



This Facilities Master Plan report has been prepared under the direction of the Permanent Public Building Committee with the guidance of Town professional staff, facility groups and citizens collectively known as the Facilities Working Group.

The process that began in December of 2013 has been challenging, enlightening and informative for the numerous participants who worked throughout the year. This group of dedicated staff and citizens provided programming information necessary to study options, participated in workshops and in public meeting to consider sites and review conceptual options, and shared their informed opinions and wealth of information, so that the proposed solutions best solved the needs of the Town of Needham. The proposed pathways, timelines and budgets are conceptual and are meant to provide guidance as Town officials and committees consider building projects over the next 10 years.

We acknowledge the participants of this process and in particular George Kent, chair of the Permanent Public Building Committee, Kate Fitzpatrick, Town Manager and the entire Facilities Working Group.

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- George Kent, Chair - Permanent Public Building Committee
- Jeanne S. McKnight, Planning Board
- Joseph P. Barnes, School Committee
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Dutifully submitted,

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December 2014



Photo 1



Photo 2: High Rock



Photo 3: Town Hall

## INTRODUCTION

This report has been prepared under the direction of the Permanent Public Building Committee (PPBC) and the Facilities Working Group (FWG). The FWG, consisting of representatives of all major Town boards and committees as well as Town officials and department heads, user groups and citizens, provided guidance, analysis of conclusions and comments throughout the planning effort.

The Facilities Master Planning process, one year in length, began in December of 2013. It has included planning and programming meetings with personnel from departments identified to be included in the Master Plan, workshops with the FWG, and public forums. The public process was made transparent to the citizens of Needham through posting notices for all public meetings, PowerPoint presentations and meeting minutes on the Town Website.

The Facilities Master Planning process focused on identifying the most reasonable approaches for solving the individual building needs of each department and mapping possible expenditure timelines and scenarios for achieving these community goals and objectives. A comprehensive Facilities Master Plan, by its very nature, does not create a single pathway for future projects but rather establishes a framework of possible pathway options for the Town during the next five to ten years. Over time, needs change and develop, some issue may take precedence due to extraordinary circumstances, and future opportunities may present themselves that can affect the course of action in a new way. Thus, the Facilities Master Plan provides a broad framework for these future interconnected capital needs, but requires adjustment after each project is constructed. This flexibility creates a tool that the Town can use for many years.

The study began with a review of the previous Facilities Master Plan that was completed in 2006, in order to understand which of those projects had been realized and under what circumstances. In addition, other recently completed building feasibility studies were made available and are referenced in this report. These include programs and planning options for school projects, school administration, and some recreation projects; each were comprehensive studies completed directly

with the end-users and under the guidance of the PPBC. Visits were made by the design team and key Town employees to pertinent sites and buildings and some facilities were examined in depth. Detailed programming was completed for the Fire and Police Departments, the Department of Public Works and recreation buildings. Conceptual design options were developed to test both program and site at their existing location and at alternative locations when current buildings or sites did not meet programming needs.

## OUTCOME FOR THE MASTER PLAN

Needham has completed the work defined in two master planning cycles and this third effort is an update plan for the next ten years. This Facilities Master Plan builds on the work accomplished during the past years and the planning efforts for new projects already underway. The Visioning Session with the FWG discussed potential issues, concerns and limitations for each of the projects under consideration. Goals that represent community visions and priorities were established to assist Town leaders as they make future decisions.

The specific goals and objectives identified by the PPBC and the FWG during initial planning meetings and the Visioning Session include:

- 1) Identify and address current issues of concern as well as emerging issues that will be important in the future
- 2) Evaluate space needs for:
  - Police and Fire Headquarters and Fire Station #2
  - The Department of Public Works (DPW) and Recycling and Transfer Station (RTS)
  - Memorial Park Building
  - Community Center and Ice Rink
- 3) Review and confirm needs of other departments through the use of other studies already completed:
  - Hillside, Mitchell and Pollard Schools
  - Needham High School
  - School Administration Building
  - Rosemary Pool

- Cricket Field Building

- 4) Determine optimum building and site sizes for all potential projects
- 5) Evaluate alternative sites for potential new / relocated building uses
- 6) Estimate probable costs for building and sites
- 7) Develop a strategy and timeline for all projects
- 8) Identify possible public / private partnerships
- 9) Identify jurisdictional constraints

## SPACE NEEDS AND EVALUATION OF CURRENT FACILITIES

The collection of data is required in order to evaluate current conditions and to calculate future needs. An increase in population counts that use Town services, due to housing and business development, affect schools, police, fire, and public works departments and community amenities. In addition, the expectations for services must be taken into account as space needs are developed.

The needs assessment was conducted to determine space requirements for each identified department for at least 20-30 years. The work included the evaluation of existing buildings and their respective sites to identify the physical condition of the structures, code compliance, and suitability for reuse. Operations were reviewed, inventories of equipment were obtained, and detailed programming sessions with end users were held to identify and confirm program elements. In addition, many identified sites for possible relocation or expansion were explored to define their limitations and possibilities including: location, accessibility, site features, environmental impact, site development, availability, and special considerations. These resulting matrices outlined realistic sites for each program, land jurisdictions that might need to change, including conversion of passive recreation sites, how reorganization or relocation of a program could affect neighborhoods, schools or emergency response times, if the operations of a department could be enhanced by relocation to or reuse of existing town property, and how development costs might affect the decision to use a particular property.



Photo 4: Police Entry off of School Street



Photo 5: Hollis Building at Dedham Avenue



Photo 6: Needham High School

### Schools and School Administration

At the time of this report, the Town is planning for the replacement or upgrade of several schools including the Hillside, Mitchell and Pollard Schools, and expansion to Needham High School. Comprehensive site and building assessments have been completed for the elementary and middle schools, sites for temporary or new structures has been explored, and eligibility/feasibility work has been initiated with the Massachusetts School Building Authority (MSBA). The School Committee will work with the MSBA to analyze potential option. Scenarios include phasing plans for modular classrooms at DeFazio Park that could be used by each school during construction, or a new permanent school at this site. These new buildings or renovations, at existing or new sites, will accommodate the needs of the community and will modernize the learning environment. Work at the high school will provide for increased enrollment by providing additional classroom space and an expanded cafeteria.

School Committee objectives to be met in any addition / renovation or rebuild include: the preference for sustaining neighborhood schools, meeting the educational goal for all day kindergarten, minimizing redistricting, and avoiding costly features that are not reimbursable under MSBA guidelines.

The School Administration Central Offices, located at the Emery Grover Building, does not provide for all of the needs of the department, requiring some administrative areas to be located throughout the school system. The outdated existing building lacks accessibility, administrative spaces and meeting rooms are undersized and inefficient, and building systems are in need of replacement. Although the school department currently occupies a centralized location, these administrative offices could be located anywhere in Town as long as the building is easily accessible and parking is adequate.

Public Facilities / Operations, partially located at the Daley Building, is currently configured to respond to the needs of the school department as well as all other public buildings. This building will continue to serve the Town, but will require general maintenance and reorganization on an as needed basis.

### Department of Public Works

The Department of Public Works (DPW) primarily operates out of two sites: 470 Dedham Avenue and the Recycling and Transfer Station (RTS) on Central Avenue. In addition, the DPW also stores significant quantities of vehicles, equipment and cold storage at eleven other sites throughout Town.

The Dedham Avenue site consists of the following: the Hollis Building, which dates from 1960 with an addition in 1965, and has limited second floor use for the storage of Town documents due to air quality and access/code issues; the former Water Pumping Station; cold, caged and bin storage areas; a newly constructed small vehicle storage structure; and the Public Services Administration Building (PSAB). Other Town departments occupy the ground floor of PSAB with DPW administration and engineering personnel occupying the second floor. DPW operations personnel occupy and use the remainder of the site over to the gravel parking area serving DeFazio Park.

The Hollis operations building is undersized for its core purpose: to store and maintain Town vehicles and equipment. Employee facilities are lacking and the building does not meet current Building Code standards. Areas for materials handling and areas for cold storage are insufficient for an operation of this size. The Water Pumping Station, housing one division of the DPW, is not effectively utilized, as old equipment associated with its former use has never been removed. The PSAB is modern, efficient and provides an excellent work environment for the five Town departments co-located there to improve efficiencies between departments, and as a centralized location for visitors.

The Dedham Avenue site, with a high water table, wetlands and a perennial stream/channel, is restrictive and cannot easily be reconstructed to accommodate all of the consolidated needs of the DPW. In addition, plans for a school at this site will compromise and limit traffic circulation patterns, and potentially raise safety concerns as noted on page 33.

The RTS currently houses the community accessed recycling center, a tipping floor used by the Town and outside sources, a materials handling area, and the newly constructed salt/sand shed. Other sites that house significant quantities of vehicle, equipment, and lay down areas for cold storage items include Memorial

Park, the Daley Building, the Ridge Hill garage, Claxton Field building, and the Cricket Field building.

### Police and Fire Department

The Police and Fire Department Headquarters Building, at the intersection of Chestnut and School Streets, was originally built in 1930 with additions in 1989 to accommodate expanded operations for both departments. This very restricted site was significantly improved in 2014 following acquisition of contiguous property to accommodate parking for department owned and personnel vehicles. The building organization does not reflect current police and fire operational needs, and is undersized for vehicles, equipment, personnel and vital records storage. Prisoner processing, which lacks a sallyport, holding area and adequate evidence storage areas, is too small and poorly configured to provide appropriate separation between staff and detainees. Furthermore, the fire apparatus bays are undersized for modern vehicles and equipment. Shared resources are not well located and the building lacks accessibility to both the upper and basement levels of the facility.

Fire Station #2, on the corner of Highland Avenue and Webster Street, requires general upgrades to the building envelope and building systems, is not accessible, and lacks the ability to store additional equipment that may be needed in the future.

### Recreation Resources and Programs

Recreation programs are usually closely associated with a playing field, park, or one of the schools in Town. Existing parks and school grounds are heavily programmed and used by citizens seven days a week. Additional recreation programs are accommodated at Rosemary Pool, DeFazio Park, Claxton Field, Memorial Park, Cricket Field, Avery Field, Dwight Field, Green's Field, Mills Field, Perry Park, Ridge Hill, and Town Forest. Various conservation areas located throughout the Town provide citizens with invaluable access to walking trails and nature.

As new Town projects are developed, recreation needs, which include after-school programs, will be considered that could enable the dual use of land and resources. Existing structures located at sites are in various states of repair and plans for retrofitting and/or replacement will continue to be studied in greater detail in the future.

Updates for the Cricket Field Building are underway and updates for or replacement of the Memorial Park Building is under consideration. Open space uses and new building sites will always be competing for available public lands. Many existing buildings do provide valuable storage space for the DPW including DPW equipment and materials that service these site but also for vehicles and equipment that are not able to be accommodated elsewhere.

DeFazio Park and all the Town lands over to School Street were originally acquired by the Town for use by the DPW. Over the years portions of this land were transferred to the School Committee (10.68 acres) and Park and Recreation Commission (8.09 acres). See jurisdictional plan and 2013 aerial in Volume 2, pages 34 and 35.

A new Community Center and Ice Rink were two projects identified during the Visioning Session and are included in this plan. Public / Private Partnerships may be considered should either of these projects become viable at some point in the next several years.



Photo 7: Emery Grover Building

**PLANNING OPTIONS**

Each identified need for space was quantified by the development of a conceptual building and site plan that was tested on both the existing site and alternative sites identified by the FWG. Existing Town owned land, with potential for development and large enough to accommodate these programs, are limited in Needham.

Each alternative site possibility was evaluated by the FWG to ensure the most efficient and cost-effective development was considered with specific focus on both the positive and negative impacts to the community at large. A matrix was developed that assessed each site using consistent criteria. Though somewhat subjective in nature, end users and professional Town staff, such as the Town Engineer or the Director of the Conservation Department, provided expert opinion on the possibilities and limitations of each site for its intended purposes.

**Primary and Middle Schools**

Currently, the town has completed a Comprehensive Facilities Assessment and Pre-feasibility Study for the Mitchell and Hillside Schools, and is beginning the Feasibility Study process with the Massachusetts School Building Authority (MSBA) for the Hillside Elementary School. In addition, a Comprehensive Facilities Assessment study was completed for the Pollard Middle School to address the needs for science classrooms, an auditorium renovation, administration office improvements, code compliance upgrades, mechanical and electrical system repairs, and deferred maintenance.

All options under consideration and study include school construction at DeFazio Park: a) modular classrooms with a permanent gymnasium b) the construction of a permanent elementary school, or c) the construction of a permanent 6th Grade Center. If the 6th Grade Center is constructed, then High Rock School would be renovated and converted into an elementary school once again. Both permanent school options require extensive redistricting, and would include reusing the Hillside School as swing space for future Town projects.

**High School**

Due to enrollment increases, a study for the addition of classrooms and the expansion of the cafeteria has been proposed for the High School.

**School Administration**

The School Administration currently occupies a building that is not accessible for staff or visitors, has undersized meeting rooms and offices, poor building conditions, as well as unusable space. The Town has studied several options for accommodating the School Administration offices at a renovated Emery Grover building, the Police / Fire Station site, the Nike site, at the PSAB, should the DPW be relocated, or at Hillside School should a choice be made to redistrict and that building became available. One significant program element that needs to be provided, is parking for those attending training sessions. The total parking requirement is approximately 100 vehicles.

**Department of Public Works**

Plans were developed to accommodate the needs of the DPW consolidated on a single major site. Four sites were considered including the current Dedham Avenue site, Parcel 74, located on Greendale Avenue, the RTS, and a site located within the Town Forest near High Rock Street. Plans include a large vehicle storage building, a maintenance facility, shops, administrative spaces, a fuel island, bin storage, and laydown areas for materials and equipment. With consolidation of these activities at one site, the use of scattered sites around town for storage could be reduced to a minimum or eliminated. The consolidation of personnel and equipment at a singular site will also save valuable time, and provide efficient and safer operations. Of the four considered, only the Dedham Avenue site cannot provide sufficient space for full consolidation; the major building components were accommodated, but the site fell short of accommodating cold storage, gantry storage for sander bodies, and a working yard. Additionally, this plan also relied on continued and expanded use of the gravel parking area associated with the DeFazio portion of this site. A phased approach for the development of an alternative site to Dedham Avenue is a potential option for future consideration.

**Recycling and Transfer Station Site and Other DPW Town Sites**

The RTS will remain fully functioning in its current capacity but requires a new employee office facility and more materials handling zones. Plans to improve traffic flow through the site, upgrades to the tipping floor building, and appropriate new employee offices and support spaces, will greatly improve the RTS functions on this site.

Some dedicated vehicles and equipment, primarily used by the DPW and located at parks or fields, may continue to be located at these sites to better serve their needs.

**Police and Fire Headquarters**

The preferred option, to construct a new facility at the present Chestnut and School Streets location, will address all the needs and deficiencies identified during the programming phase. Four options were developed for this site, including an addition / renovation option and new construction. Options explored additional structures such as a School Administrative building and a parking garage. Phased construction will be required to accommodate the needs of first responders. Fire apparatus response time is critical, and the apparatus bays must be constructed to allow the existing apparatus to respond from this site throughout construction. Other fire and police administrative personnel can be accommodated elsewhere on site or at another location in town during construction. Police personnel can work with neighboring towns to accommodate and process prisoners.

**Fire Station #2**

This building houses vehicles, equipment, and personnel who respond to emergencies in this part of Needham including the portion of Town located across Route 128. Though the building needs to have general upgrades to the envelope and building systems, no plans are proposed that would require extended phasing or relocation to accomplish those goals. The included plan does propose the location of a small addition to house additional equipment, should that need arise in the future.



Photo 8: Recycling and Transfer Station



Photo 9: Pollard Middle School - Modular Classrooms



Photo 10: Fire Station #2 - Rear

**Rosemary Pool**

A study outlining the alternative options for protecting and enhancing this community asset was completed in early 2014. Options for development included repair, renovation or full replacement, and considered everything from a return to lake swimming to a four season indoor pool. Two preferred options have been favored by the Park and Recreation Commission. These include a new pool, building renovation and equipment upgrades, an expanded and improved parking lot, accessibility compliance, and subsurface stormwater mitigation with beach and terrace improvements.

**Cricket Field Building**

A study for improvements to this building included work on both the exterior envelope and interior portions of the building. This work included the creation of an accessible route to the building and a code compliant facility, with the potential of winterization to extend the programmed use throughout the year.

**Memorial Park Building**

Proposed work at this site includes a renovation / addition option to upgrade the existing building and to make it accessible. Another option is demolition and the construction of a new facility to house all of the functions that currently exist on site with the possible addition of a teen center. Expanded facilities for this option would include appropriate rooms for home and visiting sports teams and accessible toilets. Office, meeting and storage rooms, of various sizes to accommodate the sports teams who use this multi-sport site, would also be provided.

**Community Center**

Planning for a comprehensive community center was undertaken to include gymnasiums, an indoor pool, exercise rooms, community meeting spaces, and a teen center. Sites considered included Dedham Avenue, the Town Forest and the Nike Site including the possible use of Ridge Hill. A public / private partnership is considered to be a possible strategy to advance this project.

**Ice Rink**

A conceptual plan was developed for a singular indoor rink with seating. The sites considered for this building included Dedham Avenue and the Town Forest. Future development of this site could also be a public / private partnership.

**Ridge Hill**

This property consists of conservation land surrounding a three acre parcel containing the original Ridge Hill Mansion, garage and barn structure. The site is under consideration for redevelopment as a community space. The program is not yet developed. Limitations for this site include its location within conservation land, the challenges of redeveloping the existing buildings, and its remote location in Town. Future development of this site could also be a public / private partnership.

**Nike Site**

This site is currently used as a community farm and a dog park. As the site is considered remote, no other programs were strongly identified for relocation. Though the current programs that have been located here are amenities for the Town, the potential for this site lies in its development as a destination for expanded recreational and community programs. Future development of this site could also be a public / private partnership.



Photo 11: Claxton Field



Photo 12: Cricket Field Building



Photo 13: Rosemary Pool



Photo 14: Ridge Hill Barn



Photo 15: Memorial Field Building - 1st Floor Interior



Photo 16: Memorial Field Building

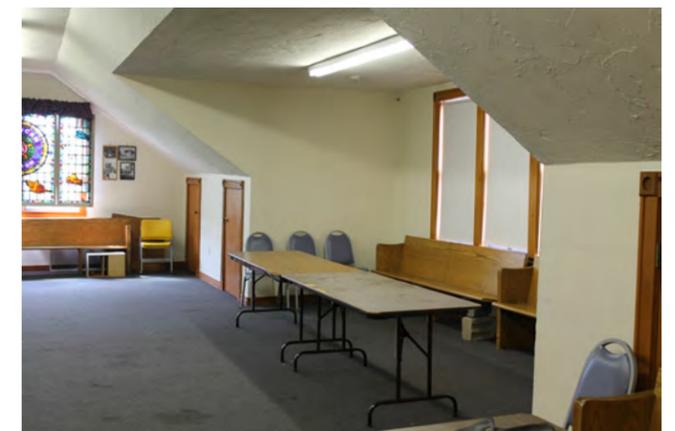


Photo 17: Memorial Field Building - 2nd Floor Interior

IMPLEMENTATION PLAN

IMPLEMENTATION PLAN

The following scenarios focus on specific needs of departments, timelines, expenditures and interconnections between projects. The master plan provides the Town with a broad framework for implementing future projects. The sequence and timing can be adjusted after each project is realized. The Implementation Plans, Scenarios 1, 2, and 3 indicate the projected date of occupancy and the costs to mid-point of construction if the project is designated for completion in the next ten years. The costs are shown in

2014 dollars if a project will be occupied in 2025 or beyond. While these scenarios have built consensus, priorities may change and timelines and costs will need to be adjusted, depending upon the Capital Funding Plan, and Town Board and Town Meeting approval of debt exclusion overrides.

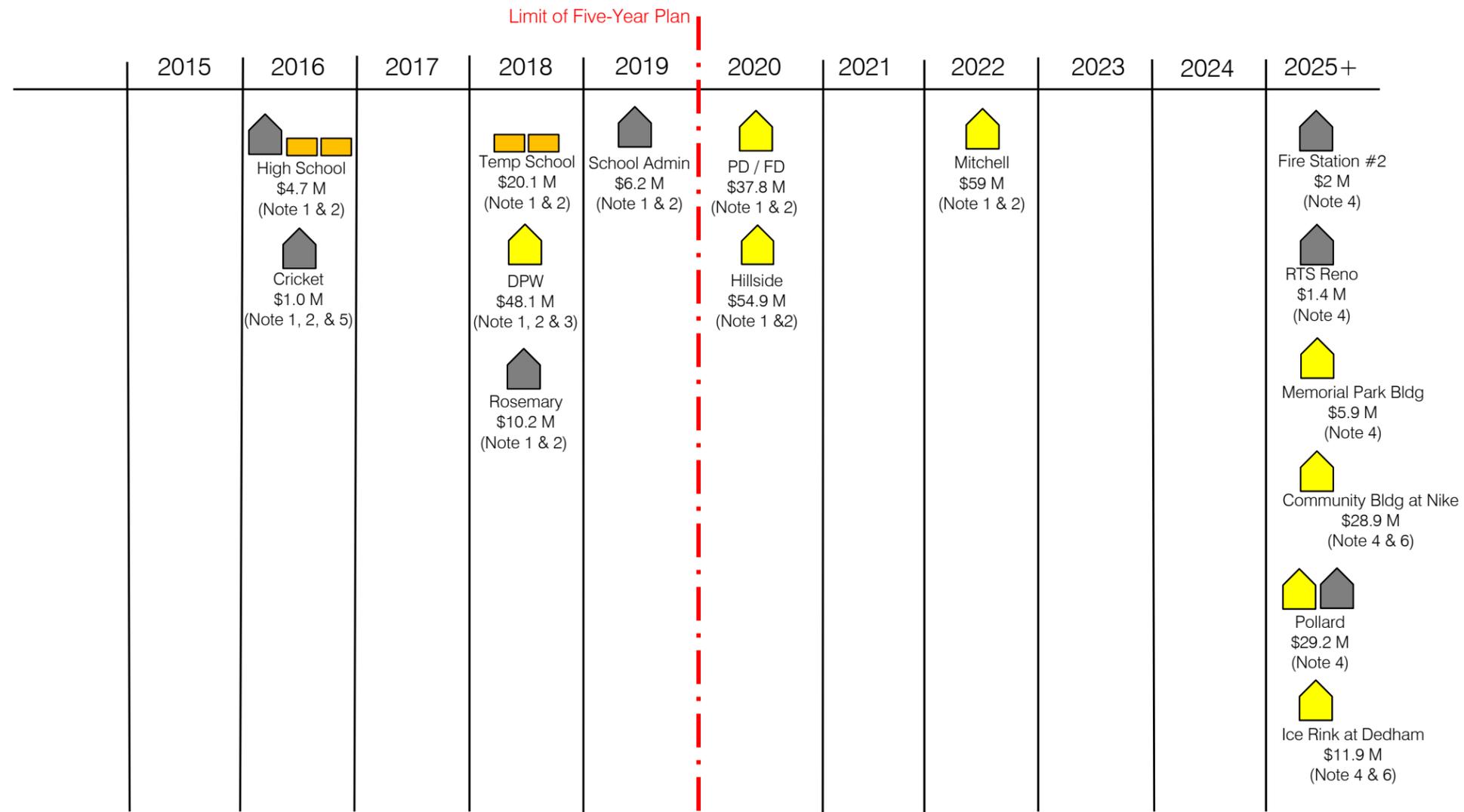
Scenarios 1, 2, and 3 shown on pages 6-11, have been developed in response to the three different options being considered for the rebuild / renovation of the three remaining schools. Scenario 1 includes a temporary school at DeFazio Park that would be occupied during the rebuild of Hillside and Mitchell Schools and the renovation at Pollard Middle School. Scenario 2 includes a permanent elementary or 6th Grade Center at DeFazio Park, returning High Rock to an elementary school, as required, and redistricting. Scenario 3, which has been developed to present a more favorable debt burden undertaken by the Town, is similar but only includes a permanent 6th Grade Center option at DeFazio Park.

SCENARIO 1

This scenario includes a Five-Year Plan limit that shows the first project occupancy beginning in 2016, with funding and design preceding this work and starting in 2015. Projects expecting occupancy beyond the Five-Year Plan limit include projects whose design and funding timeframes will begin during the initial Five-Year Plan limit.

Occupancy in 2016

The Facilities Working Group has recommended the following projects as the top priorities for occupancy in 2016: renovations and addition to accommodate the increased student population at the Needham High School and a minor renovation to Cricket Field Building. Design work and funding for these projects will need to be in place in 2015. Both of these projects are limited in scope and highly achievable. Cricket Field renovations to



Notes

1. Projects are shown at projected occupancy date.
2. Project costs are projected to the midpoint of construction.
3. The DPW project may be realized by a phased implementation approach extending out several years.
4. Project costs are estimated to 2014.
5. To be funded from operating capital 2016 or later.
6. Potential Public / Private Partnership.

Key

- = New Building
- = Renovation
- = Modular Classrooms

FIGURE 1: TIMELINE OF SCENARIO 1 - TEMPORARY SCHOOL AT DEFAZIO PARK

## IMPLEMENTATION PLAN

the exterior envelope, site access, and interior finishes and systems, are included at \$1.0 million dollars. Work at the High School is estimated at \$4.7 million dollars, and will include additional classrooms, cafeteria renovations, and a cafeteria expansion.

### Occupancy in 2018

Design work and funding will be underway starting in 2015 for projects expected to be occupied in 2018. The Facilities Working Group has recommended the following projects as the top priorities for that year: construction of a temporary school at DeFazio Park in preparation for the rebuilding of Hillside School on its existing site, construction of a relocated DPW, and work at Rosemary Pool. These projects are complicated in scope and execution.

A swing space at an alternative location is necessary due to the complexity of building on the existing Hillside site which includes a limited buildable site and wetlands restrictions. The existing school could not remain fully functioning during a rebuilding process, which is also constrained by undersized parking lots and traffic congestion. This modular structure will be used for each successive school project, and may include a permanent gymnasium building designated for recreation purposes once all public projects are complete. Though the cost of this construction is not reimbursable under MSBA guidelines, temporary accommodation is required if Hillside School is to be rebuilt on the current site. Changes to the use of DeFazio Park will include a relocated tot lot and expanded parking. The cost of the temporary school is estimated at \$20.1 million dollars.

The relocation of the DPW is required in order to accommodate a consolidated department, to improve site conditions, and to provide for a better functioning temporary school and DeFazio Park. The Town of Needham has undergone many changes since 1960 and the DPW has evolved to meet those needs. The DPW is considerably larger and more complex than the original department. Limiting site conditions currently require the use of other buildings and their associated land throughout town to store equipment and materials. In addition, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. As stormwater flows over paved as well as vegetated surfaces it picks up debris, chemicals, dirt, and other pollutants, and can flow untreated into a storm sewer system or directly to a water body. The recently constructed pre-engineered vehicle storage structure was built as a stop-gap measure to improve localized site conditions

on Dedham Avenue. A new consolidated DPW at Parcel 74 / Greendale Avenue will provide programmed space for vehicle storage, maintenance, shops, administrative spaces, a fuel island, bin storage and a laydown areas for materials and equipment. This consolidation of personnel and equipment in buildings at a singular site will save valuable time and provide efficient and safer operations. The cost of development for this program is estimated between \$48.1 and \$50 million dollars, depending on the start of construction.

Work at Rosemary Pool is required to be completed in the near future in order for a permit to be renewed by the Department of Environmental Protection (DEP). In 2013, a Rosemary Pool study looked at a variety of options for this site. A refurbishment for the pool and associated building was preferred. Other options considered ranged from permanent closure of the pool to construction of a year-round facility. The cost of this project is estimated at \$10.2 million dollars.

### Occupancy in 2019

Design work and funding will be underway starting in 2015/2016 for projects expected to be occupied in 2019. The Facilities Working Group has recommended the following project as the top priorities for that year: relocation of School Administration to the Public Services Administration Building (PSAB). Relocation of the School Administration to the PSAB on Dedham Avenue is made possible by the relocation of all the departments currently located there who will move with DPW operations to Parcel 74 / Greendale Avenue.

With the relocation of occupants of PSAB and the Water Pump Station, the relocation of School Administration would then be possible. The size of the existing building is comparable to the needs of the school department, and the relatively new building would only undergo light renovations in order to accommodate the school personnel. In addition the Water Pump Station could be renovated to serve as a large training / meeting room for the school department, as well as being made available for off hour use by the community. The work at this site includes demolition of the Hollis Building and increased parking. The cost of this project is estimated at \$6.2 million dollars.

### Occupancy in 2020

Design work and funding will be underway starting in 2015 and 2017 respectively for projects expected to be occupied in 2020. The Facilities Working Group has recommended the following projects as the top priorities for that year:

construction of a new Hillside School and a new Police and Fire Headquarters at the existing site.

The design, funding, and construction cycle for a new Hillside School will take approximately five years. The Town is now starting the Feasibility and Schematic Design phase with the MSBA. The preferred option selected from this process will require override approval in November 2016. The new Hillside School will meet the needs of a contemporary educational program, with all classrooms, core areas, specialty spaces and administrative functions being fully accommodated, as well as parking and outdoor areas to support these programs. Assuming Hillside at its current site is sustainable and the option that includes temporary modular classrooms at DeFazio is selected, then the cost of this project is estimated at \$54.9 million dollars.

The design and funding cycle for a new Police and Fire Headquarters will begin in 2017. Various options were considered with the preferred option, a stand-alone facility located in approximately the same location as the existing structure, being selected. This option provides for phased construction of the fire apparatus bays so that the apparatus equipment remains in a location that best serves the emergency response times for the portion of the town. The new facility will ultimately include appropriately sized rooms to accommodate modern equipment, prisoner processing that protects officers and detainees, evidence storage, shared meeting and training rooms, storage for records and files and administrative and support spaces for staff. The cost of this project is estimated at \$37.8 million dollars.

### Occupancy in 2022

Design work and funding will be underway starting in 2017 for the singular project expected to be occupied in 2022. The Facilities Working Group has recommended the following project as the top priority for that year: construction of a new Mitchell School at its existing site.

The design, funding and construction cycle for a new Mitchell School will take approximately five years and require acceptance by MSBA. The construction of a new school will begin following the occupation of the new Hillside School; the temporary school at DeFazio Park would then be used as swing space for the Mitchell School. The new Mitchell School will also meet the needs of a contemporary educational program with all classrooms, core areas, specialty spaces and administrative functions being fully accommodated as well as parking and outdoor areas to support these programs. The cost of this project is estimated at \$59 million dollars.

### Occupancy in 2025 and beyond or as yet undetermined

Design work and funding cycles for the remaining projects has not yet been determined. All of these projects will be reevaluated in the coming years to determine the need and priority of these proposals. The work includes upgrades at Fire Station #2, renovations / new construction at the RTS, a new or renovated Memorial Park Building and the renovations and additions to the Pollard School. The Community Center at Nike and the Ice Rink at Dedham could be public / private partnerships.



Photo 18: Hollis Building at DPW at Dedham Avenue



Photo 19: Hillside School

IMPLEMENTATION PLAN

SCENARIO 2

This scenario includes a Five-Year Plan limit that shows the first project occupancy beginning in 2016, with funding and design preceding this work and starting in 2015. Projects expecting occupancy beyond the Five-Year Plan limit include projects whose design and funding timeframes will begin during the initial Five-Year Plan limit.

Occupancy in 2016

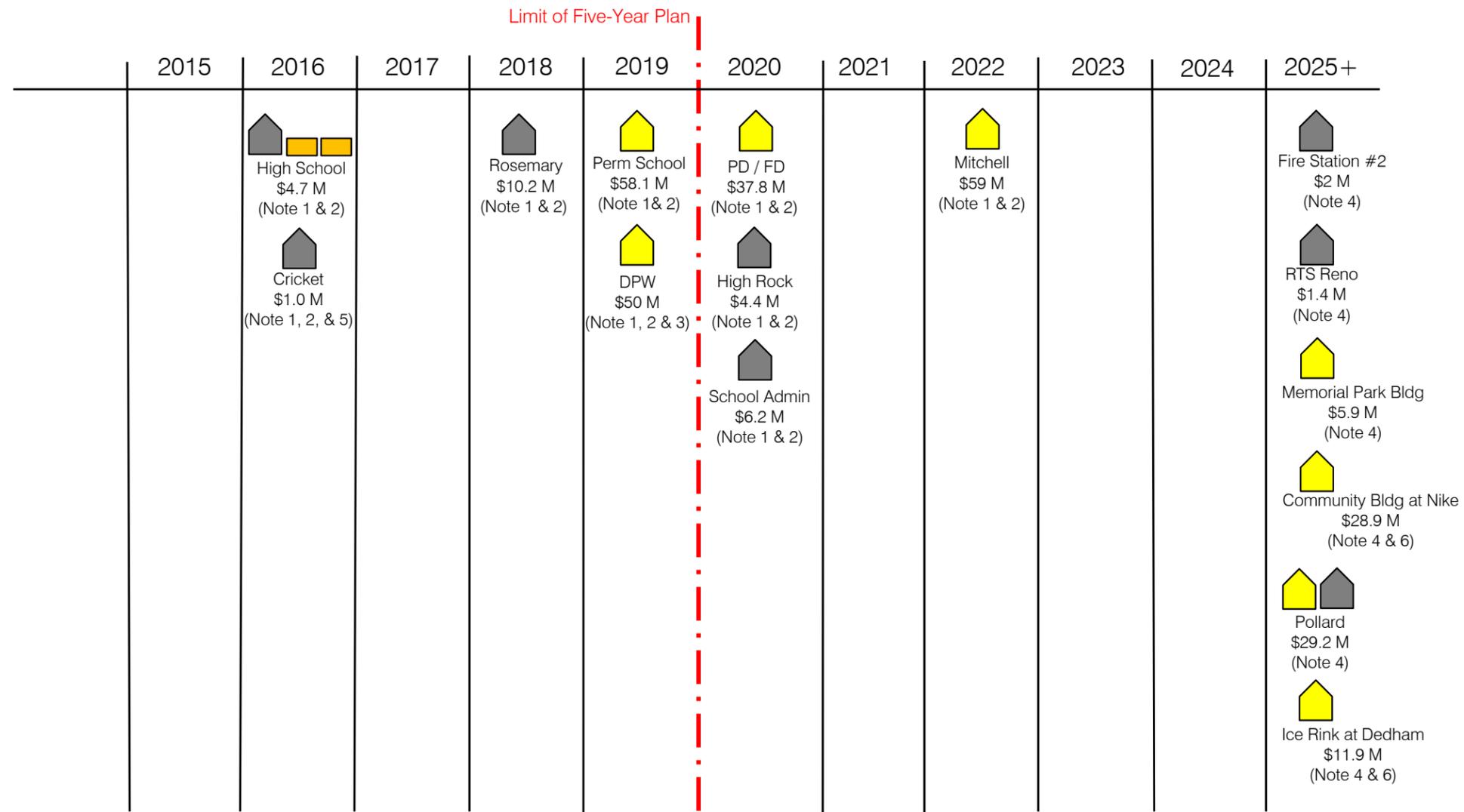
The Facilities Working Group has recommended the following projects as the top priorities for occupancy in 2016: renovations and addition to accommodate the increased student population at the Needham High School and a minor renovation to Cricket Field Building. Design work and funding for these projects will need to be in place in 2015. Both of these projects are limited in scope and highly achievable.

Work at Needham High School is estimated at \$4.7 million dollars, and will include additional classroom space cafeteria renovations, and a cafeteria expansion. Cricket Field Building renovations, to both the exterior envelope site access, interior finishes and systems are included and estimated at \$1.0 million dollars.

Occupancy in 2018

Design work and funding will be underway starting in 2015 for projects expected to be occupied in 2018. The Facilities Working Group has recommended the following project as the top priority for occupancy in the year 2018: work at Rosemary Pool.

Work at Rosemary Pool is required to be completed in the near future in order for a permit to be renewed by the Department of Environmental Protection (DEP). In 2013, a Rosemary Pool study looked at a variety of options for this site. A refurbishment for the pool and associated building was preferred. Other options considered including permanent closure of the pool to a year-round facility. The cost of this project is estimated at \$10.2 million dollars.



Notes

1. Projects are shown at projected occupancy date.
2. Project costs are projected to the midpoint of construction.
3. The DPW project may be realized by a phased implementation approach extending out several years.
4. Project costs are estimated to 2014.
5. To be funded from operating capital 2016 or later.
6. Potential Public / Private Partnership.

**Key**

- = New Building
- = Renovation
- = Modular Classrooms

FIGURE 2: TIMELINE OF SCENARIO 2 - PERMANENT SCHOOL AT DEFazio PARK

## IMPLEMENTATION PLAN

### Occupancy in 2019

Design work and funding will be underway starting in 2015 for projects expected to be occupied in 2019. The Facilities Working Group has recommended the following projects as the top priorities for that year: construction of a permanent school at DeFazio Park for either a 6th Grade Center or an elementary school and construction of a relocated DPW. The Town will work with the MSBA to determine a preferred solution for the school project. As in Scenario 1, these projects are complicated in scope and execution.

A permanent school at DeFazio Park could be built to house a 6th Grade Center, currently located at the High Rock School. A new home for 6th graders will allow for direct synergies with 7th and 8th grade students at the Pollard School. Following the occupancy of this new center, High Rock School will be renovated to provide all the spaces needed for a contemporary elementary school. Redistricting under this scenario would be required. Once High Rock is ready for occupation, Hillside School would be used as swing space for the Mitchell and Pollard Schools rebuild and renovation projects, as well as other Town projects. Once those projects are complete the Hillside School will cease to function and will be re-purposed or demolished to make way for some sort of community use. The cost of the permanent school is estimated at \$58.1 million dollars.

A Scenario 2-A could include a new elementary school at DeFazio and redistricting of grades K-5. This would eliminate the need for renovations to the High Rock School. Both options will be explored during the Hillside Feasibility Study with MSBA.

The relocation of the DPW is required in order to accommodate a consolidated department, to improve site conditions, and to reduce or eliminate conflicts with a temporary school and DeFazio Park. The DPW is considerably larger and more complex than the original department that occupied this site in the 1960's. Limiting site conditions currently require the use of other buildings and their associated land throughout town to store equipment and materials. In addition, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. As stormwater flows over paved as well as vegetated surfaces it picks up debris, chemicals, dirt, and other pollutants, and can flow untreated into

a storm sewer system or directly to a water body. The recently constructed pre-engineered vehicle storage structure was constructed as a stop-gap measure to improve localized site conditions on Dedham Avenue. A new consolidated DPW at Parcel 74 / Greendale Avenue will provide programmed space for vehicle storage, a maintenance facility, shops, administrative spaces, a fuel island, bin storage and laydown areas for materials and equipment. This consolidation of personnel and equipment in buildings at a singular site will save valuable time and provide efficient and safer operations. The cost of development for this program is estimated between \$48.1 and \$50 million dollars, depending on the start of construction.

### Occupancy in 2020

Design work and funding will be underway starting in 2015/2016 for projects expected to be occupied in 2020. The Facilities Working Group has recommended the following projects as the top priorities for that year: renovation at High Rock School, a new Police and Fire Headquarters at its existing site and relocation of School Administration to the Public Services Administration Building (PSAB). Relocation of the School Administration to the PSAB on Dedham Avenue is made possible by the relocation of all the departments currently located there who will move with DPW operations to Parcel 74 / Greendale Avenue.

The design and funding for the conversion of High Rock School back to an elementary school would begin in 2018. This work would primarily include new classroom space. The cost of this project is estimated at \$4.4 million dollars.

The design and funding cycle for a new Police and Fire Headquarters will begin in 2017. Various options were considered with the preferred option, a stand-alone facility located in approximately the same location as the existing structure, being selected. This option provides for the logically phased construction of the fire apparatus bays so that the apparatus equipment remains in a location that best serves the emergency response times for the portion of the town. The new facility will ultimately include appropriately sized rooms to accommodate modern equipment, prisoner processing that protects officers and detainees, evidence storage, shared meeting and training rooms, storage for records and files and administrative and support spaces for staff. The cost of this project is estimated at \$37.8 million dollars.

With the relocation of occupants of PSAB and the Water Pump Station, the relocation of School Administration would then be possible. The size of the existing building is comparable to the needs of the school department; and the relatively new building would only undergo light renovations in order to accommodate the school personnel. In addition the Water Pump Station could be renovated to serve as a large training / meeting room for the school department, as well as being made available for off hour use by the community. The work at this site includes demolition of the Hollis Building and increased parking. The cost of this project is estimated at \$6.2 million dollars.

### Occupancy in 2022

Design work and funding will be underway starting in 2017 for the singular project expected to be occupied in 2022. The Facilities Working Group has recommended the following project as the top priority for that year: construction of a new Mitchell School at its existing site.

The design, funding and construction cycle for a new Mitchell School will take approximately five years. The construction of a new school will begin following the occupation of the renovated elementary school at High Rock, which will accommodate the students currently located at Hillside School. In this option the Hillside School would be used as the temporary facility for the Mitchell School during construction. Some redistricting would be required because Hillside School is smaller than Mitchell School by approximately thirty students. The new Mitchell School will also meet the needs of a contemporary educational program with all classrooms, core areas, specialty spaces and administrative functions being fully accommodated as well as parking and outdoor areas to support these programs. The cost of this project is estimated at \$59 million dollars.

### Occupancy in 2025 and beyond or as yet undetermined

Design work and funding cycles for the remaining projects has not yet been determined. All of these projects will be reevaluated in the coming years to determine the need and priority of these proposals. The work includes upgrades at Fire Station #2, renovations / new construction at the RTS, a new or renovated Memorial Park Building and the renovations and additions to the Pollard School. The Community Center at Nike and the Ice Rink at Dedham could be public / private partnerships.



Photo 20: DPW at Dedham - Cold Storage



Photo 21: Town Forest

**SCENARIO 3**

This scenario was developed to align with a financing plan (see Volume 3, Appendix 5) developed to lessen the debt service undertaken by the Town, but which still requires Board acceptance, and includes a Five-Year Plan limit that shows the first project occupancy beginning in 2016, with funding and design preceding this work and starting in 2015. Projects expecting occupancy beyond the Five-Year Plan limit include projects whose design and funding timeframes will likely begin during the initial Five-Year Plan limit.

**Occupancy in 2016**

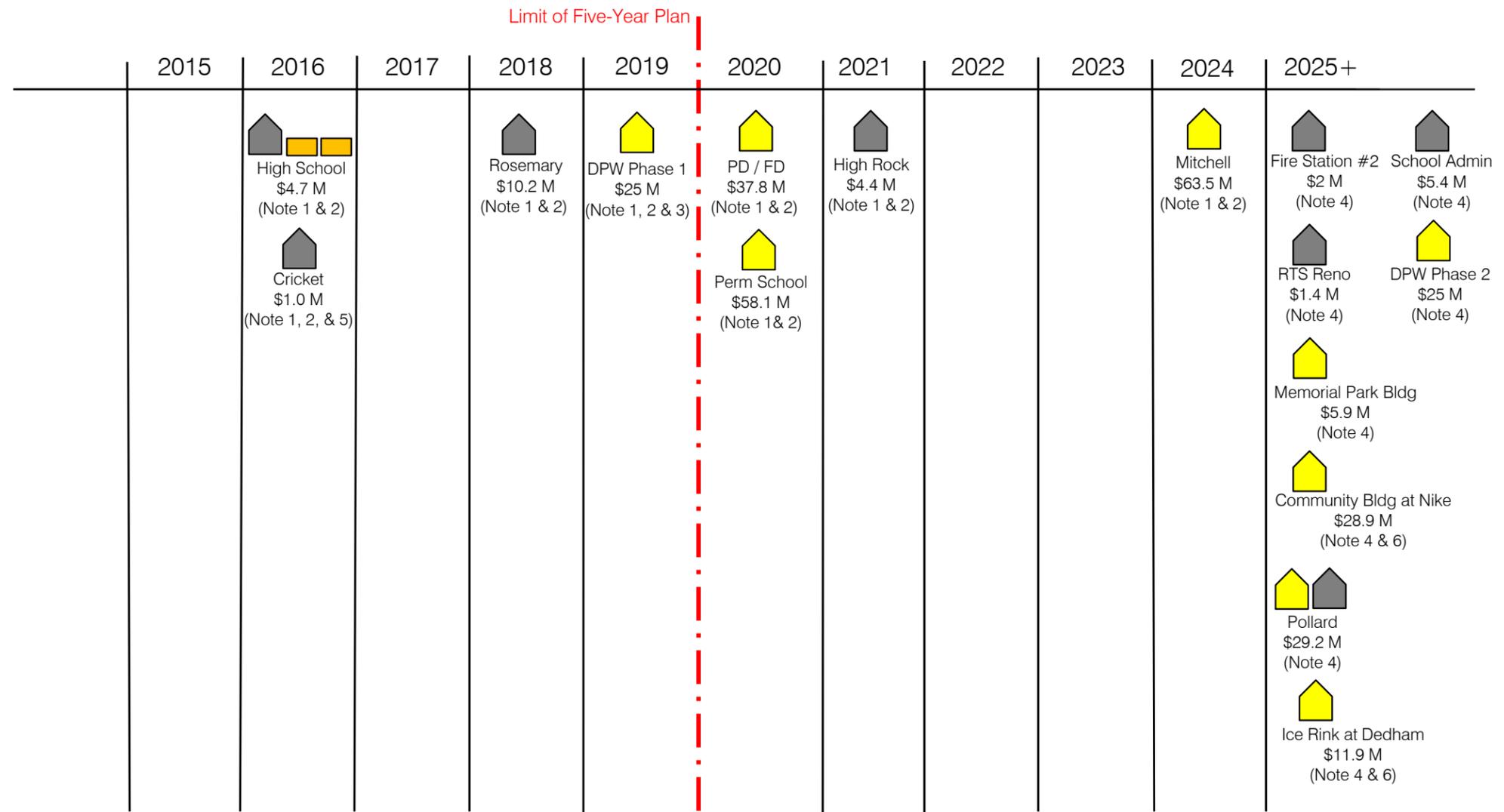
Scenario 3 anticipates the following projects as the top priorities for occupancy in 2016: renovations and addition to accommodate the increased student population at the Needham High School and a minor renovation to Cricket Field Building. Design work and funding for these projects will need to be in place in 2015. Both of these projects are limited in scope and highly achievable.

Work at Needham High School is estimated at \$4.7 million dollars, and will include additional classroom space cafeteria renovations, and a cafeteria expansion. Cricket Field Building renovations, to both the exterior envelope, site access, interior finishes and systems are included and estimated at \$1.0 million dollars.

**Occupancy in 2018**

Design work and funding will be underway starting in 2015 for projects expected to be occupied in 2018. The Facilities Working Group has recommended the following project as the top priority for occupancy in the year 2018: work at Rosemary Pool.

Work at Rosemary Pool is required to be completed in the near future in order for a permit to be renewed by the Department of Environmental Protection (DEP). In 2013, a Rosemary Pool study looked at a variety of options for this site. A refurbishment for the pool and associated building was preferred. Other options considered ranged from permanent closure of the pool to the construction of a year-round facility. The cost of this project is estimated at \$10.2 million dollars.



Notes

1. Projects are shown at projected occupancy date.
2. Project costs are projected to the midpoint of construction.
3. The DPW project may be realized by a phased implementation approach extending out several years.
4. Project costs are estimated to 2014.
5. To be funded from operating capital 2016 or later.
6. Potential Public / Private Partnership.

**Key**

- = New Building
- = Renovation
- = Modular Classrooms

FIGURE 3: TIMELINE OF SCENARIO 3 - PERMANENT SCHOOL AT DEFazio PARK

**Occupancy in 2019**

Design work will be underway in 2015 for the feasibility studies and schematic design in anticipation of a new permanent school project expected to be constructed in the existing gravel parking lot area at DeFazio Park. Relocation of the DPW (including part or all of its operations) is required in order to accommodate a new school at DeFazio Park.

In anticipation of this work, the relocation of the DPW would enable the consolidation of the department, and improve site conditions at Dedham Ave. The DPW is considerably larger and more complex than the original department that occupied this site in the 1960's. Limiting site conditions currently require the use of other buildings and their associated land throughout town to store equipment and materials. In addition, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. As stormwater flows over paved as well as vegetated surfaces it picks up debris, chemicals, dirt, and other pollutants, and can flow untreated into a storm sewer system or directly to a water body. The fuel facility is reaching the end of its useful life and its current location is difficult to access by the larger town trucks. The recently added pre-engineered vehicle storage structure was constructed as a stop-gap measure to improve localized site conditions on Dedham Avenue. A new consolidated DPW at Parcel 74 / Greendale Avenue will provide programmed space for vehicle storage, a maintenance facility, shops, administrative spaces, a fuel island, bin storage and laydown areas for materials and equipment. This consolidation of personnel and equipment in buildings at a singular site will save valuable time and provide efficient and safer operations. The cost of development for this program is estimated between \$48.1 and \$50 million dollars, depending on the start of construction. However, Scenario 3 anticipates that the DPW project will be phased, and only Phase 1 of the project, at a cost of \$25 million dollars, will be completed at this time, with a second phase occurring at a later date.

**Occupancy in 2020**

Design work and funding will be underway starting in 2015 / 2016 for projects expected to be occupied in 2020. Scenario 3 anticipates the following projects as the top priorities for that year: a new permanent school at DeFazio Park as a 6th Grade Center, and a new Police

and Fire Headquarters at its existing site.

The Town is starting the Feasibility Study and Schematic Design phase for the Hillside School with the MSBA in 2015 to study the alternatives and select a preferred solution. Scenario 3 assumes the construction of a new permanent school at DeFazio Park as a 6th Grade Center, which is one of the options in the MSBA study. Once the new school is occupied renovations and additions to the High Rock School would follow to convert it back into an elementary school. Under this scenario redistricting would be required. Once the new school is occupied, construction on the existing High Rock School could begin to convert that building back into an elementary School. The cost of the Permanent School at DeFazio is projected to be \$58.1 million dollars.

The design and funding cycle for a new Police and Fire Headquarters will begin in 2017. Various options were considered with the preferred option, a stand-alone facility located in approximately the same location as the existing structure, being selected. This option provides for the logically phased construction of the fire apparatus bays so that the apparatus equipment remains in a location that best serves the emergency response times for the portion of the town. The new facility will ultimately include appropriately sized rooms to accommodate modern equipment, prisoner processing that protects officers and detainees, evidence storage, shared meeting and training rooms, storage for records and files and administrative and support spaces for staff. The cost of this project is estimated at \$37.8 million dollars.

**Occupancy in 2021**

Design work and funding will be underway starting in 2017 for the renovation and additions to the High Rock School to convert it into an Elementary School. Redistricting would then accommodate the Hillside students so that the Hillside School building could be used as swing space for the future Mitchell School and Pollard School renovation / reconstruction / addition projects.

This work would primarily include new classroom space. The cost of this project is estimated at \$4.4 million dollars.

**Occupancy in 2024**

Design work and funding will be underway starting in 2020 for the singular project expected to be occupied in 2024. Scenario 3 anticipates the following project:

construction of a new Mitchell School at its existing site.

The design, funding and construction cycle for a new Mitchell School will take approximately four to five years. Design and construction of a new school will begin concurrent with the occupation of the new elementary school at High Rock, which with redistricting will accommodate the students currently located at Hillside School. In this option the Hillside School would be used as the temporary facility for the Mitchell School during construction. The redistricting would need to account for the fact that the Hillside School is smaller than Mitchell School by approximately thirty students. The new Mitchell School will also meet the needs of a contemporary educational program with all classrooms, core areas, specialty spaces and administrative functions being fully accommodated as well as parking and outdoor areas to support these programs. The cost of this project is estimated at \$63.5 million dollars assuming midpoint of construction in 2023.

**Occupancy in 2025 and beyond or as yet undetermined**

Design work and funding cycles for the remaining projects has not yet been determined. All of these projects will be reevaluated in the coming years to determine the need and priority of these proposals. The work includes 1) upgrades at DPW Phase 2, 2) relocation of School Administration to the Public Services Administration Building (PSAB). (Made possible by the relocation of all the departments currently located there who could move with DPW operations to Parcel 74 / Greendale Avenue), 3) Fire Station #2, 4) renovations / new construction at the RTS, 5) a new or renovated Memorial Park Building and 6) the renovations and additions to the Pollard School. The Community Building at Nike and an Ice Rink at Dedham Ave are assumed to be public/ private partnerships.

**IMPLEMENTING THE MASTER PLAN**

The community, represented by all members of the Facility Working Group, has recommended three alternative pathways to meet the identified Town facility needs. The end goals are clear, and this Facility Master Plan provides a broad framework that will accommodate adjustments as new issues, budget constraints or economic conditions arise in the future.



Photo 22: Memorial Park Building



Photo 23: Public Services Administration Building