavement Maintenance	52,000	-	-	-	-	52,000
Airport	Pavement Marking	22,000	-	-	-	-	22,000
Facilities	Municipal Buildings Improvements	100,000	-	-	-	-	100,000
Fire	Ambulance Replacement	-	-	-	-	230,000	230,000
Fire	Capital Reserve Ambulance Replacement	80,000	-	-	-	-	80,000
Fire	Capital Reserve Apparatus Replacement	245,000	-	-	-	-	245,000
Fire	Portable Radio Replacement	42,000	-	-	-	-	42,000
IMS	Network Equipment Replacement	18,000	-	-	-	-	18,000
IMS	Server Replacement	54,343	-	-	-	-	54,343
Public Works	Bridge Program	-	-	-	1,089,600	272,400	1,362,000
Public Works	Curb Installation	-	63,571	-	-	-	63,571
Public Works	Flood management	-	577,380	-	-	-	577,380
Public Works	Goose Pond Dam Improvements	-	879,400	-	-	-	879,400
Public Works	Road Rehabilitation	-	1,236,507	-	-	-	1,236,507
Public Works	Sidewalks - Replacement/Repair	-	63,571	-	-	-	63,571
Public Works	Storm Drainage Cleaning	110,090	-	-	-	-	110,090
Public Works	Stormwater Drainage Spot Repair Program	-	63,571	-	-	-	63,571
Public Works	Stormwater System Management	54,636	-	-	-	-	54,636
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 778,069	\$ 2,884,000	\$ -	\$ 1,089,600	\$ 502,400	\$ 5,254,069

General Fund 2020 Capital Improvement Program Detail

<u>Dept.</u>	<u>Project Name</u>	<u>cur rev</u>	<u>bonds</u>	<u>federal</u>	<u>state</u>	<u>other</u>	TOTAL 2019/2020
Airport	Pavement Maintenance	54,000	-	-	-	-	54,000
Facilities	Municipal Buildings Improvements	100,000	-	-	-	-	100,000
Fire	Capital Reserve Ambulance Replacement	90,000	-	-	-	-	90,000
Fire	Capital Reserve Apparatus Replacement	245,000	-	-	-	-	245,000
Fire	Ladder 1 Replacement	-	1,000,000	-	-	-	1,000,000
Fire	Portable Radio Replacement	42,000	-	-	-	-	42,000
IMS	Network Equipment Replacement	44,800	-	-	-	-	44,800
IMS	Server Replacement	30,000	-	-	-	-	30,000
Public Works	Curb Installation	-	65,478	-	-	-	65,478
Public Works	Flood management	-	712,500	-	-	-	712,500
Public Works	Road Rehabilitation	-	1,422,684	-	-	-	1,422,684
Public Works	Sidewalks - Replacement/Repair	-	65,478	-	-	-	65,478
Public Works	Storm Drainage Cleaning	113,392	-	-	-	-	113,392
Public Works	Stormwater Drainage Spot Repair Program	-	65,478	-	-	-	65,478
Public Works	Stormwater System Management	56,275	-	-	-	-	56,275
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 775,467	\$ 3,331,618	\$ -	\$ -	\$ -	\$ 4,107,085

General Fund 2021 Capital Improvement Program Detail

<u>Dept.</u>	<u>Project Name</u>	<u>cur rev</u>	<u>bonds</u>	<u>federal</u>	<u>state</u>	<u>other</u>	TOTAL 2020/2021
Airport	Fuel Farm	27,000	-	486,000	27,000	-	540,000
Airport	Pavement Maintenance	56,000	-	-	-	-	56,000
Facilities	Municipal Buildings Improvements	100,000	-	-	-	-	100,000
Fire	Apparatus Replacement	-	-	-	-	90,000	90,000
Fire	Capital Reserve Ambulance Replacement	90,000	-	-	-	-	90,000
Fire	Capital Reserve Apparatus Replacement	245,000	-	-	-	-	245,000
IMS	Server Replacement	3,000	-	-	-	-	3,000
Public Works	Curb Installation	-	68,752	-	-	-	68,752
Public Works	Flood management	-	300,000	-	-	-	300,000
Public Works	Road Rehabilitation	-	1,290,379	-	-	-	1,290,379
Public Works	Sidewalks - Replacement/Repair	-	68,752	-	-	-	68,752
Public Works	Storm Drainage Cleaning	116,974	-	-	-	-	116,974
Public Works	Stormwater Drainage Spot Repair Program	-	67,442	-	-	-	67,442
Public Works	Stormwater System Management	57,964	-	-	-	-	57,964
GRAND TOTAL - ALL GENERAL FUND PROJECTS		\$ 695,938	\$ 1,795,325	\$ 486,000	\$ 27,000	\$ 90,000	\$ 3,094,263

General Fund 2016 - 2021 Capital Improvement Program Debt Summary

	FY16	FY17	FY18	FY19	FY20	FY21
Existing and Authorized Debt	\$30,292,501	\$27,798,949	\$28,241,834	\$26,973,316	\$25,833,878	\$25,114,231
New Issues Proposed	1,813,600	4,348,355	2,709,341	2,884,000	3,331,618	1,795,325
Principal Paid	(4,307,152)	(3,905,470)	(3,977,858)	(4,023,438)	(4,051,265)	(3,882,322)
Total Existing Debt & Issues Proposed	\$27,798,949	\$28,241,834	\$26,973,316	\$25,833,878	\$25,114,231	\$23,027,234

	<u>Issue</u>	<u>Term</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>
Existing & Authorized Debt Service (P & I)			\$5,240,001	\$4,515,629	\$4,120,554	\$3,783,248	\$3,463,842	\$2,906,792
<u>Proposed Debt Service CIP FY16</u>								
City Hall Boiler / Oil Tank Removal	100,000	10	1,750	13,325	12,975	12,625	12,275	11,925
FY 16 Infrastructure	1,354,459	10	23,703	180,482	175,741	171,000	166,260	161,519
Flood Management	292,936	10	5,126	39,034	38,008	36,983	35,958	34,933
Defibrillator Replacement	66,205	7	1,159	11,610	11,278	10,947	10,616	10,285
<u>Proposed Debt Service CIP FY17</u>								
FY 17 Infrastructure	1,609,761	10		28,171	214,501	208,866	203,232	197,598
State By Pass Project	566,000	10		9,905	75,420	73,439	71,458	69,477
Goose Pond Dam Design	106,389	5		1,862	24,629	23,884	23,140	22,395
Defibrillator Replacement	66,205	7		1,159	11,610	11,278	10,947	10,616
Library Campus (Planning only)	2,000,000	20		33,250	164,750	161,250	157,750	154,250
<u>Proposed Debt Service CIP FY18</u>								
FY 18 Infrastructure	1,354,761	10			23,708	180,522	175,780	171,039
State By Pass Project	493,200	10			8,631	65,719	63,993	62,267
Flood Management	861,380	10			15,074	114,779	111,764	108,749
<u>Proposed Debt Service CIP FY19</u>								
FY 19 Infrastructure	1,427,220	10				24,976	190,177	185,182
Goose Pond Dam Repairs	879,400	20				15,390	73,980	72,441
Flood Management	577,380	10				10,104	76,936	74,915
<u>Proposed Debt Service CIP FY20</u>								
FY 20 Infrastructure	1,619,118	10					28,335	215,747
Flood Management	712,500	10					12,469	94,941
Ladder Truck Replacement	1,000,000	15					17,500	100,500
<u>Proposed Debt Service CIP FY21</u>								
FY 21 Infrastructure	1,495,325	10						26,168
Flood Management	300,000	10						5,250
Total CIP16-21 Debt Service Proposed			31,738	318,796	776,325	1,121,764	1,442,569	1,790,196
Total Projected Debt Service: General Fund			\$5,271,739	\$4,834,425	\$4,896,879	\$4,905,011	\$4,906,411	\$4,696,988



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Fuel Farm Tank Replacement**
 Department: **Airport**
 Physical Location: **Keene Dillant-Hopkins Airport**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes - To maintain compliance with underground fuel storage tank regulations and to provide services required by the flying public.**



PROJECT DESCRIPTION/JUSTIFICATION

The current aviation fuel facility consists of two 10,000 gallon underground storage tanks with associated piping, pumps, and dispensers. One tank is for Jet-A aviation fuel and the other for 100 Low Lead aviation fuel. The City acquired the fuel farm from the Town of Swanzey in 1999 when it took ownership from a former tenant because of failure to pay property taxes. Since then, the City has improved the system to be in compliance with all Federal and State regulations. Installed in 1988, the tanks are double-walled, have interstitial leak monitoring, and have a corrosion protection system. There is no history of these tanks leaking. Unfortunately, with the tanks being more than 25 years old, insurance companies are more reluctant to provide environmental contamination insurance. The insurance premium is expected to increase as the tanks age. Expecting this trend to continue as the tanks continue to age, it is appropriate to plan for replacement. Due to increased costs that have resulted from more stringent underground storage tank regulations, it also appears to be more prudent to replace the entire system because a retrofit would most likely be more expensive. The project would included the installation of two new 10,000 gallon tanks and related pumping and dispensing equipment. The new system would be an above ground system providing better maintenance access and reducing the potential for large-scale contamination. Subject to the City adequately addressing other safety-related projects at the airport, there may be an opportunity to secure FAA and NHDOT grants for a large portion of this project. Staff will continue to develop this opportunity.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design							40,000	40,000
Construction/Implementation							500,000	500,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$540,000	\$540,000
FUNDING								
Current Revenue							27,000	27,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants							513,000	513,000
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$540,000	\$540,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: Re-introduced



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Airport Obstruction Removal**
 Department: **Airport**
 Physical Location: **Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law: **Title XXXI, RSA Chapter 424:2**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To remove hazards affecting the approach to Runway 20 and improve airport safety.**



PROJECT DESCRIPTION/JUSTIFICATION

As sponsor of the Dillant-Hopkins Airport the City is obligated to operate the facility in compliance with all applicable safety regulations. This includes maintaining aerial approaches that are clear of obstructions that constitute hazards to air navigation. Having learned of obstructions to the approach to Runway 20, both on and off City property, the City undertook an effort to examine alternative approaches to address the problem. It also conducted an environmental assessment to assure consideration was paid to all aspects of the solution. These efforts have concluded that removal of the obstructions is the best practical alternative. Under a separate project, the City will acquire aviation easements from private property owners to allow for the removal of these trees. This project is for the engineering, design, administrative services, and actual removal of the problem trees. The clearing effort will incorporate factors associated with the environmental assessment. With regard to on-airport clearing, it would be the City's intent to return the area affected as quickly as possible to a forested state with lower growing trees. A forest management plan would also be developed to prevent any future issues. It is the City's intent to work with individual property owners on how obstructions are removed from their property. Completion of this project is subject to receipt of grants from the Federal Aviation Administration and the New Hampshire Department of Transportation Bureau of Aeronautics equal to 90% and 5% of its costs respectively. The final 5% of the project will be the responsibility of the City. Based on the methodology used in the removal process, all project costs may not be eligible under the terms of the grants. Any in-eligible expenses will be presented to City Council for its consideration.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design		80,000	15,000					95,000
Construction/Implementation		586,666	151,665					738,331
Property/Equip. Acquisition								0
TOTAL	\$0	\$666,666	\$166,665	\$0	\$0	\$0	\$0	\$833,331
FUNDING								
Current Revenue		33,333	8,333					41,666
Capital Reserve								0
Debt Funded								0
Federal or State Grants		633,333	158,332					791,665
Other Sources								0
TOTAL	\$0	\$666,666	\$166,665	\$0	\$0	\$0	\$0	\$833,331

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001 One time **PROJECT STATUS:** Re-introduced

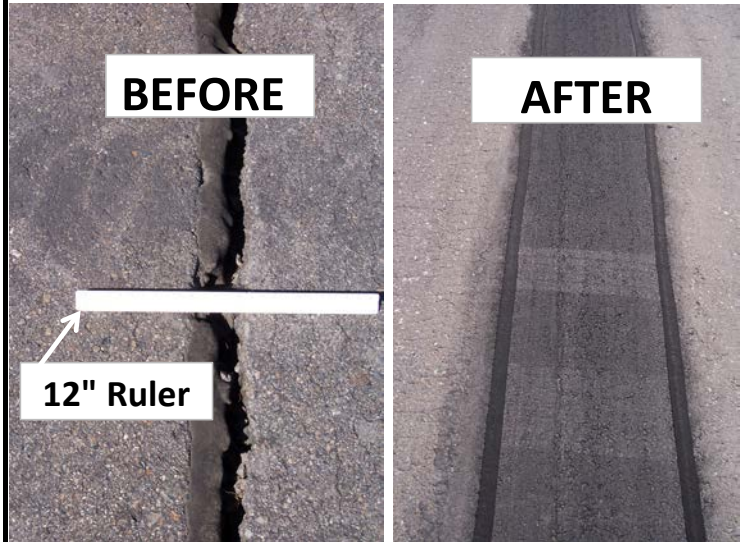


CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Pavement Maintenance**
 Department: **Airport**
 Physical Location: **Keene Dillant-Hopkins Airport**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To maintain the integrity and safety of the facilities for the good of the airport users.**



PROJECT DESCRIPTION/JUSTIFICATION

Nearly all pavement at the airport has been constructed with the assistance of various federal grant programs. These grants have historically provided up to 95% of the cost of construction. As a condition of accepting these grants the City has agreed to maintain the pavement to Federal standards for safety reasons. Through regular pavement maintenance the City can assure maximum pavement life. This maintenance includes the routine repair of defective, deteriorated, or otherwise failing pavement on aircraft movement areas. Defects include cracks in excess of 1.5" in width. Repairs involve machine saw cutting areas to provide clean edges. Loose pavement is removed, the base is compacted, and new asphalt is applied. The repair area is then sealed. Cracks less than 1.5" will be cleaned and sealed as necessary. Because this is a maintenance item, it is typically not eligible for grants from the Federal Aviation Administration or the New Hampshire Department of Transportation Bureau of Aeronautics. Pavement maintenance funding for FY14 and a portion of FY15 are being repurposed to cover a portion of the City's 5% share of the Runway 2/20 reconstruction project.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		46,000	48,000	50,000	52,000	54,000	56,000	306,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$46,000	\$48,000	\$50,000	\$52,000	\$54,000	\$56,000	\$306,000
FUNDING								
Current Revenue		46,000	48,000	50,000	52,000	54,000	56,000	306,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$46,000	\$48,000	\$50,000	\$52,000	\$54,000	\$56,000	\$306,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible < \$5,001 Ongoing

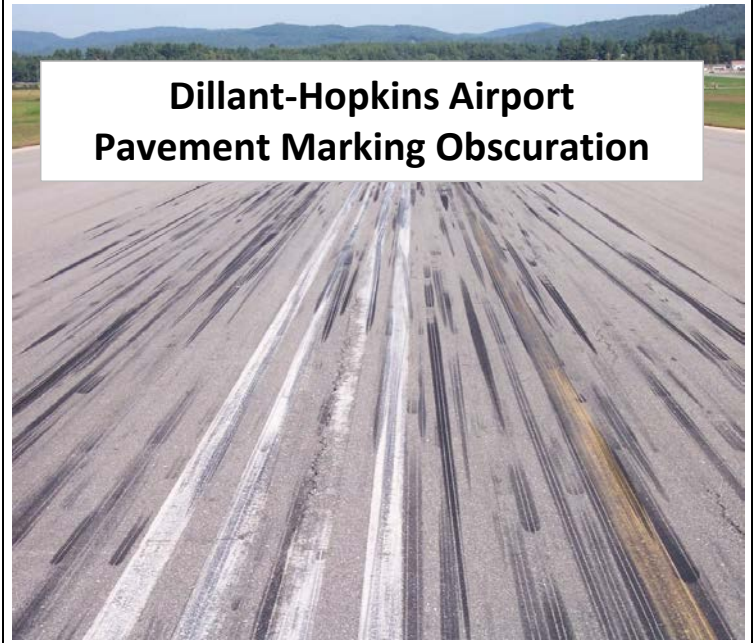
PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Pavement Marking**
 Department: **Airport**
 Physical Location: **Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law: **FAA AC 150/5340-1J**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To maintain the integrity and safety of the facilities for the good of the airport users.**



PROJECT DESCRIPTION/JUSTIFICATION

Airports are used in all weather conditions, at all times of the day, and at all times of the year. Pavement markings communicate important information to a pilot using the airport. Over time, these markings become obliterated due to weather fading, failing paint, and rubber obscuration from landing aircraft tires. Routine repainting of these markings is essential for safety (every four years).

This project includes the remarking of airfield paved surfaces. This includes touch down points, runway and taxiway centerlines, aircraft hold position lines, aircraft parking areas, runway threshold bars, and other critical pavement markings. In total, there is approximately 75,000 square feet of pavement markings.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					22,000			22,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$22,000	\$0	\$0	\$22,000
FUNDING								
Current Revenue					22,000			22,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$22,000	\$0	\$0	\$22,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Ongoing

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Runway 14/32 Reconstruction**
 Department: **Airport**
 Physical Location: **Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law: **FAA AC 150/5340-1J**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To maintain the integrity and safety of the facilities for the good of the airport users.**



PROJECT DESCRIPTION/JUSTIFICATION

Portions of Runway 14/32 are over 40 years old. As with any paved surface over time materials break down and need to be replaced. Due to the project type and location, an environmental assessment may be required prior to the construction. This study determines the various environmental permits which may be required. The current runway is 150 feet wide. The reconstructed runway will most likely be reduced in width, pending the outcome of the Airport Master Plan Update, which will examine the pavement needs relative to current Federal Aviation Administration criteria. Existing runway lights will also be relocated to the new runway edge. Completion of this project is subject to receipt of grants from the Federal Aviation Administration and the New Hampshire Department of Transportation Bureau of Aeronautics equal to 90% and 5% respectively. The final 5% of the project will be the responsibility of the City.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design	289,000							289,000
Construction/Implementation			2,055,550					2,055,550
Property/Equip. Acquisition								0
TOTAL	\$289,000	\$0	\$2,055,550	\$0	\$0	\$0	\$0	\$2,344,550
FUNDING								
Current Revenue	14,450		102,777					117,227
Capital Reserve								0
Debt Funded								0
Federal or State Grants	274,550		1,952,773					2,227,323
Other Sources								0
TOTAL	\$289,000	\$0	\$2,055,550	\$0	\$0	\$0	\$0	\$2,344,550

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will reduce operating costs One time **PROJECT STATUS:** Re-introduced



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Runway 20 PAPI Replacement**
 Department: **Airport**
 Physical Location: **Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law: **Title XXXI, RSA Chapter 424:2**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To provide a precision landing aid to those using the Runway 20 approach, improving airport safety.**

Precision Approach Path Indicator



PROJECT DESCRIPTION/JUSTIFICATION

This project includes the replacement of the Precision Approach Path Indicator (PAPI) system at the end of Runway 20 (similar to the Runway 2 installation pictured above). This equipment is used by pilots to help them stay on the correct approach angle as they land on Runway 20. The existing system is more than 24 years old and in need of replacement. Completion of this project is subject to receipt of grants from the Federal Aviation Administration and the New Hampshire Department of Transportation Bureau of Aeronautics equal to 90% and 5% respectively. The final 5% of the project will be the responsibility of the City.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design				20,000				20,000
Construction/Implementation								0
Property/Equip. Acquisition				40,000				40,000
TOTAL	\$0	\$0	\$0	\$60,000	\$0	\$0	\$0	\$60,000
FUNDING								
Current Revenue				3,000				3,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants				57,000				57,000
Other Sources								0
TOTAL	\$0	\$0	\$0	\$60,000	\$0	\$0	\$0	\$60,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: Re-introduced



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Snow Removal Equipment**
 Department: **Airport**
 Physical Location: **Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law: **FAA AC-5200-30C**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To be able to keep the Airport operational and safe during winter operations.**



PROJECT DESCRIPTION/JUSTIFICATION

The Dillant-Hopkins Airport is part of the National Plan of Integrated Airport System. As such, the City of Keene receives Federal and State assistance for use in maintaining the safety, security, and operational readiness of the Airport. This includes the maintenance of the runways, taxiways, and aprons during inclement weather to include snow and ice. The equipment used at the airport for this purpose is specialized, due to the large surfaces and operational considerations. One of the pieces of equipment used at the airport is a class IV rotary snow plow or snow blower. This equipment is rated at 4,000 tons per hour and is capable of casting snow up to 150 feet. The current snow blower is over 20 years old. Due to its age, maintenance costs and the availability of repair parts are becoming problematic and replacement is warranted. Acquisition of this equipment will be subject to a Federal grant equal to 90 percent of the cost and a State grant equal to 5 percent of the cost. The remaining 5 percent will be the responsibility of the City.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design/Administration		15,000						15,000
Construction/Implementation								0
Property/Equip. Acquisition		707,000						707,000
TOTAL	\$0	\$722,000	\$0	\$0	\$0	\$0	\$0	\$722,000
FUNDING								
Current Revenue		36,100						36,100
Capital Reserve								0
Debt Funded								0
Federal or State Grants		685,900						685,900
Other Sources								0
TOTAL	\$0	\$722,000	\$0	\$0	\$0	\$0	\$0	\$722,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Moderate \$50,001 to \$100,000
One time

PROJECT STATUS: New Project

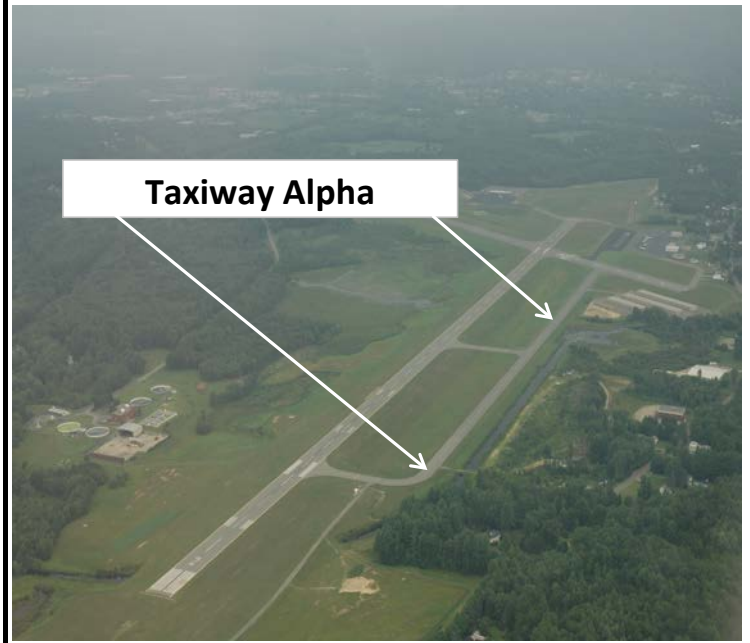


CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Taxiway A Relocation**
 Department: **Airport**
 Physical Location: **Dillant-Hopkins Airport**
 Federal Mandate: **Title 49, US Code, Subtitle VII**
 State Regulation or Law: **FAA AC 150/5380-6B**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To replace deteriorating pavement, improve airport safety and to comply with current runway/taxiway separation requirements.**



PROJECT DESCRIPTION/JUSTIFICATION

This project includes the engineering, design, and construction of a new Taxiway A. It will be approximately 3,500 feet long and 60 feet wide. Taxiway A serves the Airport's primary Runway 2/20. The current Taxiway A is over 24 years old, having been constructed in 1989. It has received routine maintenance and repair over the years but has started to deteriorate at an accelerated rate and will need to be replaced. The location of the current Taxiway A does not meet taxiway/runway separation criteria so relocation to meet Federal Aviation Regulation standards is anticipated. Its new location will be approximately 110 feet closer to Runway 2. Completion of this project is subject to receipt of grants from the Federal Aviation Administration and the New Hampshire Department of Transportation Bureau of Aeronautics equal to 90% and 5% respectively. The final 5% of the project will be the responsibility of the City.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design				300,000				300,000
Construction/Implementation				2,144,444				2,144,444
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$2,444,444	\$0	\$0	\$0	\$2,444,444
FUNDING								
Current Revenue				122,222				122,222
Capital Reserve								0
Debt Funded								0
Federal or State Grants				2,322,222				2,322,222
Other Sources								0
TOTAL	\$0	\$0	\$0	\$2,444,444	\$0	\$0	\$0	\$2,444,444

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: Re-introduced



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Revaluation**
 Department: **Assessing**
 Physical Location:
 Federal Mandate: **N/A**
 State Regulation or Law: **RSA 75:8-a**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Municipal Governance & Financial Stability**
 Council Initiative: **N/A**
 V.O.I.C.E.: **N/A**
 Departmental Objective: **To ensure the fair and equitable taxation of all property within the City of Keene in accordance with New Hampshire law.**



PROJECT DESCRIPTION/JUSTIFICATION

There are two components of this project: 1) Implementing a new CAMA (Computer Assisted Mass Appraisal) system and 2) Completing a city-wide revaluation. The current CAMA system being used by the Department of Assessment was implemented in 2001 during a revaluation for a cost of nearly \$400,000. This system has gone through one significant update in the 14 years that the City has used it. A new CAMA system would improve the workflow within the department, as well as, allow the department to take advantage of current technology being used in the appraisal industry. Two major reasons to include a CAMA conversion with a revaluation are to ensure its proper installment and to enable the department the ability to maximize the use of the system well into the future.

The revaluation, which is the largest cost component of this project, is a requisite of RSA 75:8-a which requires municipalities to "value anew" all real estate within the community at least as often as once in every five years. A revaluation, amongst other things, involves extensive market research. All property transactions occurring within the City need to be analyzed, building and construction costs will be reviewed, and income producing properties will be analyzed, including research on rental income, typical expenses, and investment rates. The above, once completed, will lead to the development of many adjustments and factors that, once calibrated, will be used in the valuation process. Finally, the values determined are statistically tested for accuracy and equity. Contracting out this project is necessary due to the scope of work and the time requirements involved. The City was last revalued as a whole in 2011 which means the City is required to complete this process for 2016.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Revaluation		138,000	107,000					245,000
Software								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$138,000	\$107,000	\$0	\$0	\$0	\$0	\$245,000
FUNDING								
Current Revenue		100,000	107,000					207,000
Capital Reserve								0
Debt Funded	38,000							38,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$38,000	\$100,000	\$107,000	\$0	\$0	\$0	\$0	\$245,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Boiler Replacement**
 Department: **Facilities**
 Physical Location: **City Hall**
 Federal Mandate: **N/A**

 State Regulation or Law: **DES Requirement**
 Master Plan (CMP) Focus Area: **Quality Built Environment**

 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Establish Priorities**

 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

The oil tank that services City Hall has to be remediated as it is a single wall tank. There are no opportunities to locate an oil tank at City Hall. There is no land available. When Washington Street was repaved the City did have street gas line stubbed in so that the City could convert to gas. Presently there are five boilers set up to sequence, but one has been removed from the sequence due to its condition. The boiler plant was installed in 1984. The four remaining boilers operate with a variance of efficiency from 78 percent to 84 percent. With the age and efficiency of the existing boilers the boilers should be replaced with newer units as opposed to conversion from oil to street gas.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		60,000						60,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$60,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		60,000						60,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$60,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Replace City Hall Oil Tank**
 Department: **Facilities**
 Physical Location: **City Hall**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Maintain Safe and Energy Efficient Buildings**



PROJECT DESCRIPTION/JUSTIFICATION

The oil tank that serves City Hall is a ten thousand gallon single wall tank. It has been brought to our attention by our assigned inspector that DES has passed rules (Env-Or 408.05 Permanent Closure Required) that require the permanent closure of single-walled Underground Storage Tanks by December 22, 2015. As of that date, all such tanks containing regulated substance that do not have secondary containment and leak monitoring must be closed. Those that do not comply with the regulations will be subject to a number of enforcement penalties, including fines, civil penalties, and delivery prohibition, much like the current "Red-Tag" program for facilities that violate spill prevention, overfill protection, release detection, leak monitoring, or corrosion protection requirements. Not complying will also affect eligibility for state funds.

Staff continues to investigate options for the closure of this tank and/or containment but as of the date of CIP submission we do not have firm numbers for our options. The options include closure and removal, possibly containment. As there is no room on City Hall property to relocate the tank, the present boiler system will need to be set for a differing fuel and in the long run conversion to a differing fuel model which could include bio-mass and/or district heat.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		40,000						40,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$40,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		40,000						40,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$40,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Renovate Chambers-Server Room**
 Department: **Facilities**
 Physical Location: **City Hall**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Strong Citizenship and Proactive Leadership**
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Inform the Public**
 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

Northeast Collaborative Architects was retained to create a conceptual design that would provide a likely cost estimate for this work. To actually accomplish the work additional design will be required as well as a construction budget. The goal of the concept plans include such elements as the need to recognize the culture of Keene's City Government, which places great emphasis on public access, collaboration and the transparency of the governmental process; design a Council Chambers for the City Council that recognizes the public nature of the City Council as a political body; design layout and furnishings for the City Council that provides for an adequate line of site for the Mayor to recognize the 15 member City Council and the public who wish to be recognized, and which can accommodate emerging technology; design two adjacent public meeting spaces with furnishings that recognize the membership size and functional needs of both advisory and quasi-judicial bodies and which can accommodate emerging technologies and design a welcoming lobby on the 1st and 2nd floors of City Hall.

For the Data Center, the requirement was to conduct a complete needs assessment, identify an ideal relocation of the current data center according to the results of the needs assessment, design a complete data center to include cooling (with humidity, drainage, condensing, pipe and duct, and mechanical design), power, fire suppression, wiring, structural, and security requirements. The current Data Center evolved from what was intended 20 years ago to be a small electronics closet. It does not have adequate space, is not located adjacent to the IMS offices, and has a poorly designed cooling system.

***The architect is currently developing short and long term improvement options and cost estimates for both the public meeting spaces and the data center. The options and costs will be shared with the City Council under separate cover for consideration.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design	25,000	***						25,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000
FUNDING								
Current Revenue	25,000	***						25,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Library Campus Development**
 Department: **Facilities**
 Physical Location: **76 Winter Street**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Historic Resources & Cultural Heritage**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Proactive renovations/ESCO**



PROJECT DESCRIPTION/JUSTIFICATION

There have been discussions in the past and recently about the condition and energy efficiency of the windows in the Library Mansion as well as Hebreton Hall. When the Library addition was completed in 1999, it was recognized at that time that the windows should be upgraded to enhance energy efficiency. This need was identified again in the Investment Grade Audit performed by Honeywell in conjunction with the Energy Services Contract (ESCO). It was not possible through the ESCO project to replace the windows in the Library Mansion or the Hebreton Hall. It should be noted that reconstruction of the windows on the Library third floor did occur in 2012 as part of a project rehabilitating the Mansion Mansards. This project would upgrade windows on the first and second floors of the Library Mansion.

The Mansards for both the Library and Annex were identified as needing repair. Prior Capital Improvement Programs (CIP) contained this work and carpeting as a combined project. The CIP for the past cycles have had projects related to the building envelope for the Library and Annex. The Library windows on the first and second floor of the mansion are in fair condition as is the brick mortar. There are some other condition issues such as flooring, minor roofing etc. The conditions at the Annex, however, are more difficult. The building envelope, except for the flat roofs, is in poor condition. This includes the brick mortar, sills, and headers for the windows, and the windows themselves in addition to the mansard. The building will need an additional exit, an elevator, a heating and air conditioning system to make the Annex more functional. All of these issues will be addressed as part of the campus development proposed for the site. With completion of a planning effort and initiation of a capital campaign to develop the Library Campus linking two historic buildings, the Library Mansion and Hebreton Hall, it is anticipated this project would move forward as part of a larger renovation project. *** For planning purposes, a project construction period beginning during FY 2017 is assumed.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			***					0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded			***					0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
N/A

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Multiple Building Improvements**
 Department: **FACILITIES**
 Physical Location: **Administration**
 Federal Mandate: **Some**

 State Regulation or Law: **Some**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Community Sustainability**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Maintain safe buildings**



PROJECT DESCRIPTION/JUSTIFICATION

Last year's CIP projects included a review of building conditions to enable the city to have a reasonable mechanism to judge the present condition of buildings in a number of categories. The survey was conducted by EMGCORP beginning in August 2013. The reports are organized based on site and buildings with the principal systems and priorities. The items in the report reflect the condition and the expected life of the component, when the report states that an expense to replace or repair a component is expected, which is not automatic. In September all of the reports and the buildings were reviewed by a city team to determine which items had to be addressed this year and what were the likely items to address in future years. This process will be repeated each year in the spring and fall.

The items to be addressed by the CIP budget include City Hall, the Parks and Recreation Building, and the Transportation Center. The Library and Annex and the Municipal Services Complex, while part of the study, are for the most part excluded from this budget, the majority of items to be resolved will be resolved as part of planned projects. Wheelock Park, Airport Buildings, the Transfer Station, and the Water Treatment Plant would be separately scheduled. The new Central Fire station was not part of the study, but in time the major systems for life span will have to be included. Excluded from costs are those that are purely maintenance items such as paint which will be addressed as part of the operating budget as opposed to the CIP.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		28,000	46,500	50,000	100,000	100,000	100,000	424,500
Property/Equip. Acquisition								0
TOTAL	\$0	\$28,000	\$46,500	\$50,000	\$100,000	\$100,000	\$100,000	\$424,500
FUNDING								
Current Revenue		28,000	46,500	50,000	100,000	100,000	100,000	424,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$28,000	\$46,500	\$50,000	\$100,000	\$100,000	\$100,000	\$424,500

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Mobile Compact Shelving**
 Department: **City Clerk**
 Physical Location: **410 Marlboro St. - Archive Facility**
 Federal Mandate: **N/A**

State Regulation or Law: **RSA Ch. 33-A**

Master Plan (CMP) Focus Area: **Strong Citizenship and Proactive Leadership**
 CMP Vision/Strategy: **Historic Resources & Cultural Heritage**

Council Initiative: **Ordinance**

V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**

Departmental Objective: **Maximize high quality storage space for Permanent and records with long term retention periods.**



PROJECT DESCRIPTION/JUSTIFICATION

This project includes the purchase, delivery, and installation of a mechanically assisted movable carriage and shelving system using existing steel shelving and adding new shelving equipment creating approximately 960 cubic feet of additional storage space. This project cost also includes the labor of moving approximately 1,600 archival boxes and books off existing shelving equipment and returning them to their original location after the installation of the new shelving system.

The current space is reaching maximum storage capacity with the existing shelving equipment. Growth is limited to the size of the 965 square foot room. The records stored in this location are appraised as valuable archives and as such, they are required to be retained for more than ten years to permanently. The use of movable shelving equipment and reducing the need for aisles to access the records will double the room's current storage capacity.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			24,500	24,500				49,000
TOTAL	\$0	\$0	\$24,500	\$24,500	\$0	\$0	\$0	\$49,000
FUNDING								
Current Revenue			24,500	24,500				49,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$24,500	\$24,500	\$0	\$0	\$0	\$49,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will generate revenue Multi-year **PROJECT STATUS:** Re-introduced

FIRE & EMERGENCY MEDICAL SERVICE APPARATUS SCHEDULES

CITY OF KEENE AMBULANCE REPLACEMENT SCHEDULE										
2016 - 2021 Capital Improvement Program										
Vehicle #	Description	Year	Use	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	Later Years
19A1	Ambulance	2007	EMS	215,000						
19A3	Ambulance	2009	EMS				230,000			
19A2	Ambulance	2012	EMS							2022
			TOTAL	\$215,000	\$0	\$0	\$230,000	\$0	\$0	

Future CIP Programs: Anticipated Replacement Costs

FY22 Ambulance (19A1) \$245,000

CITY OF KEENE FIRE APPARATUS REPLACEMENT SCHEDULE										
2016 - 2021 Capital Improvement Program										
Vehicle #	Description	Year	Use	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	Later Years
19M1	Engine	1998	Fire	450,000						
19L2	Quint	2000	Fire			710,000				
19B2	Brush Truck	2002	Fire							
19L1	Ladder Truck*	1997	Fire					1,000,000		
19B1	Brush Truck	2003	Fire						90,000	
19T1	Tanker	2005	Fire							2022
19U1	Utility	2006	Fire							2024
19R1	Rescue	2010	Fire							2025
19M2	Engine	2013	Fire							2028
			TOTAL	\$450,000	\$0	\$710,000	\$0	\$1,000,000	\$90,000	

Future CIP Programs: Anticipated Replacement Costs

FY22 Tanker Truck \$710,982
 FY23 Replacement of Utility Truck \$120,000
 FY24 Replacement Brush Truck 19B1 \$90,000
 FY25 Replacement of Rescue 1 \$756,396
 FY28 Replacement of Engine 2 \$738,386
 FY29 Fire Alarm Truck \$198,104
 FY31 Engine M1 \$810,425
 FY33 Quint 19L2 \$1,000,000

*Funding programmed through lease/purchase or issuance of a bond.
 All other apparatus acquisitions to be funded through capital reserve contributions.



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Ambulance Replacement Reserve**
 Department: **Fire Department**
 Physical Location: **31 Vernon Street**
 Federal Mandate: **No**

State Regulation or Law: **Shall meet State Requirement for Licensing**
 Master Plan (CMP) Focus Area: **Healthy Community**

CMP Vision/Strategy: **Emergency Preparedness**

Council Initiative: **N/A**

V.O.I.C.E.: **Establish Priorities**

Departmental Objective: **Ensure safety and reliability to staff and community with our fleet of ambulance**



PROJECT DESCRIPTION/JUSTIFICATION

The Ambulance Capital Reserve Fund is designed to provide adequate resources for the replacement of ambulances in accordance with a schedule that calls for replacement of one of the city's three ambulances every three years. The replacement schedule is reviewed annually and replacements advanced considering equipment condition. The regular planned replacement of ambulances minimizes on-going maintenance costs, down-time, and need to rely on other back-up services. Vehicle costs are projected to continue to increase due to implementation of federal emission standards and other safety requirements as outlined in the Safe-C 5900 standards.

Replacement schedule for units during this CIP cycle includes replacement of 19A1 in FY16 and 19A3 in FY19. While outside the CIP funding period, with adjustments compensating for inflation, sufficient funding should be available for 19A2 currently scheduled for FY22.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		215,000			230,000			445,000
TOTAL	\$0	\$215,000	\$0	\$0	\$230,000	\$0	\$0	\$445,000
FUNDING								
Current Revenue	180,628	70,000	70,000	70,000	80,000	90,000	90,000	\$650,628
Capital Reserve								\$0
Debt Funded								0
Federal or State Grants								0
Other Sources		627	266	441	642	294	520	2,790
TOTAL	\$180,628	\$70,627	\$70,266	\$70,441	\$80,642	\$90,294	\$90,520	\$653,418

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will reduce operating costs Multi-year **PROJECT STATUS:** Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Apparatus Capital Reserve**
 Department: **Fire Department**
 Physical Location: **31 Vernon Street**
 Federal Mandate: **Annual Certifications**
 State Regulation or Law: **Annual DOT Inspections**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Emergency Preparedness**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Ensure Safety and Reliability to Staff and Community**



PROJECT DESCRIPTION/JUSTIFICATION

The Fire Equipment Reserve is designed to provide adequate funds to replace or rebuild fire apparatus as scheduled in the replacement plan. The fund has also been used periodically for major repairs to fire apparatus including the replacement of engines and transmissions. This fund has been used successfully for many years to ensure the availability of funds when the purchase of fire apparatus is required. Current and proposed funding rates will provide resources sufficient for all purchases excluding the replacement of Ladder 1, which is currently scheduled for FY20. It is anticipated that this vehicle would be acquired through a lease purchase similar financing arrangement.

Fire service responsibilities and equipment are changing rapidly. To ensure a timely replacement of fire apparatus the current schedule was developed. The replacement schedule allows for new safety technology, ergonomics, structural integrity of the vehicle, compliance with NFPA standards, and new innovations to be incorporated into the apparatus. This schedule also assures reliability to provide the best service to the community and the safety of our personnel. The need for reliable apparatus is a critical component of fire protection within the City. This reserve provides funding that will allow the City to replace all apparatus at the appropriate time assuring a reliable fleet.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		450,000		710,000			90,000	1,250,000
TOTAL	\$0	\$450,000	\$0	\$710,000	\$0	\$0	\$90,000	\$1,250,000
FUNDING								
Current Revenue	437,638	220,000	260,000	260,000	245,000	245,000	245,000	1,912,638
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,644	1,173	1,826	668	1,282	1,898	8,491
TOTAL	\$437,638	\$221,644	\$261,173	\$261,826	\$245,668	\$246,282	\$246,898	\$1,921,129

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will reduce operating costs Multi-year **PROJECT STATUS:** Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Ladder Replacement**
 Department: **Fire Department**
 Physical Location: **31 Vernon Street**
 Federal Mandate: **Annual Certifications**

State Regulation or Law: **Annual DOT Inspections**

Master Plan (CMP) Focus Area: **Healthy Community**

CMP Vision/Strategy: **Emergency Preparedness**

Council Initiative: **N/A**

V.O.I.C.E.: **Establish Priorities**

Departmental Objective: **Ensure Safety and Reliability to Staff and Community**



PROJECT DESCRIPTION/JUSTIFICATION

The Ladder Replacement Project funds the replacement of the department's ladder truck currently scheduled for FY20. While regular contributions to the Apparatus Capital Reserve Fund have successfully provided needed funds for many of the city's past apparatus purchases, its current and proposed funding rates will not provide resources sufficient to accommodate the anticipated replacement of Ladder 1. It is anticipated that this vehicle would be acquired through a lease purchase or similar financing arrangement. Based on the current apparatus replacement schedule and capital reserve funding contributions now scheduled, a reduction is projected in capital reserve contributions offsetting a portion of the lease or debt service payments related to this apparatus acquisition.

To ensure a timely replacement of Ladder 1, the current schedule programming was developed. Ladder 1 was purchased in 1997 and was originally scheduled for replacement in 2017. This scheduled replacement allows for new safety technology, ergonomics, structural and mechanical integrity of the vehicle, compliance with NFPA standards, and new innovations to be incorporated into the apparatus. Regular replacement advances the reliability of apparatus service to the community and the safety of our personnel. Annual certification of the ladder continues and without an unexpected major mechanical or functional issue the truck is expected to meet the needs of the department until the time of scheduled replacement.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition						1,000,000		1,000,000
TOTAL	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$1,000,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded						1,000,000		1,000,000
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$1,000,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will reduce operating costs
Multi-year

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Defibrillator Replacement**
 Department: **Fire Department**
 Physical Location: **31 Vernon Street**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Maintaining a Safe Community**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Ensure Safety and Reliability to Staff and Community**



PROJECT DESCRIPTION/JUSTIFICATION

This project would replace four (4) Life Pak 12 Defibrillators with four (4) Life Pak 15 units. The units will also provide us a tool to provide advanced life support and cardiac care in the field. The new units are more durable and continue to have an upgradeable platform to provide years of service. The original units were purchased in July of 1998. Upgrades and refurbishments to the software and equipment in 2008 and in 2010 has maintained performance in compliance with current medical protocols and technology. These base units which are now more than fifteen (15) years old will be at the end of serviceability in calendar year 2015 and replacement is recommended.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		66,205	66,205					132,410
TOTAL	\$0	\$66,205	\$66,205	\$0	\$0	\$0	\$0	\$132,410
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		66,205	66,205					132,410
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$66,205	\$66,205	\$0	\$0	\$0	\$0	\$132,410

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will reduce operating costs
Multi-year

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Fire Alarm System Infrastructure
Department: Fire Department
Physical Location: 32 Vernon Street
Federal Mandate: N/A

State Regulation or Law: N/A
Master Plan (CMP) Focus Area: N/A

CMP Vision/Strategy: Maintaining a Safe Community
Council Initiative: Ordinance
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective: Ensure safety and reliability of municipal fire alarm system serving the community



PROJECT DESCRIPTION/JUSTIFICATION

The requested project funds would allow the replacement of equipment that operates our municipal fire alarm system and was last replaced in 1996. The circuit entrance cabinet with terminal strips, fuses, dual battery charging system, and batteries would be replaced with this upgrade. To maintain safety and reliability of the system a replacement program plan is being established for this equipment located in 32 Vernon Street.

The City of Keene Fire Department maintains and operates a municipal fire alarm system. This system currently has one hundred eighty two (182) master boxes located on buildings throughout the city and continues to grow annually. City Ordinance O-2011-03 requires specific occupancies be connected to the municipal fire alarm system for monitoring of fire alarms for public safety. The system was last updated with a major replacement of equipment in 1996. That work included replacement of the five (5) existing circuits and the addition of five (5) new circuits, along with replacement of approximately 150,000 feet of aerial wire and 15,000 feet of underground wire. At the same time the primary infrastructure internal to the station was replaced. This equipment replacement included the circuit entrance cabinet with terminal strips and fuses, the dual battery charging system with batteries, along with digitize form 4 and the digitize 3505 solid state transmitter equipment.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			50,000					50,000
TOTAL	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000
FUNDING								
Current Revenue			50,000					50,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Reduce - will reduce operating costs
Multi-year

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Mobile Radio Replacement**
 Department: **Fire Department**
 Physical Location: **31 Vernon Street**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Emergency Preparedness**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Emergency Preparedness and Personnel Safety**



PROJECT DESCRIPTION/JUSTIFICATION

The communications mobile radio project that started in FY15 CIP will continue to replace mobile radios. These radios are used daily by Fire/EMS personnel during emergency and non-emergency operations to manage incidents, request needed resources, and provide accountability and safety for our personnel and the public. As part of the New Hampshire Radio Interoperability Program all mobile radios were replaced by grant funded radios in 2003. The units for Keene were installed in 2004. The radios can no longer be factory serviced. This replacement program would allow us to maintain emergency preparedness and personnel safety by having units that are reliable and serviceable as needed for at least the next ten years. The department currently operates and maintains twenty-two (22) mobile radios. Twenty (20) of these units would require replacement in this program. This is the second year of this three year project.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition	23,500	23,500	23,000					70,000
TOTAL	\$23,500	\$23,500	\$23,000	\$0	\$0	\$0	\$0	\$70,000
FUNDING								
Current Revenue	23,500	23,500	23,000					70,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$23,500	\$23,500	\$23,000	\$0	\$0	\$0	\$0	\$70,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will reduce operating costs Multi-year
PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Portable Radio Replacement**
 Department: **Fire Department**
 Physical Location: **31 Vernon Street**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Emergency Preparedness**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Emergency Preparedness and Personnel Safety**



PROJECT DESCRIPTION/JUSTIFICATION

This communications portable radio project would replace portable radios that are used daily by Fire/EMS personnel during emergency and non-emergency operations to manage incidents, request needed resources, and provide accountability and safety for our personnel and the public.

As part of the New Hampshire Radio Interoperability Program all portable radios were replaced by grant funded radios in 2006. The units for Keene were delivered in 2006. This replacement program would allow us to maintain emergency preparedness and personnel safety by having units that are reliable and serviceable as needed for at least the next ten years. The department currently operates and maintains sixty-six (66) portable radios. The goal would be to replace all units over a four year period unless grants or other funding becomes available to accelerate replacement.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			30,000	42,000	42,000	42,000		156,000
TOTAL	\$0	\$0	\$30,000	\$42,000	\$42,000	\$42,000	\$0	\$156,000
FUNDING								
Current Revenue			30,000	42,000	42,000	42,000		156,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$30,000	\$42,000	\$42,000	\$42,000	\$0	\$156,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will reduce operating costs Multi-year **PROJECT STATUS:** Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **W Keene Fire Station Study**
 Department:
 Physical Location: **110 Hastings Ave**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Emergency Preparedness**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Provide Emergency Response**



PROJECT DESCRIPTION/JUSTIFICATION

The West Keene Fire Station is currently located at 110 Hastings Avenue. The building is owned by the State of NH and supports a National Guard unit operating from the same facility. The City currently has a two year agreement, commencing August 1, 2013, with two (2) renewal terms of two (2) years each. The City of Keene and NH National Guard continue to discuss the long term use of the facility by both parties along with the possibility of the City acquiring the facility. Acquisition would allow the Fire Department to remain at the facility providing opportunity for the possibility for co-location of a fire training facility. In the event the City were to acquire this facility some renovations to improve functionality would to be considered. Funds requested would support a study of the facility for future use.

In the event the City was no longer able to operate from this facility, evaluation of other locations would be required to maintain current Fire, EMS, and Rescue services responding from West Keene.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design				20,000				20,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$20,000
FUNDING								
Current Revenue				20,000				20,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$20,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

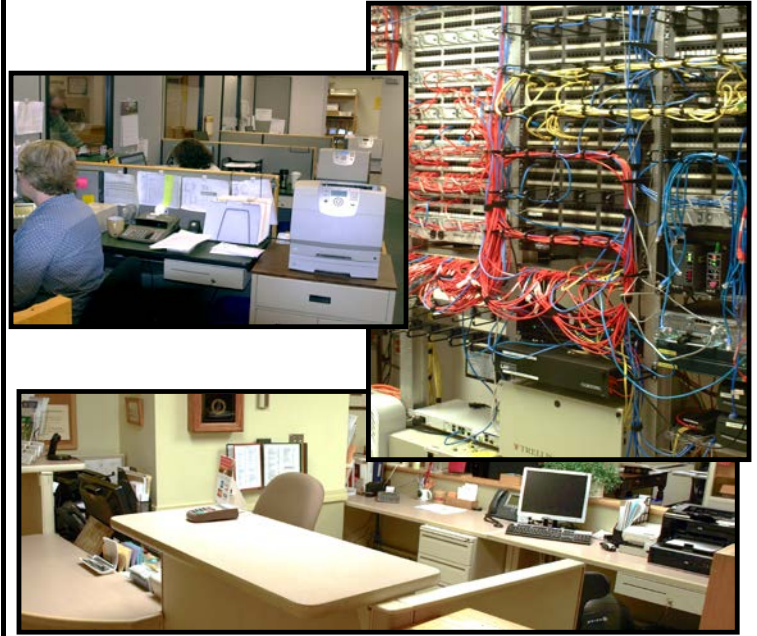
PROJECT STATUS:



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Network Equipment Replacement**
 Department: **IMS**
 Physical Location: **Multiple Facilities**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

The network infrastructure presently enables City information systems to be centralized to maximize accessibility. This involves cabling and switches within each building, core equipment in the IMS datacenter, and firewalls that manage traffic in and out of the City network. This equipment has a limited useful life. It is important that a plan be in place for the replacement of the equipment to ensure reliable operation and compliance with minimum security requirements. This plan calls for the replacement of the network equipment in the year the manufacturer will no longer provide service, which typically ranges from five to ten years after purchase.

The City computer information systems are a mission critical asset supporting essential business operations. The availability of these systems depends upon reliable network availability and performance. In addition, the network must be protected for the purposes of confidentiality and intrusion prevention. In order to meet the evolving requirements of the organizational use of information systems, the network equipment will require replacement when it reaches the manufacturer's end-of-service schedule. This will provide current security and control features that are necessary to keep up with minimum industry standards, and will minimize costly down-time in the case of equipment failure.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition				55,000	18,000	44,800		117,800
TOTAL	\$0	\$0	\$0	\$55,000	\$18,000	\$44,800	\$0	\$117,800
FUNDING								
Current Revenue				55,000	18,000	44,800		117,800
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$55,000	\$18,000	\$44,800	\$0	\$117,800

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible < \$5,001 Ongoing

PROJECT STATUS: Ongoing CIP

Schedule of Network Equipment Replacement

Building	Type	End of life(sale)	End of Maintenance	End of Support	Replacement Cost	FY Subtotal
Police	48	Jan-13	Jan-14	Jan-18	\$6,800	<i>FY18</i> <i>\$55,000</i>
Police	48	Jan-13	Jan-14	Jan-18	\$6,800	
Police	48	Jan-13	Jan-14	Jan-18	\$6,800	
Library	8	Jan-13	Jan-14	Jan-18	\$3,200	
Police	48	Jan-13	Jan-14	Jan-18	\$6,800	
Police	48	Jan-13	Jan-14	Jan-18	\$6,800	
City Hall 4th Floor	48	Jan-13	Jan-14	Jan-18	\$6,800	
City Hall	24	Jan-13	Jan-14	Jan-18	\$5,500	
City Hall	24	Jan-13	Jan-14	Jan-18	\$5,500	
City Hall	firewall	Sep-13	Sep-14	Sep-18	\$6,000	<i>FY19</i> <i>\$18,000</i>
City Hall	firewall	Sep-13	Sep-14	Sep-18	\$6,000	
Police	firewall	Sep-13	Sep-14	Sep-18	\$6,000	
Fire	24	Oct-12	Jul-15	Oct-19	\$3,200	<i>FY20</i> <i>\$44,800</i>
Public Works	24	Oct-12	Jul-15	Oct-19	\$4,000	
Public Works	24	Oct-12	Jul-15	Oct-19	\$3,200	
Public Works	24	Oct-12	Jul-15	Oct-19	\$3,200	
Library	48	Oct-12	Jul-15	Oct-19	\$4,000	
Library	48	Oct-12	Jul-15	Oct-19	\$4,000	
Public Works	48	Oct-12	Jul-15	Oct-19	\$4,000	
Public Works	48	Oct-12	Jul-15	Oct-19	\$4,000	
Airport	24	Oct-12	Jul-15	Oct-19	\$4,000	
Parks and Rec	48	Oct-12	Jul-15	Oct-19	\$4,000	
Fire Central	24	Oct-12	Jul-15	Oct-19	\$3,200	
Library	48	Oct-12	Jul-15	Oct-19	\$4,000	
City Hall	N/A	Jan-13	Oct-14	N/A	\$2,500	
Police	N/A	Jan-13	Oct-14	N/A	\$2,500	
Fire	N/A	Jan-13	Oct-14	N/A	\$2,000	
Public Works	N/A	Jan-13	Oct-14	N/A	\$2,000	
Parks and Rec	N/A	Jan-13	Oct-14	N/A	\$2,000	
Public Works	N/A	Jan-13	Oct-14	N/A	\$2,000	
Public Works	N/A	Jan-13	Oct-14	N/A	\$2,000	
Library	N/A	Jan-13	Oct-14	N/A	\$2,000	
Fire	N/A	Jan-13	Oct-14	N/A	\$2,000	
Airport	N/A	Jan-13	Oct-14	N/A	\$2,000	
Public Works	24	Oct-12	Jul-15	N/A	\$4,000	

\$142,800

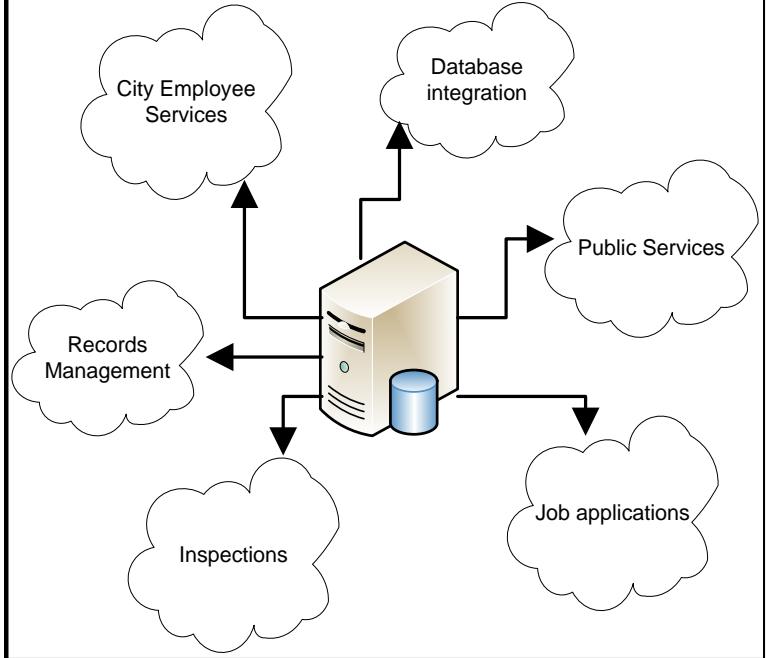


CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Database Software**
 Department: **IMS**
 Physical Location: **Data Center**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

Oracle Business Intelligence and Web Logic products are presently installed in the City computing environment. These applications provide the tools necessary to serve both City employees and the public with critical services, such as dog licensing, inspections, online job applications, records management databases, and other user interfaces. They also provide a means for the integration of multiple City databases for data reliability and efficiency purposes. The tools provide the ability to accommodate database needs internally, thus avoiding what would otherwise be significant costs for independent software solutions. Oracle licenses these products based on server specifications. As the servers are replaced over time with systems that have more processing power, the products will require license upgrades or replacement with an alternative solution. This project synchronizes with the server replacement schedule.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			86,000					86,000
TOTAL	\$0	\$0	\$86,000	\$0	\$0	\$0	\$0	\$86,000
FUNDING								
Current Revenue			86,000					86,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$86,000	\$0	\$0	\$0	\$0	\$86,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Ongoing

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Server Replacement**
 Department: **IMS**
 Physical Location: **City Hall & Remote Data Center**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

Information systems are utilized by every City department in the process of providing services to the public. From email and phone systems to database and GIS systems, all require that core server equipment run reliably. This project provides funding for the replacement of existing host servers every three years, an upgrade to the Microsoft Exchange Server platform, an upgrade of the Server operating system version, required Client Access License (CAL) upgrades as the server operating systems are upgraded, and the financial system server. This replacement schedule ensures that the processing capabilities of the server hardware and software are sufficient to support City operations.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		25,000	12,000	3,000	54,343	30,000	3,000	127,343
TOTAL	\$0	\$25,000	\$12,000	\$3,000	\$54,343	\$30,000	\$3,000	\$127,343
FUNDING								
Current Revenue		25,000	12,000	3,000	54,343	30,000	3,000	127,343
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$25,000	\$12,000	\$3,000	\$54,343	\$30,000	\$3,000	\$127,343

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Ongoing

PROJECT STATUS: Ongoing CIP

Server Replacement Costs

Server Function	1st Replacement Date	Fiscal Year	Replacement Cost
Financial Server	7/1/2015	FY16	\$22,000
Virtual Server	7/1/2016	FY17	\$9,000
Server OS & Client Licensing	7/1/2018	FY19	\$51,343
Virtual Server	7/1/2019	FY20	\$9,000
Virtual Server	7/1/2019	FY20	\$9,000
Virtual Server	7/1/2019	FY20	\$9,000

\$109,343

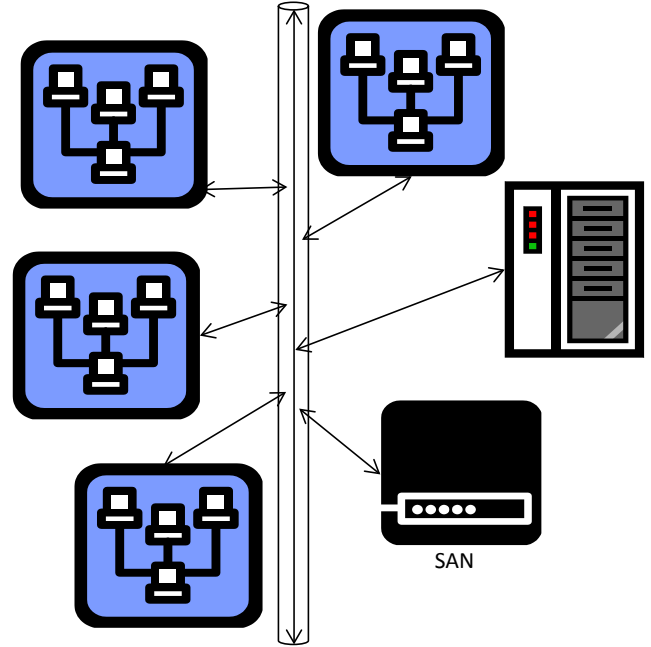
**Add \$3,000 annually to cover the cost of server OS upgrades.*



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Storage Area Network**
 Department: **IMS**
 Physical Location: **IMS Data Centers**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

The network utilized by City staff across all departments provides a path between the end users (computer users) and the databases on the servers. These databases and other electronic files such as documents, maps, and system backups are stored on storage area network (SAN) devices. The SAN's enable more than one server to access a single system of physical disks, allowing allocation of space to each server as needed, thus reducing the total cost of server equipment. The typical life of a storage area network solution is about five years.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation				5,000				5,000
Property/Equip. Acquisition				75,000				75,000
TOTAL	\$0	\$0	\$0	\$80,000	\$0	\$0	\$0	\$80,000
FUNDING								
Current Revenue				80,000				80,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$80,000	\$0	\$0	\$0	\$80,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible < \$5,001
Ongoing

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Carpenter Street Improvements**
 Department: **Parks & Recreation**
 Physical Location: **Carpenter Street**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Healthy Living**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Master Plan Recommendation #3 Determine the best and most appropriate uses of each park and wether they should be repurposed or reconfigured to maximize their service to the community**



PROJECT DESCRIPTION/JUSTIFICATION

Carpenter Street Field, acquired from the Keene School District in 2012, fills the need for a large play space within the downtown footprint of the City. It provides athletic fields, play areas, and green space for the east side neighborhoods. It is crucial to the active community in which we live and is cited in the Active and Passive Recreation Management Plan. This project would incorporate the concepts from the Wheelock Park Concept Plan and address the many aspects of improving the esthetics and utility of the field, creating a more vibrant presence within the neighborhood, and developing multi-generational attractions and use. This project will address the issues brought forward through the management plan with improvements including parking, fencing, and bleachers. A community forum to address additional amenities within the park will be held in 2015.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design				9,000				9,000
Construction/Implementation				93,937				93,937
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$102,937	\$0	\$0	\$0	\$102,937
FUNDING								
Current Revenue				51,468				51,468
Capital Reserve								0
Debt Funded								0
Federal or State Grants				51,469				51,469
Other Sources								0
TOTAL	\$0	\$0	\$0	\$102,937	\$0	\$0	\$0	\$102,937

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001 Ongoing

PROJECT STATUS: New Project

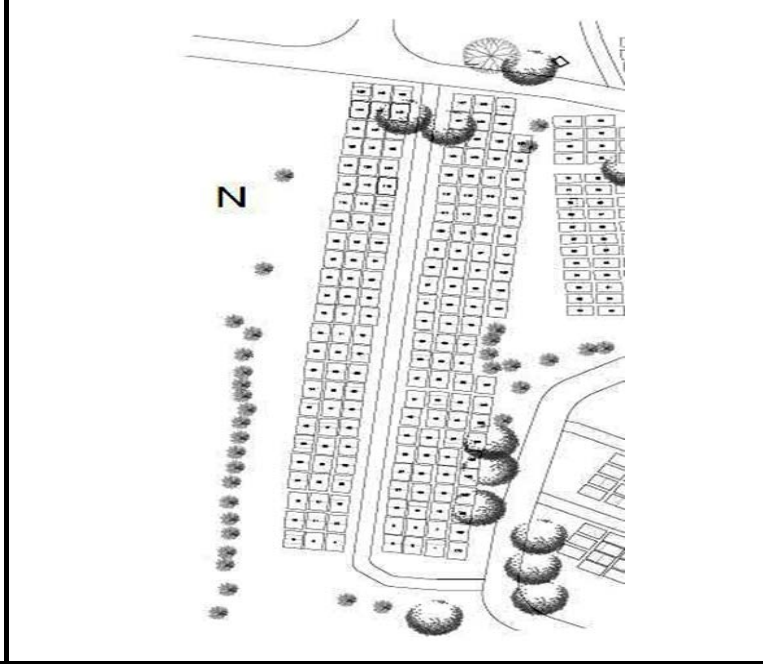


CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Cemetery Paving**
 Department: **Parks & Recreation**
 Physical Location: **Cemeteries**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Maintaining Neighborhoods**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

The project establishes a repaving program for cemetery roads in Greenlawn, Woodland, and Woodland Northeast Division Cemeteries in FY17. The FY17 program would involve an overcoat of chip seal and shimming of each road in these cemeteries, which have not received attention for over 20 years. The project includes 2,865 feet of road with 3,933 square yards of chipseal at \$8.00 a yard. These roads are plowed and used year round. In FY18, extension of paved surfaces at Monadnock View is planned. In FY 18, the improvements in Monadnock View Cemetery include paving 590 feet of road in Cemetery Section N (shown above) with grading, additional gravel (approximately 100 cubic yards), and 175 tons of pavement at \$95.00/ton.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			36,410	22,137				58,547
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$36,410	\$22,137	\$0	\$0	\$0	\$58,547
FUNDING								
Current Revenue			36,410	22,137				58,547
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$36,410	\$22,137	\$0	\$0	\$0	\$58,547

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
 N/A

PROJECT STATUS:



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Cheshire Rail Trail Phase 3**
 Department: **Parks & Recreation**
 Physical Location: **3 Washington Street**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Trails & Bike Pathways**
 Council Initiative: **Resolution**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Master Plan Recommendation #11 Provide equal access and adequate mix of facilities, trails, and open space throughout the City.**



PROJECT DESCRIPTION/JUSTIFICATION

The following is intended to be part of the Cheshire Rail Trail - Park Avenue Loop Project by the city: installation of bicycle and pedestrian signage and 11,695 feet of bike lanes / shared lane markings along West Street, Park Avenue and Summit Road. An improved bicycle and pedestrian crossing at the intersection of the Cheshire Rail Trail dog leg and West Street (just prior to the North Bridge pedestrian overpass and State Routes 9, 10 and 12) will improve the transition from trail to the existing sidewalk infrastructure. The proposed route will deliver trail users to portions of West Keene currently not readily accessible via the Cheshire Rail Trail. These improvements will also create a more defined connection from the Cheshire Rail Trail to the Appel Way Trail which begins in Wheelock Park a key recreational destination in Keene. The route delivers trail users directly past Symonds School (K-5th) and the Keene YMCA. The Keene Middle School and High Schools are also within a half mile of these proposed improvements.

A loop trail creating access to the Cheshire Rail Trail from the vicinity of the Keene YMCA and surrounding neighborhood is also another component of this proposed project. Improvements to an old woods road beginning at Summit Ridge Drive and running up to the Cheshire Rail Trail, a total of 4,033 feet include brush clearing, drainage, grading, and a crushed stone dust surface. Drainage and brush clearing are also proposed for a 3,872 foot section of Cheshire Rail Trail from Hurricane Road to the intersection with the previously described loop connection. This project was recently voted as the number one priority project for this round of grant funding out of the Southwestern Regional Planning Commission's area of ranking. These rankings are sent to NHDOT and account for 6% of their final total rated score.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		410,000						410,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$410,000	\$0	\$0	\$0	\$0	\$0	\$410,000
FUNDING								
Current Revenue								0
Capital Reserve		50,000						50,000
Debt Funded								0
Federal or State Grants		330,000						330,000
Other Sources		30,000						30,000
TOTAL	\$0	\$410,000	\$0	\$0	\$0	\$0	\$0	\$410,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Minimal \$5,001 to \$25,000 Ongoing **PROJECT STATUS:** New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Robin Hood Splash Pad**
 Department: **Parks & Recreation**
 Physical Location: **Robin Hood Pool**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Maintaining Neighborhoods**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Master Plan Recommendation #11 Provide equal access and adequate mix of facilities, trails and open space throughout the City.**



PROJECT DESCRIPTION/JUSTIFICATION

The City has two outdoor summer facilities: Robin Hood Park Pool, located on the east side, and Wheelock Park Pool on the west side of the City. Both pools were installed in 1967 as a gift from the Keene Lions Club. Through the years they had diving boards and slides for additional enjoyment by pool patrons. For insurance reasons, these devices were removed and the pools no longer have an interactive water play experience. In 2013, the City installed a Splash Pad at Wheelock Pool. The additional development of a splash pad to the east side is a focus on social equity and facility improvements. The purpose of the splash pad is to introduce water play to younger children and individuals with special needs for an interactive experience. The splash pad area will be 20' x 30'. This project has been submitted for the LWCF Grant Round 27 with the Department of Resources and Economic Development for 50 percent match.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			86,966					86,966
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$86,966	\$0	\$0	\$0	\$0	\$86,966
FUNDING								
Current Revenue			43,483					43,483
Capital Reserve								0
Debt Funded								0
Federal or State Grants			43,483					43,483
Other Sources								0
TOTAL	\$0	\$0	\$86,966	\$0	\$0	\$0	\$0	\$86,966

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Ongoing

PROJECT STATUS: New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Skate Park**
 Department: **Parks & Recreation**
 Physical Location: **Wheelock Park**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Collaborative Community Planning**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Master Plan Recommendation # 4 - Develop a comprehensive capital equipment and park asset replacement plan**



PROJECT DESCRIPTION/JUSTIFICATION

The skate park is a heavily used area that requires weekly maintenance due to the nature of the activities inside the park and facility aging. The 9,000 square foot park on Gilbo Avenue was designed and built in 1997 when wooden frame obstacles were popular skate park features. In 2010, the Ad-Hoc Skateboard Park Relocation Committee brought forward recommendations for a possible relocation of the current facility. A new "plaza" design of poured concrete bowls and transitions will reduce the maintenance dramatically while providing an updated park for new and experienced skaters to enjoy. A new space was dedicated to the creation of a skate park within the Wheelock Park Concept Plan. Design Concepts recommended that the space allow for a design of 12,000 square feet. The recommendations of the Ad-Hoc Skateboard Park Relocation Committee will be considered in conjunction with those advanced by the Active and Passive Recreation Management Plan throughout the design process.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			350,000					350,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$350,000	\$0	\$0	\$0	\$0	\$350,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources			350,000					350,000
TOTAL	\$0	\$0	\$350,000	\$0	\$0	\$0	\$0	\$350,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Ongoing

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Wheelock Park Improvements**
 Department: **Parks & Recreation**
 Physical Location: **Wheelock Park**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Healthy Living**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Master Plan Recommendation # 4 - Develop a comprehensive capital equipment and park asset replacement plan**



Wheelock Park: Final Concept Plan A
September 2014

PROJECT DESCRIPTION/JUSTIFICATION

The Wheelock Park Concept Plan for the betterment of the park was endorsed by the City Council on September 18, 2014. This process also included three public meetings. The plan derived from recommendation #4 from the Active and Passive Recreation Management Plan which is to “Develop a comprehensive capital equipment and park asset replacement plan.” The sale of a plot of land adjacent to the park to PSNH will allow the funds of the sale to be directly utilized for improvements to the park. These funds will cover paving the main park road, parking lots, and facility improvements. Additional planning will be conducted to implement the ideas suggested in the concept plan.

FY 16 - park road and parking lots (pool, tennis, baseball, playground, and various spots)
 FY 17 – facility maintenance and infrastructure (restrooms, pool bath house, and concession stand)

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design		40,000	40,000					80,000
Construction/Implementation		334,000	270,000					604,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$374,000	\$310,000	\$0	\$0	\$0	\$0	\$684,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		374,000	310,000					684,000
TOTAL	\$0	\$374,000	\$310,000	\$0	\$0	\$0	\$0	\$684,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Climate Adaptation Vulnerability Assessment
Department: Planning
Physical Location: 3 Washington St
Federal Mandate: N/A
State Regulation or Law: N/A
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Adapting to Climate Change
Council Initiative: N/A
V.O.I.C.E.: Establish Priorities
Departmental Objective: Establish Priorities for Climate Change Adaptation



PROJECT DESCRIPTION/JUSTIFICATION

Recent precipitation patterns and flooding events have highlighted the need for better infrastructure planning, especially in locations where flooding and stormwater present significant threats. CIP and other projects managed through the Public Works Department have begun increasing our stormwater management system's capacity for handling large rain events, including culvert upsizing and replacements - what other improvements need to take place to protect our most valuable community assets? A vulnerability assessment should be completed, which begins with an assessment of the threats to these assets if no protective action is taken. Using available GIS and other spatial data and with the assistance of modeling software, a report will be generated and publicly presented discussing the financial implications of taking no further adaptation action.

The second step is to evaluate possible adaptation actions with the community through facilitated public discussions, and after identifying the key strategies for Keene the modeling software would be restructured to report out which actions make the most financial sense over time. The two final products will be a cost benefit analysis of identified adaptation strategies, and a final report describing what these results might suggest for policy and financial decisions for the City. As stated on pages 66-67 of the Comprehensive Master Plan, "Adapting to climate change is about making choices today to be prepared for the potential changes of tomorrow, and maintaining or improving the community's ability to withstand those changes. It includes making existing infrastructure and policies more resilient to climate impacts."

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design			20,000					20,000
Construction/Implementation			30,000					30,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000
FUNDING								
Current Revenue			50,000					50,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Minimal \$5,001 to \$50,000
One time

PROJECT STATUS: New Project

CONSOLIDATED INFRASTRUCTURE REPORT								FY16	
STREET		Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
FY 16 Detail									
Algonquin Road	2016	\$ 47,208							\$ 47,208
Chesterfield Road - North of Route 9	2016	\$ 175,654							\$ 175,654
Chesterfield Road - South of Route 9	2016	\$ 88,329							\$ 88,329
Crescent Street	2016	\$ 23,357							\$ 23,357
Grimes Road	2016	\$ 34,356							\$ 34,356
Hurricane Road - Phase 2	2016	\$ 422,553							\$ 422,553
Pearl Street	2016	\$ 177,688							\$ 177,688
Stearns Road	2016	\$ 23,709							\$ 23,709
Wagner Street	2016	\$ 8,222							\$ 8,222
General Drainage Improvements	2016					\$ 41,200			\$ 41,200
General Sidewalk Improvements	2016						\$ 41,200		\$ 41,200
General Curbing Improvements	2016							\$ 41,200	\$ 41,200
Watermain Replacement Hurricane Rd	2016				\$ 257,500				\$ 257,500
Silent Way Sewer Replacement	2016			\$ 641,845					\$ 641,845
Detail: FY 2016 Projects		\$ 1,001,076	\$ -	\$ 641,845	\$ 257,500	\$ 41,200	\$ 41,200	\$ 41,200	\$ 2,024,020
Contingency: - 10%		\$ 100,108	\$ -	\$ 64,184	\$ 25,750	\$ 4,120	\$ 4,120	\$ 4,120	\$ 202,402
Subtotal		\$ 1,101,183	\$ -	\$ 706,029	\$ 283,250	\$ 45,320	\$ 45,320	\$ 45,320	\$ 2,226,422
Design: - 10% *			\$ -	\$ 70,603	\$ 28,325	\$ 4,532	\$ 4,532	\$ 4,532	\$ 112,524
Construction Administration: - 10%			\$ -	\$ 70,603	\$ 28,325	\$ 4,532	\$ 4,532	\$ 4,532	\$ 112,524
SUPV. & Overhead: - 1%		\$ 11,012	\$ -	\$ 7,060	\$ 2,833	\$ 453	\$ 453	\$ 453	\$ 22,264
Subtotal		\$ 11,012	\$ -	\$ 148,266	\$ 59,483	\$ 9,517	\$ 9,517	\$ 9,517	\$ 247,312
Project Total		\$ 1,112,195	\$ -	\$ 854,295	\$ 342,733	\$ 54,837	\$ 54,837	\$ 54,837	\$ 2,473,734
Inflation adjustment 2 yrs x 3%/yr proj total		\$ 67,733	\$ -	\$ 52,027	\$ 20,872	\$ 3,340	\$ 3,340	\$ 3,340	\$ 150,650
Not Programmed (use of project balance)									
Program Funding Request: 2016		\$ 1,179,928	\$ -	\$ 906,322	\$ 363,605	\$ 58,177	\$ 58,177	\$ 58,177	\$ 2,624,385

CONSOLIDATED INFRASTRUCTURE REPORT								FY17	
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
FY 17 Detail									
East Surry Road	2017	\$ 313,873							\$ 313,873
Meadow Road	2017	\$ 31,651							\$ 31,651
Mill Road	2017	\$ 9,226							\$ 9,226
Roxbury Road	2017	\$ 192,667							\$ 192,667
Water Street (Grove to Roxbury)	2017	\$ 228,663							\$ 228,663
Wood Street	2017	\$ 27,030							\$ 27,030
Wyman Road	2017	\$ 202,473							\$ 202,473
General Drainage Improvements	2017					\$ 41,200			\$ 41,200
General Sidewalk Improvements	2017						\$ 41,200		\$ 41,200
General Curbing Improvements	2017							\$ 41,200	\$ 41,200
Emerald Street Sidewalk	2017						\$ 143,650		\$ 143,650
Water - Glen Rd Pumps & Check Valves	2017				\$ 101,000				\$ 101,000
Perham Street Sewer Replacement	2017			\$ 685,341					\$ 685,341
Detail: FY 2017 Projects		\$ 1,005,584	\$ -	\$ 685,341	\$ 101,000	\$ 41,200	\$ 184,850	\$ 41,200	\$ 2,059,175
Contingency: - 10%		\$ 100,558	\$ -	\$ 68,534	\$ 10,100	\$ 4,120	\$ 18,485	\$ 4,120	\$ 205,918
Subtotal		\$ 1,106,142	\$ -	\$ 753,876	\$ 111,100	\$ 45,320	\$ 203,335	\$ 45,320	\$ 2,265,093
Design: - 10% *			\$ -	\$ 75,388	\$ 11,110	\$ 4,532	\$ 20,334	\$ 4,532	\$ 115,895
Construction Administration: - 10%			\$ -	\$ 75,388	\$ 11,110	\$ 4,532	\$ 20,334	\$ 4,532	\$ 115,895
SUPV. & Overhead: - 1%		\$ 11,061	\$ -	\$ 7,539	\$ 1,111	\$ 453	\$ 2,033	\$ 453	\$ 22,651
Subtotal		\$ 11,061	\$ -	\$ 158,314	\$ 23,331	\$ 9,517	\$ 42,700	\$ 9,517	\$ 254,441
Project Total		\$ 1,117,204	\$ -	\$ 912,189	\$ 134,431	\$ 54,837	\$ 246,035	\$ 54,837	\$ 2,519,534
Inflation adjustment 3 yrs x 3%/yr proj total		\$ 103,595	\$ -	\$ 84,585	\$ 12,465	\$ 5,085	\$ 22,814	\$ 5,085	\$ 233,629
Not Programmed (use of project balance)									
Program Funding Request: 2017		\$ 1,220,799	\$ -	\$ 996,774	\$ 146,896	\$ 59,922	\$ 268,849	\$ 59,922	\$ 2,753,163

CONSOLIDATED INFRASTRUCTURE REPORT									FY18
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
FY 18 Detail									
Armory Street (North to end)	2018	\$ 67,627							\$ 67,627
Baker Street	2018	\$ 120,244							\$ 120,244
Crossfield Street	2018	\$ 6,975							\$ 6,975
Dunbar Street	2018	\$ 24,734							\$ 24,734
Ellis Court (Wright to Woodbury)	2018	\$ 25,183							\$ 25,183
Gilsum Street (North to end)	2018	\$ 119,362							\$ 119,362
Harrison Street	2018	\$ 22,667							\$ 22,667
Jordan Road	2018	\$ 210,065							\$ 210,065
North Street (Elm to Gilsum)	2018	\$ 45,631							\$ 45,631
Red Oak Drive	2018	\$ 55,835							\$ 55,835
Willow Court	2018	\$ 4,122							\$ 4,122
Willow Street	2018	\$ 34,389							\$ 34,389
Woodbury Street	2018	\$ 170,601							\$ 170,601
Wright Street	2018	\$ 27,917							\$ 27,917
General Drainage Improvements	2018					\$41,200			\$ 41,200
General Sidewalk Improvements	2018						\$41,200		\$ 41,200
General Curbing Improvements-Granite	2018							\$41,200	\$ 41,200
To be determined	2018				\$261,941				\$ 261,941
To Be Determined	2018			\$ 97,260					\$ 97,260
Detail: FY 2018 Projects		\$ 935,351	\$ -	\$ 97,260	\$261,941	\$41,200	\$41,200	\$41,200	\$1,418,152
Contingency: - 10%		\$ 93,535	\$ -	\$ 9,726	\$ 26,194	\$ 4,120	\$ 4,120	\$ 4,120	\$ 141,815
Subtotal		\$1,028,886	\$ -	\$ 106,986	\$288,135	\$45,320	\$45,320	\$45,320	\$1,559,967
Design: - 10%		\$ -	\$ -	\$ 10,699	\$ 28,814	\$ 4,532	\$ 4,532	\$ 4,532	\$ 53,108
Construction Administration: - 10%		\$ -	\$ -	\$ 10,699	\$ 28,814	\$ 4,532	\$ 4,532	\$ 4,532	\$ 53,108
SUPV. & Overhead: - 1%		\$ 10,289	\$ -	\$ 1,070	\$ 2,881	\$ 453	\$ 453	\$ 453	\$ 15,600
Subtotal		\$ 10,289	\$ -	\$ 22,467	\$ 60,508	\$ 9,517	\$ 9,517	\$ 9,517	\$ 121,816
Project Total		\$1,039,175	\$ -	\$ 129,453	\$348,643	\$54,837	\$54,837	\$54,837	\$1,681,783
Inflation Adjustment 3%/yr x 4 yrs		\$ 130,426	\$ -	\$ 16,247	\$ 43,758	\$ 6,883	\$ 6,883	\$ 6,883	\$ 211,079
Not Programmed (use of project balance)									
Program Funding Request: 2018		\$1,169,601	\$ -	\$ 145,700	\$392,401	\$61,720	\$61,720	\$61,720	\$1,892,861

CONSOLIDATED INFRASTRUCTURE REPORT									FY19
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
FY 19 Detail									
Arch Street - (Park to Hurricane)	2019	\$ 199,670							\$ 199,670
Bridge Court	2019	\$ 10,146							\$ 10,146
Carpenter Street	2019	\$ 44,054							\$ 44,054
Fowler Street	2019	\$ 23,789							\$ 23,789
Gunn Road	2019	\$ 193,854							\$ 193,854
Harmony Lane	2019	\$ 13,752							\$ 13,752
Kingsbury Street	2019	\$ 20,250							\$ 20,250
Peg Shop Road	2019	\$ 143,727							\$ 143,727
Perham Street	2019	\$ 11,200							\$ 11,200
Richardson Court	2019	\$ 10,986							\$ 10,986
River Street	2019	\$ 66,893							\$ 66,893
Sullivan Road (Rte 9 to town line)	2019	\$ 89,237							\$ 89,237
Valley Street	2019	\$ 48,459							\$ 48,459
Village Drive	2019	\$ 56,121							\$ 56,121
Woodburn Street	2019	\$ 27,918							\$ 27,918
General Drainage Improvements	2019					\$41,200			\$ 41,200
General Sidewalk Improvements	2019						\$41,200		\$ 41,200
General Curbing Improvements	2019							\$41,200	\$ 41,200
Sewer Replacement - To Be Determined	2019			\$ 94,141					\$ 94,141
Water Replacement - to be determined	2019				\$257,500				\$ 257,500
Detail: FY 2019 Projects		\$ 960,055	\$ -	\$ 94,141	\$257,500	\$41,200	\$41,200	\$41,200	\$1,435,296
Contingency: - 10%		\$ 96,006	\$ -	\$ 9,414	\$ 25,750	\$ 4,120	\$ 4,120	\$ 4,120	\$ 143,530
Subtotal		\$1,056,061	\$ -	\$ 103,555	\$283,250	\$45,320	\$45,320	\$45,320	\$1,578,826
Design: - 10%		\$ -	\$ -	\$ 10,356	\$ 28,325	\$ 4,532	\$ 4,532	\$ 4,532	\$ 52,277
Construction Administration: - 10%		\$ -	\$ -	\$ 10,356	\$ 28,325	\$ 4,532	\$ 4,532	\$ 4,532	\$ 52,277
SUPV. & Overhead: - 1%		\$ 10,561	\$ -	\$ 1,036	\$ 2,833	\$ 453	\$ 453	\$ 453	\$ 15,788
Subtotal		\$ 10,561	\$ -	\$ 21,747	\$ 59,483	\$ 9,517	\$ 9,517	\$ 9,517	\$ 120,341
Project Total		\$1,066,622	\$ -	\$ 125,302	\$342,733	\$54,837	\$54,837	\$54,837	\$1,699,167
Inflation Adjustment 3%/yr x 5 yrs		\$ 169,885	\$ -	\$ 19,957	\$ 54,588	\$ 8,734	\$ 8,734	\$ 8,734	\$ 270,633
Not Programmed (use of project balance)									
Program Funding Request: 2019		\$1,236,507	\$ -	\$ 145,259	\$397,321	\$63,571	\$63,571	\$63,571	\$1,969,801

CONSOLIDATED INFRASTRUCTURE REPORT									FY20
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
FY 20 Detail									
Adams Court	2020	\$ 9,321							\$ 9,321
Adams Street	2020	\$ 68,492							\$ 68,492
Avalon Place	2020	\$ 8,038							\$ 8,038
Concord Road	2020	\$ 235,157							\$ 235,157
Elliot Street	2020	\$ 29,307							\$ 29,307
Gates Street	2020	\$ 21,946							\$ 21,946
Main Street (Rte 101 to Marlborough St)	2020	\$ 281,435							\$ 281,435
Moore Farm Road	2020	\$ 27,542							\$ 27,542
No Name Road	2020	\$ 13,371							\$ 13,371
Park Avenue	2020	\$ 335,999							\$ 335,999
Proctor Court	2020	\$ 16,725							\$ 16,725
South Street	2020	\$ 25,103							\$ 25,103
General Drainage Improvements	2020					\$ 41,200			\$ 41,200
General Sidewalk Improvements	2020						\$ 41,200		\$ 41,200
General Curbing	2020							\$ 41,200	\$ 41,200
Sewer Replacement - Blossom St	2020			\$ 416,100					\$ 416,100
Water Replacement - To Be Determined	2020				\$ 257,500				\$ 257,500
Detail: FY 2020 Projects		\$1,072,435	\$0	\$416,100	\$257,500	\$41,200	\$41,200	\$41,200	\$ 1,869,635
Contingency: - 10%		\$ 107,243	\$ -	\$ 41,610	\$ 25,750	\$ 4,120	\$ 4,120	\$ 4,120	\$ 186,963
Subtotal		\$ 1,179,678	\$ -	\$ 457,710	\$ 283,250	\$ 45,320	\$ 45,320	\$ 45,320	\$ 2,056,598
Design: - 10%		\$ -	\$ -	\$ 45,771	\$ 28,325	\$ 4,532	\$ 4,532	\$ 4,532	\$ 87,692
Construction Administration: - 10%		\$ -	\$ -	\$ 45,771	\$ 28,325	\$ 4,532	\$ 4,532	\$ 4,532	\$ 87,692
SUPV. & Overhead: - 1%		\$ 11,797	\$ -	\$ 4,577	\$ 2,833	\$ 453	\$ 453	\$ 453	\$ 20,566
Subtotal		\$ 11,797	\$ -	\$ 96,119	\$ 59,483	\$ 9,517	\$ 9,517	\$ 9,517	\$ 195,950
Project Total		\$ 1,191,475	\$ -	\$ 553,829	\$ 342,733	\$ 54,837	\$ 54,837	\$ 54,837	\$ 2,252,548
Inflation Adjustment 3%/yr x 6 yrs		\$ 231,208	\$ -	\$ 107,472	\$ 66,508	\$ 10,641	\$ 10,641	\$ 10,641	\$ 437,112
Not Programmed (use of project balance)									
Program Funding Request: 2020		\$ 1,422,684	\$ -	\$ 661,301	\$ 409,241	\$ 65,478	\$ 65,478	\$ 65,478	\$ 2,689,661

CONSOLIDATED INFRASTRUCTURE REPORT									FY21
STREET	Year	Rehab	Reconstruct	Sewer	Water	Drainage	Sidewalk	Curbing	Total
FY 21 Detail									
School Street (West to Emerald)	2021	\$ 38,296							\$ 38,296
Chapman Road	2021	\$ 97,462							\$ 97,462
Old Walpole Road	2021	\$ 92,416							\$ 92,416
Darling Road	2021	\$ 151,128							\$ 151,128
Dickinson Road	2021	\$ 124,137							\$ 124,137
Martin Street	2021	\$ 33,086							\$ 33,086
Lamson Street	2021	\$ 26,790							\$ 26,790
Meetinghouse Road	2021	\$ 91,473							\$ 91,473
Timberlane Drive	2021	\$ 130,865							\$ 130,865
Cady Street	2021	\$ 19,320							\$ 19,320
Hooper Street	2021	\$ 26,533							\$ 26,533
Salsbury Road	2021	\$ 54,739							\$ 54,739
Speaker Street	2021	\$ 14,971							\$ 14,971
Cobb Street	2021	\$ 9,926							\$ 9,926
St. James Street	2021	\$ 33,230							\$ 33,230
General Drainage Improvements	2021					\$ 42,000			\$ 42,000
General Sidewalk Improvements	2021						\$ 42,000		\$ 42,000
General Curbing Improvements	2021							\$ 42,000	\$ 42,000
Sewer Replacement - Colony Court	2021			\$ 889,155					\$ 889,155
Water Replacement - To Be Determined	2021				\$ 257,500				\$ 257,500
Detail: FY 2021 Projects		\$ 944,371	\$ -	\$ 889,155	\$ 257,500	\$ 42,000	\$ 42,000	\$ 42,000	\$ 2,217,026
Contingency: - 10%		\$ 94,437	\$ -	\$ 88,915	\$ 25,750	\$ 4,200	\$ 4,200	\$ 4,200	\$ 221,703
Subtotal		\$ 1,038,808	\$ -	\$ 978,070	\$ 283,250	\$ 46,200	\$ 46,200	\$ 46,200	\$ 2,438,728
Design: - 10%		\$ -	\$ -	\$ 97,807	\$ 28,325	\$ 4,620	\$ 4,620	\$ 4,620	\$ 139,992
Construction Administration: - 10%		\$ -	\$ -	\$ 97,807	\$ 28,325	\$ 4,620	\$ 4,620	\$ 4,620	\$ 139,992
SUPV. & Overhead: - 1%		\$ 10,388	\$ -	\$ 9,781	\$ 2,833	\$ 462	\$ 462	\$ 462	\$ 24,387
Subtotal		\$ 10,388	\$ -	\$ 205,395	\$ 59,483	\$ 9,702	\$ 9,702	\$ 9,702	\$ 304,371
Project Total		\$ 1,049,196	\$ -	\$ 1,183,465	\$ 342,733	\$ 55,902	\$ 55,902	\$ 55,902	\$ 2,743,099
Inflation adjustment 3%/yr x 7 yrs		\$ 241,183	\$ -	\$ 272,048	\$ 78,785	\$ 12,850	\$ 12,850	\$ 12,850	\$ 630,567
Not Programmed (use of project balance)									
Program Funding Request: 2021		\$ 1,290,379	\$ -	\$ 1,455,512	\$ 421,518	\$ 68,752	\$ 68,752	\$ 68,752	\$ 3,373,666



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **560 Main Street Assessment**
 Department: **Public Works - General Fund**
 Physical Location: **560 Main Street**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Economic Development**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

560 Main Street was the site of a number of waste disposal activities up until about 1976. The presence of polychlorinated biphenyl compounds (PCBs) and chlorinated solvents in the soil at the liquid disposal area defines this area as a hazardous waste site. Work performed in 2012 and 2013 helped delineate the three dimensional footprints of contamination. This project funds the creation of a remedial action plan (RAP) and assistance in applying for grant funds in FY15 and includes a rough estimate cost of the remediation of approximately 100,000 tons of material in FY17. The final cost of remediation will be determined after the RAP is complete and the City Council determines an ultimate goal for the site. Funds previously appropriated included funds for a thorough characterization of the limits and concentration of the soil contamination that can reduce the remediation area and its associated cost. The FY17 estimate is based on the treatment and removal of approximately 100,000 tons of soil.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design	65,000							65,000
Construction/Implementation			1,000,000					1,000,000
Property/Equip. Acquisition								0
TOTAL	\$65,000	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$1,065,000
FUNDING								
Current Revenue	65,000							65,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources			1,000,000					1,000,000
TOTAL	\$65,000	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$1,065,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
One time

PROJECT STATUS: Re-introduced

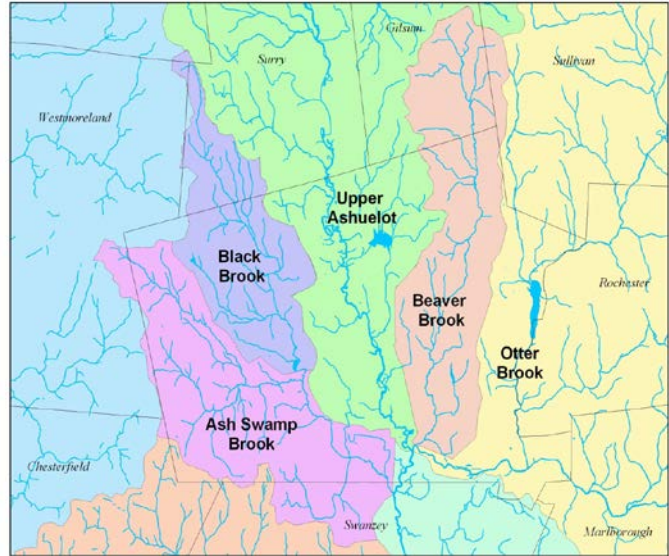


CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Flood Management - Beaver Brook
Department: Hydrologic and Hydraulic Analysis
Physical Location: Public Works - General Fund
Federal Mandate: Various
State Regulation or Law: N/A
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Infrastructure
Council Initiative: N/A
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective: Yes



PROJECT DESCRIPTION/JUSTIFICATION

The Beaver Brook flows along the east side of the City through neighborhoods and then downtown to the Ashuelot River. This brook has a long history of leaving its banks and causing significant flood damage. In 2005, 2012, and 2013 significant areas of the City along the brook were impacted with flood waters. The City is also experiencing impacts from climate changes with more intense and more frequent rain events that are impacting the Beaver Brook watershed. This project would perform a hydrologic and hydraulic analysis of the Beaver Brook watershed for various storm events (5, 10, 50, 100, and 500 year). The City would use the latest rain data to be looking forward to assist in mitigating climate change impacts. This project would allow the City to develop a master plan of longer strategies, including: the creation of flood water storage areas; identify obstructions that need to be removed; or upgrade properties that could be considered for flood proofing or removal to address flooding, along with supporting a number of "high priority projects" in the City's 2013 Hazard Mitigation Plan.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design				150,000				150,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000
FUNDING								
Current Revenue				150,000				150,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000

EXPENDITURES ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact Ongoing

PROJECT STATUS: Ongoing CIP

Bridge Rehabilitation and Replacement Program

The City is responsible for thirty-two (32) active bridges which provide critical transportation links through out the City. The bridges range in age from 2 to 93 years old. The New Hampshire Department of Transportation (NHDOT) inspects these bridges on a bi-annual basis. Bridges are broken down and each bridge subsystem (deck, superstructure, substructure, railing, approaches, etc.) are reviewed and their condition is rated. The ratings ranges from 9 – Excellent Condition to 1 – Imminent Failure. Bridges that are identified with significant deficiencies (ratings of 5 or less) are classified as “Red Listed” and inspected annually. The type of deficiencies on City bridges range from insufficient lane width to the deterioration of deck surfaces and supporting members. The City has 14 bridges that are on the State’s Red List and are listed below:

Baker Street over Beaver Brook	Harrison Street over Beaver Brook*
Main Street/Rte. 12 over Beaver Brook	Winchester St/Rte.10 over Ash Swamp Brook
Roxbury Street over Beaver Brook	Maple Ave over Black Brook
Island Street over Ashuelot River	Beaver Street over Beaver Brook
George Street over Beaver Brook	Church Street over Beaver Brook
Spring Street over Beaver Brook	Whitcomb Mills Road over White Brook
Summit Road over Black Brook	Ferry Brook Road over Ferry Brook

Note: *City Council, on February 18, 2010, voted to close the Harrison Street Bridge when Railroad Street was discontinued.

City bridge projects are eligible to participate in the State’s Municipal Bridge Aid Program. This program shares the cost of bridge repair/replacement between the community and the State with 80% of the funding from the State and 20% from the City. To be considered for funding in the program the City must indicate that it has appropriated it’s 20% share. With the 2013 increase in the State fuel charge the State Bridge Program has increased from approximately \$6M to \$12M +/- per year for bridge projects. This amount typically funds 15 - 20 bridge projects statewide.

To prioritize the City’s Red Listed Bridges the City Engineer uses the condition assessment, the type of deficiencies, the amount of traffic that uses the bridge, the impacts if weight restrictions or closure occurs, and if there is a reasonable way around the bridge. The Main Street/Rte. 12 and Winchester Street/Rte. 10 bridges both have over 20,000 vehicles per day crossing them with no easy detours and if weight restriction or closure occurred on either of these bridges there would be significant economic and social impacts to the City and the region. For these reason these two bridges are at the top for repair/replacement. The next priority bridges include the Island Street Bridge over the Ashuelot River; Roxbury Street and Beaver Street over Beaver Brook, and the Maple Avenue bridge .

The proposed plan to address the top priority bridges is as follows.

Main Street/Rte. 12. The City had previously appropriated \$330K. In 2013, NHDOT approved the transfer of previously approved funds of \$61K for the Spring Street bridge over the Beaver Brook to the Main Street bridge for a total of \$391K. Preliminary assessment of this bridge indicates that the bridge cannot be rehabilitated because it cannot handle a 50-year storm event without surcharging/backing up water in the Beaver Brook. The estimated replacement cost is approximately \$1.9M. Design has started on this bridge replacement project with construction tentatively planned for calendar year 2016 or sooner.

Winchester St/Rte. 10. This bridge’s rehabilitation cost, including bridge widening and a temporary construction phase bypass bridge, is \$580K. The City had previously appropriated \$213K. NHDOT has approved the transfer of previously approved state funding of \$360K from the Church Street bridge to the Winchester Street bridge. Design is scheduled to start in early calendar 2015. Construction is tentatively planned for calendar year 2019 after the Winchester St project is complete.

Roxbury Street. The estimated bridge replacement cost is \$920K requiring a local match of \$184K. The City has previously appropriated \$134K. This bridge is programmed in the States’ 2015-2024 TIP for FY18. To have sufficient funds for the implementation available in FY18 funds designated for the East Surry Road Bridge will be reprogrammed. The East Surry Road Bridge was reconstructed as part of the City’s May 2012 flood response receiving FEMA funds. Design in FY18 with Construction in FY19.

Maple Avenue. The estimated replacement cost is \$650K. The City Council authorized \$130K in FY15 for the City’s 20% match which will allow the City to request consideration for State Municipal Bridge Aid for this project in the 2017-2026 TIP.

Beaver Street. The estimated replacement cost is \$460K. The City previously appropriated \$92K for the City’s 20% match which will allow the City to request consideration for State Municipal Bridge Aid for this project in the 2017-2026 TIP. .

Island Street. The bridge is to scheduled to be replaced as part of the Winchester Street Upgrade Project (10309B) programmed for construction in FY17 and FY18. Funding of the city’s share of this bridge replacement is included in the Keene-Swanzey Bypass CIP project.

George Street. The City has previously appropriated \$138K for the City’s 20% match which will allow the City to request consideration for State Municipal Bridge Aid for this project in the 2017-2026 TIP.



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Bridge Repair/Replacement**
 Department: **Public Works - General Fund**
 Physical Location: **Various**
 Federal Mandate: **NO**
 State Regulation or Law: **NO**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **YES**



PROJECT DESCRIPTION/JUSTIFICATION

This project provides funding for the City's bridge repair and replacement program. The City participates in the State's Municipal Bridge Aide Program through the New Hampshire Department of Transportation (NHDOT). The program provides 80% State funding with a local 20% match. For consideration in the program the City must indicate that it has appropriated the local match.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design		285,000		138,000				423,000
Construction/Implementation		1,615,000			1,362,000			2,977,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$1,900,000	\$0	\$138,000	\$1,362,000	\$0	\$0	\$3,400,000
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded								0
Federal or State Grants		1,520,000		110,400	1,089,600			2,720,000
Other Sources		380,000		27,600	272,400			680,000
TOTAL	\$0	\$1,900,000	\$0	\$138,000	\$1,362,000	\$0	\$0	\$3,400,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible < \$5,001
Ongoing

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Curb Installation**
 Department: **Public Works - General Fund**
 Physical Location: **Various**
 Federal Mandate: **NO**
 State Regulation or Law: **NO**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **YES**



PROJECT DESCRIPTION/JUSTIFICATION

This project provides for the repair and or replacement of curbing in various locations throughout the City. It includes the installation of bituminous curbing or granite curb as part of City roadway rehabilitation and reconstruction projects. Projects will be designed when appropriate, with in-house staff. Project construction costs have been set at \$41,200 for curbing plus 10% contingencies, 10% in engineering design, 10% in construction engineering, 1% overhead costs and annual 3% inflation adjustments.

Granite curbing will be installed on complete street reconstruction projects. The City has adopted granite as the standard material for all new curb installation (Section 70-126 of the City Code Granite type A curbs shall be required on the public ways of all new developments and in conjunction with the replacement of existing sidewalks and curbs in the commerce, central business, industrial and medium and high density residential zones.). Granite curb is more costly than alternatives (e.g. asphalt), however has a much longer life expectancy. Bituminous curbing will be installed on roadway rehabilitation projects where existing bituminous curbing has deteriorated and requires replacement. The 2014 unit price of granite curbing is approximately \$30.00 per foot and for bituminous curbing it is \$3.00 per foot. FY16 includes curbing repairs on Pearl Street and Crescent Street. FY17 includes curbing repairs on Water Street.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		58,177	60,121	61,720	63,571	65,478	68,752	377,819
Property/Equip. Acquisition								0
TOTAL	\$0	\$58,177	\$60,121	\$61,720	\$63,571	\$65,478	\$68,752	\$377,819
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		58,177	60,121	61,720	63,571	65,478	68,752	377,819
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$58,177	\$60,121	\$61,720	\$63,571	\$65,478	\$68,752	\$377,819

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
N/A

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Downtown Revitalization**
 Department: **Public Works - General Fund**
 Physical Location: **560 Main Street**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Economic Development**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

The last major downtown revitalization occurred in 1988. Since that revitalization, Keene's downtown has become an economic engine for the community and represents the spirit and place of Keene. To keep the downtown vibrant and relevant, it is important to continue investing in downtown. As downtown has expanded in the railroad square area and is projected to expand on Roxbury Street and Gilbo Avenue the "downtown treatment" needs to be considered in the expanding downtown. This project contemplates engaging a consultant to assess function, aesthetics, and infrastructure needs to provide community decision makers with options and alternatives to meet the needs of the citizens and visitors of Keene. The consultant will meet with key City staff as well as hold several public forums to obtain input on the myriad of issues that will need to be considered prior to moving toward a design phase.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design			45,000	30,000				75,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$45,000	\$30,000	\$0	\$0	\$0	\$75,000
FUNDING								
Current Revenue			45,000	30,000				75,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$45,000	\$30,000	\$0	\$0	\$0	\$75,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Moderate \$50,001 to \$100,000 Multi-year **PROJECT STATUS:** New Project

FLOOD MANAGEMENT PROJECTS

PROJECT	DESCRIPTION	OBJECTIVE	FY	CONSTRUCTION COST
Rule St / Sullivan St	Construct 48" drain line from Rule St to Beaver Brook. Replaces existing 18" tile drain.	Manage increased runoff from surrounding area and reduce street and property flooding.	16	\$193,761.00
Depot Rd	Construct new drain line from Swanzey Factory Rd to existing drain on Depot Rd	Redirect increased runoff away from private property.	16	\$45,000.00
Town Brook	Construct a manhole on Town Brook behind City Hall which will create a access point for inspection and cleaning.	To reduce flooding in the basement of City Hall and adjacent buildings.	16	\$54,175.00
Roxbury St	Construct 60" drain line from Beaver Brook to existing 48" drain. Construct 36" drain from existing 48" drain to Town Brook outlet. Replaces the existing 36" brick arch on Roxbury St.	Manage increased flow and reduce localized street flooding in the Vernon St / Elm St. area Manage increased flow in system and reduce localized street flooding in the Church St., Roxbury St. area. Phase 1 of several phases in this area.	18	\$861,380.00
Church St	Construct 48" drain line from Church St to Beaver Brook - Supplements existing 30" tile drain.	Manage increased runoff and improve flows and reduce localized street flooding on Court Street and side Streets from Central Sq. to Mechanic St.	19	\$259,325.00
Central Sq	Construct 30" drain from Court St thru Central Sq., down Roxbury St to the Town Brook outlet. Replaces existing 12" tile drain.	Reduce increased runoff and improve flows and reduce localized street flooding in the Church St., Roxbury St. area. Phase 2 of several phases in this area.	19	\$191,455.00
Main St	Construct 24" drain on main St from Eagle Ct to Water St. Replaces existing 8" tile drain.	Manage increased runoff and improve flows and reduce localized street flooding of Main St. Manage increased runoff, improve flows and to reduce localized street flooding in the Church St., Roxbury St. area. Phase 2 of several phases in this area.	19	\$126,600.00
Church St / Probate St	Construct 36" drain line, Church St from Carpenter St to Probate St, Probate St to Roxbury St. Replaces existing 12" tile line.	Manage increased runoff, improve flows and reduce localized street flooding in the Church St, Roxbury St area. Phase 3 of several phases in this area	20	\$712,500.00
Edwards St	Construct 30" drain line form Church St to Roxbury St. Replaces existing 12" tile drain	To reduce drainage issues to properties, west and down gradient, of Charles St.	21	\$300,000.00
Charles St	Extend drainage line from George Street to low area on Charles Street	To reduce drainage issues to properties, west and down gradient, of Charles St.	22	\$100,000.00
Key Rd	Replace existing 48" CMP drain pipe crossing Key Road	Replace existing deteriorated and failing pipe.	22	\$120,000.00
CONSTRUCTION TOTAL				\$2,964,196.00



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Flood Management Projects**
 Department: **Public Works - General Fund**
 Physical Location: **Various**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

The City has experienced a change in its weather patterns. Severe weather events are occurring on a higher frequency. In particular the City is experiencing rainfall events that are of short duration but very intense precipitations. The City's storm water system has been constructed over the last 100 years with different design standards. As a result of these more intense rain events, the City's storm water system is not effectively handling the resulting flows. This is causing localized repetitive street flooding which is impacting the community and individual properties. The City is addressing the changing climate and its impacts through a series of short term and long term goals. These include on-going maintenance and inspection of the storm water system, identification of small improvements, and watershed analysis. The City has identified areas that have repetitive localized flooding issues. This project proposes funding to implement improvements in specific areas to reduce the frequency and impact of localized street flooding. The projects, excluding work scheduled in FY 16, have been scheduled to begin FY 18, after the completion of the Climate Vulnerability Assessment (Planning Department) scheduled for FY 17.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design	0	292,936		861,380	577,380	712,500	300,000	2,744,196
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$292,936	\$0	\$861,380	\$577,380	\$712,500	\$300,000	\$2,744,196
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		292,936		861,380	577,380	712,500	300,000	2,744,196
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$292,936	\$0	\$861,380	\$577,380	\$712,500	\$300,000	\$2,744,196

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Moderate \$50,001 to \$100,000
Ongoing

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Goose Pond Dam**
 Department: **Public Works - General Fund**
 Physical Location: **Goose Pond**
 Federal Mandate: **NO**
 State Regulation or Law: **YES**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Healthy Living**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **YES**



PROJECT DESCRIPTION/JUSTIFICATION

This project began in FY11 with funds to complete a Dam Master Plan for all City dams including the 1868-era Goose Pond Dam and Berm. The Dam Master Plan addresses concerns expressed in Letters of Deficiencies (LOD) from NH Department of Environmental Services related to this dam's inoperable outlet drain and embankments (berm) requiring the City to submit a plan to address these deficiencies. The Goose Pond Dam structure, which includes its berm, are classified as "high hazard" indicating that their failure could result in the loss of life downstream. Because the dam and berm provide a significant recreation benefit, it is also in the City's interest to evaluate and strengthen them.

The project includes funding for additional evaluation, design, and permitting of improvements in FY17. Construction is proposed for FY19. The estimated cost of improvements recommended in the FY11 Dam Master Plan to respond to the LOD, were \$715,000 (2012 cost) and have been adjusted with a 3% per year inflation factor to the date projected for construction.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design			106,389					106,389
Construction/Implementation					879,400			879,400
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$106,389	\$0	\$879,400	\$0	\$0	\$985,789
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded			106,389		879,400			985,789
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$106,389	\$0	\$879,400	\$0	\$0	\$985,789

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Minimal \$5,001 to \$50,000
One time

PROJECT STATUS: Ongoing CIP

ROAD OVERLAY & RECONSTRUCTION LIST

2016		2017		2018	
OVERLAY	EST. COST	OVERLAY	EST. COST	OVERLAY	EST. COST
Algonquin Road	\$ 47,208	East Surry Road	\$ 313,873	Armory Street (North to end)	\$ 67,627
Chesterfield Road - North of Rte 9	\$ 175,654	Meadow Road	\$ 31,651	Baker Street	\$ 120,244
Chesterfield Road - South of Route 9	\$ 88,329	Mill Road	\$ 9,226	Crossfield Street	\$ 6,975
Crescent Street	\$ 23,357	Roxbury Road	\$ 192,667	Dunbar Street	\$ 24,734
Grimes Road	\$ 34,356	Water Street (Grove to Roxbury)	\$ 228,663	Ellis Court (Wright to Woodbury)	\$ 25,183
Hurricane Road - Phase 2	\$ 422,553	Wood Street	\$ 27,030	Gilsum Street (North to end)	\$ 119,362
Pearl Street	\$ 177,688	Wyman Road	\$ 202,473	Harrison Street	\$ 22,667
Stearns Road	\$ 23,709			Jordan Road	\$ 210,065
Wagner Street	\$ 8,222			North Street (Elm to Gilsum)	\$ 45,631
				Red Oak Drive	\$ 55,835
				Willow Court	\$ 4,122
				Willow Street	\$ 34,389
				Woodbury Street	\$ 170,601
				Wright Street	\$ 27,917
Sub Total	\$1,001,076	Sub Total	\$1,005,584	Sub Total	\$935,351
Contingency - 10%	<u>\$100,108</u>	Contingency - 10%	<u>\$100,558</u>	Contingency - 10%	<u>\$93,535</u>
Construction Totals	\$1,101,183	Construction Totals	\$1,106,142	Construction Totals	\$1,028,886
Design, Const, S&OH	\$11,012	Design, Const, S&OH	\$11,061	Design, Const, S&OH	\$10,289
Inflation Factor: 3% / year x 2 yrs	\$67,733	Inflation Factor: 3% / year x 3 yrs	\$103,595	Inflation Factor: 3% / year x 4 yrs	\$130,426
Total Overlay	\$1,179,928	Total Overlay	\$1,220,799	Total Overlay	\$1,169,601

2016		2017		2018	
RECONSTRUCT	EST. COST	RECONSTRUCT	EST. COST	RECONSTRUCT	EST. COST
Subtotal	\$0	Subtotal	\$0	Subtotal	\$0
Construction Contingency: 10%	<u>\$0</u>	Construction Contingency: 10%	<u>\$0</u>	Construction Contingency: 10%	<u>\$0</u>
Construction Totals	\$0	Construction Totals	\$0	Construction Totals	\$0
Design 10%, Const 10%, S&OH 1%	\$0	Design 10%, Const 10%, S&OH	\$0	Design 10%, Const 10%, S&OH 1%	\$0
Inflation Factor: 3% / yr x 2 yrs	\$0	Inflation Factor: 3% / yr x 3 yrs	\$0	Inflation Factor: 3% / yr x 4 yrs	\$0
Total Reconstruction	\$0	Total Reconstruction	\$0	Total Reconstruction	\$0

* = Projects in conjunction with EPA Administrative Order
 # = Projects related to other water/sewer/drainage projects

ROAD OVERLAY & RECONSTRUCTION LIST

<u>2019</u>		<u>2020</u>		<u>2021</u>	
OVERLAY	EST. COST	OVERLAY	EST. COST	OVERLAY	EST. COST
Arch Street - (Park to Hurricane)	\$ 199,670	Adams Court	\$ 9,321	Cady Street	\$19,320
Bridge Court	\$ 10,146	Adams Street	\$ 68,492	Chapman Road	\$97,462
Carpenter Street	\$ 44,054	Avalon Place	\$ 8,038	Cobb Street	\$9,926
Fowler Street	\$ 23,789	Concord Road	\$ 235,157	Darling Road	\$151,128
Gunn Road	\$ 193,854	Elliot Street	\$ 29,307	Dickinson Road	\$124,137
Harmony Lane	\$ 13,752	Gates Street	\$ 21,946	Hooper Street	\$26,533
Kingsbury Street	\$ 20,250	Main Street (Ete 101 to Marlborough St)	\$ 281,435	Lamson Street	\$26,790
Peg Shop Road	\$ 143,727	Moore Farm Road	\$ 27,542	Martin Street	\$33,086
Perham Street	\$ 11,200	No Name Road	\$ 13,371	Meetinghouse Road	\$91,473
Richardson Court	\$ 10,986	Park Avenue	\$ 335,999	Old Walpole Road	\$92,416
River Street	\$ 66,893	Proctor Court	\$ 16,725	Salsbury Road	\$54,739
Sullivan Road (Rte 9 to town line)	\$ 89,237	South Street	\$ 25,103	School Street (West to Emerald)	\$38,296
Valley Street	\$ 48,459			Speaker Street	\$14,971
Village Drive	\$ 56,121			St. James Street	\$33,230
Woodburn Street	\$ 27,918			Timberlane Road	\$130,865
Sub Total	\$960,055	Sub Total	\$1,072,435	Sub Total	\$944,371
Contingency - 10%	<u>\$96,006</u>	Contingency - 10%	<u>\$107,243</u>	Contingency - 10%	<u>\$94,437</u>
Construction Totals	\$1,056,061	Construction Totals	\$1,179,678	Construction Totals	\$1,038,808
Design, Const, S&OH	\$10,561	Design, Const, S&OH	\$11,797	Design, Const, S&OH	\$10,388
Inflation Factor: 3% / year x 5 yrs	\$169,885	Inflation Factor: 3% / year x 6 yrs	\$231,208	Inflation Factor: 3% / year x 7 yrs	\$241,183
Total Overlay	\$1,236,507	Total Overlay	\$1,422,684	Total Overlay	\$1,290,379

<u>2019</u>		<u>2020</u>		<u>2021</u>	
RECONSTRUCT	EST. COST	RECONSTRUCT	EST. COST	RECONSTRUCT	EST. COST
Subtotal	\$0	Subtotal	\$0	Subtotal	\$0
Construction Contingency: 10%	\$0	Construction Contingency: 10%	\$0	Construction Contingency: 10%	\$0
Construction Totals	\$0	Construction Totals	\$0	Construction Totals	\$0
Project Total	\$0	Project Total	\$0	Project Total	\$0
Design 10%, Const 10%, S&OH 1%	\$0	Design 10%, Const 10%, S&OH 1%	\$0	Design 10%, Const 10%, S&OH 1%	\$0
Inflation Factor: 3 % / yr x 2 yrs	\$0	Inflation Factor: 3 % / yr x 3 yrs	\$0	Inflation Factor: 3 % / yr x 4 yrs	\$0
Total Reconstruction	\$0	Total Reconstruction	\$0	Total Reconstruction	\$0



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Roadway Rehabilitation**
 Department: **Public Works - General Fund**
 Physical Location: **City Roadways**
 Federal Mandate: **NO**
 State Regulation or Law: **NO**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Maintaining a Safe Community**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

The City maintains 126.8 miles of roads, 125 of which are paved. These roads are in various states of repair. The City performed a roadway condition survey in 2013 and based upon an assessment of roadway condition and traffic volume the roadways were ranked on conditions from good to bad. Roadway conditions include roadway/pavement cracking, potholes, delamination of pavement, and roughness. Roadways scheduled for improvements are selected based upon roadway condition, other scheduled infrastructure improvements such as drainage, water, sewer improvements, and grouping of roadway in a general area to take advantage of a contractor mobilizing only once to perform work. The proposed road program for FY16-21 CIP cycle focuses on rehabilitation options including mill/shim/overlay and reclaim/pavement. Complete reconstruction of roadways, sidewalks, or curbing and utilities, is not proposed during the FY16-FY21 CIP.

The average costs for road rehabilitation options (in 2014 dollars) are as follows: shim and stone chip seal \$188,000/mile, shim and 1" pavement overlay with adjustment of structures \$265,000/mile, and reclamation and 4" pavement with adjustment of structures \$615,000/mile, road reconstruction (gravels and 5" pavement) not including utilities, curbing, or concrete sidewalk is approximately \$2.15M per mile. Road reconstruction that includes granite curbing and sidewalks, on both sides of a road, is approximately \$3.2M per mile.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		1,179,928	1,220,799	1,169,601	1,236,507	1,422,684	1,290,379	7,519,897
Property/Equip. Acquisition								0
TOTAL	\$0	\$1,179,928	\$1,220,799	\$1,169,601	\$1,236,507	\$1,422,684	\$1,290,379	\$7,519,897
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		1,179,928	1,220,799	1,169,601	1,236,507	1,422,684	1,290,379	7,519,897
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$1,179,928	\$1,220,799	\$1,169,601	\$1,236,507	\$1,422,684	\$1,290,379	\$7,519,897

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT Negligible<\$5,001
N/A

PROJECT STATUS: Ongoing CIP

Criteria Used to Determine Priority of New Sidewalks

With the challenges of limited resources for new sidewalk construction the Department looked at a way to incorporate ideas of walkability, community generators and attractors to assist in prioritization. The following are the community criteria that were identified:

Schools Walking Zones **½ mile**

(Includes public/private elementary, secondary, and post-secondary)

Major Community Generator/Attractor Zone **½ mile**

(Includes Daycares/Cultural/Parks/Human Service/Municipal)

Commercial Clusters **½ mile**

(Includes Downtown/Key Rd/West St/CVS Plaza/etc.)

Concentrated Housing Developments **½ mile**

(Includes Bennett Block/CitySide Housing/Harmony Lane/etc.)

Concentric circles were then plotted on a map of the City. The more the circles intersected, the higher probability of/or potential of pedestrian traffic. An investment in sidewalks in these areas would provide a higher impact. This information would impact the Pedestrian Traffic rating, the more concentric circles the higher the rating.

A matrix was developed with a number of criteria. These criteria were also weighted with higher emphasis on pedestrian traffic and safety. The matrix criteria are as follows.

Factor	Rating		Weight
Pedestrian Factor	1	Low	.30
	3	Medium	
	5	High	
Vehicle Traffic	1	Low/Local	.25
	3	Med/Collector	
	5	High/Arterial	
Existing Sidewalk	1	Yes	.15
	3	Partial	
	5	No	
Increase Safety	1	Low	.30
	3	Med	
	5	High	

New Sidewalk Project List

LOCATION	PED TRAFFIC	VEHICLE TRAFFIC	EXISTING WALK ON STREET	INCREASE SAFETY	TOTAL	LENGTH	FISCAL YEAR	TOTAL COST				
EMERALD ST	5	2	5	1.3	3	0.5	3	1	4.1	1,300	17	\$208,927
WEST SURRY RD - ROUTE 12A	1	0	5	1.3	5	0.8	5	2	3.8	2,708		\$410,229
BRADFORD RD	1	0	3	0.8	5	0.8	5	2	3.3	3,400		\$515,058
NORTH LINCOLN ST - Beaver St to George St	1	0	3	0.8	5	0.8	5	2	3.3	2,100		\$318,124
PAKO AVE	3	1	3	0.8	5	0.8	3	1	3.3	3,520		\$533,237
PAKO AVE	3	1	3	0.8	5	0.8	3	1	3.3	2,370		\$359,026
ROXBURY ST - Reservoir St to Water St	3	1	3	0.8	5	0.8	3	1	3.3	900		\$136,339
BLOSSOM ST - Robbins Rd to West St	3	1	3	0.8	3	0.5	3	1	3	1,900		\$287,827
AMERICAN AVE - Kennedy Dr to Old Walpole Rd	3	1	1	0.3	5	0.8	3	1	2.8	1,400		\$212,083
PERHAM ST	3	1	1	0.3	5	0.8	3	1	2.8	300		\$45,446
RIVER ST - North of Mayflower	4	1	1	0.3	3	0.5	3	1	2.8	500		\$75,744
ROYAL AVE	3	1	1	0.3	5	0.8	3	1	2.8	1,400		\$212,083
WAKEFIELD ST	3	1	1	0.3	5	0.8	3	1	2.8	750		\$113,616
WOODBURN ST - Portland to Linden St.	3	1	1	0.3	5	0.8	3	1	2.8	450		\$68,169
PORTLAND ST	3	1	1	0.3	3	0.5	3	1	2.5	600		\$90,893
ROBBINS RD	3	1	1	0.3	3	0.5	3	1	2.5	730		\$110,586
KENDALL RD	1	0	1	0.3	5	0.8	3	1	2.2	1,700		\$257,529
HARRISON ST	5	2	1	0.3	1	0.2	1	0	2.2	700		\$106,041
WOODBURY ST	3	1	1	0.3	3	0.5	1	0	1.9	1,600		\$242,380
							TOTAL					\$4,094,411

Factor	Weight
Pedestrian Traffic	30%
Vehicle Traffic	25%
Existing Sidewalk	15%
Increase Safety	30%

Notes:

Sidewalks listed for construction beyond FY 15 are projected using FY15 dollars plus 3% per year

Unit costs (Installed) 2014

C = concrete sidewalk per LF \$151.49
 includes granite curbing, 10% contingencies, 10% eng design, 10% engineering const admin, 1% overhead costs and 3% inflation per year

NEW SIDEWALK LIST

2016

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Granite curbing will be ins			\$0
Design: 5%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 2yrs			\$0
Total Sidewalks			\$0

2017

LOCATION	LENGTH	TYPE WORK	EST. COST
Emerald Street	1,300	New	\$143,650
Subtotal			\$143,650
Construction Contingency: 10%			\$14,365
Construction Totals			\$158,015
Design: 10%			\$15,802
Construction Administration: 10%			\$15,802
SUPV. & Overhead: 1%			\$1,580
Project Total			\$191,198
Inflation Factor: 3% / yr x 3 yrs			\$17,729
Total Sidewalks			\$208,927

2018

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 4 yrs			\$0
Total Sidewalks			\$0

2019

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 5 yrs			\$0
Total Sidewalks			\$0

2020

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 6 yrs			\$0
Total Sidewalks			\$0

2021

LOCATION	LENGTH	TYPE WORK	EST. COST
Subtotal			\$0
Construction Contingency: 10%			\$0
Construction Totals			\$0
Design: 10%			\$0
Construction Administration: 10%			\$0
SUPV. & Overhead: 1%			\$0
Project Total			\$0
Inflation Factor: 3% / yr x 7 yrs			\$0
Total Sidewalks			\$0



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Sidewalks New**
 Department: **Public Works - General Fund**
 Physical Location: **Various**
 Federal Mandate: **NO**
 State Regulation or Law: **NO**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **YES**



PROJECT DESCRIPTION/JUSTIFICATION

This project provides for new sidewalks in various locations throughout the City. The City has over 52 miles of sidewalks. The need for new sidewalks exceeds available resources. Using the 2012 criteria to determine the priority for new sidewalks, Emerald Street, which scored the highest (meaning the greatest priority), has been programmed for a new sidewalk in FY17.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		0	208,927	0	0	0	0	208,927
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$208,927	\$0	\$0	\$0	\$0	\$208,927
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded			208,927					208,927
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$208,927	\$0	\$0	\$0	\$0	\$208,927

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Multi-year

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Sidewalk Replacement**
 Department: **Public Works - General Fund**
 Physical Location: **Various**
 Federal Mandate: **NO**
 State Regulation or Law: **NO**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **YES**



PROJECT DESCRIPTION/JUSTIFICATION

This project provides for the repair and or replacement of sidewalks in various locations throughout the City. In addition, installation of bituminous sidewalk or concrete sidewalks will be made as part of City roadway rehabilitation and reconstruction projects. Projects will be designed when appropriate with in-house staff. Project construction costs have been set at \$40,000 for sidewalks plus 10% contingencies, 10% in engineering design, 10% in construction engineering, 1% overhead costs and annual 3% inflation adjustments. The City has over 52 miles of sidewalks. The need for maintaining and replacing existing sidewalks exceeds available resources. Sidewalks to be repaired will be prioritized using the 2005 sidewalk assessment. Sidewalks that scored the highest (meaning poorest condition) will be repaired and/or replaced based upon the assessment.

For repair projects, concrete sidewalks will be installed where there are existing concrete sidewalks and asphalt sidewalks will be installed where there are existing asphalt sidewalks. Projects will include milling the existing asphalt and providing an asphalt overlay or a complete replacement of the concrete sidewalk. Based on a 2013 unit price of \$40 per linear foot for concrete sidewalks and \$12.50 per linear foot for asphalt sidewalk repairs, it is estimated that the proposed \$40,000 in annual sidewalk repairs could complete approximately 1,000 LF of concrete sidewalk or 3,200 LF of bituminous paved sidewalks. Public Works will be performing an update to the sidewalk survey in 2015. FY16 includes sidewalk repairs on Pearl Street and Crescent Street. FY17 includes sidewalk repairs on Water Street.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		58,177	59,922	61,720	63,571	65,478	68,752	377,620
Property/Equip. Acquisition								0
TOTAL	\$0	\$58,177	\$59,922	\$61,720	\$63,571	\$65,478	\$68,752	\$377,620
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		58,177	59,922	61,720	63,571	65,478	68,752	377,620
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$58,177	\$59,922	\$61,720	\$63,571	\$65,478	\$68,752	\$377,620

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Multi-year

PROJECT STATUS: Ongoing CIP

KEENE/SWANZEY BY-PASS IMPROVEMENT PROGRAM SCHEDULE

During the FY2012 and 2013 State Budgeting process significant funding was cut from the State's Transportation budget. As a result New Hampshire Department of Transportation has made significant changes to the State's Ten Year Transportation Improvement Plan 2013 - 2022. The 2015 - 2024 Ten Year Plan dated August 1, 2014 reflects what has been approved by the Legislature and signed into law by the Governor.

Description		Previous Program Yr	Amount (\$000)	Program Year (FY)
Construct Multi-Use Trail Bridge over NH 12/101 10309 P-6189	C	2010	\$ 2,200	2021
Winchester Street Reconstruction from NH Rt 101 Roundabout to Pearl St/Island St Intersection including the Key Rd Intersection - Keene 10309 B (1828) and the replacement of the Island Street Bridge. This is a Local Public Agency project and requires a 20% match project	P	2013	\$ 261.8	2013
	C	2014 - 2015	\$ 5,296	2017-2018
	R	2014	\$ 368.5	2014

Phase: C = Construction P = Preliminary Engineering R = Right of Way



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **State Bypass Improvement Program**
 Department: **Public Works - General Fund**
 Physical Location: **Various**
 Federal Mandate: **NO**
 State Regulation or Law: **NO**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Transportation**
 Council Initiative: **Resolution**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

A traffic analysis performed by the State identified the need to alleviate increased traffic congestion at key intersections along the by-pass. These projects would allow traffic to flow smoothly into and out of the City, minimizing the impacts of through traffic on the local street network. There were a number of projects identified to improve capacity and efficiency along the State by-pass network (NH 9/10/12/101). The State has completed a number of interim improvements including the widening of NH Rt 9 from the T-intersection to Base Hill Road, widening of NH Rt 9/10/12 at the T-intersection, and the construction of a multi-lane roundabout at Winchester Street and NH Rt 101.

In the State's August 1, 2014 adopted 2015-2024 TIP, the Winchester Street Reconstruction and Rt. 101 Multi-Use Trail Bridge remain within the program. The Winchester Street Reconstruction Project picks up where the State NH Rt. 101 roundabout ended and extends up Winchester Street to the Winchester Street Bridge over the Ashuelot River. This project will involve the reconstruction of Winchester Street and two critical intersections; Key Road and Island St/Pearl Street. It will also replace the Red Listed Island Street Bridge. This will be a locally managed project through the Local Public Agency Program which has a 20% local match. Funding for design of this project was approved and appropriated in FY14 with funding for construction in FY17 and FY18. The other project remaining in this program is the construction of a multi use bridge over NH Rt 101. This bridge would connect the completed multi-use trail sections that extends from Winchester Street adjacent to Keene State College to Rt. 101 and continues to the section of trail on the south side of Rt. 101 that extends into the Town of Swanzey. This project is 100% funded by the State and will be managed by the State. This project is scheduled for construction in FY21.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design	630,300							630,300
Construction/Implementation			2,830,000	2,466,000			2,200,000	7,496,000
Property/Equip. Acquisition								0
TOTAL	\$630,300	\$0	\$2,830,000	\$2,466,000	\$0	\$0	\$2,200,000	\$8,126,300
FUNDING								
Current Revenue	126,060							126,060
Capital Reserve								0
Debt Funded			566,000	493,200				1,059,200
Federal or State Grants	504,240		2,264,000	1,972,800			2,200,000	6,941,040
Other Sources								0
TOTAL	\$630,300	\$0	\$2,830,000	\$2,466,000	\$0	\$0	\$2,200,000	\$8,126,300

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible <\$5,001 Multi-year

PROJECT STATUS: Ongoing CIP

Stormwater Management

The City of Keene sits on the valley floor at the bottom of a glacial lakebed. There are five (5) watersheds and numerous brooks and streams that flow through the City. These bodies of water are used by the community to receive stormwater from City streets and private properties. As the City developed, open ditches were first constructed to convey this stormwater. Over time these open ditches were enclosed and additional receptors and pipes were installed creating a complex network of pipes and open ditches that merge with streams to move stormwater through the City. The community has modified waterways to improve the drainage characteristics of streams to allow for additional use and development of land. Over the last 10 years, the City and State of New Hampshire have been subject to changing weather patterns. Intense wet weather events are occurring at higher frequency with higher amounts of precipitation. This has stressed the City's 150+ year old stormwater system.

The City outlined a multi-prong strategy with both short term and long term actions. Types of short term actions identified included continuing maintenance of the stormwater system, evaluation of and implementation of small improvements, and the identification and implementation of flood storage and mitigation projects. Long term actions included watershed wide analysis, identification of large storage and mitigation projects and the engagement of other partners and State and Federal agencies. The following series of projects implement short term actions while continuing to move forward with long term actions to address stormwater management concerns.

Storm Drain Cleaning and Inspection. Adequate maintenance is critical to ensure that the existing enclosed stormwater system is properly working. This project will perform maintenance cleaning and inspection of catch basins and lines. The removal of sediments will restore the capacity of the collection system reducing the effects of smaller events. If problems are encountered while cleaning a line, this project provides funds to televise the area to determine what is causing the blockage so a repair strategy can be developed. It is proposed that storm drain cleaning and inspection become a regular capital item each year.

Storm Drainage Spot Repairs. This is a companion project to the cleaning and inspection work described above. The project provides the funding to perform spot repairs to the stormwater system while also addressing blockages and failures to ensure the system is working at its capacity.

Stormwater System Management Analysis and Minor Improvements. This project provides funding to perform hydrologic and hydraulic analysis of the various watersheds and parts of the stormwater system. The analysis will update existing data and use this information to identify potential mitigation projects. Another component of this project is the support of technical resources to review areas of street flooding (Roxbury and Guernsey Streets, Church and Carpenter Streets, Winchester and Ralston Streets, etc.) to determine if there are low impact/cost changes or improvements that may be accomplished to relieve flooding.



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Drainage Cleaning**
 Department: **PUBLIC WORKS**
 Physical Location: **Various**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Maintain transportation network, manage storm water to reduce potential for flooding.**



PROJECT DESCRIPTION/JUSTIFICATION

The capturing, removal and treatment of storm water is critical to maintaining the condition of the City's streets and other impervious systems. The Highway Division is planning for an ongoing drain cleaning program. The daily average for cleaning catch basin sumps (using a private contractor) is 25 per day at the rate of \$90/hour (in 2013 dollars), totaling \$720/day for cleaning basins. This ongoing program will maintain the 5,000 basins located in the City. Approximately 1,250 catch basin sumps and 2 miles of drain line are cleaned each year of the program. A private contractor will also provide services for camera inspection and drain line cleaning/flushing on the City's 80 mile network of drain lines. On average 1,500 feet of drain line can be cleaned in a day equaling \$763 per day (in 2013 dollars). Funding levels provide for approximately 16 miles of drain lines to be cleaned each year resulting in all drain lines being cleaned in approximately 5 years. In addition, approximately 5,000 lineal feet of drain line per year will be inspected via underground camera to identify areas where blockages are backing up the system or to identify areas needing spot repair (costs for spot repair are on a separate CIP page). Note: Costs have been inflated 3% per year.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design		15,450	15,914	16,390	16,883	17,389	17,911	99,937
Construction/Implementation		89,281	90,592	91,901	93,207	96,003	98,883	559,867
Property/Equip. Acquisition								0
TOTAL	\$0	\$104,731	\$106,506	\$108,291	\$110,090	\$113,392	\$116,794	\$659,804
FUNDING								
Current Revenue		104,731	106,506	108,291	110,090	113,392	116,794	659,804
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$104,731	\$106,506	\$108,291	\$110,090	\$113,392	\$116,794	\$659,804

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001 Ongoing

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Stormwater Spot Repairs**
 Department: **PUBLIC WORKS**
 Physical Location: **Various**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Maintain transportation network, manage storm water to reduce potential for flooding.**



PROJECT DESCRIPTION/JUSTIFICATION

The capturing, removal, and treatment of storm water is critical to maintaining the condition of the City's streets and other impervious systems. The City maintains over 80 miles of storm drains and over 5,000 catch basins. This project sets aside funding for spot repairs to the storm water system. This includes removing blockages and failures, to ensure the system works at capacity. This program will also be used to improve and address flood capacity issues which are encountered when coordinated with road maintenance work such as mill/shim/overlay. This project's costs includes 10% contingency, 10% in engineering design, 10% in construction engineering, 1% overhead cost and an annual 3% inflation adjustment. It is part of a multi-pronged approach to sustaining the City's storm water drainage system and is a companion to the Storm Drainage Cleaning and Inspection Program.

FY16 includes drainage repairs on Pearl Street and Crescent Street. FY17 includes drainage repairs on Water Street.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		58,177	59,992	61,720	63,571	65,478	67,442	376,380
Property/Equip. Acquisition								0
TOTAL	\$0	\$58,177	\$59,992	\$61,720	\$63,571	\$65,478	\$67,442	\$376,380
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		58,177	59,992	61,720	63,571	65,478	67,442	376,380
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$58,177	\$59,992	\$61,720	\$63,571	\$65,478	\$67,442	\$376,380

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Multi-year

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Stormwater System Management Analysis and Minor Improvements
Department: PUBLIC WORKS
Physical Location: Various
Federal Mandate: N/A
State Regulation or Law: N/A
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Infrastructure
Council Initiative: N/A
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective:



PROJECT DESCRIPTION/JUSTIFICATION

This project provides funding to perform hydraulic analysis of the various watersheds within the City of Keene and for other technical assistance for flood prone/impacted areas. The analysis will update existing data providing information to assist with identifying potential mitigation projects. It is proposed to start reviews within the Beaver Brook watershed. A component of this project is to review areas that are prone to street flooding (Roxbury and Gurnsey Streets, Church and Carpenter Streets, Winchester and Ralston Streets, etc.) to determine if there are low impact, low cost changes or improvements that can be completed to relieve the flooding. Results from this work will be incorporated into future CIP request of operating budgets depending on the scope of the improvement.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		50,000	51,500	53,045	54,636	56,275	57,964	323,420
Property/Equip. Acquisition								0
TOTAL	\$0	\$50,000	\$51,500	\$53,045	\$54,636	\$56,275	\$57,964	\$323,420
FUNDING								
Current Revenue		50,000	51,500	53,045	54,636	56,275	57,964	323,420
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$50,000	\$51,500	\$53,045	\$54,636	\$56,275	\$57,964	\$323,420

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: High \$100,001 or more
Multi-year

PROJECT STATUS: Ongoing CIP

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY16 - FY21
PARKING FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY12/13	ACTUAL FY13/14	BUDGET FY14/15	PROJECTED FY15/16	PROJECTED FY16/17	PROJECTED FY17/18	PROJECTED FY18/19	PROJECTED FY19/20	PROJECTED FY20/21
REVENUES									
Taxes	\$916,849	\$840,876	\$1,049,535	\$1,128,885	\$1,125,431	\$1,120,942	\$943,510	\$937,789	\$930,058
Parking Meter Fees / Space Rentals	553,775	531,709	561,112	763,500	763,500	859,848	859,848	859,848	956,195
Fines & Forfeits	315,113	240,752	233,369	234,100	238,289	242,554	246,896	251,316	255,815
Miscellaneous	14,744	16,313	14,784	16,424	16,535	16,648	16,762	16,877	16,993
Capital reserve / Project Balances		28,573	90,000	863,000		50,000		50,000	
Use of (Addition to) surplus			233,369						
State courthouse payment		24,792	42,500	42,500		42,500		42,500	42,500
Bond issue									
TOTAL REVENUES	\$1,800,481	\$1,683,014	\$2,224,670	\$3,048,408	\$2,186,256	\$2,332,493	\$2,109,516	\$2,158,329	\$2,201,561
EXPENDITURES									
Lots & Meters	\$586,843	\$662,798	\$701,198	\$722,935	\$745,346	\$768,451	\$792,273	\$816,834	\$842,156
Outside Services	176,799	159,523	204,840	\$204,840	204,840	204,840	204,840	204,840	204,840
City Hall Parking Facility	9,931	13,643	23,406	\$23,406	23,406	23,406	23,406	23,406	23,406
Wells Street Parking Facility	31,782	26,024	34,101	\$34,101	34,101	34,101	34,101	34,101	34,101
Capital	461,568	150,000	269,090	1,013,000	230,209	200,000	174,014	200,000	200,000
Property Taxes: Courthouse			257,728	264,635	271,569	278,792	285,260	292,164	298,883
Debt Service-TAX INC. FIN. New				95,000	94,050	92,150	90,250	88,350	86,450
Debt Service-TAX INC. FIN. existing				711,750	702,313	692,500	510,500	499,775	487,225
TOTAL EXPENDITURES	\$1,884,648	\$1,740,864	\$2,224,670	\$3,069,667	\$2,305,833	\$2,294,241	\$2,114,645	\$2,159,469	\$2,177,061
Addition to (use of) Surplus	(\$84,168)	(\$57,851)	(\$0)	(\$21,258)	(\$119,577)	\$38,252	(\$5,129)	(\$1,141)	\$24,500
CAPITAL & DEBT AS % OF BUDGET			56.7%	67.9%	56.3%	55.1%	50.1%	50.0%	49.3%
PARKING FUND INCREASE				38.0%	-24.88%	-0.50%	-7.83%	2.12%	0.81%
Projected fund balance at year end	648,875	415,506	415,506	394,248	274,671	312,923	307,794	306,653	331,153
Projected fund balance as a % of operating budget (total-capital)			21.25%	19.17%	13.23%	14.94%	15.86%	15.65%	16.75%

Note 1: Parking Meter Fees and Space Rentals: rate increases in FY 16, 18, and 21 are included in these projections for planning purposes. Parking staff are developing operational and fee change proposals for City Council consideration at a later date. Parking meter rates were last increased in August, 2001 (FY 2002), and reserved parking space rates were last increased in August, 2009 (FY 2010).

CITY OF KEENE, NEW HAMPSHIRE
Parking Fund 2016 - 2021 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2015/2016</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>TOTAL</u>
Public Works	Capital Reserve - City Hall Parking Facility	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 150,000
Public Works	Capital Reserve - Downtown Improvements	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Public Works	Capital Reserve - Wells Street Parking Facility	25,000	25,000	25,000	25,000	25,000	25,000	150,000
Public Works	Parking Structure Maintenance	15,000	-	50,000	-	50,000	-	115,000
Public Works	Surface Parking Lot Maintenance	-	80,209	-	24,014	-	-	104,223
Public Works	Wells St Parking Deck Rehabilitation	848,000	-	-	-	-	-	848,000
TOTAL CAPITAL PROGRAM		\$ 1,013,000	\$ 230,209	\$ 200,000	\$ 174,014	\$ 200,000	\$ 150,000	\$ 1,967,223

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Wells St Parking Deck Rehabilitation	\$ 259,193	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 259,193
Public Works	Parking Structure Maintenance	15,000	-	50,000	-	50,000	-	115,000
Total: Reserve Funded Projects		\$ 274,193	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 374,193

Projects Funded with Debt

Public Works	N/A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Projects Funded with Debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Capital Reserve Appropriations

Public Works	Capital Reserve - City Hall Parking Facility	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 150,000
Public Works	Capital Reserve - Downtown Improvements	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Public Works	Capital Reserve - Wells Street Parking Facility	25,000	25,000	25,000	25,000	25,000	25,000	150,000
Total: Capital Reserve Appropriations		\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 900,000

Projects Funded with Cash

Public Works	Wells St Parking Deck Rehabilitation	\$ 588,807	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 588,807
Public Works	Surface Parking Lot Maintenance	-	80,209	-	24,014	-	-	104,223
Total: Projects Funded with Cash		\$ 588,807	\$ 80,209	\$ -	\$ 24,014	\$ -	\$ -	\$ 693,030

Subtotal: Uses of Cash

(Capital Reserve Appropriations plus Projects Funded with Cash)

TOTAL CAPITAL PROGRAM		\$ 1,013,000	\$ 230,209	\$ 200,000	\$ 174,014	\$ 200,000	\$ 150,000	\$ 1,967,223
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New cash Requirement FY 16-21: reconciliation

<i>Total: Uses of cash</i>	\$738,807	\$230,209	\$150,000	\$174,014	\$150,000	\$150,000	\$1,593,030
<i>Reappropriation of Railroad Land Infrastructure project balance (90154)</i>	(588,807)	-	-	-	-	-	(588,807)
<i>New Funds needed</i>	\$ 150,000	\$ 230,209	\$ 150,000	\$ 174,014	\$150,000	\$150,000	\$1,004,223

Parking Fund 2016 - 2021 Capital Improvement Program Debt Summary

	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>
Existing and Authorized Debt	\$5,235,000	\$4,559,000	\$3,878,000	\$3,192,000	\$2,671,000	\$2,150,000
New Issues Proposed	-	-	-	-	-	-
Principal Paid	(676,000)	(681,000)	(686,000)	(521,000)	(521,000)	(521,000)
Total Existing Debt & Issues Proposed	\$4,559,000	\$3,878,000	\$3,192,000	\$2,671,000	\$2,150,000	\$1,629,000

	<u>Issue</u>	<u>Term</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>
Existing & Authorized Debt Service (P & I)			\$806,750	\$796,363	\$784,650	\$600,750	\$588,125	\$573,675
<u>Proposed Debt Service CIP FY16</u>								
N/A								
<u>Proposed Debt Service CIP FY17</u>								
N/A								
<u>Proposed Debt Service CIP FY18</u>								
N/A								
<u>Proposed Debt Service CIP FY19</u>								
N/A								
<u>Proposed Debt Service CIP FY20</u>								
N/A								
<u>Proposed Debt Service CIP FY21</u>								
N/A								
Total CIP16-21 Debt Service Proposed			0	0	0	0	0	0
Total Projected Debt Service: Parking Fund			\$806,750	\$796,363	\$784,650	\$600,750	\$588,125	\$573,675



CITY OF KEENE, NEW HAMPSHIRE

2016- 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Parking Facility Capital Reserve**
 Department: **Public Works - Parking Fund**
 Physical Location: **Various**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **N/A**
 Departmental Objective: **YES**



PROJECT DESCRIPTION/JUSTIFICATION

This project request worksheet details funding for the existing capital reserve funds established within the Parking Fund. Capital Reserve funding in the amount of \$25,000 annually for the Wells Street Parking Facility and \$25,000 annually for the City Hall Parking Facility is scheduled. In addition, annual contributions of \$100,000 supporting the Downtown Infrastructure Capital Reserve are included. Information regarding expenditures scheduled below, to be funded through these capital reserve accounts, are provided on the project request worksheet for parking structure maintenance. Additional expenditures from the Downtown Infrastructure are not currently scheduled.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		274,193		50,000		50,000	0	374,193
Property/Equip. Acquisition								0
TOTAL	\$0	\$274,193	\$0	\$50,000	\$0	\$50,000	\$0	\$374,193
FUNDING								
Current Revenue	564,158	150,000	150,000	150,000	150,000	150,000	150,000	1,464,158
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,785	1,479	1,858	2,113	2,493	2,749	12,477
TOTAL	\$564,158	\$151,785	\$151,479	\$151,858	\$152,113	\$152,493	\$152,749	\$1,476,635

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
N/A

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Parking Structure Maintenance**
 Department: **Public Works - Parking Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Vibrant Downtown**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Investing maintenance funds in City parking facilities.**



PROJECT DESCRIPTION/JUSTIFICATION

Using a variety of repair and maintenance techniques best suited for the specific situation, provide nonroutine maintenance to extend the life of the parking structures owned by the City of Keene, including Wells St. parking structure and City Hall parking structure. Wells St. parking maintenance is scheduled for FY 16 and will include structural repairs as well as waterproofing due to deterioration caused by water infiltration and corrosion causing elements. The proposed scope of repair work will restore, protect and maintain the parking structure to ensure long term durability of this valuable City asset. \$15,000 is requested in FY 16 to complete structural steel painting on the City Hall Deck. Given the condition of the steel, the \$15,000 appropriated in FY 15 for the work is insufficient. A variety of maintenance items are anticipated for the City Hall parking structure in FY 18. The scope of work, depending on a condition assessment, may include any of the following: protective resurfacing, crack and joint repair. A similar scope of work would be anticipated in FY 20 for the Wells St. parking structure. Experience has demonstrated capital expenditures beyond normal yearly maintenance are required approximately every 4-5 years to maintain the structures in good condition. Parking structures are continually assessed and adjustments to maintenance requirements are reflected in the capital budget.

FY 16 FUNDING FOR WELLS ST: Wells St Deck Capital Reserve: \$210,000, Downtown Infrastructure Capital Reserve: \$49,193, and the reappropriation of the Railroad Land Infrastructure (90154) project balance of \$588,807. The project was funded through a bond issue authorized by R-2011-26.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		863,000		50,000		50,000		963,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$863,000	\$0	\$50,000	\$0	\$50,000	\$0	\$963,000
FUNDING								
Current Revenue								0
Capital Reserve		274,193		50,000		50,000		374,193
Debt Funded								0
Federal or State Grants								0
Other Sources		588,807						588,807
TOTAL	\$0	\$863,000	\$0	\$50,000	\$0	\$50,000	\$0	\$963,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Multi-year

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Surface Parking Lot Maintenance**
 Department: **Public Works - Parking Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Vibrant Downtown**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Investing maintenance funds in City parking facilities.**



PROJECT DESCRIPTION/JUSTIFICATION

Using a variety of repair and maintenance techniques best suited for the specific situation provides nonroutine maintenance to extend the life of the parking facilities owned by the City of Keene, including Gilbo Avenue (East & West), Wells Street, Commercial Street, and Library Annex surface lots. Gilbo East surface lot maintenance is scheduled for FY 17 (mill, shim, overlay, pavement markings), Gilbo West is scheduled for FY 17 (crack sealing). Wells Street surface lot is scheduled for FY 19 (mill, shim, overlay), as is Elm Street surface lot (crack sealing). Experience has demonstrated that beyond minor yearly maintenance the surface lots require some type of capital expenditure every 5 years to maintain the lots in good condition. The scope of work, depending on the condition of the parking facility, can include any or all of the following: crack sealing, pavement sealing, pavement overlay, and pavement markings. Parking facilities are continually assessed and adjustments to maintenance requirements are reflected in the capital budget.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			80,209		24,014			104,223
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$80,209	\$0	\$24,014	\$0	\$0	\$104,223
FUNDING								
Current Revenue			80,209		24,014			104,223
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$80,209	\$0	\$24,014	\$0	\$0	\$104,223

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Multi-year

PROJECT STATUS: Ongoing CIP

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY16-FY21
SOLID WASTE FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 12-13	ACTUAL FY 13-14	BUDGET FY 14/15	PROJECTED FY 15/16	PROJECTED FY 16/17	PROJECTED FY 17/18	PROJECTED FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21
REVENUES									
Charges for Services	\$ 4,478,066	\$ 4,541,780	\$ 4,546,738	\$ 4,554,763	\$ 4,618,901	\$ 4,684,060	\$ 4,750,259	\$ 4,817,518	\$ 4,885,857
Other Financing Sources	65,698	61,142	58,695	44,464	40,758	37,053	33,348	29,642	25,937
Use of Surplus			(19,276)						
Bond Issue				207,828	77,244		166,750		
Capital Reserve							250,000		
Miscellaneous	180								
TOTAL REVENUES	\$ 4,543,943	\$ 4,602,922	\$ 4,586,157	\$ 4,807,055	\$ 4,736,903	\$ 4,721,113	\$ 5,200,357	\$ 4,847,160	\$ 4,911,794
EXPENDITURES									
Landfill / Operations	\$ 3,027,877	\$ 3,048,038	\$ 2,974,188	\$ 3,085,497	\$ 3,127,952	\$ 3,171,078	\$ 3,214,885	\$ 3,259,388	\$ 3,307,661
Recycling	465,703	497,519	518,505	595,728	610,255	625,138	640,385	656,005	672,008
Transfer/Recycling Facility Management/Admin.	87,260	91,039	89,377	512,774	528,496	544,701	561,402	578,616	596,358
Demolition Transfer/Disposal	533,870	596,703	579,733	91,419	93,508	95,645	97,830	100,066	152,352
Landfill Monitoring	148,957	116,806	149,828	152,102	154,576	157,092	159,649	162,248	164,891
Landfill Gas System	15,172	21,293	58,259	42,145	42,988	43,848	44,725	45,619	46,532
Household Hazardous Waste	60,299	71,282	79,750	74,134	75,616	77,129	78,671	80,245	81,849
Debt Service - CURRENT	22,389	20,269	50,049	20,877	21,190	21,508	21,830	22,158	22,490
Debt Service - PROJECTED	184,249	49,563	46,468	44,886	45,820	43,881	27,000	25,875	24,750
SUBTOTAL	\$ 4,545,776	\$ 4,512,512	\$ 4,546,157	\$ 4,623,198	\$ 4,728,095	\$ 4,806,983	\$ 4,875,624	\$ 4,972,489	\$ 5,110,043
CAPITAL	48,965	47,000	40,000	252,828	122,244	45,000	461,750	45,000	101,000
TOTAL EXPENDITURES	\$ 4,594,741	\$ 4,559,512	\$ 4,586,157	\$ 4,876,026	\$ 4,850,339	\$ 4,851,983	\$ 5,337,374	\$ 5,017,489	\$ 5,211,043
NET REVENUE (EXPENSE)	\$ (50,798)	\$ 43,410	\$ 0	\$ (68,971)	\$ (113,436)	\$ (130,870)	\$ (137,017)	\$ (170,329)	\$ (299,248)
SOLID WASTE FUND INCREASE				6.32%	-0.53%	0.03%	10.00%	-5.99%	3.86%
Principal repayment on interfund loan	\$ 105,000	\$ 86,170	\$ 86,170	\$ 86,170	\$ 86,170	\$ 86,170	\$ 86,170	\$ 86,170	\$ 86,170
Annual change in current resources(net rev + repmnt)	\$ 124,276	\$ 17,199	\$ 17,199	\$ 17,199	\$ (27,266)	\$ (44,700)	\$ (50,847)	\$ (84,159)	\$ (213,078)
Projected current resources at fiscal year end	\$ 505,973	\$ 523,172	\$ 523,172	\$ 495,907	\$ 495,907	\$ 451,206	\$ 400,360	\$ 316,201	\$ 103,123
Current resources as a percentage of operating budget	11.13%	11.32%	11.32%	10.49%	10.49%	9.39%	8.21%	6.36%	2.02%

CITY OF KEENE, NEW HAMPSHIRE
Solid Waste Fund 2016 - 2021 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2015/2016</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>TOTAL</u>
Public Works	Capital Reserve - Recycling/Transfer Facility	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 270,000
Public Works	Recycling Equipment Replacement	-	77,244	-	250,000	-	-	327,244
Public Works	Three-phase Power	-	-	-	-	-	56,000	56,000
Public Works	Transfer Station Roof Replacement	-	-	-	166,750	-	-	166,750
Public Works	Transfer Station Floor Repair	207,828	-	-	-	-	-	207,828
TOTAL CAPITAL PROGRAM		\$ 252,828	\$ 122,244	\$ 45,000	\$ 461,750	\$ 45,000	\$ 101,000	\$ 1,027,822

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Recycling Equipment Replacement	\$ -	\$ 77,244	\$ -	\$ 250,000	\$ -	\$ -	\$ 327,244
Total: Reserve Funded Projects		\$ -	\$ 77,244	\$ -	\$ 250,000	\$ -	\$ -	\$ 327,244

Projects Funded with Debt

Public Works	Transfer Station Floor Repair	\$ 207,828	\$ -	-	-	-	-	\$ 207,828
Public Works	Transfer Station Roof Replacement	-	-	-	\$ 166,750	\$ -	-	\$ 166,750
Total: Projects Funded with Debt		\$ 207,828	\$ -	\$ -	\$ 166,750	\$ -	\$ -	\$ 374,578

Capital Reserve Appropriations

Public Works	Capital Reserve - Recycling/Transfer Facility	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 270,000
Total: Capital Reserve Appropriations		\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 270,000

Projects Funded with State Grant

Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Projects Funded with State Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projects Funded with Cash

Public Works	Three-phase Power	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 56,000	\$ 56,000
Total: Projects Funded with Cash		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 56,000	\$ 56,000

Subtotal: Uses of Cash

(Capital Reserve Appropriations plus Projects Funded with Cash)

		\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 101,000	\$ 326,000
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TOTAL CAPITAL PROGRAM

		\$ 252,828	\$ 122,244	\$ 45,000	\$ 461,750	\$ 45,000	\$ 101,000	\$ 1,027,822
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Solid Waste Fund 2016 - 2021 Capital Improvement Program Debt Summary

	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>
Existing and Authorized Debt	\$201,019	\$373,569	\$314,842	\$256,262	\$379,730	\$325,330
New Issues Proposed	207,828			166,750		-
Principal Paid	(35,278)	(58,727)	(58,579)	(43,283)	(54,399)	(54,399)
Total Existing Debt & Issues Proposed	\$373,569	\$314,842	\$256,262	\$379,730	\$325,330	\$270,931

	<u>Issue</u>	<u>Term</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>
Existing & Authorized Debt Service (P & I)			\$44,886	\$45,820	\$43,881	\$27,000	\$25,875	\$24,750
<u>Proposed Debt Service CIP FY16</u>								
Tipping Floor Repair	207,828	10	3,637	27,693	26,966	26,238	25,511	24,783
<u>Proposed Debt Service CIP FY17</u>								
N/A								
<u>Proposed Debt Service CIP FY18</u>								
N/A								
<u>Proposed Debt Service CIP FY19</u>								
Transfer Station Roof Repair	166,750	15				2,918	16,758	16,369
<u>Proposed Debt Service CIP FY20</u>								
N/A								
<u>Proposed Debt Service CIP FY21</u>								
N/A								
Total CIP16-21 Debt Service Proposed			3,637	27,693	26,966	29,156	42,269	41,153
Total Projected Debt Service: Solid Waste Fund			\$48,523	\$73,513	\$70,846	\$56,156	\$68,144	\$65,903



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Capital Reserve- Recycle/Transfer**
 Department: **Public Works**
 Physical Location: **55 Old Summit Road**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Allow for continued diversion of waste stream through recycling**



PROJECT DESCRIPTION/JUSTIFICATION

In 1996 the City developed a reserve in the Solid Waste fund to provide funding to repair or replace major pieces of equipment or facility components.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			77,224	0	250,000			327,224
TOTAL	\$0	\$0	\$77,224	\$0	\$250,000	\$0	\$0	\$327,224
FUNDING								
Current Revenue	151,887	45,000	45,000	45,000	45,000	45,000	45,000	421,887
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		492	606	527	641	130	243	2,639
TOTAL	\$151,887	\$45,492	\$45,606	\$45,527	\$45,641	\$45,130	\$45,243	\$424,526

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001 Ongoing

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Recycling Equipment Replacement**
 Department: **Public Works**
 Physical Location: **55 Old Summit Road**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Allows for continued diversion of waste stream through recycling**



PROJECT DESCRIPTION/JUSTIFICATION

In 2015 the Keene Recycling Center will be 21 years old and each piece of original equipment will have over 23,402 hours of use. All of the original equipment has a manufacturer expected life of 10 years. The Solid Waste Division currently contracts scheduled/preventative maintenance on all equipment to extend the life of the equipment where possible. Only equipment that no longer functions properly, affects facility efficiency, or represents a safety hazard would be replaced. Equipment expected to be replaced over the next several years includes the eddy current separator (for aluminum cans) and cross belt magnet (for steel cans), and horizontal baler.

Equipment to be replaced in 2017: eddy current separator \$34,873 (includes installation cost), cross belt magnet \$42,351 (includes installation cost). Equipment to be replaced in 2019: horizontal baler \$250,000 (includes installation cost). An established capital reserve account funds the repair/replacement of major pieces of equipment at the Recycling Center.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition			77,224		250,000			327,224
TOTAL	\$0	\$0	\$77,224	\$0	\$250,000	\$0	\$0	\$327,224
FUNDING								
Current Revenue								0
Capital Reserve			77,224		250,000			327,224
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$77,224	\$0	\$250,000	\$0	\$0	\$327,224

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible < \$5,001
Multi-year

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Three Phase Power**
 Department: **Public Works**
 Physical Location: **55 Old Summit Road**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Allows for continued diversion of waste stream through recycling, processing solid waste**



PROJECT DESCRIPTION/JUSTIFICATION

The Solid Waste facility currently runs on landfill gas generated power. It is expected that as the decomposition of refuse diminishes the gas generation will eventually be insufficient to provide a reliable power source for the Solid Waste facility. In the interim, the Solid Waste Division is performing repair and maintenance functions to the existing landfill gas wellfield in hopes that sufficient gas can continue to be extracted to provide power to the facility. In the event that there is insufficient gas to power the facility three phase power lines will be needed to provide electrical power. The closest three phase power lines end at Black Brook North. The lines would be extended north on Route 12 and down Old Summit Road to the Solid Waste facility. Recent negotiations with regards to the KEAP project suggest that this project may not be required, but the current plan remains as a place mark.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design							56,000	56,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$56,000	\$56,000
FUNDING								
Current Revenue							56,000	56,000
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$56,000	\$56,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Moderate \$50,001 to \$100,000
Multi-year

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Transfer Station Roof Repair**
 Department: **PUBLIC WORKS**
 Physical Location: **55 Old Summit Road**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Maintain recycling facility to enable continued processing of recyclables**



PROJECT DESCRIPTION/JUSTIFICATION

The Solid Waste Facility was built in 1994. The Solid Waste Division, through CMA Engineers, the original designers of the facility, conducted an evaluation of the site in 2013 to review drainage systems, building condition, and road systems. The evaluation resulted in recommendations for short and long term capital needs to maintain the Facility. The facility has undergone some short term improvements recommended including reinforcement of the upper portion of the push wall at the Transfer Station to prevent damage to the siding and replacement of damaged siding. One of the pressing long term capital needs is a replacement of the roof on the solid waste facility building. Small leaks are beginning to appear in the roof which are patched as necessary, but the overall integrity of the roof, which was designed to last 20 years, is starting to become compromised in the 21 year old facility. The roof will be evaluated every year to determine if the project needs to be accelerated or can be deferred.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					166,750			166,750
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$166,750	\$0	\$0	\$166,750
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded					166,750			166,750
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$166,750	\$0	\$0	\$166,750

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Transfer Station Floor Repair**
 Department: **Public Works**
 Physical Location: **55 Old Summit Road**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Renewable Energy and Efficient Use of Resources**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Allows for continued processing of solid waste**



PROJECT DESCRIPTION/JUSTIFICATION

The addition to the transfer station was completed in 2002. Since that time over 420,000 tons (840,000,000 pounds, or 16,800 tractor trailer loads), of refuse has been processed at the facility. The wear and tear of heavy vehicles has worn off the top course of concrete and has resulted in exposure of rebar on the concrete tipping floor which is a prelude to the floor eventually breaking apart as the floor thickness is reduced and is unable to support the weight of the vehicle traffic. The extent of wear areas makes spot repair impractical, therefore floor replacement is recommended. The scope of work would include removal and replacement of existing 45' by 65' floor, repair of the 65' knee wall that separates the tipping floor from the tractor trailer tunnel and replacement of the grating used for drainage (to a storage tank that is pumped and treated at the Wastewater Treatment Facility). The temporary transfer station located on the upper level of the facility will be used during construction.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		207,828						207,828
Property/Equip. Acquisition								0
TOTAL	\$0	\$207,828	\$0	\$0	\$0	\$0	\$0	\$207,828
FUNDING								
Current Revenue								0
Capital Reserve								0
Debt Funded		207,828						207,828
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$207,828	\$0	\$0	\$0	\$0	\$0	\$207,828

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: Ongoing CIP

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CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY16-FY21
Sewer fund Multi-Year Projections

	ACTUAL FY 12/13	ACTUAL FY 13/14	BUDGET FY 14/15	PROJECTED FY 15/16	PROJECTED FY 16/17	PROJECTED FY 17/18	PROJECTED FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21
REVENUES									
Taxes	\$44,907	\$43,473	\$42,663	\$40,194	\$38,841	\$36,518	114,811	117,107	119,449
Intergovernmental	398,777	1,501,143	106,752	108,189	110,353	112,560	6,864,665	6,988,460	6,902,591
Charges for Services	5,348,643	5,911,507	6,425,354	6,857,821	6,941,543	6,665,254	10,283	10,489	10,699
Miscellaneous	80,893	18,025	9,500	9,690	9,884	10,081			
Use of Surplus			(1,036,948)	69,000					
TOTAL REVENUES	\$5,873,220	\$7,474,148	\$5,547,321	\$7,084,894	\$7,100,621	\$6,824,413	\$6,989,759	\$7,116,056	\$7,032,739
EXPENSES									
Sewer Administration	\$745,478	\$708,279	\$715,619	\$669,593	\$677,695	\$685,895	\$694,195	\$702,594	\$711,096
Mains & Manholes	297,264	342,057	343,154	337,660	\$341,746	\$345,881	\$350,066	\$354,302	\$358,589
Services	23,363	5,594	7,688	7,781	\$7,875	\$7,970	\$8,067	\$8,165	\$8,263
Martell Court pump stn	128,689	117,024	167,067	152,957	\$154,807	\$156,681	\$158,576	\$160,495	\$162,437
Laboratory	193,610	198,315	218,221	216,438	\$219,056	\$221,707	\$224,390	\$227,105	\$229,853
Maintenance	117,303	100,643	157,595	150,996	\$152,823	\$154,672	\$156,544	\$158,438	\$160,355
WWTP	2,362,359	2,602,190	2,781,370	2,718,400	2,751,292	2,784,583	2,818,276	\$2,852,378	\$2,886,891
Depreciation Expense	926,686	899,701	979,700	1,142,200	1,316,122	1,335,864	1,349,222	\$1,362,715	\$1,376,342
Debt Service - CURRENT	179,803	185,796	176,907	327,294	288,677	254,689	223,781	193,612	163,972
Debt Service - PROJECTED							19,995	38,657	61,457
SUBTOTAL	4,974,555	5,159,599	5,547,321	\$5,723,319	5,910,094	5,947,942	6,003,112	6,058,461	6,119,255
MINOR CAPITAL	93,240	299,175	0	\$0	0	0	0	0	0
TOTAL EXPENSE	\$5,067,795	\$5,458,774	5,547,321	5,723,319	\$5,910,094	\$5,947,942	\$6,003,112	\$6,058,461	\$6,119,255
NET REVENUE (EXPENSE)	\$805,425	\$2,015,373	\$0	\$1,361,575	\$1,190,527	\$876,471	\$986,647	\$1,057,595	\$913,484
SEWER FUND INCREASE	-3.69%	7.71%	1.62%	3.17%	3.26%	0.64%	0.93%	0.92%	1.00%

This section adjusts Net Revenue (Expense) to include uses of cash not recorded as expense, and to exclude expenses that do not require the use of cash. The purpose of the adjustment is to reflect the projected uses of cash from FY 16 thru FY 21:

Add Back: Depreciation	\$1,142,200	\$1,316,122	\$1,335,864	\$1,349,222	\$1,362,715	\$1,376,342
State Aid Grant Principal Receipts	121,871	118,591	116,488	57,078	\$55,628	\$54,257
Subtract: Debt Svc Principal Current Debt (Note 3)	(1,677,261)	(1,661,331)	(1,384,997)	(1,344,056)	(1,345,659)	(1,333,431)
Principal: New Debt (Note 3)					(76,171)	(76,171)
Tfirs to Capital Reserve (Note 2)	(700,000)	(800,000)	(775,000)	(875,000)	(875,000)	(750,000)
Capital Outlays Funded through Rates and Fund Resources (Note 2)	(248,385)	(163,909)	(168,826)	(173,891)	(179,108)	(184,481)
Projected Annual Cash Surplus (Deficit)	\$0	\$0	\$0	\$0	\$0	\$0

Note 1: Net Revenue (Expense) indicates the anticipated increase (decrease) in retained earnings at the end of the year.

Note 2: Net revenue is anticipated to pay for debt service and capital improvements.

Note 3: Debt Service principal, capital outlays, state aid grant principal receipts, and transfers to reserves are balance sheet transactions, and are not included in expenses.

Note 4: Budgeted revenues exclude Use of Surplus / Fund Balance.

Note 5: Additional revenue raised in FY 15-21 to cover capital outlays and debt service in FY 15-21 and future years.

Note 6: Intergovernmental Revenues in FY 2014 includes \$1,131,996 in NH Department of Environmental Services state aid grants for completed infrastructure projects. This amount was included as a receivable on the FY 2014 year end balance sheet and is receivable in annual installments through 2034.

Billing Projections

Combined Water and Sewer Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter

Projected Quarterly Bill	\$	312.10	\$	324.09	\$	329.70	\$	338.61	\$	349.68	\$	360.21
Change from Prior Year	\$	3.43	\$	11.99	\$	5.61	\$	8.91	\$	11.07	\$	10.53
Percentage change		1.11%		3.84%		1.73%		2.70%		3.27%		3.01%

Sewer Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter

Projected Quarterly Bill	\$	197.27	\$	201.86	\$	195.65	\$	201.59	\$	205.37	\$	204.29
Change from Prior Year	\$	5.00	\$	4.59	\$	(6.21)	\$	5.94	\$	3.78	\$	(1.08)
Percentage change		2.60%		2.33%		-3.08%		3.04%		1.88%		-0.53%

CITY OF KEENE, NEW HAMPSHIRE

Sewer Fund 2016 - 2021 Capital Improvement Program Summary

Dept.	Project Name	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	TOTAL
Public Works	Reserve: Martell Court	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
Public Works	Reserve: Sewer Infrastructure	450,000	500,000	475,000	575,000	575,000	450,000	3,025,000
Public Works	Reserve: Wastewater Treatment Plant	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000
Public Works	Inflow and Infiltration Study Phase 2	48,750	-	-	-	-	-	48,750
Public Works	Laboratory Equipment Replacement	38,575	15,293	-	-	-	-	53,868
Public Works	Martell Court Force Main Emergency Plan	-	45,000	-	-	-	-	45,000
Public Works	Martell Court Headworks Treatment	200,000	-	-	1,142,560	-	-	1,342,560
Public Works	Martell Court Phase 2	-	-	10,925	58,667	127,000	-	196,592
Public Works	Martell Court Roof Replacement	10,135	-	-	-	-	-	10,135
Public Works	Sewer Main - State Bypass project	-	346,300	-	-	-	-	346,300
Public Works	Sewer Main Improvements	906,322	996,773	145,700	145,259	661,301	1,455,512	4,310,867
Public Works	Sewer Mains - Bridges Improvements	45,100	-	40,000	43,500	-	-	128,600
Public Works	Sewer Structural Repairs	159,135	163,909	168,826	173,891	179,108	184,481	1,029,350
Public Works	WWTP Aeration Basin Gate Replacement	13,080	197,260	-	-	-	-	210,340
Public Works	WWTP Blower Replacement	-	-	-	68,741	179,361	184,741	432,843
Public Works	WWTP Generator Replacement	-	-	-	21,131	120,035	-	141,166
Public Works	WWTP Non-Potable Water System	-	-	-	65,400	-	-	65,400
Public Works	WWTP NPDES Permitting	40,500	-	-	-	-	-	40,500
Public Works	WWTP Sludge Pump Replacement	-	52,000	-	-	-	-	52,000
TOTAL CAPITAL PROGRAM		\$ 2,161,597	\$ 2,616,535	\$ 1,140,451	\$ 2,594,149	\$ 2,141,805	\$ 2,574,734	\$ 13,229,271

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Laboratory Equipment Replacement	\$ 38,575	\$ 15,293	-	-	-	-	\$ 53,868
Public Works	Martell Court Force Main Emergency Plan	-	45,000	-	-	-	-	45,000
Public Works	Martell Court Headworks Treatment	98,977	-	-	-	-	-	98,977
Public Works	Martell Court Phase 2	-	-	10,925	58,667	127,000	-	196,592
Public Works	Sewer Main - State Bypass project	-	346,300	-	-	-	-	346,300
Public Works	Sewer Main Improvements	906,322	996,773	145,700	145,259	661,301	-	2,855,355
Public Works	Sewer Mains - Bridges Improvements	45,100	-	40,000	43,500	-	-	128,600
Public Works	WWTP Aeration Basin Gate Replacement	-	197,260	-	-	-	-	197,260
Public Works	WWTP Blower Replacement	-	-	-	7,665	179,361	184,741	371,767
Public Works	WWTP Generator Replacement	-	-	-	21,131	120,035	-	141,166
Public Works	WWTP Non-Potable Water System	-	-	-	65,400	-	-	65,400
Public Works	WWTP Sludge Pump Replacement	-	52,000	-	-	-	-	52,000
Total: Reserve Funded Projects		\$ 1,088,974	\$ 1,652,626	\$ 196,625	\$ 341,622	\$ 1,087,697	\$ 184,741	\$ 4,552,285

Projects Funded with Debt

Public Works	Martell Court Headworks Treatment	\$ -	\$ -	\$ -	\$ 1,142,560	\$ -	\$ -	\$ 1,142,560
Public Works	Sewer Main Improvements	-	-	-	-	-	1,455,512	1,455,512
Total: Projects Funded with Debt		\$ -	\$ -	\$ -	\$ 1,142,560	\$ -	\$ 1,455,512	\$ 2,598,072

Projects Funded with Grants

Public Works	N/A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Projects Funded with State Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Capital Reserve Appropriations

Public Works	Reserve: Martell Court	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
Public Works	Reserve: Sewer Infrastructure	450,000	500,000	475,000	575,000	575,000	450,000	3,025,000
Public Works	Reserve: Wastewater Treatment Plant	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000
Total: Capital Reserve Appropriations		\$ 700,000	\$ 800,000	\$ 775,000	\$ 875,000	\$ 875,000	\$ 750,000	\$ 4,775,000

CITY OF KEENE, NEW HAMPSHIRE
Sewer Fund 2016 - 2021 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2015/2016</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>TOTAL</u>
<u>Projects Funded with Cash</u>								
Public Works	Inflow and Infiltration Study Phase 2	\$ 48,750	-	-	-	-	-	48,750
Public Works	Martell Court Headworks Treatment	101,023	-	-	-	-	-	101,023
Public Works	Martell Court Roof Replacement	10,135	-	-	-	-	-	10,135
Public Works	Sewer Structural Repairs	159,135	163,909	168,826	173,891	179,108	184,481	1,029,350
Public Works	WWTP Aeration Gate Replacement	13,080	-	-	-	-	-	13,080
Public Works	WWTP Blower Replacement	-	-	-	61,076	-	-	61,076
Public Works	WWTP NPDES Permitting	40,500	-	-	-	-	-	40,500
Total: Projects Funded with Cash		\$ 372,623	\$ 163,909	\$ 168,826	\$ 234,967	\$ 179,108	\$ 184,481	\$ 1,303,914
Subtotal: Uses of Current Cash		\$ 1,072,623	\$ 963,909	\$ 943,826	\$ 1,109,967	\$ 1,054,108	\$ 934,481	\$ 6,078,914
(Capital Reserve Appropriations plus Projects Funded with Current Cash)								
TOTAL: CAPITAL PROGRAM		\$ 2,161,597	\$ 2,616,535	\$ 1,140,451	\$ 2,594,149	\$ 2,141,805	\$ 2,574,734	\$ 13,229,271

New cash Requirement FY 16-21: reconciliation

Total: Uses of cash	\$1,072,623	\$963,909	\$943,826	\$1,109,967	\$1,054,108	\$934,481	\$6,078,914
Headworks Replacement: FY 14 Authorization	(\$101,023)						(\$101,023)
M-C Roof Replacement: FY 13 Authorization	(\$10,135)						(\$10,135)
WWTP Aeration Gate: FY 14 Authorization	(\$13,080)						(\$13,080)
WWTP Blower Replace: FY 14 Authorization				(\$61,076)			(\$61,076)
WWTP Grit Removal: FY 14 Authorization							\$0
Sewer Structural Repairs (FROM 08064)	(\$69,000)						(\$69,000)
New Funds needed	\$ 879,385	\$ 963,909	\$ 943,826	\$ 1,048,891	\$1,054,108	\$934,481	\$5,824,600

Sewer Fund 2016 - 2021 Capital Improvement Program Debt Summary

	FY16	FY17	FY18	FY19	FY20	FY21
Existing and Authorized Debt	\$14,771,445	\$13,094,184	\$11,432,853	\$10,047,856	\$9,846,360	\$8,424,531
New Issues Proposed		-		1,142,560	-	1,455,212
Principal Paid	(1,677,261)	(1,661,331)	(1,384,997)	(1,344,056)	(1,421,830)	(1,409,601)
Total Existing Debt & Issues Proposed	\$13,094,184	\$11,432,853	\$10,047,856	\$9,846,360	\$8,424,531	\$8,470,141

	Issue	Term	FY16	FY17	FY18	FY19	FY20	FY21
Existing & Authorized Debt Service (P & I)			\$2,004,555	\$1,950,009	\$1,639,686	\$1,567,837	\$1,539,271	\$1,497,403
<u>Proposed Debt Service CIP FY16</u> N/A								
<u>Proposed Debt Service CIP FY17</u> N/A								
<u>Proposed Debt Service CIP FY18</u> N/A								
<u>Proposed Debt Service CIP FY19</u> Martel Court Headworks Treatment	1,142,560	15				19,995	114,827	112,161
<u>Proposed Debt Service CIP FY20</u> N/A								
<u>Proposed Debt Service CIP FY21</u> Sewer Main Replacement	1,455,212	10						25,466
Total CIP16-21 Debt Service Proposed			0	0	0	19,995	114,827	137,628
Total Projected Debt Service: Sewer Fund			\$2,004,555	\$1,950,009	\$1,639,686	\$1,587,831	\$1,654,099	\$1,635,031

CAPITAL RESERVE -- Martell Court Pump Station

The projected balance of the capital reserve at the end of FY 21 is projected to be \$521,809, or 10% of the estimated replacement cost of covered assets.

Major Equipment/Systems	Year Constructed	Expected Life (years)	Estimated Replace/Install Date	Present Replace/Install Cost
Solids Grinder	1992	15	Rehab in FY16	\$1,177,994
Generator/Transformer	1985	35	2020	\$187,515
Martel Court Roof	1985	30	Repair in FY16	\$71,735
Building and Systems	1985	50	2035	\$2,959,487
7 Sewage Diversion Gates	2014	20	2024	\$120,000
4 Raw Sewage Pumps and Controls	2014	20	2024	\$1,500,000
Total				\$6,016,731

Details of the appropriations from the Martell Court Capital Reserve Fund - FY16 through 21

FY16	\$	98,977	Headworks Design
FY17	\$	45,000	MCPS Force Main Study
FY18	\$	10,925	MCPS Phase 2 Design
FY19	\$	58,667	MCPS Phase 2 Construction and Implementation
FY20	\$	127,000	MCPS Phase 2 Equipment Acquisition
FY21		N/A	
Total	\$	340,569	



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Capital Reserve - Martell Court**
 Department: **Public Works - Sewer Fund**
 Physical Location:
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Financial responsibility and sustainability.**



PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major planned and unplanned repairs and systems replacement at the Martell Court Pump Station. The *Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and acts as a rainy day fund to provide funding in the case of emergency expenditure that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the Martell Court capital reserve fund balance at 3-5% of the approximate current replacement value of the Martell Court Pump Station assets.

The City Council's fiscal policy establishes Capital Reserves, under State of NH law invested by the Trustees of Trust Funds, for specific purposes, including construction, reconstruction, or acquisition of a capital improvement or capital equipment.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		98,977	45,000	10,925	58,667	127,000		340,569
Property/Equip. Acquisition								
TOTAL	\$0	\$98,977	\$45,000	\$10,925	\$58,667	\$127,000	\$0	\$340,569
FUNDING								
Current Revenue	603,772	0	50,000	50,000	50,000	50,000	50,000	853,772
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,509	1,391	1,407	1,508	1,490	1,301	8,606
TOTAL	\$603,772	\$1,509	\$51,391	\$51,407	\$51,508	\$51,490	\$51,301	\$862,378

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

CAPITAL RESERVE -- SEWER INFRASTRUCTURE

The projected balance of the capital reserve at the end of FY 21 is projected to be \$1,158,717, or 1.5% of the estimated replacement cost of covered assets.

Equipment	Year Constructed	Expected Life (years)	Estimated Replace/Install Date	Present Replace/Install Cost
Court Street Lift Station *	1976	50	2026	\$182,287
Bradco Lift Station *	1981	50	2031	\$187,561
Farmstead Common Lift Station *	1992	50	2042	\$219,977
Black Brook Lift Station *	1996	50	2046	\$189,122
subtotal				<u>\$778,947</u>
Wastewater Collection System**	1890-present	50-75	ongoing	\$74,357,000
Total				<u>\$75,135,947</u>

* Expected life for buildings and infrastructure is 50 years. The various mechanical and equipment components have an expected life of 10-15 years.

** There are more than 86 miles of sewer mains in Keene with ages ranging from 1 to 120 years. Replacement cost is estimated from the 2013 Infrastructure Report.

Details of the appropriations from the Sewer Infrastructure Capital Reserve Fund - FY16 through 21

FY16	\$906,322 Sewer Main Improvements \$45,100 Lower Main St - Rte 12 bridge utilities
FY17	\$996,773 Sewer Main Improvements \$346,300 Winchester St. Sewer Main (Bypass project)
FY18	\$145,700 Sewer Main Improvements \$40,000 Roxbury St Bridge utilities
FY19	\$145,259 Sewer Main Improvements \$43,500 Winchester St - Rte 10 Ash Swamp bridge utilities
FY20	\$661,301 Sewer Main Improvements
Total	\$3,330,255



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Capital Reserve-Sewer Infrastructure**
 Department: **Public Works - Sewer Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Municipal Governance & Financial Stability**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Financial responsibility and sustainability**



PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major planned and unplanned repairs and systems replacement in the wastewater collection system. The *Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and acts as a rainy day fund to provide funding in the case of emergency expenditure that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the infrastructure capital reserve fund balance at 3-5% of the approximate current replacement value of the infrastructure assets.

The City Council's fiscal policy establishes Capital Reserves under State of NH law, invested by the Trustees of Trust funds, for specific purposes including construction, reconstruction, or acquisition, or a capital improvement, or capital equipment.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		951,422	1,343,073	185,700	188,759	661,301		3,330,255
Property/Equip. Acquisition								0
TOTAL	\$0	\$951,422	\$1,343,073	\$185,700	\$188,759	\$661,301	\$0	\$3,330,255
FUNDING								
Current Revenue	1,445,418	450,000	500,000	475,000	575,000	575,000	450,000	4,470,418
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		4,739	3,621	1,461	2,437	3,409	2,890	18,557
TOTAL	\$1,445,418	\$454,739	\$503,621	\$476,461	\$577,437	\$578,409	\$452,890	\$4,488,975

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Ongoing

PROJECT STATUS:

Ongoing CIP

CAPITAL RESERVE -- WASTEWATER TREATMENT PLANT

The projected balance of the capital reserve at the end of FY 21 is projected to be \$664,984, or 2.2% of the estimated replacement cost of covered assets.

Equipment	Year Constructed	Expected Life (years)	Estimated Replace/Install Date	Present Replace/Install Cost
Grit Removal Rehab (rehabilitation FY18)	1985	25	2028	\$2,052,426
Dewatering Equipment	1985	15	2015	\$3,276,000
WWTP Blower Replacement	1985	25	2018-2020	\$420,236
WWTP Roof Replacement	1985	25	2015	\$198,380
Sludge Pump Replacement (rehabilitation FY17)	1985	20	2028	\$648,571
Aeration Basin Gate Mixer Replacement	1985	20	2016-2017	\$185,340
Non-potable Service Water System	1985	25	2019	\$65,400
Building, Systems, and Equipment	1985	50	2035	\$24,006,905
Total				\$30,853,258

Details of the appropriations from the WWTP Capital Reserve Fund -FY16 through 21

FY 16	\$	38,575	Laboratory Equipment Replacement
FY17	\$	197,260	WWTP Aeration Gate/Mixer Replacement
	\$	52,000	WWTP Sludge pump replacement
	\$	15,293	Laboratory Equipment Replacement
FY18		N/A	
FY19	\$	65,400	WWTP Non-potable Service Water System
	\$	21,131	WWTP Generator replacement design
	\$	7,665	WWTP Blower Replacement
FY20	\$	120,035	WWTP Generator replacement
	\$	179,360	WWTP Blower Replacement
FY21	\$	184,741	WWTP Blower Replacement
Total	\$	881,460	



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Capital Reserve - WWTP**
 Department: **Public Works - Sewer Fund**
 Physical Location: **420 Airport Road**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Municipal Governance & Financial Stability**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Financial responsibility and sustainability.**



PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major planned and unplanned repairs and systems replacement at the Wastewater Treatment Plant. The *Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and acts as a rainy day fund to provide funding in the case of emergency expenditure that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the infrastructure capital reserve fund balance at 3-5% of the approximate current replacement value of the infrastructure assets.

The City Council's fiscal policy establishes Capital Reserves, under State of NH law invested by the Trustees of Trust funds, for specific purposes including construction, reconstruction, or acquisition, or a capital improvement, or capital equipment.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		38,575	264,553		94,196	299,396	184,741	881,461
TOTAL	\$0	\$38,575	\$264,553	\$0	\$94,196	\$299,396	\$184,741	\$881,461
FUNDING								
Current Revenue	37,066	250,000	250,000	250,000	250,000	250,000	250,000	1,537,066
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		718	1,248	1,215	1,843	2,237	2,118	9,379
TOTAL	\$37,066	\$250,718	\$251,248	\$251,215	\$251,843	\$252,237	\$252,118	\$1,546,445

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Multi-year

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Inflow and Infiltration Study - Ph 2**
 Department: **Public Works - Sewer Fund**
 Physical Location: **Various**
 Federal Mandate: **NPDES permit requires I and I reduction**

State Regulation or Law: **N/A**

Master Plan (CMP) Focus Area: **Quality Built Environment**

CMP Vision/Strategy: **Infrastructure**

Council Initiative: **N/A**

V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**

Departmental Objective: **Reduction in the volume of clean water that is collected, pumped and treated through the sewer infrastructure facilities**



PROJECT DESCRIPTION/JUSTIFICATION

Although the City's storm drains are separate from its sanitary sewer, at times the Wastewater Treatment Plant (WWTP) receives higher than normal flows due to the introduction of relatively clean stormwater into the wastewater collection system through leaking sewer mains or services and improperly connected sump pumps. Storm events such as the ones in March and September of 2011 and the flood of 2005 have resulted in a 4-fold increase in wastewater flows within hours after the storm begins and can last for weeks afterwards. These high flows, consisting of clean water that doesn't require treatment, can cause violations of the City's wastewater discharge permit through biological upsets, operational problems, and pumping issues at the Martell Court Pump Station. The high flows add to operating costs through significant increases in grit deposits, staff overtime, electrical demand at the pump stations, and chemical volume.

In 2014 The City, through its consultant, completed phase one of an evaluation of the City's wastewater collection system to identify areas with an increased sewer flow during or after storm events. The study identified 4 general areas of high inflow and infiltration (I&I) that require additional investigation to identify the sources of the extra water. This project funds Phase 2 of a more in-depth analysis of the "high I/I flow areas" of the collection system. The result of this Phase 2 evaluation will include directed flow monitoring and smoke testing to narrow the locations of specific problems areas of the collection system. Those locations will then be televised to identify the source and cause. The repair of leaking sewer sections will then prioritized through the Sewer Improvement and Sewer Repair capital projects. The remainder of the common sources of high flow, leaking sewer services and sump pumps, can be addressed in future projects.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		48,750						48,750
Property/Equip. Acquisition								0
TOTAL	\$0	\$48,750	\$0	\$0	\$0	\$0	\$0	\$48,750
FUNDING								
Current Revenue		48,750						48,750
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$48,750	\$0	\$0	\$0	\$0	\$0	\$48,750

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Create efficiencies
One time

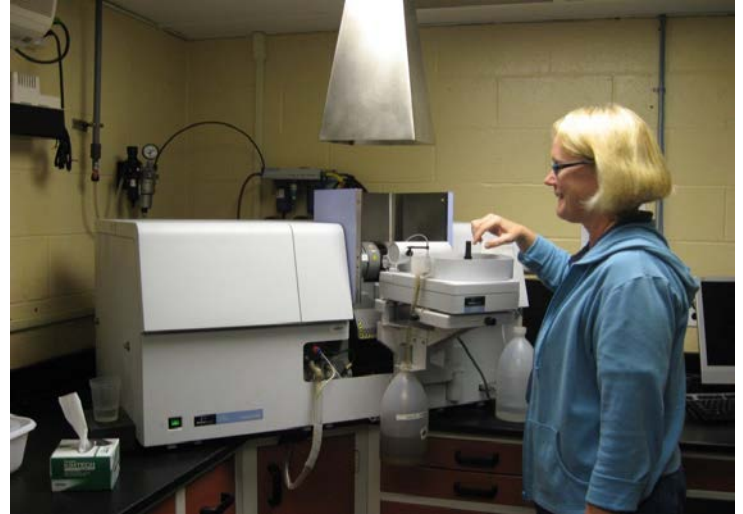
PROJECT STATUS: Ongoing CIP
Phase 2



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Laboratory Equipment**
 Department: **Public Works - Sewer Fund**
 Physical Location: **420 Airport Road**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Accurate and timely lab results at the most affordable cost**



PROJECT DESCRIPTION/JUSTIFICATION

This project funds the replacement of two pieces of laboratory equipment: one is used to test for metals and the second determines the amount of water in a sample. The Laboratory's Atomic Absorption Spectrophotometer (AA) is used to test trace metals and, as part of the equipment replacement schedule, is proposed for replacement in FY16. This piece of equipment was installed in 2005 and is approaching the end of its useful life as evidenced through increased downtime caused by failure of its electrical components. Analysis of wastewater, septage, surface water, groundwater, and drinking water that is performed in-house using this instrument would cost the City approximately \$32,850 per year if it were contracted out. The request is split between the water and sewer funds. \$1,000 for installation is allocated in each fund and the cost of a Power conditioner/ Uninterruptible power supply (\$4,600) is included in the FY16 project cost.

The laboratory uses an analytical grade solids drier to test the percent solids in wastewater sludge and dewatered cake samples. The current drier was purchased in 2002 and is scheduled for replacement in FY17. The information generated by this instrument is used to determine the dewatering equipment's effectiveness and to optimize the dewatering process. The manufacturer's quote for 2013 has been adjusted by 3% per year through FY17. No additional installation expenses are anticipated.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		1,000						1,000
Property/Equip. Acquisition		37,575	15,293					52,868
TOTAL	\$0	\$38,575	\$15,293	\$0	\$0	\$0	\$0	\$53,868
FUNDING								
Current Revenue								0
Capital Reserve		38,575	15,293					53,868
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$38,575	\$15,293	\$0	\$0	\$0	\$0	\$53,868

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Martell Court Pump Station
Emergency Plan
Department: Public Works - Sewer Fund
Physical Location: Martell Court to Wastewater Plant
Federal Mandate: N/A
State Regulation or Law: N/A
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Infrastructure
Council Initiative: N/A
V.O.I.C.E.: Establish Priorities
Departmental Objective: Emergency Response Planning



30 inch ductile iron force main

PROJECT DESCRIPTION/JUSTIFICATION

The Martell Court Pump station is the weakest link in the City's 86 mile collection system. It is the point where all of the wastewater from the City is collected and then pumped to the WWTP. There is no other route for wastewater to get to the WWTP except passing through the pump station and being pumped more than a mile in a force main that was installed in 1985. The 2014 station upgrade highlighted the importance of maintaining flow when calculations revealed there are limited hours of response time to a station failure before sewage overflows into streets and/or basements. The length of the forcemain and the volume of water that pass through it make response to its failure difficult. This project funds a study that will result in an emergency response plan in the case of station or forcemain failure and recommendations for forcemain investigation or construction in a future CIP.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design			45,000					45,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$45,000	\$0	\$0	\$0	\$0	\$45,000
FUNDING								
Current Revenue								0
Capital Reserve			45,000					45,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$45,000	\$0	\$0	\$0	\$0	\$45,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: New Project

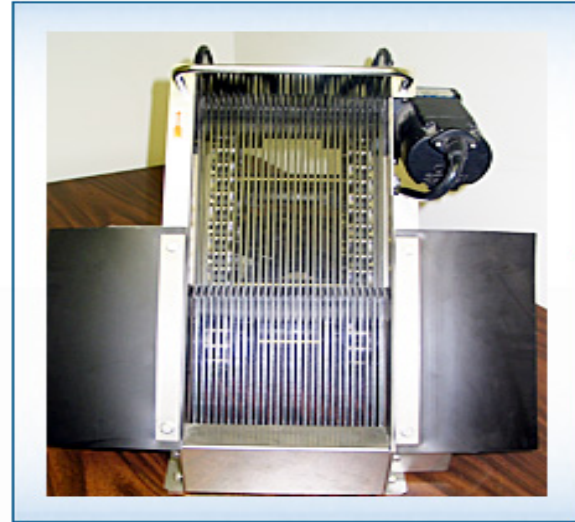


CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Head Works Treatment**
 Department: **Public Works - Sewer Fund**
 Physical Location: **176 Martell Court**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Healthy Living**
 Council Initiative: **N/A**
 V.O.I.C.E.: **N/A**
 Departmental Objective: **Protect downstream equipment from damage by removing rags, wipes, and plastics from the waste stream**



Example of screening equipment

PROJECT DESCRIPTION/JUSTIFICATION

This project funds an engineering study to select equipment and develop design and bid documents to install treatment and solids handling equipment at the Martell Court Pump Station in FY16. The existing grinding equipment will no longer be supported by the manufacturer after 2020 so replacement parts will not be available after that date, but it is expected that staff will be able to keep the existing equipment operational until then. The existing equipment was installed in the mid-1990's and in the previous CIP was scheduled for a major rehabilitation in FY16 to prolong its useful life through FY21 when a new system would be selected. This project has been moved up in the CIP because of the manufacturer's recent announcement.

All of the raw wastewater from Keene and Marlborough flows through the main pump station located on Martell Court where rags, trash and other solids are currently chopped into small pieces through a grinder. Newer types of equipment are available that remove the solids instead of grinding them to prevent the ground up material from recombining at the WWTP where it causes equipment damage. The equipment selection process will identify a range of options including screening the wastewater to remove this material.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design		200,000						200,000
Construction/Implementation					1,142,560			1,142,560
Property/Equip. Acquisition								0
TOTAL	\$0	\$200,000	\$0	\$0	\$1,142,560	\$0	\$0	\$1,342,560
FUNDING								
Current Revenue								
Capital Reserve	101,023	98,977						200,000
Debt Funded					1,142,560			1,142,560
Federal or State Grants								0
Other Sources								0
TOTAL	\$101,023	\$98,977	\$0	\$0	\$1,142,560	\$0	\$0	\$1,342,560

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Create efficiencies
One time

PROJECT STATUS: Re-introduced



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Martell Court Upgrade Phase 2**
 Department: **Public Works - Sewer Fund**
 Physical Location: **176 Martell Court**
 Federal Mandate: **The City's NPDES permit requires the City to have back up power.**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Unique Natural Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Reliable operation of the City's main sewage pumping station during power outages**



PROJECT DESCRIPTION/JUSTIFICATION

Phase 2 of the Martell Court Pump Station upgrade consists of the replacement of the transformer and generator that were installed when the Station was built in 1985. The FY18 request is for design of the 15 KVA transformer replacement and FY19 funds purchase and installation of a new transformer. The transformer converts high voltage power to secondary 480 volt power that is used to operate the station when line power is available. In FY19, the transformer will be 35 years old and approaching the end of its reliable life. FY19 also funds design for the replacement of the station's 620 kw generator and FY20 funds the purchase and installation of the generator equipment. By FY20, the generator will be 36 years old and parts will be obsolete. The generator provides power to keep the station's 4 large raw sewage pumps operating when line power is interrupted. A failure of the generator would result in sewage back up in streets and building flooding within several hours of losing line power.

Phase 1 of the Pump Station upgrade was funded in FY14 and included the replacement of 4 raw sewage pumps and their associated controls. It also included replacement of the seven gates that control sewage flow into and through the station's wet well. The project is scheduled to be complete by the end of 2014.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design				10,925	21,131			32,056
Construction/Implementation					37,536	127,000		164,536
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$10,925	\$58,667	\$127,000	\$0	\$196,592
FUNDING								
Current Revenue								0
Capital Reserve				10,925	58,667	127,000		196,592
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$10,925	\$58,667	\$127,000	\$0	\$196,592

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible < \$5,001
One time

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Martell Court Roof Repair**
 Department: **Public Works - Sewer Fund**
 Physical Location: **176 Martell Court**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **N/A**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Maintenance and protection of physical assets**



PROJECT DESCRIPTION/JUSTIFICATION

This project repairs the roof at the Martell Court Pump Station (MCPS). The rubber roof was installed in 1984 has a typical life expectancy of 15-20 years. Rubber deteriorates with age due to the effects of ultraviolet rays and the hydrogen sulfide gas that is emitted from the building's roof top air handlers. Some repairs have been made to the roof already and, with other small repairs, the existing roof is expected to last through FY21. The scope of this project has been reduced from the previous CIP based on a re-evaluation of the roof's condition.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		10,135						10,135
Property/Equip. Acquisition								0
TOTAL	\$0	\$10,135	\$0	\$0	\$0	\$0	\$0	\$10,135
FUNDING								
Current Revenue								0
Capital Reserve	10,135	0						10,135
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$10,135	\$0	\$0	\$0	\$0	\$0	\$0	\$10,135

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
N/A

PROJECT STATUS: Ongoing CIP

Water and Sewer Improvements

The City's strategy for identifying and prioritizing water and sewer improvements in conjunction with roadwork for this Capital Improvement Program is a combination of the sewer condition and the Road Overlay Program. It has evolved from its "Dig the Road Once" philosophy as the City's obligation under the 2004 Administrative Order requiring the replacement of specific sewers is complete. Sewer improvements in FY16-19 reflect condition-driven projects and are not associated with road rehabilitation projects.

A 2012 assessment of the City's paved streets used the pavement condition and traffic volume to develop a numeric rating. This rating was used to prioritize streets for overlay and streets were grouped into neighborhoods to gain efficiency in construction services and to improve the overall aesthetics of an area.

Before a street is overlaid, its water, sewer, and drain infrastructure is evaluated and repairs/improvements are planned for the year before the overlay is scheduled to avoid digging up a freshly paved road. The water, sewer, and drain evaluations are performed in different ways.

- *Sewers are evaluated according to their condition and capacity.*
 - Condition ratings were generated as part of the Priority Inspection Program that was performed between FY06 and FY11. The results of these inspections have been cataloged and deficiencies that require spot repair, short length lining, or complete lining have been identified.
 - Capacity issues have been identified using the computer model of the collection system. Inflow and infiltration was evaluated in FY14 and is an additional factor in evaluations.

- *Water main evaluations are based on age, pressure/volume, and repair frequency.*
 - While no video is available that shows the condition of the water mains, the age and material are often used as clues to their conditions. As an example, mains that were constructed between 1930 and the 1970's were made of bituminous cast iron pipe (universal pipe) and are prone to leaks. Mains that do not have a cement lining can build up a hard layer of minerals that cannot be removed through the normal flushing programs.
 - The Department operational records are used to identify mains that have experienced a number of breaks.
 - The volume of water the main can transport, and what the relationship is of a given section of main to the rest of the system is evaluated using the water distribution model. If a section does not provide the anticipated volume or pressure, a piece can be cut out and visually inspected to determine the amount of material buildup.

- *The capacity of storm drains is evaluated by the contributing storm drainage area.*
 - If capacity is not adequate the drains are upsized by excavating and replacing the drain with a larger size pipe.
 - A storm drain model that will assist the evaluation of capacity is currently being developed.



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **State Bypass Utilities**
 Department: **Public Works - Sewer Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

This project funds the replacement of sewer mains that are affected by the NH Department of Transportation's construction on Winchester Street between Island Street and the roundabout. The NH Department of Transportation's project does not include funds for sewer utilities that are damaged or need to be replaced due to a state road project. This project funds the time and materials required for the sewer main replacement and does not include road or surface replacement because that work is covered by the corresponding State road project.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			346,300					346,300
Property/Equip. Acquisition								0
TOTAL		\$0	\$346,300	\$0	\$0	\$0	\$0	\$346,300
FUNDING								
Current Revenue								0
Capital Reserve			346,300					346,300
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL		\$0	\$346,300	\$0	\$0	\$0	\$0	\$346,300

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

New Project

SEWER IMPROVEMENT LIST

The following tables outline the sewer improvements planned for **2016 - 2021 Capital Project Funding Request**. The construction cost estimates are based on 2013 prices. A contingency has been added to each project including an allowance for design, construction administration, supplies and overhead costs. The project costs have been adjusted annually by 3% for inflation to give an approximate estimated cost for the year the work is planned.

2016

ROAD NAME	LENGTH	TYPE WORK	EST. COST
Silent Way - Edgewood Interceptor		Replacement	\$641,845

Subtotal			\$641,845
Construction Contingency: 10%			\$64,185
Construction Totals			\$706,030
Design: 10%			\$70,603
Construction Administration: 10%			\$70,603
SUPV. & Overhead: 1%			\$7,060
Project Total			\$854,296
Inflation Factor: 3% / yr x 2 years			\$52,027
Total Sewer Replacement			\$906,322

2017

ROAD NAME	LENGTH	TYPE WORK	EST. COST
Perham Street sewer	1600'	Replacement	\$685,341

Subtotal			\$685,341
Construction Contingency: 10%			\$68,534
Construction Totals			\$753,875
Design: 10%			\$75,388
Construction Administration: 10%			\$75,388
SUPV. & Overhead: 1%			\$7,539
Project Total			\$912,189
Inflation Factor: 3% / yr x 3 years			\$84,585
Total Sewer Replacement			\$996,773

2018

ROAD NAME	LENGTH	TYPE WORK	EST. COST
To Be Determined			

Subtotal			
Construction Contingency: 10%			
Construction Totals			
Design: 5%			
Construction Administration: 10%			
SUPV. & Overhead: 1%			
Project Total			
Inflation Factor: 3% / yr x 4 years			
Total Sewer Replacement			\$145,700

2019

ROAD NAME	LENGTH	TYPE WORK	EST. COST
To Be Determined			

Subtotal			
Construction Contingency: 10%			
Construction Totals			
Design: 10%			
Construction Administration: 10%			
SUPV. & Overhead: 1%			
Project Total			
Inflation Factor: 3% / yr x 5 years			
Total Sewer Replacement			\$145,259

2020

ROAD NAME	LENGTH	TYPE WORK	EST. COST
Blossom Street			\$661,301

Subtotal			
Construction Contingency: 10%			
Construction Totals			
Design: 10%			
Construction Administration: 10%			
SUPV. & Overhead: 1%			
Project Total			
Inflation Factor: 3% / yr x 6 years			
Total Sewer Replacement			\$661,301

2021

ROAD NAME	LENGTH	TYPE WORK	EST. COST
Colony Court			\$1,455,512

Subtotal			
Construction Contingency: 10%			
Construction Totals			
Design: 10%			
Construction Administration: 10%			
SUPV. & Overhead: 1%			
Project Total			
Inflation Factor: 3% / yr x 7 years			
Total Sewer Replacement			\$1,455,512



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Sewer Improvements**
 Department: **Public Works - Sewer Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Improvement in collection system carrying capacity and reliable operation through upgrade of existing mains and elimination of infiltration**



PROJECT DESCRIPTION/JUSTIFICATION

This project represents the ongoing repair or replacement of sewer mains as determined by an evaluation of their condition. Repairs are scheduled the year before a road is overlaid or reconstructed to streamline the paving project. Work in this project corrects substantial deficiencies that cannot be addressed using spot repair.

The work in FY16, FY17 and FY21 is scheduled for mains that are not associated with roads. FY16 replaces the portion of the Edgewood Interceptor that is located in a wetland area and is a significant source of infiltration, FY17 corrects deficiencies that have led to sewer overflows in the Perham Street cross country sewer. FY 21 addresses issues related to the Colony Court-Bloomer Swamp line, and FY 20 work replaces the Blossom Street sewer main. Other years' projects will be identified through the ongoing sewer evaluation process.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design		70,603	75,388	22,467	21,747	45,771	205,395	441,371
Construction/Implementation		835,719	921,385	123,233	123,512	615,530	1,250,117	3,869,496
Property/Equip. Acquisition								0
TOTAL	\$0	\$906,322	\$996,773	\$145,700	\$145,259	\$661,301	\$1,455,512	\$4,310,867
FUNDING								
Current Revenue								0
Capital Reserve		906,322	996,773	145,700	145,259	661,301		2,855,355
Debt Funded							1,455,512	1,455,512
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$906,322	\$996,773	\$145,700	\$145,259	\$661,301	\$1,455,512	\$4,310,867

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Multi-year

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Sewer Utility Work - Bridges**
 Department: **Public Works - Sewer Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

The work funded by this project includes the replacement of sewer mains that are affected by the City's Bridge Replacement program. The State of NH Department of Transportation's bridge program does not provide funds for sewer utilities that are damaged or need to be replaced due to a bridge project. This project funds the time and materials required for the sewer main replacement and does not include road or surface replacement because that portion is covered by the corresponding bridge project.

FY16: Main Street bridge over Beaver Brook. FY18: Roxbury Street bridge over Beaver Brook. FY19: Winchester Street Bridge over Ash Swamp Brook.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		45,100		40,000	43,500			128,600
Property/Equip. Acquisition								0
TOTAL		\$45,100	\$0	\$40,000	\$43,500	\$0	\$0	\$128,600
FUNDING								
Current Revenue								0
Capital Reserve		45,100		40,000	43,500			128,600
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL		\$45,100	\$0	\$40,000	\$43,500	\$0	\$0	\$128,600

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

New Project



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Sewer Structural Repair/Lining
Department: Public Works - Sewer Fund
Physical Location: Various
Federal Mandate: Clean Water Act; NPDES permit
State Regulation or Law: RSA 485-A:13
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Infrastructure
Council Initiative: N/A
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective: Improvement in collection system carrying capacity and reliable operation through small repairs to existing mains and elimination of infiltration and deferring the complete main replacement



PROJECT DESCRIPTION/JUSTIFICATION

This project funds an outside contractor to make more than 200 spot repairs to sewer mains to correct deficiencies that were identified through the Priority Inspection Program. Each type of deficiency has been evaluated and a cost was estimated based on the 2011 repair bid. The cost to repair each deficiency ranges from \$2,500 to \$10,500 depending on the location, complexity and type of repair required. Engineering will be performed in-house and locations are based upon the Priority Inspection program ranking system. The project includes funds for engineering, construction, and inspection of the construction. In addition to the spot repairs, this project also funds lining in location on roads that are scheduled to be overlaid which have very old sewers.

Hundreds of sewer main structural deficiencies have been identified through the Priority Inspection Program. The deficiencies found in these mains include offset joints, holes, or large cracks that can be corrected through a small spot repair, lining, or the replacement of a short portion of the main. This project funds the repair of deficiencies that were identified in sewer mains that do not require complete replacement, or where the street is scheduled for overlay instead of reconstruction and a smaller repair is appropriate. The program to perform spot sewer main repairs by an outside contractor will allow Public Works staff to prioritize other maintenance functions.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		159,135	163,909	168,826	173,891	179,108	184,481	1,029,350
Property/Equip. Acquisition								0
TOTAL	\$0	\$159,135	\$163,909	\$168,826	\$173,891	\$179,108	\$184,481	\$1,029,350
FUNDING								
Current Revenue		159,135	163,909	168,826	173,891	179,108	184,481	1,029,350
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$159,135	\$163,909	\$168,826	\$173,891	\$179,108	\$184,481	\$1,029,350

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Ongoing

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **WWTP Gate & Mixer Replacement**
 Department: **Public Works - Sewer Fund**
 Physical Location: **420 Airport Road**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Operational flexibility at the WWTP to maintain biological nutrient removal**



Aeration basin gate moves up and down inside the frame



PROJECT DESCRIPTION/JUSTIFICATION

This project replaces eight (8) manually operated gates at the Wastewater Treatment Plant that are used to divert wastewater into different units of the biological treatment process and two (2) mixers that are used to combine the active biomass with incoming waste and keep the mixture from settling out. The gates are twenty nine (29) years old and the harsh operating environment has taken its toll. The metal is corroded, the rubber seals leak, and the gate operators are difficult to move. Two (2) original 30 HP, 2 speed, aerator motors and mixers will be replaced with smaller 3 HP, gear reduction mixers.

When fine bubble aeration was installed in 1998, the mechanical aerators were removed, but the motors and mixing equipment remained to provide flexibility for future treatment scenarios. The mixers are used to maximize biological removal of phosphorus, but they are not energy efficient and replacement parts are no longer available. The gates and mixers replaced through this project will be automated and accessible through the WWTP's SCADA system. This project request has been delayed from FY15 to FY17 to reduce cost impact to the Sewer Fund and the project cost was inflated by 3% per year.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design		13,080	50,753					63,833
Construction/Implementation			27,865					27,865
Property/Equip. Acquisition			118,642					118,642
TOTAL	\$0	\$13,080	\$197,260	\$0	\$0	\$0	\$0	\$210,340
FUNDING								
Current Revenue								0
Capital Reserve	13,080		197,260					210,340
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$13,080	\$0	\$197,260	\$0	\$0	\$0	\$0	\$210,340

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible < \$5,001
One time

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Blower Replacement**
 Department: **Public Works - Sewer Fund**
 Physical Location: **420 Airport Road**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Community Sustainability**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Appropriately timed replacement of obsolete equipment with energy efficient models**



PROJECT DESCRIPTION/JUSTIFICATION

This project includes the replacement of six blowers that were originally installed in 1985 with more energy efficient equipment. The replacement of the two largest blowers was funded in FY13 and their installation was completed in FY15. The remaining four blowers include two 75 horse power (HP) blowers that aerate the septage holding tanks, grit chamber, and final effluent and two 40 HP blowers that aerate the sludge storage tank.

FY20 funds the replacement of the two 40HP blowers and FY21 funds the replacement of the two 75 HP blowers. The replacement blowers are expected to be more energy efficient than the existing equipment. Installing more efficient equipment is in line with the City's Vision Focus Areas, specifically Focus Area 1 "Fostering Renewable Energy and Efficient use of Resources". The blowers had been scheduled for replacement in FY15 and FY16, but were pushed out because they are in good repair and a recent energy audit showed the energy savings is not as great as had been expected. It is expected the blower condition will dictate their replacement in FY20 and FY21. A multiplier of 3% per year has been added to the estimated replacement cost.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design					68,741			68,741
Construction/Implementation						53,960	55,578	109,538
Property/Equip. Acquisition						125,401	129,163	254,564
TOTAL	\$0	\$0	\$0	\$0	\$68,741	\$179,361	\$184,741	\$432,843
FUNDING								
Current Revenue							0	0
Capital Reserve	61,076			0	7,665	179,361	184,741	432,843
Debt Funded							0	0
Federal or State Grants							0	0
Other Sources							0	0
TOTAL	\$61,076	\$0	\$0	\$0	\$7,665	\$179,361	\$184,741	\$432,843

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Reduce - will reduce operating costs Ongoing
PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **WWTP Generator Replacement**
 Department: **Public Works - Sewer Fund**
 Physical Location: **Wastewater Treatment Plant**
 Federal Mandate: **The City's NPDES permit requires back up power be available.**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Emergency Preparedness**
 Council Initiative: **N/A**
 V.O.I.C.E.: **N/A**
 Departmental Objective: **To have a reliable supply of emergency power that will allow the treatment process to remain in operation when there is a power outage. Backup power is required by the City's NPDES permit**



PROJECT DESCRIPTION/JUSTIFICATION

This project replaces the WWTP's standby generator that was installed in 1985. The generator was designed to provide backup power to the Plant's critical equipment so that treatment is able to continue when line power is interrupted. Replacement is recommended in FY20 when the system is 35 years old because its reliability may be compromised as replacement parts become harder to procure. During the engineering phase of the 2013 WWTP Upgrade, the design engineer recommended the generator be upgraded to a 500 KW system when it is replaced so it is large enough to supply emergency power to the Plant's dewatering equipment. This project funds design and evaluation of the required equipment in FY19 and generator purchase and installation in FY20.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design					21,131			21,131
Construction/Implementation						120,035		120,035
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$21,131	\$120,035	\$0	\$141,166
FUNDING								
Current Revenue								0
Capital Reserve					21,131	120,035		141,166
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$21,131	\$120,035	\$0	\$141,166

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Service Water System
Department: Public Works - Sewer Fund
Physical Location: 420 Airport Road
Federal Mandate: No
State Regulation or Law: No
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Infrastructure
Council Initiative: N/A
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective: Refurbish old equipment to maintain current level of operation and defer replacement costs



PROJECT DESCRIPTION/JUSTIFICATION

This project refurbishes the non-potable service water system at the Wastewater Treatment Plant. Non-potable service water is wastewater that has received complete treatment and is suitable for discharge into the river, but is not suitable for drinking. To conserve resources, treated water is filtered then recycled for use in applications when drinking quality water is not required. Heat from the treated water will be recovered through heat pumps that will be installed as part of the FY13 WWTP upgrade. The recovered energy will be used to heat and cool the UV disinfection and septage buildings. This project defers a \$131K replacement that had been scheduled for FY17. The eventual replacement will have to be considered after FY23 when the system is 38 years old, or when the replacement parts are no longer available.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation					65,400			65,400
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$65,400	\$0	\$0	\$65,400
FUNDING								
Current Revenue								0
Capital Reserve					65,400			65,400
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$65,400	\$0	\$0	\$65,400

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Permitting Assistance**
 Department: **Public Works - Sewer Fund**
 Physical Location: **420 Airport Road**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Unique Natural Environment**
 CMP Vision/Strategy: **Community Sustainability**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Establish Priorities**
 Departmental Objective: **Assurance of an appropriately developed discharge permit**



PROJECT DESCRIPTION/JUSTIFICATION

This project funds legal and professional assistance for the WWTP's next discharge permit. The WWTP's current discharge permit expired in December 2012 and staff completed the renewal application in June 2012. It is expected the next permit will contain new discharge limits and professional assistance would be used to protect the City's interests during the permitting process.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		40,500						40,500
Property/Equip. Acquisition								0
TOTAL	\$0	\$40,500	\$0	\$0	\$0	\$0	\$0	\$40,500
FUNDING								
Current Revenue		40,500						40,500
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$40,500	\$0	\$0	\$0	\$0	\$0	\$40,500

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Multi-year

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: WWTP Sludge Pump Repair
Department: Public Works - Sewer Fund
Physical Location: 420 Airport Road
Federal Mandate: No
State Regulation or Law: No
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Infrastructure
Council Initiative: N/A
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective: Rehabilitation of existing equipment to extend its useful life and defer replacement costs



PROJECT DESCRIPTION/JUSTIFICATION

This project funds a significant rehabilitation effort to seven (7) positive displacement piston pumps at the Wastewater Treatment Plant. The pumps are used for moving wastewater sludge that has a solids content of 2-6 percent. They were installed in 1985 and are used daily as part of the treatment process. Well timed and careful maintenance has allowed these pumps to remain in service past the manufacturer's expected life of 20 years. These pumps had been scheduled for replacement in FY18, but this investment will extend their useful life through FY24 and defer an estimated replacement cost of \$649K previously scheduled for FY18.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			52,000					52,000
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$52,000	\$0	\$0	\$0	\$0	\$52,000
FUNDING								
Current Revenue								0
Capital Reserve			52,000					52,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$52,000	\$0	\$0	\$0	\$0	\$52,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
 One time

PROJECT STATUS: Ongoing CIP

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**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY16-FY21
WATER FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 12/13	ACTUAL FY 13/14	BUDGET FY 14/15	PROJECTED FY 15/16	PROJECTED FY 16/17	PROJECTED FY 17/18	PROJECTED FY 18/19	PROJECTED FY 19/20	PROJECTED FY 20/21
REVENUES									
Taxes	\$127,236	\$123,173	\$117,090	110,317	106,600	100,228			
Intergovernmental	92,945	49,349							
Charges for Services	3,768,274	3,622,938	3,815,889	3,695,829	3,892,899	4,151,519	4,243,630	4,467,828	4,839,250
Miscellaneous	21,370	24,642	15,733	23,130	23,442	23,757	24,076	24,401	24,729
Use of Surplus			(193,672)	37,820	920,132	100,000	100,000		
TOTAL REVENUES	\$4,009,824	\$3,820,102	\$3,755,041	\$3,867,096	\$4,943,073	\$4,375,504	\$4,367,706	\$4,492,229	\$4,863,979
EXPENSES									
Public Works Water	\$790,375	\$864,950	\$776,018	\$796,051	\$817,942	\$840,435	\$863,547	\$887,295	\$907,614
Water Main & Trench Repairs	202,415	171,659	242,829	\$237,775	\$244,314	\$251,032	\$257,935	\$265,028	\$271,098
Water Supply	129,724	146,827	167,378	\$172,399	\$177,140	\$182,012	\$187,017	\$192,160	\$196,560
Hydrants	89,043	98,788	132,550	\$125,759	\$129,217	\$132,771	\$136,422	\$140,174	\$143,383
Meters	227,896	316,150	373,557	\$384,764	\$395,345	\$406,217	\$417,388	\$428,866	\$438,687
Water Services	60,539	37,915	43,892	\$45,208	\$46,452	\$47,729	\$49,042	\$50,391	\$51,544
Water Treatment Facility	517,978	660,720	714,463	\$716,596	\$736,302	\$756,551	\$777,356	\$798,732	\$817,024
Laboratory	188,926	209,891	239,466	\$239,175	\$245,753	\$252,511	\$259,455	\$266,590	\$272,695
Maintenance	113,313	106,585	149,244	\$139,921	\$143,769	\$147,723	\$151,785	\$155,959	\$159,531
Depreciation Expense	851,819	867,705	871,000	887,588	905,340	923,447	941,915	960,754	\$989,576
Debt Service - CURRENT	103,430	92,725	44,643	35,848	28,061	20,825	15,533	12,555	9,528
Debt Service - PROJECTED								17,885	34,877
Subtotal	3,275,457	3,573,914	3,755,041	3,781,083	3,869,635	3,961,252	4,057,395	4,176,389	4,292,118
MINOR CAPITAL	145,081	538,741	0	0	0	0	0	0	0
TOTAL EXPENSES	\$3,420,538	\$4,112,656	3,755,041	\$3,781,083	\$3,869,635	\$3,961,252	\$4,057,395	\$4,176,389	\$4,292,118
NET REVENUE (EXPENSE)	589,286	(292,553)	0	86,013	1,073,438	414,252	310,311	315,841	571,861

WATER FUND INCREASE -6.00% 5.07% 0.69% 2.34% 2.37% 2.43% 2.93% 2.77%

This section adjusts Net Revenue (Expense) to include uses of cash not recorded as expense, and to exclude expenses that do not require the use of cash. The purpose of the adjustment is to reflect the projected uses of cash from FY 16 thru FY 21:

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21
Add Back: Depreciation	\$887,588	\$905,340	\$923,447	\$941,916	\$960,754	\$989,577
State Aid Grant Principal Receipts						
Subtract: Debt Svc Principal (current debt) (Note 3)	(326,984)	(275,151)	(275,571)	(150,588)	(153,155)	(155,769)
Debt Svc Principal (new debt) (Note 3)						(51,101)
Tfirs to Capital Reserve (Note 2)	(500,000)	(550,000)	(650,000)	(675,000)	(675,000)	(675,000)
Capital Outlays Funded through Rates and Fund Resources (Note 2)	(146,617)	(1,153,627)	(412,128)	(426,639)	(448,439)	(679,568)
Projected Annual Cash Surplus (Deficit)	\$0	\$0	\$0	\$0	\$0	\$0

Note 1: Net Revenue (Expense) indicates the anticipated increase (decrease) in retained earnings at the end of the year.

Note 2: Net revenue is anticipated to pay for operations and capital improvements in future and current years.

Note 3: Debt Service principal, capital outlays, state aid grant principal receipts, and transfers to reserves are balance sheet transactions, and are not included in expenses.

Note 4: Budgeted revenues exclude Use of Surplus / Fund Balance.

Note 5: Additional revenue raised in FY 15-21 to cover capital outlays and debt service in FY 15-21 and future years.

Billing Projections

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21
Combined Water and Sewer Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter						
Projected Quarterly Bill	\$ 312.10	\$ 324.09	\$ 329.70	\$ 338.61	\$ 349.68	\$ 360.21
Change from Prior Year	\$ 3.43	\$ 11.99	\$ 5.61	\$ 8.91	\$ 11.07	\$ 10.53
Percentage change	1.11%	3.84%	1.73%	2.70%	3.27%	3.01%
Water Utility Billing Projections: Residential property with a 5/8" connection and consumption of 27 HCF (hundred cubic feet) per quarter						
Projected Quarterly Bill	\$ 114.83	\$ 122.23	\$ 134.05	\$ 137.02	\$ 144.31	\$ 155.92
Change from Prior Year	\$ (1.57)	\$ 7.40	\$ 11.82	\$ 2.97	\$ 7.29	\$ 11.61
Percentage change	-0.85%	6.44%	9.67%	2.22%	5.32%	8.05%

CITY OF KEENE, NEW HAMPSHIRE
Water Fund 2016 - 2021 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2015/2016</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>TOTAL</u>
Public Works	Capital Reserve: Water Treatment Facility	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
Public Works	Reserve: Water Infrastructure	400,000	450,000	550,000	575,000	575,000	575,000	3,125,000
Public Works	Black Brook Storage Tank Repairs	-	-	-	-	25,000	-	25,000
Public Works	Chapman Rd Water Tank Repairs	-	-	-	-	25,000	-	25,000
Public Works	Dam Improvements	-	1,743,119	-	-	1,022,025	-	2,765,144
Public Works	Drummer Hill Tank Replacement	-	-	-	25,000	-	-	25,000
Public Works	Fox Ave Pump Station Upgrade	-	-	20,215	-	-	-	20,215
Public Works	Glenn Rd Booster Station Upgrade	-	-	20,215	-	-	-	20,215
Public Works	Laboratory Equipment Replacement	38,575	-	-	-	-	-	38,575
Public Works	Water Distribution Improvements	363,605	146,896	392,401	397,321	409,241	421,518	2,130,982
Public Works	Water Main - Bridge Improvements	40,100	-	40,000	38,300	-	-	118,400
Public Works	Water Main - State Bypass Project	-	195,900	-	-	-	-	195,900
Public Works	Water Main Cleaning and Lining	-	225,102	231,855	238,810	245,975	487,030	1,428,772
Public Works	Water Valve Replacement	83,012	85,406	87,872	90,508	93,223	96,020	536,041
Public Works	Well Field Evaluation Plan	-	-	-	-	75,000	-	75,000
Public Works	WTF 1.5 MG Storage Tank repairs	-	-	-	-	90,041	-	90,041
Public Works	WTF 3 MG Storage Tank repairs study	-	-	-	-	35,000	-	35,000
Public Works	WTF Filter Media Replacement	-	-	-	-	191,466	-	191,466
Public Works	WTF Instrumentation Upgrade	-	-	-	49,522	-	-	49,522
Public Works	WTF Pressure Reduction Valve Upgrade	-	15,590	-	86,058	-	-	101,648
TOTAL CAPITAL PROGRAM		\$ 1,025,292	\$ 2,962,013	\$ 1,442,558	\$ 1,600,519	\$ 2,886,971	\$ 1,679,568	\$ 11,596,921

PROJECT FUNDING DETAIL

Reserve Funded Projects

Public Works	Dam Improvements	\$ -	\$ 850,000	\$ -	\$ -	\$ -	\$ -	\$ 850,000
Public Works	Black Brook Storage Tank Repairs	-	-	-	-	25,000	-	25,000
Public Works	Chapman Rd Water Tank Repairs	-	-	-	-	25,000	-	25,000
Public Works	Drummer Hill Tank Replacement	-	-	-	25,000	-	-	25,000
Public Works	Fox Ave Pump Station Upgrade	-	-	20,215	-	-	-	20,215
Public Works	Glenn Rd Booster Station Upgrade	-	-	20,215	-	-	-	20,215
Public Works	Laboratory Equipment Replacement	38,575	-	-	-	-	-	38,575
Public Works	Water Distribution Improvements	300,000	146,896	300,000	300,000	300,000	325,000	1,671,896
Public Works	Water Main - Bridge Improvements	40,100	-	40,000	38,300	-	-	118,400
Public Works	Water Main - State Bypass Project	-	195,900	-	-	-	-	195,900
Public Works	Well Field Evaluation Plan	-	-	-	-	75,000	-	75,000
Public Works	WTF 1.5 MG Storage Tank repairs	-	-	-	-	90,041	-	90,041
Public Works	WTF 3 MG Storage Tank repairs study	-	-	-	-	35,000	-	35,000
Public Works	WTF Filter Media Replacement	-	-	-	-	191,466	-	191,466
Public Works	WTF Instrumentation Upgrade	-	-	-	49,522	-	-	49,522
Public Works	WTF Pressure Reduction Valve Upgrade	-	15,590	-	86,058	-	-	101,648
Total: Reserve Funded Projects		\$ 378,675	\$ 1,208,386	\$ 380,430	\$ 498,880	\$ 741,507	\$ 325,000	\$ 3,532,878

Projects Funded with Debt

Public Works	Dam Improvements	\$ -	\$ -	\$ -	\$ -	\$ 1,022,025	\$ -	\$ 1,022,025
Total: Projects Funded with Debt		\$ -	\$ -	\$ -	\$ -	\$ 1,022,025	\$ -	\$ 1,022,025

Capital Reserve Appropriations

Public Works	Capital Reserve: Water Treatment Facility	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
Public Works	Reserve: Water Infrastructure	400,000	450,000	550,000	575,000	575,000	575,000	3,125,000
Total: Capital Reserve Appropriations		\$ 500,000	\$ 550,000	\$ 650,000	\$ 675,000	\$ 675,000	\$ 675,000	\$ 3,725,000

Projects Funded with State Grant

Public Works	N/A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Projects Funded with State Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projects Funded with Cash

Public Works	Dam Improvements	\$ -	\$ 893,119	\$ -	\$ -	\$ -	\$ -	\$ 893,119
Public Works	Water Distribution Improvements	63,605	-	92,401	97,321	109,241	96,518	459,086
Public Works	Water Valve Replacement	83,012	85,406	87,872	90,508	93,223	96,020	536,041
Public Works	Water Main Cleaning and Lining	-	225,102	231,855	238,810	245,975	487,030	1,428,772
Total: Projects Funded with Cash		\$ 146,617	\$ 1,203,627	\$ 412,128	\$ 426,639	\$ 448,439	\$ 679,568	\$ 3,317,018
Subtotal: Uses of Cash		\$ 646,617	\$ 1,753,627	\$ 1,062,128	\$ 1,101,639	\$ 1,123,439	\$ 1,354,568	\$ 7,042,018
<i>(Capital Reserve Appropriations plus Projects Funded with Cash)</i>								

TOTAL CAPITAL PROGRAM **\$ 1,025,292** **\$ 2,962,013** **\$ 1,442,558** **\$ 1,600,519** **\$ 2,886,971** **\$ 1,679,568** **\$ 11,596,921**

New cash Requirement FY 16-21: reconciliation

<i>Total: Uses of cash</i>	\$646,617	\$1,753,627	\$1,062,128	\$1,101,639	\$1,123,439	\$1,354,568	\$7,042,018
<i>Use of Retained earnings: Water Fund</i>							
<i>Dam Improvement: FY 13 reserve authorization</i>		(50,000)					(50,000)
<i>Dam Improvements</i>		(720,132)					(720,132)
<i>Water Main Cleaning & Lining (FROM 05063)</i>	(37,820)						(37,820)
<i>Capital Reserve Appropriations</i>		(200,000)	(100,000)	(100,000)			(400,000)
<i>New Funds needed</i>	\$ 608,797	\$ 783,495	\$ 962,128	\$ 1,001,639	\$ 1,123,439	\$ 1,354,568	\$ 5,834,066

Water Fund 2016 - 2021 Capital Improvement Program Debt Summary

	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>
Existing and Authorized Debt	\$1,618,439	\$1,291,455	\$1,016,304	\$740,733	\$590,145	\$1,459,015
New Issues Proposed	-	-	-	-	1,022,025	-
Principal Paid	(326,984)	(275,151)	(275,571)	(150,588)	(153,155)	(206,871)
Total Existing Debt & Issues Proposed	\$1,291,455	\$1,016,304	\$740,733	\$590,145	\$1,459,015	\$1,252,144

	<u>Issue</u>	<u>Term</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>
Existing & Authorized Debt Service (P & I)			\$362,832	\$303,212	\$296,396	\$166,121	\$165,710	\$165,298
<u>Proposed Debt Service CIP FY16</u>								
N/A								
<u>Proposed Debt Service CIP FY17</u>								
N/A								
<u>Proposed Debt Service CIP FY18</u>								
N/A								
<u>Proposed Debt Service CIP FY19</u>								
N/A								
<u>Proposed Debt Service CIP FY20</u>								
Dam Improvements	1,022,025	20					17,885	85,978
<u>Proposed Debt Service CIP FY21</u>								
N/A								
Total CIP16-21 Debt Service Proposed			0	0	0	0	17,885	85,978
Total Projected Debt Service: Water Fund			\$362,832	\$303,212	\$296,396	\$166,121	\$183,595	\$251,276

CAPITAL RESERVE -- WATER TREATMENT FACILITY

The projected balance of the Water Treatment Facility Capital Reserve at the end of FY 21 is \$635,274, or 4.8% of the value of covered infrastructure.

Equipment	Year Constructed	Expected Life (years)	Estimated Replace/Install Date	Present Replace/Install Cost
Blowers and Backwash Pumps *	1993	10-15	2025	\$303,288
Emergency Generator (2) **	1997	20	2023-2025	\$243,823
Liquefied Petroleum Tank	1993	20	2024	\$31,801
Liquefied Petroleum Tank	1993	20	2024	\$31,801
Turbidity Analyzers	1993	20	2021	\$28,386
Total Organic Carbon (TOC) Analyzer	2003	10	2025	\$34,714
HVAC Replacement	1993	10-15	2027	\$27,038
Compressors (2)	1992	30	2023	\$30,354
Electrical Systems Upgrade	1992	30	2024-2029	\$582,262
WTF Filter Media Replacement	1993	20	2022-2024	\$418,622
Processing Pipe	1992	30	2027	\$3,400,507
Buildings, Systems, and Equipment	1993	50	various	\$7,645,999
Hydropower Generators	2011	50	2061	\$575,706
Total				<u>\$ 13,354,301</u>

NOTE:

* These pumps are not used often, so the replacement date is pushed out

** This unit is in good running condition

Details of the expenditures from the Water Treatment Facility Capital Reserve Fund - Years 16 through 210

FY16	\$ 38,575	Lab Equipment: Atomic Absorption Spectrophotometer
FY 17	\$ 15,590	Pressure Reduction Valve Upgrade
FY19	\$ 86,058	Pressure Reduction Valve Upgrade
	\$ 49,522	Instrumentation Upgrade
FY 20	\$ 191,466	Media Filter Replacement
Total	\$ 381,211	



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Capital Reserve - WTF**
 Department: **Public Works - Water Fund**
 Physical Location: **555 Roxbury Road**
 Federal Mandate: **no**
 State Regulation or Law: **no**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major (planned and unplanned) repairs and systems replacement at the Water Treatment Facility (WTF). *The Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and act as a rainy day fund to provide funding in the case of emergency expenditure that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the WTF capital reserve fund balance at 3-5% of the approximate current replacement value of the WTF assets.

The City Council's fiscal policy establishes Capital Reserves, under State of NH law invested by the Trustees of Trust Funds, for specific purposes including construction, reconstruction, or acquisition of a capital improvement or capital equipment.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		38,575	15,590		135,580	191,466		381,211
TOTAL		\$38,575	\$15,590	\$0	\$135,580	\$191,466	\$0	\$381,211
FUNDING								
Current Revenue	406,871	100,000	100,000	100,000	100,000	100,000	100,000	1,006,871
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,267	1,424	1,638	1,893	1,808	1,584	9,614
TOTAL		\$101,267	\$101,424	\$101,638	\$101,893	\$101,808	\$101,584	\$1,016,485

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Ongoing

PROJECT STATUS:

Ongoing CIP

CAPITAL RESERVE -- WATER INFRASTRUCTURE

The projected balance of the Water Infrastructure Capital Reserve at the end of FY 21 is \$1,453,474, or 1.4% of the value of covered infrastructure.

Facility	Year Constructed	Expected Life (years)	Estimated Replace/Install Date	Present Replace/Install Cost
Babbidge Dam	1931	100	Rehab in FY17	\$1,570,132
0.1 MG concrete tank (Drummer Hill)	1988	34	2022-2024	\$823,723
0.2 MG concrete tank (Chapman Road)	1993	100	2093	\$422,575
0.375 MG concrete tank (Black Brook)	1996	100	2096	\$613,821
1.5 MG concrete tank (Beech Hill)	1924	100	2024	\$2,032,406
3 MG Steel tank (Beech Hill)	1962	75	2037	\$4,064,811
Black Brook Booster Station	1996	50	2046	\$356,474
Branch Road Pressure Reducing Valve	1993	50	2043	\$36,409
Chapman Road Booster Station	1993	50	2043	\$415,559
Court Street Well #2	1964	40	2027-2030	\$802,055
Court Street Well #3	1965	40	2027-2030	\$802,055
Court Street Well #4	1977	40	2027-2030	\$802,055
Court Street Wells Complex	1977	40	2027-2030	\$225,765
Drummer Hill Booster Station	1988	50	2024-2027	\$970,961
Fox Circle Booster Station*	1983	50	2033	\$186,047
Glen Road Booster Station	1983	50	2033	\$205,873
Roxbury Pressure Reducing Valve	1993	50	2043	\$16,259
West Street Well #1	1991	40	2031	\$418,918
Woodward Dam	1910	100	Rehab in FY 20	\$1,022,025

TOTAL FACILITIES \$15,787,923

101 miles of water distribution system 1890 through present 50-75 ongoing \$85,971,000

TOTAL SYSTEM VALUE \$101,758,923

NOTE:

Expected life for structures is 50 years. The various equipment components have an expected life of 10-15 yrs. The expected life is the recommendation from the equipment manufacturer. The actual life of a piece of equipment can vary depending on use and maintenance.

See Water Distribution Improvements project for planned replacements. Replacement cost is estimated in the 2003 infrastructure report.

Details of the expenditures from the Water Treatment Facility Capital Reserve Fund - Years 16 through 21

FY16	\$ 300,000	Water Distribution Improvements
	\$ 40,100	Lower Main St - Rte 12 bridge utilities
FY17	\$ 146,896	Water Distribution Improvements
	\$ 850,000	Construction of dam improvements
	\$ 195,900	Winchester Street Water Main (Bypass project)
FY18	\$ 300,000	Water Distribution Improvements
	\$ 20,215	Fox Ave Pump Station Upgrade
	\$ 20,215	Glenn Road Pump Station Upgrade
	\$ 40,000	Roxbury Street bridge utilities
FY19	\$ 300,000	Water Distribution Improvements
	\$ 25,000	Drummer Hill Water Tank Replacement
	\$ 38,300	Winchester St - Rte 10 Ash Swamp bridge utilities
FY20	\$ 300,000	Water Distribution Improvements
	\$ 75,000	West Street Well Upgrade / Replace Study
	\$ 25,000	Black Brook Water Tank Upgrade
	\$ 25,000	Chapman Road Water Tank Repairs
	\$ 90,041	WTF 1.5 mg Water Tank Upgrade
	\$ 35,000	WTF 3 mg Water Tank Upgrade
FY21	\$ 325,000	Water Distribution Improvements
Total	\$ 3,151,667	



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Cap Reserve Water Infrastructure**
 Department: **Public Works - Water Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Vibrant Economy**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

This capital reserve account is for funding major (planned and unplanned) repairs and systems replacement in the Water Infrastructure. The *Municipal Wastewater Financial Management* handbook recommends that a reserve account be used to provide funds for the planned or unplanned replacement of major pieces of equipment or building components. The use of this type of account helps the municipality stabilize cash flows for project funding through regular deposits and act as a rainy day fund to provide funding in the case of emergency expenditure that cannot be absorbed by the regular operating budget. The City of Keene works to maintain the Infrastructure capital reserve fund balance at 3-5% of the approximate current replacement value of the Infrastructure assets.

The City Council's fiscal policy establishes Capital Reserves, under State of NH law invested by the Trustees of Trust Funds, for specific purposes including construction, reconstruction, or acquisition of a capital improvement or capital equipment.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		340,100	1,192,796	380,430	363,300	550,041	325,000	3,151,667
Property/Equip. Acquisition								0
TOTAL		\$340,100	\$1,192,796	\$380,430	\$363,300	\$550,041	\$325,000	\$3,151,667
FUNDING								
Current Revenue	1,454,633	400,000	450,000	550,000	575,000	575,000	575,000	4,579,633
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		4,637	4,923	3,328	3,823	4,362	4,435	25,508
TOTAL		\$404,637	\$454,923	\$553,328	\$578,823	\$579,362	\$579,435	\$4,605,141

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Black Brook storage tank repairs**
 Department: **Public Works - Water Fund**
 Physical Location: **Black Brook storage tank**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Make repairs and improvements in accordance with current standards for water storage tanks.**



PROJECT DESCRIPTION/JUSTIFICATION

This 380,000 gallon, pre-cast concrete water storage tank, constructed in 1996, provides water for fire suppression and helps maintain stable water pressure in the Black brook pressure zone. This project funds design for tank repairs recommended by the November 2013 " Water Facilities Evaluation" performed by Tighe and Bond including sealing the roof panel joints, repairing failed seals at tank penetrations, providing new above grade electrical equipment, pressure washing the tank, and sealing cracks.

This tank is equipped with a below grade, precast concrete vault that houses an electrical panel board and instrumentation to measure the level of water in the tank. During the evaluation, leaks from failed seams and failed electrical conduit penetrations were noted. It is recommended the below grade vault be discontinued and all underground utilities be re-located above ground in a small enclosure. In addition to providing a drier environment for the electrical and analytical equipment, an above ground station would allow a single staff member to check critical components without the assistance and equipment required for a regulated confined space entry. The cost associated with this work is approximately \$71,929 and is scheduled for FY22.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design						25,000		25,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0	\$25,000
FUNDING								
Current Revenue								0
Capital Reserve						25,000		25,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0	\$25,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Chapman Water Tank repairs**
 Department: **Public Works - Water Fund**
 Physical Location: **Chapman Water Tank**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Make repairs and improvements in accordance with current standards for water storage tanks..**



PROJECT DESCRIPTION/JUSTIFICATION

This 200,000 gallon, pre-cast concrete water storage tank was constructed in 1993. This project funds design to correct the deficiencies identified by Tighe and Bond in the November 2013 " Water Facilities Evaluation" including pressure washing the tank roof, sealing the roof panel joints, installing sealant between the access hatch and mounting flange, and moving the electrical equipment above ground in a new building.

This tank is equipped with a below grade, precast concrete vault that houses an electrical panel board and level instrumentation for the tank. It is recommended the existing vault be discontinued and all underground utilities be re-located above ground in a small enclosure. In addition to providing a drier environment for the electrical and analytical equipment, an above ground station would allow a single staff member to check critical components without the assistance and equipment required for a regulated confined space entry. The cost associated with this work is approximately \$54,449 and is scheduled for FY22.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design						25,000		25,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0	\$25,000
FUNDING								
Current Revenue								0
Capital Reserve						25,000		25,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0	\$25,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Dam Improvements**
 Department: **Public Works - Water Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **Yes - letter of deficiency (admin rule)**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Protection of the City's main water supply and compliance with the DES letter of deficiency.**



PROJECT DESCRIPTION/JUSTIFICATION

The Dam Master Plan for the 1910-era Woodward Dam and the 1931-era Babbidge Dam was funded in FY11 and completed in FY12. The Master Plan addressed Letters of Deficiency (LOD) from NH Department of Environmental Services citing concerns for potential failure of the dams in a 100-year flood event. The LOD requires the City to submit a plan to address deficiencies including stabilization of the dams and an increase in storage capacity. Both dams are classified as "high hazard" indicating that their failure could result in the loss of life downstream. Between them, the dams store more than 600 million gallons of water, more than a 6-month supply for the City. The failure of one or both of these 80 year old dams would cause a significant impact to the City's water supply because the existing wells cannot meet the City's entire water demand.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design	150,000		122,987					272,987
Construction/Implementation			1,620,132			1,022,025		2,642,157
Property/Equip. Acquisition								0
TOTAL	\$150,000	\$0	\$1,743,119	\$0	\$0	\$1,022,025	\$0	\$2,915,144
FUNDING								
Current Revenue			122,987					122,987
Capital Reserve	200,000		850,000					1,050,000
Debt Funded						1,022,025		1,022,025
Federal or State Grants								0
Other Sources (retained earnings - water fund)			720,132					720,132
TOTAL	\$200,000	\$0	\$1,693,119	\$0	\$0	\$1,022,025	\$0	\$2,915,144

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: High \$50,001 or more
One time

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Drummer Hill tank replacement**
 Department: **Public Works - Water Fund**
 Physical Location: **Drummer Hill tank**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Improve water quality and provide improved water pressure and volume for fire suppression**



PROJECT DESCRIPTION/JUSTIFICATION

This project replaces the Drummer Hill water tank with a new, above ground tank that meets current standards. This 100,000 gallon, pre-cast concrete water storage tank with an interior liner and aluminum dome roof was constructed in 1987 to provide fire suppression and potable water for residential customers. This tank was evaluated by Tighe and Bond in the November 2013 "Water Facilities Evaluation" and Underwood Engineers in the June 2013 "Low Pressure Zone Study". These studies indicate the tank should be replaced to improve pressure and address the significant number of improvements needed to bring the tank into compliance with public health standards, including the 10 State Standards guidelines for water storage tanks.

The tank's deficiencies include: leaking seals, lack of intrusion protection, a gap of approximately 1 inch between the walls and the domed roof, the presence of seams, absence of a watertight gasketed cover, and lack of a sample site. In addition, the tank is partially buried, and it is recommended that seamed tanks be located above grade to allow regular sanitary inspections. The tank does not provide the recommended 35 psi minimum static pressure to existing customers because the tank overflow elevation is too low and the tank itself is smaller than recommended for fire suppression by the Insurance Services Office. FY19 funds a pre-design evaluation and full design is planned in FY 22. Construction of the new tank is proposed in FY24 at an approximate cost of \$614,764.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	Fy18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design					25,000			25,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$25,000
FUNDING								
Current Revenue								0
Capital Reserve					25,000	0		25,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$25,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Fox Ave Water booster station**
 Department: **Public Works - Water Fund**
 Physical Location: **Fox Ave**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **To maintain water quality monitoring capability and replace aging electrical components.**



PROJECT DESCRIPTION/JUSTIFICATION

The Fox Avenue water booster station was constructed in 1983 and is a below grade pre-cast concrete pump station. The station is equipped with continuously online monitoring equipment that allows staff to monitor and trend water quality parameters and have some equipment control through the plant's Supervisory Control and Data Acquisition System (SCADA). This project includes the FY18 replacement of the turbidity, chlorine, and pH online analyzers.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition				20,215				20,215
TOTAL	\$0	\$0	\$0	\$20,215	\$0	\$0	\$0	\$20,215
FUNDING								
Current Revenue								0
Capital Reserve				20,215				20,215
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$20,215	\$0	\$0	\$0	\$20,215

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Glen Rd booster station upgrade
Department: Public Works - Water Fund
Physical Location: Glen Road
Federal Mandate: N/A
State Regulation or Law: N/A
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Infrastructure
Council Initiative: N/A
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective: To maintain water quality monitoring capability and replace aging electrical components.



PROJECT DESCRIPTION/JUSTIFICATION

The Glen Road water booster station was constructed in 1983 and is a below grade pre-cast concrete pump station. The station is equipped with continuously online monitoring equipment that allows staff to monitor and trend water quality parameters and remotely control equipment control through the plant's Supervisory Control and Data Acquisition System (SCADA). This project includes the FY18 replacement of the existing online turbidity, chlorine, and pH analyzers.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition				20,215				20,215
TOTAL	\$0	\$0	\$0	\$20,215	\$0	\$0	\$0	\$20,215
FUNDING								
Current Revenue								0
Capital Reserve				20,215				20,215
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$20,215	\$0	\$0	\$0	\$20,215

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Multi-year

PROJECT STATUS: New Project

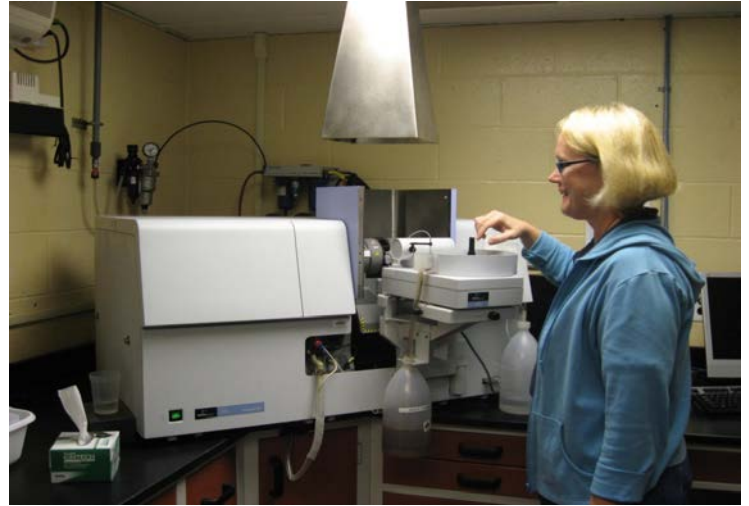


CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Laboratory Equipment**
 Department: **Public Works - Water Fund**
 Physical Location: **420 Airport Road**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Accurate and timely lab results at the most affordable cost.**



PROJECT DESCRIPTION/JUSTIFICATION

This project funds the replacement of the Laboratory's Atomic Absorption Spectrophotometer (AA) that is used to test trace metals. As part of the Laboratory's equipment replacement schedule, the AA is due for replacement in FY16. This instrument was purchased and installed in 2005 and is approaching the end of its useful life as evidenced through increased downtime caused by failure of the its electrical components. Analysis of wastewater, septage, surface water, groundwater, and drinking water that is performed in-house using this instrument would cost the City approximately \$32,850 annually if sent out for analysis. The project cost is split between the water and sewer funds. \$1,000 is allocated in each fund for installation and a power conditioner/uninterruptible power supply (\$4,600) is included in the FY16 request.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		1,000						1,000
Property/Equip. Acquisition		37,575						37,575
TOTAL	\$0	\$38,575	\$0	\$0	\$0	\$0	\$0	\$38,575
FUNDING								
Current Revenue								0
Capital Reserve		38,575						38,575
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$38,575	\$0	\$0	\$0	\$0	\$0	\$38,575

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: Ongoing CIP

Water and Sewer Improvements

The City's strategy for identifying and prioritizing water and sewer improvements in conjunction with roadwork for this Capital Improvement Program is the Road Overlay Program. It has evolved from its "Dig the Road Once" philosophy as the City's obligation under the 2004 Administrative Order requiring the replacement of specific sewers is complete.

A 2012 assessment of the City's paved streets used the pavement condition and traffic volume to develop a numeric rating. This rating was used to prioritize streets for overlay and streets were grouped into neighborhoods to gain efficiency in construction services and to improve the overall aesthetics of an area.

Before a street is overlaid, its water, sewer, and drain infrastructure is evaluated and repairs/improvements are planned for the year before the overlay is scheduled to avoid digging up a freshly paved road. The water, sewer, and drain evaluations are performed in different ways.

- *Sewers are evaluated according to their condition and capacity.*
 - Condition ratings were generated as part of the Priority Inspection Program that was performed between FY06 and FY11. The results of these inspections have been cataloged and deficiencies that require spot repair, short length lining, or complete lining have been identified.
 - Capacity issues have been identified using the computer model of the collection system. Inflow and infiltration is being evaluated in FY14 and will become an additional factor in future evaluations.

- *Water main evaluations are based on age, pressure/volume, and repair frequency.*
 - While no video is available that shows the condition of the water mains, the age and material are often used as clues to their conditions. As an example, mains that were constructed between 1930 and the 1970's were made of bituminous cast iron pipe (universal pipe) and are prone to leaks. Mains that do not have a cement lining can build up a hard layer of minerals that cannot be removed through the normal flushing programs.
 - The Department operational records are used to identify mains that have experienced a number of breaks.
 - The volume of water the main can transport, and what the relationship is of a given section of main to the rest of the system is evaluated using the water distribution model. If a section does not provide the anticipated volume or pressure, a piece can be cut out and visually inspected to determine the amount of material buildup.

- *The capacity of storm drains is evaluated by the contributing storm drainage area.*
 - If capacity is not adequate the drains are upsized by excavating and replacing the drain with a larger size pipe.
 - A storm drain model that will assist the evaluation of capacity is currently being developed.

Separate programs for the replacement of mainline water valves and the repair of sewers that are not associated with other road work have been created to keep the focus on this catch-up repair work.

WATER DISTRIBUTION IMPROVEMENTS

The 2013 Updated Water Capital Infrastructure Plan study recommended that a number of major water mains should be upgraded from their current 6-inch and 8-inch sizes to 10-inch and 12-inch. In addition, improvements will be made to Glen Road/Darling Rd/Mountainview Rd area to improve water pressure. These upgrades will provide additional water flow and assist in addressing pressure problems in the outlying areas of the City. In addition to the upgrades of the identified mains, funds from this project will be used for other unplanned improvements as required in the distribution system, and to replace 6" mains with a minimum of 8" diameter mains to improve water flow and water pressures

2016

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST**</u>
Watermain Replacement Hurricane Rd. (Arch St to Hastings Ave, 8" to 12")	1,000'	\$363,605

** All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

Project Total	\$363,605
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2018

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST**</u>
To Be Determined		\$392,401

** All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

Project Total	\$392,401
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2020

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST</u>
To be determined		\$409,241

** All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

Project Total	\$409,241
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2017

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST**</u>
Glen Rd/Darling Rd/Mountain View Rd. combine into a single pressure zone with check valves		\$146,896

** All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

Project Total	\$146,896
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2019

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST**</u>
To be determined		\$397,321

** All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

Project Total	\$397,321
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2021

<u>LOCATION</u>	<u>LENGTH</u>	<u>EST. COST</u>
To be determined		\$421,518

** All costs include 10% for construction contingencies, 10% for engineering design, 10% for construction administration, 1% for supervision and 3% inflation per year

Project Total	\$421,518
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CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Water Distribution Improvements**
 Department: **Public Works - Water Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

The work funded by this project includes the replacement of water mains as part of the City's infrastructure program. Depending on their age, condition, and size, water mains may be replaced when a roadway is rehabilitated or reconstructed. This is done to minimize the disturbance of a newly reconstructed road in the near future due to a broken water main and to upsize inadequately sized mains. Mains are also replaced when work by any other utility project requires its relocation. As they are replaced, the mains are upsized to increase pressure and flow and to maintain good water quality. The majority of water main replacement includes replacing the 6" mains with a main that is at least 8" in diameter on streets that are undergoing rehabilitation. The goal is to perform water main, valve, and hydrant replacement the year prior to the roadway work.

FY16 includes water main upgrades on Hurricane Road from Arch St to Hastings Ave. FY17 includes water system improvements to address low water pressure issues in the Glen Road high service zone by relocating check valves in the Darling Rd/Mountain View Rd area.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design		30,050	31,880	32,429	32,836	33,822	35,174	196,192
Construction/Implementation		333,555	115,016	359,972	364,485	375,419	386,344	1,934,790
Property/Equip. Acquisition								0
TOTAL		\$363,605	\$146,896	\$392,401	\$397,321	\$409,241	\$421,518	\$2,130,982
FUNDING								
Current Revenue		63,605		92,401	97,321	109,241	96,518	459,086
Capital Reserve		300,000	146,896	300,000	300,000	300,000	325,000	1,671,896
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL		\$363,605	\$146,896	\$392,401	\$397,321	\$409,241	\$421,518	\$2,130,982

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Water Utility Work - Bridges**
 Department: **Public Works - Water Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

The work funded by this project includes the replacement of water mains that are affected by the City's Bridge Replacement program. The State of NH Department of Transportation's bridge program does not provide funds for water utilities that are damaged or need to be replaced due to a bridge project. This project funds the time and materials required for the water main replacement and does not include road or surface replacement because that portion is covered by the corresponding bridge project.

FY16: Main Street bridge over Beaver Brook. FY18: Roxbury Street bridge over Beaver Brook. FY19: Winchester Street bridge over Ash Swamp Brook.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		40,100		40,000	38,300			118,400
Property/Equip. Acquisition								0
TOTAL		\$40,100	\$0	\$40,000	\$38,300	\$0	\$0	\$118,400
FUNDING								
Current Revenue								0
Capital Reserve		40,100		40,000	38,300			118,400
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL		\$40,100	\$0	\$40,000	\$38,300	\$0	\$0	\$118,400

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

New Project



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **State Bypass Utilities**
 Department: **Public Works - Water Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **Policy**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

This project funds the replacement of water mains that are affected by the NH Department of Transportation's construction on Winchester Street between Island Street and the roundabout. The NH Department of Transportation's project does not include funds for water utilities that are damaged or need to be replaced due to a state road project. This project funds the time and materials required for the water main replacement and does not include road or surface replacement because that work is covered by the corresponding State road project.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			195,900					195,900
Property/Equip. Acquisition								0
TOTAL		\$0	\$195,900	\$0	\$0	\$0	\$0	\$195,900
FUNDING								
Current Revenue								0
Capital Reserve			195,900					195,900
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL		\$0	\$195,900	\$0	\$0	\$0	\$0	\$195,900

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

N/A

PROJECT STATUS:

New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Water Main Cleaning and Lining**
 Department: **Public Works - Water Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

This project includes renewing old water mains through mechanical cleaning and lining to extend their life and improve water quality. Lining is a rehabilitation process which may be more cost effective than traditional excavation and replacement. Cleaning restores the interior condition of the pipe, and lining provides a protection against future deterioration and, depending on the lining technique, may also provide structural integrity. Lining allows improvements to the main while avoiding disruption to the street surfaces, traffic, and customer services which can lead to increased cost and inconvenience. Lining is planned for streets where the other utilities do not require replacement or where the road will receive surface rehabilitation instead of complete reconstruction. The City has a number of water mains that are sufficient in size for their location, but have reduced capacity because of mineral deposits. Advanced mineral deposits can result in a significant decrease in amount of water the main can transport.

This program complements the Water Distribution Improvements program and will occur in areas where water main requires attention, but the other utilities do not require replacement and generally where the roadway will be paved the following year. These projects will be designed with in-house staff and costs presented below are based on unit prices from 2014 bids and adjusted by 3% per year. **Projects may include but are not limited to:** FY17 Ellis Court (560 LF of 6" main), FY17 Woodbury St (1,810 LF of 6" main), FY18 Carpenter St (1130 LF of 6"main), FY18 Kingsbury St (525 LF of 6"main), FY19 West St (from Symonds Place to the railroad/Multi-Use trail crossing - 2,100 LF of 12"main), FY20 Roxbury St (Reservoir St to Oak St - 1,000 LF of 12"main), FY20 Hopper St (315 LF of 6"main), FY20 Speaker St (220 LF of 6"main), FY20 Cady Lane (200 LF of 6"main), FY20 Cobb St (300 LF of 6"main) and FY21 Meadow Rd (1320 LF of 6" & 1320 LF of 12"main).

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation			225,102	231,855	238,810	245,975	487,030	1,428,772
Property/Equip. Acquisition								0
TOTAL		\$0	\$225,102	\$231,855	\$238,810	\$245,975	\$487,030	\$1,428,772
FUNDING								
Current Revenue			225,102	231,855	238,810	245,975	487,030	1,428,772
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL		\$0	\$225,102	\$231,855	\$238,810	\$245,975	\$487,030	\$1,428,772

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Ongoing

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Water Gate Valve Replacement**
 Department: **Public Works - Water Fund**
 Physical Location: **Various**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Water system maintenance**



PROJECT DESCRIPTION/JUSTIFICATION

This project replaces gate valves in water mains that are not scheduled for replacement through other infrastructure improvement projects. Properly functioning main line gate valves are required to isolate water mains in the event of a break, routine repair, or contamination. The 2003 infrastructure study cites the state of NH requirement for a routine valve turning program for system maintenance. More than one third of the City valves are sixty years old or older and are difficult to open, close, or cannot be operated at all and are maintenance problems. The deficiencies include leaky valve packing and/or complete valve failure. This project will be designed by in-house engineering staff and includes funds for an outside contractor to complete the work.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation		83,012	85,406	87,872	90,508	93,223	96,020	536,041
Property/Equip. Acquisition								0
TOTAL		\$83,012	\$85,406	\$87,872	\$90,508	\$93,223	\$96,020	\$536,041
FUNDING								
Current Revenue		83,012	85,406	87,872	90,508	93,223	96,020	536,041
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL		\$83,012	\$85,406	\$87,872	\$90,508	\$93,223	\$96,020	\$536,041

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT:

Ongoing

PROJECT STATUS:

Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Well Field Evaluation Plan**
 Department: **Public Works - Water Fund**
 Physical Location: **West and Court St Well Facilities**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Continually support and maintain infrastructure.**



PROJECT DESCRIPTION/JUSTIFICATION

The West Street and Court Street well facilities include three well buildings that were constructed in mid 1960's, one well building that was constructed in 1977 and two corrosion control buildings that house chemical feed equipment that were constructed in 1988. The November 2013 " Water Facilities Evaluation" performed by Tighe and Bond included many action items for the both facilities . This project funds a more in-depth evaluation of these facilities in FY20. The proposed evaluation will assist the City in determining the best approach to addressing the deficiencies identified in the Tighe and Bond report.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design						75,000		75,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$75,000	\$0	\$75,000
FUNDING								
Current Revenue								0
Capital Reserve						75,000		75,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$75,000	\$0	\$75,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Multi-year

PROJECT STATUS: New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **1.5 MG storage tank repairs**
 Department: **Public Works - Water Fund**
 Physical Location: **WTF**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Continually support and maintain infrastructure.**



Tank is underground, inside the fence line

PROJECT DESCRIPTION/JUSTIFICATION

The 1.5 million gallon water storage tank located at the Water Treatment Facility is a buried, cast-in-place concrete tank that was built in 1924, and is in generally good condition. Improvements recommended by the November 2013 Tighe and Bond "Water Facilities Evaluation" report will extend its useful life and bring it up to current water storage tank standards. This project funds design to correct deficiencies including a new membrane roof cover, re-grading the soil over the tank, and installing a separate vent.

This tank is covered by approximately 6 inches of topsoil with several low areas that hold standing water and allow water to pond on the tank's flat roof. Tighe and Bond recommended that the buried tank should be equipped with an impermeable membrane roof cover and that the topsoil be graded to divert water away from the tank roof. The report also indicated the existing tank overflow currently acts as both an overflow and a vent for the tank, which does not conform with current standards for water storage tanks. Construction is scheduled to occur in FY22, preliminary cost estimates for the improvements are \$278,226.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design						90,041		90,041
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$90,041	\$0	\$90,041
FUNDING								
Current Revenue								0
Capital Reserve						90,041		90,041
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$90,041	\$0	\$90,041

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **WTF 3 MG Water Storage tank**
 Department: **Public Works - Water Fund**
 Physical Location: **WTF**
 Federal Mandate: **N/A**
 State Regulation or Law: **N/A**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Extend the useful life of the water storage tank through repairs and maintenance.**



PROJECT DESCRIPTION/JUSTIFICATION

The City's 3.0 million gallon water storage tank is an above grade welded steel tank that was constructed in 1962. The November 2013 " Water Facilities Evaluation" performed by Tighe and Bond included an interior and exterior inspection that noted several deficiencies. This project funds a more detailed tank evaluation in FY20 to determine a specific scope of work that is expected to include painting and tank repairs scheduled in FY23 at an estimated cost of \$2,275,882.

The deficiencies noted by Tighe and Bond include failure of isolated areas of the interior and exterior coating systems and corrosion on the tank wall, interior rust nodules on the floor of the tank and with holes and delamination on the roof of the tank, visible signs of corrosion on the ladder rails and replacement of the tank vent. Tighe and Bond also recommend installing cathodic protection and a guard rail at the top of the tank for safe walking along the dome. Structural concerns noted include the joint sealant between the tank flange and the top of the concrete is discontinuous and should be replaced with new sealant and exposed surfaces of concrete foundation should also be repaired.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design						35,000		35,000
Construction/Implementation								0
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$35,000	\$0	\$35,000
FUNDING								
Current Revenue								0
Capital Reserve						35,000		35,000
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$35,000	\$0	\$35,000

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: No impact
Ongoing

PROJECT STATUS: New Project

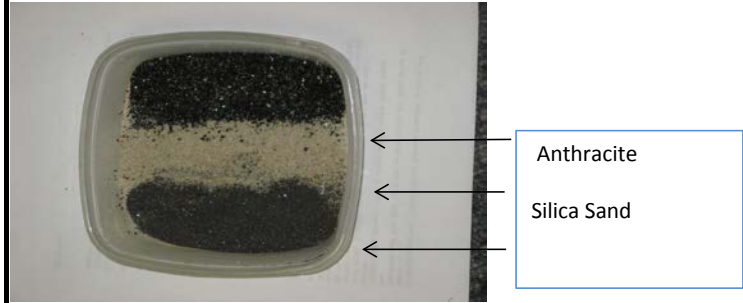


CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Filter media and underdrain replacement
Department: Public Works - Water Fund
Physical Location: WTF
Federal Mandate: N/A
State Regulation or Law: N/A
Master Plan (CMP) Focus Area: Quality Built Environment
CMP Vision/Strategy: Infrastructure
Council Initiative: N/A
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective: Maintain compliance with drinking water standards through filter maintenance.



PROJECT DESCRIPTION/JUSTIFICATION

The City's water treatment facility has three treatment units that each have three different layers of filter media that has been renewed, but not replaced since its installation in 1993. The City contracted with Tighe and Bond Consulting Engineers in 2013 to perform an evaluation of the filters and media in part to address turbidity violations. The report found the anthracite media should be replaced because it does not meet specifications and may impact filter performance and efficiency. The visible parts of the filter units were found to be in good repair but there are components that cannot be inspected while they are filled with media. Tighe and Bond recommend completing the evaluation and replacing the waste gate gasket seals when the media has been removed.

This project funds the final phase of the filter inspection and replacement of the underdrain system, waste gate gasket, and filter media for each unit -- one unit every two years. Work on the first filter unit is proposed for FY20; the remaining two units are funded in FY22 and FY24 respectively.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design/construction oversight						17,575		17,575
Construction/Implementation						173,891		173,891
Property/Equip. Acquisition								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$191,466	\$0	\$191,466
FUNDING								
Current Revenue								0
Capital Reserve						191,466		191,466
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$0	\$191,466	\$0	\$191,466

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
One time

PROJECT STATUS: New Project



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Instrumentation Upgrade WTF**
 Department: **Public Works - Water Fund**
 Physical Location: **555 Roxbury Road**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Healthy Community**
 CMP Vision/Strategy: **Infrastructure**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Monitor plant performance and make process changes to optimize water quality.**



PROJECT DESCRIPTION/JUSTIFICATION

The Water Treatment Facility (WTF) is equipped with continuously online monitoring equipment that allows the operations staff the ability to monitor and trend the performance of the WTF through the plant's Supervisory Control and Data Acquisition System (SCADA). The analytical data generated allows staff the ability to make process changes and optimize the water treatment process. This project included the replacement of 8 online turbidity analyzers in FY14, the installation was completed in October 2013, and the replacement of an online total organic carbon (TOC) analyzer in FY15. Costs associated with the operating budget are for service contracts that cover parts, preventative maintenance, repair, and calibration of the instrumentation. FY19 includes the replacement of a chlorine analyzer and 6 level transmitters at the filter units, clearwell, and waste tanks. Installation of the equipment is performed by in-house personnel.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition					49,522			49,522
TOTAL	\$0	\$0	\$0	\$0	\$49,522	\$0	\$0	\$49,522
FUNDING								
Current Revenue								0
Capital Reserve					49,522			49,522
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$0	\$0	\$49,522	\$0	\$0	\$49,522

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
N/A

PROJECT STATUS: Ongoing CIP



CITY OF KEENE, NEW HAMPSHIRE 2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: Pressure Reducing Valve Upgrade
Department: Public Works - Water Fund
Physical Location: Water Treatment Facility
Federal Mandate: N/A
State Regulation or Law: N/A
Master Plan (CMP) Focus Area: N/A
CMP Vision/Strategy: Energy Efficiency
Council Initiative: Policy
V.O.I.C.E.: Continually Assess Facilities and Infrastructure
Departmental Objective: Improve flow balance between the hydro-turbines and the process filters.



PROJECT DESCRIPTION/JUSTIFICATION

The existing pressure reducing valve (PRV) was installed when the Water Treatment Facility was constructed in 1993. It is oversized, and a restriction plate was installed to keep the valve from cavitating. The hydro turbine system came on-line in 2011 and works in conjunction with the PRV. For electricity generation, water flows through the turbines any extra water flows through the existing PRV, creating operational issues. The November 2013 "Water Facilities Evaluation" performed by Tighe and Bond recommends replacement of the original PRV within 7 to 11 years based on age. However, because of the operational issues that affect the operation of the turbines, staff recommends the project be moved to FY19.

The new system will consist of two PRVs in parallel, a smaller one to handle the transition for lower flows and a larger valve for higher flows. Both new valves will be sized appropriately and will be smaller than the original PRV. FY17 funds an evaluation and design for the new system with construction in FY19.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design			15,590					15,590
Construction/Implementation					17,100			17,100
Property/Equip. Acquisition					68,958			68,958
TOTAL	\$0	\$0	\$15,590	\$0	\$86,058	\$0	\$0	\$101,648
FUNDING								
Current Revenue								0
Capital Reserve			15,590		86,058			101,648
Debt Funded								0
Federal or State Grants								0
Other Sources								0
TOTAL	\$0	\$0	\$15,590	\$0	\$86,058	\$0	\$0	\$101,648

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Create efficiencies
One time

PROJECT STATUS: New Project

**CITY OF KEENE, NEW HAMPSHIRE
CAPITAL IMPROVEMENT PROGRAM FY16-FY21
EQUIPMENT FUND MULTI-YEAR PROJECTIONS**

	ACTUAL FY 12/13	ACTUAL FY 13/14	BUDGET FY 14/15	PROJECTED FY15/16	PROJECTED FY16/17	PROJECTED FY17/18	PROJECTED FY18/19	PROJECTED FY19/20	PROJECTED FY20/21
REVENUES									
Charges for Services	\$2,131,016	\$2,219,535	\$2,235,914	\$2,321,038	\$2,415,743	\$2,514,394	\$2,617,157	\$2,724,205	\$2,816,710
Miscellaneous	9,558	10,209	7,700	14,900	15,049	15,199	15,351	15,505	15,660
Use of (Addition to) Surplus			35,267						
Equipment Sales	9,392	2,990	7,500	5,200	5,252	5,305	5,358	5,411	5,465
TOTAL REVENUES	\$2,149,966	\$2,232,734	\$2,286,381	2,341,138	\$2,436,044	\$2,534,897	\$2,637,865	\$2,745,121	\$2,837,835
EXPENSES									
Personnel & Benefits	\$462,829	\$494,633	\$519,064	\$546,315	\$574,996	\$605,184	\$624,852	\$645,160	\$666,127
Operating Costs	1,223,418	1,262,139	1,337,317	\$1,364,300	\$1,394,251	\$1,425,225	\$1,457,284	\$1,490,492	\$1,524,921
Depreciation	415,265	410,105	430,000	430,000	430,000	435,000	445,000	450,000	460,000
SUBTOTAL	2,101,511	2,166,876	2,286,381	2,340,615	2,399,247	2,465,409	2,527,136	2,585,652	2,651,048
MINOR CAPITAL	14,350	56,095	0	0	0	0	0	0	0
TOTAL EXPENSE	\$2,115,861	\$2,222,972	\$2,286,381	\$2,340,615	\$2,399,247	\$2,465,409	\$2,527,136	\$2,585,652	\$2,651,048
NET REVENUE (EXPENSE)	\$34,105	\$9,762	\$0	\$523	\$36,797	\$69,488	\$110,729	\$159,469	\$186,786

EQUIPMENT FUND INCREASE (DEC) 11.81% 2.37% 2.50% 2.76% 2.50% 2.32% 2.53%

This section adjusts Net Revenue (Expense) to include uses of cash not recorded as expense, and to exclude expenses that do not require the use of cash. The purpose of the adjustment is to reflect the projected uses of cash from FY 16 thru FY 21:

Add: Depreciation	\$430,000	\$430,000	\$435,000	\$435,000	\$435,000	\$435,000	\$445,000	\$450,000	\$460,000
Subtract: Tfirs to Capital Reserve (see Note 2)	(450,000)	(550,000)	(600,000)	(600,000)	(600,000)	(600,000)	(610,000)	(620,000)	(600,000)
Debt Service Principal (see Note 2)									
Capital Outlays (see Note 2)									
Projected Annual Cash Surplus (Deficit)	(\$19,477)	(\$83,203)	(\$95,512)	(\$54,271)	(\$10,531)	(\$10,531)	(\$10,531)	(\$10,531)	\$46,786

Projected cash balance at year end \$ 355,564 336,087 252,884 157,373 103,102 92,571 139,358

Projected cash balance as a % of operating budget 14.36% 10.54% 6.38% 4.08% 3.58% 5.26%

Projected percentage increase - internal fleet charges 4.00% 4.25% 4.25% 4.25% 4.25% 3.50%

Note 1: Net Revenue (Expense) indicates the anticipated increase (decrease) in retained earnings at the end of the year.

Note 2: Debt Service principal, capital outlays, and transfers to reserves are balance sheet transactions, and are not included in expenses.

Note 3: Budgeted revenues exclude Use of Surplus / Fund Balance in FY 16-21.

CITY OF KEENE, NEW HAMPSHIRE

Equipment Fund 2016 - 2021 Capital Improvement Program Summary

<u>Dept.</u>	<u>Project Name</u>	<u>2015/2016</u>	<u>2016/2017</u>	<u>2017/2018</u>	<u>2018/2019</u>	<u>2019/2020</u>	<u>2020/2021</u>	<u>TOTAL</u>
Public Works	Capital Reserve - Equipment Replacement	\$ 450,000	\$ 550,000	\$ 600,000	\$ 610,000	\$ 620,000	\$ 600,000	\$ 3,430,000
Public Works	Equipment Replacement	422,461	845,451	818,521	684,256	756,170	508,752	4,035,611
TOTAL CAPITAL PROGRAM		\$ 872,461	\$ 1,395,451	\$ 1,418,521	\$ 1,294,256	\$ 1,376,170	\$ 1,108,752	\$ 7,465,611

PROJECT FUNDING DETAIL

<u>Reserve Funded Projects</u>								
Public Works	Equipment Replacement	\$ 422,461	\$ 845,451	\$ 818,521	\$ 684,256	\$ 756,170	\$ 508,752	\$ 4,035,611
Total: Reserve Funded Projects		\$ 422,461	\$ 845,451	\$ 818,521	\$ 684,256	\$ 756,170	\$ 508,752	\$ 4,035,611
<u>Projects Funded with Debt</u>								
Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Projects Funded with Debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>Capital Reserve Appropriations</u>								
Public Works	Capital Reserve - Equipment Replacement	\$ 450,000	\$ 550,000	\$ 600,000	\$ 610,000	\$ 620,000	\$ 600,000	\$ 3,430,000
Total: Capital Reserve Appropriations		\$ 450,000	\$ 550,000	\$ 600,000	\$ 610,000	\$ 620,000	\$ 600,000	\$ 3,430,000
<u>Projects Funded with State Grant</u>								
Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Projects Funded with State Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>Projects Funded with Cash</u>								
Public Works	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total: Projects Funded with Cash		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal: Uses of Cash		\$ 450,000	\$ 550,000	\$ 600,000	\$ 610,000	\$ 620,000	\$ 600,000	\$ 3,430,000
(Capital Reserve Appropriations plus Projects Funded with Cash)								
TOTAL CAPITAL PROGRAM		\$ 872,461	\$ 1,395,451	\$ 1,418,521	\$ 1,294,256	\$ 1,376,170	\$ 1,108,752	\$ 7,465,611



CITY OF KEENE, NEW HAMPSHIRE

2016 - 2021 Capital Project Funding Request

GENERAL PROJECT DATA

Project Name: **Capital Reserve-Equipment Replace**
 Department: **PUBLIC WORKS**
 Physical Location: **330 Marlboro St.**
 Federal Mandate: **No**
 State Regulation or Law: **No**
 Master Plan (CMP) Focus Area: **Quality Built Environment**
 CMP Vision/Strategy: **Transportation**
 Council Initiative: **N/A**
 V.O.I.C.E.: **Continually Assess Facilities and Infrastructure**
 Departmental Objective: **Yes**



PROJECT DESCRIPTION/JUSTIFICATION

The City of Keene Fleet has 137 vehicles and pieces of equipment in the replacement program. The age of the fleet ranges from one year to more than 15 years. This project sets aside funds for the orderly and timely replacement of vehicles and equipment when they reach the end of their useful life which is determined through a complete evaluation process. Operating vehicles beyond their service life results in increased maintenance costs, poor customer service, and lost production time due to a vehicle or equipment being out of service for extensive repairs. The replacement program is based on equipment age, condition, trade-in value, and operational needs of the user. When practical, emphasis is put on purchasing fuel efficient "green" vehicles as replacements are being evaluated. This replacement program list is reviewed extensively by the Fleet Services Administrative Review Committee before any piece of equipment is replaced. Vehicles are not replaced just because they are on the schedule.

FINANCIAL PLAN & PROJECT SCHEDULE

	PRIOR YR	FY16	FY17	FY18	FY19	FY20	FY21	TOTAL
EXPENDITURES								
Design								0
Construction/Implementation								0
Property/Equip. Acquisition		422,461	845,451	818,521	684,256	756,170	508,752	4,035,611
TOTAL	\$0	\$422,461	\$845,451	\$818,521	\$684,256	\$756,170	\$508,752	\$4,035,611
FUNDING								
Current Revenue	781,905	\$450,000	\$550,000	\$600,000	\$610,000	\$620,000	\$600,000	\$4,211,905
Capital Reserve								0
Debt Funded								0
Federal or State Grants								0
Other Sources		1,214	773	446	335	132	269	3,169
TOTAL	\$781,905	\$451,214	\$550,773	\$600,446	\$610,335	\$620,132	\$600,269	\$4,215,074

ANNUAL DEPARTMENT OPERATING BUDGET IMPACT: Negligible<\$5,001
Ongoing

PROJECT STATUS: Ongoing CIP

VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT PLAN

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021
STAFF CARS											
			REPLACE AT								
			7Yrs./60,000								
0901	2009	\$23,080	Honda Civic Hybrid	P3	Pool car					\$28,765	
0903	2009	\$23,080	Honda Civic Hybrid	P1	Pool Car					\$28,765	
0720	2007	\$23,080	Honda Civic Hybrid	P2	Pool car		\$24,780				
2110	2012	\$16,585	Ford Focus	110	Assessing						
3118	2014	\$18,559	Ford Fusion	118							
1001	2009	\$29,879	Ford Escape Hybrid	1	PW						
0902	2009	\$23,080	Honda Civic Hybrid	114	Code		\$27,927				
19C2	2009	\$37,336	Suburban	19C2	Fire		\$45,177				
19C1	2009	\$21,927	Explorer	19C1	Fire						\$28,000
0606	2006	\$35,132	Suburban	19C3	Fire	\$42,400					
1903	2012		Ford Interceptor		Fire						
0973	2009	\$29,879	Ford Escape	57	Engineering						
0014	2000	Rental	Ford Taurus		Fleet						
1144	2011	\$18,989	Ford Transit connect	1144	PD Parking						
1243	2012	\$22,374	Ford Transit Connect	1143	PD Parking						
VANS											
			REPLACE AT								
			10 YEARS/70,000								
			(8 YEARS/70,000 old)								
0004	2000	\$18,151	Ford E-150	7	Fleet						
1370	2013	\$16,353	Ford E-150		Water Meter						
1108	2011	\$17,392	Ford E-150	8	Water Meter						
1258	2012	\$16,491	Ford E-150	58	Engineering						
0907	2009	\$22,232	Ford E-250	101	Parks & Rec				\$28,902		
0203	2002	\$16,686	Ford E-150	1145	PD Parking						
0908	2009	\$22,232	Ford E-250	102	Parks & Rec			\$28,902			
1259	2012	\$16,491	Ford E-150	59	WWTP						\$21,438
0313	2003	\$14,250	Ford E-250	125	Records						
AMBULANCE											
			(Funding by separate Fire Department Capital Reserve Program)								
0707	2007		C4500 Chevy International	19A1	Fire						
19A2	2013		C4500 Chevy	19A2	Fire						
19A3	2009		C4500 Chevy	19A3	Fire						
MARKED POLICE											
			REPLACE AT								
			60,000/3 YEARS								
1436	2014	\$34,970	Ford Interceptor	1136	Cruiser	\$103,221	\$106,503	\$109,698	\$112,737	\$77,392	\$79,714
1137	2011	\$27,138	Crown Vic	1137	Cruiser						
1333	2013	\$34,970	Ford Interceptor	1133	Cruiser						
1334	2013	\$34,970	Ford Interceptor	1134	Cruiser						
1435	2014	\$34,970	Ford Interceptor	1135	Cruiser						
1140	2011	\$27,138	Crown Vic	1140	Cruiser						
1130	2011	\$21,994	Crown Vic	1130	Cruiser						
1138	2011	\$27,424	Crown Vic	1138	Cruiser						
1439	2014	\$34,970	Ford Interceptor	1139	Cruiser						
PD UNMARKED/ STAFF CARS											
			REPLACE AT								
			80,000/ 6 YEARS								
0318	2003	\$20,595	Ford Taurus	1121	Unmarked						
2111	2012	\$27,570	Ford Interceptor Util.	1129	Unmarked				\$35,558		
0929	2010	\$41,000	Tahoe	1111	Shift Commander	\$33,393			\$47,970		

VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT PLAN

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021
0037	2000	\$2900	Lexus 300 ES	1120	PD Staff		\$24,096				
1110	2012	\$26,423	Ford Taurus	1110	PD Staff						
0923	2009	\$17,859	VW Jetta	1123	PD Staff			\$20,895			
1222	2012	\$20,528	Dodge Caravan	1122	PD Staff						
0924	2009	\$20,910	Dodge Caravan	1124	PD Staff			\$24,465			
DUMP TRUCKS											
35/48/50 GWW											
0202	2002	\$112,143	Freightliner	6	Highway					\$137,000	
0526	2005	\$133,600	Ford Dump (Irg)	26	Highway						
0527	2005	\$133,600	Freightliner	27	Water						
0965	2009	\$151,000	Freightliner	65	Highway						
9406	1994	\$80,463	Inter. Dump	3	Highway	\$125,000					
1405	2014	\$80,463	Inter. Dump	5	Highway						
9508	1995	\$80,463	Inter. Dump	AP5	Airport						
1412	2014	\$80,463	Inter. Dump	12	Highway						
9502	1995	\$80,463	Inter. Dump	7	Highway	\$128,000					
0312	2003	\$120,000	Freightliner	2	Highway			\$131,000			\$140,000
9901	1999	\$88,000	Inter. Dump	4	Highway			\$131,000			
9906	1999	\$88,000	Inter. Dump	10	Highway			\$131,000			
0201	2002	\$112,143	Freightliner	22	Highway					\$137,000	
09AP8	2009	Grant	Freightliner	AP8	Airport				\$134,000		
0001	2001	\$76,644	Sterling	72	Highway						
1 TON TRUCKS											
10,000 GWW											
REPLACE AT 60,000/10 YEARS											
0611	2006	\$44,888	Ford Dump (sm)	11	Highway		\$58,354				
0724	2007	\$44,888	Ford F450	24	Highway		\$58,354				
113	2011	\$23,967	Ford F-350 Dump	13	Water						
0874	2008	\$44,888	Ford F450	74	Highway			\$58,354			
0823	2008	\$29,956	Ford F-350	23	WWTP				\$38,943		
4134	2014	\$33,562	GMC K3500	134	Cemetery						
1445	2013	\$37,806	Dodge 3500	45	Highway					\$64,585	
1275	2012	\$49,681	Ford F450	75	Highway						
0006	2000	\$26,411	Ford F350	107	Highway						
1214	2012	\$31,623	Ford F350	14	Water						
0815	2008	\$29,956	Ford F350	15	Water			\$38,943			
9820	1998	\$22,000	Ford F350	20	Fleet						
0205	2002	\$25,749	Ford F350	19B1	Fire						
0308	2003	\$25,749	Ford F250	19b2	Fire						
1119	2011	\$27,659	Ford F 350	19	Fleet						
3/4 TON TRUCKS											
REPLACE AT 80,000/10 YEARS											
9808	1998	\$21,805	Ford F250	130	Parks			\$25,000			
9821	1998	\$21,805	Ford F250	131	Parks			\$25,000			
1301	2000	\$22,232	GMC 2500	AP1	Airport						
0103	2001	\$23,597	Ford F250	19S1	Fire						
06AP3	2006	\$22,232	Ford F250	AP3	Airport						\$25,000
0904	2009	\$22,232	Ford F250	104	Parks						
1116	2011	\$20,483	Ford F250	16	Water						
1/2 TON TRUCKS											
REPLACE AT 70,000/10 YEARS											

VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT PLAN

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021
4103	2014	\$31,348	GMC 1500 Crew	103	Parks						
0818	2008	\$36,000	Ford F150	18	Highway				\$24,000		
1425	2014	\$19,828	GMC 1500	25	Highway						
1/4 TON TRUCKS											
REPLACE AT											
70,000/10 YEARS											
0310	2003	\$14,985	Ford Ranger	21	WTTP						
9804	1998	\$10,494	Ford Ranger	32	Facilities						
0314	2003	\$15,496	Ford Ranger	112	Code						
0502	2005	\$14,707	Ford Ranger	120	inspections						
SIDE WALK PLOWS											
REPLACE AT											
10 YEARS											
0411	2004	\$74,905	Holder (sidewalk plow)	50	Highway	\$16,000	\$16,000	\$16,000			
0412	2004	\$74,905	Holder (sidewalk plow)	51	Highway	\$16,000	\$16,000	\$16,000			
0553	2005	\$74,905	Holder (sidewalk plow)	53	Highway	\$16,000	\$16,000	\$16,000			
0752	2007	\$82,357	Trackless (sidewalk plow)	52	Highway						
0649	2006	\$110,000	Trackless (sidewalk plow)	49	Highway						
BACKHOE											
REPLACE AT											
12 YEARS											
0114	2001	\$63,874	John Deere 410D	41	Highway	\$25,000	\$25,000	\$25,000			
9608	1996	\$81,100	John Deere 710D	39	Water	\$25,000	\$25,000	\$25,000	\$25,000		
PAYLOADERS											
REPLACE AT											
15 YEARS											
0115	2001	\$148,964	John Deere Payloader	17	Transfer Station						
0634	2006	\$126,667	Komatsu	34	Highway				\$140,000		\$36,600
0031	2000	\$148,500	John Deere Payloader	33	Highway		\$140,000				
0306	2003	\$161,802	Case Payloader	AP5	Airport						
0607	2006	\$61,595	409 Loader	JCB	Recycle						\$18,000
GRADER											
8510	1985	\$80,500	Fiat Motorized Grader	37	Highway						
TRACTORS											
REPLACE AT											
10 YEARS											
0407	2004	\$106,472	Ford Versatile Tractor	40	Highway						\$80,000
066AP	2006	\$106,472	Ford Versatile Tractor	60	Airport			\$70,000			
0905	2009	\$31,000	New Holland Tractor	105	Parks & Rec					\$40,300	
0932	2009	\$20,125	Cub Cadet	132	Cemetery				\$26,163		
9918	1999	\$39,147	Kubota Tractor	29	WTTP						
1410	2014	\$23,400	Toyota Forklift		Recycle						
0513	2005	\$6,190	John Deere 1300	113	Parks & Rec			\$12,900			
0909	2009	\$8,000	John Deere X700	109	Parks & Rec			\$10,400			
1117	2011	\$32,250	Volvo MC15C	skidsteer	Highway						
0108	2001	\$33,020	NewHolland LS190	skidsteer	Solid Waste			\$42,926			
0706	2007	\$70,588	Toro Mower	Mower	Cemetery						\$80,000
0635	2006	\$8,359	Simplicity	135	Cemetery		\$10,867				
SPECIALTY EQUIPMENT											
REPLACE AT											
10 YEARS											
0317	2003	\$204,638	Ford L8000 Vactor	28	Water/Sewer	\$65,000	\$65,000	\$65,000	\$65,000		
9801	1998	\$134,240	Vac Con	36	Highway						

VEHICLE AND EQUIPMENT 6 YEAR REPLACEMENT PLAN

VEHICLE NUMBER	MODEL YEAR	Purchase Price	DESCRIPTION	VEHICLE DEPT. NO	USING DEPT/DIV	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021
9408	1994		Oshkosh Snow Blower	AP4	Airport						
AIR COMPRESSORS											
			REPLACE AT 10 YEARS								
9503	1990	\$10,000	Ingersoll Compressor	133	Cemetery						
9714	1997	\$10,000	Lindsay Compressor	88	Highway	\$13,840					
9909	1999	\$10,818	Lindsay Compressor	86	Water				\$14,063		
0589	2000	\$10,000	Air Compressor	89	Highway				\$13,000		
CONSTRUCTION EQUIPMENT											
			REPLACE AT 10 YEARS								
0704	2007	\$4,499	Graco Painter	80	Highway			\$5,849			
9012	1990	\$6,000	Snow Blower attach	80	Highway				\$7,800		
9823	1998	\$10,000	Chipper		Highway			\$13,000			
0912	2009	\$1,788	Woods Brush Hog		Highway				\$2,324		
9912	2000	\$7,155	Rosco Roller		Highway			\$9,311			
9410	1994	\$18,700	Forklift		Fleet Services						
9818	1998	\$3,000	Trailer for Cemetery		Cemetery				\$3,900		
9924	1999	\$8,200	Hydro Tek Steamer		Highway				\$10,660		
0113	2001	\$21,208	Asphalt Reclaimer		Highway						
9301	1993	\$21,208	Asphalt Reclaimer		Highway						
8210	1982	\$20,000	Trailer		Highway						
0010	2000	\$5,800	Miller Curber		Highway			\$7,540			
0022	2000	\$33,000	Cimline Crack Sealer		Highway				\$42,900		
0520	2005	\$9,260	Weider/Generator on Trailer		Fleet Services					\$12,038	
0408	2004	\$38,000	USA Mower Attach		Highway						
0011	2000	\$5,225	Stowe Roller		Parks & Rec						
9014	1990	\$20,000	Snogo Blower		Highway						
0663AP	2006		Satsco/Chipper		Airport						
0409	2004		Pronovost Snowblower		Highway						
0036	2000	\$9,995	Vibromax Roller		Highway						
Total						\$422,461	\$845,451	\$818,521	\$684,256	\$756,170	\$508,752