

# Provisional Capital Submissions

## Section 9



**Five Year Department Submissions  
Section Index  
FY2015 - FY2019**

| Title   | Department                | Group                  | Page |
|---|---------------------------|------------------------|------|
| <b>Alphabetical by Title (sort)</b>                 |                           |                        |      |
| Athletic Fields Master Plan                         | Parks & Recreation        | Community Services     | 9-16 |
| Bridge Repairs                                      | DPW                       | Public Works           | 9-3  |
| Canoe Launch  | Parks & Recreation        | Community Services     | 9-17 |
| DeFazio Park Parking Lot and Tot Lot Improvements   | DPW                       | Drains                 | 9-4  |
| DPW Complex   | DPW                       | Public Works           | 9-5  |
| Emery Grover Roof Replacement                       | Public Facilities         | Public Schools         | 9-10 |
| Expansion of RTS Additional Recycling Area          | DPW                       | RTS                    | 9-19 |
| Fire Flow Improvements                              | DPW                       | Water                  | 9-24 |
| Improvements to Memorial Park Buildings and Grounds | Trustees of Memorial Park | Community Services     | 9-18 |
| Irrigation Supply                                   | DPW                       | Water                  | 9-25 |
| Library RFID Conversion Project                     | Needham Public Library    | Needham Public Library | 9-12 |
| Pollard Locker Room Retrofit                        | Public Facilities         | Public Schools         | 9-11 |
| Pollard School Improvements                         | Needham Public Schools    | Public Schools         | 9-2  |
| Public Playgrounds                                  | Park & Recreation         | Community Services     | 9-13 |
| Radio Repeater Building Replacement (Hillcrest Rd.) | Multiple Departments      | Various                | 9-1  |
| Renovation of Buildings at Camp Property            | Parks & Recreation        | Community Services     | 9-14 |
| Sewer Main Replacement                              | DPW                       | Sewer                  | 9-23 |
| Sewer System Infiltration & Inflow Removal          | DPW                       | Sewer                  | 9-21 |
| Sign Shop   | DPW                       | Highway                | 9-7  |
| Street Sign Inventory                               | DPW                       | Highway                | 9-6  |
| Survey Equipment                                    | DPW                       | Engineering            | 9-8  |
| Town Common Historic Redesign and Beautification    | DPW                       | Parks                  | 9-9  |
| Trail Improvements: Farley Pond Loop                | Community Development     | Community Services     | 9-15 |
| Transfer Station Building Renovation and Expansion  | DPW                       | RTS                    | 9-20 |
| Capital Request Code Key                            |                           |                        | 9-26 |



Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |  |                            |     |  |    |   |              |     |  |    |                              |
|--|--|----------------------------|-----|--|----|---|--------------|-----|--|----|------------------------------|
| <b>Title</b>   | <b>Radio Equipment/Repeater Building Replacement (Hillcrest Rd.)</b> |                            |     |  |    |   |              |     |  |    |                              |
| Department   | Fire, Police, DPW, Schools   |                            |     |  |    |   |              |     |  |    |                              |
| Location   | Hillcrest Rd. (at base of water tower)                               |                            |     |  |    |   |              |     |  |    |                              |
| Estimated Project Cost   | \$230,000.   | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes |  | No | X                            |
| <b>Project Summary</b>   |  |                            |     |  |    |   |              |     |  |    |                              |
| <p>This future request is to replace the failing building at the base of the water tower on Hillcrest Rd. The building houses radio equipment and related support components for the radios and antennas used by the following departments: Fire, Police, DPW and Schools (including the school buses). The new building would contain all of the same with the back-up generator in a separate room for noise control purposes. Additionally, water testing and metering equipment would now be housed at this location.</p> <p>The current building, which is built with cement blocks, is deteriorating and has several water leaks both in the walls and the roof. There has also been damage to the building and contents from animals (rodents), and the steel entrance door has heavy rust and rot. We have not been able to find records of when the structure was built, but it appears it was most likely in the late 1960s or early 1970s.</p> <p>Representatives from each of the departments who use the building have met several times to discuss what is actually needed, and have met with one vendor to secure cost estimates. The estimate from the one vendor was used to develop the dollar amount in this request. As this project was not previously included in the five year capital plan, it is expected that it will not be done for several years, which would most likely have an impact on the pricing.</p> <p>We will also research the possibility of grant funding, and see what other funding programs might be available.</p> <p>It has also been determined that the new building should be larger than the existing building to allow for future additional equipment, which could possibly include private antenna and communications equipment. Private equipment may be a source of revenue for the Town. The current building size is 8'X10' and the proposed replacement building would be up to 10'X18' to allow for the added water department equipment, placing the back-up power generator in a separate room, as well as possible expansion space.</p> <p>If this building is not replaced, or significantly rebuilt, continuing damage to the communications equipment could cause a major void(s) in public safety radio signals and the ability to communicate during emergencies. There is also concern of electrical problems due to water and rodent damage to the electrical wiring in the building.</p> <p>In the meantime, it is recommended that the Public Facilities Department investigate what maintenance issues the current building needs, and take steps to have those issues completed.</p> |  |                            |     |  |    |   |              |     |  |    |                              |
|  |  |                            |     |  |    |   |              |     |  |    | <b>FY2016-FY2020 Version</b> |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |                             |                            |     |  |    |   |              |     |  |    |   |
|---|-----------------------------|----------------------------|-----|--|----|---|--------------|-----|--|----|---|
| <b>Title</b>  | Pollard School Improvements |                            |     |  |    |   |              |     |  |    |   |
| Department  | School Department           |                            |     |  |    |   |              |     |  |    |   |
| Location  | 200 Harris Avenue           |                            |     |  |    |   |              |     |  |    |   |
| Estimated Project Cost  | \$12,847,035<br>(2014\$)    | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes |  | No | X |
| <b>Project Summary</b>  |                             |                            |     |  |    |   |              |     |  |    |   |
| <p>In 2011, a facilities assessment was conducted of the Mitchell, Hillside and Pollard Schools. This assessment identified repair projects that should be undertaken to extend the useful life of these school buildings. It also identified, in summary fashion, the need for programmatic improvements at the Pollard Middle School, for the purpose of adapting Pollard to the "21<sup>st</sup> Century Learning" environment. This environment reflects changes in education that have occurred over the past 50 years, including technology integration, project-based learning, team-teaching, multi-disciplinary collaboration and special education delivery methods. Dore &amp; Whittier, the architects who conducted the facilities assessment, concluded that a detailed programmatic study be undertaken, in order to understand the full scope of the programmatic improvements needed and to ensure that any future renovation/improvement project be comprehensive enough to meet both the facility maintenance and programmatic needs of the school for the next several decades.</p> <p>Some of the programmatic improvements identified by Dore &amp; Whittier include renovation and enlargement of the science and engineering classrooms, updates to the auditorium and reconfiguration of the administration area. The science classrooms are undersized from Massachusetts School Building Authority (MSBA) standards, do not have adequate prep rooms or storage spaces and include casework and plumbing fixtures that are in poor condition. The engineering classroom is a converted space that is not well-suited to delivery of the curriculum. The auditorium needs updating, including sound and lighting upgrades, in order to remain a suitable space for performing arts, guest lectures and assemblies. In addition, the administration space, which is located on the side of the building, is difficult for visitors to locate, doesn't allow school personnel to view visitors as they approach the building and is undersized by MSBA standards.</p> <p>Finally, the modular classrooms, constructed in 2002, are not designed for permanent, long-term facilities. They are constructed of inexpensive materials, in fast-production style construction techniques and are not energy efficient. A long-term solution will be required within the next ten years. (The expected lifespan for modular classrooms is 20 years.)</p> <p>This request is for funds to repair/renovate or reconstruct the Pollard Middle School to address identified needs and meet programmatic needs. The projected cost was developed by Dore &amp; Whittier, 2014, based on "Science Option 3," which constructs a 14,500 s.f. science wing addition to the school. A Statement of Interest will be filed with the MSBA to initiate a dialog about this facility.</p> |                             |                            |     |  |    |   |              |     |  |    |   |
| <b>FY2016-FY2020 Version</b>  |                             |                            |     |  |    |   |              |     |  |    |   |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |                          |                            |     |  |    |   |              |     |   |    |  |
|---|--------------------------|----------------------------|-----|--|----|---|--------------|-----|---|----|--|
| <b>Title</b>  | <b>Bridge Repairs</b>    |                            |     |  |    |   |              |     |   |    |  |
| Department  | DPW - Engineering        |                            |     |  |    |   |              |     |   |    |  |
| Location  | Various throughout Town  |                            |     |  |    |   |              |     |   |    |  |
| Estimated Project Cost  | 1,000,000 –<br>5,000,000 | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes | X | No |  |
| Project Summary   |                          |                            |     |  |    |   |              |     |   |    |  |
| <p>Surrounded on three sides by the Charles River, the Town jointly maintains a number of bridges with neighboring communities. The Massachusetts Bridge Inspection Program has identified a number of bridges that have some level of deficiency and has recommended repairs. This program is essential to improve the structural and/or surface integrity of all bridges throughout Needham. Capital Project costs will include surveying, engineering evaluation, design, and repair or reconstruction. Bridges are one of the infrastructure assets whose value and depreciation are now tracked under the GASB 34 program.</p> <p><u>Cooks (Eliot) Bridge</u> – Central Ave to Newton Upper Falls –there is presently a CIP request in for construction in FY 2016.</p> <p><u>Other Bridges</u><br/>           Lyon’s Bridge, Greendale Ave to Dedham<br/>           Dedham Ave Bridge to Dedham<br/>           Newell’s Bridge, Central Ave to Dover<br/>           Fisher’s Bridge, South St to Dover<br/>           Pierce’s Bridge, Charles River St. to Dover and So. Natick<br/>           Kendrick Bridge to Newton</p> |                          |                            |     |  |    |   |              |     |   |    |  |
| <b>FY2014-FY2018 Version</b>  |                          |                            |     |  |    |   |              |     |   |    |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |  |                            |     |  |    |   |              |     |  |    |                         |
|--|--|----------------------------|-----|--|----|---|--------------|-----|--|----|-------------------------|
| <b>Title</b>   | <b>DeFazio Park Parking Lot and Tot Lot Improvements</b> |                            |     |  |    |   |              |     |  |    |                         |
| Department   | Public Works - Drains                                    |                            |     |  |    |   |              |     |  |    |                         |
| Location   | 380 Dedham Ave   |                            |     |  |    |   |              |     |  |    |                         |
| Estimated Project Cost   | <b>\$10,000,000</b>                                      | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes |  | No | X                       |
| <b>Project Summary</b>   |  |                            |     |  |    |   |              |     |  |    |                         |
| <p>This project is to create paved parking for DeFazio Park and Tot Lot.</p> <p>These improvements will decrease pollutants entering the Reservoir and wetland and bring the Town into compliance with our Memorandum of Understanding (MOU) with the U.S. Environmental Protection Agency (EPA) and our National Pollutant Discharge Elimination System permit (NPDES).</p> <p>In the spring of 2012 the DeFazio parking lot was scarified, graded, and resurfaced with stone chips as a temporary solution. The parking lot is heavily used resulting in numerous and large depressions on the surface. During heavy rains, gravel and dirt run into the nearby reservoir which has resulted in deposits of sand and silt into nearby wetlands. The project will improve the entrance to the parking lot near the Tot Lot to improve child safety between the Tot Lot and the playing fields, and create a buffer for the wetlands. Stormwater quality features will be installed to improve stormwater before it enters into the stream and the reservoir.</p> <p>This project may be impacted by potential developments at the DeFazio complex, and its future is uncertain.</p> |  |                            |     |  |    |   |              |     |  |    |                         |
|  |  |                            |     |  |    |   |              |     |  |    | FY2015 - FY2019 Version |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |                            |                            |     |  |    |          |              |     |  |    |                         |
|---|----------------------------|----------------------------|-----|--|----|----------|--------------|-----|--|----|-------------------------|
| <b>Title</b>  | <b>DPW Complex</b>         |                            |     |  |    |          |              |     |  |    |                         |
| Department  | Department of Public Works |                            |     |  |    |          |              |     |  |    |                         |
| Location  | TBD                        |                            |     |  |    |          |              |     |  |    |                         |
| Estimated Project Cost  | <b>\$20-50 Million</b>     | Alternative Funding Source | Yes |  | No | <b>X</b> | CPA Eligible | Yes |  | No | <b>X</b>                |
| <b>Project Summary</b>  |                            |                            |     |  |    |          |              |     |  |    |                         |
| <p>This project has been postponed pending the Town's Facility Master Plan update.</p> <p>The recently completed Public Services Administration Building (PSAB, 500 Dedham Ave) was occupied by the DPW since November 2011, eliminating the space problems and air quality issues experienced on the second floor of the DPW Operations Building. However, deficiencies continue to exist throughout the building internally and the DPW site externally. The poor condition of the current building, unmet equipment and vehicle storage, stormwater quality issues require a solution. Ultimately, the expansion and renovation of the DPW Operations Building (470 Dedham Ave) and site, referred to as DPW Phase II, will be required to address the need for storage as well as the stormwater quality issues.</p> <p>In 2006, the DPW was made aware that municipal DPW facilities were no longer exempt from National Pollutant Discharge Elimination System (NPDES) stormwater requirements regulating transportation facilities under the Federal Highway Act. All municipal DPW facilities are now required to comply with stormwater discharge requirements (quality). In 2009, Town Meeting approved \$42,000 for engineering and design for stormwater quality improvements on a portion of the DPW site. This work has been completed, and construction for these improvements was being funded by Town meeting for FY 2014.</p> <p>In FY13 Town Meeting approved \$40,000 for a feasibility study of the proposed DPW storage garage.</p> <p>The work that was approved for FY14 under this request is for the construction of the 6 garage bays. The work addresses part of the storage space needs for DPW equipment and will provide for vehicle coverage out of the elements. The current DPW facility is over 50 years old. With modifications, it will continue to be used well into the future. The major building systems including electrical, plumbing, and HVAC are all original and are in need of replacement. The remainder of the current open vehicle storage area is proposed to be covered.</p> <p>The remaining portions of the DPW site must be addressed. The lack of vehicle and equipment storage is the primary contributor to the water quality issues. Completion of the DPW facility construction in the Phase II request will resolve these stormwater management issues. Additionally, by providing shelter from the elements, the service life of vehicles and equipment can be extended.</p> |                            |                            |     |  |    |          |              |     |  |    |                         |
|   |                            |                            |     |  |    |          |              |     |  |    | FY2015 - FY2019 Version |

Town of Needham  
 Capital Improvement Plan  
 January 2015

| Future Capital Project<br>CIP-FCP   |                                      |                            |     |   |    |  |              |     |  |    |   |
|---|--------------------------------------|----------------------------|-----|---|----|--|--------------|-----|--|----|---|
| Title   | Street Sign Inventory                |                            |     |   |    |  |              |     |  |    |   |
| Department  | Department of Public Works - Highway |                            |     |   |    |  |              |     |  |    |   |
| Location  | Town-wide                            |                            |     |   |    |  |              |     |  |    |   |
| Estimated Project Cost  | \$45,000                             | Alternative Funding Source | Yes | X | No |  | CPA Eligible | Yes |  | No | X |
| Project Summary   |                                      |                            |     |   |    |  |              |     |  |    |   |
| <p>This would be a town-wide analysis of all street signs. This is largely in response to the Manual on Uniform Traffic Control Devices (MUTCD) most recent revisions requiring a level of retroreflectivity in specific street signs in June 2014. The Town is presently only replacing signs on an as needed basis. This study would include an inventory of all signs, their compliance with the retroreflectivity requirement, their compliance with other MUTCD requirements height, size, placement, legibility, etc, and make recommendations on a replacement plan. This inventory will be able to be updated by Town employees as changes are made once the inventory is done.</p> <p>May use Ch 90 or operating budget for funding, depending on urgency.</p> |                                      |                            |     |   |    |  |              |     |  |    |   |
| <b>FY2016-FY2020 Version</b>  |                                      |                            |     |   |    |  |              |     |  |    |   |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |                                      |                            |     |  |    |   |              |     |  |    |   |
|--|--------------------------------------|----------------------------|-----|--|----|---|--------------|-----|--|----|---|
| <b>Title</b>   | <b>Sign Shop</b>                     |                            |     |  |    |   |              |     |  |    |   |
| Department   | Department of Public Works - Highway |                            |     |  |    |   |              |     |  |    |   |
| Location   | Engineering - TBD                    |                            |     |  |    |   |              |     |  |    |   |
| Estimated Project Cost   | 35,000                               | Alternative Funding Source | Yes |  | No | x | CPA Eligible | Yes |  | No | x |
| <b>Project Summary</b>   |                                      |                            |     |  |    |   |              |     |  |    |   |
| <p>The proposed purchase of sign shop equipment and materials will allow for the preparation of signs on demand. Last year, the turnaround to receive ordered signs was several months, delaying installations in newly regulated traffic areas, and in the typical updates of faded signs throughout town. It is expected that after the purchase of the sign shop, the DPW will make almost all of the signs for the town.</p> <p>A sign shop consist of:<br/>Cutting machines (including a computer), software, sheet metal and stock of common sign shapes, storage racks and an assembly station.</p> |                                      |                            |     |  |    |   |              |     |  |    |   |
| <b>FY2016-FY2020 Version</b>   |                                      |                            |     |  |    |   |              |     |  |    |   |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |                            |                            |     |  |    |   |              |     |  |    |   |
|--|----------------------------|----------------------------|-----|--|----|---|--------------|-----|--|----|---|
| <b>Title</b>   | <b>Survey Equipment</b>    |                            |     |  |    |   |              |     |  |    |   |
| Department   | Department of Public Works |                            |     |  |    |   |              |     |  |    |   |
| Location   | Engineering                |                            |     |  |    |   |              |     |  |    |   |
| Estimated Project Cost   | 35,000                     | Alternative Funding Source | Yes |  | No | x | CPA Eligible | Yes |  | No | x |
| <b>Project Summary</b>   |                            |                            |     |  |    |   |              |     |  |    |   |
| <p>The proposed purchase of new survey equipment will allow the Engineering Division to replace and update the existing total station. The existing Total station was purchased more than 10-years ago and has been extensively used by the Department of Public works in support of multiple Capital and operation projects. Parts have become worn down requiring more frequent service calls to make the equipment operational and accurate; newer equipment and software will allow for more efficient and accurate surveying.</p> |                            |                            |     |  |    |   |              |     |  |    |   |
| <b>FY2016-FY2020 Version</b>   |                            |                            |     |  |    |   |              |     |  |    |   |

Town of Needham  
 Capital Improvement Plan  
 January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |   |                            |     |  |    |   |              |     |   |    |  |
|--|---|----------------------------|-----|--|----|---|--------------|-----|---|----|--|
| <b>Title</b>   | <b>Town Common Historic Redesign &amp; Beautification</b> |                            |     |  |    |   |              |     |   |    |  |
| Department   | Public Works – Parks & Forestry                           |                            |     |  |    |   |              |     |   |    |  |
| Location   | 1471 Highland Ave   |                            |     |  |    |   |              |     |   |    |  |
| Estimated Project Cost   | \$500,000   | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes | X | No |  |
| <b>Project Summary</b>   |   |                            |     |  |    |   |              |     |   |    |  |
| <p>The Town is presently undergoing an internal design process for the Town Common. This will include improved hardscape, landscaping, amenities, tree plantings, and utility improvements, that are consistent with the historic nature of the common as well as the improvements being made in the downtown streetscape improvement project.</p> |   |                            |     |  |    |   |              |     |   |    |  |
| <b>FY2016-FY2020 Version</b>   |   |                            |     |  |    |   |              |     |   |    |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |  |                            |     |  |    |   |              |     |   |    |  |
|--|--|----------------------------|-----|--|----|---|--------------|-----|---|----|--|
| <b>Title</b>   | <b>Emery Grover Roof Replacement</b>       |                            |     |  |    |   |              |     |   |    |  |
| Department   | Department of Public Facilities/Operations |                            |     |  |    |   |              |     |   |    |  |
| Location   | 1330 Highland Ave                          |                            |     |  |    |   |              |     |   |    |  |
| Estimated Project Cost   | 150,000                                    | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes | X | No |  |
| Project Summary  |  |                            |     |  |    |   |              |     |   |    |  |
| <p>This request is to replace the existing roof at the Emery Grover Building. The existing slate roof at the Emery Grover is over 100 years old. It poses a continual maintenance problem and is way beyond the expected 75 year life span of this roof type. In the spring of 2010 leaks in this roof caused damage to flooring materials that forced the Department to reprioritize its summer asbestos abatement work and caused interruption to the operations of this building over the summer.</p> <p>A new environmentally conscious material that mimics the aesthetics of slate, but is composed of recycled rubber from tires will be used to replace this roof. This material would reduce the cost of installation by over one third and would reduce the cost of maintenance. The anticipated lifespan of this material is 50 years. If slate material is required the cost of this installation would be \$237,537.</p> <p>Replacing this roof will increase the energy efficiency of this building and will decrease leaks and the cost of repair and inconvenience to the occupants.</p> <p>This project is pending the results of the Emery Grover feasibility study.</p> |  |                            |     |  |    |   |              |     |   |    |  |
| <b>FY2014-FY2018 Version</b>   |  |                            |     |  |    |   |              |     |   |    |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |                                     |                            |     |  |    |   |              |     |  |    |   |
|--|-------------------------------------|----------------------------|-----|--|----|---|--------------|-----|--|----|---|
| <b>Title</b>   | <b>Pollard Locker Room Retrofit</b> |                            |     |  |    |   |              |     |  |    |   |
| Department   | Public Facilities Operations        |                            |     |  |    |   |              |     |  |    |   |
| Location   | Pollard Middle School               |                            |     |  |    |   |              |     |  |    |   |
| Estimated Project Cost   |                                     | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes |  | No | X |
| <b>Project Summary</b>   |                                     |                            |     |  |    |   |              |     |  |    |   |
| <p>This request is to retrofit the locker rooms at the Pollard Middle School. This project would include installing new lockers, replacing existing tile and bathroom fixtures, and painting.</p> <p>Retrofitting the locker rooms will make the space more functional. Many lockers are broken and there is a need for additional lockers due to larger class sizes. Tile flooring is starting to crack in places and will need replacing before becoming a safety hazard. General maintenance such as painting and replacing bathroom fixtures will also improve the current appearance.</p> |                                     |                            |     |  |    |   |              |     |  |    |   |
| FY2015 - FY2019 Version  |                                     |                            |     |  |    |   |              |     |  |    |   |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |   |                            |     |  |    |                                     |              |     |  |    |                                     |
|--|---|----------------------------|-----|--|----|-------------------------------------|--------------|-----|--|----|-------------------------------------|
| <b>Title</b>   | <b>Library RFID Conversion Project</b>  |                            |     |  |    |                                     |              |     |  |    |                                     |
| Department   | Library                                 |                            |     |  |    |                                     |              |     |  |    |                                     |
| Location   | 1139 Highland Avenue, Needham, MA 02494 |                            |     |  |    |                                     |              |     |  |    |                                     |
| Estimated Project Cost   | 100,200                                 | Alternative Funding Source | Yes |  | No | <input checked="" type="checkbox"/> | CPA Eligible | Yes |  | No | <input checked="" type="checkbox"/> |
| <b>Project Summary</b>   |   |                            |     |  |    |                                     |              |     |  |    |                                     |
| <p>RFID, <u>R</u>adio <u>F</u>requency <u>I</u>dentification is a technology for identifying, checking in, and checking out library materials. RFID tags are placed on the materials and then the tags are read electronically. When items are checked in or out, the scanner/reader keeps track of the status of the materials.</p> <p>Project Cost:</p> <p>RFID tags:</p> <p style="margin-left: 20px;">Books—150,000 @ .15 each = 22,500</p> <p style="margin-left: 20px;">Media-- 28,000 @ .65 each = 18,200</p> <p style="text-align: right; margin-right: 20px;">Total; RFID Tag Cost: 40,700</p> <p>2 Conversion Stations @ 4,000 each: 8,000</p> <p>4 Readers for Circulation Desk @ 1,500 each: 6,000</p> <p>1 Portable Scanner: 1,500</p> <p>2 Self-Check Stations @ 22,000 each 44,000</p> <p style="text-align: right; margin-right: 20px;">Total Project Cost: 100,200</p> <p>Per Year Cost that will need to be added to library budget:</p> <p>RFID Tags:</p> <p style="margin-left: 20px;">Books—13,500 @ .15 each = 2,025</p> <p style="margin-left: 20px;">Media— 4,000 @ .65 each = 2,600</p> <p style="text-align: right; margin-right: 20px;">Total Yearly Cost 4,625</p> |   |                            |     |  |    |                                     |              |     |  |    |                                     |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |                           |                            |     |   |    |  |              |     |   |    |  |
|--|---------------------------|----------------------------|-----|---|----|--|--------------|-----|---|----|--|
| <b>Title</b>   | <b>Public Playgrounds</b> |                            |     |   |    |  |              |     |   |    |  |
| Department   | Park and Recreation       |                            |     |   |    |  |              |     |   |    |  |
| Location   | Various Locations         |                            |     |   |    |  |              |     |   |    |  |
| Estimated Project Cost   | \$600,000                 | Alternative Funding Source | Yes | X | No |  | CPA Eligible | Yes | X | No |  |
| <b>Project Summary</b>   |                           |                            |     |   |    |  |              |     |   |    |  |
| <p>The Town of Needham has 19 public playground locations: Broadmeadow (2), Eliot (2), Hillside (2), Mitchell (1), Newman (3), Claxton, Cricket, DeFazio, Greene's, Mills, Perry, Riverside, Rosemary Pool, and Walker-Gordon.</p> <p>Hillside and Mitchell have the oldest school-site playgrounds. Both schools are under consideration for renovation/construction, and the playground projects will be included in those plans.</p> <p>Broadmeadow's Grade 1-5 and Kindergarten playgrounds were installed in 2002 and will likely need upgrades in upcoming years. Eliot's two playgrounds were installed in 2004 and appear to be in excellent condition. Newman's Grade 1-5 and Kindergarten playgrounds were installed in 2012 and are in excellent condition. The Preschool playground received a poured-in-place surface in 2013. Its equipment was originally purchased in 1998 and moved to the Newman site in 2004. It is in good condition, but will need some refreshing. An improvement recommended for Broadmeadow and Eliot would be the installation of poured-in-place pathways. Though the current wood fiber surfacing is considered ADA compliant, the MA Architectural Board may be creating a new ruling that will require other options for pathways.</p> <p>For the non-school playgrounds, all sites are in very good to excellent condition. Greene's Field's equipment was installed new in 2013, with a major donation from residents of over \$180,000. The Exchange Club has "adopted" DeFazio and Claxton, adding improvements over several years. Parent Talk has "adopted" Cricket, Perry and Mills, with new playgrounds installed between 2001-2007. Riverside received new equipment in 2007 as part of the nearby Charles River Landing project. Walker-Gordon was replaced in 2013 as part of the park reconstruction project. It is likely that DeFazio and Rosemary Pool will be renovated if there are major renovations at those sites. Cricket will have ADA improvements completed when the park building is renovated.</p> |                           |                            |     |   |    |  |              |     |   |    |  |
| <b>FY2016-FY2020 Version</b>   |                           |                            |     |   |    |  |              |     |   |    |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |  |                            |     |  |    |   |              |     |   |    |  |
|--|--|----------------------------|-----|--|----|---|--------------|-----|---|----|--|
| <b>Title</b>   | <b>Renovations of Camp Property Buildings</b>                      |                            |     |  |    |   |              |     |   |    |  |
| Department   | Park and Recreation  |                            |     |  |    |   |              |     |   |    |  |
| Location   | Camp Property – adjacent to Rosemary Lake, off Pennsylvania Avenue |                            |     |  |    |   |              |     |   |    |  |
| Estimated Project Cost   | \$250,000  | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes | X | No |  |
| <b>Project Summary</b>   |  |                            |     |  |    |   |              |     |   |    |  |
| <p>Due to the difficulty in securing summer program space, an alternate site for a program would be the Camp Property on Rosemary Lake. In order to prepare the site for use, the following projects would be needed: (a) replace 2 latrines with environmentally-friendly, accessible restroom facility; (b) update activity building interior; (c) restore electrical service, replace electrical wiring, and install lights; (d) update water service; (e) create accessibility to activity building; (f) furnish building; (g) add portable dock at lake; (h) improve landscape to maximize participant safety and accessibility, and protect environment. Efforts would be made to apply for grants or private funding to supplement Town funding.</p> <p>A pre-feasibility study has been included in the request for funding for the Rosemary trails at the camp property, and this project would be discussed with that study.</p> <p>If the renovation of the Rosemary Pool building includes programming space, the camp property buildings could be removed from the site, so the costs related to the project would be reduced, and would only be needed for demolition.</p> |  |                            |     |  |    |   |              |     |   |    |  |
| <b>FY2016-FY2020 Version</b>   |  |                            |     |  |    |   |              |     |   |    |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |  |                            |     |   |    |  |              |     |   |    |  |
|---|--|----------------------------|-----|---|----|--|--------------|-----|---|----|--|
| <b>Title</b>  | <b>Trails Improvements: Farley Pond Loop</b> |                            |     |   |    |  |              |     |   |    |  |
| Department  | Conservation                                 |                            |     |   |    |  |              |     |   |    |  |
| Location  | Farley Pond Conservation Area                |                            |     |   |    |  |              |     |   |    |  |
| Estimated Project Cost  | \$15,000                                     | Alternative Funding Source | Yes | X | No |  | CPA Eligible | Yes | X | No |  |
| <b>Project Summary</b>  |  |                            |     |   |    |  |              |     |   |    |  |
| <p>This proposed loop trail is identified in the Town of Needham Trails Master Plan and would create a circuit for the Farley Pond Trail. The Farley Pond Trail has several small bootleg trails that lead to abutting private property. The proposed loop trail would create a turnaround for users seeking a short circuit off of South Street or for users from the Town Forest. It would require some vegetative clearing and one or more structures for stream/wetland crossing. Although this is an internal loop trail that does not connect to any other trail connections, the Farley Pond Loop Trail is a high priority for the new trails because creation of the loop would provide an immediate benefit to the Town Forest, Boy Scout Property and Farley Pond users.</p> <p>Although it is possible that portions of the work may be done by volunteers, a contingency has been requested in the event that a private or not-for-profit contractor is needed to provide assistance in the completion of this trail segment.</p> |  |                            |     |   |    |  |              |     |   |    |  |
| <b>FY2016-FY2020 Version</b>  |  |                            |     |   |    |  |              |     |   |    |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |                                    |                            |     |  |    |   |              |     |   |    |  |
|---|------------------------------------|----------------------------|-----|--|----|---|--------------|-----|---|----|--|
| <b>Title</b>  | <b>Athletic Fields Master Plan</b> |                            |     |  |    |   |              |     |   |    |  |
| Department  | Park and Recreation                |                            |     |  |    |   |              |     |   |    |  |
| Location  | Various parks                      |                            |     |  |    |   |              |     |   |    |  |
| Estimated Project Cost  | \$75,000                           | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes | X | No |  |
| <b>Project Summary</b>  |                                    |                            |     |  |    |   |              |     |   |    |  |
| <p>The Park and Recreation Commission has been working with user groups to determine how athletic fields are being used and how best to schedule the athletic fields to provide optimal use without jeopardizing the maintenance plan. Renovations have occurred at several parks, and some school sites will be improved in upcoming years. The study would help the Commission determine whether new athletic fields are needed to accommodate the need and provide feasibility studies on possible locations for new athletic fields.</p> <p>The ability for the Town to maintain current athletic facilities, along with any possible new facilities, would be included within the study.</p> |                                    |                            |     |  |    |   |              |     |   |    |  |
| <b>FY2016-FY2020 Version</b>  |                                    |                            |     |  |    |   |              |     |   |    |  |

Town of Needham  
 Capital Improvement Plan  
 January 2015

| Future Capital Project<br>CIP-FCP  |                              |                            |     |   |    |  |              |     |   |    |  |
|--|------------------------------|----------------------------|-----|---|----|--|--------------|-----|---|----|--|
| Title  | Canoe Launch                 |                            |     |   |    |  |              |     |   |    |  |
| Department   | Park and Recreation          |                            |     |   |    |  |              |     |   |    |  |
| Location   | South Street – Dedham Avenue |                            |     |   |    |  |              |     |   |    |  |
| Estimated Project Cost   | TBD                          | Alternative Funding Source | Yes | X | No |  | CPA Eligible | Yes | X | No |  |
| Project Summary  |                              |                            |     |   |    |  |              |     |   |    |  |
| <p>The Town of Needham is adjacent to a major state resource – the Charles River. It creates about 2/3rds of the Town’s border, with the City of Newton, the City of Boston, the Town of Dedham, and the Town of Dover. \</p> <p>There is an existing access point to the river for canoes and kayaks on South Street, near the intersection with Dedham Avenue. There is a circular driveway, creating parking access for approximately 10-12 vehicles. There is pedestrian access, only, to the river.</p> <p>The initial request for design funds, approximately \$30,000, would be utilized to work on a plan that kept the natural setting, but created more consistent access on a pervious path, and possibly creating the ability for vehicles to back up to the launch area with their boats. This project would require permits through the Conservation Commission and DEP.</p> |                              |                            |     |   |    |  |              |     |   |    |  |
| <b>FY2016-FY2020 Version</b>   |                              |                            |     |   |    |  |              |     |   |    |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |  |                            |     |   |    |  |              |     |   |    |  |
|---|--|----------------------------|-----|---|----|--|--------------|-----|---|----|--|
| <b>Title</b>  | <b>Improvements to Memorial Park Buildings and Grounds</b>                               |                            |     |   |    |  |              |     |   |    |  |
| Department  | Trustees of Memorial Park (submitted on their behalf by Director of Park and Recreation) |                            |     |   |    |  |              |     |   |    |  |
| Location  | Memorial Park – 92 Rosemary Street   |                            |     |   |    |  |              |     |   |    |  |
| Estimated Project Cost  | \$8,000,000  | Alternative Funding Source | Yes | X | No |  | CPA Eligible | Yes | X | No |  |
| <b>Project Summary</b>  |  |                            |     |   |    |  |              |     |   |    |  |
| <p>Various improvements have been completed at Memorial Park in recent years, with the major renovation of the athletic fields being the most prominent. In 2014, a new memorial was added to the park, commemorating the Needham residents who have lost their lives in wars or conflicts, starting with the Revolutionary War. The section of the park with the memorials was redesigned and the remaining memorials were moved.</p> <p>The Facilities Master Plan includes a possible project for the building, estimated at \$5.9 million in 2014 dollars. It is anticipated that it would likely be a new building, with rooms directly related to the use of the park (meeting rooms, restrooms, concession, storage) as well as upper floor space to meet other community recreation needs.</p> <p>Additional projects to be completed: (a) replacement of retaining wall along Highland Avenue and within the parking lot; (b) addition of park benches, particularly in area along Highland Avenue with red maples; (c) illumination of the two flag poles with solar lighting system; and (d) other improvements to the athletic fields.</p> <p>Some of the projects, or portions of projects, may be eligible for CPA funding.</p> |  |                            |     |   |    |  |              |     |   |    |  |
| <b>FY2016-FY2020 Version</b>  |  |                            |     |   |    |  |              |     |   |    |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |   |                            |     |                          |    |                                     |              |     |                          |    |                                     |
|---|---|----------------------------|-----|--------------------------|----|-------------------------------------|--------------|-----|--------------------------|----|-------------------------------------|
| <b>Title</b>  | <b>Expansion of RTS Additional Recycling Area</b> |                            |     |                          |    |                                     |              |     |                          |    |                                     |
| Department  | DPW - RTS   |                            |     |                          |    |                                     |              |     |                          |    |                                     |
| Location  | Recycling and Transfer Station, 1421 Central Ave. |                            |     |                          |    |                                     |              |     |                          |    |                                     |
| Estimated Project Cost  | <b>TBD</b>  | Alternative Funding Source | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> | CPA Eligible | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| <b>Project Summary</b>  |   |                            |     |                          |    |                                     |              |     |                          |    |                                     |
| <p>Funds are being sought to design and expand the "Additional Recycling Area," currently located to the West of the new salt shed, to allow for the orderly drop off, collection, and processing of materials for reuse and recycling.</p> <p>This is necessary make the Additional Recycling Area more efficient, attractive, and allow for the collection of additional materials. Materials currently being collected includes: automotive fuel, books, bottles &amp; cans with deposits, clothing or other textiles, household items, paint, appliance, automotive batteries, batteries, cell phones, computers, electronic devices, fluorescent lamps, medical sharps, mercury containing devices, monitors (CRTs), printer, fax, and copier cartridges, propane tanks, scrap metal, TV's, and Tires.</p> <p>The proposal includes expanding the existing Additional Recycling Area approximately to the North, putting in place a block retaining wall, and purchasing additional roll-off and shipping containers. The additional space will allow the Town to be responsive to future public requests for material processing as recycling technology improves. Proposed new materials to be accepted include:</p> <ul style="list-style-type: none"> <li>• Upholstered furniture for recycling (vendon: Conigliaro Industries, Framingham)</li> <li>• Mattresses for recycling (vendon: Conigliaro Industries, Framingham)</li> <li>• Carpeting (vendon: Conigliaro Industries, Framingham)</li> <li>• Styrofoam for recycling (vendon: ReFoamIt, Leominster)</li> <li>• Reusable building materials (vendon: Habitat for Humanity/Boston Building Materials Resource Center)</li> <li>• Bicycles (vendon: Bikes not Bombs)</li> <li>• Durable medical equipment (vendon)</li> <li>• Rigid plastic (vendon: EL Harvey)</li> </ul> |   |                            |     |                          |    |                                     |              |     |                          |    |                                     |
|   |   |                            |     |                          |    |                                     |              |     |                          |    | FY2015 - FY2019 Version             |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |   |                            |     |  |    |   |              |     |  |    |                         |
|---|---|----------------------------|-----|--|----|---|--------------|-----|--|----|-------------------------|
| <b>Title</b>  | <b>Transfer Station Building Renovation and Expansion</b> |                            |     |  |    |   |              |     |  |    |                         |
| Department  | DPW - RTS   |                            |     |  |    |   |              |     |  |    |                         |
| Location  | Recycling and Transfer Station, 1421 Central Ave.         |                            |     |  |    |   |              |     |  |    |                         |
| Estimated Project Cost  | <b>2.5 Million</b>  | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes |  | No | X                       |
| <b>Project Summary</b>  |   |                            |     |  |    |   |              |     |  |    |                         |
| <p>The Recycling and Transfer Station has grown organically over the years and currently includes seven separate buildings:</p> <ul style="list-style-type: none"> <li>• Transfer station building with customer reception area, staff office, and restroom – not ADA compliant</li> <li>• 3-Bay garage used for surplus paint and equipment storage and Re-use-it area</li> <li>• Employee break trailer with storage and restroom – not ADA compliant</li> <li>• REX building garage with Superintendent office and restroom – not ADA compliant</li> <li>• Surplus paint reuse shed and hazardous waste locker</li> <li>• 40' trailer for storage</li> <li>• 12' trailer for storage</li> </ul> <p>Some of the limitations of the current facility include:</p> <ul style="list-style-type: none"> <li>• Supervisor's office is isolated from the day-to-day operations and staff activity, making supervision and oversight challenging.</li> <li>• Condition of transfer station reception area, office, and restroom is sub-par</li> <li>• Total area of customer reception area and office area for two staff is 13' x 15'</li> <li>• Plumbing in transfer station restroom occasionally freezes in the winter</li> <li>• No shower facilities on site for staff working in extremely dirty environment</li> <li>• Limited secure storage for valuable inventory such as PAYT trash bags</li> <li>• Employee lunch/break room is in donated second-hand trailer located in isolated area of facility</li> </ul> <p>Looking to the future, in order to improve efficiency and oversight of operations, provide adequate working conditions, and provide secure storage, new quarters at the RTS are desperately needed. The new area would combine the functions of five separate storage buildings into one facility attached to the existing transfer station building. The new facility would include: customer service area, staff office, superintendent office, employee lunch/break room, meeting room, restroom, shower facilities, and secure storage area all in a single facility.</p> <p>The new facilities would most likely be a three-story addition to the existing transfer station building consisting of secure storage and shower/locker room on the ground level, customer reception and office area on the first floor, and meeting room and employee break room on the second floor.</p> <p>A May 2014 Annual Town Meeting Warrant approved funding for a temporary office trailer to provide adequate customer service, office, and restroom facilities and to bring the superintendent's office into the main operations area. This trailer is intended to be temporary and will be situated so as not to interfere with potential transfer station expansion.</p> |   |                            |     |  |    |   |              |     |  |    |                         |
|   |   |                            |     |  |    |   |              |     |  |    | FY2015 - FY2019 Version |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>  |   |                            |     |  |    |   |              |     |  |    |   |
|--|---|----------------------------|-----|--|----|---|--------------|-----|--|----|---|
| <b>Title</b>   | <b>Sewer System Inflow &amp; Infiltration Removal</b> |                            |     |  |    |   |              |     |  |    |   |
| Department   | Public Works - Sewer                                  |                            |     |  |    |   |              |     |  |    |   |
| Location   | Various   |                            |     |  |    |   |              |     |  |    |   |
| Estimated Project Cost   | TBD   | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes |  | No | X |
| Project Summary  |   |                            |     |  |    |   |              |     |  |    |   |
| <p>A study to determine which areas will be worked on was requested for FY 13 and FY 14 with results expected by 2015. This project has been delayed due to low rain amounts over the past few years. Without a sufficient water table, it is not possible to accurately study inflow and infiltration in the Town's sewer system.</p> <p>Areas for Infiltration and Inflow removal design and construction will be determined by the study for the next 10 years. The Town of Needham, along with numerous other communities, is under Administrative Orders from the Department of Environmental Protection (DEP) to identify and remove Infiltration and Inflow (I/I) in existing sewer systems.</p> <p>Infiltration is defined as groundwater or storm water runoff that enters the system through deteriorated pipe or manhole structures that need to be repaired.</p> <p>Inflow is defined as clean, non-septic water, which is introduced to the system. This water is generally produced by residential sump pumps that drain basements. The inflow removal program is being presented separately from the infiltration removal program. Much of this work could address inflow to include extending or expanding the storm drain system to accept groundwater from household sump pumps. Needham's most significant problem is believed to be from these private sources. The program will initiate with an education and information campaign to inform and prepare the homeowners as to the nature of the problem. The cost impacts to the community, the legal implications, the likely solutions, the responsibilities of the homeowner, and the potential enforcement actions by the Town, the Massachusetts Water Resource Authority (MWRA), the DEP and the Environmental Protection Agency (EPA) will need to be communicated. The preliminary engineering will likely take the form of smoke testing and flooded dye testing to determine any direct or indirect interconnections between the sewer and the storm drain system. It also includes a door-to-door investigation of households to determine where violations are occurring. Typical violations include, but are not limited to, sump pumps or open clean-outs where non-sanitary flow is discharging directly to the sewer system as well as foundation drains, yard drains, roof leaders and other cross connections.</p> <p><u>Cost Benefits of Program:</u></p> <ol style="list-style-type: none"> <li>1) Failure to do any mitigation in any of the MWRA communities will cause the overall costs for all participating communities to increase.</li> <li>2) The failure of the Town of Needham to address its I/I while neighboring communities reduce theirs will increase the percentage of the cost to Needham.</li> </ol> |   |                            |     |  |    |   |              |     |  |    |   |

| <b>Future Capital Project<br/>CIP-FCP</b> |  |
|---|--|
| <b>Title</b>                              | <b>Sewer System Inflow &amp; Infiltration Removal</b>  |
| 3)  | When Needham decreases its I/I the same or better than other participating communities its percentage of cost will stay the same or decrease.                              |
| 4)  | The overall cost to operate the MWRA sewer system tends to increase. The portion of the cost attributed to Needham decreases in percentage but increases in total dollars. |
| 5)  | The Town must keep up with its I/I mitigation in order to avoid disproportionate increases in cost and to comply with the MassDEP's administrative order.                  |
|   |  |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |                               |                            |     |  |    |   |              |     |  |    |   |
|---|-------------------------------|----------------------------|-----|--|----|---|--------------|-----|--|----|---|
| <b>Title</b>  | <b>Sewer Main Replacement</b> |                            |     |  |    |   |              |     |  |    |   |
| Department  | Public Works – Sewer          |                            |     |  |    |   |              |     |  |    |   |
| Location  | Greendale Ave                 |                            |     |  |    |   |              |     |  |    |   |
| Estimated Project Cost  | 600,000                       | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes |  | No | X |
| <b>Project Summary</b>  |                               |                            |     |  |    |   |              |     |  |    |   |
| <p>The Town of Needham is in the final phases of completing a Facilities Master Plan. This plan has a building located on Parcel 74 on Greendale Ave. In order to facilitate the construction of a building on this property, a new or relined sewer line will be necessary. Additionally, the existing sewer line has been determined to be in the process of deteriorating and in need of replacement.</p> <p>This request is for replacing or relining 1,209 feet of 18 inch reinforced concrete pipe gravity sewer main running through Town property in the right of way from Greendale Ave near Cheney Street towards Route 128. This is the total length of pipe that runs through the right of way to the first man hole on Rt. 128.</p> <p>Cost Estimate:<br/> FY 2020 - \$100,000 Engineering<br/> FY 2021 - \$500,000 Construction</p> |                               |                            |     |  |    |   |              |     |  |    |   |
| <b>FY2016-FY2020 Version</b>  |                               |                            |     |  |    |   |              |     |  |    |   |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |                               |                            |     |  |    |   |              |     |  |    |   |
|---|-------------------------------|----------------------------|-----|--|----|---|--------------|-----|--|----|---|
| <b>Title</b>  | <b>Fire Flow Improvements</b> |                            |     |  |    |   |              |     |  |    |   |
| Department  | Public Works - Water          |                            |     |  |    |   |              |     |  |    |   |
| Location  | Birds Hill & Tower Hill       |                            |     |  |    |   |              |     |  |    |   |
| Estimated Project Cost  | 2,743,000                     | Alternative Funding Source | Yes |  | No | X | CPA Eligible | Yes |  | No | X |
| <b>Project Summary</b>  |                               |                            |     |  |    |   |              |     |  |    |   |
| <p>The Department is requesting a feasibility study to investigate possible options to increase water pressure in the Tower Hill and Birds Hill areas. The goal is to create a high pressure zone in those two areas, potentially supplied by water booster stations. The FY17 and FY18 estimates provided are based upon a 1999 water system report and may be altered pending the completion of a feasibility study.</p> <p>FY18 - Bird's Hill Tank high service area &amp; Dunster Road Tank high service area / engineering, design - \$ 504,000<br/> FY19 - Bird's Hill Tank high service area &amp; Dunster Road Tank high service area / construction - \$ 2,239,000</p> |                               |                            |     |  |    |   |              |     |  |    |   |
| <b>FY2016-FY2020 Version</b>  |                               |                            |     |  |    |   |              |     |  |    |   |

Town of Needham  
Capital Improvement Plan  
January 2015

| <b>Future Capital Project<br/>CIP-FCP</b>   |                                  |                            |     |                          |    |                                     |              |     |                          |    |                                     |
|---|----------------------------------|----------------------------|-----|--------------------------|----|-------------------------------------|--------------|-----|--------------------------|----|-------------------------------------|
| <b>Title</b>  | <b>Irrigation Supply</b>         |                            |     |                          |    |                                     |              |     |                          |    |                                     |
| Department  | <b>Public Works - Water</b>      |                            |     |                          |    |                                     |              |     |                          |    |                                     |
| Location  | <b>Reservoir/ 486 Dedham Ave</b> |                            |     |                          |    |                                     |              |     |                          |    |                                     |
| Estimated Project Cost  | <b>To be determined</b>          | Alternative Funding Source | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> | CPA Eligible | Yes | <input type="checkbox"/> | No | <input checked="" type="checkbox"/> |
| <b>Project Summary</b>  |                                  |                            |     |                          |    |                                     |              |     |                          |    |                                     |
| <p>Funding for a feasibility study was approved at the 2013 ATM to determine if the Needham Reservoir/Dedham Avenue can be used to supply non-potable water for irrigation of the Golf Course, DeFazio Complex and Pollard fields. The study is currently on-going. To date, the consultant has recommended that the Town not pursue the Dedham Ave wells for an irrigation water supply for the following reasons;</p> <ol style="list-style-type: none"> <li>1. The presence of the existing wells within wetlands and the resulting wetlands permit requirements will be significantly cumbersome and could negate the feasibility of well reactivation.</li> <li>2. The well facilities being over 100 years old are unlikely to be in adequate condition for reactivation. Substantial cost could be expended to assess these facilities, just to confirm their inadequacy and non-viability from a wetland permit standpoint.</li> <li>3. The applicability of the WMA relative to the establishment of an irrigation supply using these wells is unclear and requires discussion with MassDEP.</li> </ol> <p>Currently we are exploring options for possible irrigation wells on both DeFazio and Golf Course properties. If feasible, then design and construction funding will be requested. Construction costs cannot be determined at this time.</p> |                                  |                            |     |                          |    |                                     |              |     |                          |    |                                     |
|   |                                  |                            |     |                          |    |                                     |              |     |                          |    | FY2015 - FY2019 Version             |

## Capital Request Code Key

### Project Category:

- B** = Building
- F** = Facility (seasonal buildings and active sites, e.g., beach, fields or park)
- I** = Infrastructure, e.g., road, bridge, and sidewalks, drainage systems, sewer laterals or systems, water supply distribution systems
- L** = Land purchase or improvements (trails)

### Useful Life:

- I** = more than five (5) years but less than eight (8) years
- II** = between eight (8) and twelve (12) years
- III** = between twelve (12) and eighteen (18) years
- IV** = between eighteen (18) and twenty-five (25) years
- V** = more than twenty-five (25) years.

### Primary Reason:

- 1** = public/employee health or safety
- 2** = legal requirement
- 3** = obsolete/non-functioning
- 4** = operational efficiency
- 5** = scheduled replacement
- 6** = supports performance measure
- 7** = new function or service
- 8** = other

### Operating Budget Impact:

- A.** The project will generate revenue to offset costs in full.
- B.** The project will reduce operating cost.
- C.** The project is estimated to result in less than \$5,000 in increased operating expenditures.
- D.** The project is estimated to result in less than \$25,000 in increased operating expenditures.
- E.** The project is estimated to result in less than \$50,000 in increased operating expenditures.
- F.** The project is estimated to result in more than \$50,001 in increased operating expenditures.