# Public Works and Utilities

# Feasibility Study

# October 2021

# Introduction

**HISTORY:** Town Council requested staff begin the process of a feasibility study for the development and construction of a new Public Works and Utilities facility.

**PURPOSE:** To begin a feasibility study for the relocation of the Public Works facility, known as the "shop" currently located at 360 Falmouth St.

**CURRENT LOCATION FACTS: T**he existing facility is approximately 5.23 acres located at 360 Falmouth St, Warrenton, VA. This facility was originally uses as a telephone company service yard. The Town began using the property for their Public Works functions in the 1980's. Over the years, several additions have been made to the property as the responsibilities and operations of the Town's Public Works and Utilities Department grew. These improvements included additional office space, a large salt barn, and some covered storage space. Operations have and continue to be adjusted to fit in the space.

While the facility was growing, so were the adjacent residential properties. The current facility is surrounded by residential use. Hillsborough Condos, circa 1990, are north of the main entrance to the facility and share the east property line with the yard; Leeds Square Townhouses, circa 1983, shares the northwest property line of the yard; Aviary Townhouses, circa 1988, share the south property lines with the entrance way and yard; there are duplexes constructed in 2005 to the west which share the property line with the yard; and several single-family residential properties along Falmouth St. constructed from 1900 to the 1930's.

The location of the current facility works well from an operations standpoint as it is within Town limits and has direct access to all points in Town for service with alternative routes if required. Residents are familiar with the location because it has been there so long; however, the increase in operations and equipment have an adverse effect on the surrounding residential uses. These include noise from trucks and OSHA warning devices at any given hour of day or night, especially during afterhours responses and snow response; dust and run off from the gravel drive areas; and the regular operation of commercial equipment in the residential area.

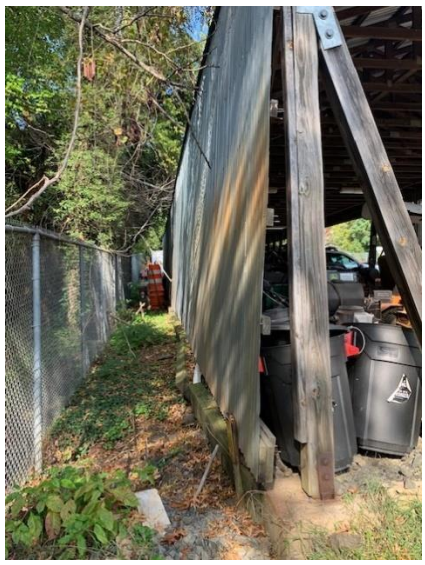
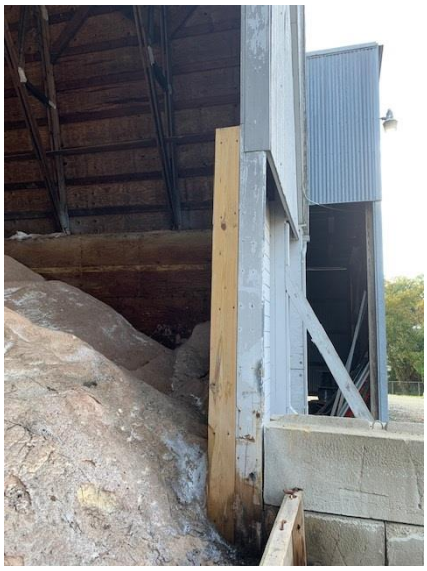
The size of the current facility does not function well. The limited space present challenges for properly storing vehicles and equipment, holding training and meetings, providing a clean work environment for staff, and complying with DEQ requirements. We have out grown the space.

A parcel detail and an aerial of the location are included in the Feasibility Notebook.

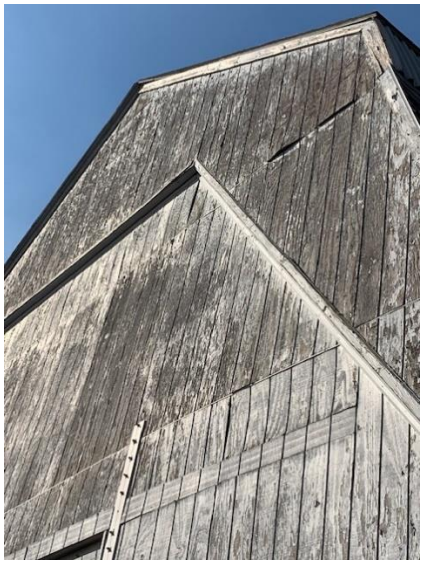
**CURRENT LOCATION CHALLENGES:** It is located within Town limits and is surrounded by residential properties. The site has aging buildings, is subject to DEQ violations; and is fundamentally suffering from the stress of functions and equipment out growing the space.

The most pressing issues are:

- Deteriorating structures used to store equipment and machinery:




- Existing structures are undersized and improperly equipped to protect equipment and machinery from the environment effectively: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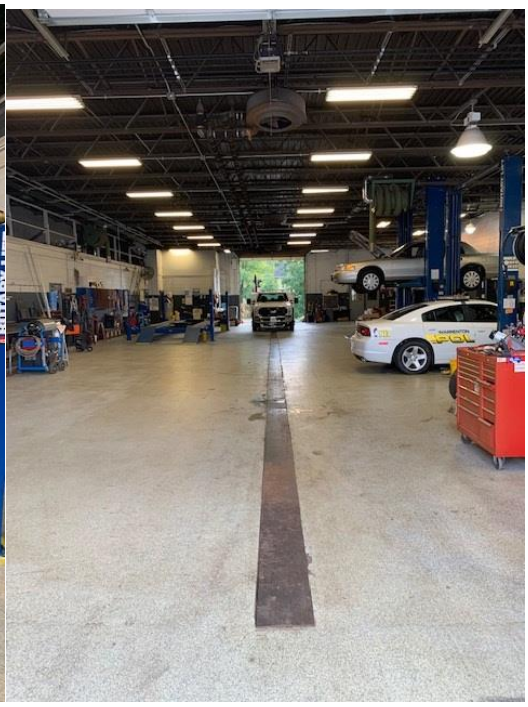
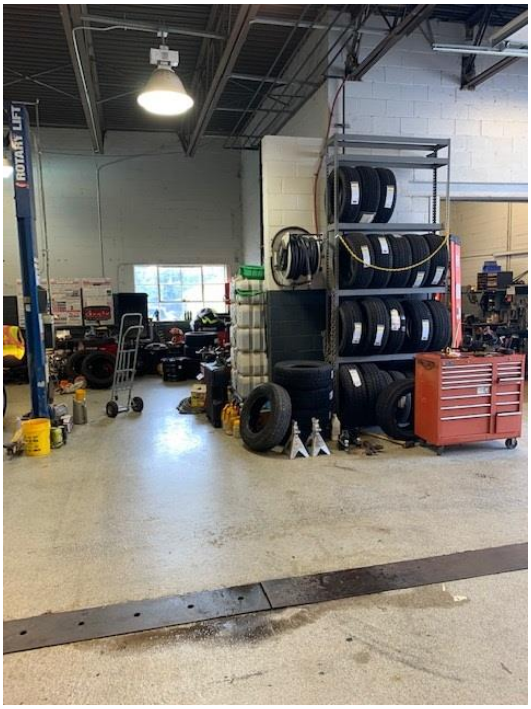
- The grounds are gravel, stone, and dirt material which are a continuous maintenance issue for the surfaces as well as the equipment driving over it:




- The only truck wash is outside:


- The fleet garage is a multi-use area for storage, maintenance, meetings, welding, fabrication, vehicle outfitting, and other functions as necessary.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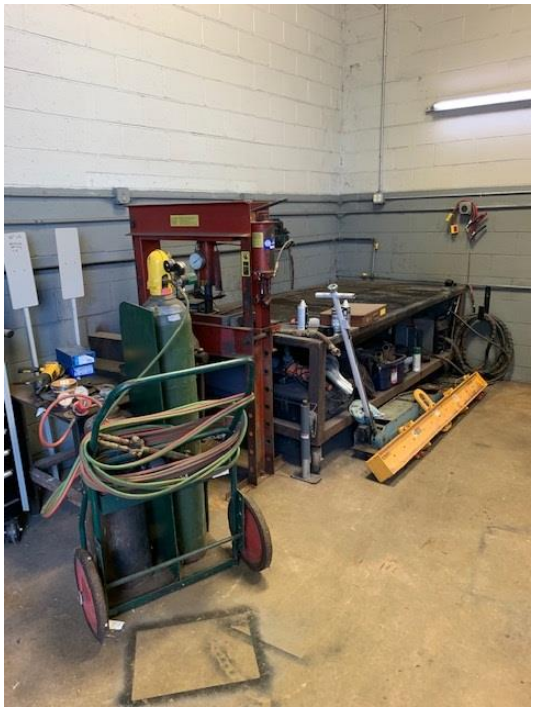
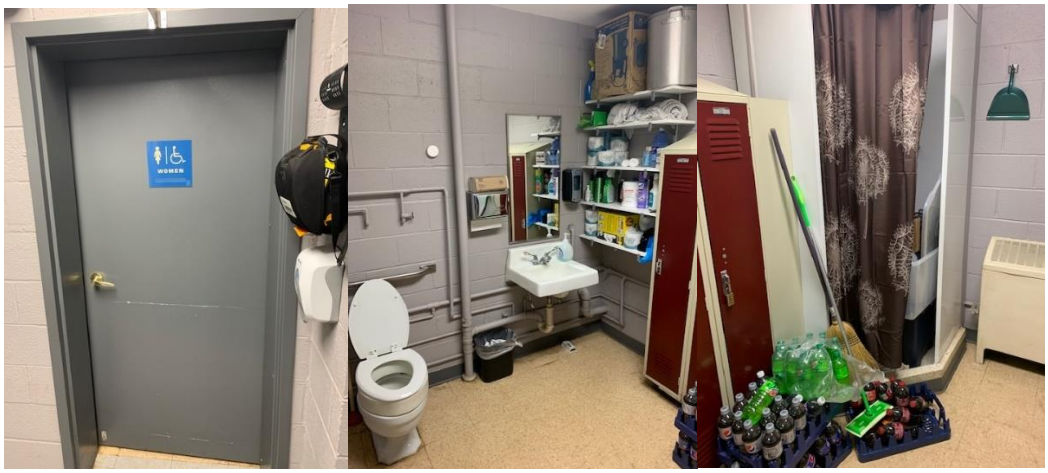


- Inadequate training room- Two stations:


- The bathrooms are in poor condition; there is no ladies locker room; the men's locker room is in poor shape; and the men's room does not have air conditioning.

  Ladies Room:

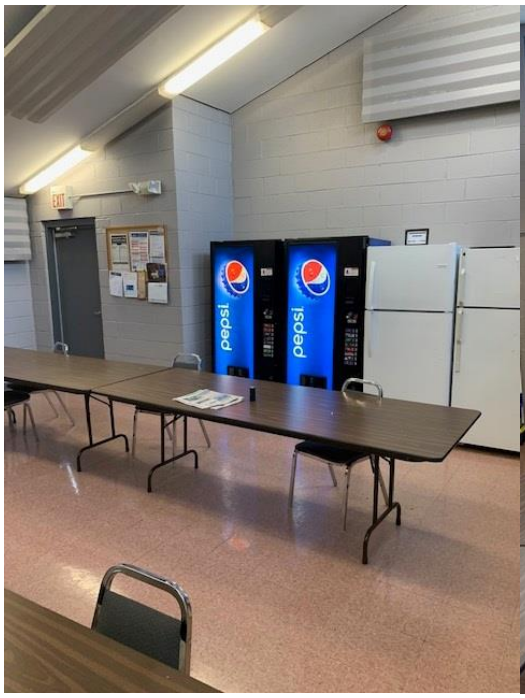



  Men's Room:


- The sign “shop” is nothing but a storage room:

- The salt barn needs repairs and is not properly situated or improved to meet DEQ standards.

- The lunchroom is a multi-use room and does not provide adequate space or equipment for a truly functioning lunchroom for the number of staff.

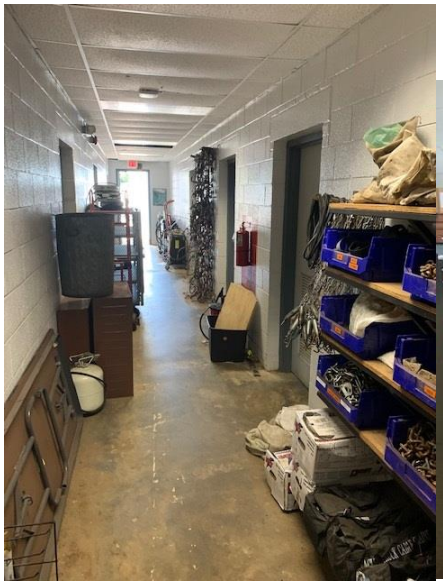



- Inadequate storage rooms- rooms are separated and create a tracking challenge; halls used for extra storage space:



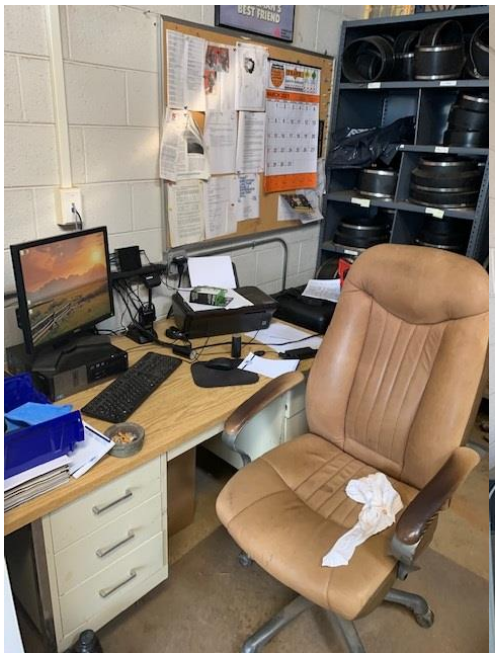






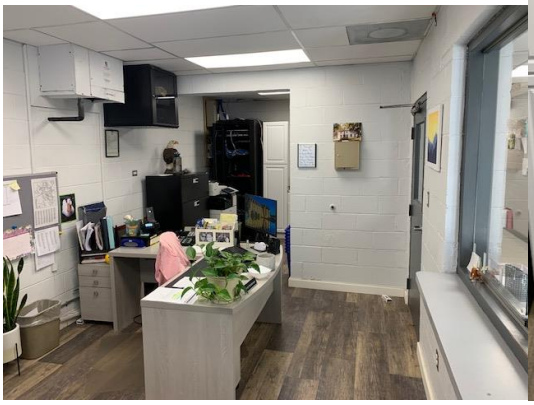




- Front counter and administration area is small and serves multiple uses:






- Inadequate employee parking: parking is adjacent to residential uses adding to the disruption:
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- The site overall creates challenges on several levels for DEQ compliance:

- Fueling station does not have any cover; pumps are outdated; poorly situated at the main entrance of equipment to the yard:

- The location of the shop creates noise and disrupts the residential aspects of the surrounding properties, especially during an emergency response or night long responses to snow and ice.





**PRELIMINARY STAFF REQUESTS:** we engaged staff into this process. The objective is to make sure we capture the concerns from staff as the primary user of the current facility and any future facility. We engaged in face-to-face discussions as well as provided a survey. Copies of the survey are in the Feasibility Notebook. The results are:

From Face-to-face discussions:

- New restrooms with functional locker and shower rooms.
- A separate training room that can accommodate all staff for regular training and meetings.
- A separate fleet maintenance bay dedicated to fleet maintenance only.
- Inside truck washing station with a steam cleaning system.
- A designated fabrication and welding shop.
- A functional sign shop where signs can be repaired, fabricated, and refreshed as well as stored.
- A central supply area for storing and managing all supplies.
- A small equipment shop.
- HAZMAT supply and response unit storage space.
- New, upgraded salt storage and fuel dispensing areas.
- Adequate office space for each team supervisor, stormwater, utility T&D, and administration.
- Adequate space designated for staff access to computers with desk space for reports and individual training.
- Inspection's office to house all inspectors.

From Survey Results:

- Indoor storage.
- Training room.
- Indoor truck wash.
- Indoor salt storage.
- Lockers and showers.
- Lunchroom.
- Consolidated file and storage space.
- Emergency operations room/space.
- Adequate office accommodations.
- Separate welding and sign shop.
- Room for growth.

**BASIC SPACE CONSIDERTIONS:** The initial assessment of adequate operating space for Public Works is at least ten (10) acres of working space. When considering relocation, we must also consider the relationship with Town limits: in Town limits or outside of Town limits. This may be affected by boundary line adjustments as the Town moves forward. In short, the obvious efficiencies of having the shop located in Town limits start with response time to Town issues; distance traveled; fuel usage; and access. Moving the shop out of Town limits may interfere with our ability to respond as quickly as we would for example, snow routes may not be plowed. We will need to calculate distance, time, and costs for trips as we examine different sites.

Next, DEQ requirements must be taken into consideration. These will be addressed during site work and construction design; however, we must consider the costs of designing a facility meeting the DEQ requirements specifically for the salt and fuel storage and distribution.

Also, accessibility to sanitary sewer and water. Again, this will be addressed in site and construction design. At this point, the sites we are exploring will require significant improvements for these services. A study was done in 2019 for the Stafford Farm area. The report is attached.

For preliminary discussion, we submit the following square footage for specific space:

- Fleet mechanic shop and facilities- 20,000 sq. ft.
- Indoor garage storage- car, truck, and hot wash- 50,000 sq. ft.
- Central supply room- 20,000 sq. ft.
- General offices- 2250 sq. ft.
- Staff work areas- 2200 sq. ft.
- Conference room- 2000 sq. ft.
- Lunchroom- 1,000 sq. ft.
- Locker rooms and shower for all staff- industry standards.
- Fuel pumps with canopy- 5,000 sq. ft.
- Indoor aggregate storage to include salt/drive thru loading- 50,000 sq. ft.

**TOTAL UNDER ROOF OCCUPIED:** 100,000 sq ft.

**TOTAL UNDER ROOF STORAGE:** 50,000 sq. ft.

**SITE ANALYSIS:** A report presented by Bohler Engineering was completed and submitted to staff on September 29, 2021. A full copy of the report is in the feasibility study notebook. The report includes site analysis and a sketch layout of the structure.

**NEXT STEPS:** We recommend the following as our next steps:

- Direction from Council to continue the study.
- Zoning analysis.
- Budget worksheet.