



# Town of York Police Department

New Public Safety Building  
& Access Road

## Application for Preliminary Site Plan Review

14th March 2014



Submitted to:  
Town of York Planning Board

Submitted by:  
SMRT  
144 Fore St., P.O. Box 618  
Portland, Maine 04101  
p 207.772.3846

# PLANNING BOARD APPLICATION FORM



## INSTRUCTIONS

*This application form must be filled out completely and accurately for any application to the Planning Board. Attach additional information, plans, studies, etc. as required.*

## PROJECT INFORMATION

Project Name: York Police Department: New Public Safety Building and Connector Road

Project Description: Construction of an 18,000+/-sf police station building and the associated access, parking and utilities infrastructure. Construction of a Connector Road between  
ridge Road and US Route 1 to also serve the Police Station site.

Street Address: 1051 US Route 1

Tax Map(s) & Lot(s): Assessing ID # 134-101

## AUTHORIZED REPRESENTATIVE

*Identify the one person who will be the primary contact for this project.*

Name: Andrew Johnston

e-mail: ajohnston@smrtinc.com Phone #: 207-772-3846

## PROPERTY OWNER(S)

*Identify the owner or owners of all property involved in this application. Attach additional sheets if necessary. The property owner is the applicant.*

Name: Town of York

Mailing Address: 186 York Street, York, Maine 03909

By signing, I certify that the information provided is true and accurate, and that my authorized representative, if applicable, has my consent to represent this application.

Owner's Signature: Robert S. Gandon Date: 3.14.14

*In the event there is more than one owner, all must sign. Attach additional sheets if necessary.*

## Table of Contents

1. Development Context Narrative
2. Project Narrative & Impact Statements
3. Shoreland Permit Narrative
4. Wetland Permit Narrative
5. Organizational Charts
6. Figures
  - a. Vision Plan
  - b. Zoning Plan
  - c. New Developable Area Plan
  - d. Organizational Charts

## Attachments

- Attachment 1 - Building Plans and Renderings
- Attachment 2 - Financial Capacity Information
- Attachment 3 - Property Deeds and Easements
- Attachment 4 - Undeveloped Habitat, Watershed and Floodplain Information
- Attachment 5 - Wetland Delineation Report
- Attachment 6 - Buffer Restoration Plan
- Attachment 7 - Traffic Summary
- Attachment 8 - Utility Capacity Letters
- Attachment 9 - Historical Resources Correspondence
- Attachment 10 - Fire Chief Correspondence
- Attachment 11 - Site Lighting Fixture Cut Sheets
- Attachment 12 - Stormwater Reports and Addenda
- Attachment 13 - Earthwork Calculations

## Development Context

The overall context of the proposed development has been reviewed using the information and maps in the York Comprehensive Plan and the Beginning with Habitat maps issued by Maine Department of Inland Fisheries and Wildlife.

The natural resource inventory plan contained in the Comprehensive Plan shows the site to be outside any mapped un-fragmented habitat areas. The closest of these is a <250 acre area shown to the north of the York Wild Kingdom.

The project site is within the Coastal Watershed-Central according to the Surface Waters and Watersheds Map in the Comprehensive Plan.

The Maine Department of Inland Fisheries and Wildlife (IF&W) map series cover a number of topics related to natural resource areas and functions, wildlife habitat areas and conservation lands.

The High Value Plant and Animal Habitats Map identifies the presence of rare, threatened, or endangered wildlife, rare, or exemplary plants and natural communities, and essential or significant wildlife habitats. None of the listed resources are shown in close proximity to the project site.

The IF&W Undeveloped Habitat Blocks map highlights areas that are likely to provide the best opportunity to conserve large relatively undisturbed habitat blocks. The project site is identified on this plan as an undeveloped Forest Area<500 acres. The map shows this as an isolated undeveloped block, surrounded on all sides by existing development.

The Public and Conservation Lands map shows parcels within the town and surrounding area that are protected through public ownership, or private conservation. There are no such parcels shown in the area around the project site. In fact, all identified parcels are on the west side of I-95.

The project site is identified on the IF&W Wetlands Characterization map. In particular, the wetland that is characterized as a Shoreland Wetland on the town inventory is shown as afforested wetland with plant and animal habitat value. The adjoining downstream wetland, on the north side of the York Wild Kingdom Road is shown as also providing runoff and flood flow alteration value, presumably by the capacity of this area to retain and store floodwaters

The final map in the IF&W series identifies US Fish and Wildlife Service Trust Species Habitats. The IF&W trust species list includes animals and plants that regularly occur in the Gulf of Maine region and are;

- Endangered, threatened, or candidate species for either category,
- Identified as species of concern, or
- Migratory birds, or fish that show significant and persistent decline in populations.

The map identifies areas that could potentially be valuable habitat for any of these species. The potential habitats are split into three categories representing the top 25% (most important), next 25% (moderately important) and bottom 50% (less important). The majority of the project site is shown in the bottom 50% category, with a small strip associated with the Shoreland Wetland area shown in the moderately important category.

## Project Narrative

### Background:

The 2009 update to the Town of York Comprehensive Plan highlighted significant deficiencies in the existing Town Police Department facility. These included a lack of sufficient space, lack of adequate parking, poor handicapped accessibility and fire code and safety concerns. The need for a new Police Station to better serve the needs of the town, and to accommodate future growth projections is clearly stated in the Municipal Capacity - Inventory & Analysis section of the document. The town, assisted by professional consultants has investigated a number of alternative sites in order to establish a feasible and appropriate location for the new facility. The site between Ridge Road and Route 1 was selected as the most suitable available site by the town in 2010. Subsequent preliminary design and permitting investigations were undertaken to establish site constraints and budget costs for the development. The conceptual level design and cost information was presented to town residents in May 2011, in the form of two referendum questions asking for funding for the design and construction of the connector road and the police station. In both cases the votes were in favor of the projects.

### Existing Site:

The site for the new police station and connector road is located between Ridge Road and Route 1, adjacent to the York Wild Kingdom property. The entire property is approximately 56 acres in size, including a small 1.9 acre triangular shaped parcel on the north side of the York Wild Kingdom property. The address of the property is 1051 US Route 1 and it is shown on The Town of York GIS Map as Assessing ID 134-101, Parcel ID 0094-0077. The property spans three separate zones in the town. The northwest portion of the site (towards Route 1) is in the RT1-4 zone. The central portion of the property is in the GEN-3 zone and the southeast portion of the property (towards Ridge Road) is in the RES-7 zone. The site of the new police station facility spans the GEN-3 and RES-7 zones. Municipal offices are an allowed use in both of these zones. The Shoreland Zone mapping shows a Mixed Use Shoreland Zone associated with the largest (central) wetland on the project site. There is also a small area of Shoreland Zone at the Ridge Road end of the site. The site zoning is shown on *Figure b* of this submission.

The topography of the site is gently rolling with typical slopes of between 2% and 10%, upland areas sloping towards intermittent drainage features that occur throughout the property. Subsurface soil conditions at the site typically comprise topsoil, marine deposits, sandy loams and glacial till. Groundwater is expected to be within three to four feet of the surface at most locations and shallow ledge was observed in a number of preliminary probes and borings that were recently undertaken at the site. Maine Geological Survey information indicates that underlying bedrock in the area is igneous granite and metamorphic schist.

A number of the drainage features on the site are associated with protected natural resources. A freshwater wetland delineation was originally undertaken by Stantec (then Woodlot Alternatives) in 2007. In 2012 further work was undertaken at the site to verify the previously delineated wetland edges and to identify and characterize a number of vernal pools that were identified in the proximity of the site. The identified natural resource boundaries and buffers were used in developing the designs for the connector road alignment and the police station. The natural resource inventory plan contained in the Comprehensive Plan shows the site to be outside any mapped un-fragmented habitat areas. The closest of these is a <250 acre area shown to the north of the York Wild Kingdom. The Natural Resource Inventory Map is included in Attachment 2.

The project site is within the Coastal Watershed-Central according to the Surface Waters and watersheds map in the Comprehensive Plan. This is further identified as Subwatershed C6 in

the build-out analysis completed for the town in 2001. There is a single flood plain on the property associated with the most easterly drainage feature. A flood zone A (no elevation) is delineated on FEMA Flood Insurance Rate Map Community Panel Number 230159 0026D. Watershed and Floodplain maps are included in *Attachment 4*.

#### Project Design:

The basic elements and technical aspects of the project design have not changed since it was originally proposed under the previous review submission in 2012. The proposed development consists of two parts. The first is the new through road between Route 1 and Ridge Road to provide access to the police station and to serve as a new roadway connection to York Beach, and the second is building/site development at the police station site.

#### Low Impact Development Design

The latest update to the Comprehensive Plan (Volume I, Section 3.22) proposes the adoption of a Green Enterprise Recreation Overlay District in this part of York. The proposed language for this district emphasizes the need for sustainable low-impact design approaches, the need to provide for pedestrian and non-vehicular traffic, the desire to support existing businesses, and the wish to protect natural habitats and surface water quality to the maximum practical degree. The design for the police station site and new connector road considers these important planning priorities and incorporates low impact design (LID) techniques to many aspects of the project.

The road alignment is designed to avoid and minimize impacts to natural resources to the maximum practical extent, while maintaining a safe and functional thoroughfare that will meet the needs of the police department and provide congestion relief for the York Beach area. Stormwater treatment for runoff from the road is provided through the use of LID Best Management Practices (BMPs), including stormwater buffers, filter strips and bioretention cells. The roadway corridor includes an eight-foot wide multi-use trail that is separated from the vehicular roadway by a five foot wide grass esplanade. The multi-use trail will be paved from Ridge Road to the Police Station site to facilitate year-round pedestrian and bicycle access. From the police station to Route 1 the trail will be stone dust and will be suitable for the expected seasonal use of this connection.

The police station building is being designed to meet LEED® Silver standards, reflecting the importance that is being given to energy efficiency and environmental footprint throughout the design and construction processes. A geothermal heat recovery system is planned for the building, and the structure has been oriented to maximize solar potential. The site plan for the police station provides the town ordinance minimum required parking spaces to reduce the impervious footprint, and further LID BMPs are used for stormwater treatment in and around the new facility. These include filtering roof drip strips, Bioretention cells and underdrained filters, all of which will aid in reducing runoff from developed areas and providing water quality treatment for any discharge from the site. It is hoped that this project will set the standard for further development of this important area of York and encourage similar techniques to be used in future proposals.

#### Connector Road:

In order to allow for efficient access to all part of town, the YPD must be able to access the York Beach community as well as Route 1. To achieve this, a roughly 4,800 LF connecting road between these two points will be constructed within a new Right-Of-Way. The horizontal and vertical geometry of the road has been designed to meet Town of York Collector Street standards, while meeting the goal of avoiding and minimizing impacts to adjacent natural resources to the maximum extent practical. The road will have a paved width of 24 feet with 3 reinforced shoulders at each side. Turning lanes will be provided at the intersection with

Route 1, with two outward lanes extending approximately 200-feet onto the site. In addition, a six-foot wide paved shoulder is provided at the intersection approach, and a further three-feet of unpaved reinforced edge. This will allow additional space for emergency vehicles to pass when the road is congested. The road structure will be typical bituminous pavement, with a section of 21" aggregate subbase, 3" crushed aggregate base and a total of 4" of hot bituminous pavement (1½" and 2½"). No curbing is proposed. Crossing culverts will be constructed at locations where the new road crosses the existing drainage features on the property. Where culvert crossings are located on delineated streams, the culverts will be oversized to accommodate a natural "bed" in the invert of the pipe.

An 8ft wide multi-use trail will be constructed along the new road alignment, connecting Ridge Road to the police station site. The sidewalk will be constructed with a minimum of 10" of crushed aggregate base and 2" of hot bituminous pavement. A stone dust pedestrian/bicycle path will be constructed through the remainder of the property, connecting the police station to US Route 1.

*The third party Traffic Review Engineer has indicated that further traffic analysis, including summer traffic counts and license plate surveys would be beneficial to informing the final design of the Route 1 and Connector Road intersection. The town is proposing to construct the Connector Road under this application, but not to open it to traffic pending receipt of this information and finalization of the design. The project will return to the Planning Board for further approval prior to opening the road, once the final design for the intersection has been reviewed.*

#### Alternative Alignments

A number of alternative routes and design criteria were explored for the new Connector Road before the design presented in this application was chosen. These included an option to connect to the York Wild Kingdom Road. However, this could not be achieved in a cost effective manner that met the objectives of the town and the abutting property owner. In addition, a number of alternative alignments based on the current Route 1 connection location and using different design criteria were explored. The presented design represents most favorable environmental alternative and one that meets the key objectives of the project in the most cost effective manner.

#### Police Station Site

The police station site is located on a small knoll to the east side of the new access road, approximately 1,000 feet from Ridge Road, allowing easy access to both Route 1 and the York Beach area. The York Police Department building is an approximately 18,000 SF building that will provide appropriate accommodations for police station staff in a modern, energy efficient environment. The design of the building provides a structure which is, first and foremost, a response to functional needs of the department. Operational needs have determined the configuration of the building areas with respect to each other, and internally. The shape of the building has been driven by the desire of the town to have a building with sloped roofs. The designers' efforts have aimed to avoid a flat roof area by making bays of enclosed areas with a width of approximately 65'. With a 6/12 roof, this results in a ridge approximately 32' above the eaves. It should be noted that the orientation of the building has been located to maximize the solar orientation and facilitate the possible addition of solar collectors in the future. Building plans and a rendering are included in *Attachment 1*.

#### Access and Parking:

The police station will be accessed at two locations from the new through road. The westerly access will be for staff, cruisers and official visitors, and the easterly access will be for the public. The Town of York code requirement for parking for this type of facility is established as

four spaces for every 1,000 SF of floor area. At 18,000 SF the resultant requirement is 72 parking spaces. While the initial program suggested more parking than that, the LEED Silver requirement has led to a decision not to seek that additional parking. All parking shall be 90 degrees to access aisles.

#### Traffic

The project comprises the construction of new public safety building to house the current York Police Department facilities. The existing Police Station is located a short distance away in the same area of town at 36 Main Street. As such, it will not generate any *additional* traffic in the town, or on the local road network. The project also includes construction of a new Connector Road between Route 1 and Ridge Road. This will provide additional infrastructure to alleviate congestion on other adjacent routes. The project is thus expected to be of net benefit to traffic circulation on the local road network. A summary of the traffic evaluation for the project, including sight distances at the ends of the new Connector Road, and recommendations on turning lanes is included in *Attachment 7*. Please note that the traffic analysis undertaken for this application assumes that the Connector Road will not be opened to the Route 1 connection. *The third party Traffic Review Engineer has indicated that further traffic analysis, including summer traffic counts and license plate surveys would be beneficial to informing the final design of the Route 1 and Connector Road intersection. The town is proposing to construct the Connector Road under this application, but not to open it to traffic pending receipt of this information and finalization of the design. The project will return to the Planning Board for further approval prior to opening the road, once the final design for the intersection has been reviewed.*

#### Utilities:

Power and communications -The new facility will be served by three-phase power from the CMP system in Ridge Road. The new service will run underground from the street to the police station site. A pad-mounted transformer will be installed adjacent to the new Police Station with ongoing secondary service to the building. Communications and cable conduits will be installed in the same trench as the electrical service to the specifications of the governing utilities.

Sewer - Sewer service for the new Police Station will be provided by York Sewer District. A new gravity sewer extension will be constructed as part of this project. The new sewer will connect to the existing system in Caddy's Way, across land recent purchased by York Sewer District. It will extend into the site, serving the new police station facility and continuing up the Connector Road to provide potential future sewer access to abutting property owners. A sewer capacity letter is included in *Attachment 8*.

Water - Water service to the site will be provided by the York Water District. A new 8" Ductile Iron diameter water main will be constructed between Ridge Road and the Police Station site to provide fire and domestic supply. York Water District has also indicated that a loop to the end of the main in Caddy's Way may be beneficial to overall system performance, and that consideration should be given to sizing the new main for expected future growth in the area. Domestic and fire services for the new facility will be tapped off the new service main. A fire hydrant will be installed in the roadway adjacent to the new building to provide external fire-fighting protection. A water capacity letter is included in *Attachment 8*.

#### Stormwater Management

Stormwater from the newly developed areas of the site and roadway will be captured and treated in accordance with the State of Maine Chapter 500 Stormwater Law. Small Bioretention cells and vegetated buffers will be used to treat runoff from the new roadway. Filtering drip strips and bioretention cells in and adjacent to parking lots and around the

building will treat runoff from these areas. In addition, a number of areas alongside the road will be utilized as Stormwater Buffers. These areas will be deed restricted in accordance with MDEP requirements.

The stormwater management BMPs are primarily designed to treat runoff from developed areas for water quality. However, in addition to this primary function, they will also serve to slow and detain runoff so that flows to downstream resources are not increased. The new Connector Road will cross several drainageways that convey runoff from upstream areas to the west of the site, across the property in a generally easterly direction. Surface flows in these drainageways will be conveyed under the new road in a series of culvert crossings. The culverts will be sized to convey the peak design 100-year flood flow at each location. At two locations, the crossings are defined as natural streams. In these cases the culvert crossings will be oversized and constructed with a natural "bed" within the pipe to maintain the hydraulic conditions at either side of the crossing. The original Stormwater Management Report, and the three subsequent addenda are included in *Attachment 12*.

In addition to the permanent measures described above, a comprehensive array of temporary soil erosion and sediment control measures are proposed to protect the site and downstream resources during construction of the project. Soil erosion BMPs are shown on the accompanying plans and notes.

#### Landscaping and Lighting

A preliminary landscaping plan has been developed for the site to create an attractive environment around the new police station facility and supplement the existing vegetation that will remain around the site perimeters. Some additional plantings are also proposed around the new entrance to the Connector Road from US Route 1. Lighting for the police station parking lot is designed to provide safe and adequate lighting without intruding on adjacent properties, or the adjacent roadway. Light locations are shown on the site electrical plan and fixture cut sheets are included in *Attachment 11*.

#### Historic Resources

Letters have been sent to Maine Historic Preservation Commission and York Historic District. We are currently awaiting responses. Copies of the letters are included in *Attachment 9*.

#### Fire Department Review

An initial meeting was held with Chief Bridges on October 26<sup>th</sup> 2011. Further correspondence was undertaken throughout the development of the plans during the previous permitting of the project. The project has been designed to meet all local and state fire codes. Copies of correspondence and meeting minutes are included in *Attachment 10*.

#### Natural Resources

Natural resource protection was one of the primary objectives considered during the evolution of the concept design for the new facility and connector road. The design was developed to achieve the program goals while avoiding natural resources impacts and, where unavoidable, minimizing those impacts.

After selection of the site, existing conditions information was gathered including mapping of natural resources and the associated regulatory setbacks. The mapping information was used to develop a preliminary design that met appropriate site and safe road alignment guidelines, while avoiding and minimizing natural resource impacts to the greatest practicable extent. A copy of the Wetland Delineation Report is included in *Attachment 5*.

Preliminary meetings were held with natural resource consultants and regulators at the State and Federal levels during development of the design to ensure that the design objectives could be met, and that the project would meet the criteria required by the relevant permit guidelines. A pre-application meeting with State and Federal regulators set parameters for mitigation of the potential wetland and vernal pool buffer impacts. A mitigation plan, designed to address the impacts was developed and submitted with the state and federal permit applications.

The project design limits all proposed direct wetland impacts to the Right-of-Way associated with the new road. The majority of these are associated with necessary crossings of drainage features on the site. There are no wetland impacts on any single lot (existing, or proposed).

Some areas of unauthorized clearing occurred at the site following previous project approval and the start of construction. Restoration of these areas is included as part of this submission and described in the section below

#### Restoration of Previously Impacted Areas

Following previous approval of this project, significant areas of unauthorised clearing occurred at the site. These areas were outside the limits of disturbance shown on the project plans, or presented in previous permit applications. The plans submitted with this application include details of proposed restoration and re-planting in these areas, in order to bring the site into conformance with current State and Federal permits, and to resolve locally administered Shoreland Permit violations. The plans and supporting documents in this submission give priority to restoration activities and include safeguards to ensure that no clearing is undertaken without prior approval. A copy of the Buffer Restoration Plan for impacted areas within State and Federal jurisdiction is included as *Attachment 6*.

#### Permitting

The project has a current USACE Programmatic General Permit. A permit amendment will be required with revised plans showing the Communication Tower, the associated stormwater facilities, and revised sewer service location. Implementation of the Buffer Restoration Plan will be required to achieve compliance with the permit.

The project has a current Maine Department of Environmental Protection Natural Resource Protection Act Permit. An Amendment will be required to cover the addition of the Communication Tower, the associated stormwater facilities and the revised sewer service location. Implementation of the Buffer Restoration Plan will be required to achieve compliance with the permit.

In addition to the Site Plan Review, Shoreland Permit Review and Wetlands Permit Review that will be undertaken by the Planning Board, the project design needs to address the local Shoreland Permit violations to the satisfaction of the Code Enforcement Office. A Flood Hazard Development Permit will also be required to authorize the proposed flood plain crossing at the Ridge Road end of the Connector Road.

#### Construction Sequence

New construction on the project will give priority to tasks required to restore areas that were subject to previous unauthorized clearing. These areas will be cleared of debris, planted and stabilized in order achieve conformance with previously issued permits and resolve recorded violations.

1. Prior to construction all clearing limits and limits of disturbance shown on the project plans shall be clearly staked in the field for approval by the Project Engineer. No clearing or cutting shall be undertaken until the limits have been approved.
2. All stormwater buffers shown on the plans and referenced in the project approvals shall be clearly survey located and marked with rebar pins at each corner, as required by the conditions of the Maine DEP permit issued for the project. Temporary fencing shall be erected to clearly delineate these areas during construction.
3. Site construction will begin with processing of the existing rock debris pile that is adjacent to the impacted vernal pool.
4. Rock will be removed from the top of the debris pile until such time as it is sufficiently stable to remove the area of rock closest to the vernal pool. Rock from the stockpile will be processed and used as granular borrow on the project site.
5. As soon as it is safe and practical, rock debris will be removed from the restoration area within 100 feet of the wetland edge associated with the impacted vernal pool.
6. The stockpile of loam and woody debris adjacent to the vernal pool will be spread across the restoration area, as described in the Buffer Restoration Plan. Excess material will be moved out of the restoration area and re-used on the site.
7. The addition of organic material, grading and stabilization of the restoration area shall be undertaken at the earliest possible opportunity so that seeding and planting can take place while construction of other aspects of the project continues.
8. As soon as base grades have been established and the restoration area has been stabilized, perimeter fencing shall be erected with signs identifying it as a protected natural resource area.
9. Restoration of plantings shall be undertaken under the supervision of the project wetland scientist.
10. Construction of the remainder of the project shall continue once the restoration area is stabilized and adequately protected.

#### Waiver Request

The applicant respectfully requests the following waivers from the Town of York Site Plan and Subdivision Regulations;

1. Section 6.4.14.2 requires street cross sections every fifty feet along the entire street proposed in the development. The applicant requests a waiver from this provision on the following grounds. The proposed street cross section is relatively uniform throughout the length and has only three different section configurations. These are clearly shown on the site plan and details. In our opinion this information, along with the detailed road profile information clearly shows the alignment, elevations and sections required for accurate construction of the road. Adding repeated similar cross sections along the length of the road would be redundant.
2. Section 6.3.32 requires that a High Intensity Soil Survey be submitted indicating the suitability of the soil conditions for the uses proposed. The applicant requests a waiver from this requirement on the grounds that a high intensity soil survey is neither warranted nor appropriate for this type of development. Maine DEP requires Class A High Intensity Soil Surveys for only two classes of projects. The first is for a specific area of land that is to be used for wastewater disposal, or disposal of other wastes. The second is for residential and commercial subdivisions that utilize on-site wastewater disposal and have lot areas of less than two acres. The primary reason for undertaking a High Intensity Soil Survey is to determine the capability of surficial soils to accept, treat and disperse relatively high intensity waste disposal functions. The proposed project will be connected to municipal sewer and will not include any on-site disposal of waste materials. Therefore, this information will not be helpful or relevant

to the development. A geotechnical investigation has been undertaken to determine depth to bedrock, soil bearing capacity and other physical parameters for use in the design of the building foundation and pavement sections.

3. Section 9.5.9 of the Town of York Site Plan and Subdivision Regulations states that the maximum centerline grade of a road shall be 2% within 75 feet of an intersection. The applicant requests a waiver from the is standard on the grounds that the intersection approach grade is not critical at signalized intersections, and that the proposed design grades meet the standard of good engineering practice. As noted during the engineering review of this project, the design road grade at the approach to the Route 1 intersection exceeds the standard in Section 9.5.9 of the Town of York (). The American Association of State Highway and Transportation Officials (AASHTO) design manual - A policy on Geometric Design of Highways and Streets (AASHTO 2004) recommends a maximum grade of 3% in the vicinity of intersections where this is practical. The manual goes on to state that "Where existing conditions make such designs too expensive, grade should not exceed 6% at the intersection approach." The reasoning behind these criteria is that the accelerating and stopping distances for vehicles on a grade of 3% differ little from the corresponding distances on the level. This standard is applied for two reasons. Firstly, to ensure that decelerating vehicles approaching an un-signalized intersection have sufficient distance to safely stop. Secondly, and more relevant in this case, that accelerating vehicles leaving the stopped position are not unduly delayed by a significant rising grade - this could potentially increase conflicts with vehicles travelling on the intersecting roadway. The design grade at the approach to the signalized US Route 1 intersection is 2% for a distance of forty feet from the intersection. The profile then enters and vertical curve, with the grade increasing to a maximum of 3.8% at a distance of seventy-five feet from the intersection. The design falls well within the parameters recommended in the referenced AASHTO guide.
4. Section 7.18.6 requires that proper and complete monumentation shall be installed prior to final approval of the application. The applicant requests a waiver from this provision on the grounds that monumentation of the new road right-of-way will be subject to possible damage by construction traffic and earth moving operations. Some of the proposed monuments are located in areas where significant grade change is proposed. It is proposed that monumentation be installed in these areas as soon as earthwork is complete.

#### Summary

The new York Police Station project is designed to address the significant deficiencies in the current facility described in the Comprehensive Plan. The location for the project has been selected as the most appropriate available site and the preliminary design has been tailored to meet appropriate road safety and design standards while avoiding and minimizing impacts to natural resources. The new building and associated facilities will benefit the community and allow the police department to better serve the Town of York over the coming years.

### Impact Statements

- a) Water supply for domestic consumption - The new facility will have no significant impact on the overall domestic water consumption within the community. The new police station will allow re-location of existing staff from the existing police department building that is served by the same York Water District system. A new water main and service will be constructed to serve the new facility and this infrastructure could potentially serve additional future service connections. A letter indicating capacity to serve the facility from York Water District is included in *Attachment 8*.
- b) Water supply for fire protection. The new facility will be served by a new water main that will be constructed in the Connector Road as part of this project. The fire protection requirements for the new building will not be significantly different from those at the existing police department building.
- c) Wastewater treatment and disposal. The new facility will connect to the same York Sewer District system as the current police station building. The flows will be similar as the facility will be staffed by existing employees that will be re-located to the new building. A new sewer system will be constructed in the Connector Road to serve the police station facility. A letter from York Sewer District indicating capacity to serve this project is included in *Attachment 8*.
- d) Police, fire, ambulance services. This new facility will obviously be of significant benefit to the police department. It addresses significant deficiencies in the current facility and will allow the department to better serve the town. The construction of the new Connector Road will create an additional route between ridge Road and Route 1 for use by emergency services.
- e) Stormwater management. The development of the project includes the construction of several stormwater Best Management Practices that will capture, detain and treat runoff from the site and surrounding areas. The system is designed to ensure that there will be no increase in peak flow to off-site downstream areas, and that water quality treatment is provided in accordance with current local and state standard. Although the project will not solve the reported flooding problems in the York Beach area, the design will ensure that flooding frequency is not increased and that surface water quality is not impacted.
- f) The project will re-locate the existing police department facility and therefore will not generate any additional traffic per se. The addition of new infrastructure will add capacity to the road network and reduce congestion.
- g) On-site parking is adequate for the proposed use. There will be no parking along the new Connector Road. No off-site parking impacts are anticipated.
- h) Water quality. The project will have no significant impact on water quality. Wastewater will discharge to the York Sewer district system and stormwater treatment facilities will ensure that there is no degradation of surface waters due to runoff from the development.
- i) Environmental quality. The road alignment and geometry has been designed to avoid and minimize impacts to natural resources to the maximum practical degree. The new building is designed to meet LEED © Silver Standard and incorporates a number of innovative energy efficiency and environmental design features. The overall project will have the minimum possible environmental impact.
- j) Historic and archaeological resources. Correspondence has been sent to MHPC and YHDC to determine the presence of any significant historic resources at the site. We are awaiting responses.
- k) Fiscal impacts. The construction of this project is funded by the issue of municipal bonds, approved through a referendum vote by the people of York.
- l) The scale of the project is governed by the current needs of the York Police Department with allowance for some future growth during the design life of the new building. The building is approximately 18,000sf and the new impervious area associated with the site improvements is just under two acres.
- m) N/A
- n) N/A

The following drawings are included with this application:

G1001 COVER SHEET  
GI002 SITE NOTES AND LEGEND  
1-6 EXISTING CONDITIONS SHEETS  
1 OF 2 STANDARD BOUNDARY PLAN  
2 OF 2 STANDARD BOUNDARY PLAN  
CE001 EROSION CONTROL NOTES  
CE101 EROSION CONTROL PLAN  
CE501 EROSION CONTROL DETAILS  
CG101 GRADING AND DRAINAGE PLAN  
CG501 GRADING AND DRAINAGE DETAILS  
CG502 GRADING AND DRAINAGE DETAILS  
CP101 SITE LAYOUT AND UTILITY PLAN  
CP102 ROAD GEOMETRY PLAN  
CP201 ROAD PLAN AND PROFILE  
CP202 ROAD PLAN AND PROFILE  
CP203 ROAD PLAN AND PROFILE  
CP501 SITE DETAILS  
CP502 SITE DETAILS  
CP503 SITE DETAILS  
CU101 UTILITY PLAN  
CU501 UTILITY DETAILS  
CU502 UTILITY DETAILS  
ES101 ELECTRICAL SITE/LIGHTING PLAN  
LP101 PLANTING & LANDSCAPING PLAN  
LP501 PLANTING & LANDSCAPING DETAILS



Image taken from Delorme Maps



York Police Department  
New Public Safety Building &  
Connector Road

Project No. 06122-10  
December 2011

Site Location Plan

## Shoreland Permit Narrative

Part of the site is within a Mixed Use Shoreland District, as shown on the Town of York Zoning Map and the Overall Existing Conditions Site Plan Sheet. Public buildings and facilities for the Town of York are permitting in sections of Shoreland Zone except those located within 250 feet of the Normal High Water Mark of the Atlantic Ocean, the York River and its tributaries, and the section of Cape Neddick River located east of Route One, provided applicable structure setbacks of the Shoreland Zoning Subdistrict are met.

Within the Mixed Use Subdistrict, all principal and accessory structures and substantial expansions of such structures shall set back 100 feet (but 35 feet on Harris Island only) from the normal high water mark of any waterbody, or from the upland edge of any coastal wetland or of an inland wetland of 10 or more acres in size. For Inland Wetlands with a contiguous area of 4 or more acres, but less than 10 acres, the setback shall be 75 feet. The proposed Police Station building is more than 75-feet from the upland edge of the closest wetland within the Mixed Use Shoreland District.

### Erosion and Sediment Control

Soil erosion and sediment control measures are described in plan and narrative format on the project plan sheets. The dedicated soil erosion plan sheets and details describe a full range of soil erosion and sediment control measures that have been designed for the proposed development.

The design of the road and the site improvements associated with the new Police Station building has been tailored to match the existing conditions topography to the maximum practical extent. The town subdivision and road construction standards include specific vertical geometry design parameters that have to be applied to the new Connector Road. At some locations these parameters, along with property and natural resource constraints, and the need for crossing storm drain culverts require that the road elevation deviates from the existing ground surface. Every effort has been made to minimize these deviations, and hence limit the earthwork and limits of disturbance associated with the new construction.

Erosion and sediment control measures will be in place throughout the extent and duration of the construction activities. This project falls under the jurisdiction of the State of Maine Pollution Discharge Elimination System (MPDES) General Permit for Construction Activities. As such, weekly inspections and reports on soil erosion and sediment control measures will be required until permanent stabilization of all disturbed area is achieved.

Requirements for temporary and permanent stabilization of disturbed areas are described on the Erosion Control Notes plan sheet (CE001).

Disturbance to natural drainageways will be minimized to maximum extent practicable. New drainageways and roadside swales are designed to convey the maximum predicted peak flow during the 25-year design storm event. All new drainage channels will be stabilized with vegetation.

### Clearing or Removal of Vegetation for Activities Other Than Timber Harvesting

The project design limits the clearing of trees and other vegetation to that necessary for the development of permitted uses on the site. The road grading has been designed to limit the area of disturbance required to construct a road that meets the town standards for collector roads and minimizes disturbance of adjacent natural resources in accordance with town, State and federal regulatory standards.

Similarly, the police station site design has been developed to maximize the retention of existing vegetation while providing improvements that meet the critical needs of the York Police Department.

Clearing operations will be conducted in a manner that minimizes soil disturbance, and an extensive array of soil erosion and sediment control Best Management Practices (BMPs) have been designed to effectively stabilize disturbed areas, and protect downstream receiving areas.

Limited cutting of vegetation is proposed within wetland areas, associated with required road crossings. At each location the crossing is located and designed to minimize and avoid wetland impacts to the maximum practical extent. Mitigation will be provided from wetland impacts in accordance with guidelines issued by Maine DEP and US Army Corps of Engineers.

Following earlier approval of this project, significant areas of unauthorized clearing occurred at the site. The plans submitted with this application include details of proposed restoration and re-planting in these areas, to bring the site into conformance with current State and Federal permits and to resolve locally administered Shoreland Permit violations. The plans and supporting documents in this submission give priority to restoration activities and include safeguards to ensure that no clearing is undertaken without prior approval.

#### Stormwater Runoff

A Low Impact Development (LID) approach has been taken to the stormwater design for the proposed development. This emphasizes the use of natural buffers, swales and filter strips to capture and treat stormwater runoff from develop areas proximate to the source. Where filter strips and buffers cannot be designed to meet the current State stormwater regulations, small scale bioretention cells have been used to provide equivalent treatment. This type of design approach minimizes clearing and disturbance associated with the construction of stormwater management infrastructure. Roof edge drip strips are used around the perimeter of the new police station building to capture, filter and treat the roof runoff before allowing it to slowly drain towards the natural drainageways and wetlands.

#### Road and Driveway Construction

Earthen embankments for road and driveway construction have been designed at a maximum slope of 2:1 (horizontal:vertical). All earth embankment slopes will be stabilized with vegetation and erosion control matting, where applicable. Riprap stone slope stabilization and retaining walls have been incorporated into the design where these elements can be utilized to minimize wetland impacts and clearing of existing vegetation.

The new Connector Road crosses a number of wetlands and drainageways to provide essential access to the new police station building. At each location the road crossing has been located and designed to minimize wetland impacts and maximize setbacks from wetland areas at the approaches to the crossing.

Grades on the new roadway meet the town standard for Collector Roads. The centerline grade of the road does not exceed 6% at any location.

Runoff from the new roadway is directed into roadside swales, wooded buffers and at some locations bioretention cells and underdrained filters. All of these BMPs are designed to treat runoff water quality and capture, detain and disperse stormwater in a manner that promotes natural infiltration. Crossing culverts are designed to maintain existing flow patterns in drainageways and minimize disruption to the natural hydrology.

### Soils

A Geotechnical Report for the project was issued by SW Cole Engineering Inc. in November 2011. This information supplements a previously undertaken Preliminary Geotechnical Evaluation of the site by RW Gillespie and Associates. The investigations included a total of 29 test borings and 112 auger probes throughout the area of road and site development. The investigations generally encountered dark brown topsoil and forest duff up to 2.0 feet in thickness, overlying silty sand with varying amounts of gravel ranging from 2.0 to 8.0 feet in depth. Refusal surfaces (probable bedrock) were encountered at depths ranging from the ground surface to 16 feet. It is anticipated that some ledge removal will be required to achieve even grades for the building foundation, and in isolated areas of the new roadway alignment. It is also possible that organic deposits of varying depths may be encountered at wetland crossings. However, the soils conditions through most of the site are generally favorable for site development with no evidence to suggest the presence of weak, fine grained cohesive soils. The use of standard soil erosion and construction techniques will be sufficient to avoid adverse environmental impacts either during or after construction of the project.

### Water Quality Protection

The project does not propose to locate, store, or discharge any noxious substances that could contaminate, pollute or harm water quality.

### Essential Services

The installation of all proposed new utilities is kept within the Right-of-Way of the new Connector road except at the service connections to the new police station building. Electricity, sewer and water mains will follow the road to the building site. A sewer connection to the existing line in Ridge Road will be installed within the existing ROW. The possibility of looping the water main to connect with an existing line in Caddy's Way is being investigated. This line would be installed in a new easement that crosses the existing CMP power line corridor that runs through the property.

### Parking Areas

The new parking area for the police station building meets the required setback distance of 75-feet from the nearest wetland edge. Runoff from parking areas is captured and treated in stormwater BMPs before allowing treated flow to discharge in a non-erosive manner to downstream receiving waters.

### Restoration of Previously Impacted Areas

Restoration of the areas of unauthorized clearing within the Shoreland Zone at the site is described in the Buffer Restoration Plan included as *Attachment 6* of this submission. Priority will be given to restoration of the impacted area as soon as construction resumes at the site. The construction sequence is described in the Project Narrative.

### Standards

Section 18.2.6 of the Town of York Zoning Ordinance describes the Standards for Review of Shoreland Permits. They are listed below;

- a. Will not result in unsafe or unhealthful conditions - The project does not propose any uses, processes, storage, or disposal of materials that could present a risk to safety or health. The primary function of development is to provide a new efficient headquarters for the York Police Department so that they can continue to protect public safety.
- b. Will not result in soil erosion and sedimentation - As described above, a comprehensive soil erosion and sediment control plan has been developed for the project. The plan includes temporary and permanent measures that will ensure that there is no significant soil erosion or sedimentation as a result of the development.
- c. Will not result in water pollution - The area of the proposed development has been kept to the minimum area required to achieve a viable and functional facility. A comprehensive stormwater management plan has been developed for the project. Runoff from new impervious areas will be captured and treated in a variety of BMPs that are specifically designed to meet State and federal water quality protection standards. Wastewater disposal is provided through a connection to the York Sewer district system. The project is not expected to have any significant detrimental impact on water quality.
- d. Will not adversely impact spawning grounds, fish, aquatic life, bird and other wildlife habitats - The proposed project will not directly impact the shoreland wetland and maintains an adequate buffer from the wetland edge to minimize any potential for adverse impacts to aquatic, or other wildlife habitats.
- e. Will conserve shoreland vegetation - The project maintains adequate buffers from the shoreland wetland and will not result in undue disturbance of shoreland vegetation.
- f. Will conserve visual points of access to inland and coastal waters, and shoreland vistas as viewed from public facilities and public roads - At present the shoreland wetland in the proximity of the site is not visible from public facilities, or roads. The interior portions of the site are largely inaccessible and viewsheds of the wetlands are limited by thick vegetation. The new Connector Road will enhance views of the shoreland wetland and associated stream, both at the crossing locations and where the new road runs close to the wetland edge. The area at the western edge of the wetland will also be visible from the new Public Safety Building.
- g. Will conserve actual points of access to waters - There is limited access through the site to the Ice Pond located on the southwest side of the new road. Currently there is a small track that leads across private property into the site from Ridge Road. The edge of the pond can then be accessed through the thick vegetation that covers the dam at the northeast end. The new road and sidewalk will provide improved public access to this area. Similar improvements to public access will be gained to the other streams and wetlands on the property from the multi-use trail that extends along the new right-of-way.
- h. Will conserve natural beauty - The road and site development have been designed to avoid impacts to natural resources to the maximum extent practical, and minimize the disturbance required to achieve the core objectives of the project. The site topography outside the new right-of-way and the majority of the vegetation on the site will remain unchanged.
- i. Will avoid problems associated with floodplain development and use - The construction of the new Connector Road requires a single flood plain crossing at the outlet to the Ice Pond near Ridge Road. An approximate 100-year flood boundary is indicated on the

- FEMA Flood Insurance Rate Map at this location. No base elevation has been determined, indicating that the extents of the flood plain have been estimated by FEMA, and that no detailed hydrologic analysis has been done on this segment. However the outline corresponds approximately with a surveyed elevation of 11 feet. The proposed road crossing encroaches into the flood plain and the fill required for the construction will result in a minor reduction in the flood storage capacity. The volume of fill required within the flood plain, and below the base flood elevation has been calculated, and compensatory storage will be provided through excavation of stormwater BMPs and site grading in the vicinity of the flood plain wetland. This will ensure that there is no net loss in flood storage capacity within the catchment due to the project. The road crossing is designed to accommodate the peak flow from a 500-year design storm event, and vertical headwalls are provided at each end of the crossing to protect the integrity of the road structure and crossing utilities. Thus the project will avoid the two most common problems associated with floodplain development and use; the loss of flood volume storage and loss or damage to property due to construction within flood prone areas.
- j. Will not interfere with existing navigational uses - There are no navigational uses within the waterways adjacent to the project site.
  - k. Will not unreasonably alter the natural flow or storage capacity of any water body - Please see response to item i), above. A similar approach is taken at the non- flood plain wetland crossings. None of the other drainageways have flood plains associated with them, so the primary focus at these locations is to accommodate the natural flow without undue interference, or modification. This is achieved through the use of adequately sized crossing culverts with appropriate inlet and outlet protection.
  - l. Will adequately provide for the disposal of wastewater - wastewater from the project will discharge to the York sewer District system in Ridge Road via new gravity and pressure sewers in the street.
  - m. Will conserve protective buffers from the normal high water mark of adjacent wetlands - The location of the improvements will conserve buffers from the existing wetland edge of Shoreland Wetlands at all locations, except where crossing are necessary to provide access to permitted uses. A minimum buffer of 75-feet has been maintained from the site improvements associated with the police station development and the edge of the Shoreland Wetland. Areas impacted by previous clearing at the site will be restored as part of this project.
  - n. Will conserve the amount of pervious surface - The project design makes every effort to preserve previous and landscaped areas and limit the construction of new impervious surfaces. Where these are required, runoff is captured, treated and dispersed through soil and underdrain treatment systems that mimic natural pervious surfaces and limit surface runoff.

## Wetland Permit Narrative

The wetland systems on the site have been delineated and evaluated by Stantec Consulting (Stantec). The original delineation was undertaken in 2007 and a subsequent verification was undertaken in October 2011 to confirm the wetland boundaries. A Wetland Delineation and Vernal Pool Survey Report was issued to November 30, 2011. A copy is included in *Attachment 5*.

The project has been designed to avoid and minimize wetland impacts to the maximum extent practical, as required by local, State and Federal regulations. The horizontal and vertical alignment of the proposed Connector Road has been designed to follow existing grades and avoid protected natural resources while still meeting the Town of York design standards and engineering best practices for road design. The new police station has been sited at a location that creates no wetland impacts for this portion of the development.

All of the wetland impacts for the project are within the Right-of-Way (ROW) for the new road. There is no wetland impact on any single lot as a result of this project.

There are no plans for further development of the site at this stage and although "lots" will be created by the division of the existing parcels by the new road ROW these are not part of an overall plan to develop the property.

The proposed use, fill, and alteration of the site will not increase the risk of off-site flooding and will not increase stormwater discharge from the property during the 2 and 50 year design storm events. A full stormwater report, including analysis of all contributing areas and runoff and routing calculations will be submitted with the final review application package.

Applications for State and federal permits associated with the proposed wetland fills at the site and impacts to vernal pool buffers will be submitted at the end of January.

## Preservation of Natural and Historic Features.

The grading plans for the development are shown on several sheets. Plan Sheet CG101 shows the site grading around the new Police Station building and associated site improvements. Sheets CP201 -CP204 show the alignment and grading of the proposed new Connector Road. The site grading, and hence the extents and magnitude of the proposed cuts and fills are shown graphically on these sheets. An overall determination of earthwork quantities has been undertaken by the project construction team and is included as *Attachment 13* of this submission. The attachment includes graphical representations and numerical quantities for cut and fill volumes at the site. The road profile sheets have been revised to include identification of all areas where the proposed elevation will change more than five feet from the existing conditions. The road plan and profile sheets show all grading associated with the new road and locations where this work extends beyond the limits of the right-of-way are shown on the plan sheets.

The site grading has been developed to minimize cuts and fills while meeting Town of York standards for road design and producing an efficient and feasible layout for the project. The road alignment has been developed to minimize impacts to protected natural resources and follows existing topography to the extent practical, while maximizing setbacks and minimizing deep cuts, which could require ledge removal. General site grading maintains slopes at less than 20%, except for shoulder slopes and reinforced embankments associated with road construction.

Retention of wildlife habitat values following development of the site has been maximized through the incorporation of strategies to avoid and minimize natural resource impacts and to limit the extent of clearing required to meet the project objectives.

The limited access through the site to the edge of the Ice Pond will be improved by the construction of the new road and multi-use trail. Currently there is a small track that leads across private property into the site from Ridge Road. The edge of the pond can be accessed through the thick vegetation that covers the dam at the northeast end. The new road and sidewalk will provide improved public access to this area. Similar improvements to public access will be gained to the other streams and wetlands on the property from the multi-use trail that extends along the new right-of-way.

There is no information to indicate that there are any significant historical resources on the project site. Correspondence from the State of Maine Historic Preservation Commission is included in *Attachment 9* of this submission.

Figures

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Attachment 1 - Building Plans and Rendering

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Attachment 2 - Financial Capacity Information

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Attachment 3 - Title, right, or interest

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Attachment 4 - Undeveloped Habitat, Watershed and Floodplain Information

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Attachment 5 -Wetland Delineation Report

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Attachment 6 - Buffer Restoration Plan

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Attachment 7 - Traffic Analysis

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Attachment 8 - Utility Capacity Letters

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Attachment 9 - Historical Resources Correspondence

Attachment 10 - Fire Chief Correspondence

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Attachment 11 - Site Lighting Fixtures and Cut Sheets

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Attachment 12 - Stormwater Report and Addenda

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Attachment 13 - Earthwork Calculations

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