

PROGRAM HIGHLIGHTS**ENGINEERING SERVICES**

<u>SERVICE INDICATORS</u>	<u>Actual 2011</u>	<u>Actual 2012</u>	<u>Estimated 2013</u>	<u>Projected 2014</u>
1. Capital Project Designed/Managed by Engineering Staff	26	38	27	25
2. Private Development Project Plan Reviews	40	35	50	50
3. Street/Driveway/Excavation Permits	642	459	437	472
4. Utility Service Connections/Inspections	52	41	68	60
5. Monitoring Well Annual Licenses/Permits	43	44	43	43
6. GIS Referrals/Requests for Service	137	170	120	130
7. Traffic Operations Committee Referrals	41	23	30	30
8. Poles and Wires Licenses	29	25	25	20

2014 GOALS

- Develop and/or continue an implementation strategy for City Council's consideration of improvement options on the City's priority transportation corridors: a) Loudon Road Corridor (CIP #19); and b) Langley Parkway (CIP #40).
- Advance and/or complete the design and/or construction of the following major transportation corridor projects in accordance with their respective program schedules: a) US Route 3 North (North State Street, Fisherville Road, Village Street from Penacook Street to the Boscawen Town Line) (CIP #35); and b) Main Street Downtown Complete Streets Improvement Project (CIP# 460).
- Advance and/or complete the design and/or construction of the following major airport projects in accordance with their respective program schedules: a) Construction of Phase 1 (East End) Parallel Taxiway to Runway 12/30 (CIP #73); b) Apply for FAA grant for Snow Removal Equipment (CIP #77); and c) Coordinate the installation of a new FAA Localizer.
- Advance and/or complete the design and/or construction of the following major utility projects in accordance with their respective program schedules: a) Hopkinton Road/Saw Mill Road Water Main Cleaning and Lining Project – Design (CIP #84); b) Loudon Road Water Main Replacement Project – Phase 2 (CIP #85); c) Sewalls Falls Road Water Main Extension Project (in conjunction with the design of the Sewalls Falls Road Bridge Replacement) (CIP #86); d) Penacook Sanitary Sewer Lining Project (CIP #91); and e) Design the relocation of the water and sewer mains associated with the new on line bridge replacement at Exit 12 (NHDOT project).
- Advance and/or complete the design and/or construction of the following major streetscape, sidewalk, traffic operation and targeted neighborhood improvement projects in accordance with their respective program schedules: a) North Main/Bouton/I-393 Traffic Signal Improvements Project and Water Street Signal Coordination Improvements (CIP #283).
- Advance and/or complete the design and/or construction of the following major bridge improvement projects in accordance with their respective program schedules: a) Design/Permitting of the Sewalls Falls Road Bridge Replacement Project (CIP #22).
- Advance and implement the following major technology improvements in accordance with their respective program schedules: a) Digital Tax Map Development Project – Phase 2 (CIP #297).
- Develop strategies for evaluating and implementing mechanisms for a City-wide Stormwater Enterprise for funding the stormwater management program (CIP #479).
- Continue to support the comprehensive citywide traffic and transportation engineering program with staff and the Transportation Policy Advisory Committee (TPAC), including review of the City's Transportation Master Plan and the Traffic Management Policy.

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2013 GOALS STATUS

1. Develop and/or continue an implementation strategy for City Council's consideration of improvement options on the City's priority transportation corridors: a) Loudon Road Corridor (CIP #19); and b) Langley Parkway (CIP #40).

9-Month Status:

- a) Following notice in April 2012 by NHDOT and FHWA that the Loudon Road Corridor project was determined eligible for Highway Safety Improvement Program (HSIP) funding (90% Federal/10% Local), staff has been working closely with the City Manager's office to reach out to Loudon Road business leaders to inform them of the pending project. A detailed public review program is being developed and it is expected that the project will be presented to the public in 2013. Construction is not expected to begin until the completion of the Loudon Road water main reconstruction (CIP #85), which is programmed for the 2013 construction season.
 - b) The traffic and environmental feasibility study is underway to determine the project-related impacts of the Langley Parkway – Phase 3 project. Engineering staff continues to work with VHB, the City's transportation planning consultant, on the project. Conceptual design and cost estimates of corridor alignment and intersection alternatives is underway, including coordination with Concord Hospital, Lincoln Financial and area residents. The project study is expected to continue through early 2013, concluding with a presentation to City Council in mid to late 2013.
2. Advance and/or complete the design and/or construction of the following major transportation corridor projects in accordance with their respective program schedules: a) US Route 3 North (North State Street, Fisherville Road, Village Street from Penacook Street to the Boscawen Town Line) (CIP #35).

9-Month Status:

- a) Construction of Phase 4 of US Route 3 North (Palm Street to Penacook Street) was substantially completed in December 2012. A minor punch list was developed at final project inspection and all of the remaining work will be completed by June 28, 2013. Engineering staff completed the design of the Phase 5 Improvements (Village Street from the Boscawen Town Line to Stark Street) and, through the public design review process, a request to relocate aerial utilities within the Penacook Village area to underground locations was heard by City Council. At its March 2013 meeting, City Council approved an appropriation resolution funding the additional utility work. In that, staff will issue utility relocation contracts and complete the necessary work through the 2013 construction season. Construction of the Phase 5 improvements will be deferred until the 2014 construction season.
3. Advance and/or complete the design and/or construction of the following major traffic intersection projects in accordance with their respective program schedules: a) South Street, Clinton Street, Broadway, and West Street (McKee Square) Intersection Improvement Project (CIP #31); and b) Manchester Street, Old Turnpike Road Intersection Improvement Project (CIP #519).

9-Month Status:

- a) City Council accepted the report at its May 2012 meeting recommending that the roundabout option be the preferred alternative and the project be placed in the out year of the City's CIP program.
- b) A detailed ground and topographic survey was completed along the Manchester Street/Old Turnpike Road intersection project area and preliminary design by Engineering staff is nearly complete. Staff is coordinating traffic and highway alignment of the intersection improvement project with the NHDOT Traffic Bureau. A preliminary design report on intersection improvement options is expected in mid-2013.

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4. Advance and/or complete the design and/or construction of the following major airport projects in accordance with their respective program schedules: a) Design of Parallel Taxiway to Runway 12/30 (CIP #73); and b) Runway Safety Area Study – Runway 12/30 (CIP #73).

9-Month Status:

- a) The design plans for the Taxiway B project were presented to federal, state and local agencies at a Natural Resource Agency meeting in February 2013. Plans are 60% complete and will be forwarded to the Federal Aviation Administration (FAA) and the NH Department of Transportation (NHDOT) for review and comment. Staff is coordinating the project mitigation efforts with US Fish & Wildlife Services.
- b) The Runway Safety Area Determination Study is complete and its recommendations accepted by the FAA. Long term recommendations will be implemented at the time the main runway 17/35 is reconstructed. Short term recommendations (placing the localizer on frangible mounts) will be implemented as part of the Taxiway B project.
5. Advance and/or complete the design and/or construction of the following major utility projects in accordance with their respective program schedules: a) Hopkinton Road/Saw Mill Road Water Main Cleaning and Lining Project – Design (CIP #84); b) Loudon Road Water Main Replacement Project – Phase 2 (CIP #85); c) Sewalls Falls Road Water Main Extension Project (in conjunction with the design of the Sewalls Falls Road Bridge Replacement) (CIP #86); and d) Penacook Water Main Cleaning and Lining Project, Phase II (CIP #84).
- 9-Month Status:
- a) Engineering staff completed the design for the Hopkinton Road/Saw Mill Road Water Main Cleaning and Lining Project in March 2013. This project is an FY 2014 program project and is not funded until July 1, 2013. Construction is not expected until the 2014 construction season.
- b) In late 2011, the City received one bid for the Loudon Road Water Main Replacement Project – Phase 2. Staff rejected the bid due to a lack of competition and high pricing. Engineering staff has reviewed the project design and contract specifications and is currently soliciting bids. Construction is expected to begin in early 2013 and continue throughout the 2013 construction season.
- c) Final design is underway on the Sewalls Falls Road Bridge Replacement project. Initial efforts have focused on detailed analysis of the existing truss bridge structure. Design of the water main extension along Sewalls Falls Road from Manor Road to Monitor Way is expected in late 2013, in conjunction with the bridge project final design tasks.
- d) The Penacook Water Main Cleaning and Lining project was completed in October 2012.
6. Advance and/or complete the design and/or construction of the following major streetscape, sidewalk, traffic operation and targeted neighborhood improvement projects in accordance with their respective program schedules: a) Main Street/Pleasant Street Traffic Signal Operations Improvement Project (CIP #283); b) Pleasant Street/Warren Street/Fruit Street Traffic Signal Operations Improvement Project (CIP #283); and c) Warren Street Safe Routes to School Improvements Project (CIP #380).

9-Month Status:

- a) Given the recent award of a TIGER grant for the Downtown Complete Streets Improvement Project, the Main Street/Pleasant Street Traffic Signal Operations Improvement project was cancelled and the funds for the signal design project were re-appropriated for the Main Street design given that the signal improvement project is part of the downtown project.
- b) The field survey is complete and preliminary design alternatives by Engineering staff have been evaluated and reviewed with both the Traffic Operations Committee (TOC) and the Transportation Policy Advisory Committee (TPAC). In order to develop a complete streets solution to the intersection, the preferred alternative exceeds the available funding for the project; therefore staff will prepare a report to Council outlining alternatives and recommendations for their consideration in mid-2013.

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- c) In conjunction with the Pleasant Street/Warren Street/Fruit Street Intersection improvement, additional survey along Warren Street was gathered to provide a survey base plan for the Warren Street Safe Routes to School Improvements Project. Although not programmed until FY 2014, the streetscape improvements are targeted to provide better crosswalk control along this heavy pedestrian oriented corridor. City staff will be coordinating with the Concord School District if joint funding for this project becomes available.
7. Advance and/or complete the design and/or construction of the following major bridge improvement projects in accordance with their respective program schedules: a) Design/Permitting of the Sewalls Falls Road Bridge Replacement Project (CIP #22).
9-Month Status: Final design of the bridge project is underway. The initial phases of the design include a detailed bridge structural evaluation by the design consultant. The evaluation has been completed and reports have been reviewed with both FHWA and NHDOT. Staff presented findings to City Council in August 2012, and recommended that, in light of the report findings indicating extensive work required, limited remaining fatigue life, and concerns with fracture critical members, previous alternatives considered should be reevaluated. Engineering staff continued its evaluation of alternatives with the design consultant and has been attending the NHDOT cultural and natural resource review meetings and presented the findings to the Concord Heritage Commission. Final alternative review was presented at a public meeting in January 2013, and City Council accepted a staff recommendation to replace the bridge at its February 2013 meeting. Engineering staff continues to complete the environmental and cultural permitting in advance of proceeding to final design.
8. Advance and implement the following major technology improvements in accordance with their respective program schedules: a) Digital Tax Map Development Project – Phase 3 (CIP #297).
9-Month Status: Tax Map Development Phase 3 was postponed to FY 2015. Layer development completed by summer interns include street lights inventory and utility records update.
9. Develop strategies for evaluating and implementing mechanisms for a City-wide Stormwater Enterprise for funding the stormwater management program (CIP #479).
9-Month Status: Staff reviewed a conceptual strategy for a stormwater utility with the Fiscal Policy Advisory Committee in late 2011. Although the project was not funded in the FY 2013 CIP program, Engineering staff will continue to develop data and prepare funding option plans for Council review.
10. Continue to support the comprehensive City-wide traffic and transportation engineering program with staff and the Transportation Policy Advisory Committee (TPAC), including review of the City's Transportation Master Plan and the Traffic Management Policy.
9-Month Status: This is an ongoing effort. Engineering staff supports the full TPAC committee, as well as Bike, Pedestrian and Public Transit subcommittees.

ADDITIONAL 2013 ACCOMPLISHMENTS

1. Coordinated and conducted perambulation of municipal boundary line with the Town of Bow. The actual perambulation included the Concord City Surveyor, Concord City Councilor Werner, Bow Selectman Judd, and Bow Town Manager Stack.
2. Assisted the General Services Department by assigning address numbers to all of the City's wastewater pump stations.

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3. Completed a title search of Kimball Park property in conjunction with the Boys and Girls Club development project. Completed applications to the National Park Service (NPS) and the NH Department of Resources and Economic Development Department (DRED) in conjunction with redesignation of the Land and Water Conservation Fund (LWCF) Kimball Park boundary in conjunction with the site improvement project.
4. Completed a title search of the Dame School property in anticipation of City acquisition of the property from the Concord School District.
5. Executed a grant agreement with the Federal Aviation Administration (FAA) to install frangible mounting bolts on the Localizer to comply with recommendations of the Runway Safety Determination Study (RSDS).
6. Given that required public improvements were not completed in accordance with approvals, Engineering Services, through approval by City Council, seized the financial guarantees for the Hess Oil (Main Street) and the Reserve at Stonehaven (Sanborn Road) projects and completed the design and construction management of the public improvements.
7. In an effort to relocate the snow dump at Terrill Park to a property owned by the City on Terrill Park Drive, Engineering staff successfully negotiated an easement allowing for the design and construction of an access drive to the site. Engineering staff has completed a preliminary design and will complete final design and permitting through 2013 for site use in 2014.
8. Engineering staff worked closely with the Parks/Recreation and General Services Departments to complete the design, permitting and construction of the pond expansion at Beaver Meadow Golf Course.
9. Engineering staff coordinated the completion of Phase I of the Bridge Overweight Load Permit System. Data collection and bridge inventory was completed to prepare cost estimates for calculated structural load analysis on some of Concord's bridges to comply to current NHDOT overweight load permit requirements.
10. The Geographic Information System (GIS) team initiated a computerized records management system which links the physical attributes of our water utility system to the GIS mapping features.
11. Engineering staff coordinated with staff from Parking Enforcement and the Concord School District to address on-street parking issues and related resident concerns at the Abbot-Downing and Mill Brook Schools.
12. Engineering staff developed ArcGIS Server based web GIS applications. The PC version has fully replaced the ten-year old ArcIMS sites for internal and public users. A preliminary mobile device version is being tested by General Services Department users.
13. Engineering staff created comprehensive Penacook sewer system maps of capital improvements, sewer inspections and assessments. This is a document required by EPA for Penacook Waste Water Treatment permit renewal.

ENGINEERING SERVICES**BUDGET DETAIL**

	2010 ACTUAL	2011 ACTUAL	2012 ACTUAL	2013 BUDGETED	2013 ESTIMATED	2014 BUDGET
REVENUE						
LICENSE FEES	\$440	\$7,485	\$4,510	\$5,280	\$4,540	\$4,540
PERMITS, STUDIES AND MISC	\$915	\$4,418	\$3,502	\$2,000	\$2,000	\$2,000
MISCELLANEOUS	\$0	\$2,025	\$2,250	\$1,800	\$1,800	\$1,800
POLE LICENSE RECORDING FEE	\$850	\$280	\$400	\$100	\$120	\$100
REPORTS, PRINTS & COPIES	\$2,913	\$2,908	\$2,687	\$2,600	\$2,600	\$2,600
ADMIN FRM IMPACT FEES & TRUSTS	\$40,011	\$40,012	\$40,013	\$40,000	\$40,000	\$20,000
OTHER FEES AND CHARGES	\$11,216	\$12,280	\$14,437	\$19,250	\$17,600	\$18,150
Total	\$56,345	\$69,407	\$67,798	\$71,030	\$68,660	\$49,190
APPROPRIATIONS						
COMPENSATION	\$511,585	\$514,781	\$559,851	\$602,870	\$602,370	\$625,270
OUTSIDE SERVICES	\$49,791	\$75,874	\$48,785	\$62,360	\$62,145	\$64,305
SUPPLIES	\$13,210	\$12,599	\$14,028	\$15,380	\$15,120	\$13,270
VEHICLE MAINTENANCE	\$6,895	\$7,030	\$10,081	\$10,000	\$10,000	\$10,000
INSURANCES	\$20,837	\$18,726	\$18,125	\$24,620	\$24,100	\$19,040
FRINGE BENEFITS	\$352,161	\$316,327	\$354,823	\$373,120	\$379,590	\$400,400
ADMIN CHARGES ALLOCATED	(\$170,160)	(\$176,430)	(\$198,156)	(\$194,730)	(\$194,733)	(\$259,840)
Total	\$784,319	\$768,907	\$807,538	\$893,620	\$898,592	\$872,445

BUDGET DETAIL**ENGINEERING SERVICES**

<u>POSITION TITLE</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
City Engineer	1.0	1.0	1.0	1.0
Associate Engineer	2.0	2.0	2.0	2.0
Traffic Engineer	1.0	1.0	1.0	1.0
City Surveyor	1.0	1.0	1.0	1.0
GIS Coordinator	1.0	1.0	1.0	1.0
Project Manager	1.0	1.0	1.0	1.0
Senior Engineering Technician	1.0	1.0	1.0	1.0
Engineering Technician II	3.0	*2.0	2.0	2.0
Engineering Technician I	4.0	4.0	4.0	4.0
GIS Analyst	1.0	1.0	1.0	1.0
Engineering Aide	1.0	1.0	1.0	1.0
Fiscal Supervisor	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>
Total	18.0	17.0	17.0	17.0

* In FY 2012 a vacant Engineering Technician II position that was unfunded in FY 2011 was eliminated.

ENGINEERING SERVICES

FUNDING IMPACT

This budget contains no significant funding changes.