

Study Report
**Middleton Facilities
Study**

Middleton, MA

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Owner

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(ii) Table of Contents

(I) ACKNOWLEDGEMENTS..... 3
(II) TABLE OF CONTENTS 5

SECTION 1: EXECUTIVE SUMMARY 7

SECTION 2: PROBLEM STATEMENT 11

SECTION 3: EXISTING CONDITIONS 15

SECTION 4: PROGRAM NEEDS 31

SECTION 5: PLANNING CONCEPTS AND OPTIONS 35

SECTION 6: COST 43

SECTION 7: PREFERRED OPTION 51

APPENDIX A: EXISTING CONDITIONS DRAWINGS 53

APPENDIX B: PREFERRED OPTION – SCHEMATIC DESIGN 55

APPENDIX C: COST ESTIMATE..... 57

Section 1: Executive Summary

In 2017, the Town of Middleton commissioned Gienapp Design to assist the town with assessing selected public facilities and determining long-term Planning Options for the maintenance, improvement and replacement of the Town's buildings. This Planning Study included an assessment of the existing assets (buildings and sites), preliminary programming of the space and functional needs for each facility, and an evaluation of the existing facilities against their space and operational needs. The Planning Options considered maximizing the use of existing assets whenever possible, project priorities and sequence, schedule, site availability, schedule and cost.

The Planning Study included consideration of the long-term (50 years or more) needs of the town. Having an understanding of the long-term direction for all facilities should inform the priority and scope of maintenance, renovations and replacement of existing facilities when planning Capital Improvements in the short and mid-term.

Full existing conditions assessments, and preliminary programming, were performed for the Fire Station, Police Station, Council on Aging, and Town Hall buildings. Only a partial/overview assessment was performed for the Library and the Department of Public Works as there is a consensus these facilities need no significant improvements for the foreseeable future.

The evaluation of the existing building and sites, compared to the Departments' programmatic needs showed that none of the existing buildings and sites meet the long-term needs of the Town Departments. None of the four buildings can be adequately improved to meet the long-term needs of their future program needs. The sites of the Police Station, Fire Station and Old Town Hall are too small to allow for construction of new buildings to meet the program needs. These findings may be briefly summarized as follows:

1. Police Station: The nature of the existing building and recently added modular units are not good candidates for renovation for a modern Police Station; a new building is required. The site is of marginal size for a new facility and is nearly too small to allow construction of a new facility while maintaining operations in the existing station. Providing temporary facilities and/or complex phasing to accomplish construction of a new station on the existing site is costly and impractical.
2. Fire Station: The existing site is too small to allow for construction of a new station that meets the current and future needs of the Department. The existing building is of marginal use as part of an expanded or renovated facility and the site is too small to erect an addition of adequate size to meet the program.
3. Town Hall: The existing building is too small to house all departments that would ideally be located in a single building. It is currently functional only because multiple departments are located at the DPW building (the Building Department, Planning and Health agent). The site is of adequate size to expand the existing building, although due to the configuration of the existing building and cost, expansion and renovation does not appear advantageous. Renovation and expansion does not

ultimately result in facility with modern performance with regard to space and energy efficiency, security, low maintenance, acoustical performance and other characteristics.

4. Old Town Hall, Council on Aging: The existing building is too small and of physical characteristics that do not accommodate the number and sizes of spaces for the long-term space needs of the Council. The nature of the building is not conducive to providing full, barrier-free accessibility of all program areas. The site is too small to provide the necessary parking or to allow an addition that would sufficiently augment the existing building to meet the program needs.

After evaluation of the existing buildings and programs, the Working Group identified the priorities for Capital Improvements as follows:

- A. Fire Station: The deficiencies of the existing building, compared to the program and public safety concerns makes the Fire Station the highest priority for improvement.
- B. Town Hall: The lack of accessibility, shortcomings of program space and structural deficiencies establishes the Town Hall improvements as the second priority. The existing specific structural failure of the floor area near the Administrator's office must be repaired 'immediately' if the building is to remain occupied (this work is in process). Depending on available funding and potential sites/facilities, the implementation of replacing the building, or significant Capital Improvements can be deferred from the short-term. However, this will require significant short-term expenses, such as installation of an elevator, which will not contribute to the long-term capital improvements.
- C. Police Station: While the station falls very short of the needs and standards of a modern facility, the recent modular unit addition and associated minor renovations, marginally satisfies the most immediate needs of the Department. The Town would be justified to accelerate replacement of the Police Station if it is practical to do so in association with other capital improvements.
- D. Old Town Hall – Council on Aging: The existing building limits the programming the Council can offer to the Town's residents. The small site and lack of adequate parking limits the buildings use. However, the existing building reasonably accommodates the existing program and essential services offered by the Council.

After evaluating the four buildings and their programs, the Working Group generated, and evaluated, multiple Planning Options that provide sites and buildings of adequate size to meet long-term program needs. Given that the four existing sites are of marginal size for most of the programs, the Working Group considered potential real estate acquisitions abutting existing sites, or new sites that would meet the Town's needs. The many Planning Options were evaluated based on an array of criteria including long-term success and the ability of phasing to address priorities and cost. In the initial evaluation, utilizing existing Town-owned sites was favored, over acquiring new sites, both due to cost and the time required for site acquisition, which may delay the implementation schedule of any improvements. However, the Town does not own sites that satisfy the program criteria.

The array of Planning Options can be categorized by four different Concepts that may be summarized as follows:

Concept A: Acquisition of a two-acre parcel for construction of a new Fire Station on a new site. In this concept, there are multiple options of renovation and new construction for the other facilities, although some of those options are of marginal success in meeting the long-term needs.

Concept B: Purchase two sites (or combined larger site) for relocation and construction of a new Fire Station and construction of a new Town Hall. The Police Station could later be relocated to a new building constructed on the existing Town Hall site; there are other options. The existing Town Hall (Memorial Hall) would be demolished and the Old Town Hall would be renovated for the Council on aging.

Concept C: Purchase of two sites, or a larger single site, to allow construction of a new Police Station and a new Fire Station. A large site would allow for potentially combining the buildings into one, as a Public Safety Complex. The Town Hall and Council on Aging would be accommodated through renovations on the existing sites.

Concept D: Purchase of a large site, at least six acres preferred, to establish a new central Town Complex through construction of new facilities for all four programs: Fire Station, Police Station, Town Hall and Council on Aging.

After evaluation of all Planning Options, Concept D, creation of a Town Complex is the Preferred Option. Since all four of the buildings require a new building, or a full renovation, construction of a new Town Complex is nearly the same cost as other options. This Concept allows for flexibility in implementation; once the site is acquired new facilities can be constructed over time as required by program needs and available funding. There will be cost savings through economies of scale, sharing of common facilities (parking and site improvements, meeting space, etc.) and the potential sale of existing buildings and sites. Only this concept will provide all facilities with long term solutions that meet all program criteria.

The cost to implement Concept D, the creation of a new Town Complex is as follows:

Building Construction (4 Buildings):	\$28,200,000
Project Cost Markup (30%):	<u>\$8,500,000</u>
Total Project Cost:	\$36,700,000
Land Acquisition	\$1,120,000
Potential Land Sales:	-\$1,700,000
Total Estimated with Land:	\$36,120,000

Section 2: Problem Statement

Middleton currently has aging facilities to house some of their municipal and public safety departments. In particular, the Fire Station, Police Station, Town Hall and Old Town Hall (Council on Aging/Senior Center) buildings need to be improved in order for the Town to deliver public services to the residents. While all of the buildings have been maintained in operational condition, each of the buildings are failing to meet the needs of the Town's Departments in different and varying ways.

The purpose of this Planning Study was assist the Town with assessing the four selected public facilities and determining long-term Planning Options for the maintenance, improvement and replacement of the Town's buildings. This Planning Study included an assessment of the existing assets (buildings and sites), preliminary programming of the space and functional needs for each facility, and an evaluation of the existing facilities against their space and operational needs. The Planning Options considered maximizing the use of existing assets whenever possible, project priorities and sequence, schedule, site availability, schedule and cost.

The goal of the Planning Study was to identify all viable Planning Options, evaluate and determine the Advantageous and Non-advantageous options and ultimately recommend the Preferred Option(s) for further study and implementation.

The Planning Study included consideration of the long-term (50-100 years) needs of the town while always considering the short and mid-term (20 years) actions and Capital Improvements necessary to provide on-going Town services. However, the Working Group recognized the town currently has limited town-owned sites available for the departments under study, and most of them are of small size compared to the Department's current needs, and especially in the context of continued growth of the community and town services.

None of the Departments are projected to have significant growth in the number of staff. The failure of the buildings to meet the size and program of the buildings is generally the result of increased functional requirements caused by modern standards for safety and delivery of services: examples include the size of fire trucks to provide more functionality, standards for Police handling of detainees, necessity of computer network systems, security concerns, requirements and expectations of barrier-free accessibility, modern standards for climate control and energy efficiency and increase of Town services. The attributes of the historical and aging buildings has made it costly and difficult for the Town to modernize the buildings to keep pace with changing needs, codes and standards (e.g. the characteristics of Memorial Hall has impeded the Town's ability to provide barrier free accessibility and/or functional meeting rooms for public meetings).

Each of the buildings are in need of general modernization of building systems (HVAC), addition of Fire Protection systems, and in some cases the exterior envelope. While the buildings have generally been well maintained, most of the systems in the buildings are near, or beyond, their anticipated useful life.

While more detailed information is included in the Existing Conditions section of this Report, the

deficiencies of the existing buildings may be summarized as follows:

FIRE STATION: Based on the visit to the station the following main problems were found:

1. No identifiable public entrance with proper visibility, containment or security. Public entrance of marginal handicapped accessibility.
2. A lack of square footage to meet department needs including:
 - 2.1. Storage for equipment necessary for firefighting.
 - 2.2. Space for rolling stock (vehicles and equipment) with adequate headroom and provisions.
 - 2.3. Acceptable bunk space including female facilities.
 - 2.4. Office space for staff.
 - 2.5. Adequate kitchen / dining facility.
 - 2.6. Training spaces, resulting in the department having to seek alternative sites and facilities.
3. Unacceptable second floor access and not a code compliant egress.
4. Limited usefulness of second floor due to configuration (sloped ceiling), lack of handicapped accessibility and marginal means of egress.
5. Configuration prohibits proper security measures.
6. Concerns with fire truck circulations paths (including backing into lower bays) in the areas with pedestrian traffic (including children) for the library.

POLICE STATION: Deficiencies at the current Police Station maybe summarized as follows:

1. Lack of meeting standards for the secure area for detainee arrival (Sallyports), processing and holding.
2. Evidence room and Record Storage do not have adequate levels of security.
3. Limited usefulness of the second floor due to configuration and lack of handicapped accessibility.
4. Challenge to meet current certification standards due to lack of training space.

MEMORIAL HALL (TOWN HALL): A summary of deficiencies of the building to meet program needs:

1. Structural issues resulting from the excessive weight of files and other items within the building. This has led to sloping floors in many areas. The design of repairs of the most dramatic structural failure is in process. However, similar overloading will continue to be of concern as/if use of the building intensifies.
2. Marginal accessibility to all areas; no stair-free access to the second floor. Some spaces are not being fully utilized due to limited accessibility within the building.
3. Use of the second-floor is severely limited due to lack of accessibility, configuration and performance: lights, acoustics and climate control.
4. Windows and other thermal performances of the buildings is very low costing the Town extra funds to heat and cool the building. Poor energy efficiency of heating, and particularly window air conditioners for cooling.

5. The current oil fired boiler supplying steam radiators is very inefficient.
6. Building wiring is inadequate for current needs and requires modernization.
7. The IT infrastructure is not properly located and does not have proper environmental control; in the basement, it is inadequate and has a high potential for equipment loss through water damage.

OLD TOWN HALL (COUNCIL ON AGING): The deficiencies of the Old Town Hall in meeting the program may be summarized as follows:

1. Stairs throughout the building do not meet code requirements and are difficult to navigate, especially for persons with limited mobility and vision.
2. A lack of smaller spaces for various activities for the clients.
3. Access to the Elevator on the first-floor level limits the usefulness for programmed activities.
4. There is not enough storage space for the food pantry (some food is stored in a room with the grease trap and ejector pump).
5. Front entry and façade are in deteriorating condition. Front stairs do not meet building code (as well as accessibility).
6. Lack of separation between reception / office areas and function space.
7. While there have been many accessibility improvements, the building has many non-acceptable conditions including; front exterior stairs and entrance, main interior stair, kitchen (on former stage), etc.

Section 3: Existing Conditions

The following provides a summary of the assessment of the existing conditions of the buildings and sites:

FIRE STATION – EXISTING CONDITIONS

FIRE STATION: The current fire station was built in the 1950s for \$66,016; it did not include the current second floor which was added, largely with volunteer labor in the 1970's. The current building consists of 9,246 square feet. It has two levels of apparatus bays.

The upper apparatus bays and doors have low headroom clearance by today's standards. When purchasing new equipment the Town must order units with lower than normal headroom, which increases the cost of the trucks. The first floor contains three bays, offices, dispatch, and a bathroom. The dispatch is operational as a local back-up to the regional dispatch which provides regular, daily dispatch services for the Town.

The lower level is used for the secondary equipment and is too small for all of the equipment. There are some items, such as the antique truck that is no longer used for fire-fighting, which could potentially be stored elsewhere. This lower level contains three bays and the mechanical systems for the whole building, with the exception of an emergency generator which is located outside the building.

The top, or second, floor contains a kitchen/dining area, bunkrooms, offices and a full bath. Access and egress to and from this floor is limited to a single spiral staircase, which is inadequate for access and especially unacceptable as a means of egress. The town recently performed minor renovations to the second floor to repair water damage caused by wind-driven rain into the attic louvers. These repairs have eliminated air-quality concerns due to potential mold resulting from wet insulation and finishes. The Town and Department also recently constructed new partitions on the second floor to create a series of new bunk rooms. A separate space has been reassigned to be the women's bunkroom.

The overall square footage of the station is far short of the programmatic need and current standards. The general lack of the building to meet the functional needs of the station are as much of a concern as the small buildings size. The building is lacking an appropriate stair or means of egress from the upper floor which houses the sleeping quarters. There is only one stair which is circular and not a practical or legal means of egress; there is not a practical solution to improve the egress without an addition or taking away existing much-needed space. Despite the recent limited improvements the Station is lacking adequate bunk space and equivalent facilities for females (although smaller) as provided for males.

There is no room dedicated for office file storage cabinets in any available space on the second level. The Tel/Data room is on the Basement level in a room that is not adequately temperature controlled. The waterline currently runs through the Tel/data room posing a threat to vital telecommunications

services.

Apparatus bays are of inadequate size for modern vehicles. The basement level has trucks closely spaced, preventing adequate access to equipment when needed. The first level is too tight for the existing ladder truck. The ceiling height is less than 11' high to the bottom of the structure.

There is no training space on-site, requiring training being conducted at other locations; usually the Police Station or the Library. While this is reasonably workable, it raises concern with an increase in response time if the firefighters are not on site.

There is concern that the traffic pattern of fire trucks and equipment on the lower level (mostly upon return) is through the library parking lot which is frequently congested with pedestrians (including children) using the Library. This is of particular concern, as the trucks must be backed into the storage bays.

SPECIFIC FIRE STATION INFORMATION INCLUDES:

1. Finishes
 - 1.1. VCT / Carpet / Wood: VCT on Second Floor being replaced with carpet. VCT in Kitchen remaining is in poor condition.
 - 1.2. Ceiling: ACT / Gypboard: Gypboard in second floor spaces is in fair condition.
 - 1.3. Walls: fair, some require repainting.
2. Windows: wood windows are in fair condition.
3. Doors / Thresholds: knobs, doors not wide enough for accessibility.
4. Roof: In fair condition with some repairs required.
5. Siding/Exterior: siding is in need of painting. Large portions of the exterior trim requires replacement.
6. Building Systems
 - 6.1. Fire Protection: No Sprinkler System.
 - 6.2. Generator: Yes, of adequate size for current needs.
 - 6.3. Type of HVAC: electric baseboard, window mounted AC units.
 - 6.4. Plumbing: bathroom and shower are in fair condition.
 - 6.5. Electrical
 - 6.5.1. Exit signs – No exit signs.
 - 6.5.2. Emergency Lighting is inadequate.
7. Accessibility
 - 7.1. Stairs: No accessible Stairs, and only one spiral stair is provided as a means of egress from the second floor other than the pole.
 - 7.2. Elevator: No.
 - 7.3. Handicap Accessible Toilet Rooms: No (one bathroom on each level).

- 7.4. Doors & Accessories: Not accessible.
- 8. Site
 - 8.1. Parking spaces: 4 spots for visitors, 1 for employee in front of the main entrance.
 - 8.2. Site access: slope up to first floor apparatus bays is too steep and causes trucks difficulty backing into spaces.
- 9. Potential for growth: None.
- 10. Location: Good location in terms of response times and being central.
- 11. Missing program elements:
 - 11.1. Storage space for files.
 - 11.2. Storage space for training equipment.
 - 11.3. Storage space for foam buckets.
 - 11.4. Adequate bunk space for males and females.
 - 11.5. Training room.
 - 11.6. More space in apparatus bays: drive-through apparatus requested for easier mobility and storage of vehicles.
 - 11.7. Proper entrance/vestibule space for use by public and employees. Current door is blocked by truck and goes right into the apparatus bay.
 - 11.8. Public “window” for check-in is not handicap accessible.
- 12. Can spaces be converted to fit another program (with or without renovation): NO
- 13. Measure and count Rolling Stock:
 - 13.1. 4 vehicles on first floor level: Ambulance, ladder truck, pump truck and pick-up truck.
 - 13.2. Downstairs: 2 pump trucks, ambulance, brush truck, boat.
 - 13.3. Ambulance is 21’-7” long
 - 13.4. Pump truck 30’-10” long
 - 13.5. Ladder Truck is tallest of all the trucks: 10’-2” tall
 - 13.6. Door opening for apparatus is currently 10’-6” tall and 24’ wide for larger opening
 - 13.7. Apparatus on first floor, floor to ceiling is 12’-5” tall, not including structure and steel beams.

FIRE STATION SUMMARY

The existing Fire Station is not adequate for the Department’s current and future needs and cannot be renovated to satisfy them. The Department requires a new building to meet the current and future needs.

The current site of the Fire Station is in a good central location. However, the site is not large enough for expansion of the existing building or construction of a new station on the site.

A new station on a new site is required.

POLICE STATION – EXISTING CONDITIONS

POLICE STATION: The current police station building constructed in 1946 in Danvers as the Danvers Police Station. The main structure was relocated to Middleton in the 1970's when Danvers constructed a new Police station. The existing holding cells on the rear of the building were newly constructed at that time on-site in Middleton as it was not practical to relocate the masonry cells from Danvers.

In approximately 2010, the building was expanded by adding two modular units to the side of the station to increase square footage on the first floor. The modular units were acquired as used units, having previously been a temporary classroom (prior to construction of the new Howe-Manning School). The current square footage of the station is 10,496 square feet which is split between three levels (basement, first and second floors).

The first floor holds all major operations including holding, booking, dispatch, offices, and the public entrance. The second floor is mainly used for report writing and training, contains a break room for the staff and three offices for higher officers. The basement has two main rooms. The larger basement room under the original building holds the locker area, a small workout space, oil tanks, and a small evidence room. The smaller basement room, newly constructed as part of adding the modular units to the station, is currently used for records storage.

Despite the minor renovations that were possible/practical as part of adding the modular units, the secure area including sallyports, booking and holding areas do not meet today's standards in size and technical performance.

The Police Station is currently satisfying the Department's most critical needs. However, the functionality of numerous areas, while passing, are marginal for compliance with certification requirements.

The minor renovations when two modular units were added to the west side included adding a full basement under the modular units for storage of incident reports and long term document storage. The new basement houses the sprinkler service valve and allowed the existing basement to be moderately improved to provide a workout room.

The second floor has an office area with desk spaces for patrolmen to write Daily Reports. But, due to the marginal conditions of the space, most officers write their reports downstairs. Locker space is also located on the second floor. The second floor includes a training room that is big enough for current internal use but undersized for multi-department or regional area trainings.

Due to the condition of the cells, and the availability of the regional jail, there are rarely detainees held in the station's cells and there are no detainees held overnight. All overnight detainees are transported to the regional facility.

Specific Police Station information includes:

1. Building Finishes:

- 1.1. Flooring: VCT / Carpet / Wood: VCT ceiling is in poor condition. Second floor carpet is in good condition
- 1.2. Ceiling: ACT / Gypboard: 2x4 ACT Tiles
- 1.3. Walls: Paint in fair condition. Few noticed scrapes.
2. Fire Protection: Sprinklers throughout building
3. Type of HVAC: Forced air system
4. Electrical
 - 4.1. Exit signs - Yes
 - 4.2. Emergency Lighting - Yes
5. Accessibility:
 - 5.1. Stairs:
 - 5.1.1. Ground level entry ramp-slope and railings are compliant.
 - 5.1.2. First to second floor stair riser height and railings are not compliant.
 - 5.1.3. Elevator: No elevator
 - 5.1.4. Handicap Accessible Toilet Rooms: There is one unisex located in the entrance vestibule. No other accessible toilet rooms in the building.
6. Site:
 - 6.1. Parking: number of Spaces: 9 public parking spots, 1 Handicap accessible spot = (10 spaces). 19 spots are located in the back for the employees and cruisers and other police equipment.
 - 6.2. Site access (entrance/exit): One in and out entrance. Paving is in poor shape.
7. Potential for growth: Lot adjacent to police station could be potential growth space, however the Chief mentioned that the land is believed to have chemical containments in the grounds.
8. Location: The location is adequate. The Police Station is not required to be centrally located as response to calls is generally from roaming patrolmen, not the central station (as is the case with the Fire Department).
9. Missing in existing program:
 - 9.1. Proper storage for long term record filing.
 - 9.2. Adequate Sally port - 2 secure Sally ports.
 - 9.3. Handicap accessible bathroom for employees including men's and women's separate bathrooms.
 - 9.4. Training Room: a large training room could accommodate Police and Fire department training. Current area fits current purposes.
 - 9.5. Fitness room.
 - 9.6. Separate counter for public obtaining Reports only.
 - 9.7. D.A.R.E.
 - 9.8. Computer work area on the first floor to allow for prompt report writing and filing.
 - 9.9. Armory and ammunition room that allows for additional storage and improved security.

- 9.10. Gun lockers – located in sally ports (currently inside the station).
- 9.11. Larger interview room with video recording facilities.
- 9.12. Can spaces be converted to fit another program (with or without renovation):
Not without major renovations that are too radical to be practical in the existing building.

POLICE DEPARTMENT SUMMARY:

While the existing building satisfies the current critical needs of the Department, additional space, and significant improvements are required to meet the current standards and future program needs. The site is not large enough to comfortably fit the program of a new station and is not large enough to construct a new station while maintaining the operation of the existing station.

The existing building, even with significant renovations, is not acceptable or suitable for any of the other building programs.

The site is a marginal size for the Council on Aging or the Town Hall due to parking demands. If the Town of Middleton chooses to leave the Department in the current building for an extended period then additional renovations will be necessary to keep the Department's certifications. Renovations may also be necessary to comply with ADA regulations.

TOWN HALL – EXISTING CONDITIONS

Town Hall, also known as Memorial Hall, was built in 1837 as a school house. The structure contains 9,975 square feet of space, and the current program only intensively utilizes around 80 percent of the total square footage; some is not fully utilized due to accessibility and the current structural concern. The square footage is divided into three floors with the first and second containing most of the facility's program. The basement is primarily mechanical and building systems (e.g. network equipment).

The building is not handicapped accessible beyond the first floor; the current stairs are not code compliant, and there is no elevator. While the existing ramp is generally code-compliant, the length of the ramp to the semi-remote parking lot is not user friendly, especially for those with limited mobility.

Since the second floor is not accessible, it cannot be used for public meetings. Consequently, the second floor is not very well utilized. It is also marginally acceptable that the Town Administrator's office is located on a non-accessible floor (the staff make accommodations for persons needing access to the Administrator's office services).

The Assistant Town Administrator's office also serves as the conference room and file storage for the entire Selectman's/ Administrator's office creating operational conflicts. Offices on the northeast corner of the second floor have been structurally compromised due to file storage loads and the floor sags noticeably in this area. Portions of this area were previously repaired to improve floor joists and tie the floor to the exterior wall to stabilize the bowing of the facade. Lally columns have been added in some areas, particularly the basement, to reinforce for vertical loads caused by overloading with file storage. Additional structural repairs to the floor in, and adjacent to the Administrator's office are in process.

The current office layout does not meet the programmatic needs of Town Hall due, in part, to the poor adjacency of departments and lack of proper file storage areas. While the building is of adequate size for the existing departments, it is not large enough to house all of the departments including the Building Department, Planning Department and Health Department that are currently located in the DPW building.

The exterior siding and trim on the exterior of the building was recently replaced/restored and is in good condition. The windows were updated recently but irregular window openings have poor thermal conditions at the window perimeters resulting in drafty spaces and poor energy efficiency.

All building systems need to be replaced. There is no central ventilation or air-conditioning system in the building. The current window conditioners provide marginally conditioned space with nearly unacceptable sound levels and poor energy efficiency. The heating system is near the end of its useful life, is not efficient and has very limited controls.

While the building could theoretically be renovated and expanded to serve as the town hall it may not be the most practical and cost effective solution.

The Town Hall site is large enough for a new or renovated building for Town Hall, Council on Aging or

Police Station. It would be difficult to fit a new Fire Station on the sites due to the narrow large turning radius. It would be difficult but possible to construct a new building on the site while the existing building is still standing, and would temporarily require additional space or measures for parking.

Specific Town Hall information includes:

1. Building Finishes:

- 1.1. Flooring: VCT / Carpet / Wood: Hardwood flooring throughout. The floor is creaky and stained in locations where furniture or storage cabinets are located. It should be replaced, along with substrate. Carpet in fair shape in offices.
- 1.2. Ceiling: ACT / Gypboard: The ACT in the offices is in poor shape and should be replaced. Some ACT shows effects of moisture penetration through sagging. The gypboard in the large meeting room is in fair shape.
- 1.3. Walls: Wainscot on second floor walls.

2. Windows: New windows were installed about 4-5 years ago but the openings are not fully satisfactory. There are gaps in the window casings allowing drafts and poor energy efficiency.

3. Doors / Thresholds: Thresholds do not meet ADA compliance standards for handicap accessibility.

4. Roof: Roof appears to be in good shape.

5. Siding: Siding and trim are in good shape and have been painted recently.

6. Building Systems:

6.1. Fire Protection: No sprinklers in the building.

6.2. Type of HVAC: oil-fired steam boiler.

6.3. Electrical

6.3.1. Exit signs: Yes, on first floor level and second floor "conference room". Second floor has some older signs that are not back lit as required.

6.3.2. Emergency Lighting – Second floor does not appear to have full coverage.

7. Accessibility:

7.1. Stairs:

7.2. Riser Height: 8" x 11" not ADA compliant

7.3. Railings – Front entrance stairs are not compliant. Interior stairs on either side of the building are not compliant due to railing width and extensions being inappropriate.

7.4. Elevator: There is no elevator, a ramp provides access the first-floor level at side of building.

7.5. Handicap Accessible Toilet Rooms: One bathroom located on each floor, one of which is Unisex and handicap accessible on the first floor.

7.6. Doors & Accessories (closers, door swing clearance): nearly all doors are three feet in width.

8. Site:

8.1. Parking: # of Spaces: 28 spots (2 HA) 30 spots total

8.2. Site access (entrance/exit): 2 access points in and out of the site. Awkward circulation due to the entrance being between a traffic light.

- 8.3. Potential for growth: Lot size is adequate for current use and provides ample parking.
- 8.4. Location: Ideal location close to center of downtown.
- 9. The building is of adequate size for the existing program and no significant department growth is anticipated. However, the building is only large enough because some town departments, that should ideally be located in the Town Hall, are currently located at the DPW building.
- 10. Anything missing in existing program:
 - 10.1. Functioning Conference Room.
 - 10.2. Accessible Town Meeting Room.
 - 10.3. File storage / archives room that is safe from fire or water damage.
 - 10.4. Can spaces be converted to fit another program (with or without renovation):
 - 10.5. This building could possibly be used as another office building. Alternately, with an addition for a kitchen and open meeting hall the building converted for the Council for Aging if it were updated for handicap accessibility, including an elevator. This would give the Council of Aging a chance to utilize more spaces for multiple activities.

TOWN HALL SUMMARY:

The existing Town Hall has adequate total space for the existing Departments. Ideally, Building, Planning and Health Departments currently in the DPW building, would be located with the other Town Departments currently in Town Hall. The existing building is not large enough for all of the departments.

Due to the lack of handicap accessibility to the second floor it cannot be used for public meetings and functions. It is highly undesirable for the Administrator's office to be located on a non-accessible floor; it is only marginally acceptable because of special accommodations made by the Town staff when required by the public.

The building is in need of specific structural repairs due to the current use. A major renovation would be necessary if the future use of the building were to intensify.

The site is of adequate size to provide for a new building and parking. It would be possible to construct a new building on the site if the existing building is demolished. With careful planning, the site is large enough to allow for the construction of a new Town Hall and potentially the Police Station or Senior Center on the site, while the existing building is still occupied if temporary parking is provided.

COUNCIL ON AGING EXISTING CONDITIONS

The Council on Aging, effectively the Senior Center, is in the former Town Hall and consequently the building is known as 'Old Town Hall'. It was constructed in 1849 making it one of the most historic buildings in Middleton. On the rear of the site is a small brick building, the "Tramp House" built in 1878. The Tramp House is not used by the Senior Center.

The main building was renovated to provide handicapped accessibility to both floors and other limited improvements. The building has ramps on the exterior and interior and an elevator from the basement to the main activity room. The building has a total of 4,489 square feet on two main floors with a small third floor for storage and utility (the third floor is not accessible and is a staff only area for limited storage). The main activity space, located on the second floor, is a nearly double height room with a relatively new kitchen on the raised platform that was previously a stage. While the raised kitchen meets the current limited food service uses, it would not be acceptable for a more intense food service use.

The lower floor is mainly used for activities in the open area, which also is the circulation route from the entrance to the elevator. The lower level provides storage for the Food Pantry and space for mechanical equipment; there is a handicapped accessible toilet room on this floor. The main interior stair is not MAAB compliant and connects all three levels. This stair is very steep and difficult for most any user, especially those with limited mobility. This stair would be considered marginal, or unacceptable, for any public building. Because of the poor stair configuration the elevator is heavily used, limiting the success of using the open area for programs such as exercise, dance and computer training because of circulation to the elevator crossing the open space.

The building appears to be in generally good condition with the exception of the siding and trim on the front façade and stairs. These require renovation/ reconstruction. The main room on the second floor is used for reception, offices, kitchen and the primary activity/dining area.

Particular concerns are the main interior stair and the kitchen, located on the former stage. Floors are in good condition as are walls and ceilings. The exterior and interior have been recently painted with some touchups needed in the basement and areas of heavy use.

Specific Old Town Hall information includes:

1. Building Finishes:
 - 1.1. Flooring: VCT / Carpet / Wood: Good condition.
 - 1.2. Ceiling: ACT / Gypboard: Good condition.
 - 1.3. Walls: Good condition.
2. Windows: Updates to vinyl windows. Some basement windows need to be replaced.
3. Doors / Thresholds: 2
4. Roof: Good condition.
5. Siding: Good condition on sides and back with minor issues. Siding and trim on the front is in need

- of repair or replacement.
6. Building Systems:
 - 6.1. Fire Protection: No Sprinkler system
 - 6.2. Type of HVAC: Forced air furnace with central air
 - 6.3. Electrical
 - 6.4. Exit signs - Yes
 - 6.5. Emergency Lighting - Yes
 7. Accessibility:
 - 7.1. Stairs: interior
 - 7.2. Riser Height (8.5" riser by 10" tread) are not compliant.
 - 7.3. Railings – stair railings are not compliant.
 - 7.4. Elevator: Lift connecting first and second floors
 - 7.5. Handicap Accessible Toilet Rooms: Yes, 1 in basement and two on the first floor
 - 7.6. Doors & Accessories (closers, door swing clearance): entrance/ egress hardware on the front entrance needs to be replaced.
 - 7.7. Other: Reception desk is not handicapped accessible.
 8. Site:
 - 8.1. Parking: # of Spaces: 2 Handicap Spots, 22 Spots = 24 spots
 - 8.2. Site access (entrance/exit): 2 entrance points for easy drop-off
 - 8.3. Potential for growth: No
 - 8.4. Location: Good
 9. Program:
 - 9.1. Change or stay the same: Stay the same with growth
 - 9.2. Use as another town function hall
 - 9.3. Anything missing in existing program:
 - 9.3.1. Additional parking
 - 9.3.2. More food pantry storage and a separation of this program from the rest of the building.
 - 9.3.3. Multipurpose rooms for activities: dance, art, exercise, smaller private rooms or meeting rooms.
 - 9.3.4. Offices for the staff.
 - 9.3.5. Library – reading/quiet space with a small number of books.
 10. Can spaces be converted to fit another program (with or without renovation):
 11. Yes, but not many other uses. Potential for meeting space and small events that need use of a kitchen.

12. Staff and clients are reasonably content with the building and what it offers in terms of program.

COUNCIL ON AGING SUMMARY:

The gross building area is nearly sufficient for the current programs. However, the current program and services offered are limited by the size and configuration of the building, most notably the lack of multiple rooms for simultaneous activities. The square footage is mostly taken by the main hall on the second floor which does not lend itself to being sub-divided for separate activities. The building should be made fully accessible. The steep interior front stair is of particular concern since many users have at least limited mobility issues. The users would benefit from more parking and allow the Council to offer more functions. The site is not large enough for a significant addition that would provide increased program space or alleviate parking considerations.

DPW EXISTING CONDITIONS

There are two buildings on the DPW site. The main building has DPW facilities on the ground floor and the Building, Planning, and Health Departments on the second floor. The building is constructed of CMU with stucco finish in some areas. A CMU addition on the back contains additional equipment bays and storage. The stucco finish is deteriorating in some areas and both of these buildings require painting and other maintenance. A second structure is a large wood-frame salt storage barn.

The interior stair to the second-floor of the main building is not code compliant and there is no elevator providing accessibility to the second floor. However, public coming to see the departments on the second floor are directed to stay on the first-floor level and members of the second floor departments come downstairs to meet them; this is not ideal but meets functional requirements. A significant portion of the second floor office area is for the storage of building department records.

The Middleton Electric Light Company is on an adjacent site and appears to operate autonomous from the DPW facility.

Specific DPW building information includes:

1. Building Finishes:
 - 1.1. Flooring: VCT / Carpet / Wood: Carpet on second floor is in good shape, minor stains in Building Inspector's office.
 - 1.2. Ceiling: ACT / Gypboard: Act in bathroom on first floor is in bad shape. Drywall in second floor building and inspection offices is in good shape.
 - 1.3. Walls: Paint on second floor of the Building Department is in good shape
2. Windows: Vinyl replacement windows
3. Doors / Thresholds: Doors are in good shape.
4. Building Systems:
 - 4.1. Fire Protection: The building is not sprinklered.
 - 4.2. Fire alarms: The fire alarm control panel and detection system appear to be relatively new.
 - 4.3. Type of HVAC: Not verified.
 - 4.4. Electrical
 - 4.4.1. Exit signs – Yes, new.
 - 4.4.2. Emergency Lighting – Yes, new.
5. Accessibility:
 - 5.1. Stairs:
 - 5.1.1. Riser Height – not accessible.
 - 5.1.2. Railings – Main stair to second floor offices is not code compliant. Railings do not have the proper extensions.
 - 5.2. Elevator: No
 - 5.3. Handicap Accessible Toilet Rooms: No HA bathroom on first or second floor. Second floor is

completely inaccessible.

- 5.4. Doors & Accessories (closers, door swing clearance): There are door knobs on most of the office doors and accessible hardware and closers on the egress doors.
6. Site:
 - 6.1. Parking: # of Spaces:
 - 6.1.1. 8 spaces in front of Electric Building + 1 Handicap =9 spaces
 - 6.1.2. 8 spaces in front of Planning Department Building + 1 Handicap = 9 spaces
 - 6.1.3. Parking in back for employee and DPW vehicles
7. Site access (entrance/exit): One entrance in and out
 - 7.1. Potential for growth: Yes. The site is big enough for some expansion/addition.
 - 7.2. Location: Good.
 - 7.3. Program:
8. Change or stay the same:
9. It is functional, but only marginally acceptable that there is not accessibility to the second floor town offices.
10. Anything missing in existing program:
 - 10.1. Conference Room
 - 10.2. Additional storage space.
 - 10.3. Can spaces be converted to fit another program (with or without renovation):
 - 10.4. Garages are specific to DPW rolling stock. This area could potentially be used for the Fire Department; however, the location is very poor for the Fire Department. The garage would also require many improvements to meet the life safety needs of the Fire Department.

LIBRARY EXISTING CONDITIONS

The original Middleton Library was built in 1891. In 2006, the library underwent a large expansion and restoration project which tripled the space of the building and now provides 19,141 square feet. This building does not need additional work nor does the program need to be relocated. There is some desire for additional meeting space, particularly since the buildings that are the subject of this Planning Study, do not have adequate meeting space and use the library rooms for that purpose. Additionally, archival storage space for rare or historic documents would provide proper storage for the library.

It is reported the Library could utilize additional parking and it is observed it is heavily used. The Fire Department uses the path through the parking lot for access to the lower level of the Fire Station. This is of concern due to the conflict of heavy pedestrian traffic in the parking lot with the maneuvering of the fire trucks (including backing into bays).

It is not anticipated to make any renovations to the library building or site as a result of this study. However, the specific needs for more meeting space and better archives should be further evaluated for inclusion in the Town's Capital Plan.

Section 4: Program Needs

A spreadsheet of a preliminary Space Needs Program for each of the four uses is included in Appendix B. Those spreadsheets indicate the number, type and square footage of each space for the building and the total anticipated building area. The Space Needs Programs are primarily to understand the size of building and site required for new facilities and informs the anticipated project cost.

FIRE STATION:

The current Fire Station lacks many program elements required for a modern fire station. The current station does not have enough room to house all of the vehicles the department owns. Currently the department owns the following: 1 ladder truck, 1 brush truck currently stored outside the station, 1 pickup truck, 2 Ambulances, 3 pump trucks, and 1 boat on a trailer. Ideally all of these vehicles will be stored within the station. The new station will require proper storage for fire fighting equipment.

The following are the key program deficiencies of the current station:

1. Six interior bays for vehicles, ideally four of which should be pull through bays for larger vehicles.
2. Two proper means of egress.
3. EMS and training equipment storage.
4. Women's and Men's bunk rooms and separate bathrooms.
5. Training room.
6. Entry Lobby/ vestibule for public, including a window or desk for public interaction.

As documented in the space needs program and site evaluation, the Fire Station requires a building of 20,800 gross square feet and a site of two acres minimum.

POLICE STATION:

The Police Station does not provide for many of the program elements of a modern station. While the recent addition of the modular units improved many aspects of the building, there are still many compromises in spaces, adjacencies and separation of activities.

The following are a few of the main short-comings of the existing station:

1. Separate parking for police, staff and civilian vehicles.
2. Proper Sally Ports that can be secured.
3. Women's and Men's showers and restrooms.
4. More secure evidence storage and records area.
5. Fitness area.
6. Accessible means of egress.
7. Proper firearms storage.

8. Accessibility to training room
9. Separation and flow of detainee processing areas.

As documented in the space needs program and site evaluation, the Police Station requires a building of 11,400 gross square feet and a site of at least one acre.

TOWN HALL:

The current Town Hall, while containing roughly enough gross square feet for the existing program it does not provide space to include other town offices currently located in the DPW building (Planning, Building and Health Department)..

A program for a new building should include the

1. A large meeting room to hold public meetings including the Selectmen's meetings.
2. Elevator to provide access if a second floor is built.
3. Effective offices to hold each department.
4. Proper archival records storage area protected from fire and water damage.

As documented in the space needs program and site evaluation, a new Town Hall requires a building of 10,500 gross square feet and a site of at least one acre.

COUNCIL ON AGING:

The Council on Aging building is currently housed in the Old Town Hall building. The existing building provides enough space for the current meal program. However, the building does not provide spaces for multiple, simultaneous activities or good space or exercise and other mobile activities not appropriate for the dining room. Although the entrance ramp and the elevator accomplish access to the key areas, there are still many conditions that do not meet accessibility requirements and are not user friendly, especially to those with limited mobility. The current facility lacks multiple small spaces for activities and private meetings. The lower level food pantry would also benefit from an increase of square footage. Therefore, the following spaces should be added if a new facility is constructed.

1. Offices for Council on Aging staff members.
2. Two 8-12 person rooms for activities.
3. 4 offices/conference rooms for private meetings or 2-4 persons.
4. A space for computer stations for general use and training.
5. Improved storage for the food pantry along with a private entrance.
 - a) Additional parking.

As documented in the space needs program and site evaluation, the Council on Aging/Senior Center

requires a building of 9,300 gross square feet and a site of at least one acre to meet a somewhat expanded offering of services. Significant additional space could be utilized if there is a town commitment to providing expanded services. A facility of 10,000 – 12,000 sf would not be unreasonable for a town the size of Middleton.

SUMMARY:

The preliminary programming for the facilities may be summarized as follows:

	<u>Gross Square Footage</u>	<u>Site</u>
FIRE STATION:	20,800sf	2 acres
POLICE STATION:	11,400sf	1 acres
TOWN HALL:	10,500sf	1 acres
COUNCIL ON AGING:	9,300sf	1 acres

Section 5: Planning Concepts and Options

STUDY TERMINOLOGY

In order to perform the investigation and evaluation, key terms were developed to describe the building's usage. The key terms used include:

- **Program:** Space use and function (i.e. office space, storage, restrooms)
- **Concepts vs Options:** Concepts refer to the overall strategy and Options refer to the multiple variations possible given the primary action.
- **Effective and usable area** – This term refers to land that has no abnormal topography, configuration, is not wetlands or has other attributes limiting the usefulness or buildability limiting its use for a building or parking.

CRITERIA AND ASSUMPTIONS

Several criteria were established to guide the development of Planning Options. Some are based on initial evaluations explained elsewhere in this Report or are obvious needs. These criteria are summarized below:

1. Fire Station Main Priority: The current Fire Station building is too small for the program required. It cannot be renovated to meet the department needs and the site is inadequate site for expansion. The building size and conditions compared to the space needs program and public safety concerns makes providing a new facility for the Fire Department the project with the highest priority.
 - 1.1. Potential sites for a new Fire Station are limited to those within one-half mile of the center of Middleton. This is required in order to meet regulatory standards and minimize response time. Ideally, a new site will have easy access to major roads (presumably 114 and 62) in order to prevent an increase in response time.
2. Police and Town Hall: These programs are both high priorities for new facilities. After addressing the Fire Department, these two programs are nearly equal in priority. Which one will be advanced first will depend on the conditions at that time availability of a site and phasing opportunities or limitations; at this time, Town Hall is the second priority.
3. While there is some preference to have the Police Station centrally located it is not essential. Police response time is generally dependent on the location of officers on patrol and not from the Station.
4. The Town Hall does not need to be centrally located, but it may be more convenient to residents.
5. Old Town Hall site: The Old Town Hall site cannot accommodate any other program. Due to the site's historic nature, it may not be desired to demolish the current structure. Even if the existing building is demolished, the site is not of adequate size for another program.

6. Options that require temporary locations for the Fire Station or Police Station should not be considered. Such options are not practical because of the cost of temporary fit-up to meet the specialized needs of these departments.
7. Acreage Requirements: Below is a list of acre requirements for each of the specified programs:
 - 7.1. Fire Station: 2 Acres effective usable area.
 - 7.2. Police Station: 1 Acre effective usable area.
 - 7.3. Town Hall: 1 Acre effective usable area.
 - 7.4. Council on Aging: 1 Acre effective usable area.
8. Based on the evaluation of the existing buildings and the program needs, a new building, or effectively a new building, is required for each of the four building programs. While there are Planning Options that propose renovation and expansion of the existing buildings a very comprehensive renovation of any of the buildings would be required. The renovation will likely be so extensive that the existing building may be a cost liability rather than a cost-saving asset. However, it may be desired to renovate and expand a building for other than financial reasons.

PLANNING CONCEPTS

In order to address the goals and issues above, four concepts have been created. Within each concept there are multiple options for the Town to consider. Option numbers correspond to the Chart of Design Options in Appendix B

CONCEPT A: Relocate Fire Station Only

This option includes acquisition of a 2-acre site for the relocation of the Fire Station as the first priority. The other three programs remain on their existing sites. This solution will address the highest priority - the Fire Department. Option 1 includes renovating the Town Hall or building a new Town Hall at the existing site, and/or constructing a new Police Station. Option 2 includes Constructing a new Town Hall building and a new Police Station on the existing site. The Council on Aging would remain at the existing location under both of these Options.

CONCEPT B: Relocate Town Hall and Fire Station:

This Concept is based on purchasing a one acre site for a new Town Hall and a two-acre site for a new Fire Station. There are multiple options for the other two programs; Option 3 proposes constructing a new building for the Police Station on the Memorial Hall site. Option 4 includes moving the Police Department to the Memorial Hall site, and moving the Council on Aging to the current Police Station Site.

Concept C: Relocate Police Station and Fire Station:

Concept C is centered around purchasing a one-acre site for a new Police Station and purchasing a two-acre site for a new Fire Station. Town Hall and the Council on Aging have various options. Option

5 includes moving the Council on Aging to the Current Police Station site. Option 6 includes combining the Police Station and the Fire Station on one site to create a public safety complex. This could be constructed as separate buildings or could be combined in one building. Option 7 includes constructing a new building to house the Town Hall on the current Police Station Site. There could be some minor reduction in the total building space required by combining the programs in one building. However, the greater savings would be realized by having both buildings located on one site in order to share the site development cost, share public and visitor parking and soft costs such as site acquisition.

Concept D: Town Complex

Concept D proposes the Town acquire a site with 6 acres or greater of effective usable area to create a new town complex with new facilities for all four programs; Fire Station, Police Station, Town Hall, and Council on Aging. These buildings need not be constructed at one time and could be implemented over a number of years. This concept is shown as Option 8 in the Chart of Design Options in Appendix B.

For plans and graphic diagrams of the Planning Concepts and Planning Options see Appendix B.

Building Sites

One of the most significant obstacles in implementing any Concept is the acquisition of a site with a minimum of two useable acres, and in an acceptable central location for a new Fire Station. The Town does not currently own any properties that meet this requirement and there is a very limited number of sites meeting this requirement in the ½ mile center of downtown. Acquisition of any site will take time and impact the earliest possible construction of a new Fire Station. The lead time is even greater if it is necessary to acquire multiple adjacent lots to assemble into one site, because there are no available single sites of adequate size.

One criteria in evaluating the Planning Concepts is the anticipated increasing difficulty in acquiring new sites in the future. The number of large undeveloped parcels near the center of town continues to decrease. If the acquisition of a site at this time is only adequate for the Fire Station, the Town must assume future acquisitions will be even more difficult. Consequently, the town must consider the advantages of the first site acquisition being large enough for as many programs as possible. While a larger site will have increased acquisition cost this higher cost will be partially offset by savings when compared to the soft costs of multiple site acquisitions and savings in site development cost of a single site. Even with a larger site, construction of the additional building facilities can be implemented over time.

The Fire Station should begin as soon as possible due to the conditions of the current Fire Station.

CONCEPT DESCRIPTIONS

Concept A: Relocate Fire Station Only

Concept A is centered around acquiring a 2-acre site for construction of a new Fire Station. The site must be located within one-half mile of the downtown corner (current fire station) to keep response times short.

This Concept does not necessarily provide a long-term, permanent (50-100 year) solution for the other three programs. This option is mostly attractive only if the Town does not think a larger site, or more sites, to accommodate the other programs could be acquired in a reasonable time frame to address the pressing needs of the Fire Department. As represented in the Planning Concept Options Diagram, it is assumed a new Police Station would be constructed on the existing site. While this is possible, it is difficult and will incur increased costs due to the complexity of phasing. It is also a marginal long-term solution due to the small site size. The Council on Aging would remain at the existing site with a comprehensive renovation. This will also be a marginally acceptable long term solution and will require expense for temporary facilities during the renovation.

Pros	Cons
<ol style="list-style-type: none"> 1. Fire station can be moved to a new efficient site. 2. New Town Hall can be constructed in back of Memorial Hall and implementation of the Town Hall is not dependent on any other project. 3. The Fire Station site will be available for other Town uses, or potentially sold. 4. This option may be able to realize a new Fire Station earlier than any other options. 	<ol style="list-style-type: none"> 1. Constructing a new Police Station on the current site will require complex and costly phasing. The site will ultimately be of marginal size and limit, or prohibit, future expansion. 2. Council on Aging would remain in Old Town Hall which will be marginally acceptable even after a significant renovation. It will limit the potential to offer more services and the potential use will be limited by the available parking. 3. This option provides a marginal mid-term solution for the Council on Aging and is likely not a long-term solution.

Concept B: Relocate Town Hall & Fire Station

The current Fire Station building site is not a candidate for the long-term needs of the Department. The current Town Hall structure, even with significant renovations, is at best marginally acceptable for long term use as a Town Hall. This Concept would allow for the Fire Station to be moved to a new two-acre site and the Town Hall to be moved to a programmatically efficient building. The new Town Hall would require a one acre lot. If the Town Hall program moves to a new building then the Police Department could be moved to a new building constructed on the Memorial Hall site. The existing Memorial Hall would need to be demolished.

Pros.	Cons.
<ol style="list-style-type: none"> 1. Relocating the Town Hall offices would make the Memorial Hall site available for reuse for a new Police Station, other town use or sold. 2. This concept addresses the highest two priorities without phasing restrictions. 3. The Fire Station and Town Hall do not need to be constructed at one time. 	<ol style="list-style-type: none"> 1. Finding two effective sites could be problematic. They could be co-located on one site. 2. Memorial Hall would have to be demolished in order to fit the new Police Station on the site.

Concept C: Relocate Police Station & Fire Station

This concept is to purchase one site that is large enough to accommodate both a new Fire Station and Police Station. While this could occur on two separate sites, it is more advantageous if the Town acquires one site of 3-4 useable acres to accommodate both buildings. Subsequently, a new Town Hall could be constructed on the Memorial Hall site and Memorial Hall would be demolished. The Old Town Hall could be renovated for continued occupancy by the Council on Aging, or a new Council on Aging building could be constructed at the Police Station site.

The land needs are the same for this concept as Concept B: the difference is whether the Fire Station and Police Station are on one site, or the Fire Station and Town Hall are on one site.

Pros.	Cons.
<ol style="list-style-type: none"> 1. This Concept could address both life safety buildings as the first priority. 2. The existing Police property can be used for another town program, presumably the Council on Aging or sold. 3. A combined Public Safety <u>site</u> will result in a cost savings due to decreased site development costs such as parking and infrastructure whether or not the two buildings are fully independent. 4. There will be the opportunity, but not necessity, to connect the buildings for efficiency, although it is not anticipated the total gross building area will be 	<ol style="list-style-type: none"> 1. It may be more difficult to find a site large enough for both buildings, than just one. 2. While it is not required to construct the Police Station at the same time as the Fire Station, there will be a tendency to do so. This may advance replacing the Police Station ahead of replacing Town Hall.

<p>significantly reduced by combining the buildings.</p> <ol style="list-style-type: none">5. It would not be necessary to construct the Police Station at the same time as the Fire Station, particularly if they are independent structures.6. The Town Hall could be implemented as the second project as has been prioritized.7. There are advantageous to collecting the access of emergency vehicles together rather than at two locations.8. If a site is available, there will be less cost and time required to acquire one site than two.9. Relocating the Police Station would make that site available for a new Town Hall. That would, in turn, make the Memorial Hall site available for a new Council on Aging Building.	
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Concept D: Town Complex

This Concept calls for the purchase of a site with not less than five acres of effective useable land. This site would allow the phased construction of new facilities for all four programs; Fire Station, Police Station, Town Hall and Council on Aging.

This Concept would allow for ‘immediate’ construction of a new Fire Station, with future construction of the other facilities in the priority and schedule determined appropriate to the Town.

This Concept would provide the opportunity to create a new Town Center complex that would become part of the identity of the community and be a convenience to the residents. There will be some program and cost savings by allowing sharing some facilities and infrastructure such as conference rooms, parking, access roads, traffic control measures, generators, etc.

Pros.	Cons.
<ol style="list-style-type: none"> 1. All programs can be relocated and placed in new buildings without time constraints due to phasing or sequencing of projects. 2. If a large enough site is acquired for the complex, future expansion will be easier. 3. There will be cost savings in the site development costs through sharing of infrastructure, access drives, parking and amenities even if all of the buildings are free standing. 4. Each building can be built to current and projected needs and allow room for future expansion. 5. Purchase of a large site may leave opportunities for other Town needs as they develop. 6. A new site and new buildings will provide the opportunity for very efficient planning of the complex. 	<ol style="list-style-type: none"> 1. There are a limited number of sites that are large enough to fit a town complex. 2. The cost of acquiring a large site will become part of the cash flow of implementing the first project – presumably the Fire Station. 3. The Town may not have a use for the existing Memorial Hall and Old Town Hall – two of the Town’s main historical structures.

There are options in Concept B that consider purchase of an existing building, such as the Goddard School on Route 62, for renovation for use as the Town Hall or Council on Aging. If a suitable existing building is available for purchase it is likely financially advantageous. A cost estimate for this option is included in the Appendix.

However, this scenario has not generally been considered in evaluation of the Concepts as such a building/site may not be available at the appropriate time.

Section 6: Cost

The Estimated Construction Cost (ECC) is the cost of the actual construction including bricks and mortar costs and amounts incurred as part of the construction; e.g. the amount paid to the General Contractor. The Total Project Cost is the total amount expected to be incurred as part of the project. It includes the construction cost and estimated amounts for soft costs (including architectural and engineering fees); furniture fixtures and equipment; surveys and testing; Tel/data systems, and all other expenses to occupy the building, excluding land cost.

For projects of this nature, the Total Project Cost (TPC) is typically 30% higher than the ECC.

The ECC and TPC indicated below is for the modernization of facilities of all four programs, not just the one key item signifying the definition.

No.	Option Name	Estimated Construction Cost	Total Project Cost Excluding Land
Concept A	Relocate Fire Station Only	\$ 24 Million	\$ 32 Million
Concept B	Relocate Town Hall and Fire Station	\$ 28 Million	\$ 37 Million
Concept C	Relocate Police Station and Fire Station	\$ 28 Million	\$ 37 Million
Concept D	Town Complex	\$ 28 Million	\$ 36 Million

The table above illustrates the maximum estimated cost for each Concept. This includes all new construction, extensive renovations of the existing buildings, and proposed sites to be acquired by the Town. See Tables on pages 41-44 for clarification and a breakdown of the cost calculations.

A cost estimate for each of the Planning Concepts and Options is included in the Appendix of this Report. A summary of the component costs of the Concepts as stated above are provided on the following pages.

There are only minor cost differences in each of the Concepts. This is due to the following factors:

1. Renovations of Memorial Hall and Town Hall would be comprehensive in order to meet the required programs and fully modernize the buildings. Consequently, the cost of renovations is estimated to be nearly the same cost as new construction.
 - 1.1. An exception is that renovation of Old Town Hall for continued occupancy as the Senior Center is assumed at a lower cost. However, it should be recognized that will not provide a complete long-term solution for the program.
2. Where existing buildings are replaced with a new building on the site, the estimates include demolition of the existing building and site improvements for a prepared building site. If the existing site is not utilized as part of the solution, the demolition cost of the existing buildings is not included.

3. Land acquisition cost is carried at the Assessed Value of the property which may not accurately reflect the actual purchase price.

There are options in Concept B that consider purchase of an existing building, such as the Goddard School on Route 62, for renovation for use as the Town Hall or Council on Aging. If a suitable existing building is available for purchase it is likely financially advantageous. A cost estimate for this option is included in the Appendix.

However, this scenario has not generally been considered in evaluation of the Concepts as such a building/site may not be available at this appropriate time.

Concept A, Option 1

Description	SF	\$ per SF	Extended Cost	Subtotal
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Demolition Work

Police Station	10496	\$25	\$ 374,880	
Subtotal				\$ 374,900

Building

New Fire Station	20,800	\$ 500	\$ 10,400,000	
New Police Station	11,400	\$ 600	\$ 6,840,000	
New Town Hall	10,500	\$ 350	\$ 3,675,000	
Renovate Council on Aging	4,498	\$ 175	\$ 787,200	
Subtotal				\$ 21,702,200
Extra Land Development Costs				\$ -
Contingency 10%				\$ 2,170,300
Total Estimated Construction Cost				\$ 23,872,500
Project Cost Multiplier (30%)				\$ 7,161,800

Total Project Cost Excluding Land \$ 31,410,000

Land to be Aquired	Value			
Lot 60	\$ 466,000			
Subtotal Anticipated Land Cost				\$ 466,000

Land to be sold		Site Work	
NONE			
Total Anticipated Cost after Land Sales			<u><u>\$ 31,876,000</u></u>

Concept B, Option 4

Description	SF	\$ per SF	Extended Cost	Subtotal
Demolition Work				
Demolish Police Station	10496	\$25	\$ 374,880	
Demolish Memorial Hall	9975	\$25	\$ 359,250	
Subtotal				\$ 734,200
Building				
New Fire Station	20,800	\$ 500	\$ 10,400,000	
New Police Station	11,400	\$ 600	\$ 6,840,000	
New Council on Aging	9,300	\$ 400	\$ 3,720,000	
New Town Hall	10,500	\$ 400	\$ 4,200,000	
Subtotal				\$ 25,160,000
Extra Land Development Cost				\$ -
Contingency 10%				\$ 2,516,000
Total Estimated Construction Cost				\$ 27,676,000
Project Cost Markup (30%)				\$ 8,302,800
Total Project Cost Excluding Land				<u>\$ 36,713,000</u>

Land to be Aquired	Value	Development
Lot 60 for Fire Station	\$ 560,000	
New Site for Town Hall	\$ 600,000	
Subtotal Anticipated Land Cost		\$ 1,160,000
Land to be sold	Value	Site Work
Old Town Hall	\$ 500,000	
		\$ (500,000.00)
Total Anticipated Cost after Land Sales		<u>\$ 37,373,000</u>

Description	SF	\$ per SF	Extended Cost	Subtotal
Demolition Work				
Demolish Police Station	9975	\$25	\$ 359,250	
Demolish Memorial Hall	10496	\$25	\$ 374,880	
Subtotal				\$ 734,200
Building				
New Fire Station	20,800	\$ 500	\$ 10,400,000	
New Police Station	11,400	\$ 600	\$ 6,840,000	
New Town Hall	10,500	\$ 400	\$ 4,200,000	
New Council on Aging	9,300	\$ 400	\$ 3,720,000	
Subtotal				\$ 25,160,000
Extra Land Development Cost				\$ -
Contingency 10%				\$ 2,516,000
Total Estimated Construction Cost				\$ 27,676,000
Project Cost Markup (30%)				\$ 8,302,800
Total Project Cost Excluding Land				<u>\$ 36,713,000</u>

Land to be Aquired	Value			
Lot 60 for Fire Station	\$ 466,000			
Lot 81 for Police Station	\$ 475,000			
Lot 82for Police Station	\$ 396,000			
Subtotal Anticipated Land Cost				\$ 1,337,000
Land to be sold		Site Work		
Old Town Hall	\$ 500,000			\$ (500,000)
Total Anticipated Cost after Land Sales				<u>\$ 37,550,000</u>

Concept D, Option 8

Description	SF	\$ per SF	Extended Cost	Subtotal
-------------	----	-----------	---------------	----------

Demolition Work

NONE

Building

New Fire Station	20,800	\$ 500	\$ 10,400,000	
New Police Station	11,400	\$ 600	\$ 6,840,000	
New Town Hall	10,500	\$ 400	\$ 4,200,000	
New Council on Aging	9,300	\$ 400	\$ 3,720,000	
				Subtotal
				\$ 25,160,000
				Extra Land Development Cost
				\$ 500,000
				Contingency 10%
				\$ 2,566,000
				Total Estimated Construction Cost
				\$ 28,226,000
				Project Cost Markup (30%)
				\$ 8,467,800

Total Project Cost Excluding Land \$ 36,693,800

Land to be Acquired	Value
---------------------	-------

Lot 61 for Town Complex	\$ 560,000	
Lot 63 for Town Complex	\$ 560,000	
Subtotal Anticipated Land Cost		\$ 1,120,000

Land to be sold	Value	Site Work
-----------------	-------	-----------

Old Town Hall	\$ 500,000	
Memorial Hall	\$ 600,000	
Police Site	\$ 600,000	
Subtotal		\$ (1,700,000.00)

Total Anticipated Cost after Land

Sales \$ 36,113,800

Section 7: Preferred Option

The Preferred Concept for a long-term solution is Concept D, the Town Complex. Six or more effective usable acres will be required for a new town complex for all four programs; Fire Station, Police Station, Town Hall, and Council on Aging. A site of this size will provide enough space for the existing programs as well as room for future expansion. A central location, within one-half mile of the existing Fire Station, is required due to requirements of the new station. The other programs would also benefit from this central placement.

Providing a centrally located Town Complex will benefit Middleton's residents providing the convenience of one location to do business with multiple Town departments. This Concept will provide the town with easier interdepartmental communications and sharing of infrastructure improvements. It is anticipated there will be significant savings in soft costs, and time, by acquiring one site, rather than two to four sites to facilitate all four programs.

While Concept D ultimately results in four new facilities, it does not appear it will have a significantly higher cost than any other Concept or Option. Town Hall is the only building with a site of adequate size that a renovation and addition may serve the very long term needs of the Town; such a renovation and addition will have a similar cost to new construction. Consequently, the long term solution will require the investment in purchasing at least three new sites and the cost equivalent of four new buildings. The cost per acre of a large site is likely less than the cost per acre of smaller sites, especially if many sites must be purchased and combined to form sites large enough for the programs. The soft costs to acquire one site will be far less than the total soft costs to acquire multiple sites. Legal, and other costs to purchase a site are not included in the estimate in this Report. Multiple buildings on one site may offer some savings by the reduction in total gross building area by allowing for some shared facilities such as meetings rooms. There will be a savings in land development expenses to prepare and construct on one site as there will be shared infrastructure such as entrance drives and paving, parking and utilities.

The current structures housing these departments require a high level of maintenance due to their age and deteriorating conditions. When combined with the need to replace all of the buildings' mechanical systems, add fire protection systems and meet building code and MAAB requirements such as adding elevators, the cost to continue occupancy of the existing structures will continue to grow and have a significant cost impact. These short term repairs and maintenance of the existing buildings are not included in the estimates in this Report.

There will be an increase in cash flow to the first project constructed (e.g. Fire Station) as it will presumably include the site preparation and at least some site development of the infrastructure for the site/complex.

This new Town Complex facility which includes Town Hall, the Fire and Police Stations and the Council on Aging would be a new modern facility that is fully accessible and meets MAAB standards and would meet the Town's growing needs for decades to come.

Gienapp Design developed conceptual cost estimates for the options described in the Planning Concepts and Options section of this Report.

The cost of the Preferred Option, Concept D may be summarized as follows:

Building Construction Costs (4 buildings):	\$	28,226,000
Mark-up for Project Costs:	\$	<u>8,467,800</u>
<u>Total Project Cost (excluding land):</u>	\$	<u>36,693,800</u>

Appendix A: Existing Conditions Drawings

Contents of section A	Pages
Sfi Town assessors sheet information & comparable towns	1
Tfi ? [W/Va` Ba^UMEfSf[a` 7j [ef] Y 6dSi [Ye	\$Z%
Ufi ? [W/Va` 8[dMEfSf[a` 7j [ef] Y 6dSi [Y	&Z
Vfi ? [W/Va` A^V Fai ` : S^S^ V 6Bl 7j [ef] Y 6dSi [Ye	(
Wi Middleton Town Hall Existing Drawings	7-9



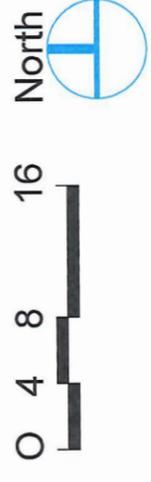
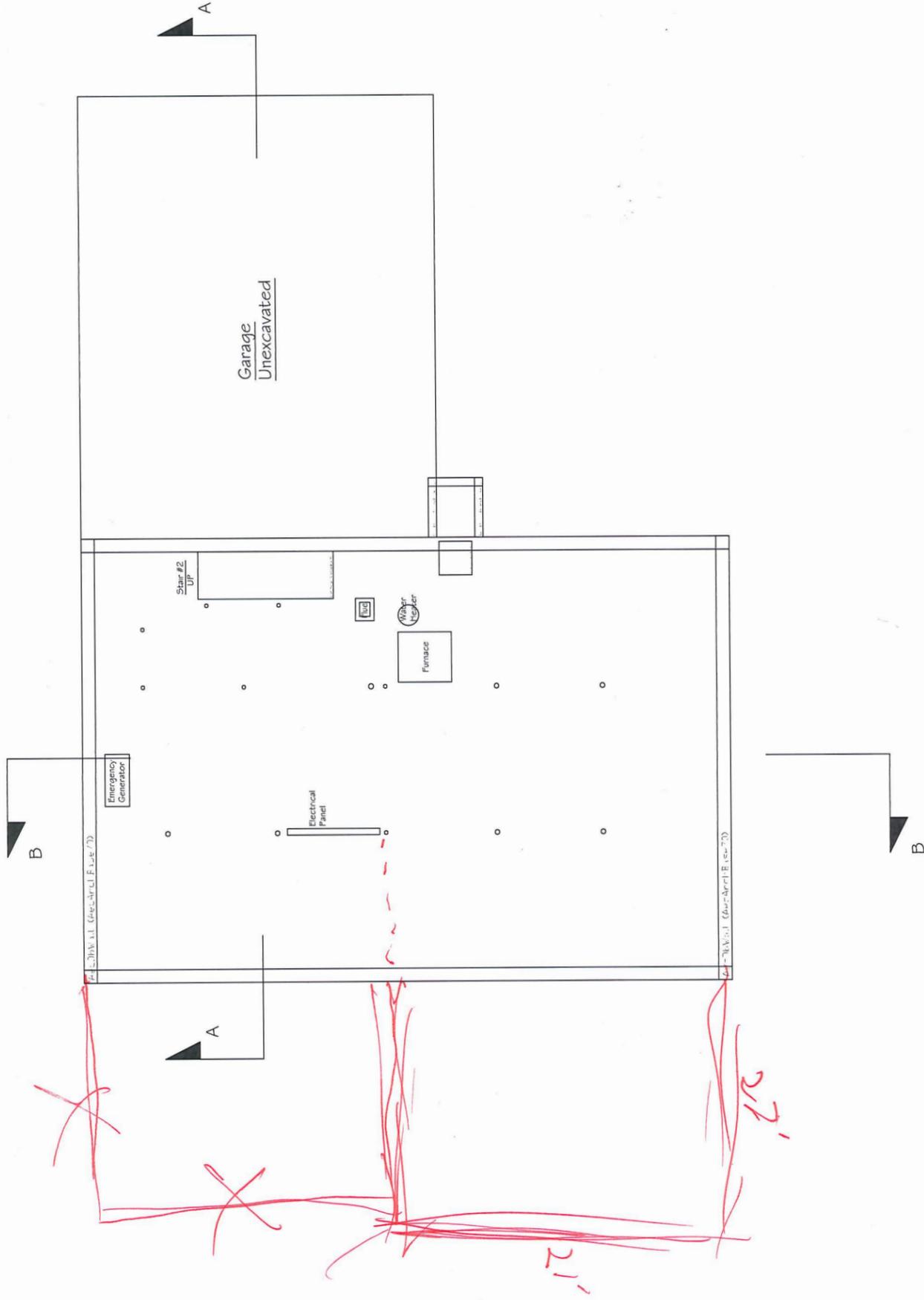
Existing Assessors Information

Prepared by: RC

Building	Address	Plot Area (Acres)	Footprint SF	Total SF	Last Work Done	Built	Building Grade
Fire Station	4 Lake Street	0.25	3230 sf	9,246	10/7/2009 (Replace Front Door)	1957	C (Average)
Police Station	65 N Main St.	1	5,092	10,496	5/17/2012 (Handicap Ramp)	1946	C+ (Average)
Memorial Hall	48 S Main St.	1.2	3,140 sf	9,975	8/12/2008 (Repair)	1837	C +(Average)
Old Town Hall	38 Maple St.	0.557	2,224	4,498	6/22/2016 (Deck Replacement)	1849	B (Good)
DPW Electric	197 N Main St.	7.41	10,789	10,789	1/2/2015 (Gutter Repair)	1985	C (Average)
DPW	195 N Main St.		8,754	14,562	10/18/2013 (Move Wall)	1940	C (Average)
Library	1 S Main St.	1	8,389 sf	19,141	9/1/2016 (Roof Repair)	1891	B (Good)

Town Comparison

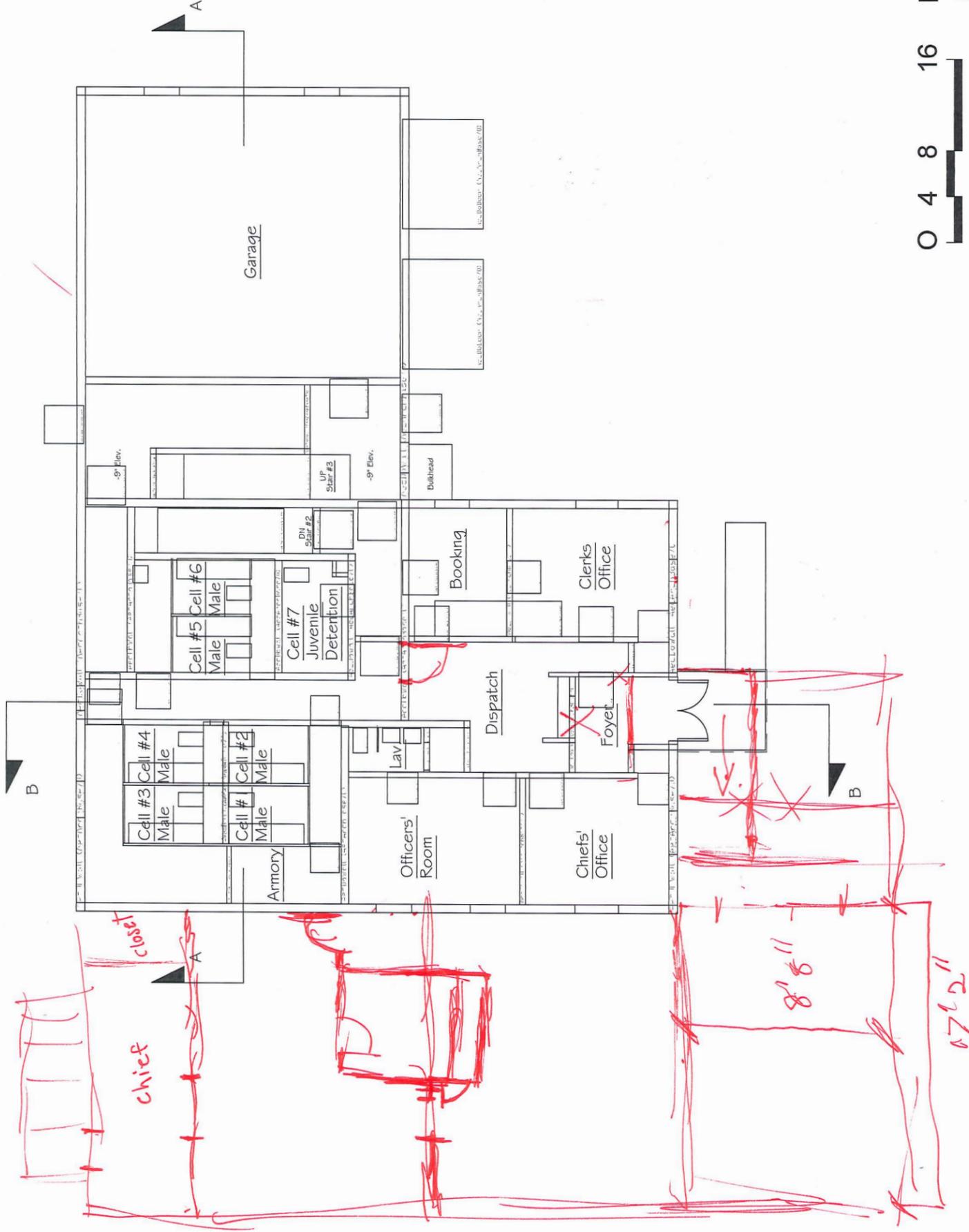
Town	Population	Land Area	Population Density	Police	Fire	Senior Center	F&P	Town Hall
Hamilton	MA 7,764	14.2 sq miles	530 psm	9,500	9,500	5,000	19,000	10,462
Boxford	MA 7,965	23.6 sq miles	330 psm	8,900	4,665	4,388		15,836
Georgetown	MA 8,183	12.9 sq miles	620 psm	6,336	6,336	10,000	12,672	9,890
Salisbury	MA 8,283	15.4 sq miles	460 psm	18,250	6,691	5,044		9,384
Littleton	MA 8,924	16.6 sq miles	524.9 psm					16,375
Sutton	MA 8,963	32.4 sq miles	260 psm	7,500	6,453	5,184		6000
Middleton	MA 8,987	14.0 sq miles	624psm	10,496	9,246	4,498		9,975
Danvers	MA 26,493	13.3 sq miles	1,898.5 psm	17,150	20,000	13,467		25,407
Wellesley	MA 27,982	10.18 sq miles	2700 psm	14,813	18,000	9,396		11,362
Carver	MA 11,509	37.4 sq miles	290 psm	7,919	17,000	5,247		15,700



Basement Floor Plan / Existing Conditions

Middleton Police Station
Middleton, MA

1 change
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First Floor Plan / Existing Conditions

Middleton Police Station
Middleton, MA



Gienapp Design
Associates
Architects

20 December 2000

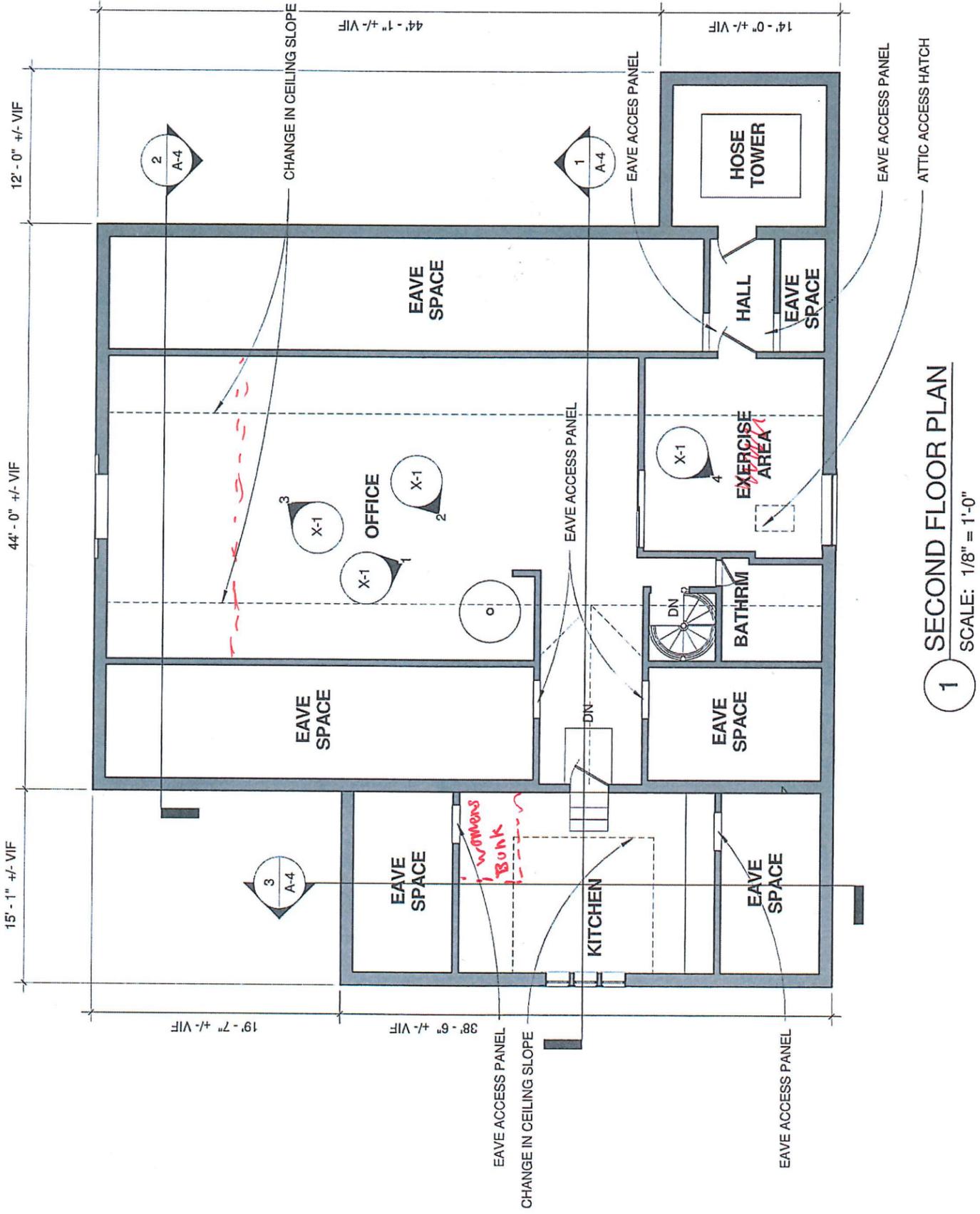
4 LAKE STREET MIDDLETON, MA
 MIDDLETON FIRE STATION ROOF INSULATION
SECOND FLOOR PLAN

A-1



GENERAL NOTES:

1. INSTALL SPRAY FOAM INSULATION TO UNDERSIDE OF ALL ROOF FRAMING, TYP
2. IN ATTIC OR EAVE SPACES, APPLY THERMAL BARRIER TO ALL EXPOSED SPRAY FOAM INSULATION, TYP



1 SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"

Appendix B: Design Option – Schematic Design

Contents of section A	Pages
Sfi Program Analysis For Facilities	14-19
Tfi Program Site Requirement	\$0
Ufi Chart of Design Options	21
Vfi Site Options Map	22
Wfi Design Option Site Layouts	23-26
f) Building on Site Layouts	27-30



Fire Station Program

	Units	Area/Unit	NSF (1)	GF (2)	DGSF (3)	Subtotal
PUBLIC SPACES						
Vestibule	1	200	200	1	240	
Entry Lobby/Check-In	6	30	180	1	216	
Subtotal			380			500
ADMINISTRATIVE SPACES						
Chief Office	1	150	150	1.20	180	
Captain Office	1	150	150	1.20	180	
Deputy Chief Office	1	100	100	1.20	120	
Open Offices/Desk Area	3	100	300	1.20	360	
Conference Room	7	20	140	1.20	168	
Subtotal			840			1,000
TRAINING/BUNKS						
Training Center/ EMS	20	20	400	1.20	480	
SCBA Room	1	200	200	1.20	240	
Fitness Area	4	150	600	1.20	720	
Day Room	6	100	600	1.20	720	
Women's Toilet Room (with shower)	1	80	80	1.20	96	
Men's Toilet Room (with shower)	2	80	160	1.20	192	
Men's Locker Room	15	20	300	1.20	360	
Women's Locker Room	5	20	100	1.20	120	
Men's Dorm	7	60	420	1.20	504	
Women's Dorm	3	60	180	1.20	216	
Laundry?	2	100	200	1.20	240	
Break Room/Kitchen	6	50	300	1.20	360	
Subtotal			3540			4,200
BUILDING SUPPORT						
Building and Grounds Storage and Equipmen	1	100	100	1.25	125	
Men's Toilet Room	3	50	150	1.25	188	
Women's Toilet Room	3	50	150	1.25	188	
Janitor	1	0	0	1.25	0	
Electric Room	1	50	50	1.25	63	
Boiler Room	1	130	130	1.25	163	
Fan Room	1	50	50	1.25	63	
Sprinkler Room	1	50	50	1.25	63	
Data/Alarm	1	50	50	1.25	63	
Elevator?	1	240	240	1.25	300	
Subtotal			970			1,200



Fire Station Program

Units Area/Unit NSF (1) GF (2) DGSF (3) Subtotal

Total for Station **6,900**

Gross Factor 1.2

Total DGSF for Office Space 8,280

APPARATUS/PREP

Apparatus Bays	5	1620	8100	1.25	10125	
Gear Room (lockers for uniforms)	30	20	600	1.25	750	
Gear Washing Area	2	150	300	1.25	375	
Emergency Equipment	1	200	200	1.25	250	
EMS Storage	1	200	200	1.25	250	
Subtotal			9400			11,800

Total for Apparatus 11,800

Total for Fire Station 20,100

- 1. Net Square Feet:** Actual useable room/area
- 2. Gross factor:** Multiplier to account for circulation and general space around others.
- 3. Department Gross Square Footage:** The 'block' of area required for the design tenant or group of spaces.



Police Station Program

	Units	Area	NSF(1)	GF(2)	DGSF(3)	Subtotal
PUBLIC SPACES						
Vestibule	1	80	80	1.3	104	
Entry Lobby/Check-In	1	150	150	1.3	195	
Accessible Toilet Rooms	1	65	65	1.3	85	
Subtotal			295			400
ADMINISTRATIVE SPACES						
Chief Office	1	216	216	1.3	280.8	
Captain Office	1	125	125	1.3	163	
Deputy Chief Office	1	175	175	1.3	228	
Admin. Waiting Room	4	50	200	1.3	260	
Conference Room	10	28	280	1.3	364	
Dead Records Storage	1	600	600	1.3	780	
Subtotal			1596			2,100
PATROL/TRAINING						
Communications/Command Center	1	200	200	1.3	260	
Report Writing/Computer Room	2	75	150	1.3	195	
Patrol Supervisors Office Space	1	100	100	1.3	130	
Detective Office	1	150	150	1.3	195	
Break Room/Kitchenette	2	150	300	1.3	390	
Evidence Prep Room	1	100	100	1.3	130	
Evidence General Storage	1	100	100	1.3	130	
Evidence Room for Drugs and Guns	1	100	100	1.3	130	
Training Room	30	20	600	1.3	780	
Fitness Room	2	150	300	1.3	390	
Men's Locker Room	13	30	390	1.3	507	
Women's Locker Room	7	30	210	1.3	273	
Ammunitions	1	60	60	1.3	78	
Recovered Property Storage Room	1	100	100	1.3	130	
Radio/Server/Telephone	1	200	200	1.3	260	
Shooting Range	0	0	0	1.3	0	
Subtotal			3060			4,000



Police Station Program

	Units	Area	NSF(1)	GF(2)	DGSF(3)	Subtotal
DETENTION AREAS						
Sally Port	2	200	400	1.5	600	
Booking Area	1	300	300	1.5	450	
Interview/Bail Bond	2	72	144	1.5	216	
Male Holding	2	50	100	1.5	150	
Female Holding	1	50	50	1.5	75	
Juvenile Holding	1	100	100	1.5	150	
Subtotal			1094			1,700
BUILDING SUPPORT						
Garage for Patrol Cars	9	162	1458	1.2	1749.6	
Building and Grounds Storage and Equipment	1	0	0	1.2	0	
Men's Toilet Room	3	50	150	1.2	180	
Women's Toilet Room	3	50	150	1.2	180	
Janitor	1	0	0	1.2	0	
Electric Room	1	150	150	1.2	180	
Boiler Room	1	150	150	1.2	180	
Fan Room	1	150	150	1.2	180	
Building Maintenance and Supplies	1	100	100	1.2	120	-
Sprinkler Room	1	100	100	1.2	120	
Data/Alarm	1	100	100	1.2	120	
Storage	1	100	100	1.2	120	
Elevator?	0	0	0	1.2	0	
Subtotal			2608			3,200
Total for Police Station						11,400
Gross Factor						1.00
Total for Police Station						11,400

1. **Net Square Feet:** Actual useable room/area
2. **Gross factor:** Multiplier to account for circulation and general space around others.
3. **Department Gross Square Footage:** The 'block' of area required for the design tenant or group of spaces.



Town Hall Program

	Units	Area	NSF(1)	GF(2)	DGSF(3)	Subtotal
PUBLIC SPACES						
Vestibule	1	80	80	1.3	104	
Entry Lobby	7	30	210	1.3	273	
Accessible Toilet Rooms	2	65	130	1.3	169	
Meeting Hall	1	500	500	1.3	650	
Conference Room	2	250	500	1.3	650	
			1420			1,900
ADMINISTRATIVE SPACES						
Assessor's office	1	200	200	1.3	260	
Town Clerk	1	300	300	1.3	390	
Town Administrator	1	300	300	1.3	390	
Registrars	1	200	200	1.3	260	
Tax Collection Office	1	300	300	1.3	390	
Treasurer	1	200	200	1.3	260	
Records Storage	1	600	600	1.3	780	
Accountant	1	200	200	1.3	260	
Information Technology	1	100	100	1.3	130	
			2400			3,200
MOVED DEPARTMENTS						
Planning Department	2	140	280	1.3	364	
Building Inspectors Office	1	150	150	1.3	195	
Records	1	300	300	1.3	390	
Meeting Rooms	2	120	240	1.3	312	
Health Department	1	150	150	1.3	195	
			1120			1,500



BUILDING SUPPORT

Building/Grounds Storage and Equipment	1	100	100	1.2	120
Men's Toilet Room	3	65	195	1.2	234
Women's Toilet Room	3	65	195	1.2	234
Janitor	1	30	30	1.2	36
Electric Room	1	80	80	1.2	96
Mechanical	1	200	200	1.2	240
Building Maintenance and Supplies	1	150	150	1.2	180
Sprinkler Room	1	80	80	1.2	96
Storage	1	200	200	1.2	240
Elevator?	1	240	240	1.2	288
Subtotal			1470		1,800
				<i>Total for Town Hall</i>	8,400
				<i>Gross Factor</i>	1.25
				Total for Town Hall	10,500

1. **Net Square Feet:** Actual useable room/area
2. **Gross factor:** Multiplier to account for circulation and general space around others.
3. **Department Gross Square Footage:** The 'block' of area required for the design tenant or group of spaces.



Council on Aging Program

	Units	Area	NSF(1)	GF(2)	DGSF(3)	Subtotal
PUBLIC SPACES						
Vestibule	1	80	80	1.3	104	
Entry Lobby/Check-In	1	400	400	1.3	520	
Reception	1	100	100	1.3	130	
Subtotal			<u>580</u>			800
ADMINISTRATIVE SPACES						
Private Affairs	4	100	400	1.3	520	
Food Pantry	1	500	500	1.3	650	
Manager	1	150	150	1.3	195	
Kitchen	1	400	400	1.3	520	
Offices	3	100	300	1.3	390	
Subtotal			<u>1750</u>			2,300
ACTIVITY SPACES						
Exercise Program Space	1	400	400	1.3	520	
8-12 Person Rooms	2	300	600	1.3	780	
Computer Stations	3	30	90	1.3	117	
Dining Hall	1	800	800	1.3	1040	
Subtotal			<u>1890</u>			2,500
BUILDING SUPPORT						
Building and Grounds Storage and Equipment	1	100	100	1.2	120	
Men's Toilet Room	3	100	300	1.2	360	
Women's Toilet Room	3	120	360	1.2	432	
Janitor	1	30	30	1.2	36	
Electric Room	1	80	80	1.2	96	
Building Maintenance and Supplies	1	150	150	1.2	180	
Sprinkler Room	1	100	100	1.2	120	
Storage	1	200	200	1.2	240	
Elevator?	1	100	100	1.2	120	
Subtotal			<u>1420</u>			1,800
Total for Council on Aging						7,400
Gross Factor						1.25
Total for Council on Aging ≈						9,300

1. **Net Square Feet:** Actual useable room/area

2. **Gross factor:** Multiplier to account for circulation and general space around others.

3. **Department Gross Square Footage:** The 'block' of area required for the design tenant or group of spaces.

BUILDING	FIRE STATION	POLICE STATION	TOWN HALL	COUNCIL ON AGING	LIBRARY	DEPARTMENT of PUBLIC WORKS
Existing Building Footprint						
Address	4 Lake Street	65 N. Main St.	48 S. Main St.	38 Maple St.	1 S. Main St.	195 N. Main Street
Footprint (sf)	3,230	5,092	3,140	2,224	8,389	10,789
Total Area (sf)	9,246	10,496	9,975	4,498	19,141	14,562
Plot Area (acres)	.25	1	1.2	.55	1	7.41
Suggested Area (sf)	17,000	13,000	7,500	7,500		
Number of Spaces Recommended	27	37	38	20		
Suggested Site Area (acres)	2.3	1.0	.63	.5		
One Floor						
Two Floors		2 Floors Not Ideal				
Suggested Site Area (acres)	1.3	1.0	.5	.4		
Suggested Area (sf)						
Total Existing Area (sf)						

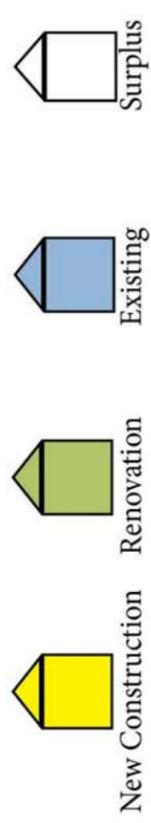
Program Site Requirements

Middleton, MA

	Fire Station Lot: Existing Building: 9,246	Police Station Lot: 40,000 SF Existing Building: 10,496	Memorial Hall Lot: 50,000 SF Existing Building: 9,975	Old Town Hall Lot: 21,000 SF Existing Building: 2,224	DPW Lot: 237,000 SF Existing Building: 25,351	Library Lot: 48,000 SF Existing Building: 19,141	1 Acre Site / Lot Combination	2 Acre Site / Lot Combination	3-4 Acre Site / Combination	6+ Acre Site/ Combination
Existing Conditions										
Concept A	Option #1 Total Cost: 38.1M	Cost: \$ 7,800,000	Cost: \$ 3,750,000	Cost: \$ 500,000	Cost: \$ #####	Cost: \$ #####	Cost: \$ 8,900,000			
	Option #2 Total Cost: 39.6M	Cost: \$ 7,800,000	Cost: \$ 3,750,000	Cost: \$ 500,000	Cost: \$ #####	Cost: \$ #####	Cost: \$ 2,000,000			
Concept B	Option #3 Total Cost: 38.6M	Cost: \$ #####	Cost: \$ 7,800,000	Cost: \$ 500,000	Cost: \$ #####	Cost: \$ #####	Cost: \$ 3,750,000			
	Option #4 Total Cost: 43.0M	Cost: \$ 3,000,000	Cost: \$ 7,800,000	Cost: \$ #####	Cost: \$ #####	Cost: \$ #####	Cost: \$ 3,750,000			
Concept C	Option #5 Total Cost: 46.0M	Cost: \$ 3,000,000	Cost: \$ 3,750,000	Cost: \$ #####	Cost: \$ #####	Cost: \$ #####	Cost: \$ 7,800,000			
	Option #6 Total Cost: 36.5M	Cost: \$ #####	Cost: \$ 3,750,000	Cost: \$ 500,000	Cost: \$ #####	Cost: \$ #####	Cost: \$ 8,500,000			
Concept D	Option #7 Total Cost: 39.8M	Cost: \$ 7,800,000	Cost: \$ #####	Cost: \$ 500,000	Cost: \$ #####	Cost: \$ #####	Cost: \$ 2,700,000	Cost: \$ 8,500,000		
	Option #8 Total Cost: 47.2M	Cost: \$ #####	Cost: \$ #####	Cost: \$ 500,000	Cost: \$ #####	Cost: \$ #####	Cost: \$ 8,500,000			TOWN COMPLEX Cost: \$ 22,300,000

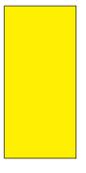
Notes:

- New Police Station would require 14,300 square feet
- New Fire Station would require 20,800 square feet
- New Council on Aging would require 9,300 square feet
- New Town Hall would require 10,500 square feet
- All additions will range from 1,000 square feet to 2,000 square feet
- Combined public safety building would require a minimum of 30,000 square feet

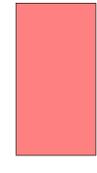


Planning Chart & Options Diagram

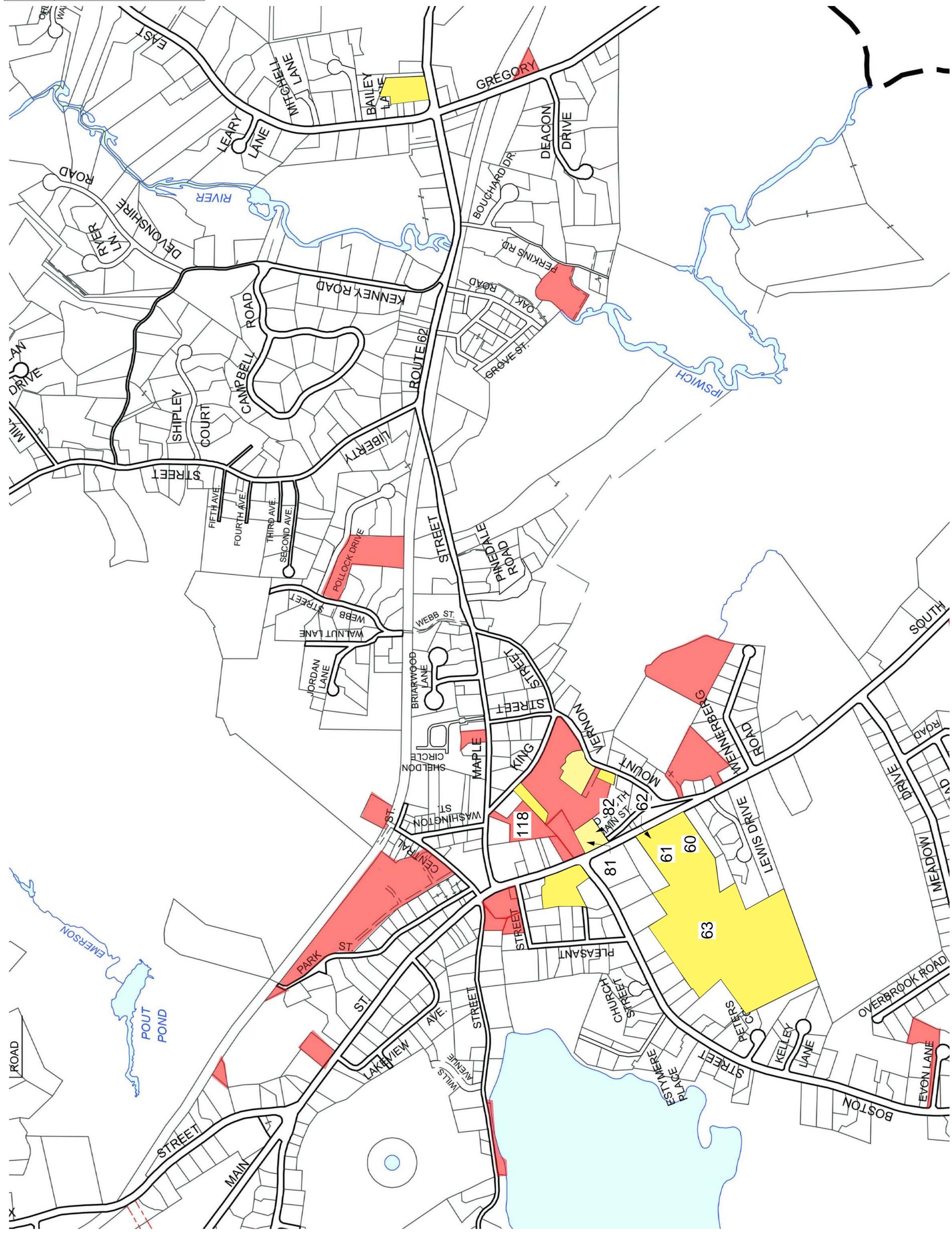
Color Code Key



Potentially available sites for purchase

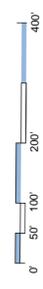
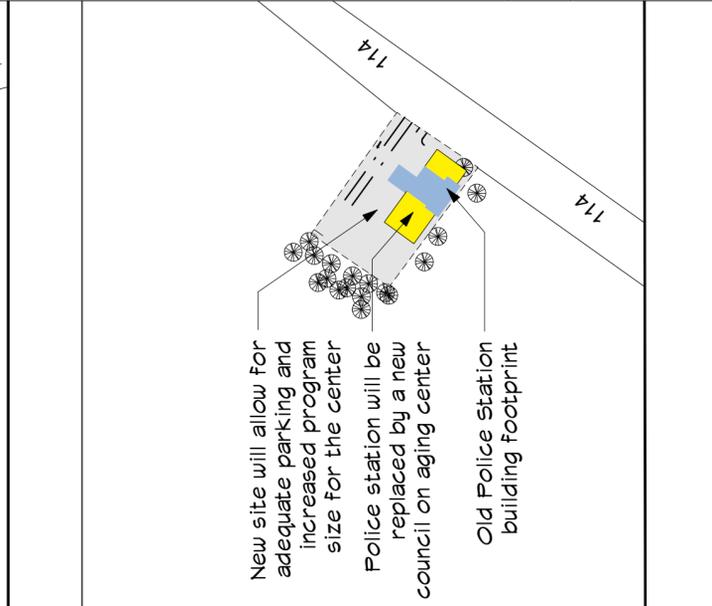
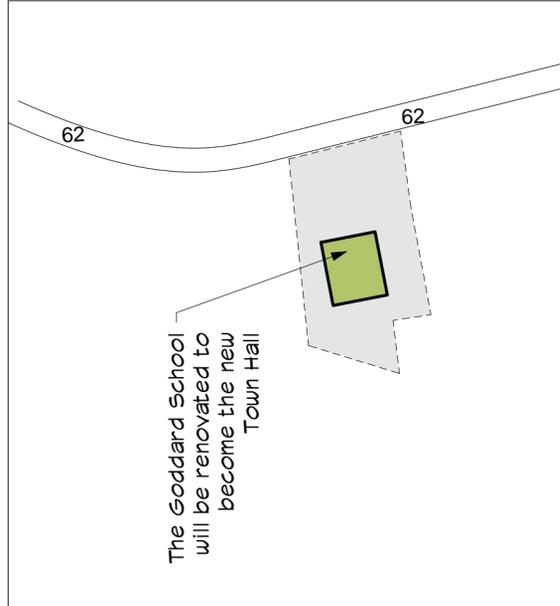
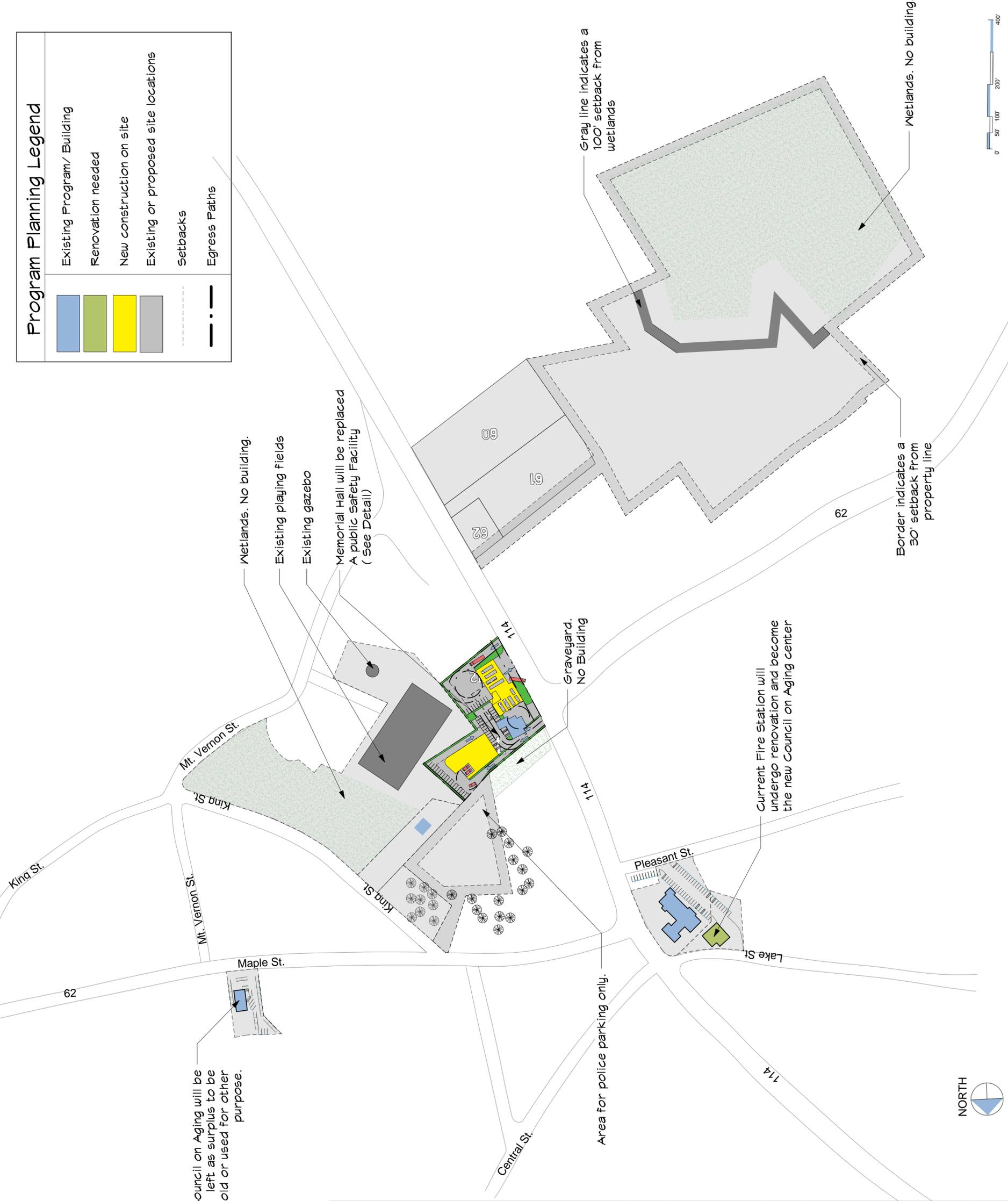


Sites owned by town



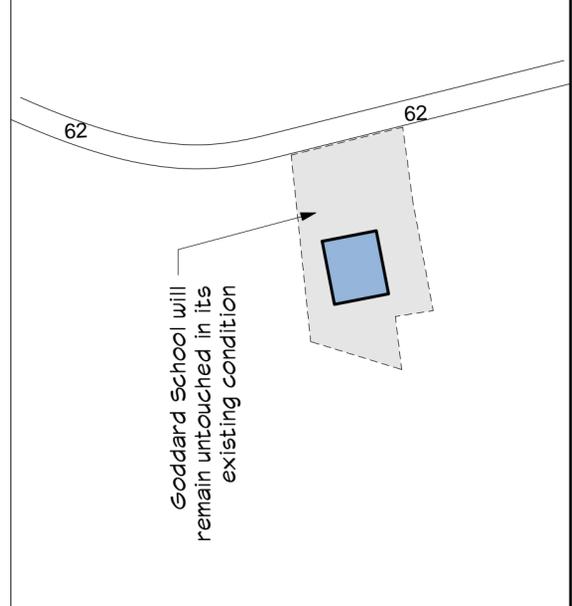
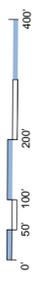
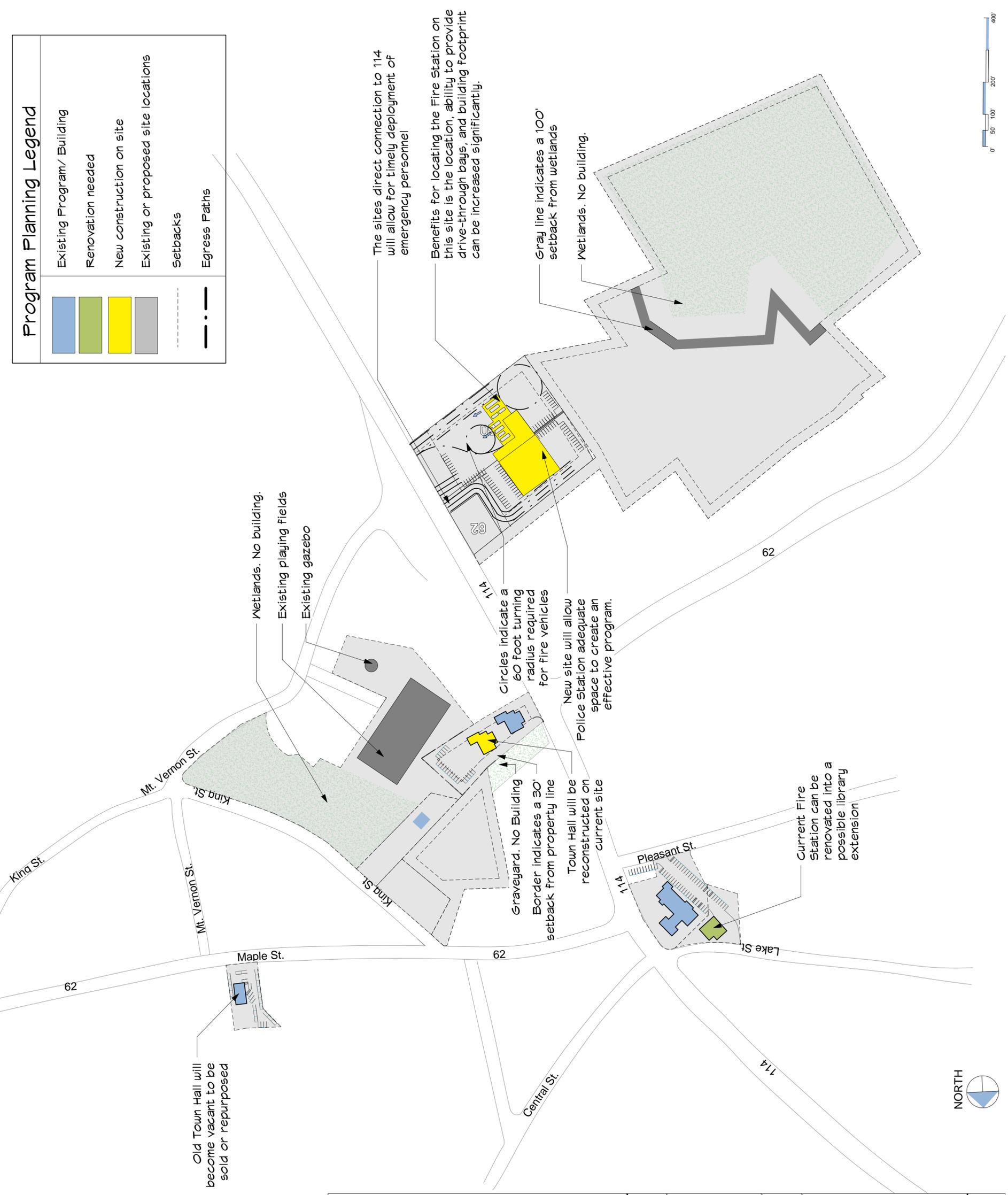
Site Options

Program Planning Legend	
	Existing Program/ Building
	Renovation needed
	New construction on site
	Existing or proposed site locations
	Setbacks
	Egress Paths

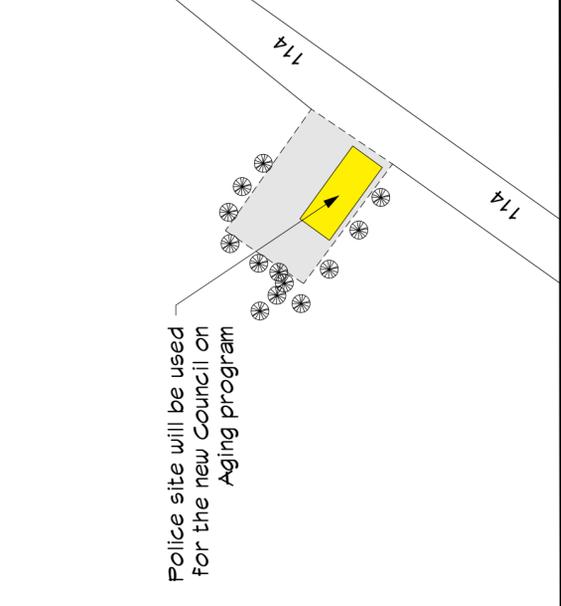


Concept B

Program Planning Legend	
	Existing Program/ Building
	Renovation needed
	New construction on site
	Existing or proposed site locations
	Setbacks
	Egress Paths



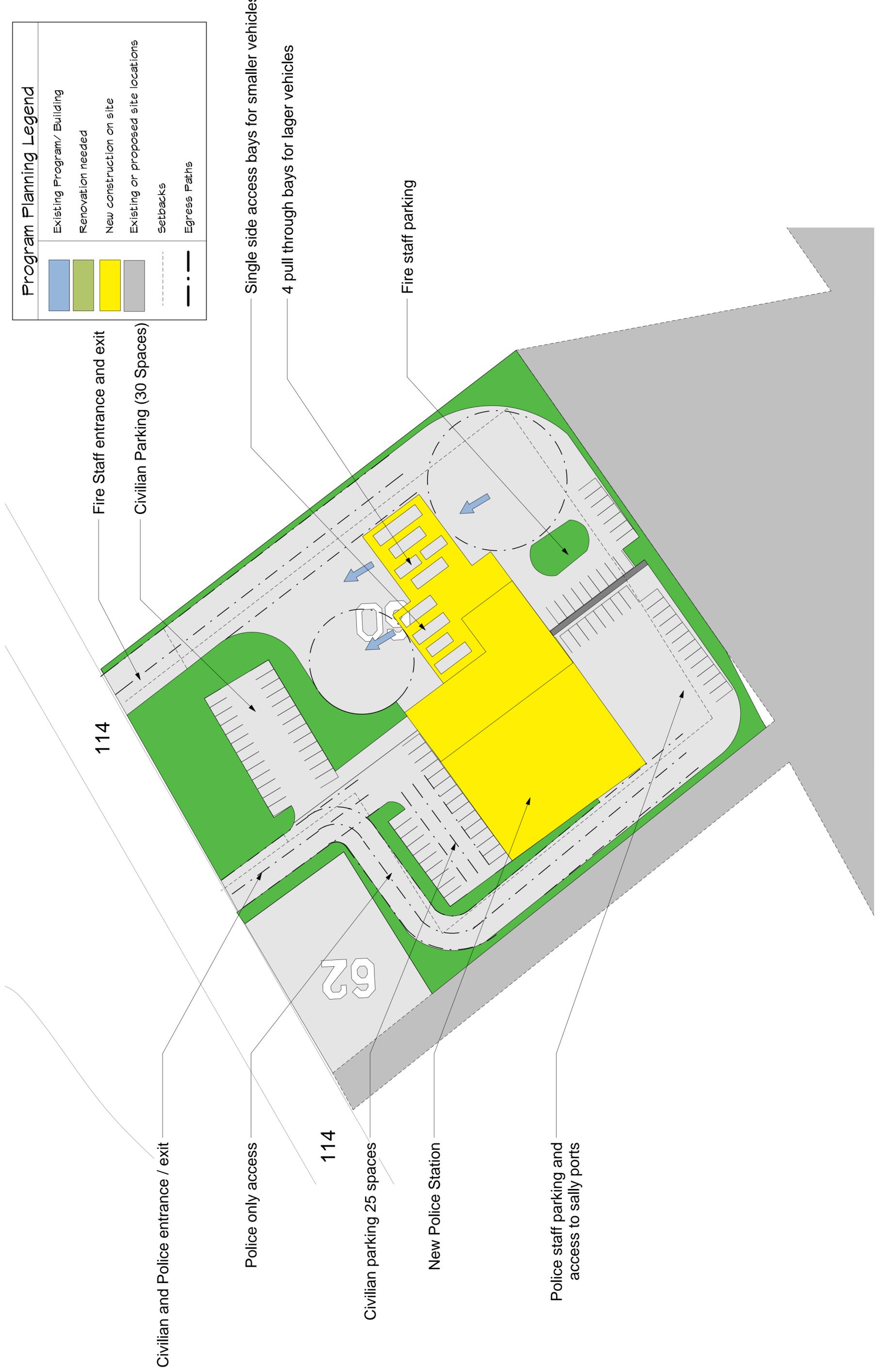
Site Option 3: the Goddard School



Existing Police site

Concept C

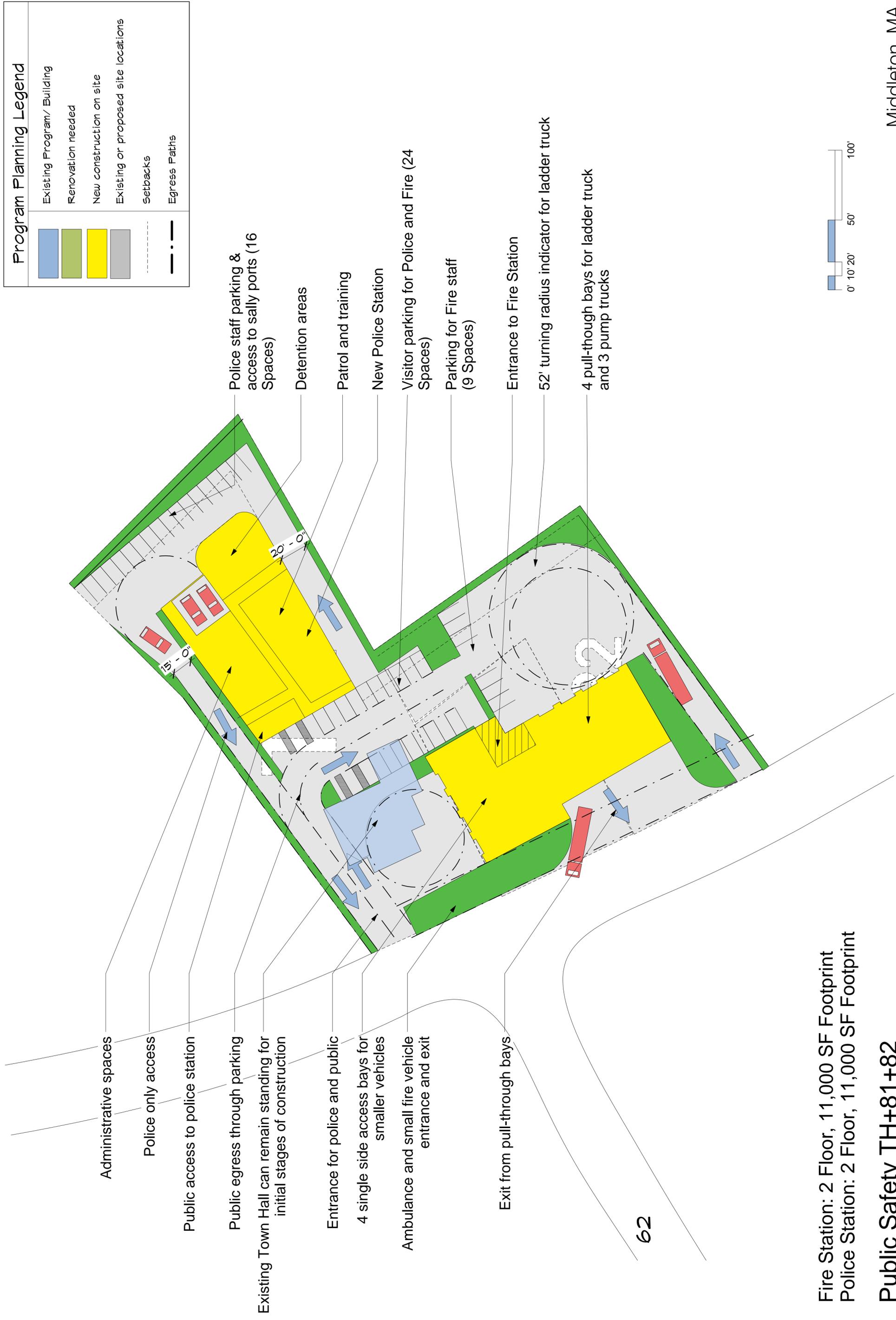
Program Planning Legend	
	Existing Program/ Building
	Renovation needed
	New construction on site
	Existing or proposed site locations
	Setbacks
	Egress Paths



Public Safety Facility Purchased Site

Middleton, MA

Program Planning Legend	
	Existing Program/ Building
	Renovation needed
	New construction on site
	Existing or proposed site locations
	Setbacks
	Egress Paths



Administrative spaces

Police only access

Public access to police station

Public egress through parking

Existing Town Hall can remain standing for initial stages of construction

Entrance for police and public

4 single side access bays for smaller vehicles

Ambulance and small fire vehicle entrance and exit

Exit from pull-through bays

62

Police staff parking & access to sally ports (16 Spaces)

Detention areas

Patrol and training

New Police Station

Visitor parking for Police and Fire (24 Spaces)

Parking for Fire staff (9 Spaces)

Entrance to Fire Station

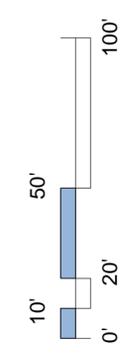
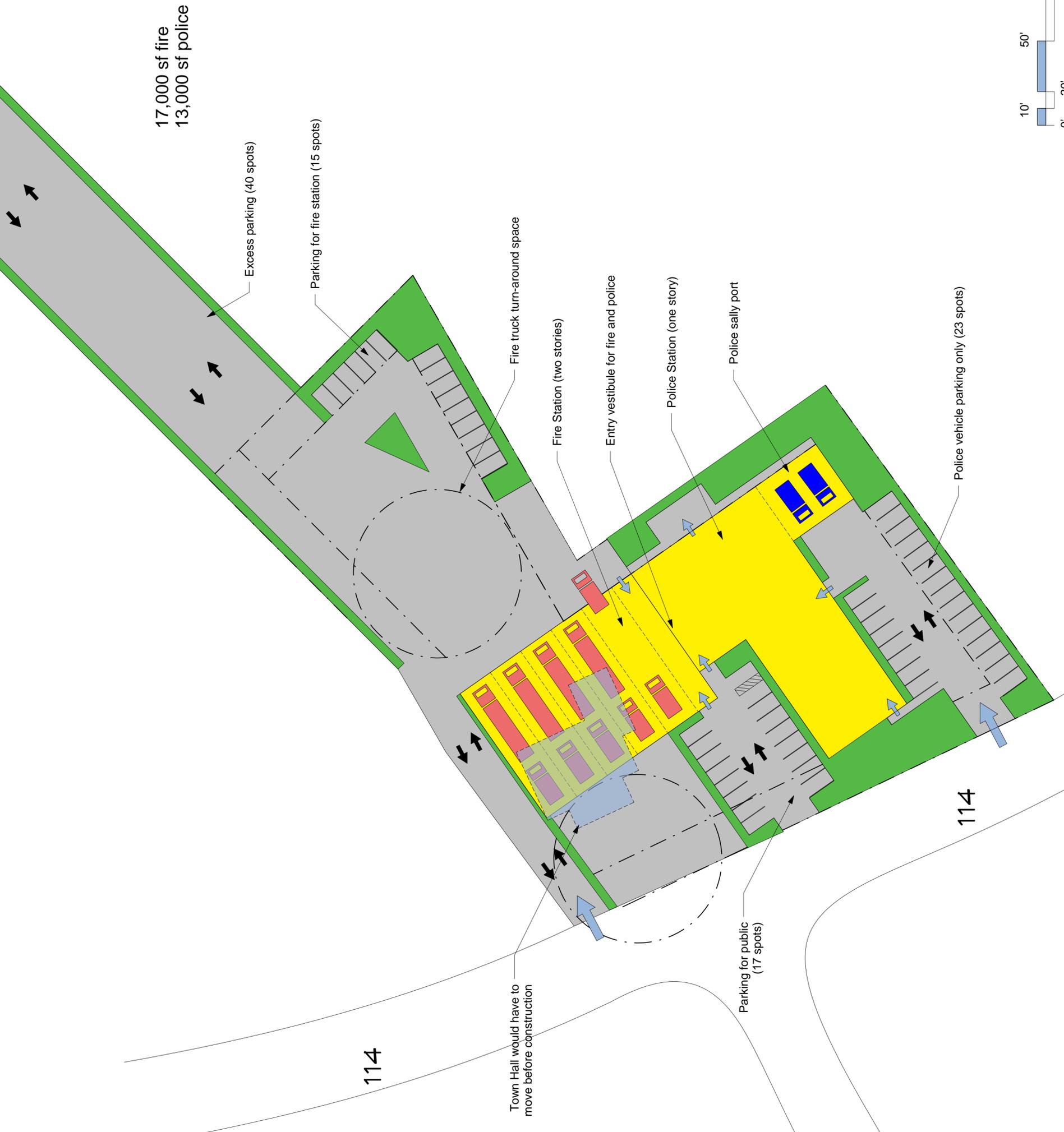
52' turning radius indicator for ladder truck

4 pull-through bays for ladder truck and 3 pump trucks

Fire Station: 2 Floor, 11,000 SF Footprint

Police Station: 2 Floor, 11,000 SF Footprint

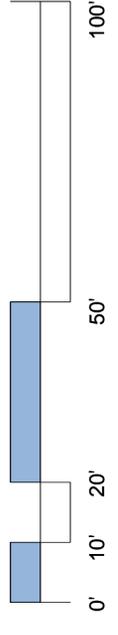
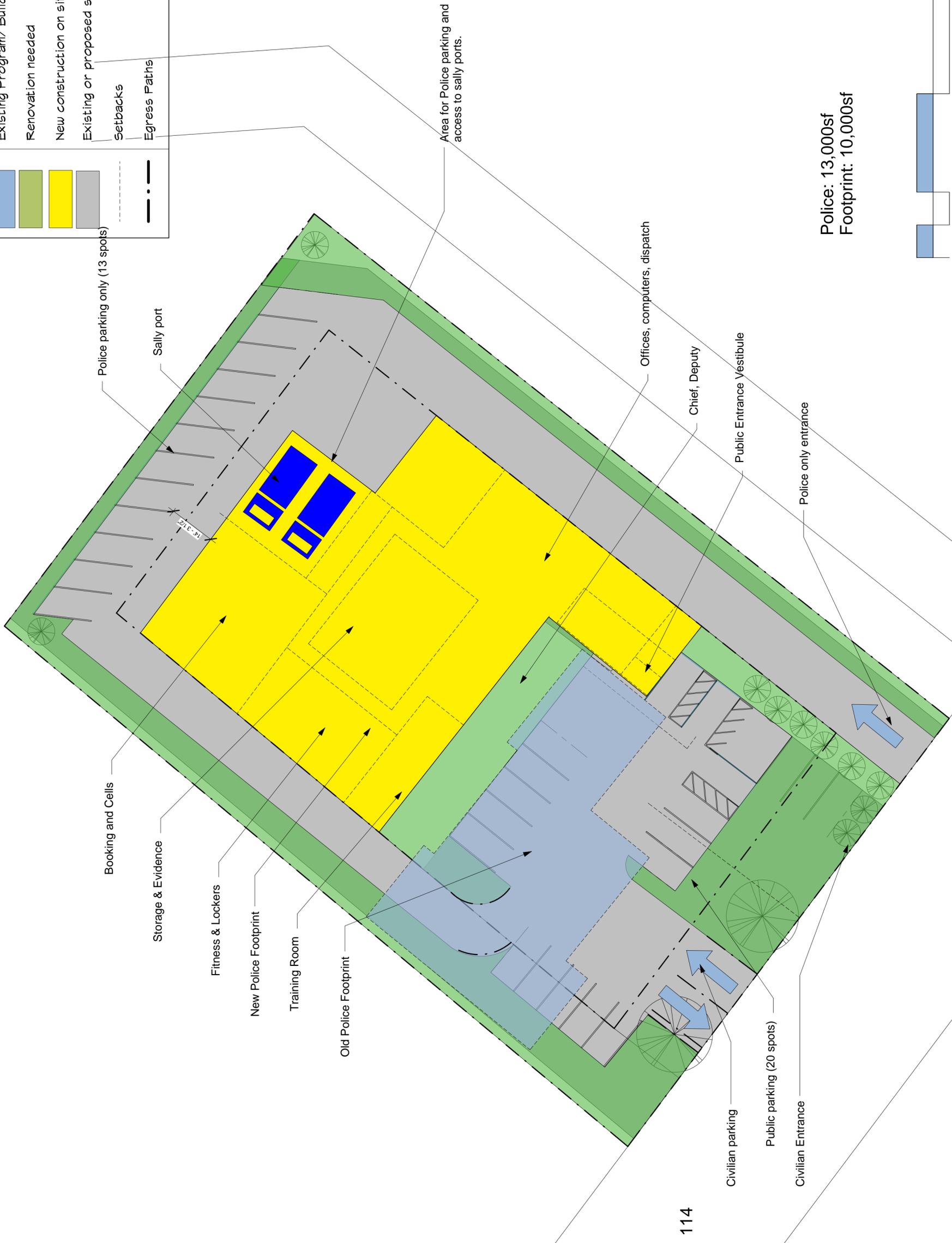
Public Safety TH+81+82



Public Safety TH Version 2

Program Planning Legend

	Existing Program/ Building
	Renovation needed
	New construction on site
	Existing or proposed site locations
	Setbacks
	Egress Paths



New Police on Current Site

Appendix C: Cost Estimate

Each chart refers to one of the design options shown in the Design Options table in Appendix B

Conceptual Design Probable Cost

Town of Middleton
Middleton, MA



Gienapp Design Associates, LLC

03/03/17
Prepared: RC

Property: Middleton

Design Options

Phase	Description	Work	SF	\$ per SF	Land Development	Extended Cost	Subtotal
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Concept A Option 1 (Reno. TH and COA)

Demolition Work

Police Station		Demo	10496	\$25		\$ 374,880	
	Subtotal						\$ 374,900

Building

Fire Station		Const	20,800	\$ 500	\$ -	\$ 10,400,000	
Police Station		Const	11,400	\$ 600	\$ -	\$ 6,840,000	
Town Hall		Reno	10,500	\$ 350	\$ -	\$ 3,675,000	
Council on Aging		Reno	4,498	\$ 175	\$ -	\$ 787,150	
	Construction Cost						\$ 21,702,200

Design Contingency (10%)							\$ 2,170,300
Total Estimated Construction Cost							\$ 23,872,500

Project Cost Multiplier (30%)							\$ 7,161,800
Project Cost (Excluding Land)							\$ 31,409,200

Land to be Aquired	Assessed Value						
Lot 60	\$ 466,000.00						
Subtotal							\$ 466,000

Land to be sold	Assessed Value						
Subtotal							\$ -

Total Anticipated Cost After Land Sales							\$ 31,875,200
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Conceptual Design Probable Cost

Town of Middleton
Middleton, MA



Gienapp Design Associates, LLC

03/03/17
Prepared: RC

Property: Middleton							
Design Options							
Phase	Description	Work	SF	\$ per SF	Land Development	Extended Cost	Subtotal

Concept A, Option 1 variation 2 (Reno. COA, New TH)

Demolition Work

Memorial Hall	Demo	9975		\$20		\$ 299,400	
Police Station	Demo	10496		\$20		\$ 311,904	

Subtotal \$ 611,304

Building

Fire Station	Const	20,800	\$	500	\$ -	\$ 10,400,000	
Police Station	Const	11,400	\$	600	\$ -	\$ 6,840,000	
Town Hall	Const	10,500	\$	400	\$ -	\$ 4,200,000	
Council on Aging	Reno	4,498	\$	175		\$ 787,150	

Construction Cost \$ 22,227,200

Design Contingency (10%) \$ 2,222,800

Total Estimated Construction Cost \$ 24,450,000

Project Cost Multiplier (30%) \$ 7,335,000

Project Cost (Excluding Land) \$ 31,785,000

Land to be Aquired	Assessed Value				
Lot 60	\$ 466,000.00				
Subtotal					\$ 466,000

Land to be sold	Assessed Value				
Subtotal					\$ -

Total Anticipated Cost After Land Sales \$ 32,251,000

Low High

Conceptual Design Probable Cost

Town of Middleton
Middleton, MA



Gienapp Design Associates, LLC

03/03/17
Prepared: RC

Property: Middleton							
Design Options							
Phase	Description	Work	SF	\$ per SF	Land Development	Extended Cost	Subtotal

Concept B, Option 3

Demolition Work

Memorial Hall	Demo	9975	\$20			\$ 299,400	
	Subtotal						\$ 299,400

Building

Fire Station	Const	20,800	\$ 500	\$ -	\$ 10,400,000		
Police Station	Const	11,400	\$ 600	\$ -	\$ 6,840,000		
Council on Aging	Reno	4,498	\$ 175		\$ 787,150		
Goddard School for Town Hall	Reno	9,850	\$ 200		\$ 1,970,000		
	Construction Cost						\$ 19,997,200
	Design Contingency (10%)						\$ 1,999,800
	Total Estimated Construction Cost						\$ 21,997,000

	Project Cost Multiplier (30%)						\$ 6,599,100
	Project Cost (Excluding Land)						\$ 28,596,100

Land to be Acquired	Assessed Value				
Lot 81 for Fire Station	\$ 475,000.00				
Lot 82 for Fire Station	\$ 396,000.00				
Goddard School	\$ 2,298,000.00				
	Subtotal				\$ 3,169,000

Land to be sold	Assessed Value				
Police Site	\$ 600,000				
	Subtotal				\$ (600,000)

	Total Anticipated Cost After Land Sales						\$ 32,366,000
						Low	High

Conceptual Design Probable Cost

Town of Middleton
Middleton, MA



Gienapp Design Associates, LLC

03/03/17
Prepared: RC

Property: Middleton

Design Options

Phase	Description	Work	SF	\$ per SF	Land Development	Extended Cost	Subtotal
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Concept B, Option 4

Demolition Work

Memorial Hall	Demo	9975	\$25			\$ 359,250	
Police Station	Demo	10496	\$25			\$ 374,880	
Subtotal						\$	734,200

Building

Fire Station	Const	20,800	\$ 500	\$ -		\$ 10,400,000	
Police Station	Const	11,400	\$ 600	\$ -		\$ 6,840,000	
Council on Aging	Const	9,300	\$ 400	\$ -		\$ 3,720,000	
Goddard School For Town Hall	Reno	9,850	\$ 200			\$ 1,970,000	

Construction Cost \$ 22,930,000

Design Contingency (10%) \$ 2,293,000

Total Estimated Construction Cost \$ 25,223,000

Project Cost Multiplier (30%) \$ 7,566,900

Project Cost (Excluding Land) \$ 33,525,000

Land to be Aquired	Assessed Value				
Lot 60 for Fire Station	\$ 560,000				
Goddard	\$ 2,000,000				
Subtotal				\$	2,560,000

Land to be sold	Assessed Value				
Old Town Hall	\$ 500,000				
Subtotal				\$	(500,000)

Total Anticipated Cost After Land Sales \$ 35,585,000

Low High

Conceptual Design Probable Cost

Town of Middleton
Middleton, MA



Gienapp Design Associates, LLC

03/03/17
Prepared: RC

Property: Middleton

Design Options

Phase	Description	Work	SF	\$ per SF	Land Development	Extended Cost	Subtotal
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Concept C, Option 5

Demolition Work

Memorial Hall	Demo	9975	\$25			\$ 359,250	
Police Station	Demo	10496	\$25			\$ 374,880	
	Subtotal						\$ 734,200

Building

Fire Station	Const	20,800	\$ 500	\$ -		\$ 10,400,000	
Police Station	Const	11,400	\$ 600	\$ -		\$ 6,840,000	
Town Hall	Const	10,500	\$ 400	\$ -		\$ 4,200,000	
Council on Aging	Const	9,300	\$ 400	\$ -		\$ 3,720,000	

Construction Cost \$ 25,160,000

Design Contingency (10%) \$ 2,516,000

Total Estimated Construction Cost \$ 27,676,000

Project Cost Multiplier (30%) \$ 8,302,800

Project Cost (Excluding Land) \$ 36,713,000

Land to be Aquired	Assessed Value				
Lot 60 for Fire Station	\$ 466,000				
Lot 81 for Police Station	\$ 475,000				
Lot 82 for Police Station	\$ 396,000				
Subtotal					\$ 1,337,000

Land to be sold	Assessed Value				
Old Town Hall	\$ 500,000				
Subtotal					\$ (500,000)

Total Anticipated Cost After Land Sales \$ 37,550,000

Conceptual Design Probable Cost

Town of Middleton
Middleton, MA



Gienapp Design Associates, LLC

03/03/17
Prepared: RC

Property: Middleton

Design Options

Phase	Description	Work	SF	\$ per SF	Land Development	Extended Cost	Subtotal
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Concept C, Option 6

Demolition Work

Memorial Hall	Demo	9975	\$20			\$ 299,400	
Subtotal						\$	299,400

Building

Fire Station	Const	20,800	\$ 500	\$ -		\$ 10,400,000	
Police Station	Const	11,400	\$ 600	\$ -		\$ 6,840,000	
Town Hall	Const	10,500	\$ 400	\$ -		\$ 4,200,000	
Council on Aging	Reno	4,498	\$ 175	\$ -		\$ 787,150	

Construction Cost \$ 22,227,200

Design Contingency (10%) \$ 2,222,800

Total Estimated Construction Cost \$ 24,450,000.00

Project Cost Multiplier (30%) \$ 7,335,000

Project Cost (Excluding Land) \$ 31,785,000

Land to be Aquired	Assessed Value				
Lot 60	\$ 466,000				
Lot 61	\$ 398,000				
Subtotal				\$	864,000

Land to be sold	Assessed Value				
Police Site	\$ 600,000				
Subtotal				\$	(600,000)

Total Anticipated Cost After Land Sales \$ 32,049,000

Conceptual Design Probable Cost

Town of Middleton
Middleton, MA



Gienapp Design Associates, LLC

03/03/17
Prepared: RC

Property: Middleton

Design Options

Phase	Description	Work	SF	\$ per SF	Land Development	Extended Cost	Subtotal
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Concept C, Option 7

Demolition Work

Police Station	Demo	10496	\$20			\$ 311,904	
Subtotal						\$	311,904

Building

Fire Station	Const	20,800	\$ 500	\$ -		\$ 10,400,000	
Police Station	Const	11,400	\$ 600	\$ -		\$ 6,840,000	
Town Hall	Const	10,500	\$ 400	\$ -		\$ 4,200,000	
Council on Aging	Reno	4,498	\$ 175			\$ 787,150	
Construction Cost						\$	22,227,200

Design Contingency (10%) \$ 2,222,800

Total Estimated Construction Cost \$ 24,450,000

Project Cost Multiplier (30%) \$ 7,335,000

Project Cost (Excluding Land) \$ 31,785,000

Land to be Aquired	Assessed Value				
Lot 60 for Police Station	\$ 466,000				
Lot 81 for Fire Station w/ Town Hall site	\$ 475,000				
Lot 82 for Fire Station w/ Town Hall site	\$ 396,000				
Subtotal					\$ 1,337,000

Land to be sold	Assessed Value				
Old Town Hall	\$ 500,000				
Subtotal					\$ (500,000)

Total Anticipated Cost After Land Sales \$ 32,622,000

Conceptual Design Probable Cost

Town of Middleton
Middleton, MA



Gienapp Design Associates, LLC

03/03/17
Prepared: RC

Property: Middleton							
Design Options							
Phase	Description	Work	SF	\$ per SF	Land Development	Extended Cost	Subtotal

Concept D, Option 8

Demolition Work

Subtotal	\$	-	\$	-
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Building

Fire Station	Const	20,800	\$	500	\$	125,000	\$	10,525,000
Police Station	Const	11,400	\$	600	\$	125,000	\$	6,965,000
Town Hall	Const	10,500	\$	400	\$	125,000	\$	4,325,000
Council on Aging	Const	9,300	\$	400	\$	125,000	\$	3,845,000

Construction Cost	\$	25,660,000
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Design Contingency (10%)	\$	2,566,000
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Total Estimated Construction Cost	\$	28,226,000
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Project Cost Multiplier (30%)	\$	8,467,800
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Project Cost (Excluding Land)	\$	36,693,800
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Land to be Acquired	Assessed Value				
Lot 61 for Town Complex	\$ 560,000				
Lot 63 for Town Complex	\$ 560,000				
Subtotal				\$	1,120,000

Land to be sold	Assessed Value				
Memorial Hall	\$ 600,000				
Old Town Hall	\$ 500,000				
Police Site	\$ 600,000				
Subtotal				\$	(1,700,000)

Total Anticipated Cost After Land Sales	\$	36,114,000
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