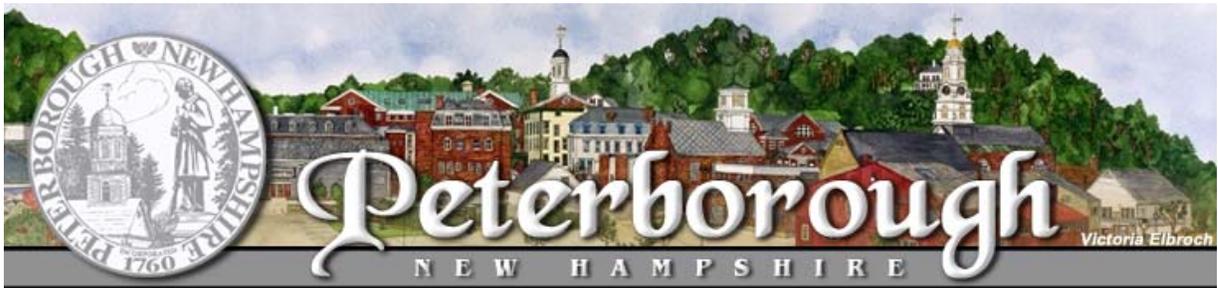


Weller & Michal Architects Inc.



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# Peterborough Municipal Facilities Needs Assessment & Feasibility Study

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Executive  
Summary

## EXECUTIVE SUMMARY



## Background

Existing Peterborough Municipal facilities are undersized, overcrowded, and either now or soon will impede the efficient and proper delivery of town services. Five Town Departments are hampered by building or land constraints at their current locations.

Public Works

Water/Wastewater

Fire and Rescue

Police

Recreation

A Municipal Needs Study Committee<sup>1</sup> has been charged by the Select Board with evaluating space needs for all departments, identifying and evaluating facility options and reporting back to the Select Board. The Select Board and the Town Department Heads understand that a 'do-nothing' alternative does not properly and responsibly address the needs of the Peterborough community. The Town needs to anticipate needs ten to twenty-five years from now.

Each Town Department suffers under the burden of space constraints compounded in some circumstances by outdated equipment and building systems. Typically (with the exception of the Police Department), each Department is using facilities that date back over 35 years. Many of the facilities are not up to current demands; consequently many have no possibility of meeting Town needs over the next quarter century.

At the Town Fire Department, undersized sized apparatus bays and overhead doors require the department to special order larger vehicles. The building is not likely to meet current seismic codes, and is not fully sprinklered against fire. There is also no space for a dedicated Emergency Operations Center (EOC). Currently, the Fire Chief serves as the Emergency Management Director for the Town of Peterborough. Recent national and local natural disasters underscore the importance of community facilities which can operate in times of distress.

The Police Department garage is in poor condition, and record storage and evidence storage capacity is no longer adequate. It is necessary to separate adult and juvenile holding areas as required by state law.

The Recreation Department is in dire need of better storage (some equipment is stored exposed to the weather and some equipment is actually stored by volunteers in their homes). The Department also is unable to provide recreational services to the community during the winter, as it has no indoor facilities. Much of the foreseen demand for recreational services cannot be met by current facilities.

The Public Works Department is in need of additional garage space to house vehicles, and a central fuel bulk storage facility.

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<sup>1</sup> The Committee is comprised of the Public Works Director, the Town Administrator, and the Office of Community Development Director

## Recommendations

Total current Departmental space is about 33,000 square feet. Departmental needs support a total of 70,000 square feet. New and renovated facilities sized to meet anticipated needs have projected year 2005 costs of \$12 million:

15,900 square foot Fire and Rescue	\$3.9 million
12,000 square foot Police	\$2.7 million
25,000 square foot New Public Works Center	\$3.7 million
10,300 square foot Water/Wastewater (buildings only)	\$2.3 million
6,700 square foot Recreation (buildings only)	\$1.0 million

Such budgets (both space and cost) are consistent with comparable facilities identified in other communities (See Comparable Facilities section starting on page 76). Cost of site acquisition, where required, is NOT included.

The costs noted above are for free-standing, individual projects. Small savings may be achieved by combining new facilities on one site – the “Joint Facility Option”. Savings would stem from some shared facility use, shared land use and therefore a smaller site-size requirement, and possibly a reduction in ‘soft costs’ of implementing one larger project rather than multiple smaller projects.

However, the anticipated savings from a Joint Facility may not outweigh other relevant factors, including relative needs and siting considerations (the Summer Street Fire Department facility is older and less appropriate to current need than the Police Department facility on Grove Street).

The Police Department can remain at the existing Grove Street location. This centrally located, visible site is considered appropriate in terms of the Department’s dispatch requirements, and will permit the needed expansion.

The current Fire Department location is not tenable, and will not support a suitable expansion on the existing site. Consequently, we recommend this Department be relocated into a new facility.

The Recreation Department is best served in the near term by new and expanded athletic fields, and options exist to create these fields both on portions of the Evans Flats site, and at the Town’s sewer lagoons. Recreational use of the Evans Flats site seems consistent with public interest.

The other Department clearly in need of upgraded facilities is the Public Works Department. Their location on Evans Flats prevents the larger site from being easily debated as to the highest and best use of this area (which includes 26.72 acres of town-owned property). Both commercial and conservation interests are thwarted in part by the current siting of this facility.

The 2004 Evans Flats Land Use Analysis of the Peterborough Master Plan Steering Committee identified several options for Evans Flats. That Analysis included several scenarios developed with community input, and observed that a final decision regarding Evans Flats depended in part on the conclusions reached from a municipal needs study. Two of the four scenarios (Concept 2, Concept 4) generated in public sessions identified joint municipal facilities on all or part of the



town land. Opportunity exists to site new facilities for both the Public Works Department and the Fire Department in the general Evans Flats area, but in a manner that maximizes the potential to use the bulk of the undeveloped Evans Flats parcel for other uses, ideally to be determined by an open community planning process.

The Town should seek to acquire both the existing Armory site and the former car dealership on Elm Street. This would allow the most flexible use of the Evans Flats area, without constraining options. Alternatively, consider the frontage along Route 101, as shown in Figure 2 – Municipal Facilities Option 2



Figure 1 - Municipal Facilities Option 1



Figure 2 – Municipal Facilities Option 2

## PROPERTY ASSESSMENTS



Figure 3 - Existing Fire & Rescue Department

### Department Description

The Fire and Rescue Department provides Fire and Rescue services to two towns [Peterborough and Sharon] and Emergency Medical Services (ambulance services) to Peterborough, Sharon, Dublin, Frankestown, Greenfield, and Hancock. The Department responds to over 1100 calls each year, and provides fire protection to over 6,000 people living in the 52 square mile area of the two towns. The department also helps cover neighboring towns in emergency situations.

The Department is an on call organization consisting of approximately 50 Firefighters and Emergency Medical Service (EMS) members. The only full time employee is the Chief, who is assisted by ten officers.

Between 10 and 15 outside public visitors may come to the Department each day. The Department conducts meetings involving both inside staff and public, and sometimes runs all-day training or educational programs.

### Existing Site Uses and Zoning Considerations

The Fire Station property is located at 16 Summer Street, which is in the General Residence District. The minimum lot size requirement for that District is 20,000 square feet for a one- or two-family residence. This parcel exceeds 10 acres, although much of it is steep slope that to date has been considered inaccessible (Refer to Figure 4 on the next page)

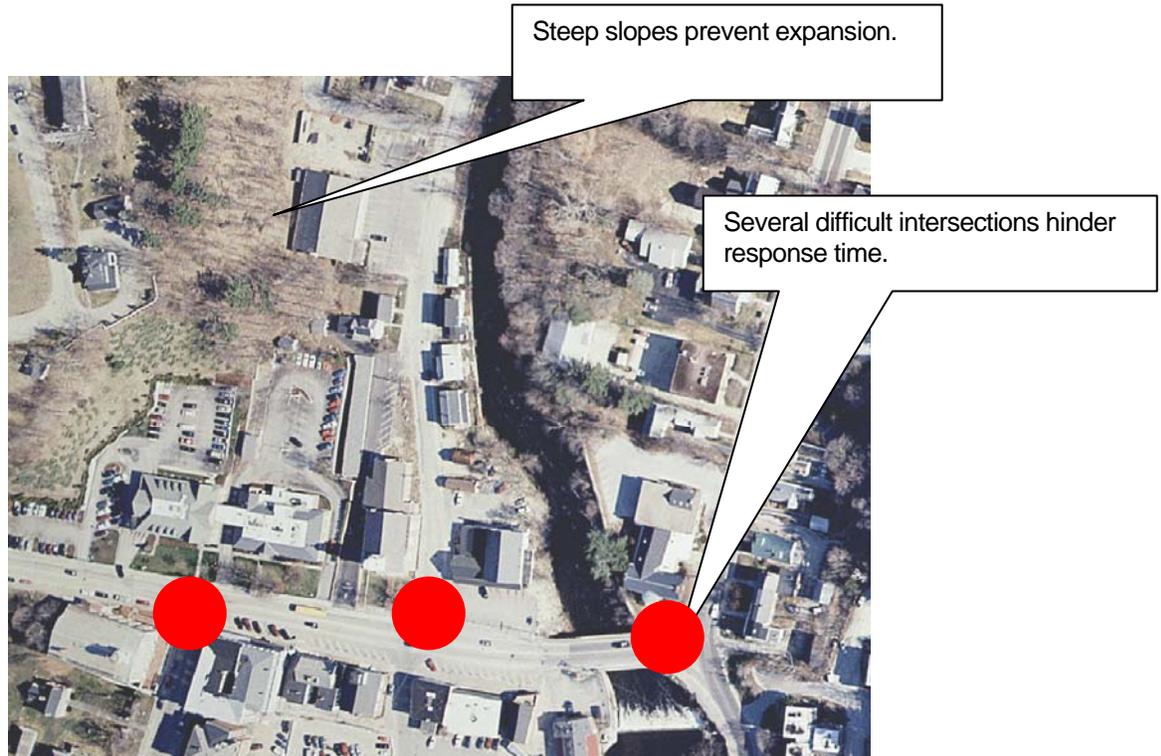


Figure 4 - Summer Street Fire Department Site

Approximately 2% of the lot is occupied by the structure, and 3% covered by paved parking lot.

Potential for future development: Even though the site abuts the downtown, the residential zoning does not allow full-fledged retail/commercial use. There are some uses permitted by special exception in the General Residence District. Currently there is not any discussion with the Planning Board about changing the zoning designation for this parcel.

### Characteristics of Existing Facilities

The current facility occupied by the Peterborough Fire and Rescue Department was built in 1945 for the Department of Public Works. The building was converted to the fire department in 1972 to provide needed space for apparatus, equipment and administrative functions. The building has been added onto twice to provide additional space for equipment and training room.

The current brick masonry building has several deficiencies which impact the efficient operation of the department. Primary complaints include the lack of office space, inadequate sized apparatus bays to accommodate larger vehicles, equipment storage areas without proper ventilation, lack of secured storage rooms and inadequate areas for maintenance, and the need for modern restrooms and shower facilities. There is also no space for a dedicated Emergency Operations Center (EOC). Currently, the Fire Chief serves as the Emergency Management Director for the Town of Peterborough.

## Building and Fire Codes

Weller & Michal Architects reviewed key elements (primarily fire and life-safety related) of the ICC 2000 International Building Code<sup>2</sup> (IBC2000) and the 2003 Life Safety Code (NFPA 101) as they affect the current facility used by the Peterborough Fire & Rescue.

### Size Limits Established by Fire and Building Codes

Under codes, the maximum legal size of a building is dependent on how a building is constructed and what it is used for.

The current building is classified as Construction Type III-B (non combustible exterior walls-unprotected) and a Business Occupancy. The current building size is under the total maximum allowable building area per floor (14,000 square feet plus an additional 14,000 square feet for a fully sprinkled building) for a total maximum allowable area of 28,000 square feet. The construction type allow for an expansion of the existing building, however a projected facility program and site limitations preclude a realistic expansion of the facility.

### Codes Issues

Current building does not present any major code violations or areas of concern which impact life safety and/or egress code requirements.

### ADA Accessibility

Current building does not fully comply with ADA accessibility requirements for publicly owned facilities (Title II).

- ADA, require accessible entrances and parking
- ADA, accessible toilet rooms

## Existing Space Uses

The current facility (Refer to Figure 6 on the next page) occupied by the Peterborough Fire & Rescue Department contains approximately 7,900 net square feet. About 76% of the net floor space, or 6,025 square feet, is directly used for specific functions for housing fire apparatus and equipment storage. The balance of the area is consumed in administrative functions, day room, toilet rooms and circulation space. Refer to Facility Needs Assessment by Department for a complete breakdown of space by specific function

The current facility lacks key design requirements and amenities necessary for a modern fire and rescue department (Refer to photos shown in Figure 5 and Figure 7). These Include:

- Apparatus Bays to accommodate larger fire fighting equipment, vehicle access from two directions, and 12 foot high doors
- Adequate office space for the fire chief, administrative assistant, deputy chiefs, captains, etc

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<sup>2</sup> IBC2000, with amendments, is the current Building Code applicable throughout the state of New Hampshire.

- Bunkrooms for storm coverage
- Adequate equipment storage
- Modern fire fighter toilet/shower rooms for male and female
- Ventilated and well heated apparatus bays



Figure 5 - View of Existing Apparatus Garage & Hose Drying Racks

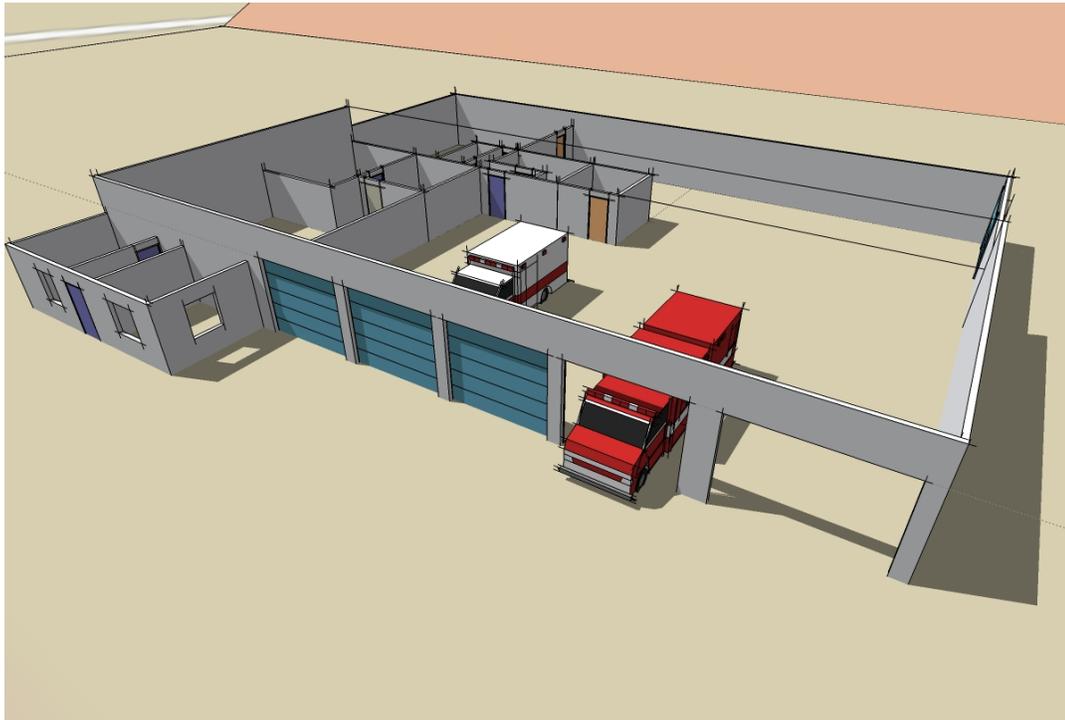


Figure 6 - Existing Fire Station Layout



Figure 7 - Interior Views of Existing Fire Station

## Primary Building Systems

The following analysis, conducted by our mechanical/electrical engineers, summarizes all the major systems and life-safety code items that will need to be addressed in order to continue safe and prudent operation of the current fire station.

### Electrical Systems

#### Power Distribution

Electrical service enters the rear of the building to a 200 amp, 3 phase main panel. The meter, panel, standby generator and other equipment are all located in an undersized electrical room. Main service is an older load center style with limited room for expansion.

#### Branch Circuitry

Electrical distribution is primarily original with some additions and modifications over time as needed. Electrical wiring within the apparatus bay/garage is not compliant with current NEC regulations.

Receptacles in the apparatus bay/garage should be ground fault circuit interrupted protected to comply with code.

Standby generator (120/208 v, 3 phase) is new within the past 10 years and appears to be in good condition. Breaker rating is 25 KVA with a 90 amp, 3-pole breaker. Currently the generator capacity is adequate to serve the fire station's current needs under present loading. However, the generator would unlikely support additional equipment or air conditioning if the facility was expanded (Refer to Figure 8).



Figure 8 - Existing Stand-By Generator & Distribution System

### Lighting

Interior lighting throughout the facility was replaced in 2003 through a PSNH program.

### Communication System

Communication wiring and phone system is 33 years old and is essentially original when the building converted to the fire station. Additional wiring and computer wiring has been added.

### Fire Alarm and Sprinkler System

Current fire alarm system is limited and not in compliance with ADA horns and strobes requirements. System should be replaced to permit safe continued use of the facility by outside groups.

### Mechanical Systems

#### Heating System

The primary heating plant is an oil fired American Standard cast iron boiler, 786 MBH, which appear to be in fair condition (Refer to Figure 9).

Heating distribution system is via two zone circulating pumps positioned on the zone return mains.

The apparatus bay/garage is heated with hot water unit heaters with NO central or tail pipe exhaust system.

Office and Training Room are heated with baseboard radiation with NO central outside air ventilation.

Kitchenette area is provided with a residential style appliances and residential type hood which is not NFPA compliant.



Figure 9 - Existing Heating/Cooling Systems

### Plumbing

Water service to the existing fire station is a 3/4 inch service, which is minimal for a building of this type. Hot water is heated via an indirect heat exchanger integral to the boiler room.

Fixtures in fire fighter's locker rooms are in poor condition and non compliance with ADA regulations (Refer to Figure 10).



Figure 10 - Existing Plumbing Fixtures

### Fire Protection

Building is fully sprinklered and served by a 6 inch water main and wet type alarm valve.

### Building Air Compressor System

Existing air compressor, which supplies air for fire trucks air breaks, is an antiquated unit and should be considered for replacement.



Figure 11 - Existing Air Compressors

A new and separate air compressor is located in the Apparatus bay/garage for providing fresh air to firemen air backpacks. The compressor is new and in good condition. However, its location may allow for diesel fumes to be introduced into the compressed air (Refer to Figure 11).

## Recommendations

### Needs and Wants

For the purposes of this study, **Wants** are defined as improvements and changes that would enhance the operation and function of the current fire station and make it a more desirable asset for the Peterborough Fire and Rescue. These suggestions and recommendations would receive lower priority when allocating scarce resources.

**Needs** are defined not solely as requirements for change mandated by law (or building codes), but also as improvements and changes that are compelling in their logic and would be a positive response to a clearly and strongly held complaints with the existing facility. Without addressing these **Needs**, the building will continue to deteriorate, frustrate many and fall short of its full potential to serve the fire and rescue department for the Town of Peterborough.

If the option to build new on a new site is NOT pursued the list of Needs and Wants are as follows:

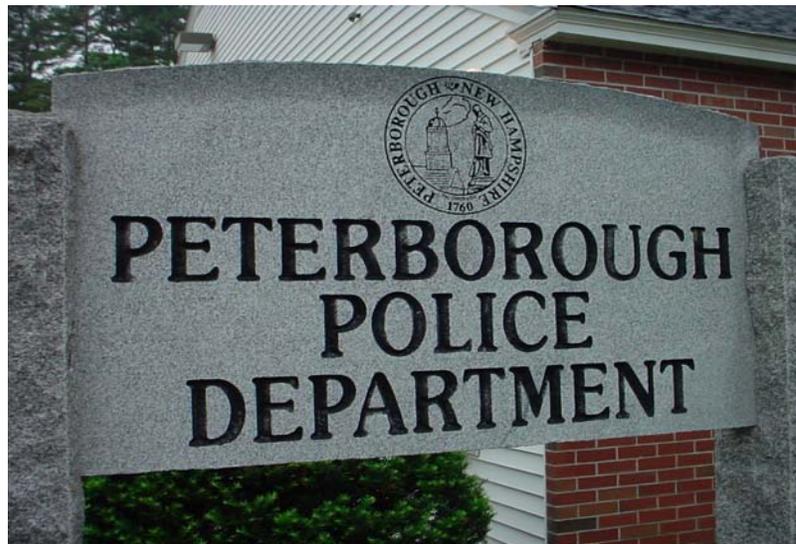
Potentially, the list of **Needs** includes:

- ADA – Install new toilet and shower rooms to comply with ADA standards
- Energy Efficiency/Human Comfort – new HVAC distribution and control system
- Life-Safety Code – new fire alarm system
- Life Safety Code – replace existing wiring within the apparatus garage to comply with current codes

- Update communication system

Potentially, the list of **Wants** includes:

- Exterior – window replacement
- Safety - space for new SCBA and related equipment
- Equipment Replacement - replace existing 25 year old Stand-by-Generator to handle additional capacity
- Apparatus Garage – expand and modernize facility



### Department Description

The Peterborough Police Department is the only municipal department that is staffed 24 hours a day, 7 days a week<sup>3</sup>. The police department consists of 10 full time officers, 5 part time officers and 2 clerk/dispatchers. The command structure consists of the chief, a lieutenant and two sergeants. The department operates two police vehicles at all times.

Police services provided by the Department typically include:

- Patrolling neighborhoods (visibility-crime deterrent)
- Investigation of reported crimes
- Traffic accident investigation
- Speed enforcement on specific roadways
- Parking ordinance enforcement
- Assisting motorists
- Animal control
- Security checks on residential dwellings while occupants are away
- Security checks on businesses during off hours
- Fingerprinting for public school system employment screening

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<sup>3</sup> The police station is staffed with one clerk/ dispatcher Monday through Friday from 8:00 a.m. to 12:00 (midnight). On holidays, weekends and from 12:00 midnight to 8:00 a.m. during the week, the doors are locked and the telephone is answered by the Hillsborough County Sheriffs Department located in Goffstown, NH.

Currently 17 employees are typically working 'on site' each day, and 2-4 others are working out in the community. The Police and Fire Departments are evaluating a combined 24-hour dispatch position, which would require added space, equipment and staff.

Between 10 and 20 outside public visitors may come to the Department each day. As many as 25 other Town employees may visit the Department in a given week. The Department conducts meetings between staff and the public, usually involving between 6 and 30 attendees.

The Department generates a significant quantity of records, and has distinct and specific security requirements with segregated site and facility circulation needs. Special storage needs include bulky items (seized vehicles and other property) and evidence (including bodily fluids which must be refrigerated).

The Department does not consider it necessary to be located adjacent to other Town Departments.

### Existing Site Uses and Zoning Considerations

The Police Department property is located in the General Residence District, at 73 Grove Street, just north of Route 101 (Refer to Figure 12 below)

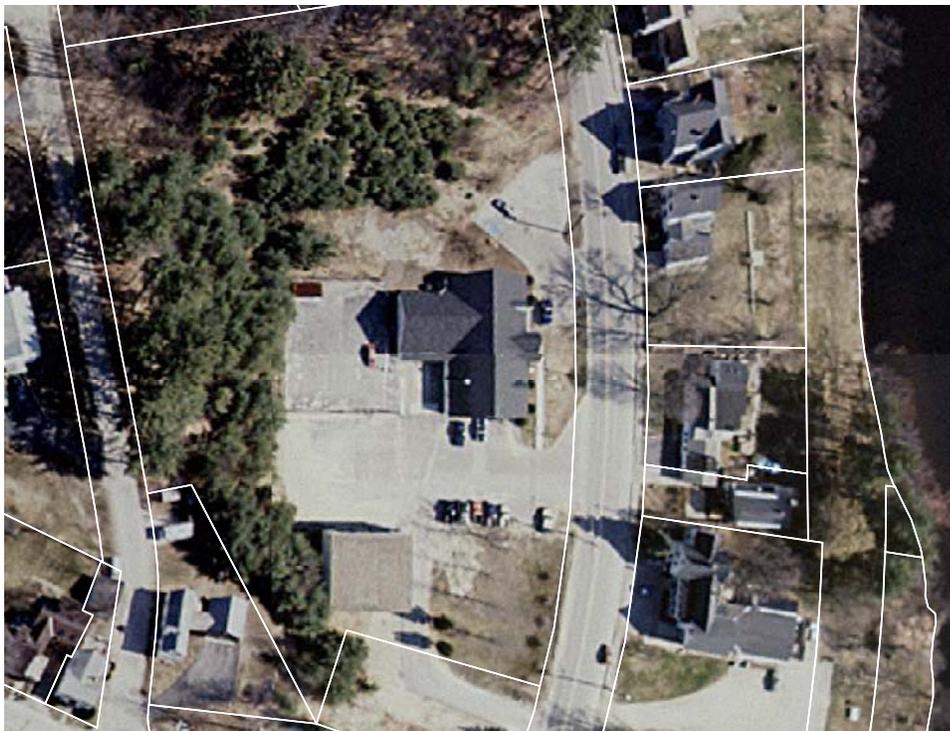


Figure 12 - Grove Street Police Station Site

The minimum lot size requirement for that District is 20,000 square feet for a one- or two-family residence. This parcel is approximately 3 acres. Approximately 8% of the lot is occupied by the structure, and 20% covered by impermeable materials.

Potential for future development: Current zoning designation allows only residential development and some limited non-residential development by special exception of the Board of Adjustment. Currently there is not any discussion with the Planning Board about changing the zoning designation for this parcel.

### Characteristics of Existing Building

The current facility occupied by the Peterborough Police Department was formerly the PSNH office building, which was built in 1964. The Police Department moved in approximately 10 years ago (1995) following extensive renovations to convert the building for police use (Refer to Figure 13).



Figure 13 - Visitors' View of Existing Police Station

### Building and Fire Codes

Weller & Michal Architects reviewed key elements (primarily fire and life-safety related) of the ICC 2000 International Building Code<sup>4</sup> (IBC2000) and the 2003 Life Safety Code<sup>5</sup> (NFPA 101) as they affect the current facility used by the Peterborough Police Department.

#### Size Limits Established by Fire and Building Codes

Under codes, the maximum legal size of a building is dependent on how a building is constructed and what it is used for. We would classify the current building under the codes as Construction Type V-B (combustible construction -unprotected) and the use as a Business Occupancy. The current building size is under the total maximum allowable building area of

<sup>4</sup> IBC2000, with amendments, is the current Building Code applicable throughout the state of New Hampshire.

<sup>5</sup> The 1997 NFPA 101 is the current code enforced by the State Fire Marshal. We elected to review the 2003 edition of this Code because it is anticipated that the State of New Hampshire will move to the current edition within the next two years.

14,400 square feet per floor (7,200 square feet plus an additional 7,200 square feet for a fully sprinkled building). The building construction type allows for two stories.

#### Codes Issues

The current building does not present any major code violations or areas of concern which impact life safety and/or egress code requirements. However, not all aspects

#### ADA Accessibility

The current building complies with ADA accessibility requirements for publicly owned facilities (Title II).

#### Existing Space Uses

The current facility (Refer to Figure 14) occupied by the Peterborough Police Department contains approximately 6,850 net square feet on two floors. About 82% of the net floor space, or 5,614 square feet, is directly used for specific functions for public use, administrative and record keeping, police officers work areas, training, toilet rooms/showers, holding cells and archive storage.. The balance of the area is circulation space and mechanical rooms. Refer to Facility Needs Assessment by Department for a complete breakdown of space by specific function.



Figure 14 - Existing Police Department Layout

The current facility will need to address the following design issues in order to assure a modern police department:

- Security Issues of public areas from daily operations
- Formal interview room
- Evidence Room (security, and controlled environment)
- Additional archive record storage area

- Work space for future police officers
- Future space for 24 hour dispatch (police and fire)
- Separate holding and booking areas for Adults and Juveniles (isolated from sight and sound) per state law

## Primary Building Systems

The following analysis was conducted by our engineers, W.V. Engineering, Inc, and summarizes all the major systems and life-safety code items that will need to be addressed in order to continue safe and prudent operation of the current police department.

### Electrical Systems

#### Power Distribution

Electrical service is a 400 amp, 3 phase with older equipment, which appears to be from the original construction when it was the PSNH office building.

#### Branch Circuitry

Electrical distribution capacity is unknown due to lack of information on current electrical demand.

Replacement of an older GE panel boards should be considered as part of any major renovation or expansion (Refer to Figure 15 on the next page).

Receptacles throughout the building appear to be adequate for the present police functions, but excessive use of extension cords and awkward location of equipment was noticeable.

Building is provided with a standby propane gas fired generator, Kohler 20 KW unit that appears to be approximately 10 years old. Equipment appears to be in good condition. However, the enclosure has been severely damaged by snow plowing operations and should be repaired as soon as possible.

In general, electrical system for the renovated facility appears to be in good to excellent condition.

#### Lighting

Current lighting throughout the facility is typically surface mounted wrap around style fixtures. Lights use current technology (T-8 lamps and electronic ballasts) and appear to be in good condition.

Holding cell light fixtures are vandal resistant corner mount style for detention type spaces.

Exterior lighting around the police facility and outside enclosed impound area is limited to older existing lighting.



Figure 15 - Existing Electrical Panels and Emergency Power

### Fire Alarm and Sprinkler System

Current fire alarm system appears to be part of the 1995 renovation. Fire alarm pull stations, horn strobe appliances appear to comply with current NFPA and ADA requirements.

### Communication System

The current dispatch and control center operates from 8 am to 12 pm and is not a 24 hour / 7 days per week 911 dispatch center (Refer to Figure 16).



Figure 16 - Existing Communication System & Security at Sally-Port

Communication service includes underground telephone service. The telephone system, telephone wiring and CAT 5 wiring are located in the Electrical Room and extend out to work areas.

The camera system in the Sally-Port and holding cell area is not operational and needs to be replaced.

## Mechanical Systems

### Heating System

The primary heating plant is an oil fired Weil McLain (model WGO-6) cast iron boiler, firing rate of 1.8 gph, 218 MBH that appears to be in good condition.

Heating distribution system is divided into three zones each with its own circulator pump. Building is primarily heated with hot water baseboard radiation, each room individually controlled. A hot water unit heater is provided in the Sally Port.

Oil storage consists of two 275 gallon vertical oil storage tanks.

Cooling system in the office area is a split type cooling system, with 5 ton condenser unit. Equipment appears in good condition.

Fitness Room is equipped with a package-through wall heat pump unit which provides both heat and air conditioning. Equipment appears in good condition.

Toilet Room and Locker Room exhaust is provided by a roof top unit. Evidence Room's exhaust fan is operational; however it appears to not be working effectively.

### Plumbing

Water service to the building is a 1 inch service and appears not be equipped with backflow prevention.

Hot water is heated via a 40 gallon 3800/5500 watt electric water heater, in good condition, with a 3-way mixing valve. The hot water system is not a re-circulated system.

Fixtures in Men and Women toilet rooms are tank type water closets, lavatories and showers. Fixtures appear to be in good condition and ADA compliant.

Holding Cells are equipped with prison type stainless steel fixtures with integral lavatory and water closet. Water can be shut off from outside the cells.

### Fire Protection

The building is fully sprinklered with a municipal water service, backflow prevention and dry alarm valve.

## Recommendations

### Needs and Wants

For the purposes of this study, **Wants** are defined as improvements and changes that would enhance the operation and function of the building and make it a more desirable asset for the Peterborough Police Department. These suggestions and recommendations would receive lower priority when allocating scarce resources.

**Needs** are defined not solely as requirements for change mandated by law (or building codes), but also as improvements and changes that are compelling in their logic and would be a positive response to a clearly and strongly held complaints with the existing facility. Without addressing these **Needs**, the building will continue to deteriorate, frustrate many and fall short of its full potential to serve the needs of the Peterborough Police Department.

If the option to build new on a new site is NOT pursued the list of Needs and Wants are as follows:

Potentially, the list of **Needs** includes:

- Additional space for 24 hour dispatch (police and fire) which will require new equipment and personnel
- Adequate separation of aggressive persons from the remainder of the prisoner population
- Separate area for juveniles from the adult population as required by state law
- Repair damage to standby generator enclosure
- Additional archive record storage area for 700 letter size files per year
- Security cameras

Potentially, the list of **Wants** includes:

- Security Issues such as lacking bullet walls and bullet proof glass in order to separate public areas from daily operation areas.
- Security, size and controlled environment for storing weapons, ammunition, and other sensitive types of evidence
- Lack of sufficient secure storage for bicycles and other general purpose evidence.
- Lack of additional office space for future police officers as community needs increase
- Additional space for police officers in the squad room
- Need drive through two bay Sally Port
- Lack adequate size police officers equipment and locker room
- Ability to store existing 6 vehicles plus future vehicles from inclement weather and vandals
- Interior space to clean police vehicles (one bay)
- Fitness room where personnel can exercise prior to and after work.



Figure 17 - DWP Entrance

### Department Description

The Department of Public Works consists of four departments: Utilities, Highway, Buildings and Grounds, and Recycling. The Highway Department is responsible for such things as repairing or replacing street signs, stop signs and guardrails, patching potholes, roadside mowing, cleaning up debris, etc. They are also actively involved with many other projects around town.

### Existing Site Uses and Zoning Considerations

The Public Works Department property is located west of Elm Street and north of Route 101 is located in the Commercial District (Refer to Figure 18) The site is approximately 26 acres . Approximately 2% of the lot is occupied by the structure, and 3% covered by impermeable materials. The parcel is part of the historic "Evans Flat" tract, and as such the potential for future development of this parcel is an issue due to natural resource and potential historic constraints.

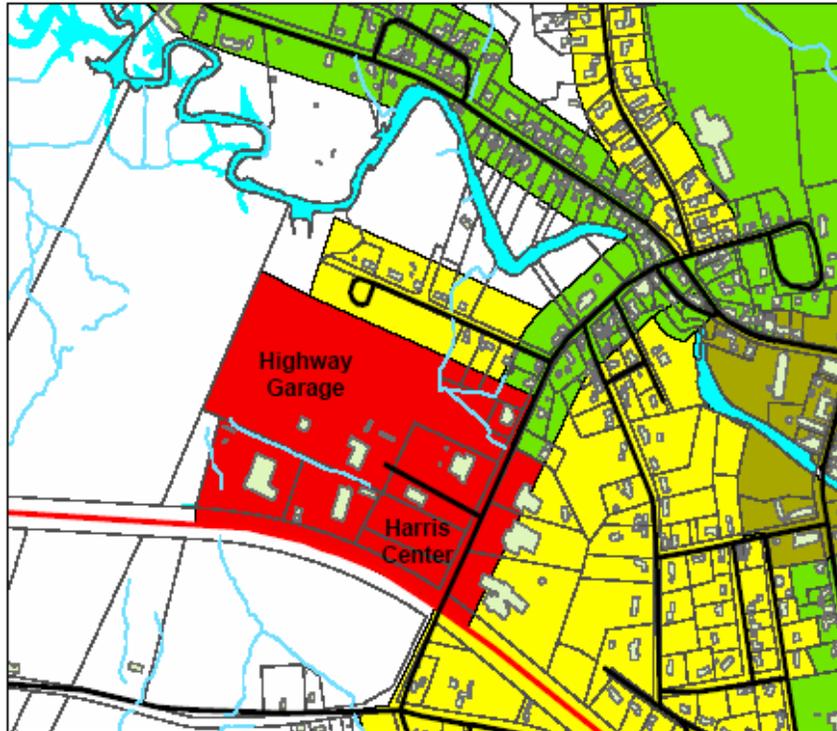


Figure 18 - Zoning Districts around DPW Site

### Characteristics of Existing Public Works Building

The current facility occupied by the Peterborough Department of Public Works was built in 1970, after the Town was given the land by the Goyette family for a Town Barn in 1969. The facility has served the town for over 35 years, but now is too small and in need of repair. The location, at Evans Flat<sup>6</sup>, maybe difficult to expand further due to wetland considerations reflected in the town master plan (Refer to Figure 19).

<sup>6</sup> A history of the area as prepared by the NH Division of Historical Resources indicates that wetlands were filled to allow the construction of the Town Barn, and that prior proposals to build an elementary school on the site were defeated because the land was considered too wet. The Evans Flats area is part of what was the "Gridley Lot"; this was one of the original Four Great Farms laid out around 1738. This land came into the ownership of Asa Evans, a wealthy farmer and Selectman in the late 1700s. Early road development skirted this area, presumably because it was partly flooded and wet much of the time. Until Route 101 was built in 1958 there was very little development in this area. Some housing was constructed on Evans Road in the 1950s; the National Guard was built in the 1950s; the Town Barn was built in 1968; and in the 1970s and 1980s the bowling alley, garage, and motel were built. Today, much of the original Gridley Lot south of the Nubanusit remains undeveloped. Conservation efforts by the Town and the Harris Center for Conservation Education have preserved 104 acres. See the "Evans Flat Land Use Analysis" Peterborough Master Plan Steering Committee, November 1, 2004. The Peterborough Heritage Commission has been inventorying the Evans Flat area as well.



Figure 19 Existing Public Works Facility

## Building and Fire Codes

Weller & Michal Architects reviewed key elements (primarily fire and life-safety related) of the ICC 2000 International Building Code<sup>7</sup> (IBC2000) and the 2003 Life Safety Code<sup>8</sup> (NFPA 101) as they affect the current facility used by the Peterborough Department of Public Works.

### Size Limits Established by Fire and Building Codes

Under codes, the maximum legal size of a building is dependent on how a building is constructed and what it is used for.

The current building is classified as Construction Type V-B (unprotected construction) and an S-2 Storage Occupancy. The current building size is under the total maximum allowable building area per floor (7,200 square feet plus an additional 3,600 square feet for street frontage for a total maximum allowable area of 10,800 square feet. The building is allowed to be two stories.

### Codes Issues

Current building does not present any major code violations or areas of concern which impact life safety and/or egress code requirements. However, the code does require fire separations of different types of uses such as welding and storage of combustibles from the remainder of the building.

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<sup>7</sup> IBC2000, with amendments, is the current Building Code applicable throughout the state of New Hampshire.

<sup>8</sup> The 1997 NFPA 101 is the current code enforced by the State Fire Marshal. We elected to review the 2003 edition of this Code because it is anticipated that the State of New Hampshire will move to the current edition within the next two years.



Figure 20 – Dilapidated Storage Shed

#### ADA Accessibility

Current building does not fully comply with ADA accessibility requirements for publicly owned facilities (Title II).

#### Existing Space Uses

The current facility (Refer to Figure 21 below) occupied by the Peterborough Department of Public Works contains approximately 10,441 net square feet primarily on one floor, though a small mezzanine is available. About 95% of the net floor space, or 9,908 square feet, is directly used for specific functions for vehicle storage, equipment repairs, staff areas and storage.

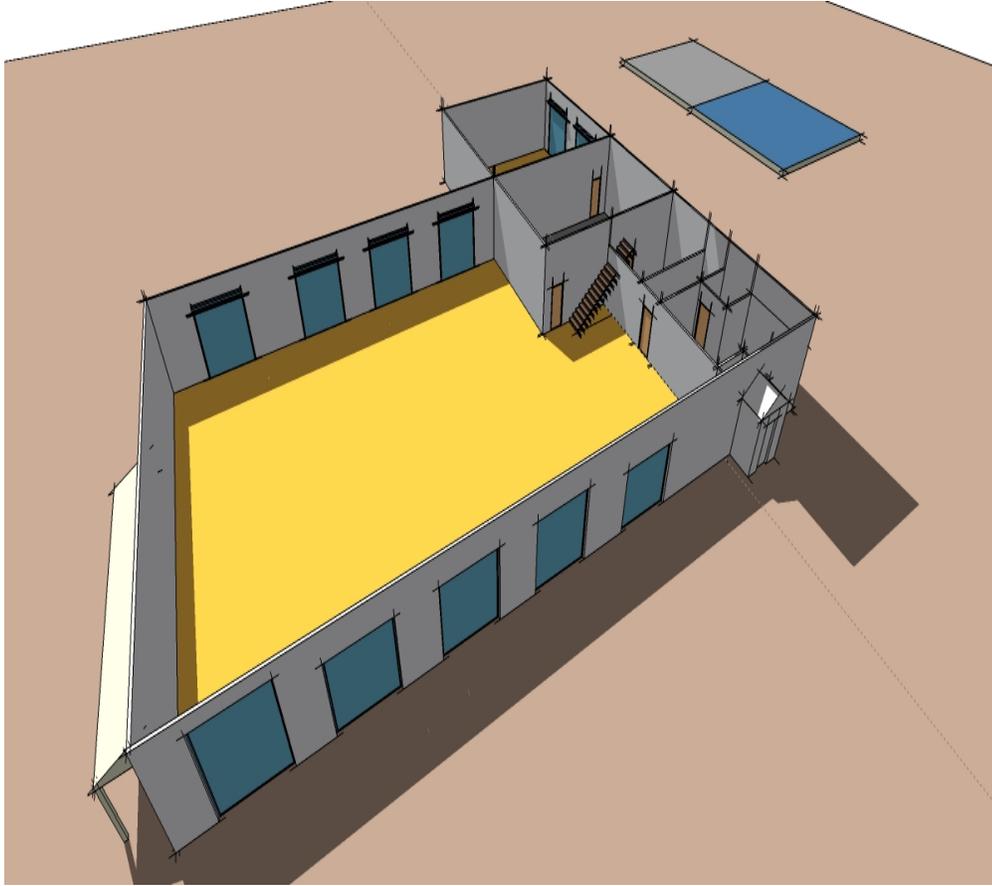


Figure 21 - Existing DPW Building Layout



Figure 22 - Interior of Existing Vehicle Garage

The current facility will need to address the following design and/or code issues in order to assure a modern public works department:

- Adequate space for equipment storage
- Adequate supply storage
- Additional vehicle bays
- On site parking for 30 vehicles
- ADA – men and women toilet rooms
- Adequate space for employee lunch room, lockers and meeting space (expanding staff)

## Primary Building Systems

The following analysis was conducted by our engineers, W.V. Engineering, Inc, and summarizes all the major systems and life-safety code items that will need to be addressed in order to continue safe and prudent operation of the current public works department.

### Electrical Systems

#### Power Distribution

Electrical service includes an underground 400 amp, 3 phase, 4-wire service, located at the south end of the main garage, and is sufficient size to provide anticipated future needs.

Service equipment is located adjacent to the sprinkler entrance and includes a main disconnect switch and residential load center style panel boards for distribution.

Facility is supplied with a 20 KW standby generator, installed in 2000, which presently provide back up power for the entire building. However, the generator rating is not sufficient to backup the entire 400 amp service if the entire service was fully loaded.

#### Branch Circuitry

Distribution wiring within the building is predominantly original (1970 era) with additional wiring added to serve new or relocated equipment.

Distribution panel boards located in the shop/repair area, which are wall mounted, presently have other equipment located in front of the panels, and therefore do not comply with current NEC code (Refer to Figure 23).

Ground fault circuit protection for receptacles located in the garage area need to be retrofitted or replaced with ground fault protection for personnel safety and NEC codes. Some conduit work needs to be reattached or re-supported in compliance with current NEC codes.



Figure 23 Existing Electrical Distribution Systems

## Lighting

Interior lighting throughout the facility was replaced in 2003 through a PSNH program.

Exterior lighting includes fixtures mounted on the building and yard pole mounted fixtures. Exterior lighting coverage appear not to be sufficient given the level of night time activities associated with winter plowing, etc. Public Works staff reports indicate lighting is sufficient with truck headlights are in operation. Recommend a review of night time lighting requirements in order to eliminate glare and reduce energy consumption.

## Fire Alarm and Sprinkler System

The fire alarm system within the building is a self contained system with modern ADA compliant horns and strobes. However, placement and location of devices is non compliant with current NFPA 72 code requirements to ensure complete building coverage.

Building mounted heat detectors are installed in only some areas. Recommend a complete fire alarm review and upgrade as part of a comprehensive renovation of the building.

## Communication System

Communication wiring includes an older phone service entrance which appears to be original with the building. Additional communications, phone and data wiring have been added over time.

## Mechanical Systems

### Heating System

The primary heating plant is new HB Smith oil fired boiler; model 19H, 5 sections and rated output of 500 MBH.

The building appear to be one zone with distribution pump positioned on the supply main with high and low combustion air openings and a backflow prevention device located on the makeup water connection.

Four 270 gallon (nominally 1,000 gallons total) above ground diesel tanks (Refer to Figure 24 on the next page), located adjacent to the unrated exterior shed, provide a minimum fuel supply for the facility and town uses. Greater storage capacity, perhaps 4,000 to 5,000 gallons, would allow the Town to take advantage of larger 'drops' and bulk fuel prices from vendors. Similarly, should the Town try use of biodiesel; the minimum delivery quantity is 4,000 gallons. (Appropriate containment features will be needed with bulk storage tanks.)



Figure 24 Existing Oil Fuel Tanks

The garage area of the building is primarily heated with hot water horizontal unit heaters and with a waste oil heater located in the shop area. The office and break areas are equipped with baseboard radiation and through the wall air conditioners.

### Plumbing

Existing plumbing fixtures do not comply with ADA requirements and are in poor condition. Currently, the existing kitchen sink has been used as a janitor mop sink; this violates building codes. The building is served with a combination sprinkler and domestic water service entrance. The building has a 1 inch domestic water service and a 6 inch sprinkler main. Backflow prevention is not provided (Refer to Figure 25).



Figure 25 – Existing Plumbing Fixtures and Sprinkler Riser

## Fire Protection

Building is fully sprinklered with a complete system and has a wet type alarm valve. (Refer to Figure 25).



Figure 26 - Existing Hazardous Materials Storage

## Recommendations

### Needs and Wants

For the purposes of this study, **Wants** are defined as improvements and changes that would enhance the operation and function of the building and make it a more desirable asset for the Peterborough Public Works Department. These suggestions and recommendations would receive lower priority when allocating scarce resources.

**Needs** are defined not solely as requirements for change mandated by law (or building codes), but also as improvements and changes that are compelling in their logic and would be a positive response to a clearly and strongly held complaints with the existing facility. Without addressing these **Needs**, the building will continue to deteriorate, frustrate many and fall short of its full potential to serve the needs of the Peterborough Public Works Department.

If the option to build new on a new site is NOT pursued the list of Needs and Wants are as follows:

Potentially, the list of **Needs** includes:

- Additional Garage Space for town vehicles
- ADA – Install horn and strobes per current NFPA 72 code requirements
- Increase Capacity of Fuel Dispensing Tanks – provide spill contaminant protection
- At least one bulk storage tank (4,000 gallon minimum) at cost of \$40-\$50,000

Potentially, the list of **Wants** includes:

- Upgrade exterior lighting to provide coverage to support night time activities
- Ground fault circuit protection located in the Garage
- Replace existing plumbing fixtures
- Provide backflow prevention for existing sprinkler and domestic water service
- Install a janitor room with a dedicated mop sink



## Water and Wastewater Department

### Characteristics of Existing Facilities

The Water/Utility Division manages the city's water and wastewater system and is responsible for overseeing wastewater facilities, including the distribution and collection systems, monitoring town wells and sewer system. Water/Utility division staff is also responsible for repairing fire hydrants and breaks in the water and sewer system.



Figure 27 - Existing Waste Water Treatment Plant

The current facility occupied by the Peterborough Waste Water Department, as part of the Public Works Department, was built in 1971 (Refer to Figure 27). The Director of Public Works has stated the current facility will need to be replaced in the near future in order to meet state standards.

The Water Department shares facilities with the Wastewater Treatment Plant and stores parts and equipment at other Town Departments (including the Police Department, Town Garage and the small Hunt Road building).

The current waste water facilities, including storage at the Hunt Road Building and garage space at the current police garage, contains approximately 2,855 net square feet. About 70% of the net floor space, or 2,800 square feet, is directly used for specific functions for pump and well equipment, electrical transformers, lab and lunch room, staff areas and storage (Refer to Figure 28 on the next page).

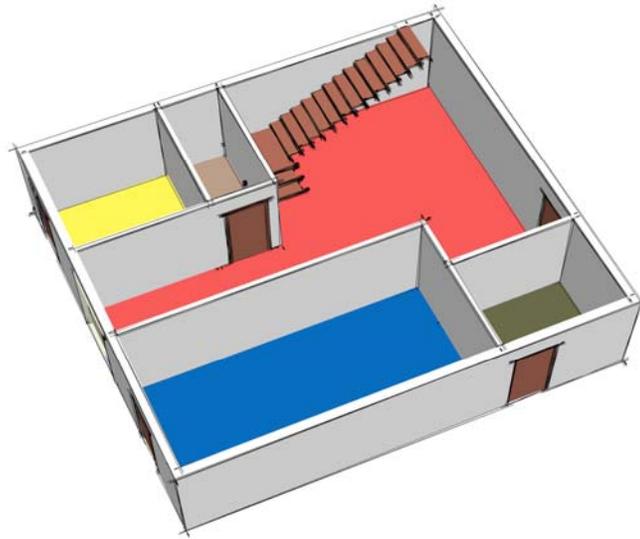


Figure 28 Existing Floor Plan Waste Water Treatment Plant



Figure 29 - Existing Storage Facilities

The current facility will need to address the following design and/or code issues in order to assure a modern public works department.

Potentially, the list of **Needs** includes:

- Staff lockers and shower room (employee health)
- Adequate administrative work space and storage for current and future staff
- Covered garage storage for (6-8) vehicles (protection from the weather)
- Centralized storage of equipment and supplies (staff efficiency)
- Ability to expand facilities as future growth in town services occurs



Figure 30 – Main Recreation Offices

### Department Description

The Recreation Department is charged with “providing the best possible recreation experience for all children, teens, adults and senior citizens in the Town of Peterborough.” The Department employs two full-time and two part-time office workers, two full-time and four seasonal maintenance workers, and up to 50 seasonal program-related staff.

The Department considers itself in the midst of a transition as the demand for services grows. Currently office and maintenance work is on a Monday-Friday schedule, but the Department is considering evening and weekend hours to meet needs.

Immediate needs expressed by the Department include secure storage space and indoor program space – primarily a gymnasium and/or ice arena,

Neighborhood parks, an indoor pool facility, and enlarged and expanded playing field space are on the Departments list of future needs.

### Existing Site Uses and Zoning Considerations

The Recreation Department property is located in the General Residence District.

The minimum lot size requirement for the General Residence District is 20,000 square feet for a one- or two-family residence. This parcel is approximately 9 acres. Approximately 1% of the lot is occupied by the structures, and 3% covered by impermeable materials.

Potential for future development: Current zoning designation allows only residential development and some limited non-residential development by special exception of the Board of Adjustment. Currently there is no discussion with the Planning Board about changing the zoning designation for this parcel.

### Characteristics of Recreation Main Offices

The Beaver Jutras Recreation Building used by the Peterborough Recreation Department was built in 1995 as a relatively small and economical structure to provide for both office needs and meeting space (Refer to Figure 31). The location of the building and the adjacent storage shed prohibits the expansion of ball fields on either side of the building.

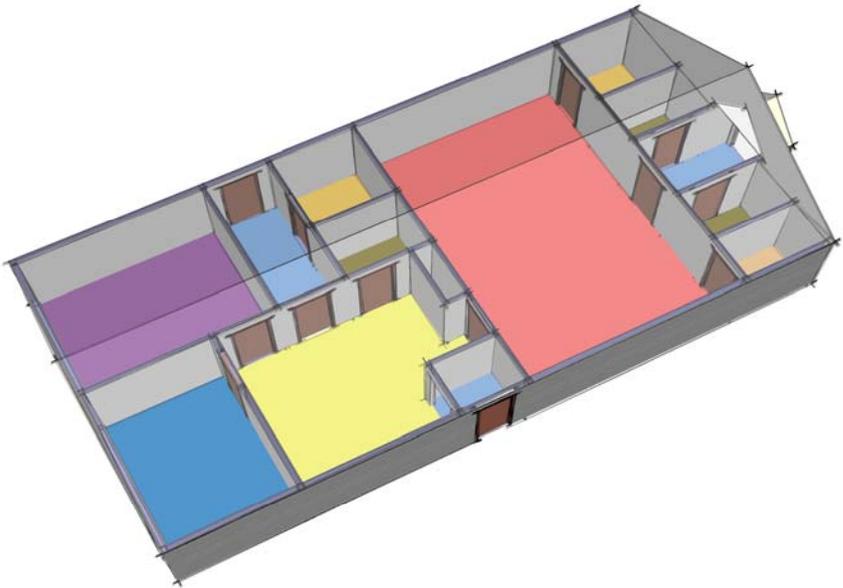


Figure 31- Existing Floor Plan Beaver Jutras Recreation Building

### Building and Fire Codes

Weller & Michal Architects reviewed key elements (primarily fire and life-safety related) of the ICC 2000 International Building Code<sup>9</sup> (IBC2000) and the 2003 Life Safety Code (NFPA 101) as they affect the current facility used by the Peterborough Recreation Department.

#### Size Limits Established by Fire and Building Codes

Under codes, the maximum legal size of a building is dependent on how a building is constructed and what it is used for.

<sup>9</sup> IBC2000, with amendments, is the current Building Code applicable throughout the state of New Hampshire.



The current Main Recreation Offices is classified as Construction Type V-B (combustible exterior walls-unprotected) and a Business Occupancy. The current building size is under the total maximum allowable building area (7,200 square feet plus an additional 3,600 square feet (street frontage increase) for a total maximum allowable area of 10,800 square feet. A two story building is allowed.

#### Codes Issues

Current building does not present any major code violations or areas of concern which impact life safety and/or egress code requirements.

#### ADA Accessibility:

Current building complies with ADA accessibility requirements for publicly owned facilities (title II).

#### Existing Space Uses

The Main Recreation Building occupied by the Peterborough Recreation Department dates from 1995 and contains approximately 1,600 net square feet on one floor. About 91% of the net floor space, or 1,466 square feet, is directly used for specific functions for public use, administrative, conference room, public toilets and storage. The balance of the area is circulation space and mechanical rooms. Refer to Facility Needs Assessment by Department for a complete breakdown of space by specific function.



Figure 32 - Recreation Center Community Entrance and Equipment Storage Shed

The current facility will need to address the following design issues in order to effectively administer a community recreational program as outlined by the director:

- Adequate indoor program space to accommodate new programs
- Storage space for outdoor equipment, vehicles and weather sensitive supplies

## Primary Building Systems of Main Recreation Offices

The following analysis was conducted by our engineers, W.V. Engineering, Inc, and summarizes all the major systems and life-safety code items that will need to be addressed in order to continue safe and prudent operation of the current recreation department.

### Electrical Systems

#### Power Distribution

Electrical service is overhead from PSNH pole to an electrical room which enters from the outside of the building. The building has a 240 volt, 100 ampere service.

#### Branch Circuitry

Receptacles throughout the building appear to be adequate for the present use with some use of extension cords. Additional receptacles have been added.

In general, electrical system for the facility appears to be in good to excellent condition.

#### Lighting

Current lighting throughout the facility is typically surface mounted wrap around style fixtures.

#### Fire Alarm and Sprinkler System

Building does not include an ADA fire alarm system or sprinkler system in order to comply with current NFPA and ADA requirements.

#### Communication System

Communication system, including telephone wiring and CAT 5 wiring, appear to be in good serviceable condition.

### Mechanical Systems

#### Heating System

Current heating system in a forced hot air / oil fired system

Heating distribution system is ducted in the attic

Oil storage 270 gallons is located in the Mechanical Room

Cooling system in the office area is a DX system

#### Plumbing System

Size of water service to the building is unknown.

Fixtures in Men and Women public toilet rooms are tank type water closets and wall hung lavatories. Fixtures appear to be in good condition and ADA compliant.

### Characteristics of Existing Pool Building

The in ground public swimming pool was built in 1936. The current Pool Building was built in the late 1950's to replace the original, and renovated in 1993. The building is used by the Peterborough Recreation Department as a multi purpose building. The building contains approximately 2,740 net square feet on one floor. Half the building is used year-round for Arts and Crafts and other programs. The other half is not used in the winter when the pool is closed (Refer to Figure 33 and Figure 34).



Figure 33 - Existing Arts and Crafts / Bath House Facilities

About 95% of the net floor space, or 2,375 square feet, is directly used for specific functions. The Arts and Crafts portion of the building contains 1,152 square feet for recreation along with public toilets, snack bar and storage. The remainder of the building is the Bath House with public toilet rooms/showers, changing rooms, and storage. The balance of the area is circulation space and mechanical rooms. Refer to Facility Needs Assessment by Department for a complete breakdown of space by specific function.

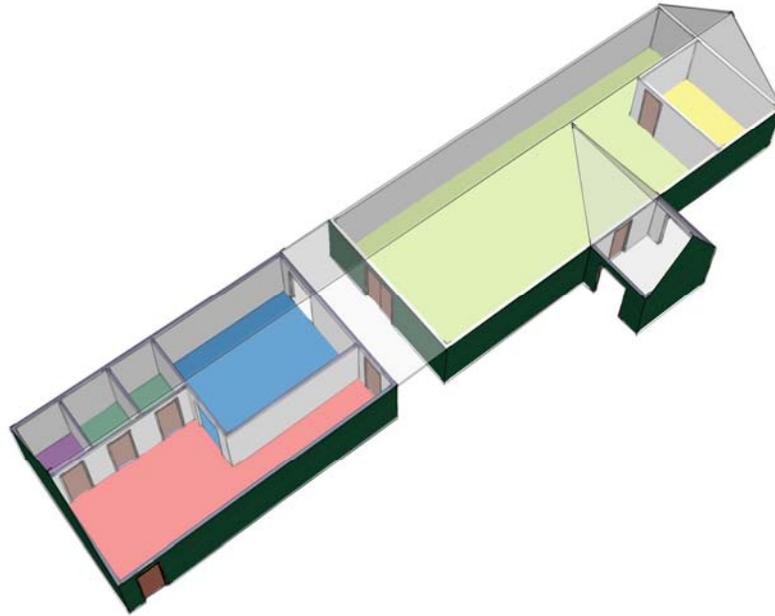


Figure 34- Existing Floor Plan Recreation & Crafts Area and Pool Changing Rooms



Figure 35 - View of Existing Arts & Crafts Area and Toilet Rooms



Figure 36 - View of Existing non ADA compliant Plumbing in Bathhouse

Pool's locker and shower rooms do not comply with current ADA regulations (Refer to Figure 36 above)

Pool's underground pump room was constructed in 1936 and has outlived its useful life in context with today modern pool equipment (Refer to Figure 37 below).



Figure 37 - Existing Pump Room and Pool Equipment

## Primary Building Systems of Existing Recreation Pool Facilities

The following analysis was conducted by our engineers, W.V. Engineering, Inc, and summarizes all the major systems and life-safety code items that will need to be addressed in order to continue safe and prudent operation of the current swimming pool facilities

The in-ground swimming pool, and underground pump room, which were officially opened in 1936, have all outlived their useful life in comparison with today modern pool equipment, facility design and ADA Guidelines. The last major equipment installation dates from 1965.

## Electrical Systems

### Power Distribution

Electrical service is overhead from PSNH poles to an electrical room. Size of service is unknown.

### Branch Circuitry

Receptacles throughout the building appear to be adequate for the present use with some use of extension cords. Additional receptacles have been added.

In general, electrical system for the facility appears to be in good to excellent condition.

### Lighting

Current lighting throughout the facility is typically surface mounted wrap around style fixtures in fair to poor condition and should be replaced.

Exterior lighting around the pool areas includes pole mounted utility style flood lights and were not viewed at night to confirm effectiveness and glare.

### Fire Alarm and Sprinkler System

Currently the building pool locker rooms and adjacent spaces do not have an ADA approved fire alarm system.

## Mechanical Systems

### Heating System

Current heating and ventilation system is limited in the Arts and Crafts portion of the building and should be replaced. There is NO heating system in the pool Bath House.

### Plumbing System

Size of water service to the building is unknown.

Fixtures in Men and Women public toilet rooms, located in the Arts and Crafts portion of the building, are tank type water closets and wall hung lavatories. Fixtures appear to be in good condition and ADA compliant. However, toilet fixtures in the Bath House are non compliant with ADA requirements (Refer to Figure 36 above).

### Fire Protection

Building is not fully sprinklered

## Recommendations

### Needs and Wants

For the purposes of this study, **Wants** are defined as improvements and changes that would enhance the operation and function of the building and make it a more desirable asset for the Peterborough Recreation Department. These suggestions and recommendations would receive lower priority when allocating scarce resources.

**Needs** are defined not solely as requirements for change mandated by law (or building codes), but also as improvements and changes that are compelling in their logic and would be a positive response to a clearly and strongly held complaints with the existing facility. Without addressing these **Needs**, the building will continue to deteriorate, frustrate many and fall short of its full potential to serve the needs of the Peterborough Recreation Department.

If the option to build new on a new site is NOT pursued the list of Needs and Wants are as follows:

Potentially, the list of **Needs** includes:

- New athletic fields properly sized for competitive competition
- Adequate reception area
- Indoor program space
- ADA – provide full compliance with access requirements for pool facilities with ADA standards
- Life Safety – install complete fire alarm system at Pool
- Replace existing HVAC and ventilating system at Pool building

Potentially, the list of **Wants** includes:

- Space for future recreation staff when programs are expanded
- Additional athletic fields
- Indoor field facility complying with contemporary standards
- Upgrade and repair existing swimming pool
- New Arts and Crafts/Bath House facility

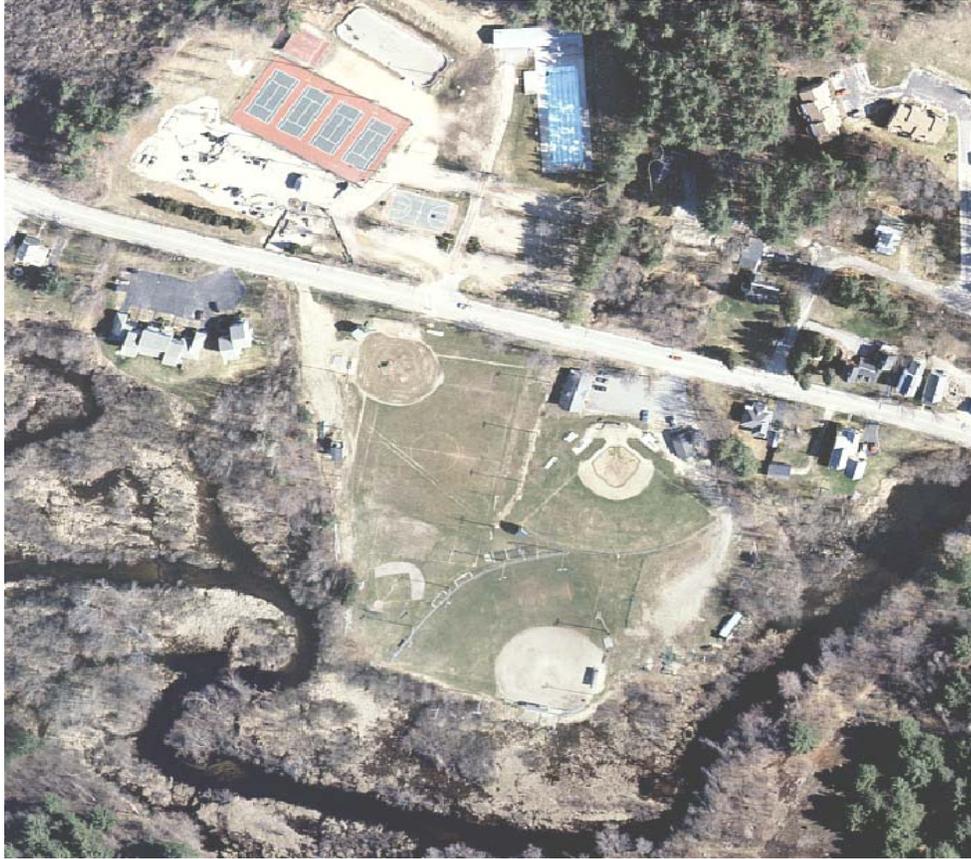


Figure 38 - View of Existing Athletic Fields

## FACILITY NEEDS ASSESSMENT



## Departmental Space Projections

### Needs Assessment

Do current municipal facilities for the Town of Peterborough support the efficient and proper delivery of town services? Can existing structures be renovated and/or expanded to meet current and anticipated near-term needs? Are there alternatives for combining space and program needs of the various town departments? The purpose of any Needs Assessment is to lay a foundation for decision-making. It is important that those managing the assets of the Town of Peterborough strategically consider the best use of the community assets, alternative sites and their historical significance to the community, and long term planning through 2025.

This study established a *Proposed Facility Program* for the five major municipal facilities (Fire, Police, Public Works, Waster Water Treatment and Recreation), which should be considered as a working program document. This program will become one tool as part of a feasibility study to enable the Town of Peterborough to guide planning and evaluate options.

### Data Collection

Through a process of questionnaires and conversation with Department heads, we have tried to establish current information about each Town Department's mission, staffing, work flow and interactions, adjacency preferences to other departments, support space, equipment and storage needs. We have also identified in general terms what works, and what doesn't work well in each department as to assist the process of forecasting future space needs.

Each Town Department head completed a survey form, which is one of the tools applied to identify and define what would be needed in terms of major rooms or function for the department's needs and efficient operation. See the Appendix for copies of completed Departmental Questionnaires.

Floor plans of current facilities used by Fire and Rescue, Police, Public Works, Waste Water Treatment, and Recreation were used to determine Existing Space Allocation totals for each department. See the Appendix for copies of completed Existing Space Allocation sheets.

## Summary of Facility Space Programs

A two-step process was employed for arriving at a Proposed Facility Program for each Town Department.

First, we determined a breakdown of existing space for each municipal facility by major function [staff areas, support spaces, copy and record storage, conference rooms, etc.] This data was analyzed and tabulated through a process of preparing reference plans and computing square footages of each existing facility.

The Total Existing Space Allocation for the five Peterborough Municipal departments is about 33,000 square feet, as indicated in Table 1.

Table 1- Summary of Existing Space Allocation

### SUMMARY of Existing Space Allocation PETERBOROUGH MUNICIPAL FACILITIES

Department	SPACE USE CODE							SubTotal	% of total
	PS	SWS	SS	SSO	C	S	BS		
Police	585	1,293	1,116	1,157	846	1,472	380	6,849 SF GFA	21%
Fire & Rescue	50	5,844	352	110	-	1,243	290	7,889 SF GFA	24%
Public Works	-	9,270	393	-	-	245	533	10,441 SF GFA	32%
Waste Water Treatment	-	240	65	80	260	1,360	850	2,855 SF GFA	9%
Recreation	180	1,030	90	2,740	-	762	135	4,937 SF GFA	15%
<b>Total Gross Floor Area</b>	<b>815</b>	<b>17,677</b>	<b>2,016</b>	<b>4,087</b>	<b>1,106</b>	<b>5,082</b>	<b>2,188</b>	<b>32,971 SF GFA</b>	<b>100%</b>
	2%	54%	6%	12%	3%	15%	7%	100%	

- PS** Public Common Space
- SWS** Staff Work Spaces
- SS** Staff Support Spaces
- SSO** Work Spaces for Others
- C** Circulation/Core Factor
- S** Storage
- BS** Building Services

Secondly, from the collected survey instruments, we identified specific departmental and staff needs including required work areas for staffing, conference space, and staff support areas, equipment and record storage, and providing for the special needs of each department.

This information was placed into a Facility Space Program format for projecting a total square footage space requirement for each department. In developing these facility programs and space requirements we applied acceptable industry space standards for facilities for fire and rescue, police, public works, waste water treatment and recreation.

Slightly less than 70,000 square feet of space is recommended for the five departments. This represents a doubling of space overall. The total Proposed Facility Space Program for each Town Department is shown in Table 2.

Table 2 - Proposed Municipal Facility Needs

**SUMMARY of Proposed Facility Space Programs by Department  
PETERBOROUGH MUNICIPAL FACILITIES**

<b>Department</b>	<b>Recommended Facility Size</b>	<b>% of total area</b>	<b>Exist Facility Size</b>
<b>Fire &amp; Rescue</b>	15,863 SF	23%	6,849 SF
<b>Police</b>	11,748 SF	17%	7,889 SF
<b>Public Works</b>	24,726 SF	36%	10,441 SF
<b>Water &amp; Sewer</b>	10,347 SF	15%	2,855 SF
<b>Recreation</b>	6,686 SF	10%	4,937 SF
<b>Total Gross Floor Area</b>	69,371 SF	100%	32,971 SF

Departmental Options

Primary options to meet facility needs for each Department are either to construct new facilities or renovate existing facilities in place. Not all facilities/sites lend themselves to major renovations and expansions; however, as a preliminary identification of options, it was assumed that each existing site could accommodate the necessary redesign/expansion of the building.

A “Projected Facility Program and Project Budget” was prepared for both options for each of the following Town Departments:

- Fire and Rescue
- Police
- Public Works
- Waste Water Treatment Facilities
- Recreation Facilities

Building construction budgets were arrived at by computing current 2005 project costs for similar facilities through Means Cost Estimator, reviewing project costs from recently completed municipal facilities, and reviewing Cost Summary of New Hampshire data for projects being or recently completing the bidding process.

Please note that our project cost research does not include accurate figures for TOTAL CONSTRUCTION COSTS. Cost estimates for fixed equipment and site work can vary significantly depending upon the nature of the facility and the proposed project site. Our analysis



uses a percentage of the Total Building Costs to assist in establishing reasonable and likely costs for these additional cost areas.

In all cases we have provided both a Total Construction Costs and Total Project Costs to assist in financial planning and allocation of resources.

FIRE and RESCUE – OPTION 1 (new facility)

Option One assumes a new facility with a program area of 15,863 square feet is constructed on a suitable building site. The facility program (Refer to Table 3) is based on an analysis of the existing facility, information provided by Chief Lenox and applying planning standards from comparable municipal facilities.

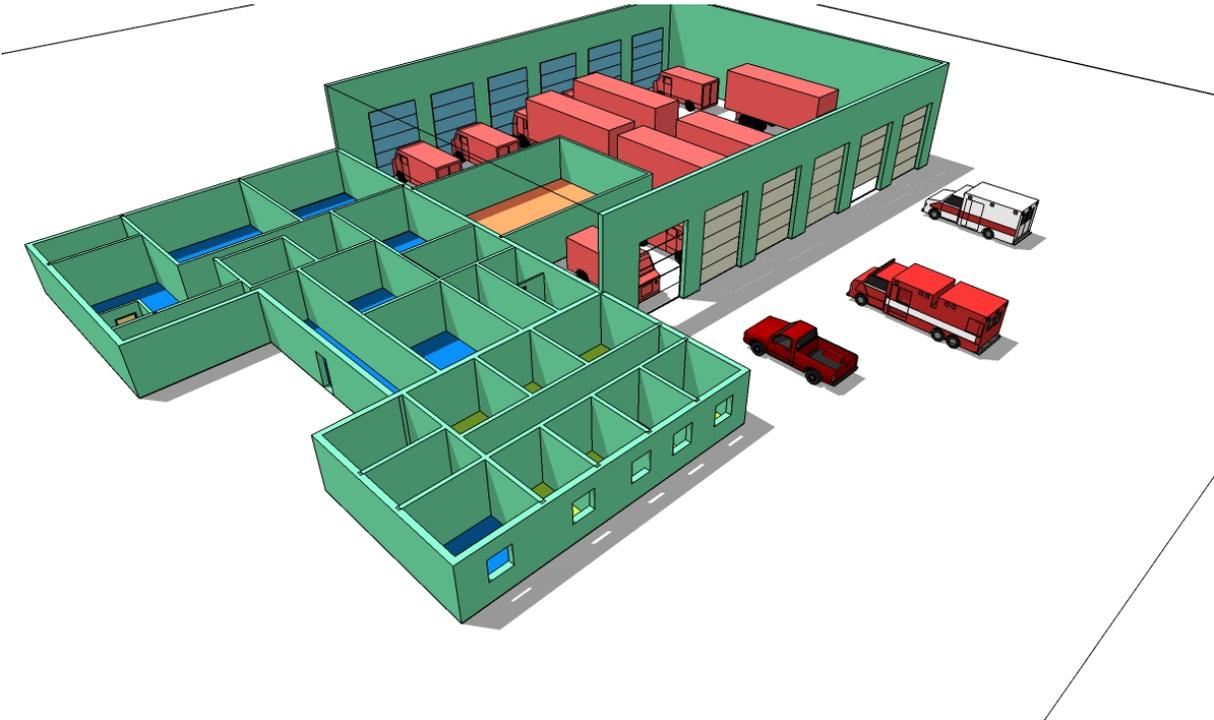


Figure 39 - New Fire Station Option 1

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **FIRE and RESCUE - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

**FACILITY PROGRAM**

Major Functional Areas	Description	Notes	Proposed Area
Fire Apparatus Garage	vehicle storage		6,920
Fire Fighter	support spaces for fire fighters		1,770
Fire Equipment Storage	equipment storage		1,801
Administrative	offices and storage		940
Training	meeting space		840
Building Services	mechanical & electrical		420
<b>Total Program Area (Net Square Foot)</b>			<b>12,691</b>
	Wall and Chase Factor	10%	1,269
	Circulation Factor	5%	635
	Schematic Design SF Factor	10%	1,269
<b>Subtotal of Adjustment Factors</b>			<b>25%</b>
			<b>3,173</b>
<b>Gross Floor Area</b>			<b>15,863</b>

**Project Budget Summary**

Construction Description	Cost/SF	Proposed Costs
Building Shell and Finishes	\$80	\$1,269,050
Masonry	\$25	\$396,578
Equipment	7612 \$10	\$158,631
Plumbing	\$10	\$158,631
HVAC	\$15	\$237,947
Electrical	\$20	\$317,263
<b>Means Cost Index (Median Construction)</b>	<b>\$160</b>	<b>per SF</b>

**Project Summary of ALL Costs**

A	Building Costs		<b>\$2,538,100</b>
B	Fixed Equipment (% of A)	8%	\$203,048
C	Site Development Costs (% of A)	12%	\$304,572
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$3,045,720</b>
E	Moveable Furniture & Equipment (% of A)	5%	\$152,286
F	Professional Fees (% of D)	12%	\$365,486
G	Contingencies/Inflation (% of D)	10%	\$304,572
<b>TOTAL PROJECT COSTS</b>			<b>\$3,868,064</b>

Table 3 - Project Budget for New Fire and Rescue Facility



FIRE and RESCUE – OPTION 2 (renovated facility)

Option Two assumes the existing fire and rescue facility could be expanded at its current location by construction a new Apparatus Garage and renovating the remainder of the building in order to comply with the same program as required for a new facility (Refer to Table 4). This Option was calculated to establish building renovation costs – the site of the existing Fire Station does not support such an expansion, and so expanding the current facility is not recommended.

PROJECTED FACILITY PROGRAM & PROJECT BUDGET

FACILITY **FIRE and RESCUE - Renovated Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

FACILITY PROGRAM			
Major Functional Areas	Description	Notes	Proposed Area
Fire Apparatus Garage	vehicle storage		6,920
Fire Fighter	support spaces for fire fighters		1,770
Fire Equipment Storage	equipment storage		1,801
Administrative	offices and storage		940
Training	meeting space		840
Building Services	mechanical & electrical		420
<b>Total Program Area (Net Square Foot)</b>			<b>12,691</b>
	Wall and Chase Factor	10%	1,269
	Circulation Factor	5%	635
	Schematic Design SF Factor	10%	1,269
<b>Subtotal of Adjustment Factors</b>			<b>25%</b>
			<b>3,173</b>
<b>Gross Floor Area</b>			<b>15,863</b>

Project Budget Summary				
	Construction Description		Cost/SF	Proposed Costs
	Renovate Existing Building	7900	\$45	\$713,841
	New Apparatus Garage (Shell & Finishes)	7612	\$110	\$837,320
	Equipment		\$5	\$38,060
	Pllumbing		\$6	\$45,672
	HVAC		\$12	\$91,344
	Electrical		\$18	\$137,016
	<b>Means Cost Index (Median Construction)</b>		<b>\$151</b>	per SF average

Project Summary of ALL Costs

A	Building Costs (New Construction + Addition)			<b>\$1,863,253</b>
B	Fixed Equipment (% of A)		5%	\$93,163
C	Site Development Costs (% of A)		10%	\$186,325
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$2,142,741</b>
E	Moveable Furniture & Equipment (% of A)		5%	\$107,137
F	Professional Fees (% of D)		12%	\$257,129
G	Contingencies/Inflation (% of D)		10%	\$214,274
	<b>TOTAL PROJECT COSTS</b>			<b>\$2,721,280</b>

Table 4 - Project Budget for Renovated Fire and Rescue Facility



POLICE STATION – OPTION 1 (new facility)

Option One assumes a new facility with a program area of 11,748 square feet erected on a suitable building site. The facility program (Refer to Table 5) is based on an analysis of the existing facility, information provided by Chief Guinard and applying planning standards from comparable municipal facilities (Refer to Figure 40 and Table 5.)

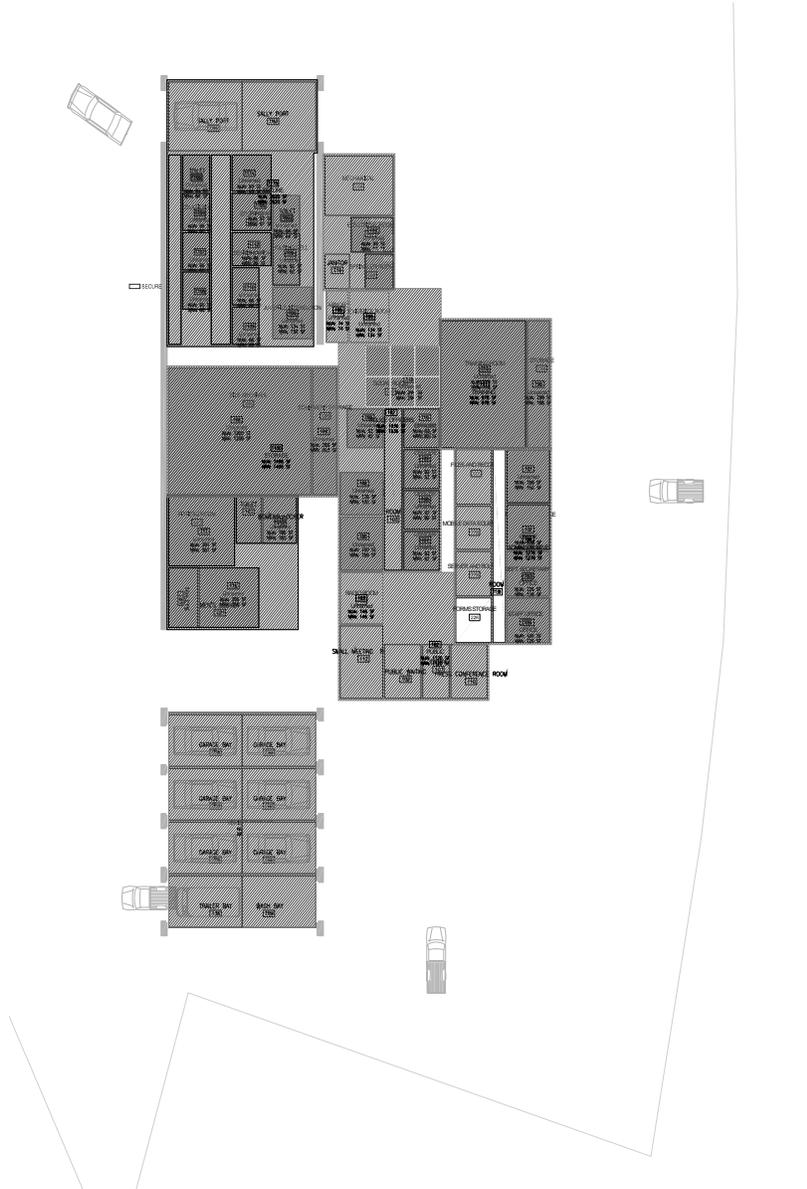


Figure 40 - New Police Department Facility

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **POLICE STATION - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>Facility Program</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
Public	general public functions		673
Administrative	support staff & record keeping		825
Police Officers	investigative & police matters		2,283
Seminars-Training	officers		840
Juveniles Holding Areas	private separate area from adults		328
Adult Booking & Holding Area	secure area		776
Storage	equipment & long term records		1,470
Building Services	mechanical & electrical		441
Sally Port	secure area for detainee transfer		525
<b>Total Program Area (Net Square Foot)</b>			<b>8,160</b>
	Wall and Chase Factor	5%	408
	Circulation Factor	10%	816
	Schematic Design SF Factor	10%	816
<b>Subtotal of Adjustment Factors</b>			<b>2,040</b>
<b>Projected Gross Floor Area Required</b>			<b>10,200</b>

Police Vehilces Storage	vehicle storage		1,548
			<b>11,748</b>

<b>Project Budget Summary</b>			
	<b>Construction Description</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>
	Building Shell and Finishes	\$90	\$918,028
	Masonry	\$25	\$255,008
	Equipment	\$10	\$102,003
	Plumbing	\$14	\$142,804
	HVAC	\$14	\$142,804
	Electrical	\$22	\$224,407
	<b>Means Cost Index (Median Construction)</b>	<b>\$175</b> per SF	
	Police Vehicle Garage	\$100	\$154,800

**Project Summary of ALL Costs**

A	Building Costs	\$165	<b>\$1,939,855</b>
B	Fixed Equipment (% of A)	5%	\$96,993
C	Site Development Costs (% of A)	10%	\$193,985
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$2,230,833</b>
E	Moveable Furniture & Equipment (% of A)	1%	\$19,399
F	Professional Fees (% of D)	12%	\$267,700
G	Contingencies/Inflation (% of D)	10%	\$223,083
<b>TOTAL PROJECT COSTS</b>			<b>\$2,741,015</b>

Table 5 – Project Budget New Police Station



POLICE STATION – OPTION 2 (renovated facility)

Option Two assumes the existing police facility is expanded at its current location by constructing new additions and renovating portions of the existing building in order to comply with the facility program (Refer to Figure 41 and Table 6).

The renovation would meet programmed needs and include new sally-port, new juvenile holding facilities, new squad room and new community/training room. Additional office space would be added in a north-side wing.

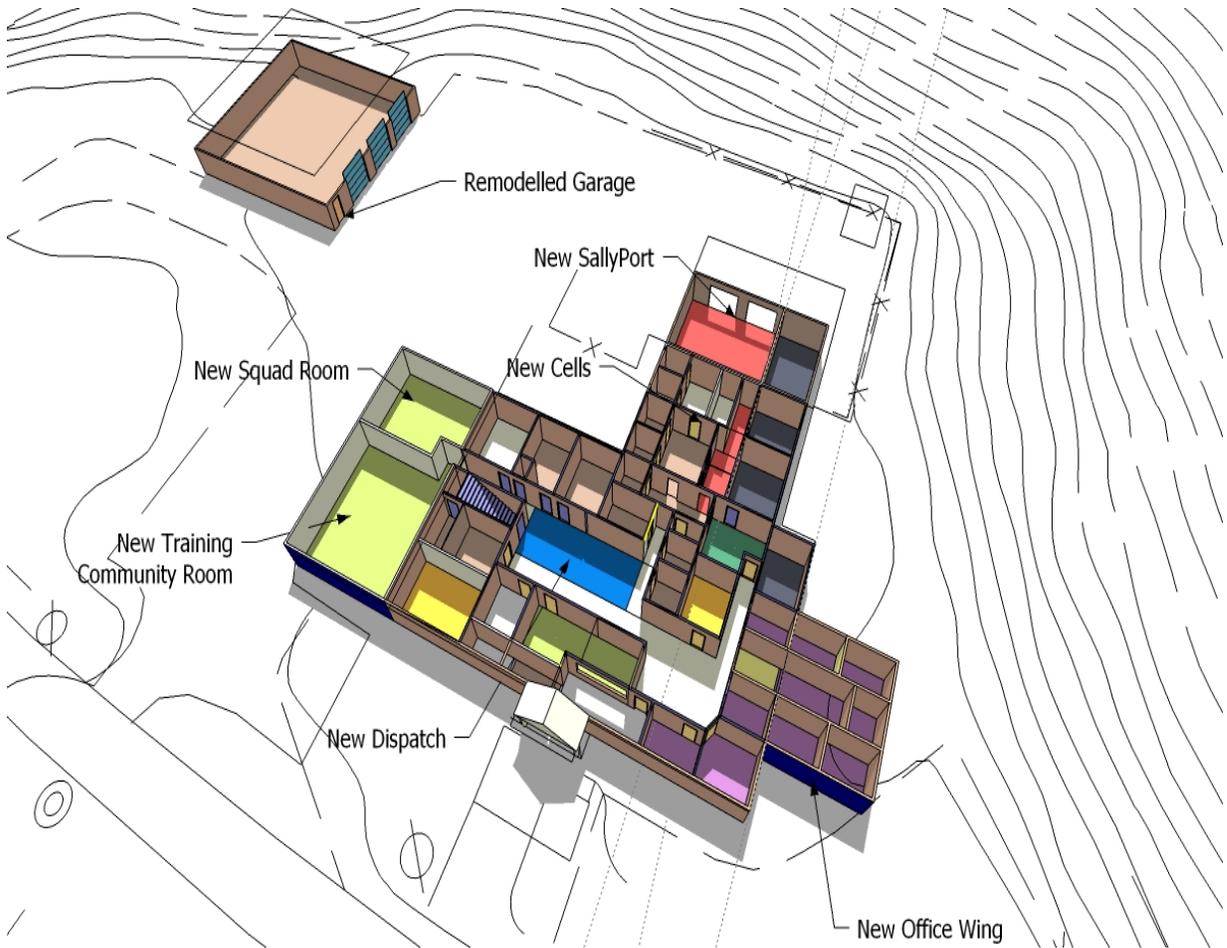


Figure 41 - Police Expanded on Existing Site

FACILITY **POLICE STATION - Renovated Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>Facility Program</b>				
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>	
Public	general public functions		673	
Administrative	support staff & record keeping		825	
Police Officers	investigative & police matters		2,283	
Seminars-Training	officers		840	
Juveniles Holding Areas	private separate area from adults		328	
Adult Booking & Holding Area	secure area		776	
Storage	equipment & long term records		1,470	
Building Services	mechanical & electrical		441	
Sally Port	secure area for detainee transfer		525	
<b>Total Program Area (Net Square Foot)</b>			<b>8,160</b>	
	Wall and Chase Factor	5%	408	
	Circulation Factor	10%	816	
	Schematic Design SF Factor	10%	816	
<b>Subtotal of Adjustment Factors</b>			<b>2,040</b>	
<b>Projected Gross Floor Area Required</b>			<b>10,200</b>	
Police Vehicules Storage	vehicle storage		1,548	
			<b>11,748</b>	
<b>Project Budget Summary</b>				
	<b>Construction Description</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>	
	Addition to Exist Building (Shell & Finishes)	1,900	\$80	\$152,000
	Masonry		\$10	\$19,000
	Equipment		\$3	\$5,700
	Plumbing		\$8	\$15,200
	HVAC		\$14	\$26,600
	Electrical		\$20	\$38,000
	<b>Means Cost Index (Median Construction)</b>		<b>\$135</b>	per SF
	Interior Renovations	1,000	\$100	\$100,000
	Sally Port	630	\$120	\$75,600
	Police Vehicle Garage	1,548	\$100	\$154,800
<b>Project Summary of ALL Costs</b>				
A	Building Costs		\$ 50	<b>\$586,900</b>
B	Fixed Equipment (% of A)		5%	\$29,345
C	Site Development Costs (% of A)		5%	\$29,345
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$645,590</b>
E	Moveable Furniture & Equipment (% of A)		5%	\$29,345
F	Professional Fees (% of D)		12%	\$77,471
G	Contingencies/Inflation (% of D)		10%	\$64,559
<b>TOTAL PROJECT COSTS</b>				<b>\$816,965</b>

Table 6 – Project Budget for Renovated Police Department



PUBLIC WORKS – OPTION 1 (new facility)

Option One described a new facility with a program area of 24,800 square feet on a building site to be determined. The facility program (Refer Table 7) is based on an analysis of the existing facility, information provided by Town Engineer Edwin Betz and applying planning standards from comparable municipal facilities.

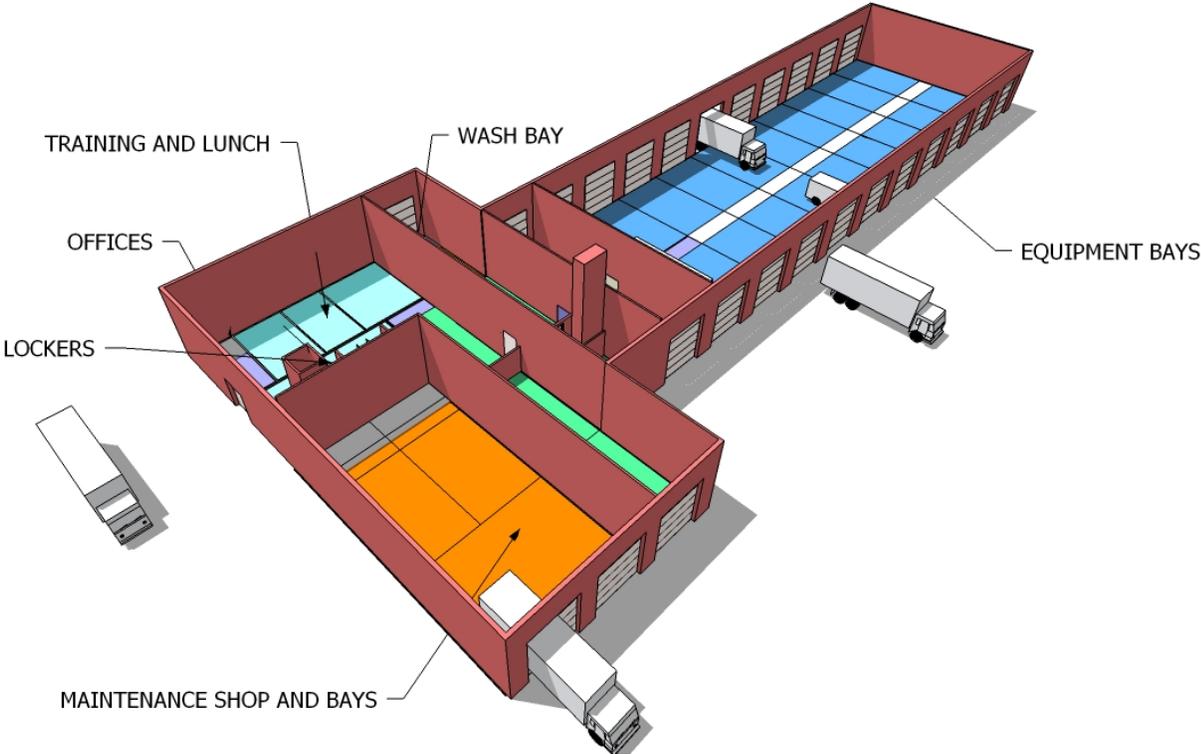


Figure 42 - Proposed Public Works Building

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **PUBLIC WORK - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>FACILITY PROGRAM</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
General	general public functions		690
Staff Areas	staff administrative functions		1,355
Vehicle Garage Bays	vehicle storage		12,915
Maintenance	general work areas		5,712
Building Services	mechanical & electrical		462
<b>Total Program Area (Net Square Foot)</b>			<b>21,134</b>
	Wall and Chase Factor	5%	1,057
	Circulation Factor	2%	423
	Schematic Design SF Factor	10%	2,113
<b>Subtotal of Adjustment Factors</b>			<b>3,593</b>
<b>Gross Floor Area</b>			<b>24,726</b>

<b>Project Budget Summary</b>			
<b>Construction Description</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>	
New Building (Shell and Finishes)	24,726	\$65	\$1,607,203
Masonry		\$10	\$247,262
Equipment		\$5	\$123,631
Plumbing		\$5	\$123,631
HVAC		\$10	\$247,262
Electrical		\$15	\$370,893
Means Cost Index (Median Construction)		\$110 per SF	

**Project Summary of ALL Costs**

A	Building Costs		<b>\$2,719,881</b>
B	Fixed Equipment (% of A)	2%	\$54,398
C	Site Development Costs (% of A)	10%	\$271,988
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$3,046,267</b>
E	Moveable Furniture & Equipment (% of A)	2%	\$54,398
F	Professional Fees (% of D)	8%	\$243,701
G	Contingencies/Inflation (% of D)	10%	\$304,627
<b>TOTAL PROJECT COSTS</b>			<b>\$3,648,993</b>

Table 7 – Project Budget for New Public Works Facility



PUBLIC WORKS – OPTION 2 (renovated facility)

Option Two described expanding the existing public works facility at its current location by construction a new vehicle garage addition and renovating portions of the existing building in order to comply with the facility program (Refer to Table 8).

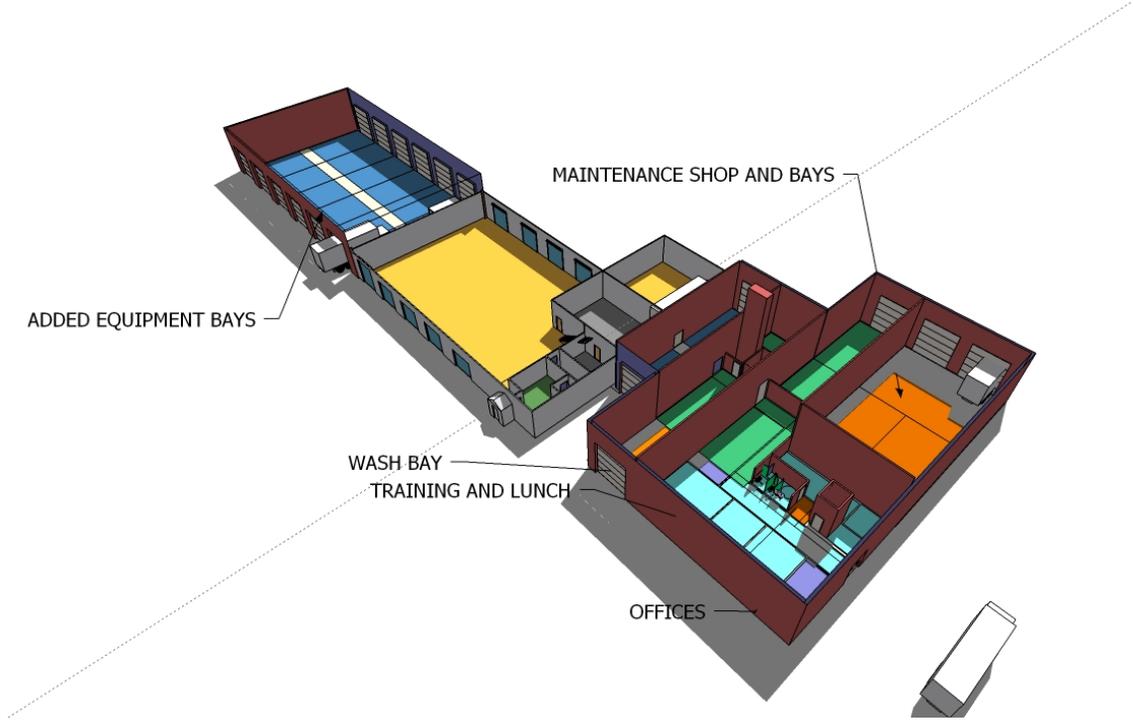


Figure 43 - Public Works Barn Expansion

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **PUBLIC WORK - Renovation**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>FACILITY PROGRAM</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
General	general public functions		690
Staff Areas	staff administrative functions		1,355
Vehicle Garage Bays	vehicle storage		12,915
Maintenance	general work areas		5,712
Building Services	mechanical & electrical		462
<b>Total Program Area (Net Square Foot)</b>			<b>21,134</b>
	Wall and Chase Factor	5%	1,057
	Circulation Factor	2%	423
	Schematic Design SF Factor	10%	2,113
<b>Subtotal of Adjustment Factors</b>			<b>3,593</b>
<b>Gross Floor Area</b>			<b>24,726</b>

<b>Project Budget Summary</b>				
	<b>Construction Description</b>		<b>Cost/SF</b>	<b>Proposed Costs</b>
	New Building Shell and Finishes	14000	\$85	\$1,190,000
	Masonry		\$5	\$123,631
	Equipment		\$3	\$74,179
	Plumbing		\$4	\$98,905
	HVAC		\$7	\$173,083
	Electrical		\$10	\$247,262
	Renovation of Existing Building	10000	\$25	\$250,000
	<b>Means Cost Index (Median Construction)</b>		<b>\$114</b>	<b>per SF</b>
<b>Project Summary of ALL Costs</b>				
A	Building Costs		\$77	<b>\$1,907,060</b>
B	Fixed Equipment (% of A)		2%	\$38,141
C	Site Development Costs (% of A)		5%	\$95,353
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$2,040,554</b>
E	Moveable Furniture & Equipment (% of A)		2%	\$38,141
F	Professional Fees (% of D)		8%	\$163,244
G	Contingencies/Inflation (% of D)		10%	\$204,055
	<b>TOTAL PROJECT COSTS</b>			<b>\$2,445,995</b>

Table 8 - Project Budget Renovated Public Works Facility



WASTE WATER TREATMENT PLANT – OPTION 1 (new facility)

Option One described new facilities with a total program area of 7,500 square feet, which would be constructed on the existing site of the current waste water treatment plant. The facility program is based on an analysis of the existing facility, information provided by Stephen Rheaume and Town Engineer Edwin Betz (Refer to Table 9).

PROJECTED FACILITY PROGRAM & PROJECT BUDGET

FACILITY **WASTE WATER TREATMENT PLANT - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

Facility Program	Description	Notes	1000 200	Proposed Area
<b>Major Functional Areas</b>				
Waste Water Treatment	general functions			1,610
Staff Areas	staff administrative functions			2,237
Building Services	mechanical & electrical			1,155
Storage Facilities	general work areas			1,428
<b>Total Program Area (Net Square Foot)</b>				<b>6,430</b>
	Wall and Chase Factor	5%		321
	Circulation Factor	2%		129
	Schematic Design SF Factor	10%		643
<b>Subtotal of Adjustment Factors</b>			<b>17%</b>	<b>1,093</b>
<b>Gross Floor Area</b>				<b>7,523</b>
Vehicle Garage	vehicle storage			2,825
				10,347
<b>Project Budget Summary</b>				
	<b>Construction Description</b>		<b>Cost/SF</b>	<b>Proposed Costs</b>
Garage Storage Building	Building Shell and Finishes		\$90	254,205
Waste Water Treatment Facility	Building Shell and Finishes		\$80	\$601,825
	Masonry		\$15	\$112,842
	Equipment		\$5	\$37,614
	Plumbing		\$10	\$75,228
	HVAC		\$14	\$105,319
	Electrical		\$20	\$150,456
<b>Means Cost Index (Median Construction)</b>			<b>\$144</b>	per SF
<b>Project Summary of ALL Costs</b>				
A	Building Costs		\$129	<b>\$1,337,489</b>
B	Fixed Equipment (% of A)		25%	\$334,372
C	Site Development Costs (% of A)		15%	\$200,623
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$1,872,485</b>
E	Moveable Furniture & Equipment (% of A)		5%	\$66,874
F	Professional Fees (% of D)		12%	\$224,698
G	Contingencies/Inflation (% of D)		10%	\$187,248
<b>TOTAL PROJECT COSTS</b>				<b>\$2,351,306</b>

Table 9 Project Budget New Waste Water Treatment Plant



RECREATION FACILITIES – OPTION 1 (renovate and expand existing facilities)

Option One involves expanding the existing recreation main offices, building a new storage garage (thereby allowing expansion of Bishop Field) and improving the Public Pool – Recreation Facilities at its current location in order to comply with the facility program (Refer to Table 10). Cost associated with relocating Bishop Field is not included in the overall cost estimate. As part of this option is a potential development of new playing fields (supporting soccer, lacrosse, adult-softball, etc) at the Evans Flat site. An illustration of this potential NEW recreational site for the town is shown Figure 44 below.

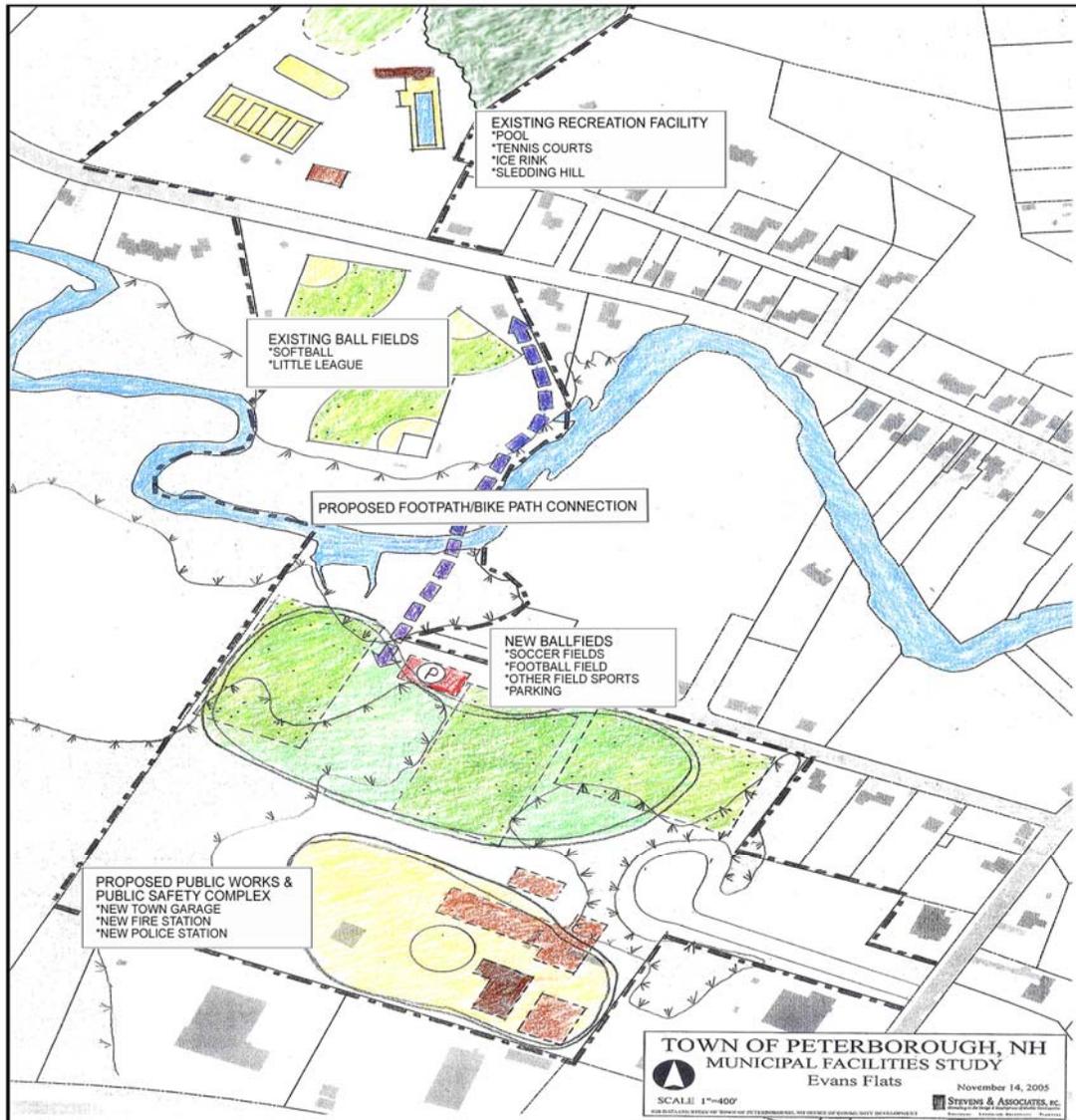


Figure 44 – Proposed Recreation Fields at Evans Flat

The expanded buildings components only (not fields) of this option are based on the following projected facility program and budget.

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **RECREATION DEPARTMENT - Renovate Facilities**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

Facility Program			
Major Functional Areas	Description	Notes	Proposed Area
Recreation Dept Main Offices	general public functions		2,756
Recreation Pool Facilities	pool and recreation space		5,415
Recreation Garage Storage	vehicle storage		2,389
<b>Total Program Area (Net Square Foot)</b>			<b>10,560</b>
	Wall and Chase Factor	5%	528
	Circulation Factor	10%	1,056
	Schematic Design SF Factor	10%	1,056
<b>Subtotal of Adjustment Factors</b>			<b>2,640</b>
<b>Gross Floor Area</b>			<b>13,199</b>

Project Budget Summary				
	Construction Description	SF	Cost/SF	Proposed Costs
Recreation Dept Main Offices	Renovate & Expand Existing Building	1200	\$135	\$162,000
Recreation -Pool Facilities	Renovate & Expand Existing Building	2500	\$90	\$225,000
	Masonry		\$5	\$6,000
	Equipment		\$5	\$6,000
	Plumbing		\$20	\$24,000
	HVAC		\$15	\$18,000
	Electrical		\$18	\$21,600
	<b>Means Cost Index (Median Construction)</b>		<b>\$153</b> per SF	
Recreation Garage Storage Building	New Building (Shell and Finishes)	2986	\$90	\$268,734
Recreation Athletic Fields	Relocate Bishop Field			Not Included
<b>Project Summary of ALL Costs</b>				
A	Building Costs		\$ 109	<b>\$731,334</b>
B	Fixed Equipment (% of A)		2%	\$14,627
C	Site Development Costs (% of A)		6%	\$43,880
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$789,841</b>
E	Moveable Furniture & Equipment (% of A)		2%	\$14,627
F	Professional Fees (% of D)		10%	\$78,984
G	Contingencies/Inflation (% of D)		10%	\$78,984
<b>TOTAL PROJECT COSTS</b>				<b>\$962,436</b>

Table 10 – Project Budget for Expanded Recreation Facilities



RECREATION FACILITIES – OPTION 2 (new and expanded buildings and fields)

Option One involves expanding the existing recreation main offices, building a new storage garage (thereby allowing expansion of Bishop Field) and expanding the Public Pool – Recreation Facilities to include more program space at its current location (Refer to Table 11). Most importantly, this Option is based on the development of new playing fields (supporting soccer, lacrosse, adult-softball, etc.) at the Towns' current sewer lagoon site. An illustration of this potential NEW recreational site for the town is show below.

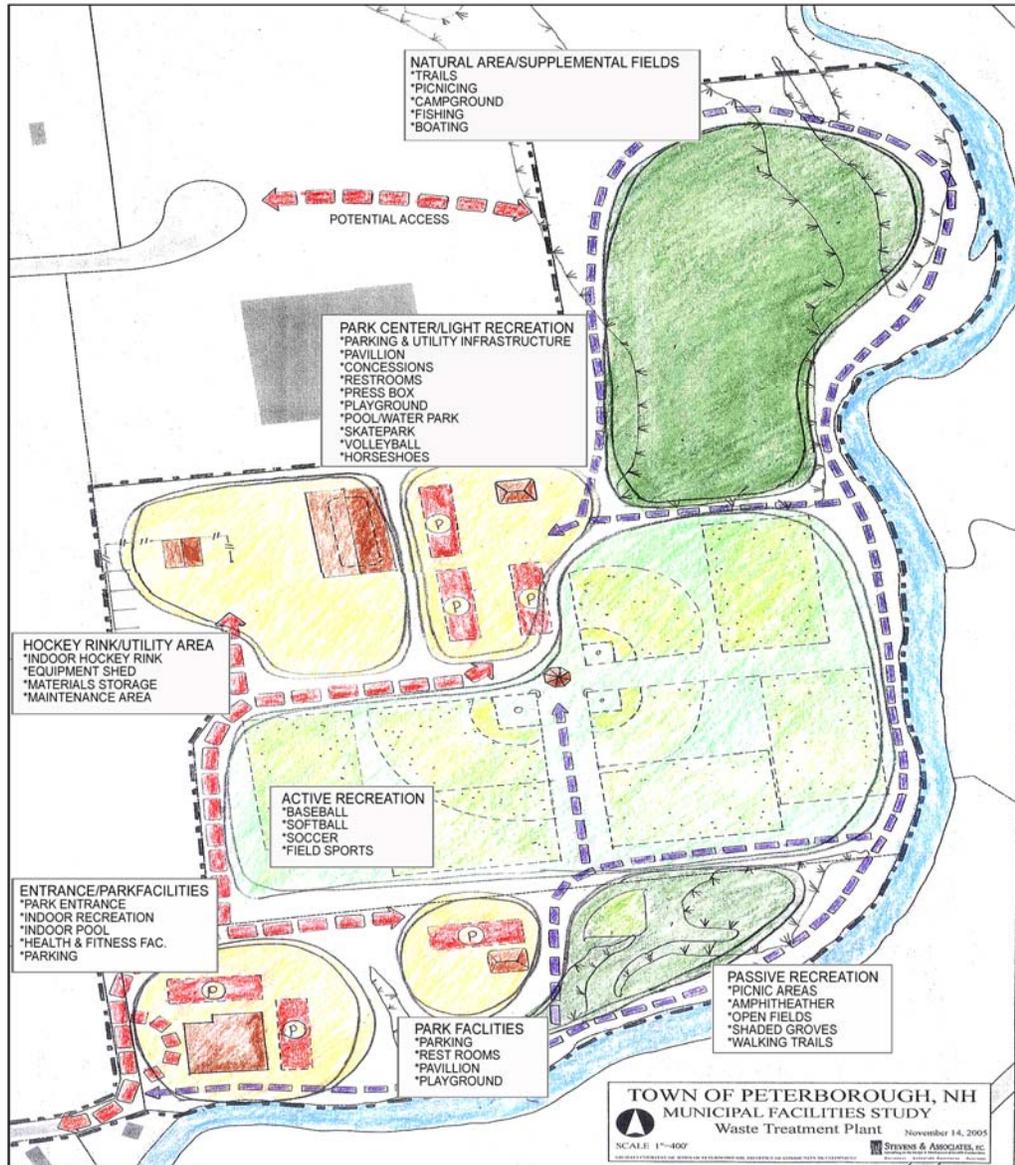


Figure 45 - Proposed Recreation Fields at Sewer Lagoons Site

The expanded buildings components only (not fields) of this option are based on the following projected facility program and budget.

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **RECREATION DEPARTMENT - New Facilities**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

Facility Program			
Major Functional Areas	Description	Notes	Proposed Area
Recreation Dept Main Offices	general public functions		2,756
Recreation Pool Facilities	pool and recreation space		5,415
Recreation Garage Storage	vehicle storage		2,389
<b>Total Program Area (Net Square Foot)</b>			<b>10,560</b>
	Wall and Chase Factor	5%	528
	Circulation Factor	10%	1,056
	Schematic Design SF Factor	10%	1,056
<b>Subtotal of Adjustment Factors</b>			<b>2,640</b>
<b>Gross Floor Area</b>			<b>13,199</b>

Project Budget Summary				
	Construction Description	SF	Cost/SF	Proposed Costs
Recreation Dept Main Offices	New (Building Shell and Finishes)	3445	\$100	\$344,531
	Masonry		\$2	\$6,891
	Equipment		\$2	\$6,891
	Plumbing		\$6	\$20,672
	HVAC		\$12	\$41,344
	Electrical		\$16	\$55,125
	<b>Means Cost Index (Median Construction)</b>			<b>\$138</b> per SF
Recreation -Pool Facilities	New Building (Shell and Finishes)	5415	\$158	\$855,491
Recreation Garage Storage Building	New Building (Shell and Finishes)	2986	\$90	\$268,734
Recreation Athletic Fields	Relocate Bishop Field			Not Included
	New Fields @ Sewer Lagoon			Not Included
<b>Project Summary of ALL Costs</b>				
A	Building Costs		\$135	<b>\$1,599,679</b>
B	Fixed Equipment (% of A)		5%	\$79,984
C	Site Development Costs (% of A)		10%	\$159,968
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$1,839,630</b>
E	Moveable Furniture & Equipment (% of A)		2%	\$31,994
F	Professional Fees (% of D)		10%	\$183,963
G	Contingencies/Inflation (% of D)		10%	\$183,963
<b>TOTAL PROJECT COSTS</b>				<b>\$2,239,550</b>

Table 11 – Project Budget for New and Expanded Recreation Facilities



## Joint-Facility Options

The 2004 Evans Flats Land Use Analysis of the Peterborough Master Plan Steering Committee identified several options for Evans Flats. That Analysis included several scenarios developed with community input, and observed that a final decision regarding Evans Flats depended in part on the conclusions reached from a municipal needs study. Two of the four scenarios (Concept 2, Concept 4) generated in public sessions identified joint municipal facilities on all or part of the town land. Opportunity exists to site new facilities for both the Public Works Department and the Fire Department in the general Evans Flats area, but in a manner that maximizes the potential to use the bulk of the undeveloped Evans Flats parcel for other uses, ideally to be determined by an open community planning process.

The Town should seek to acquire both the existing Armory site and the former car dealership on Elm Street, as shown in Figure 1 - Municipal Facilities Option 1. This would allow the most flexible use of the Evans Flats area, without constraining options. The entire 27 acres would be relatively unconstrained, and an appropriate community planning process could go forward without delaying or awaiting decisions with regard to needed Municipal facilities. Alternatively, consider the frontage along Route 101, as shown in Figure 2 – Municipal Facilities Option 2. Recreational uses of the Evans Flats parcels are compatible with either scenario, and the adjacency of the Department of Public Works could give the Recreation Department needed storage and vehicle maintenance.

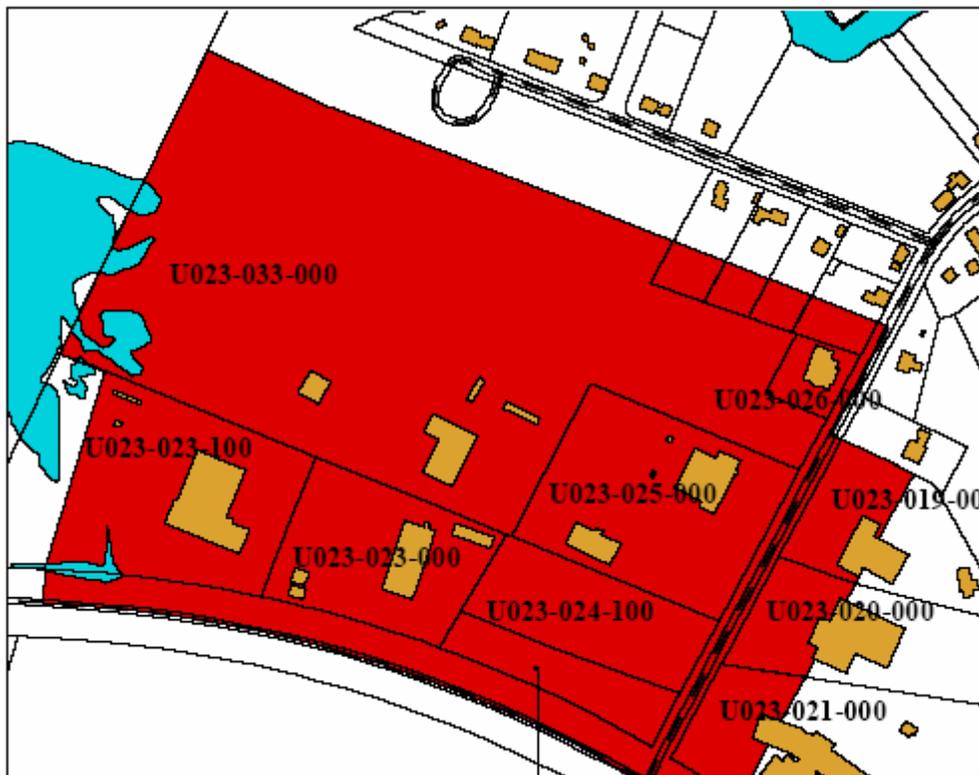


Figure 46 - Commercial Properties at Evans Flats

Joint-Facility Option 1

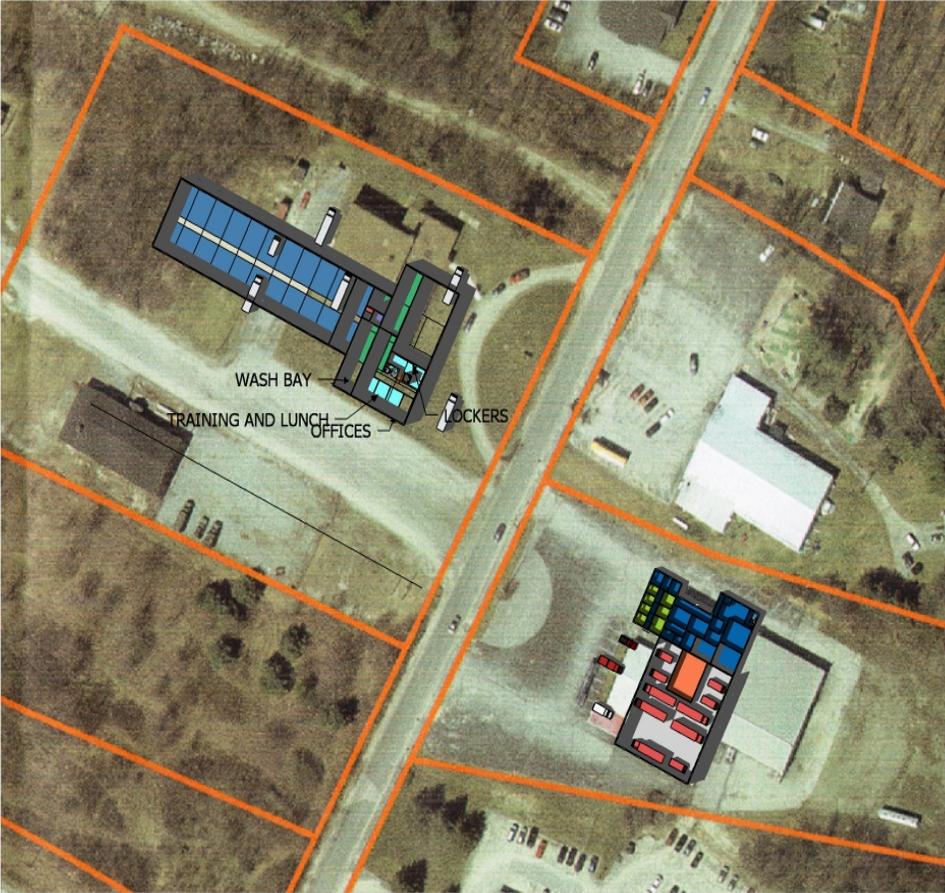


Figure 47 – Proposed Municipal Complex on Elm Street

Joint-Facility Option 2

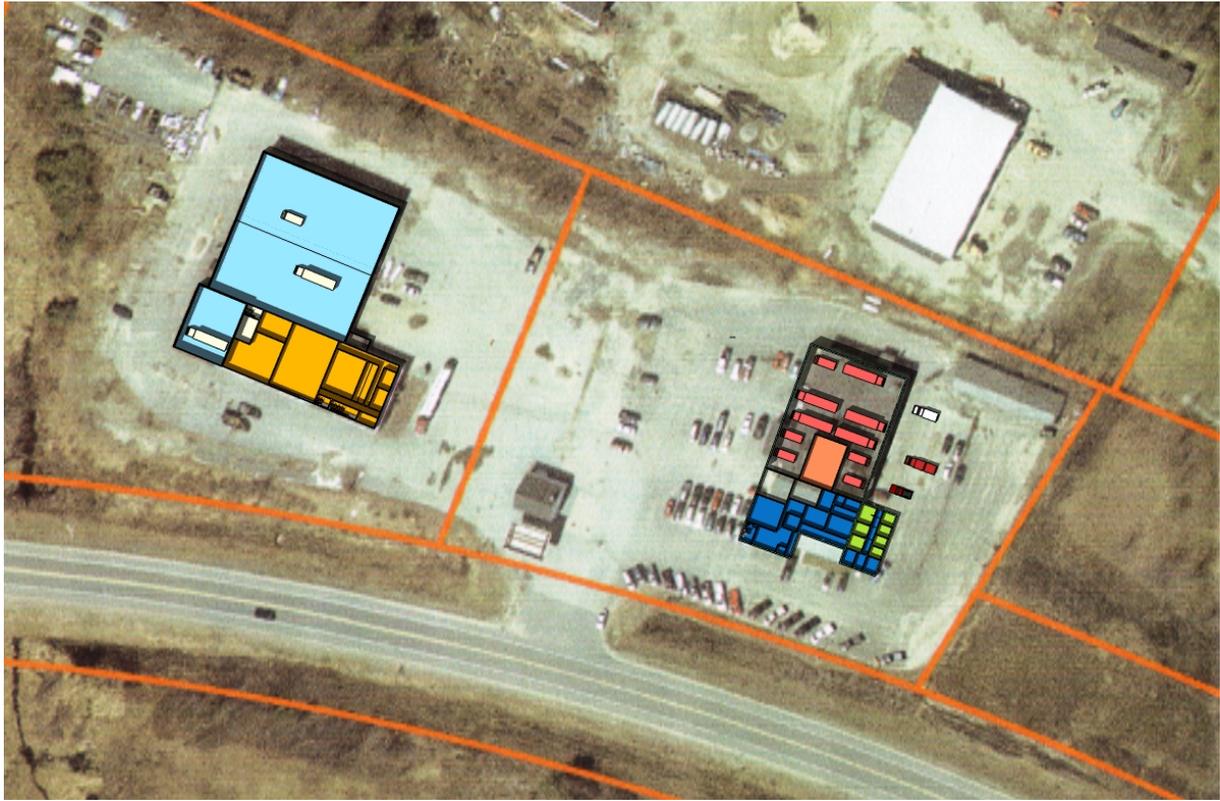


Figure 48 – Proposed Municipal Complex on Highway 101

## Comparable Facilities

Construction costs listed below for each Comparable Facilities represent only construction cost and do not represent the Total Project Cost. Total Construction Costs includes the sum total of building costs, costs for fixed equipment and site development costs. Total Project Costs can include furniture, equipment, and professional fees in addition to the Total Construction Costs. Site acquisition costs are generally not available or reported.

### Fire Stations

New Fire Department Facility located in Southwest Harbor, Maine: facility program of 9,684 square feet including site work and utilities. Construction is reinforced masonry and metal siding; wood truss roof framing with standing seam metal roof system, oil fired radiant heating system. Project is scheduled to begin construction in November 2005.

Cost: \$1,356,000

New Fire Department Facility located in Brunswick, Maine: facility program of 12,400 square feet including site work and utilities. Project is still in the planning phase.

Cost: \$1,900,000 (projected budget)

New Fire Department Facility located in Nashua, New Hampshire: facility program of 20,124 square feet including (3) engine bays, fire equipment storage/cleaning area, offices, dayroom and kitchen, training room, exercise room, library and 10 person dorm room.

Cost: \$4,500,000 (projected budget)

New Fire Department Facility located in Portsmouth, New Hampshire: facility program of 24,400 square feet including site work and utilities. Construction is reinforced masonry, structural steel, metal roofing and metal wall panels.

Cost: \$5,300,000 (projected budget)

### Police Stations

New Police Department facility located in Milford, New Hampshire: facility program of 13,412 square feet including site work and utilities. Construction is reinforced masonry, and includes detention equipment and an elevator. Project is scheduled for completion in October 2005.

Cost: \$2,900,000

New Police Department facility located in Somersworth, New Hampshire: facility program of 13,500 square feet including site work and utilities. Project is still in the planning phase.

Cost: \$3,500,000 (projected budget)

New Police Department facility located in Meredith, New Hampshire: facility program of 11,200 square feet over two stories with 1,200 square feet of unfinished space. Project includes site work and utilities. Construction is wood frame with clapboard siding, asphalt shingles and an oil fired heating system. Project is schedule to begin construction in spring 2006.

Cost: \$2,200,000 (projected budget)

New Police Department facility located in Gilford, New Hampshire: facility program of 15,000 square feet two story building including site work and utilities. Project is currently in the process of selecting a construction manger. Project is still in the planning phase.

Cost: \$2,500,000 - \$3,000,000 (projected budget)

New Police Department facility located in Hillsborough, New Hampshire: facility program of 10,000 square feet including site work and utilities. Construction is reinforced masonry, and includes detention equipment. Project completed 2003.

Cost: \$1,800,000

Expansion and Renovation of existing Police Department located in Hollis, New Hampshire: facility program include a new two car Sallyport, new two car storage garage, relocation of dispatch center and creation of a new booking room. Project scope includes fitting up of 3,800 square feet of existing second floor space. Total area is 2,000 square feet of new space and 8,000 square feet of renovated space.

Cost: \$1,000,000 (projected budget)

Addition to existing police station located in Derry, New Hampshire: facility program include a two story addition of 4000 square feet. Project consists of integrating existing spaces with new spaces to accommodate new functions and correction of circulation flow. Upgrades to all HVAC systems and new parking lot. Project is schedule for completion in January 2006.

Cost: \$700,000

## Public Safety Complexes

The following projects are combined police and fire facilities:

New Police / Fire Safety Complex located in Rye, New Hampshire: facility program of 23,000 square feet including site work and utilities. Construction is a two story building with four double bay apparatus garage, fire department offices and living quarters, police department offices, training room with LP gas fired radiant heating system within the apparatus garage and complete HVAC system of heating and cooling for the remainder of the building. Project is schedule to be completed in November 2006.

Cost: \$2,850,000 (projected budget)

Existing Police / Fire Safety Complex located in Pembroke, New Hampshire: total facility program of 27,154 square feet. Facility is comprised of a new two story building (14,500 square feet) which contains new police facilities and shared common space with the fire department. The existing fire department apparatus garage is expanded to (4) bays with new space for office space and storage for a total of 10,700 square feet). Project was completed in 2004.

Cost: \$2,000,000

Existing Police / Fire Safety Complex located in Hooksett, New Hampshire: facility program of 33,000 square feet. Facility is a two story building with five double bay apparatus garage, fire department offices and living quarters, police department offices and holding areas. The facility provides common areas for personnel training and exercise. Building is constructed of steel framing with brick veneer and steel studs construction and concrete masonry at the apparatus garage. Project was completed in 1999 using a design/build approach.

Cost: \$2,300,000

### Public Works

Highway Garage located in Pemkroke, New Hampshire (population 7,000): total facility program of 7,500 square feet highway garage and 1,000 square feet of administration. Garage includes a new pre-engineered metal building structure (60 x 80) with concrete walls 4 feet high and an existing highway garage of 3,150 square feet.

Cost: Unavailable

New Highway Garage located in Rindge, New Hampshire: facility program of 9,000 square feet highway garage and 1,000 square feet of administration. Garage includes pre-engineered metal building structure (90 x 100) with concrete masonry and metal stud walls and vinyl siding exterior.

Cost: \$1,600,000 (project pending due to funding)

### Waste Water Treatment Plants

New Water Treatment Plant located in Exeter, New Hampshire. Includes construction of a new water treatment plant and vehicle garage of 16,000 square feet. The facility will provide water treatment and raw water pump stations adjacent to the existing reservoir for a population of 15,000 people.

Cost: \$12,000,000 (project pending due to funding)

### Recreation

New Community Center located in Lake Sunapee Community Center: facility program of 18,000 square feet including an auditorium, gymnasium, multi purpose rooms and outdoor playing fields

Cost: \$3,200,000 (projected budget)

## APPENDICES

# APPENDICES

### Completed Departmental Questionnaires

Police Department

Fire Department

Public Works Department

Waste Water Utility Department

Recreation Department

### Existing Departmental Space Allocations

### Proposed Departmental Facility Programs

### WV Engineering "Mechanical and Electrical System Report"



## Completed Departmental Questionnaires

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**WELLER & MICHAL ARCHITECTS INC.**

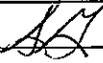


## DEPARTMENTAL QUESTIONNAIRE

Weller & Michal Architects Inc. 222 West Street, Keene NH 03431 voice (603) 357-4031 fax (603) 357-9290

Please complete this form as part of a Needs Assessment Study for your department. Thank you

DEPARTMENT NAME Peterborough Police Dept.

PREPARED BY Chief Scott Guinard 

DEPARTMENTAL SIZE

Number of employees requiring facilities/space on site Seventeen

Number of employees typically working off-site Two to four

TYPICAL HOURS OF OPERATION Twenty-four hours a day, seven days a week

**Department's Mission:**

Please provide a short statement that best describes your department's mission and services provided.

To serve the community, to fairly and impartially enforce the law, to protect life and to safeguard property. To this end, department

resources will be organized, maintained and deployed in a manner consistent with this mission.

Please describe future changes (town growth, additional staff, technology, etc) that you envision will impact your department's mission, how services are delivered, and impact your overall space needs.

With future community growth, additional staffing will be required, which will require additional office/work space. The police and fire department are studying the possibility of a combined 24-hour dispatch position(s) which will require additional equipment, space and personnel.

**Work Group Relationships:**

List in order of importance the departments, individuals or spaces and their proximity to your department or workgroup. Indicate their required proximity from your workspace in order for you to operate your department in an efficient manner.

Departments and/or Persons	Immediately Adjacent	Nearby	Convenient
<u>Fire and Ambulance</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
<u>Town administration</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>
<u>Public Works</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>

**Overall Group Requirements:**

Please complete the following questions noting applicable items and information requested.

**Work Flow and Interactions**

Outside public visitors each day, usual 10 maximum 20

Other department/town employees who visit your department: each day 5 (or each week 25)

Staff meetings usually involve how many staff? 4 to 15

Do you conduct meetings involving the public or outside visitors? Yes (yes or no)

Meetings involving the public or outside visitors involve how many people? 10 to 30

Meetings use what types of visual aids? Video, overheads, Power Point

**Meeting Spaces**

In your current operation do you use/need private conference rooms? Yes

Number of Seats you require in each room used for conferencing? min. 6 max. 30

In your current operation do you use Open Areas for meetings and/or conferencing? Yes

Quantity of people in these meetings would normally be? 6

Do any conferencing areas require a kitchenette, buffet etc? Please describe No

**Support Space**

Do you need Public Waiting space? Yes (yes or no)

If so what type or size of space is needed? Waiting room for the public. Public cannot have access to daily operations area without authorization.

Is workspace needed by outside consultants or temporary workers? Yes (yes or no).

If so what type of space is needed? private offices, group space, etc? Please explain Group space:

Press conferences, meeting with representatives from other agencies

What is the maximum number of consultants and temporary workers that need to be accommodated at any one time in your department? Six

Can any of these people share a workspace? Yes

Are there any equipment requirements for these workspaces? Tables, chairs, electrical supply.

Is there need for employee breakroom space within your department? If so, describe Yes

Kitchenette: Table and chairs, refrigerator, sink, microwave, etc.

## Equipment

Describe in general terms the essential types of equipment your department uses (PC, printers, scanner, photo copier, etc.) Base radio, computers, printers, telephones, Intoxilyzer, fax,

copier

Are your computers networked? Yes (yes or no) Within department? Yes Within facility? Yes

Does your department share equipment such as network printer copiers, fax, etc with other departments? If so, describe No

Special or Future equipment needs? If so, describe Mobile data terminals in vehicles which will require PC and router inside station

## Large Equipment Storage

Describe in general terms large equipment and tools (not vehicles) your department stores for use.

Radar trailer, tires, barricades, traffic cones, weapons, ammunition

## Office and Miscellaneous Storage

Current "Overall Storage" for this department can best be described as (well, reasonably well, just barely or not well at all) Please be specific Reasonably well. Office supplies, records and uniform supplies are stored in an unfinished attic area which is almost filled to capacity. Traffic barricades, cones and tires are stored in the police garage and outside utility shed.

When completing the following questions please describe "Storage Needs" which will meet your needs 5-10 years into the future

- Do you currently use Letter/Legal Files? Yes (yes or no) If so, quantity and number of drawers? Approximately 600 to 700 letter size files a year. Two later<sup>er</sup> file drawers per year. Archive records are stored in attic space.

Are these files shared by everyone in the department? If not, list which positions/people need access to them Yes

- Central bound records, reference books or codes? If so, estimate how much space is needed considering future growth Four full-size bookcases

Is this reference material shared by everyone in the department? If not, list which positions/people need access to them Yes

- Shelving for books, binders or catalogues? If so, quantity and number of shelves? Shelving in ten rooms. Two to three shelving units per room.

Are these materials shared by everyone in the department? If not, list which positions/people need access to them Yes

- Special storage needs (engineering plans, computer printouts, oversize or bulky materials?) If so, describe Evidence room, firearms and ammunition (armory), traffic cones, signs and barricades, vehicle tires, impound lot (seized vehicles)

Are these materials shared by everyone in the department? If not, list which positions/people need access to them Yes

Are these materials shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

- Storage for forms/stationary/publications Currently stored in four areas (squad room, records room, conference room and attic space)

Are these materials shared by everyone in the department? If not, list which positions/people need access to them Yes

- Central storage for employee's personal items – lockers, coat closet etc? Locking? \_\_\_\_\_  
Currently using equipment room and inadequate lockers in restrooms.
- Other utility or storage room needs? If so, describe Cell block and prisoner booking area, sally port x 2

#### Security

Do you have any special security needs? If so, describe Yes: evidence room for selected personnel and overall security prohibiting non-department members

#### Communications

Do you have any special communication needs? If so, describe Yes, base station radio and antenna tower. With 24-hour dispatch (police and fire), additional space, equipment and personnel will need to be accommodated. Mobile data terminals will require PC and router.

#### Parking Requirements

How much on site parking for employee vehicles do you require 18 (maximum), 8 (minimum)

**Material Storage**

What kinds and quantities of material do you store on site? Are there special environmental protection needs associated with this material (protection from weather, environmental hazards, etc.) \_\_\_\_\_

Evidence needs to be stored at room temperature and well ventilated.  
Weapons and ammunition, dry and at room temperature.  
Records, office supplies, uniforms, dry and at room temperature.  
Some evidence must be refrigerated in secured area (blood and other fluids).

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**Vehicle Needs**

Please inventory vehicles currently used by your department. Please identify new vehicle expectations, based on current capital planning.

Three marked cruisers, one 4X4, one radar trailer, one unmarked cruiser  
and one classic (D.A.R.E.) vehicle.

It is anticipated that an additional marked cruiser will be added to the  
fleet within five years as additional shift staffing x 2 is added.

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**Garage Needs**

Please comment on bay size, bay height, door size and type, that you think best serve your needs.

Standard size bays and garage doors will meet our needs.

The department needs the ability to store all five vehicles and trailer.

Additional space will be needed as the fleet grows.

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Please comment on special inside functions (such as washing road salt off equipment), that your facility might need to support.

Inside space and water supply for cleaning vehicles (one bay).

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### **Other Comments**

Please provide any additional information you believe to have an impact on the overall size and operation of your department. Thank you

As the department adds staffing, additional work space in the squad room or individual offices will be needed. Currently, each individual office is occupied and there are only two work stations in the squad room. Each shift is staffed with two officers and at times three officers.

If and when the department established a 24 hour police/fire dispatch center, additional equipment space will be needed at the dispatch center and a separate office will be needed for a department secretary.

The current police garage is in very poor condition. Keeping the vehicles ice free during inclement weather and protected from vandals when not in use is a necessity.

Our current evidence room and attic space is filled to capacity. Additional space in both areas is needed at this time.

Personnel have recently expressed the desire to have a fitness room where personnel can exercise prior to and after work. The department once had a fitness room but converted it into the squadroom in 1997 because of work space needs.

## DEPARTMENTAL QUESTIONNAIRE

Weller & Michal Architects Inc. 222 West Street, Keene NH 03431 voice (603) 357-4031 fax (603) 357-9290

**Please complete this form as part of a Needs Assessment Study for your department. Thank you**

DEPARTMENT NAME Fire Rescue

PREPARED BY Chief Lenox

DEPARTMENTAL SIZE

Number of employees requiring facilities/space on site 50

Number of employees typically working off-site \_\_\_\_\_

TYPICAL HOURS OF OPERATION 24/7/365

**Department's Mission:**

Please provide a short statement that best describes your department's mission and services provided.

Department provides Fire & Rescue for two towns  
EMS for 6 towns

Please describe future changes (town growth, additional staff, technology, etc) that you envision will impact your department's mission, how services are delivered, and impact your overall space needs.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Work Group Relationships:**

List in order of importance the departments, individuals or spaces and their proximity to your department or workgroup. Indicate their required proximity from your workspace in order for you to operate your department in an efficient manner.

Departments and/or Persons	Immediately Adjacent	Nearby	Convenient
Admin Asst.	x		
Deputy Chiefs		x	
Captains		x	
Lieuts			x
Fire Insp.			x
Supt Fire Alarm			x
Public Inf. Officer			x

**Overall Group Requirements:**

Please complete the following questions noting applicable items and information requested.

**Work Flow and Interactions**

Outside public visitors each day, usual 10 maximum 15  
Other department/town employees who visit your department: each day      (or each week 5)  
Staff meetings usually involve how many staff? 4/7/5/10/50  
Do you conduct meetings involving the public or outside visitors? 4 (yes or no)  
Meetings involving the public or outside visitors involve how many people? 10-20  
Meetings use what types of visual aids? Power point

**Meeting Spaces**

In your current operation do you use/need private conference rooms? yes  
Number of Seats you require in each room used for conferencing? min. 12 max. 50  
In your current operation do you use Open Areas for meetings and/or conferencing? yes  
Quantity of people in these meetings would normally be? 5-10  
Do any conferencing areas require a kitchenette, buffet etc? Please describe yes / For  
ALL DAY PROGRAMS

**Support Space**

Do you need Public Waiting space? 4 (yes or no)  
If so what type or size of space is needed? Space For 2-5 people  
  
Is workspace needed by outside consultants or temporary workers? NO (yes or no).  
If so what type of space is needed? private offices, group space, etc? Please explain       
  
What is the maximum number of consultants and temporary workers that need to be accommodated at any one time in your department?       
Can any of these people share a workspace?       
Are there any equipment requirements for these workspaces?       
  
Is there need for employee breakroom space within your department? If so, describe yes -  
Room For Breaks / Lunch / Supper

**Equipment**

Describe in general terms the essential types of equipment your department uses (PC, printers, scanner, photo coping, etc.) All of the Above - FAXES - RADIOS

Are your computers networked? (Yes) (Yes or no) Within department? Y Within facility? Y

Does your department share equipment such as network printer copiers, fax, etc with other departments? If so, describe NO

Special or Future equipment needs? If so, describe \_\_\_\_\_

**Large Equipment Storage**

Describe in general terms large equipment and tools (not vehicles) your department stores for use. \_\_\_\_\_

**Office and Miscellaneous Storage**

Current "Overall Storage" for this department can best be described as (well, reasonably well, just barely or not well at all) Please be specific \_\_\_\_\_

JUST BARELY / NOT WELL

When completing the following questions please describe "Storage Needs" which will meet your needs 5-10 years into the future

- Do you currently use Letter/Legal Files? YES (Yes or no) If so, quantity and number of drawers? \_\_\_\_\_

8 / 4 DRAWERS

Are these files shared by everyone in the department? If not, list which positions/people need access to them NO - ADMIN ASST. - OFFICERS

- Central bound records, reference books or codes? If so, estimate how much space is needed considering future growth AT LEAST A 10X6 BOOK CASE

Is this reference material shared by everyone in the department? If not, list which positions/people need access to them YES

- Shelving for books, binders or catalogues? If so, quantity and number of shelves? \_\_\_\_\_

SAME AS ABOVE

Are these materials shared by everyone in the department? If not, list which positions/people need access to them yes

- Special storage needs (engineering plans, computer printouts, oversize or bulky materials?) If so, describe

Plans For The Fire Prevention Division

Room 16x16

Are these materials shared by everyone in the department? If not, list which positions/people need access to them

No - Fire Prevention & Chief Officers

Are these materials shared by everyone in the department? If not, list which positions/people need access to them

- Storage for forms/stationary/publications Small Storage Rm

Are these materials shared by everyone in the department? If not, list which positions/people need access to them ADMIN ASST

- Central storage for employee's personal items - lockers, coat closet etc? Locking?

For 50 Firefighters

- Other utility or storage room needs? If so, describe

### Security

Do you have any special security needs? If so, describe yes -

### Communications

Do you have any special communication needs? If so, describe yes / station

Intercom / Radio Room For Dispatching  
Enclosures

### Parking Requirements

How much on site parking for employee vehicles do you require Parking For

50

**Material Storage**

What kinds and quantities of material do you store on site? Are there special environmental protection needs associated with this material (protection from weather, environmental hazards, etc.) \_\_\_\_\_

Building Supplies  
Medical Supplies / Equipment  
Building MAINT Supplies  
HAZ- MAT Supplies  
Fire Fighting Supplies

**Vehicle Needs**

Please inventory vehicles currently used by your department. Please identify new vehicle expectations, based on current capital planning.

1 COMMAND CAR, 2 PUMPS, 1 LADDER, 1 TANKER,  
2 AMBULANCES, 2 SQUADS, 6 Wheel ATU, 1 Brush  
Truck, 1 BOAT,

**Garage Needs**

Please comment on bay size, bay height, door size and type, that you think best serve your needs.

BAY size 80 x 14  
DOOR size 12 x 16

DRIVE THROUGH BAYS

Please comment on special inside functions (such as washing road salt off equipment), that your facility might need to support.

Washing / MAINTENANCE / Re-Stocking /



# PETERBOROUGH FIRE AND RESCUE

16 SUMMER STREET, PETERBOROUGH, NEW HAMPSHIRE 03458

Fire or Emergency Ambulance 911

Business — 603-924-8090 • Fax — 603-924-8091

Website — [www.firerescue.us](http://www.firerescue.us)

## PETERBOROUGH FIRE & RESCUE

### FIRE STATION MASTER PLAN

2004

#### History:

The building housing the fire station was originally built for the Peterborough Public Works department in 1945, making this building almost 60 years old in 2004. The PPW department used the building for twenty-seven years and in 1972, the building was turned over to the Fire & Rescue Department to house their apparatus, equipment and administrative offices. The front section of the first bay on the left was converted to a 10' X 12' office, which the current Fire Chief and Administrative Assistant/Secretary share. The remaining area of the bay had been converted to a meeting room and kitchen space for the department members. The bay to the rear was added at a later date. In 2003 the new training room was added for meetings, training, and conferences. This enabled the department to host meetings and regional training at the station. In July of 2004, portable office dividers were installed into the original meeting room that had been created from converting the first bay. This was done in order to give the Administrative Division a place to work in the meeting room. When the building was transferred from Peterborough Public Works to Peterborough Fire & Rescue, the department was under the direction of a call Fire Chief and there was no Administrative Assistant or Secretary. In 1989 the department hired its first full time Fire Chief (Donald Parkhurst). In 1994, the Fire Chief (Stephen Black) hired the first part time Assistant to help with the administrative needs of the office and department. Today the Department has a full time Fire Chief and a twenty hour Administrative Assistant. The administrative activities of the department have continued to increase since 1994 and are predicted to continue this trend for the next ten years or more.



***"Fire Sprinklers Save Lives"***

**Needs:**

The Fire Chief's and the Administrative Assistant's office, which creates the administrative area, should be in an area that is not located adjacent to the front door of the building. This office's location now allows and encourages members to congregate in that area which becomes very distracting, non-confidential and unproductive. Constant vigilance is required in order to control this congregation. The administrative office area should be located somewhere out of the direct line of the public and employees. New office space is needed for specific personnel and functions. Specifically, a private office is required for the Chief of the Department; space is required for an Administrative Assistant/Secretary, plan reviews, training, fire prevention, EMS, maintenance, files, and a general work area for "other" administrative duties.

The building's systems and utilities need updating. The HVAC is not efficient and the building is hot in the summer and cold in the winter. The apparatus bays need to be equipped with an exhaust removal system in order to remove particles of combustion from the engines. This would keep contaminants from infiltrating the administrative and kitchen areas of the station. This will also keep the member's personal protective turn out gear protected from contaminants which would extend the life of the gear. Additionally, the boiler room is presently the only real storage area in the building and it is not an acceptable practice to store combustible materials in a boiler room.

The apparatus bays need to be reworked to accommodate larger vehicles. The present standard is to have at least ten foot wide and fourteen feet high doors with eighty-foot deep bays. The present doors are nine feet wide, twelve feet high and the bays are only fifty feet deep. This has caused us to create vehicle size specifications to fit this station, customizing the size, when purchasing new vehicles.

The restrooms need to be updated and showers must be installed to decontaminate the members who respond on medical and fire calls that have been subjected to hazardous or contaminated atmospheres and conditions. These areas should also be equipped with lockers so members can have a clean change of clothes in the case of contamination.

The personal protective gear should be in a well-ventilated room that is capable of drying the gear completely. This is important so that the gear is available for a second response in a very short period of time. The department should also look at purchasing a washer system to clean the turnout gear.

An air compressor room should be built to assure that clean fresh air is being pumped into the breathing air tanks for consumption for the members. This area could also be used for the storage of medical oxygen so that we could operate our own cascade system and be able to purchase in bulk. Presently both of these systems are housed on the open apparatus floor subjected to diesel fumes. Although we do filter the air, a separate clean room would also cut back on maintenance of the unit.

It would be advisable to have a secured room for the storage of the spare medical oxygen tanks and SCBA tanks. It should be noted that we do not have a locked room for the medical supplies, just a cabinet on the apparatus floor. These very expensive and sensitive supplies should be in a locked room.

The radio and speaker system should be upgraded, as we do not have coverage throughout the entire station and out in the yard. The radio room must be upgraded to give us the capabilities to take over communications in the event that KMA should have a failure or if the radio traffic gets too busy during major events such as, lightening storms, snow and ice storms and working fires. We should have the capabilities to monitor the 911 calls through a speaker system until such time we completely take over communications.

A general storage area/room should be built for miscellaneous supplies for firefighting, EMS and building maintenance. Additionally, a custodian room is needed and should be included in the physical plant upgrades.

Bunkrooms should be incorporated in the plans so when members come in for storm coverage, or in the future, full time duty, they have a place that will accommodate them. A separate bathroom and shower facility should be provided for this area. All accommodations for staff should be made for at least fifteen members.

The building should also include an "Emergency Operations Center" (EOC) that can provide meeting and operational space for a twenty-five member team in the event of a man-made or natural disaster. This room should have available, Internet connections, telephones, radios for all departments, fax machine and other administrative tools. It should be equipped with a small refreshment area for the staff.

There are other funding methods available to Public Safety Officials and Towns, which should be explored. Grants may be available for building Public Safety Buildings, EOCs, and installing exhaust systems.

## DEPARTMENTAL QUESTIONNAIRE

Weller & Michal Architects Inc. 222 West Street, Keene NH 03431 voice (603) 357-4031 fax (603) 357-9290

Please complete this form as part of a Needs Assessment Study for your department. Thank you

DEPARTMENT NAME Peterborough Public Works / Highway Garage

PREPARED BY R. Dubois, Superintendent. M. West, mechanic

DEPARTMENTAL SIZE

Number of employees requiring facilities/space on site 13

Number of employees typically working off-site 11

TYPICAL HOURS OF OPERATION M-F 7:00a-3:30p

**Department's Mission:**

Please provide a short statement that best describes your department's mission and services provided.

all aspects of a town highway dept. From putting up signs to Building playgrounds. also maintenance of all town owned vehicles and equipment.

Please describe future changes (town growth, additional staff, technology, etc) that you envision will impact your department's mission, how services are delivered, and impact your overall space needs.

We are in need of more staff. with all the help we give other departments, it's hard to keep up with our highway schedule. Services are becoming more personalized and people want things done faster.

**Work Group Relationships:**

List in order of importance the departments, individuals or spaces and their proximity to your department or workgroup. Indicate their required proximity from your workspace in order for you to operate your department in an efficient manner.

Departments and/or Persons	Immediately Adjacent	Nearby	Convenient
<u>All departments</u>	<u>NONE</u>	<u>Police, Fire</u>	<u>NONE</u>
<u>Town house, Fire, Police, Recreation</u>		<u>Recreation</u>	
<u>Library, utilities, recycling center.</u>		<u>community develop</u>	

**Overall Group Requirements:**

Please complete the following questions noting applicable items and information requested.

**Work Flow and Interactions**

Outside public visitors each day, usual 2-3 maximum 15-30  
Other department/town employees who visit your department: each day 3-4 (or each week 10)  
Staff meetings usually involve how many staff? 15  
Do you conduct meetings involving the public or outside visitors? No (yes or no)  
Meetings involving the public or outside visitors involve how many people? 2-4-30 classes  
Meetings use what types of visual aids? MAPS, PROJECTOR, overhead viewer, handson.

**Meeting Spaces**

In your current operation do you use/need private conference rooms? YES  
Number of Seats you require in each room used for conferencing? min. 15 max. 30  
In your current operation do you use Open Areas for meetings and/or conferencing? YES  
Quantity of people in these meetings would normally be? YES 15-30  
Do any conferencing areas require a kitchenette, buffet etc? Please describe yes  
Some of the seminars and classes supply lunches and coffee

**Support Space**

Do you need Public Waiting space? NO (yes or no)  
If so what type or size of space is needed? \_\_\_\_\_  
\_\_\_\_\_

Is workspace needed by outside consultants or temporary workers? NO (yes or no.  
If so what type of space is needed? private offices, group space, etc? Please explain \_\_\_\_\_  
\_\_\_\_\_

What is the maximum number of consultants and temporary workers that need to be accommodated at any one time in your department? 15-30

Can any of these people share a workspace? yes

Are there any equipment requirements for these workspaces? DESK OR TABLE, phone, power etc.  
\_\_\_\_\_  
\_\_\_\_\_

Is there need for employee breakroom space within your department? If so, describe yes  
Break Room / Lunch Room / meeting Room, - Bath Room } Breaks are from  
9A-9:15A Lunch is from 12p-12:30p with 13-15 employees Break Room / lunch  
Room can not accomodate everyone.

**Equipment**

Describe in general terms the essential types of equipment your department uses (PC printers, scanner, photo copying, etc.) FAX

Are your computers networked? <sup>NOT</sup> YES (yes or no) Within department? N/A Within facility? N/A

Does your department share equipment such as network printer copiers, fax, etc with other departments? If so, describe NO

Special or Future equipment needs? If so, describe New office chairs, hook-up old Fax line,

**Large Equipment Storage**

Describe in general terms large equipment and tools (not vehicles) your department stores for use. Air Compressors, hand tools, Sanders for trucks, sm. Roller, line stripping machine, attachments for sidewalk tractor, tire + wheel machines, assorted jacks and stands

**Office and Miscellaneous Storage**

Current "Overall Storage" for this department can best be described as (well, reasonably well, just barely or not well at all) Please be specific. Not well at all } Building at the seams

When completing the following questions please describe "Storage Needs" which will meet your needs 5-10 years into the future

- Do you currently use Letter/Legal Files? yes (yes or no) If so, quantity and number of drawers? 18

Are these files shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

- Central bound records, reference books or codes? If so, estimate how much space is needed considering future growth \_\_\_\_\_

Is this reference material shared by everyone in the department? If not, list which positions/people need access to them YES

- Shelving for books, binders or catalogues? If so, quantity and number of shelves? 2-6  
3-5 shelves each

Are these materials shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

YES

- Special storage needs (engineering plans, computer printouts, oversize or bulky materials?)  
If so, describe \_\_\_\_\_

YES

Engineering plans, water-sewer-catch basin maps

Are these materials shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

NO

Super and operator

Are these materials shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

Yes - when needed

- Storage for forms/stationary/publications \_\_\_\_\_

Are these materials shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

yes

- Central storage for employee's personal items – lockers, coat closet etc? Locking? 15  
lockers, for foul weather gear, hard hats, gloves, cold weather gear, uniforms

- Other utility or storage room needs? If so, describe YES sim storage and barricades  
diesel fuel storage, paint room storage.

### Security

Do you have any special security needs? If so, describe \_\_\_\_\_

### Communications

Do you have any special communication needs? If so, describe Fax Line, Better 2 way Radio  
Communications.

### Parking Requirements

How much on site parking for employee vehicles do you require \_\_\_\_\_

100' X 100' 15-30 vehicles

**Material Storage**

What kinds and quantities of material do you store on site? Are there special environmental protection needs associated with this material (protection from weather, environmental hazards, etc.) YES

lots of snow storage, sand and salt shed 1296.29 tons each.  
Rugmill, stone, culverts and Basins, Gasoline + Diesel fuel  
Propane, engine oil and lubricants,

**Vehicle Needs**

Please inventory vehicles currently used by your department. Please identify new vehicle expectations, based on current capital planning.

See Vehicle List

**Garage Needs**

Please comment on bay size, bay height, door size and type, that you think best serve your needs.

20 bays 20' wide X 30' long X 25' high.  
4 maintenance bays 2- 20X30X25, 2- 20X75X25  
1 equipment wash bay 20 X 100 X 25  
1 welding bay 20 X 30 X 25  
1 sign room/barricades 20 X 30 X 25

Please comment on special inside functions (such as washing road salt off equipment), that your facility might need to support.

wash bay, welding room, paint room, parts storage room

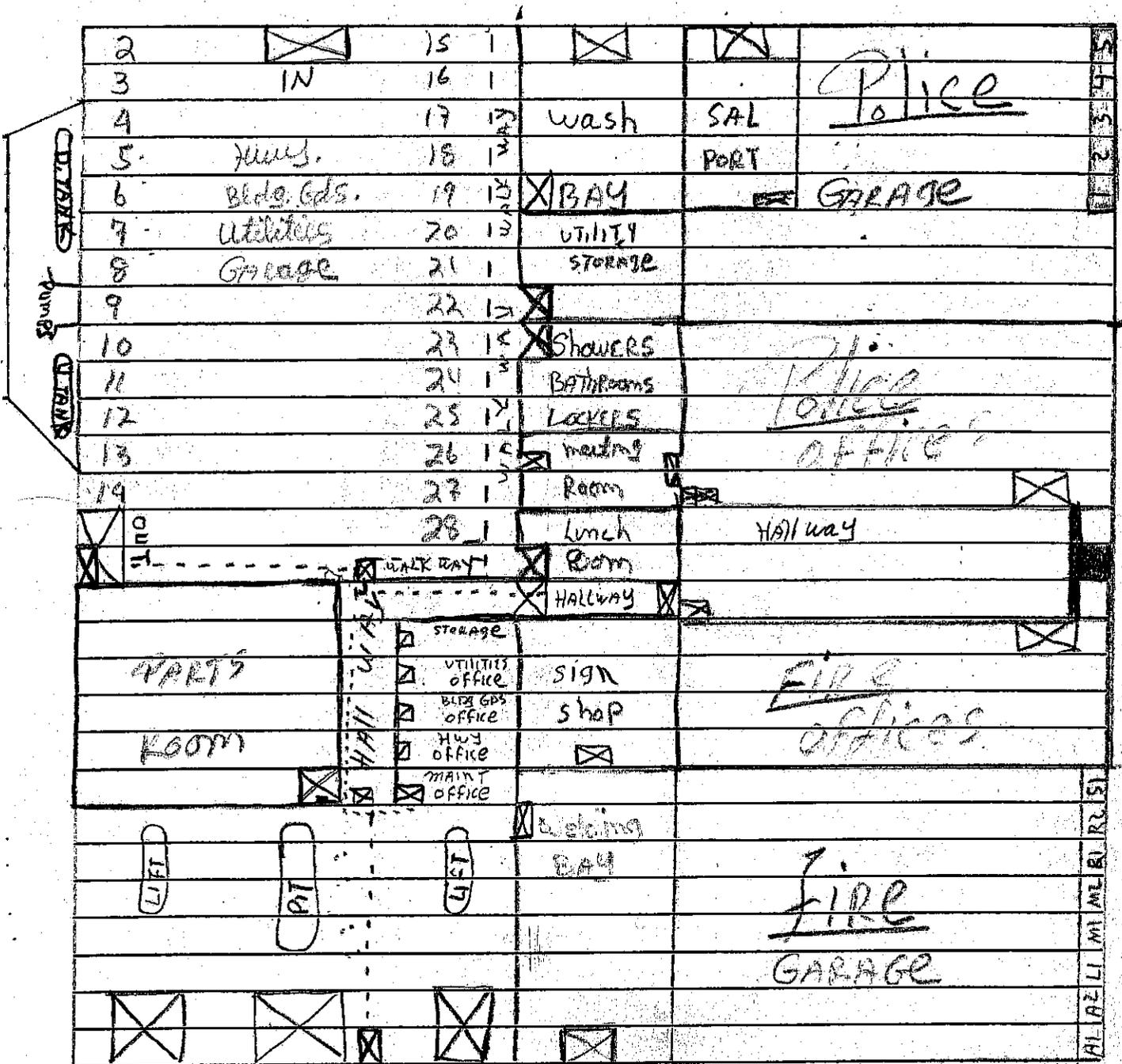
~~1~~



# Safety Complex

## Other Comments

Please provide any additional information you believe to have an impact on the overall size and operation of your department. Thank you



OR A DOOR  
IN A DOOR

**Highway Department**

Unit	Year	Make	Model	Vin Number	Plate	Garaged at
H-2	04	GMC	Sierra 2500 4x4	1GTHK24294E340342	G02484	Highway Garage
H-3	99	Int.	4900 6x2	1HTSDAAR8YH262123	G04476	Highway Garage
H-4	00	Ford	F-450 4X4	1FDXF47F1YEE25526	G01847	Highway Garage
H-5	92	Chevy	Kodiak 6x2	1GBP7H1J0NJ106938	G12574	Highway Garage
H-6	01	Elgin	Pelican SE	S8926S	G01240	Highway Garage
H-7	02	Ford	F-450 4X4	1FDXF47F52EB41405	G00457	Highway Garage
H-8	90	J.Deere	544E	DW544ED524521	G13801	Highway Garage
H-9	96	Sweepstr	H-SERIES	H84P3NH	G02506	Highway Garage
H-10	93	Ford	F-150 4x2	2FTDF15Y2PCB04495	G00449	Highway Garage
H-11	98	Int.	2674 8x2	1HTGLAET4WH521671	G07869	Highway Garage
H-12	04	Landa	MVC-3-30324	P0804-87965 P.Washer	\$4,021.00	Highway Garage
H-13	04	Trackless	MT-5	2196	G12321	Highway Garage
H-13A	96	Trackless	B-3 Blower	1182		Highway Garage
H-13B	96	Trackless	AS-4 Sweeper	404		Highway Garage
H-13C	96	Trackless	AB-5 Plow	665		Highway Garage
H-13D	96	Trackless	BF Flail Mower	164		Highway Garage
H-13E	96	Trackless	MTF-4 Front Mower	214		Highway Garage
H-13F	96	Trackless	MTS Sander	477		Highway Garage
H-13G	04	Cotta	KL-6000 Plow	MOD-6006 / ser.0312286	\$3,250.00	Highway Garage
H-14	05	Freightliner	M2106	1FVACYDC05HN87506	G16729	Highway Garage
H-15	05	Sullivan	D185Q	D185Q11JD	G11674	Highway Garage
H-16	03	Int.	7400 SFA 6x2	1HTWDAAR93J058580	G16531	Highway Garage
H-17	00	Stone	SR2500	Deluxe 11/4ton roller WP2500		Highway Garage
H-18	87	SMI	5250A	4D0219891	G02514	Highway Garage
H-19	88	J.Deere	672B	DW672BX519590	G04827	Highway Garage
H-20						
H-21	04	Freightliner	FI-80	1FVABXAK34HM37963	G17251	Highway Garage
H-22						
H-23	88	Hawkinsen	Bandit - 100	LSG423/2379	G11146	Highway Garage
H-24						
H-25						
H-26						
H-27						
H-28	88	Bomag	Roller	W1-280 / 800702		Highway Garage
H-29	88	E.Bever	Trailer	090320	G07092	Highway Garage
H-30	75	Miller	Welder	HF887844	G02507	Highway Garage
H-31	02	Custom	4T162EDBTWHD	5B732153721004231		Highway Garage
H-32						
H-33	82	Picard	TCRD4TSU HotBox	6782E	G11675	Highway Garage
H-34	91	20 Gal.	Port. Air Comp.	209106968		Highway Garage
H-35	?	Homlte	Port. Generator	80881030		Highway Garage
H-36	64	Western	24926 Shop Air Comp	24926		Highway Garage
H-37	98	Cadilack	QB-1 Sandblaster	997049		Highway Garage
H-38						Highway Garage
H-39	00	Fedders	Window AC Unit	FM898024 / A2Q06F2BG		Highway Garage
H-40	93	STIHL	Weed Eater	F586		Highway Garage
H-41	93	Echo	Weed Eater	GT-2000		Highway Garage
H-42	0	Hlite	Weed Eater	D630CD		Highway Garage
H-43	0	Husq	272XP Chain Saw	3420139		Highway Garage
H-44	0	Husq	272XP Chain Saw	3420093		Highway Garage
H-45	0	CERL	0-Oil Trailer	SPC-200-A		Highway Garage





## DEPARTMENTAL QUESTIONNAIRE

Weller & Michal Architects Inc. 222 West Street, Keene NH 03431 voice (603) 357-4031 fax (603) 357-9290

Please complete this form as part of a Needs Assessment Study for your department. Thank you

DEPARTMENT NAME Utilities Division (WATER & WASTE WATER)

PREPARED BY Stephen Rheanne

DEPARTMENTAL SIZE

Number of employees requiring facilities/space on site 2

Number of employees typically working off-site 3

TYPICAL HOURS OF OPERATION 8 7:00 - 3:30

**Department's Mission:**

Please provide a short statement that best describes your department's mission and services provided.

To provide Clean, Safe drinking water and  
Reliable Service. Maintain Sewer Collection  
System and Comply with DES Regulations

Please describe future changes (town growth, additional staff, technology, etc) that you envision will impact your department's mission, how services are delivered, and impact your overall space needs.

with a new Treatment plant will need additional  
Employees - new SCADA up grades

MANPOWER SHORTAGE

**Work Group Relationships:**

List in order of importance the departments, individuals or spaces and their proximity to your department or workgroup. Indicate their required proximity from your workspace in order for you to operate your department in an efficient manner.

Departments and/or Persons	Immediately Adjacent	Nearby	Convenient
<u>Finance</u>			<input checked="" type="checkbox"/>
<u>Highway</u>			<input checked="" type="checkbox"/>

**Overall Group Requirements:**

Please complete the following questions noting applicable items and information requested.

**Work Flow and Interactions**

Outside public visitors each day, usual \_\_\_\_\_ maximum \_\_\_\_\_  
Other department/town employees who visit your department: each day \_\_\_\_ (or each week 1)  
Staff meetings usually involve how many staff ? 5  
Do you conduct meetings involving the public or outside visitors? N (yes or no)  
Meetings involving the public or outside visitors involve how many people ? \_\_\_\_\_  
Meetings use what types of visual aids? \_\_\_\_\_

**Meeting Spaces**

In your current operation do you use/need private conference rooms? No  
Number of Seats you require in each room used for conferencing? min. 3 max. 5  
In your current operation do you use Open Areas for meetings and/or conferencing? yes  
Quantity of people in these meetings would normally be? 5  
Do any conferencing areas require a kitchenette, buffet etc? Please describe \_\_\_\_\_

**Support Space**

Do you need Public Waiting space? No (yes or no)  
If so what type or size of space is needed? \_\_\_\_\_  
Is workspace needed by outside consultants or temporary workers? No (yes or no).  
If so what type of space is needed? private offices, group space, etc? Please explain \_\_\_\_\_  
What is the maximum number of consultants and temporary workers that need to be accommodated at any one time in your department? 6  
Can any of these people share a workspace? yes  
Are there any equipment requirements for these workspaces? Computers

Is there need for employee breakroom space within your department? If so, describe Yes - No  
Lunch room facility - Need Shower room  
LOCKERS (4 - 10)

**Equipment**

Describe in general terms the essential types of equipment your department uses (PC, printers, scanner, photo copying, etc.) PC, Printer, Copier, Scanner, backhoe, 6 wheeler dump Truck, Vector, Flusher

Are your computers networked? Yes (yes or no) Within department? Yes Within facility? \_\_\_\_\_

Does your department share equipment such as network printer copiers, fax, etc with other departments? If so, describe NO

Special or Future equipment needs? If so, describe Vector/Flusher Truck

**Large Equipment Storage**

Describe in general terms large equipment and tools (not vehicles) your department stores for use. Vector Trailer mounted - Flusher Trailer mounted Generator Trailer mounted

**Office and Miscellaneous Storage**

Current "Overall Storage" for this department can best be described as (well, reasonably well, just barely or not well at all) Please be specific not well @ all - Flusher, Vector, generator are out in the weather. All Trucks are out in weather. New backhoe and dump truck will also have no garage to be stored in.

When completing the following questions please describe "Storage Needs" which will meet your needs 5-10 years into the future

- Do you currently use Letter/Legal Files? Yes (yes or no) If so, quantity and number of drawers? 2- Map file cabinets 8 drawers each

Are these files shared by everyone in the department? If not, list which positions/people need access to them By all

- Central bound records, reference books or codes? If so, estimate how much space is needed considering future growth \_\_\_\_\_

Is this reference material shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

- Shelving for books, binders or catalogues? If so, quantity and number of shelves? 4 with 6 Shelves

Are these materials shared by everyone in the department? If not, list which positions/people need access to them yes

- Special storage needs (engineering plans, computer printouts, oversize or bulky materials?)  
If so, describe

mapping and files for DES

Are these materials shared by everyone in the department? If not, list which positions/people need access to them By All

Are these materials shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

- Storage for forms/stationary/publications \_\_\_\_\_

Are these materials shared by everyone in the department? If not, list which positions/people need access to them \_\_\_\_\_

- Central storage for employee's personal items – lockers, coat closet etc? Locking? \_\_\_\_\_

No

- Other utility or storage room needs? If so, describe \_\_\_\_\_

#### Security

Do you have any special security needs? If so, describe No

#### Communications

Do you have any special communication needs? If so, describe Cell phones

#### Parking Requirements

How much on site parking for employee vehicles do you require 0 CARS

**Material Storage**

What kinds and quantities of material do you store on site? Are there special environmental protection needs associated with this material (protection from weather, environmental hazards, etc.) \_\_\_\_\_

Sodium bisulfate and Chlorine

**Vehicle Needs**

Please inventory vehicles currently used by your department. Please identify new vehicle expectations, based on current capital planning.

2004 F350 utility (Ford)  
2003 F350 utility (Ford)  
98 utility van 3500 (Chevy)  
2001 Pick up (Ford) Ranger  
2001 F350 Dump (Ford)  
2005 Backhoe (on order)  
LO WHEEL DUMP TRUCK  
TYGOL VACTOR (KACUM)

**Garage Needs**

Please comment on bay size, bay height, door size and type, that you think best serve your needs.

35' X 25' 5 bay drive thru. 2 - 14'H X 12'W  
3 - 12'H X 10'W

Please comment on special inside functions (such as washing road salt off equipment), that your facility might need to support.

Steam Cleaner; Chain hoist w/ I Beam  
Rollers



**Material Storage**

What kinds and quantities of material do you store on site? Are there special environmental protection needs associated with this material (protection from weather, environmental hazards, etc.) \_\_\_\_\_

Sodium bisulfate and Chlorine

**Vehicle Needs**

Please inventory vehicles currently used by your department. Please identify new vehicle expectations, based on current capital planning.

2004 F350 utility (Ford)  
2003 F350 utility (Ford)  
98 utility van 3500 (Chevy)  
2001 Pick up (Ford) Ranger  
2001 F350 Dump (Ford)  
2005 Backhoe (on order)  
LO WHEEL DUMP TRUCK  
TYGOL VACTOR (KACUM)

**Garage Needs**

Please comment on bay size, bay height, door size and type, that you think best serve your needs.

35' X 25' 5 bay drive thru. 2 - 14'H X 12'W  
3 - 12'H X 10'W

Please comment on special inside functions (such as washing road salt off equipment), that your facility might need to support.

Steam Cleaner; Chain hoist w/ I Beam  
Rollers

# DEPARTMENTAL QUESTIONNAIRE

Weller & Michal Architects Inc. 222 West Street, Keene NH 03431 voice (603) 357-4031 fax (603) 357-9290

Please complete this form as part of a Needs Assessment Study for your department. Thank you

DEPARTMENT NAME RECREATION

PREPARED BY JEFFREY M. KING DIRECTOR

DEPARTMENTAL SIZE

Number of employees requiring facilities/space on site OFFICE 2 FULL TIME 2 PART TIME | MAINTENANCE 4 SEASONAL 2 FULL TIME SNAGO, 2 PART TIME SNAGO

Number of employees typically working off-site THIS NUMBER CAN VARY WIDELY DEPENDING ON THE NUMBER AND TYPE OF PROGRAMS WE'RE OFFERING AT A GIVEN TIME

AQUATICS  
12 SEASONAL  
CONCESSION  
4 SEASONAL  
PROGRAMS  
~ 50 SEASONAL ON PART-TIME  
VOLUNTEERS/COACHES  
~ 200  
SPORTS OFFICIALS  
~ 50

TYPICAL HOURS OF OPERATION OFFICE OFFICIAL HOURS: 8:30AM-4:30PM M-F | MAINTENANCE OFFICIAL HOURS M-F 7:00-2:30  
REALITY: 8:15AM-5:00PM M-F SAT & SUN VARYING PROGRAM STAFF 7 DAYS PER WEEK VARYING HOURS

**Department's Mission:**

Please provide a short statement that best describes your department's mission and services provided.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please describe future changes (town growth, additional staff, technology, etc) that you envision will impact your department's mission, how services are delivered, and impact your overall space needs.

WE ARE IN THE MIST OF A TRANSITION DUE TO CASHFLOW AND AN INCREASED DEMAND FOR SERVICE. WE HAVE PURCHASED A SOFTWARE PACKAGE AND BEGAN UPGRADING OUR TECHNOLOGY. WE HAVE INCREASED OUR OFFICE STAFF. WE ARE NOW CONSIDERING EVENING OFFICE HOURS AND POSSIBLY WEEKEND OFFICE HOURS AS WELL AS WEEKEND MAINTENANCE HOURS. WE ARE IN NEED OF STORAGE SPACE, INDOOR PROGRAMMING SPACE INCLUDING A GYMNASIUM AND ICE RINKS. WE ARE IN GREAT NEED OF ATHLETIC FIELD SPACE. WE ARE IN NEED OF AN INDOOR AQUATIC FACILITY. WE ARE IN NEED OF RECREATION/DVD ROOMS

**Work Group Relationships:**

List in order of importance the departments, individuals or spaces and their proximity to your department or workgroup. Indicate their required proximity from your workspace in order for you to operate your department in an efficient manner.

Departments and/or Persons	Immediately Adjacent	Nearby	Convenient
REG PROGRAM COORDINATION	✓		
REG SECRETARY	✓		
REG MAINTENANCE AND PROGRAM STAFF		✓	
SCHEDULES		✓ NOT THE CASE NOW	
DPW		✓ NOT THE CASE NOW	
FINANCE DEPT.			✓
TOWN ADMINISTRATION			✓

Overall Group Requirements:

Please complete the following questions noting applicable items and information requested.

**Work Flow and Interactions**

Outside public visitors each day, usual \_\_\_\_\_ maximum \_\_\_\_\_

Other department/town employees who visit your department: each day 5 (or each week \_\_\_\_\_)

Staff meetings usually involve how many staff? 6 <sup>DIRECTOR</sup> <sup>PROGRAM</sup> 10-12

Do you conduct meetings involving the public or outside visitors? YES (yes or no)

Meetings involving the public or outside visitors involve how many people? 5-50-100

Meetings use what types of visual aids? WHITE BOARD, FLIP CHARTS, POWER POINT, LARGE SCREEN TV VCR/DVD

**Meeting Spaces**

In your current operation do you use/need private conference rooms? YES BUT WE USE OUR OFFICES

Number of Seats you require in each room used for conferencing? min. 2 max. 5

In your current operation do you use Open Areas for meetings and/or conferencing? YES

Quantity of people in these meetings would normally be? 5-25

Do any conferencing areas require a kitchenette, buffet etc? Please describe YES. GROUPS RESERVE OUR MEETING ROOM CONSTITENTLY. THEY OFTEN USE THE KITCHENETTE.

**Support Space**

Do you need Public Waiting space? YES (yes or no)

If so what type or size of space is needed? WE CURRENTLY HAVE AN INDOOR RECEPTION AREA. THERE IS NOT ENOUGH AREA FOR PEOPLE TO COME DOWN BY ELL OUR REGISTRATION AND THERE CAN GET TO BE A LINE

Is workspace needed by outside consultants or temporary workers? NO (yes or no).

If so what type of space is needed? private offices, group space, etc? Please explain NA

What is the maximum number of consultants and temporary workers that need to be accommodated at any one time in your department? NA

Can any of these people share a workspace? NA

Are there any equipment requirements for these workspaces? NA

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Is there need for employee breakroom space within your department? If so, describe NOT CURRENTLY

## Equipment

Describe in general terms the essential types of equipment your department uses (PC, printers, scanner, photo copying, etc.) ALL OF THOSE LISTED PLUS DIGITAL CAMERAS FOR OFFICE. ALL MAINTENANCE EQUIPMENT, VEHICLES

PROGRAMS EQUIPMENT, SPORTS EQUIPMENT

Are your computers networked? YES (yes or no) Within department? YES Within facility? YES

Does your department share equipment such as network printer copiers, fax, etc with other departments? If so, describe YES - PRINTERS

Special or Future equipment needs? If so, describe \_\_\_\_\_

## Large Equipment Storage

Describe in general terms large equipment and tools (not vehicles) your department stores for use. \_\_\_\_\_

MOWERS TRIMMERS TOOLS PUMP MACHINE, ETC. BOATS <sup>SPIN</sup> SPRAYER TRAILER INFIELD GRASSMOWER TRACTOR

## Office and Miscellaneous Storage

Current "Overall Storage" for this department can best be described as (well, reasonably well, just barely or not well at all) Please be specific NOT WELL AT ALL - OUR STORAGE IS SPREAD OUT. UNORGANIZED.

SOME EQUIPMENT IS KEPT OUTSIDE EXPOSED TO THE WEATHER. SPORTS EQUIPMENT IS OFTEN KEPT BY VOLUNTEER COUNCILS AT THEIR HOMES.

When completing the following questions please describe "Storage Needs" which will meet your needs 5-10 years into the future

- Do you currently use Letter/Legal Files? YES (yes or no) If so, quantity and number of drawers?

100'S 12-15 LARGE DRAWERS

Are these files shared by everyone in the department? If not, list which positions/people need access to them YES

- Central bound records, reference books or codes? If so, estimate how much space is needed considering future growth 1 GOOD SIZED BOOKSHELF

Is this reference material shared by everyone in the department? If not, list which positions/people need access to them YES

- Shelving for books, binders or catalogues? If so, quantity and number of shelves? \_\_\_\_\_

WE NEED AT LEAST 25 SHELVES - WE DON'T HAVE THAT MANY NOW

Are these materials shared by everyone in the department? If not, list which positions/people need access to them YES

- Special storage needs (engineering plans, computer printouts, oversize or bulky materials?)  
If so, describe WE SHOULD HAVE ONE LARGE CABINET FOR BLUEPRINTS. NOW WE HAVE THEM  
ROLLS UP AND STUFFED IN A BOX

Are these materials shared by everyone in the department? If not, list which positions/people need access to them YES

Are these materials shared by everyone in the department? If not, list which positions/people need access to them

- Storage for forms/stationary/publications WE'RE OKAY ON THIS

Are these materials shared by everyone in the department? If not, list which positions/people need access to them YES

- Central storage for employee's personal items – lockers, coat closet etc? Locking? NO

ADMINISTRATIVE HAS LOCKERS BUT NO ONE USES. NOT NEEDED AT THIS TIME BUT WOULD BE NICE.

COULD REALLY USE STORAGE/LOCKER ROOM FOR PAPERWORK

- Other utility or storage room needs? If so, describe WE NEED A MAINT. CLOSET THAT CAN BE USED

FOR MAINT. WE ALSO A SUPPLY CLOSET FOR SUPPLIES

**Security**

Do you have any special security needs? If so, describe NOTHING EXTRAORDINARY

**Communications**

Do you have any special communication needs? If so, describe YES WE WOULD LIKE TO HAVE MORE NETWORK

STATION ON MOBILE

**Parking Requirements**

How much on site parking for employee vehicles do you require MIN. 8. SHOWN - 25

111  
111

## Material Storage

What kinds and quantities of material do you store on site? Are there special environmental protection needs associated with this material (protection from weather, environmental hazards, etc.) \_\_\_\_\_

ATHLETIC FIELD PAINT - AT LEAST 50 10 gal. pails at a time. CAN'T FREEZE!

FERTILIZER, SEED, CAN'T GET WET! 3-4 PALLETS LIME TOP

SPORTS EQUIPMENT/UNIFORMS - MUST BE KEPT DRY AND PROTECTED FROM MOULD AND MOLD

GASOLINE/DIESEL

CHEMICALS

## Vehicle Needs

Please inventory vehicles currently used by your department. Please identify new vehicle expectations, based on current capital planning.

1 MINI BUS - NEED AT LEAST TWO MORE

1 SMALL OUTFIT TRUCK - NEED NEW ONE TO REPLACE IT

1 MAINT TRACTORS

1 TRACTOR - NEED MORE ATTACHMENTS SUCH AS BLOWING, BUSH

1 HEAVY GRADER

1 4X4 SUV FOR DIRECTION I CAN DREAM CAN'T I? IT WOULD BE NICE TO HAVE AND USEFUL

1 LAMBORGHINI IF WE EVER GET A MINE

## Garage Needs

Please comment on bay size, bay height, door size and type, that you think best serve your needs.

I NEED SOMETHING LARGE ENOUGH TO FIT MY MINI BUS IN WITH SPACE TO CRAWL AROUND EVEN A DAY

FOR A FULL SIZE BUS. PLUS ENOUGH SPACE TO PUT OWN TRACTORS IN WITHOUT COMPROMISING THEM

Please comment on special inside functions (such as washing road salt off equipment), that your facility might need to support.

NO

**Other Comments**

Please provide any additional information you believe to have an impact on the overall size and operation of your department. Thank you

AS STATED EARLIER WE LACK INDOOR AND OUTDOOR PROGRAM SPACE AND STORAGE SPACE. OUR OFFICE SPACE IS ACTUALLY VERY NICE AND FORMS ADEQUATE. IN ORDER TO MEET THE GROWING NEEDS OF THE COMMUNITY HOWEVER, WE NEED TO LOOK AT BUILDING FIELDS, AN ICE RINK, AN INDOOR POOL, AN INDOOR FIELD FACILITY AND SKATE/BIKE PARKS FOR BOTH INDOOR AND OUTDOOR. FOR US, IT'S NOT JUST ABOUT OUR STAFF, IT'S MORE ABOUT WHAT WE COULD/SHOULD BE OFFERING

## Existing Departmental Space Allocations

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**WELLER & MICHAL ARCHITECTS INC.**



**SUMMARY of Existing Space Allocation  
PETERBOROUGH MUNICIPAL FACILITIES**

Department	SPACE USE CODE							SubTotal	Total	% of total
	PS	SWS	SS	SSO	C	S	BS			
Police	585	1,293	1,116	1,157	846	1,472	380	6,849		27%
Fire & Rescue	50	5,844	352	110	-	1,243	290	7,889		31%
Public Works	-	9,270	393	-	-	245	533	10,441		41%
Waste Water Treatment	-	240	65	80	260	1,360	850	2,855		11%
Recreation	180	1,030	90	2,740	-	762	135	4,937		20%
<b>Total Gross Floor Area</b>	<b>815</b>	<b>17,677</b>	<b>2,016</b>	<b>4,087</b>	<b>1,106</b>	<b>5,082</b>	<b>2,188</b>	<b>25,179</b>	<b>SF GFA</b>	<b>100%</b>
	3%	70%	8%	16%	4%	20%	9%	131%		
<b>PS</b>	Public Common Space									
<b>SWS</b>	Staff Work Spaces									
<b>SS</b>	Staff Support Spaces									
<b>SSO</b>	Work Spaces for Others									
<b>C</b>	Circulation/Core Factor									
<b>S</b>	Storage									
<b>BS</b>	Building Services									

**Peterborough - Police**

<b>Job/ Space</b>	<b>Function</b>	<b>Room Name</b>	<b>Room Dimensions</b>	<b>Area (square feet)</b>	<b>Floor Area as % of Total</b>
PS	Public Common Space	Airlock/Entry		172	
		Waiting Area (5 people)		200	
		Conference Room		144	
		Public Toilet Rm		69	
				<b>Public Common Space</b>	<b>585</b>
SWS	Staff Work Spaces	Police Chief Office		137	
		Lt Office		69	
		Police Officer Office - 1		87	
		Police Officer Office - 2		87	
		Police Officer Office - 3		87	
		Police Officer Office - 4		87	
		Squad Room		218	
		Evidence Room/Vault		170	
		Dispatch		103	
		Admin/Files/Copy Equipment		248	
		<b>Staff Work Spaces</b>	<b>1,293</b>	<b>19%</b>	
SS	Staff Support Spaces	Men Toilet & Locker Rm		190	
		Women Toilet & Locker Rm		184	
		Seminar / Traing Room & Storage		631	
		Kitchen		111	
				<b>Staff Support Spaces</b>	<b>1,116</b>
SSO	Spaces for Others	Sally Port		392	
		Adults Booking & Cells		660	
		Juvenile / Children Interigation		105	
				<b>Spaces for Others</b>	<b>1,157</b>
C	Circulation	PS, SWS,SS & SSO by Factor		846	
				<b>Circulation</b>	<b>846</b>
S	Storage	Armory		52	
		Equipment Storage		181	
		Archieve Storage		1,239	
				<b>Storage</b>	<b>1,472</b>
BS	Building Services	Boiler Rm		203	
		Mechanical Rm		177	
		Electrical Rm		150	
				<b>Building Services</b>	<b>380</b>
<b>Total</b>				<b>6,849</b>	<b>100%</b>

Peterborough-Fire & Rescue

Job/ Space	Function	Room Name	Room Dimensions	Area (square feet)	Floor Area as % of Total
PS	Public Common Space	Reception		50	
		Public Common Space		50	1%
SWS	Staff Work Spaces	Apparatus Garage for 5 vehicles		4,782	
		Office-Fire Chief		125	
		Radio Room		146	
		Day Room, Conference & Office Space		791	
		Staff Work Spaces		5,844	74%
SS	Staff Support Spaces	Men Toiler & Showers		122	
		Women Toilet & Shower		55	
		Kitchen		175	
		Staff Support Spaces		352	4%
SSO	Work Spaces for Others	Shop		110	
		Work Spaces for Others		110	1%
C	Circulation	PS, SWS,SS & SSO by Factor		-	
		Circulation		-	0%
S	Storage	Large Equipment Storage		760	
		Fire Fighting Equipment		483	
		Storage		1,243	16%
ME	Mechanical/Electrical			290	
		Mechanical/Electrical		290	4%
<b>Total</b>				<b>7,889</b>	<b>100%</b>

**Peterborough-Public Works**

Job/ Space	Function	Room Name	Room Dimensions	Area (square feet)	Floor Area as % of Total
PS	Public Common Space			-	
Public Common Space				-	0%
SWS	Staff Work Spaces				
		Equipment Bay		6,433	
		Two Bay Equipment Rm		1,404	
		Welding Room		1,033	
		Office		400	
				-	
				-	
Staff Work Spaces				9,270	89%
SS	Staff Support Spaces				
		Lunch & Management Room		337	
		Toilet		56	
Staff Support Spaces				393	4%
SSO	Work Spaces for Others				
Work Spaces for Others				-	0%
C	Circulation				
		PS, SWS,SS & SSO by Factor		-	
Circulation				-	0%
S	Storage				
		Parts & Equipment Storage		245	
Storage				245	2%
ME	Mechanical/Electrical				
		Utility Room		413	
		Boiler Room		120	
Mechanical/Electrical				533	5%
<b>Total</b>				<b>10,441</b>	<b>100%</b>

**Peterborough-Waste Water Dept**

Job/ Space	Function	Room Name	Room Dimensions	Area (square feet)	Floor Area as % of Total
PS	Public Common Space			-	
Public Common Space				-	0%
SWS	Staff Work Spaces				
		Lab		180	
		Office/Staff Work Area		60	
				-	
				-	
Staff Work Spaces				240	8%
SS	Staff Support Spaces				
		Toilet Rm		50	
		Lunch Room		15	
Staff Support Spaces				65	2%
SSO	Work Spaces for Others				
		Sodium Bisulfate Rm		80	
Work Spaces for Others				80	3%
C	Circulation				
		PS, SWS,SS & SSO by Factor		260	
Circulation				260	9%
S	Storage				
		Storage (at Hunt Row Building)		1,000	
		Storage Shed (Waste Water Planit)		120	
		Storage (at Police Garage)		240	
Storage				1,360	48%
ME	Mechanical/Electrical				
		Pump Room		400	
		Wet Well Room		400	
		PLC Cener		50	
Mechanical/Electrical				850	30%
<b>Total</b>				<b>2,855</b>	<b>100%</b>

**Peterborough-Recreation Dept**

<b>Job/ Space</b>	<b>Function</b>	<b>Room Name</b>	<b>Room Dimensions</b>	<b>Area (square feet)</b>	<b>Floor Area as % of Total</b>
PS	Public Common Space	Public Vestibule		60	
		Public Toilets (handicapped)		90	
		Staff Entry		30	
		<b>Public Common Space</b>			<b>180</b>
SWS	Staff Work Spaces	Recreation Director Office		230	
		Program Coordinator Office		160	
		Receptionist		80	
		Staff /Public Concerence Rm		560	
		<b>Staff Work Spaces</b>			<b>1,030</b>
SS	Staff Support Spaces	Copy and File Area		15	
		Kitchen		40	
		Staff Toilet (handicapped)		35	
		<b>Staff Support Spaces</b>			<b>90</b>
SSO	Work Spaces for Others	Public Pool Locker Room & Storage		1,588	
		Public Pool Refreshements, Kitchen & Toilets		1,152	
		<b>Work Spaces for Others</b>			<b>2,740</b>
C	Circulation	PS, SWS,SS & SSO by Factor		-	
<b>Circulation</b>			<b>-</b>	<b>0%</b>	
S	Storage	Rec Storage Rm		40	
		Rec Equipment/Ballfield Storage		722	
		<b>Storage</b>			<b>762</b>
ME	Mechanical/Electrical	Mechanical & Electrical Room		135	
		<b>Mechanical/Electrical</b>			<b>135</b>
<b>Total</b>				<b>4,937</b>	<b>100%</b>

# Proposed Departmental Facility Programming

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**WELLER & MICHAL ARCHITECTS INC.**



# Facility Program

FACILITY **POLICE STATION - New Facility**  
CLIENT **Peterborough, NH**  
PROJECT **Municipal Facility Study**

## Police Department Information

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- **Police Officers & Staff**  
17

- **Major Functional Requirements**

Public  
Administrative  
Police Officers  
Seminars-Training  
Juveniles Holding Areas  
Adult Booking & Holding Area

Storage  
Building Services  
Sally Port

- **Secondary Functional Requirements**

Police Vehilces Storage

## Other Requirments

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Outside Parking for	10 vehicles
Covered Parking for Police Vehicles	5 vehicles plus 1 future
Outside Storage for	8 impounded cars
Cleaning Vehicles	1 vehicle bay

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **POLICE STATION - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>Facility Program</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
Public	general public functions		673
Administrative	support staff & record keeping		825
Police Officers	investigative & police matters		2,283
Seminars-Training	officers		840
Juveniles Holding Areas	private separate area from adults		328
Adult Booking & Holding Area	secure area		776
Storage	equipment & long term records		1,470
Building Services	mechanical & electrical		441
Sally Port	secure area for detainee transfer		525
<b>Total Program Area (Net Square Foot)</b>			<b>8,160</b>
	Wall and Chase Factor	5%	408
	Circulation Factor	10%	816
	Schematic Design SF Factor	10%	816
<b>Subtotal of Adjustment Factors 25%</b>			<b>2,040</b>
<b>Projected Gross Floor Area Required</b>			<b>10,200</b>
Police Vehicules Storage	vehicle storage		1,548
			<b>11,748</b>

<b>Project Budget Summary</b>			
<b>Construction Description</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>	
Building Shell and Finishes	\$90	\$918,028	
Masonry	\$25	\$255,008	
Equipment	\$10	\$102,003	
Plumbing	\$14	\$142,804	
HVAC	\$14	\$142,804	
Electrical	\$22	\$224,407	
Means Cost Index (Median Construction)		\$175 per SF	
Police Vehicle Garage	\$100	\$154,800	

**Project Summary of ALL Costs**

A	Building Costs	\$165	<b>\$1,939,855</b>
B	Fixed Equipment (% of A)	5%	\$96,993
C	Site Development Costs (% of A)	10%	\$193,985
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$2,230,833</b>
E	Moveable Furniture & Equipment (% of A)	1%	\$19,399
F	Professional Fees (% of D)	12%	\$267,700
G	Contingencies/Inflation (% of D)	10%	\$223,083
<b>TOTAL PROJECT COSTS</b>			<b>\$2,741,015</b>

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **POLICE STATION - Renovated Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>Facility Program</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
Public	general public functions		673
Administrative	support staff & record keeping		825
Police Officers	investigative & police matters		2,283
Seminars-Training	officers		840
Juveniles Holding Areas	private separate area from adults		328
Adult Booking & Holding Area	secure area		776
Storage	equipment & long term records		1,470
Building Services	mechanical & electrical		441
Sally Port	secure area for detainee transfer		525
<b>Total Program Area (Net Square Foot)</b>			<b>8,160</b>
	Wall and Chase Factor	5%	408
	Circulation Factor	10%	816
	Schematic Design SF Factor	10%	816
<b>Subtotal of Adjustment Factors</b>			<b>2,040</b>
<b>Projected Gross Floor Area Required</b>			<b>10,200</b>
Police Vehiclces Storage	vehicle storage		1,548
			<b>11,748</b>

<b>Project Budget Summary</b>			
<b>Construction Description</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>	
Addition to Exist Building (Shell & Finishes)	1,900	\$80	\$152,000
Masonry		\$10	\$19,000
Equipment		\$3	\$5,700
Plumbing		\$8	\$15,200
HVAC		\$14	\$26,600
Electrical		\$20	\$38,000
<b>Means Cost Index (Median Construction)</b>		<b>\$135</b>	per SF
Interior Renovations	1,000	\$100	\$100,000
Sally Port	630	\$120	\$75,600
Police Vehicle Garage	1,548	\$100	\$154,800
<b>Project Summary of ALL Costs</b>			
A	Building Costs	\$ 50	<b>\$586,900</b>
B	Fixed Equipment (% of A)	5%	\$29,345
C	Site Development Costs (% of A)	5%	\$29,345
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$645,590</b>
E	Moveable Furniture & Equipment (% of A)	5%	\$29,345
F	Professional Fees (% of D)	12%	\$77,471
G	Contingencies/Infilation (% of D)	10%	\$64,559
<b>TOTAL PROJECT COSTS</b>			<b>\$816,965</b>

# Public Program Summary

PROJECT **POLICE STATION - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Entry Vestibule	airlock	1	75	75
	Waiting Area	space for the public to wait	1	125	125
	Conference Rm	visitors & staff conferences	1	200	200
	Press Conference Rm	meeting with outside reps	1	120	120
					0
					520
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Public Toilet	unisex ADA	1	65	65
					0
					0
					0
					0
					0
					0
					0
					65
<b>Total Program Area (Net Square Foot)</b>					<b>585</b>
		Wall and Chase Factor			0
		Circulation Factor		15%	88
		Schematic Design SF Factor			0
<b>Subtotal of Adjustment Factors</b>					<b>88</b>
<b>Gross Floor Area</b>					<b>673</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.



# Police Officers Program Summary

PROJECT **POLICE STATION - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Police Chief Office	Office		1	145	145
Lt Office			1	120	120
Police Officer Office-1			1	90	90
Police Officer Office-2			1	90	90
Police Officer Office-3			1	90	90
Police Officer Office-4			1	90	90
Police Officer Office-future			1	90	90
Squad Room	officers preparation for duty	a	1	300	300
					1015
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
Evidence Room	storage		1	135	135
Armory			1	75	75
Fitness Room	exercise equipment		1	300	300
Men Locker/Shower Rm		b	1	200	200
Men Toilet Rm		c	1	150	150
Women Locker/shower Rm		d	1	120	120
Women Toilet Rm		e	1	80	80
					1060
<b>Total Program Area (Net Square Foot)</b>					<b>2075</b>
				Wall and Chase Factor	0
				Circulation Factor	10% 208
				Schematic Design SF Factor	0
<b>Subtotal of Adjustment Factors</b>					<b>10% 208</b>
<b>Gross Floor Area</b>					<b>2283</b>

**General Comments and Notes:**

- 
- a. Space for 6 officers at 50 sf / officer = 300 sf
- b. Men lockers (20 lockers @ 10 sf each) = 200 sf
- c. Men toilet room
- d. Womenlockers (6 lockers @ 20 sf each) = 120 sf plus one shower
- e. Women police toilet room

# Seminars-Training Program Summary

PROJECT **POLICE STATION - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Seminar/Training Room	training space	a	1	700	700
					0
					0
					0
					0
					0
					700
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
Storage	equipment & supplies		1	100	100
					0
					0
					0
					0
					0
					0
					0
					0
					100
<b>Total Program Area (Net Square Foot)</b>					<b>800</b>
		Wall and Chase Factor			0
		Circulation Factor		5%	40
		Schematic Design SF Factor			0
<b>Subtotal of Adjustment Factors</b>					<b>5%</b>
<b>Gross Floor Area</b>					<b>840</b>

**General Comments and Notes:**

- 
- a. Space calculation based on 35 persons x 20 sf/ person = 700 sf
- b.
- c.
- d.

# Juvenile Holding Area Program Summary

PROJECT **POLICE STATION - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Child's Integration		1	125	125
	Juvenile Holding Cell		1	90	90
					0
					0
					0
					0
					215
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Toilet Room		1	70	70
					0
					0
					0
					0
					0
					0
					0
					70
<b>Total Program Area (Net Square Foot)</b>					<b>285</b>
	Wall and Chase Factor				0
	Circulation Factor			15%	43
	Schematic Design SF Factor				0
<b>Subtotal of Adjustment Factors</b>					<b>15%</b>
<b>Gross Floor Area</b>					<b>328</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Adult Holding Area

## Program Summary

PROJECT POLICE STATION - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Booking & Search Room		1	100	100
	Identification Room		1	75	75
	Intoxication Room		1	60	60
	Adult Cells		4	60	240
	Isolation Cell		1	60	60
					535
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	General Open Area		1	70	70
	Laundry/Shower Area		1	70	70
					0
					0
					0
					0
					0
					0
					0
					140
<b>Total Program Area (Net Square Foot)</b>					<b>675</b>
				Wall and Chase Factor	0
				Circulation Factor	15%
				Schematic Design SF Factor	0
<b>Subtotal of Adjustment Factors</b>					<b>15%</b>
					<b>101</b>
<b>Gross Floor Area</b>					<b>776</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Facility Program

FACILITY **FIRE and RESCUE - New Facility**  
CLIENT **Peterborough, NH**  
PROJECT **Municipal Facility Study**

## Fire Department Information

---

- **Fire Fighters**
  - Full Time - 1
  - Part Time - 3
  - On Call Volunteers - 50
  
- **Service Population**
  - Fire 6500
  - Ambulance 15,000
  
- **Major Functional Requirements**
  - Apparatus
  - Fire Fighters
  - Fire Equipment Storage
  - Administrative
  - Training
  - Building Services

## Other Requirments

---

Outside Parking for	50 vehicles for volunteer fire fighters
Cleaning Vehicles	2 vehicles bay apron

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**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **FIRE and RESCUE - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

**FACILITY PROGRAM**

Major Functional Areas	Description	Notes	Proposed Area
Fire Apparatus Garage	vehicle storage		6,920
Fire Fighter	support spaces for fire fighters		1,770
Fire Equipment Storage	equipment storage		1,801
Administrative	offices and storage		940
Training	meeting space		840
Building Services	mechancial & electrical		420
<b>Total Program Area (Net Square Foot)</b>			<b>12,691</b>
	Wall and Chase Factor	10%	1,269
	Circulation Factor	5%	635
	Schematic Design SF Factor	10%	1,269
<b>Subtotal of Adjustment Factors</b>			<b>3,173</b>
<b>Gross Floor Area</b>			<b>15,863</b>

**Project Budget Summary**

Construction Description	Cost/SF	Proposed Costs
Building Shell and Finishes	\$80	\$1,269,050
Masonry	\$25	\$396,578
Equipment 7612	\$10	\$158,631
Plumbing	\$10	\$158,631
HVAC	\$15	\$237,947
Electrical	\$20	\$317,263
<b>Means Cost Index (Median Construction)</b>	<b>\$160</b>	<b>per SF</b>

**Project Summary of ALL Costs**

A	Building Costs		<b>\$2,538,100</b>
B	Fixed Equipment (% of A)	8%	\$203,048
C	Site Development Costs (% of A)	12%	\$304,572
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$3,045,720</b>
E	Moveable Furniture & Equipment (% of A)	5%	\$152,286
F	Professional Fees (% of D)	12%	\$365,486
G	Contingencies/Infilation (% of D)	10%	\$304,572
<b>TOTAL PROJECT COSTS</b>			<b>\$3,868,064</b>

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **FIRE and RESCUE - Renovated Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

**FACILITY PROGRAM**

Major Functional Areas	Description	Notes	Proposed Area
Fire Apparatus Garage	vehicle storage		6,920
Fire Fighter	support spaces for fire fighters		1,770
Fire Equipment Storage	equipment storage		1,801
Administrative	offices and storage		940
Training	meeting space		840
Building Services	mechanical & electrical		420
<b>Total Program Area (Net Square Foot)</b>			<b>12,691</b>
	Wall and Chase Factor	10%	1,269
	Circulation Factor	5%	635
	Schematic Design SF Factor	10%	1,269
<b>Subtotal of Adjustment Factors</b>			<b>25% 3,173</b>
<b>Gross Floor Area</b>			<b>15,863</b>

**Project Budget Summary**

Construction Description	Cost/SF	Proposed Costs
Renovate Existing Building	7900 \$45	\$713,841
New Apparatus Garage (Shell & Finishes)	7612 \$110	\$837,320
Equipment	\$5	\$38,060
Plumbing	\$6	\$45,672
HVAC	\$12	\$91,344
Electrical	\$18	\$137,016
<b>Means Cost Index (Median Construction)</b>	<b>\$151</b>	<b>per SF average</b>

**Project Summary of ALL Costs**

A	Building Costs (New Construction + Addition)		<b>\$1,863,253</b>
B	Fixed Equipment (% of A)	5%	\$93,163
C	Site Development Costs (% of A)	10%	\$186,325
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$2,142,741</b>
E	Moveable Furniture & Equipment (% of A)	5%	\$107,137
F	Professional Fees (% of D)	12%	\$257,129
G	Contingencies/Inflation (% of D)	10%	\$214,274
	<b>TOTAL PROJECT COSTS</b>		<b>\$2,721,280</b>



# Fire Fighters Program Summary

PROJECT **FIRE and RESCUE - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Day Room	hanging out/feeding staff	a	1	600	600
Kitchen/Prep/Storage	food preparation		1	200	200
Bunk Room	15 bunks w/ toilet & shower	b	1	500	500
					1300
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
Men Toilet Rm & Showers			1	175	175
Men Locker Rm		c	1	120	120
Women Toilet Rm & Showers			1	100	100
Women Locker Rm		d	1	50	50
Janitor Closet			1	25	25
					470
					<b>45' e Foot</b>
					<b>1770</b>
				220' e Circulation Factor	0
				Circulation Factor	5%
				Schematic Design SF Factor	0
					<b>Subtotal of Adjustment Factors</b>
					5%
					<b>89</b>
					<b>Gross Floor Area</b>
					<b>1859</b>

**General Comments and Notes:**

- 
- a. Space for fire fighters to hangout and prepare meals, etc. (40 occup x 15 sf = 600 sf)
- b. Bunk room based on 15 bunks, open plan at 30 sf / fire fighter
- c. Men lockers (20 lockers @ 10 sf each) = 200 sf
- d. Women lockers (5 lockers @ 10 sf each) = 50 sf

# Fire Equipment Storage Program Summary

PROJECT **FIRE and RESCUE - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Large Equipment Storage Room	fire fighter equipment		1	800	800
General Storage Room	combustibles		1	500	500
Equipment Maintenance Room			1	250	250

1550

Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
Air Compressor Room			1	100	100
Medical Oxygen Tank Storage			1	35	35
Medical Storage			1	30	30

165

**45'e Foot)**

**1715**

Wall and Chase Factor		0
Circulation Factor	5%	86
Schematic Design SF Factor		0

**Subtotal of Adjustment Factors    5%                    86**

**Gross Floor Area                                    1801**

**General Comments and Notes:**

- a.
- b.
- c.
- d.

# Administrative Program Summary

PROJECT **FIRE and RESCUE - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Entry/Reception	vestibule/waiting		1	70	70
Command Center			1	80	80
Administrative Asst	work area & files		1	120	120
Captain Office			1	150	150
Lieutenant Office			2	85	170
Fire Inspector			1	80	80
Supt Fire Alarm			1	80	80
Public Information Officer			1	80	80
					760
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
Reference Area			1	15	15
Files & Copy Aea			1	30	30
Fire Logs Storage			1	20	20
Personal Property Storage			1	70	70
					135
<b>Total Program Area (Net Square Foot)</b>					<b>895</b>
				Wall and Chase Factor	0
				Circulation Factor	5%
				Schematic Design SF Factor	0
				45	
				<b>Subtotal of Adjustment Factors</b>	<b>5%</b>
			<b>132</b>	<b>Gross Floor Area</b>	<b>940</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Training Program Summary

PROJECT **FIRE and RESCUE - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Emergency Operations/Meeting Rm	space for (25-50 persons)	a	1	800	800
					800
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Reference Storage		1	0	0
					0
<b>Total Program Area (Net Square Foot)</b>					<b>800</b>
					0
					40
					0
<b>Subtotal of Adjustment Factors</b>					<b>5%</b>
<b>Gross Floor Area</b>					<b>840</b>

**General Comments and Notes:** 0

- 
- a. Meeting space for 50 people at 15 sf / person = 800 sf
- b.
- c.
- d.

# Building Services

## Program Summary

PROJECT **FIRE and RESCUE - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Mechanical Room	equipment	1	200	200
	Electrical Room	meter and panels	1	150	150
	Sprinkler Room		1	50	50
					400

Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
			1		0

	0
<b>Total Program Area (Net Square Foot)</b>	<b>400</b>
Wall and Chase Factor	0
Circulation Factor	5%
Schematic Design SF Factor	0
<b>Subtotal of Adjustment Factors</b>	<b>5%</b>
<b>Gross Floor Area</b>	<b>420</b>

<b>General Comments and Notes:</b>	55
------------------------------------	----

- 
- a.
- b.
- c.
- d.

# Facility Program

FACILITY **PETERBOROUGH PUBLIC WORKS**  
CLIENT **Peterborough, NH**  
PROJECT **Municipal Facility Study**

## Public Works Department Information

---

- Staff

full time staff - 13

- Major Functional Requirements

General  
Staff Areas  
Vehicle Garage Bays  
Maintenance  
Building Services

- Secondary Functional Requirements

## Other Requirments

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Outside Parking for Pump Island	30 vehicles bulk fuel storage for vehicles (4000 gallons)
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**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **PUBLIC WORK - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>FACILITY PROGRAM</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
General	general public functions		690
Staff Areas	staff administrative functions		1,355
Vehicle Garage Bays	vehicle storage		12,915
Maintenance	general work areas		5,712
Building Services	mechanical & electrical		462
<b>Total Program Area (Net Square Foot)</b>			<b>21,134</b>
	Wall and Chase Factor	5%	1,057
	Circulation Factor	2%	423
	Schematic Design SF Factor	10%	2,113
<b>Subtotal of Adjustment Factors</b>			<b>3,593</b>
<b>Gross Floor Area</b>			<b>24,726</b>

<b>Project Budget Summary</b>			
	<b>Construction Description</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>
	New Building (Shell and Finishes)	24,726 \$65	\$1,607,203
	Masonry	\$10	\$247,262
	Equipment	\$5	\$123,631
	Plumbing	\$5	\$123,631
	HVAC	\$10	\$247,262
	Electrical	\$15	\$370,893
	<b>Means Cost Index (Median Construction)</b>	<b>\$110</b> per SF	

<b>Project Summary of ALL Costs</b>			
A	Building Costs		<b>\$2,719,881</b>
B	Fixed Equipment (% of A)	2%	\$54,398
C	Site Development Costs (% of A)	10%	\$271,988
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$3,046,267</b>
E	Moveable Furniture & Equipment (% of A)	2%	\$54,398
F	Professional Fees (% of D)	8%	\$243,701
G	Contingencies/Inflation (% of D)	10%	\$304,627
	<b>TOTAL PROJECT COSTS</b>		<b>\$3,648,993</b>

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **PUBLIC WORK - Renovation**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

**FACILITY PROGRAM**

Major Functional Areas	Description	Notes	Proposed Area
General	general public functions		690
Staff Areas	staff administrative functions		1,355
Vehicle Garage Bays	vehicle storage		12,915
Maintenance	general work areas		5,712
Building Services	mechanical & electrical		462
<b>Total Program Area (Net Square Foot)</b>			<b>21,134</b>
	Wall and Chase Factor	5%	1,057
	Circulation Factor	2%	423
	Schematic Design SF Factor	10%	2,113
<b>Subtotal of Adjustment Factors</b>			<b>3,593</b>
<b>Gross Floor Area</b>			<b>24,726</b>

**Project Budget Summary**

Construction Description	Cost/SF	Proposed Costs
New Building Shell and Finishes	14000 \$85	\$1,190,000
Masonry	\$5	\$123,631
Equipment	\$3	\$74,179
Plumbing	\$4	\$98,905
HVAC	\$7	\$173,083
Electrical	\$10	\$247,262
Renovation of Existing Building	10000 \$25	\$250,000

**Means Cost Index (Median Construction) \$114 per SF**

**Project Summary of ALL Costs**

A	Building Costs	\$77	<b>\$1,907,060</b>
B	Fixed Equipment (% of A)	2%	\$38,141
C	Site Development Costs (% of A)	5%	\$95,353
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$2,040,554</b>
E	Moveable Furniture & Equipment (% of A)	2%	\$38,141
F	Professional Fees (% of D)	8%	\$163,244
G	Contingencies/Inflation (% of D)	10%	\$204,055
<b>TOTAL PROJECT COSTS</b>			<b>\$2,445,995</b>

# Public Program Summary

FACILITY **PETERBOROUGH PUBLIC WORKS**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Entry Vestibule	airlock	1	50	50
	Conference Rm	seminars & staff conferences	1	500	500
					550
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Public Toilet		1	50	50
					50
<b>Total Program Area (Net Square Foot)</b>					<b>600</b>
					0
					90
					0
<b>Subtotal of Adjustment Factors</b>					<b>15%</b>
					<b>90</b>
<b>Gross Floor Area</b>					<b>690</b>

**General Comments and Notes:**

- 
- a. Meeting space for 30 people at 15 sf/person = 500 sf
- b.
- c.
- d.

# Staff Areas

## Program Summary

FACILITY **PETERBOROUGH PUBLIC WORKS**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Office	public work director		1	120	120
Department Secretary	open area		1	100	100
Future Staff	open area		1	100	100
Lunch Room	staff	a	1	300	300
					620
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
Copy Area/Forms Storage			1	50	50
File and Record Storage			1	75	75
Computer Equipment			1	50	50
Men Locker /shower Room		b	1	300	300
Men Toilet Room			1	120	120
Women Toilet Room			1	75	75
					670
<b>Total Program Area (Net Square Foot)</b>					<b>1290</b>
Wall and Chase Factor					0
Circulation Factor					5%
Schematic Design SF Factor					0
<b>Subtotal of Adjustment Factors</b>					<b>65</b>
<b>Gross Floor Area</b>					<b>1355</b>

**General Comments and Notes:**

- 
- a. Lunch Room 15 persons at 20 sf/ person = 300 sf
- b. Locker Room for 30 lockers & 2 shower stalls = 300
- c.
- d.

# Vehicle Garage Bays Program Summary

FACILITY **PETERBOROUGH PUBLIC WORKS**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Vehicle Bays	a	20	600	12000
					12000
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Parts Storage Room		1	300	300
					300
<b>Total Program Area (Net Square Foot)</b>					<b>12300</b>
				Wall and Chase Factor	0
				Circulation Factor	615
				Schematic Design SF Factor	0
<b>Subtotal of Adjustment Factors</b>					<b>615</b>
<b>Gross Floor Area</b>					<b>12915</b>

**General Comments and Notes:**

- 
- a. Typ bay is 25 ft high
- b.
- c.
- d.

# Maintenance Program Summary

FACILITY **PETERBOROUGH PUBLIC WORKS**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Maintenance Shop	20' x 30' bays dimensions	a	2	600	1200
Maintenance Shop	20' x 75' bays dimensions	a	2	1500	3000
Equipment Wash Bay	20' x 40' bay dimensions	a	1	800	800
Welding Bay	20' x 30' bays dimensions	a	1	300	300
Sign Room & Barriades	20' x 30' bays dimensions	a	1	300	300

5600

Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
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**Total Program Area (Net Square Foot) 5600**

Wall and Chase Factor	0
Circulation Factor	112
Schematic Design SF Factor	0

**Subtotal of Adjustment Factors 2% 112**

**Gross Floor Area 5712**

**General Comments and Notes:**

- 
- a. Typ bay is 25 ft high
- b.
- c.
- d.

# Building Services

## Program Summary

FACILITY **PETERBOROUGH PUBLIC WORKS**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Mechanical Room	boiler, a.c. equipment	1	250	250
	Electrical Room	meter and panels	1	120	120
	Sprinkler Room		1	70	70
					0
					440
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
					0
<b>Total Program Area (Net Square Foot)</b>					<b>440</b>
					0
					22
					0
<b>Subtotal of Adjustment Factors</b>					<b>22</b>
<b>Gross Floor Area</b>					<b>462</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Facility Program

FACILITY **PETERBOROUGH WASTER WATER UTILITY DEPARTMENT**  
CLIENT **Peterborough, NH**  
PROJECT **Municipal Facility Study**

## Public Works Department Information

---

- **Staff**  
full time 5-8

- **Major Functional Requirements**

Waste Water Treatment  
Staff Areas  
Building Services  
  
Storage Facilities

- **Secondary Functional Requirements**  
Vehicle Garage

## Other Requirments

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Outside Parking for 6 vehicles

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# Program Summary

## Program Summary

### PROJECTED FACILITY PROGRAM & PROJECT BUDGET

FACILITY **WASTE WATER TREATMENT PLANT - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

Facility Program			1000	
Major Functional Areas	Description	Notes	200	Proposed Area
Waste Water Treatment	general functions			1,610
Staff Areas	staff administrative functions			2,237
Building Services	mechanical & electrical			1,155
Storage Facilities	general work areas			1,428
<b>Total Program Area (Net Square Foot)</b>				<b>6,430</b>
	Wall and Chase Factor	5%		321
	Circulation Factor	2%		129
	Schematic Design SF Factor	10%		643
<b>Subtotal of Adjustment Factors</b>			17%	<b>1,093</b>
<b>Gross Floor Area</b>				<b>7,523</b>

Vehicle Garage	vehicle storage			2,825
				10,347

Project Budget Summary			
	Construction Description	Cost/SF	Proposed Costs
Garage Storage Building	Building Shell and Finishes	\$90	254,205
Waste Water Treatment Facility	Building Shell and Finishes	\$80	\$601,825
	Masonry	\$15	\$112,842
	Equipment	\$5	\$37,614
	Plumbing	\$10	\$75,228
	HVAC	\$14	\$105,319
	Electrical	\$20	\$150,456
<b>Means Cost Index (Median Construction)</b>		<b>\$144</b>	per SF

#### Project Summary of ALL Costs

A	Building Costs	\$129	<b>\$1,337,489</b>
B	Fixed Equipment (% of A)	25%	\$334,372
C	Site Development Costs (% of A)	15%	\$200,623
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$1,872,485</b>
E	Moveable Furniture & Equipment (% of A)	5%	\$66,874
F	Professional Fees (% of D)	12%	\$224,698
G	Contingencies/Inflation (% of D)	10%	\$187,248
<b>TOTAL PROJECT COSTS</b>			<b>\$2,351,306</b>

# Waste Water Treatment Program Summary

FACILITY **PETERBOROUGH WASTER WATER UTILITY DEPARTMENT**

Primary Areas	Description	Notes	Number	Area	Proposed Area	
	Pump Rm	waste water treatment	a	1	1000	1,000
	Wet Well Rm	waste water treatment	b	1	200	200
						-
						-
					1,200	
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area	
	Chemical Storage Room		1	100	100	
	PLC Center	electrical transformers	1	100	100	
					200	
<b>Total Program Area (Net Square Foot)</b>						<b>1,400</b>
					Wall and Chase Factor	-
					Circulation Factor	15%
					Schematic Design SF Factor	-
<b>Subtotal of Adjustment Factors</b>					15%	210
<b>Gross Floor Area</b>						<b>1,610</b>

**General Comments and Notes:**

- 
- a. Existing Pump Room is approximately 400 sf and is planned to remain in service (new space)
- b. Existing Wet Well Room is approximately 400 sf and is planned to remain in service
- c.
- d.

# Staff Areas

## Program Summary

FACILITY **PETERBOROUGH WASTER WATER UTILITY DEPARTMENT**

Primary Areas	Description	Notes	Number	Area	Proposed Area
Office	utility supt		1	100	100
Staff Work Area	open area		1	1,000	1,000
Main Computer Terminal	staff		1	200	200
Staff Conference/Lunch Room	staff	a	1	150	150
Laboratory	waste water treatment		1	200	200
					1,650
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Copy Area/Forms Storage		1	15	15
	File and Record Storage		1	50	50
	Computer Equipment		1	20	20
	Men Locker /shower Room	b	1	150	150
	Men Toilet Room		1	60	60
					295
<b>Total Program Area (Net Square Foot)</b>					<b>1,945</b>
					-
					-
					-
<b>Subtotal of Adjustment Factors</b>					<b>15%</b>
					292
<b>Gross Floor Area</b>					<b>2,237</b>

**General Comments and Notes:**

- 
- a. Lunch Room 6 persons at 25 sf/ person = 150 sf
- b. Locker Room for 10 lockers & 1 shower stalls = 150
- c.
- d.

# Storage Facilities

## Program Summary

FACILITY **PETERBOROUGH WASTER WATER UTILITY DEPARTMENT**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	General Storage Room		1	200	200
	Equipment Storage Room		1	1000	1,000
	Parts Storage Room		1	200	200
					-
					1,400
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
					-
<b>Total Program Area (Net Square Foot)</b>					<b>1,400</b>
Wall and Chase Factor					-
Circulation Factor					28
Schematic Design SF Factor					-
<b>Subtotal of Adjustment Factors</b>					<b>28</b>
					2%
<b>Gross Floor Area</b>					<b>1,428</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Building Services

## Program Summary

FACILITY **PETERBOROUGH WASTER WATER UTILITY DEPARTMENT**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Mechanical Room	boiler, a.c. equipment	1	100	100
	Electrical Room	meter and panels	1	1000	1,000
				200	-
					-
					1,100
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area

					-
<b>Total Program Area (Net Square Foot)</b>					<b>1,100</b>
					-
Wall and Chase Factor					-
Circulation Factor					5%
Schematic Design SF Factor					-
<b>Subtotal of Adjustment Factors</b>					<b>5%</b>
<b>Gross Floor Area</b>					<b>1,155</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Vehicle Garage Program Summary

FACILITY **PETERBOROUGH WASTER WATER UTILITY DEPARTMENT**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Vehicle Bays		6	420	2,520
		(3) pickup trucks		1000	-
		dump truck		200	-
		utility van			-
		back hoe			-
		tiger vactor			-

Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Steam Cleaning Area		1	120	120
	Parts Storage		1	50	50
					-
					-
					-
					-

<b>Total Program Area (Net Square Foot)</b>	<b>2,690</b>
---	--------------

	Wall and Chase Factor		-
	Circulation Factor	5%	135
	Schematic Design SF Factor		-
	<b>Subtotal of Adjustment Factors</b>	5%	135
	<b>Gross Floor Area</b>		<b>2,825</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Facility Program

FACILITY **PETERBOROUGH RECREATION DEPARTMENT**  
CLIENT **Peterborough, NH**  
PROJECT **Municipal Facility Study**

## **Recreation Department Information**

---

### - **Major Functional Requirements**

Main Administrative Offices

Garage for Vehicles & Equipment Storage

Pool Facilities

### - **Secondary Functional Requirements**

Parking

Expanded Ball Fields

Ice Hockey Rink

## **Other Requirments**

---

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **RECREATION DEPARTMENT - Renovated Facilities**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>Facility Program</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
Recreation Dept Main Offices	general public functions		2,756
Recreation Pool Facilities	pool and recreation space		5,415
Recreation Garage Storage	vehicle storage		2,389
<b>Total Program Area (Net Square Foot)</b>			<b>10,560</b>
	Wall and Chase Factor	5%	528
	Circulation Factor	10%	1,056
	Schematic Design SF Factor	10%	1,056
<b>Subtotal of Adjustment Factors</b>			<b>2,640</b>
<b>Gross Floor Area</b>			<b>13,199</b>

<b>Project Budget Summary</b>				
	<b>Construction Description</b>	<b>SF</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>
Recreation Dept Main Offices	Renovate & Expand Existing Building	1200	\$135	\$162,000
Recreation-Pool Facilities	Renovate & Expand Existing Building	2500	\$90	\$225,000
	Masonry		\$5	\$6,000
	Equipment		\$5	\$6,000
	Plumbing		\$20	\$24,000
	HVAC		\$15	\$18,000
	Electrical		\$18	\$21,600
	<b>Means Cost Index (Median Construction)</b>		<b>\$153</b>	per SF
Recreation Garage Storage Building	New Building (Shell and Finishes)	2986	\$90	\$268,734
Recreation Athletic Fields	Relocate Bishop Field			Not Included

**Project Summary of ALL Costs**

A	Building Costs	\$109		<b>\$731,334</b>
B	Fixed Equipment (% of A)	2%		\$14,627
C	Site Development Costs (% of A)	6%		\$43,880
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$789,841</b>
E	Moveable Furniture & Equipment (% of A)	2%		\$14,627
F	Professional Fees (% of D)	10%		\$78,984
G	Contingencies/Inflation (% of D)	10%		\$78,984
<b>TOTAL PROJECT COSTS</b>				<b>\$962,436</b>

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **RECREATION DEPARTMENT - New Facilities**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>Facility Program</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
Recreation Dept Main Offices	general public functions		2,756
Recreation Pool Facilities	pool and recreation space		5,415
Recreation Garage Storage	vehicle storage		2,389
<b>Total Program Area (Net Square Foot)</b>			<b>10,560</b>
	Wall and Chase Factor	5%	528
	Circulation Factor	10%	1,056
	Schematic Design SF Factor	10%	1,056
<b>Subtotal of Adjustment Factors</b>			<b>2,640</b>
<b>Gross Floor Area</b>			<b>13,199</b>

<b>Project Budget Summary</b>				
	<b>Construction Description</b>	<b>SF</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>
Recreation Dept Main Offices	New (Building Shell and Finishes)	3445	\$100	\$344,531
	Masonry		\$2	\$6,891
	Equipment		\$2	\$6,891
	Plumbing		\$6	\$20,672
	HVAC		\$12	\$41,344
	Electrical		\$16	\$55,125
	<b>Means Cost Index (Median Construction)</b>		<b>\$138</b>	per SF
Recreation -Pool Facilities	New Building (Shell and Finishes)	5415	\$158	\$855,491
Recreation Garage Storage Building	New Building (Shell and Finishes)	2986	\$90	\$268,734
Recreation Athletic Fields	Relocate Bishop Field			Not Included
	New Fields @ Sewer Lagoon			Not Included
<b>Project Summary of ALL Costs</b>				
A	Building Costs		\$135	<b>\$1,599,679</b>
B	Fixed Equipment (% of A)		5%	\$79,984
C	Site Development Costs (% of A)		10%	\$159,968
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$1,839,630</b>
E	Moveable Furniture & Equipment (% of A)		2%	\$31,994
F	Professional Fees (% of D)		10%	\$183,963
G	Contingencies/Inflation (% of D)		10%	\$183,963
<b>TOTAL PROJECT COSTS</b>				<b>\$2,239,550</b>

# Public Program Summary

FACILITY **PETERBOROUGH RECREATION DEPARTMENT**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Public Entry & Lobby		1	150	150
	Public Contrence Room		1	600	600
					750
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Public Toilets		2	50	100
	Kitchen		1	100	100
	Storage		1	100	100
					300
<b>Total Program Area (Net Square Foot)</b>					<b>1050</b>
				Wall and Chase Factor	0
				Circulation Factor	105
				Schematic Design SF Factor	0
<b>Subtotal of Adjustment Factors</b>					<b>105</b>
<b>Gross Floor Area</b>					<b>1155</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Administrative Program Summary

FACILITY **PETERBOROUGH RECREATION DEPARTMENT**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Recreation Director Office		1	175	175
	Program Coordinator Office		1	150	150
	Department Secretary		1	120	120
	Future Staff		1	150	150
					595
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Copy Area/Forms Storage		1	75	75
	File and Record Storage		1	125	125
	Break Room/Conferences		1	175	175
					0
	Staff Toilet		1	55	55
					430
<b>Total Program Area (Net Square Foot)</b>					<b>1025</b>
					0
					51
					0
<b>Subtotal of Adjustment Factors</b>					<b>51</b>
<b>Gross Floor Area</b>					<b>1076</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.





# Vehicle & Equipment Storage Program Summary

FACILITY **PETERBOROUGH RECREATION DEPARTMENT**

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Vehicle Garage	vehicle storage	5	175	875
	Trailer Storage		1	200	200
	Future Vehilce		1	200	200
					1275
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Equipment Parts & Storage		1	1000	1000
					1000
<b>Total Program Area (Net Square Foot)</b>					<b>2275</b>
					0
					114
					0
<b>Subtotal of Adjustment Factors</b>					<b>114</b>
<b>Gross Floor Area</b>					<b>2389</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **SWIMMING POOL BUILDING - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>Facility Program</b>			
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>
Recreation Facilities	program space		2700
Pool Facilities	pools & equipment space		1465
<b>Total Program Area (Net Square Foot)</b>			<b>4165</b>
	Wall and Chase Factor	5%	208
	Circulation Factor	15%	625
	Schematic Design SF Factor	10%	417
<b>Subtotal of Adjustment Factors</b>			<b>1250</b>
<b>Gross Floor Area</b>			<b>5,415</b>

<b>Project Budget Summary</b>				
	<b>Construction Description</b>	<b>SF</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>
Recreation Pool Building	Building Shell and Finishes	5415	\$100	\$541,450
	Masonry		\$10	\$54,145
	Equipment		\$5	\$27,073
	Plumbing		\$10	\$54,145
	HVAC		\$15	\$81,218
	Electrical		\$18	\$97,461
	Repairs & Upgrades to Public Pool		Allowance	\$100,000
	<b>Means Cost Index (Median Construction)</b>		<b>\$158</b> per SF	

**Project Summary of ALL Costs**

A	Building Costs			<b>\$855,491</b>
B	Fixed Equipment (% of A)		5%	\$42,775
C	Site Development Costs (% of A)		12%	\$102,659
D	<b>TOTAL CONSTRUCTION COSTS</b>			<b>\$1,000,924</b>
E	Moveable Furniture & Equipment (% of A)		5%	\$42,775
F	Professional Fees (% of D)		10%	\$100,092
G	Contingencies/Inflation (% of D)		10%	\$100,092
<b>TOTAL PROJECT COSTS</b>				<b>\$1,243,884</b>

# Public Pool Facilities

## Program Summary

FACILITY **SWIMMING POOL BUILDING - New Facility**

Primary Areas	Description	Notes	Number	Area	Proposed Area	
	Public Lockers & Toilets		2	500	1000	
	Public Toilet Rooms		2	150	300	
	Recreation Space		1	1000	1000	
	Public Refreshment & Snack Bar		1	400	400	
					2700	
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area	
	Equipment Parts & Storage		2	300	600	
	Pool Mechanical Room		1	300	300	
	Janitor Room		1	65	65	
	Staff Locker Rooms/Toilets		2	250	500	
					1465	
<b>Total Program Area (Net Square Foot)</b>					<b>4165</b>	
				Wall and Chase Factor	0%	0
				Circulation Factor	0%	0
				Schematic Design SF Factor	0%	0
<b>Subtotal of Adjustment Factors</b>					<b>0%</b>	<b>0</b>
<b>Gross Floor Area</b>					<b>4165</b>	

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Facility Program

FACILITY SAFETY CENTER (Police and Fire) - New Facility  
CLIENT Peterborough, NH  
PROJECT Municipal Facility Study

## Police Department Information

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### - Police Officers & Staff

Full Time - 17

### - Fire Officers & Staff

Full Time - 1

Part Time - 3

On Call Volunteers - 50

### - Service Population

Fire 6500

Ambulance 15,000

Police 12 - 13,000

### - Major Functional Requirements

#### Common Functions

Public

Administrative

Common Building Services

#### Common Police/Fire Functions

#### Police Functions

Police Officers

Juveniles/Children Holding Areas

Adult Holding Areas

Police Storage

Sally Port

#### Fire Functions

Fire Fighters

Fire Apparatus

Fire Equipment Storage

#### Future Space

Walls, Circulation, Schematic Design Factors

## Other Requirements

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Outside Parking for	50 vehicles for volunteer fire fighters
Outside Parking for	10 vehicles for police
Outside Storage for	8 impounded cars
Covered Parking Police Vehicles	5 vehicles plus 1 future
Cleaning Vehicles	1 vehicle bay

**PROJECTED FACILITY PROGRAM & PROJECT BUDGET**

FACILITY **SAFETY CENTER (Police and Fire) - New Facility**  
 CLIENT **Peterborough, NH**  
 PROJECT **Municipal Facility Study**

<b>Facility Program</b>				
<b>Major Functional Areas</b>	<b>Description</b>	<b>Notes</b>	<b>Proposed Area</b>	<b>Total Proposed Area</b>
Public	general public functions		765	
Administrative	support staff & record keeping		1,470	
Common Building Services	mechanical & electrical		977	<b>3,211</b>
Common Police/Fire Functions	training and fitness		1,760	<b>1,760</b>
Police Officers	investigative & police matters		2,016	
Juveniles/Children Holding Areas	private separate area from adults		310	
Adult Holding Areas	secure area		955	
Police Storage	equipment & long term records		1,470	
Sally Port	secure area		525	<b>5,275</b>
Fire Fighters	offices, bunk room		2,657	
Fire Apparatus	vehicle garage		6,920	
Fire Equipment Storage	fire fighter equipment		1,801	<b>11,377</b>
Future Shell			-	-
<b>Total Program Area (Net Square Foot)</b>				<b>21,624</b>
	Wall and Chase Factor	5%		1,081
	Circulation Factor	5%		1,081
	Schematic Design SF Factor	10%		2,162
<b>Subtotal of Adjustment Factors 20%</b>				<b>4,325</b>
<b>Projected Gross Floor Area Required</b>				<b>25,948 sf</b>

Police Vehilces Garage	vehicle storage	1548
------------------------	-----------------	------

<b>Project Budget Summary</b>			
<b>Construction Description</b>	<b>Cost/SF</b>	<b>Proposed Costs</b>	
New Building (Shell and Finishes)	\$80	\$2,075,856	
Masonry	\$25	\$648,705	
Equipment	\$10	\$259,482	
Plumbing	\$14	\$363,275	
HVAC	\$14	\$363,275	
Electrical	\$22	\$570,860	
<b>Means Cost Index (Median Construction)</b>	<b>\$165</b>	per SF	
Police Vehicle Garage	\$105	\$162,540	

**Project Summary of ALL Costs**

A	Building Costs	\$ 162	<b>\$4,443,993</b>
B	Fixed Equipment (% of A)	6%	\$266,640
C	Site Development Costs (% of A)	10%	\$444,399
D	<b>TOTAL CONSTRUCTION COSTS</b>		<b>\$5,155,032</b>
E	Moveable Furniture & Equipment (% of A)	4%	\$177,760
F	Professional Fees (% of D)	10%	\$515,503
G	Contingencies/Infilation (% of D)	10%	\$515,503
<b>TOTAL PROJECT COSTS</b>			<b>\$6,363,798</b>

# Public Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Entry Vestibule	airlock	1	125	125
	Waiting Area	space for the public to wait	1	125	125
	Conference (press) Rm	visitors & staff conferences	1	300	300
					0
					0
					550
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Public Toilet	Men & Women	2	55	110
	Janitor Closet		1	35	35
					145
<b>Total Program Area (Net Square Foot)</b>					<b>695</b>
		Wall and Chase Factor			0
		Circulation Factor		10%	70
		Schematic Design SF Factor			0
<b>Subtotal of Adjustment Factors</b>					<b>70</b>
<b>Gross Floor Area</b>					<b>765</b>

**General Comments and Notes:**

- 
- a. Common vestibule
- b. Common waiting area for all visitors
- c. Common/Multi-Use space for both staff & visitors

# Administrative Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Dispatch	a	1	300	300
	Administrative-Police	b	1	200	200
	Administrative-Fire	c	1	200	200
					0
					0
					0
					0
					700
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Copy Area/Forms Storage	d	1	150	150
	File and Record Storage	e	2	200	400
	Mobile Data Equipment	d	1	150	150
					700
<b>Total Program Area (Net Square Foot)</b>					<b>1400</b>
	Wall and Chase Factor				0
	Circulation Factor			5%	70
	Schematic Design SF Factor				0
<b>Subtotal of Adjustment Factors</b>					<b>70</b>
<b>Gross Floor Area</b>					<b>1470</b>

**General Comments and Notes:**

- 
- a. Common dispatch area (joint staff)
- b. Police administrative staff
- c. Fire administrative staff
- d. Shared space
- e. Individual file storage area for police and fire

# Building Services

## Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Mechanical Room	boiler, a.c. equipment	2	200	400
	Electrical Room	meter and panels	1	150	150
	Sprinkler Room		1	80	80
					0
					0
					0
					630
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Electrical Sub Panel Room	sub panels	2	50	100
	Mechanical Sub Panel Room		2	50	100
	Janitor Room/Storage		2	50	100
					300
<b>Total Program Area (Net Square Foot)</b>					<b>930</b>
	Wall and Chase Factor				0
	Circulation Factor			5%	47
	Schematic Design SF Factor				0
<b>Subtotal of Adjustment Factors</b>					<b>5%</b>
<b>Gross Floor Area</b>					<b>977</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

# Common Police Fire Areas

## Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
Seminar/Training/Command Center	training space	a	1	1000	1000
Fitness Room	exercise equipment	b	1	600	600
					1600
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area

	0
<b>Total Program Area (Net Square Foot)</b>	<b>1600</b>
Wall and Chase Factor	0
Circulation Factor 10%	160
Schematic Design SF Factor	0
<b>Subtotal of Adjustment Factors 10%</b>	<b>160</b>
<b>Gross Floor Area</b>	<b>1760</b>

**General Comments and Notes:**

- 
- a. Space calculation based on 40 persons x 20 sf/ person = 800 sf + 200 sf for Storage= 1000 sf
- b. Space for exercise equipment

# Police Officers Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Police Chief Office		1	145	145
	Police Lt Office		1	120	120
	Police Officer Office-1		1	90	90
	Police Officer Office-2		1	90	90
	Police Officer Office-3		1	90	90
	Police Officer Office-4		1	90	90
	Police Officer Office-future		1	90	90
	Squad Room		1	300	300
	Conference Room		1	120	120
					1135
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Evidence Room		1	135	135
	Armory		1	75	75
	Men Locker/Shower Rm	a	1	200	200
	Men Toilet Rm	b	1	150	150
	Women Locker/Shower Rm	c	1	120	120
	Women Toilet Rm	d	1	80	80
	Janitor		1	25	25
					785
<b>Total Program Area (Net Square Foot)</b>					<b>1920</b>
	Wall and Chase Factor				0
	Circulation Factor			5%	96
	Schematic Design SF Factor				0
<b>Subtotal of Adjustment Factors</b>					<b>96</b>
<b>Gross Floor Area</b>					<b>2016</b>

**General Comments and Notes:**

- a. Men lockers (20 lockers @ 10 sf each) = 200 sf
- b. Men toilet room and (2) showers
- c. Womenlockers (6 lockers @ 10 sf each) = 60 sf + Showers
- d. Women police toilet room and showers (2)

# Juvenile Holding Areas

## Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Child's Integration		1	125	125
	Juvenile Holding Cell		1	100	100
					0
					0
					0
					0
					225
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Toilet Room		1	70	70
					0
					70
<b>Total Program Area (Net Square Foot)</b>					<b>295</b>
	Wall and Chase Factor				0
	Circulation Factor			5%	15
	Schematic Design SF Factor				0
<b>Subtotal of Adjustment Factors</b>				5%	<b>15</b>
<b>Gross Floor Area</b>					<b>310</b>

### General Comments and Notes:

- 
- a.
- b.
- c.
- d.

# Adult Holding Areas

## Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Booking & Search Room		1	150	150
	Identification Room		1	75	75
	Intoxication Room		1	75	75
	Adult Cells		4	60	240
	Isolation Cell		1	120	120
					660
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	General Open Area		1	100	100
	Laundry/Shower Area		1	70	70
					0
					170
<b>Total Program Area (Net Square Foot)</b>					<b>830</b>
				Wall and Chase Factor	0
				Circulation Factor	15%
				Schematic Design SF Factor	0
<b>Subtotal of Adjustment Factors</b>					<b>15%</b>
<b>Gross Floor Area</b>					<b>955</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.





# Police Vehicle Storage Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
Covered Police Vehicles	police vehile storage bay	a	5	170	850
Trailer Storage	radar trailer		1	100	100
Future Vehilce	police vehile storage bay		1	170	170
					0
					0
					0
					1120
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Cleaning Vehicle Bay		1	170	170
					0
					170
<b>Total Program Area (Net Square Foot)</b>					<b>1290</b>
	Wall and Chase Factor			5%	65
	Circulation Factor			5%	65
	Schematic Design SF Factor			10%	129
<b>Subtotal of Adjustment Factors</b>					<b>258</b>
<b>Gross Floor Area</b>					<b>1548</b>

**General Comments and Notes:**

- 
- a. parking space 170 sf per vehicle
- b.
- c.
- d.

# Fire Fighters Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
	Command Center	communications	1	80	80
	Captain Office	office	1	150	150
	Lieutenant Office		2	85	170
	Fire Inspector		1	80	80
	Supt Fire Alarm		1	80	80
	Public Information Officer		1	80	80
	Conference Room		1	120	120
					760
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
	Day Room	hanging out/feeding staff	a	1	600
	Kitchen/Prep/Storage	food preparation		1	200
	Bunk Room	15 bunks w/ toilet & shower	b	1	500
	Men Toilet Rm & Showers			1	175
	Men Locker Rm		c	1	120
	Women Toilet Rm & Showers			1	100
	Women Locker Rm		d	1	50
	Janitor Closet			1	25
					0
					0
					0
					0
					1770
<b>Total Program Area (Net Square Foot)</b>					<b>2530</b>
					0
					127
					0
<b>Subtotal of Adjustment Factors</b>					<b>5%</b>
					<b>127</b>
<b>Gross Floor Area</b>					<b>2657</b>

**General Comments and Notes:**

- 
- a. Space for fire fighters to hangout and prepare meals, etc. (40 occup x 15 sf = 600 sf)
- b. Bunk room based on 15 bunks, open plan at 30 sf / fire fighter
- c. Men lockers (20 lockers @ 10 sf each) = 200 sf
- d. Women lockers (5 lockers @ 10 sf each) = 50 sf

# Fire Apparatus Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
Apparatus Bay	(2) main line pumper	b	2	640	1280
Apparatus Bay	ladder engine, command car	a	1	1280	1280
Apparatus Bay	tanker & squad cars	b	2	640	1280
Apparatus Bay	forest truck, 6 wheel ATV & boat	b	2	640	1280
Apparatus Bay	ambulance space	c	3	320	960
Apparatus Bay	future main line pumper	b	1	640	640
Apparatus Bay	future command car	d	1	200	200
					6920
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
					0
<b>Total Program Area (Net Square Foot)</b>					<b>6920</b>
					0
Wall and Chase Factor					0
Circulation Factor					0
Schematic Design SF Factor					0
<b>Subtotal of Adjustment Factors</b>					<b>0%</b>
<b>Gross Floor Area</b>					<b>6920</b>

**General Comments and Notes:**

- a. Typical Large Engine Garage Space 16 ft wide by 80 feet long = 1280 sf
- b. Typical Medium Engine Garage Space 16 ft wide by 40 feet long = 640 sf
- c. Typical Garage space for ambulance = 16 ft wide by 20 feet long = 320 sf
- d.

# Fire Equipment Storage Program Summary

PROJECT SAFETY CENTER (Police and Fire) - New Facility

Primary Areas	Description	Notes	Number	Area	Proposed Area
Large Equipment Storage Room	fire fighter equipment		1	800	800
General Storage Room	combustibles		1	500	500
Equipment Maintenance Room			1	250	250
					0
					0
					0
					0
					1550
Support Spaces and Equipment	Description	Notes	Number	Area	Subtotal Area
Air Compressor Room			1	100	100
Medical Oxygen Tank Storage			1	35	35
Medical Storage			1	30	30
					165
<b>Total Program Area (Net Square Foot)</b>					<b>1715</b>
	Wall and Chase Factor				0
	Circulation Factor			5%	86
	Schematic Design SF Factor				0
<b>Subtotal of Adjustment Factors</b>					<b>86</b>
<b>Gross Floor Area</b>					<b>1801</b>

**General Comments and Notes:**

- 
- a.
- b.
- c.
- d.

WV Engineering "Mechanical and Electrical System Report"

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**WELLER & MICHAL ARCHITECTS INC.**



August 26, 2005

Re: **Peterborough Municipal Complex**  
**Peterborough, NH**  
**Mechanical & Electrical Report**  
**W.V. Engineers - WVA Project No. 04235**

## **Police Department**

### **Mechanical**

The building is heated with an oil fired Weil McLain boiler (Model WG0-6). This boiler has a firing rate of 1.8 gph and an output of 218 MBH. The boiler and related equipment appears to be in good condition.

The building divided into three piping zones each with it's own circulator. The building is primarily heated with hot water baseboard radiation, each room is individually thermostatically controlled. There are a couple of lengths of electric baseboard radiation in various locations. A hot water unit heater is provided in the sally port. There are two 275 gallon vertical oil storage tanks located in the adjacent storage room.

The office area has a split type cooling system, York Model N2AHD020A06C with 5 ton condenser York Model H4DB060S06A. Both appear in good condition.

The fitness room is equipped with a package-through wall heat pump unit to provide heat as well as air conditioning. Unit appears in good condition.

A roof exhauster is provided for toilet/locker room exhaust. The evidence room is provided with a ceiling exhaust fan although there are complaints that the fan is not effective.

The building is fully sprinklered. There is a municipal water service with backflow prevention and dry alarm valve.

There is also a 1" domestic water service which appears not to be equipped with backflow prevention. Water is heating with a 40 gallon 3800/5500 watt electric heater. The heater appears to be in good condition and is equipped with a 3-way mixing valve. The domestic hot water system is not recirculated.

The main mens and womens toilet locker area are provided with tank type water closets , lavatories and showers. Fixtures appear to be in good condition and ADA compliant.

The holding cell are equipped with prison-ware type stainless steel fixtures with integral lavatory and water closet. Water is able to be shut-off from outside the cells.

## Electrical

The police department resides within a building that was formerly the Public Service Company of NH office building in Peterborough, NH. The police station moved in approximately 10 years ago with renovations that occurred in 1995.

The building is equipped as a modern police station typical for small town police stations prior to 911. The building does not include specific bullet proof glass or bullet proof materials within walls which separate public areas from private areas.

The building also does not include sufficient secure storage for held evidence including fire arms, bicycles and other general purpose evidence.

The police station serves as a holding facility with incarcerated persons being transported to Hillsboro County Jail after booking and processing. The dispatch folks are on staff at this location from 8:00 a.m. to midnight. This is not a 24 hour/7 day per week 911 dispatch center. 911 calls go to the State first then redirected to Peterborough. Peterborough dispatch does not record calls at this location.

Processing which occurs here includes folks who are booked and then release on personal recognizance or bail. Transportation from Peterborough to Manchester includes transportation by County Sherriffs.

For booking and holding cell areas - there is no separation for juvenile, for men, or for women. There is one set of cells which hold all inmates.

When large incidents occur, inadequate separation results in the least aggressive persons being held in the adjacent conference room.

Single door sallyport not drive through, is located off the holding cell area.

The electric service for the building is a 400 amp, 3 phase, older equipment which appears to be from the original construction as a PSNH building. The building is provided with a standby propane gas fired generator. The unit is a Kohler 20 kW. The unit appears to be approximately 10 years old and in generally good to excellent condition. However, the enclosure has been severely damaged by snow plowing operations around the back of this building. This exposes part of the engine and equipment to increment weather and possible vandalism or sabotage. The unit enclosure should be repaired as soon as possible.

The electric demand information for the building would need to be provided in order for evaluation of existing service capacity to confirm that, that capacity is sufficient for the present use and for growth.

The distribution of receptacles throughout the building appears to be adequate for the present police functions. We did observe any excess use of extension cords or awkward location of equipment due to insufficient receptacles.

Replacement of the older GE panelboards should be considered as part of a 10 year renovation.

Lighting throughout the facility is typically surface mounted wraparound style fixtures. These appear to be new with the 1995 renovation, including T-8 lamps and electronic ballast and appear to be in good to excellent condition.

Holding cell light fixtures include vandal resistant corner mount style for detention spaces.

Fire alarm system within the building appears to be part of the 1995 renovations. The fire alarm pull stations, horn strobe appliances appear to meet current NFPA 72 and ADA Guidelines as these were enforced in 1995.

Communications for the building includes underground telephone service along with telephone service and CAT 5 wiring in the electric room extended out to work area outlets. Some of the wiring in the electric room is untidy but seems to be organized and labeled.

Camera systems in the sally-port and holding cell area is limited but sufficient for current needs.

Exterior lighting at the police facility and the outside/fenced enclosed impound area is limited to older/existing lighting. The site was not reviewed at night.

In general, electrical for the recently renovated building appears to be in good to excellent condition.

## **Fire & Rescue Department**

### **Mechanical**

The fire department building is heated with an American Standard oil fired cast iron boiler, Model 1B-J1PFA505. The name plate output is 786 MBH. The boiler is in fair condition.

Heating distribution is via two zone circulating pumps positioned on the zone return mains. Burner stages to maintain reset water temperature.

The office and training room areas are provided with baseboard radiation. There is no outside air ventilation for these areas.

The truck bays are heated with hot water unit heaters. There is no central or tail pipe exhaust systems.

The kitchenette area is provided with residential style appliances. The kitchen hood is also residential type and not NFPA 96 compliant.

The building is served by a 3/4" domestic water service. Fixtures in the shower/locker rooms include tank type water closets. Fixtures throughout are in poor condition.

Domestic hot water is heated via an indirect heat exchanger integral to the boiler room.

The building is fully sprinklered, served by a 6" water main and wet type alarm valve.

The building is also equipped with a 5 Hp recirculating compressor for shop and equipment use. The estimated capacity is approximately 25 cfm with a 100 gallon receiver.

A separate compressor is located in the truck bay for fully breathing apparatus.

## Electrical

Site lighting around the fire station is minimal with some limited building mounted lighting and pole mounted lighting. This site has not been reviewed at night.

Electric service enters to the rear of the building to a 200 amp, 3 phase main panel with a meter located in the building. The meter, panel, standby generator, and other equipment are all located in a tight electric room. The main service is an older load center style with limited room for expansion.

The 120/208 volt, 3 phase, standby generator is new and appears to be good to excellent condition. The breaker has a rating of 25 KVA with a 90 amp, 3-pole breaker.

This generator capacity could likely serve the entire fire station needs under the present loading. With an expansion or renovation, added equipment and/or central air conditioning would not likely be supported by this generator.

The electrical distribution within the building is primarily original to the conversion from public works with some additions and modifications over time as needed.

The building air compressor for the fire truck air breaks is a antiquated unit which has performed well over years but should be considered for replacement.

A new Scott air compressor for providing fresh air to firemen air backpacks is located in the apparatus bay with an extension for fresh air intake to the outside of the building. The unit is new and in good to excellent condition.

Electrical wiring within the apparatus bay/garage are is not compliant with current NEC. Conduits which extend from below the garage area slab should be provided with hazardous location conduit seal fittings. Alternative approach would be to abandon these conduits and wiring and extend wiring from overhead and maintain 18 inches minimum clearance from the over head to the garage floor.

Lighting within the building includes a wide variety of ceiling mounted flourescent light fixtures including surface mounted utility type fixtures in the apparatus bays and lensed or wraparound type fixtures in offices and staff areas.

Flourescent lamping was replaced recently with energy retrofit T-8 lamps and electronic ballasts as part of a PSNH energy audit and incentive replacement program.

Fire alarm systems within the building is limited. A complete new fire alarm system with ADA compliant horns and strobes throughout the facility should be provided as part of any renovation project.

Communications wiring includes phone system wiring which is essentially original with the building conversion. Additional wiring including limited computer wiring has been added over time.

The staff has applied for grants for improved equipment including turnout gear, washing machine with dryer/extractor equipment. At present, equipment is hung in the boiler room to dry after cleanup.

At present, there is no hazmat shower or decontamination provisions at the fire station. The firemen use the Peterborough Hospital decontamination shower when required.

At present there is no central vehicle exhaust system. A grant application has been made to obtain this equipment.

The fire station is also used for various meetings including outside groups such as Cub Scouts. Path-of-egress, emergency lighting, and fire alarm improvements should be made in order to continue use of this space by staff or outside groups.

Receptacles located in the garage/apparatus bay areas should be ground fault circuit interrupter protected to comply with current codes in these damp or wet locations.

## **Public Works**

### **Mechanical**

The building is heated with what appears to be a new HB Smith oil fired boiler, Model 19H - 5 section, with a rated output of about 500 MBH.

The oil supply is stored in four 275 gallon above ground tanks located in an adjacent unrated exterior shed.

The building appears to be one pumping zone with distribution pump positioned on the supply main. Both high and low combustion air openings are provided, a backflow prevention device is located on the makeup water connection.

The building is primarily heated with hot water horizontal unit heaters. A waste oil heater is located and provides some heat for the shop area.

The office/break areas are equipped with baseboard radiation and through wall air conditioners.

There is a fuel dispensing facility, tanks are not protected with spill contaminant.

There is a combination sprinkler and domestic water service entrance. The building has 1" domestic water and 6" sprinkler mains; backflow prevention is not provided.

The building is provided with a complete system with wet type alarm valve.

Toilet facilities include tank type water closet, fixtures are not ADA compliant and in poor condition.

The kitchenette area is furnished with a stainless steel drop-in sink. We observed this sink being used as a janitors sink to rinse out mops.

## Electrical

Outside lighting includes building mounted and yard pole mounted light fixtures. Exterior lighting coverage does not appear to be sufficient given the night time activities associated with winter snow plowing etc. Staff reports indicate that lighting is sufficient with truck headlights. We would recommend a review of the lighting at night with consideration of installing additional energy efficient cutoff style fixtures as opposed to glare producing flood light style fixtures.

Public works building is reported to be a 1970 era building. This story and ½ steel building is generally in fair to good condition. Electrical service includes an underground 400 amp, 3 phase, 4-wire service located at the south end of the main garage. The service equipment is located adjacent to the sprinkler entrance and includes a main disconnect switch and residential load center style panelboards for distribution. The 400 amp service is sufficient in size to provide the needs for the building now and into the future.

A 20 kW standby generator was installed in 2000 and presently backs up the entire building. The generator rating is not sufficient to backup the entire service if the entire service were fully loaded.

Distribution wiring within the building is predominantly original with the construction of the building. Some wiring addition have been installed to serve new or relocated equipment.

Some conduit work should be reattached/re-supported in compliance with current codes. Distribution panelboards located in the shop/repair area are wall mounted and presently have shop equipment located in front of the panel. Equipment should be relocated so that code required space is provided and maintained in front of these panels.

Ground fault circuit protection for receptacles located in the garage areas should be retrofit or replaced with ground fault protection equipment for personnel safety.

Lighting throughout the facility is surface mounted fluorescent fixtures. Fluorescent lamping was replaced recently with energy retrofit T-8 lamps and electronic ballasts as part of a PSNH energy audit and incentive replacement program.

Fire alarm system within the building is a self-contained system with modern ADA compliant horns and strobes. Placement and location of horn and strobes is not complete and does not comply with current NFPA 72 for complete building coverage. Building mounted heat detectors are installed in some area. Fire alarm review and upgrade should occur as a part of a comprehensive renovation of the building.

Communications wiring includes older phone service entrance as original with the building construction. Additional communications/phone/data wiring has been installed over time.

## **Recreational Center**

The Recreational Center for the Town of Peterborough includes a series of buildings and sites located around town. The main facility includes ballfields, recreational department building, and tennis/swimming pool across the street from the ballfield area.

The recreation center office building was built in 1992 as relatively small and economically constructed building good for recreation staff office needs and small meetings etc. The location of the building

prohibits the expansion of either of the ballfields adjacent to it. These ballfields are not properly sized for full scale little league or Cal Ripkin use. Discussion on how to reconfigure these fields and buildings have been ongoing.

The building is served by electrical power overhead from PSNH to an electric room. The electrical panels are new with the 1992 construction of the building. Panels appears to be in fair to good condition.

Power distribution and receptacle locations within the building are adequate. Some extension cord use was noted. Additional receptacles have been added as needed over time.

Lighting consists primarily of surface mounted wraparound fixtures. The building communication systems include phone and CAT 5 wiring and appear to be in good serviceable condition. No specific recommendations for improvements to this recreation office building are being made at this time.

The swimming pool building, pool, and underground pump room were construction in 1936. The pool pump room and bathhouse have all outlived their useful life with todays modern pool equipment, facility design and ADA Guidelines being key issues to overcome with these existing facilities. The underground pump room has been well maintained by the staff over the years and is in fair to good condition. Monitoring of the process and equipment has been ongoing.

Access to the pool, pool locker rooms and adjacent spaces for ADA compliance is limited. Wooden ramps and passing through a series of gates would be required for wheelchair bound occupants. The building does not include ADA compliant fire alarm systems. There are ADA compliant toilet facilities within the concession/team room side of the building. The team room/concession side of the building also includes a small food prep kitchen with 3-bowl sink, popcorn machine, microwave ovens etc. No open top cooking or grilling occurs within this facility. The kitchenette also includes free standing freezer and cooler equipment.

Pool room lighting includes surface mounted incandescent and flourescent fixtures in fair to poor condition. Heating and ventilation is limited in these areas and should be totally replaced as part of a comprehensive renovation or replacement of this aged facility.

Exterior lighting around the pool areas includes pole mounted utility style flood lights which are non-cutoff style. The facility has not been viewed at night to confirm effectiveness of these light fixtures.

### **Public Beach Bathhouse**

The public beach bathhouse is a small bathhouse with small meeting room and publicly accessible toilet facilities. The toilet facilities include ADA compliant sink and tank type toilets with grab bars and sufficient space/access for wheelchair bound users.

The buildings are provided with flourescent lighting and appear to be in fair to good condition.

**END**