TOWN OF HEBRON
MUNICIPAL FACILITIES STUDY

FINAL DRAFT
JUNE 24, 2010

5.0 PUBLIC WORKS

5.1 Public Works Complex (550 Old Colchester Road)

Physical Characteristics

Present Use Group:	B-Business, S-1 Storage, S-2 Storage
Construction Type:	VB
Area:	9,000+ sq ft for the complex
Year Built:	Office/Garage – 1984 Cold Storage Building – 1967

History

This fourteen (14) acre parcel of land was originally a gravel pit and then used as the town landfill which was closed and capped in 1995. The old landfill encompassed approximately eight (8) acres leaving six (6) acres for the operation of the public woks department and the transfer station.

Description of Use

Services provided by the public works department include road maintenance and reconstruction, solid waste disposal, snow and ice removal, maintenance of town buildings and grounds, animal control, trail maintenance and construction, vegetation control, vehicle maintenance, site improvement and construction activities, and drainage maintenance and improvements. Public works presently has 15 employees.

The facility is the hub for the repair and maintenance of all town vehicles in addition to being the home for road work crews and road maintenance. Due to the lack of adequate storage, many seasonal items are being stored at the Burnt Hill Park complex and Old Fire Station No. 2 on Deepwood Drive.

Architectural / Structural

The majority of the employees park behind the cold storage building. The parking arrangement is not structured and the parking is encroaching onto the neighboring property to the North.

Overall the complex is run down as a result of the usage and the age of the structures on the property. None of the buildings are in compliance with the Americans with Disabilities Act.

Garage/Office Building

Architectural / Structural

The building consists of a 6,000 square foot, pre-engineered steel framed building with corrugated metal siding and roofing. Originally constructed in 1982, the building has seen very little change.

The building is comprised of an office shared by the Administrative Assistant and Public Works Director; lunch room/foreman's desk; women's room; men's room; mechanical room; parts storage; mezzanine for parts storage; truck wash bay; two truck bays; and a maintenance bay.

The doors do not provide proper clearances for accessibility. The swinging doors to the exterior are not at the same level on both sides as required by the state building code. This creates a tripping hazard and prevents a person with a disability to enter the building. The door from the corridor into the maintenance bay has a step. The garage bay side should have a level landing at the same elevation as the corridor floor and ramp down. With the current building configuration, this is not feasible. The door hardware is of the knob type. This type of hardware is not in compliance with accessibility requirements.

Several of the doors on the exterior of the building and within the building are past their useful life. Due to the amount of use these doors have, the hinges are pulling out of the doors and frames and the frames are breaking apart from the surrounding wall framing. As a result the doors are sagging in rubbing.

Storage is an issue. Currently equipment and supplies are being stored in every conceivable location, such as, women's shower stall, main corridor, mechanical room, etc. The storage of materials in the corridor shall be moved to another location.

Above the office area is a twenty (20) feet by sixty (60) feet mezzanine. The mezzanine is framed with 2x10's @ 12" on center. This area is being used to store parts and tools. The framing is insufficient for the intended use. The mezzanine has a posted live load of 33 psf. This is consistent with the framing size and spacing. Additional structural support is highly recommended. Storage areas generally have a minimum design live load of 125 psf.

There is evidence the roof has had leaks. The insulation is damaged and water stains are present. The roof and insulation are 27 years old and should be scheduled for replacement. Replacement of the roofing system will not only eliminate building leaks it will also help with energy conservation. The department sealed the roof in the fall of 2009 as a result of minor leaks in a few areas. The process of resealing the roof adds a few more years to the life of the roof but with the expansion and contraction of the building, cracks will form in the sealer.

The south side wall of the garage bays have been damaged by vehicle impacts. Both the metal wall panels and the concrete masonry units should be replaced. Due to the close proximity of the metal siding to the ground, the siding has rusted. This is evident especially around the doors. Many areas along the bottom edge of the wall panels are rusting. Replacement of the wall panels and insulation is recommended. There are products that have the insulation built into the panels for energy conservation measures and durability issues.

Depending on the time of year, vehicles and equipment are swapped from inside to outside storage. Several of the plow trucks are stored in this building. Many of the plows are 11 feet wide and the garage doors are only 12 feet wide. The overhead doors and surrounding framing are easily subject to damage from the vehicles.

The configuration of the buildings on the site makes it very difficult to maneuver a thirty seven (37) foot long truck that has a plow head-on into the garage bay. The space between the buildings is approximately eighty (80) feet. The truck drivers have to angle the plows to get in the building and reposition the plow angle once inside of the building.

The maintenance bay is mainly confined to one bay for the servicing of the town vehicles. A vehicle lift is not available for use due to the height restrictions within the building and the durability of the concrete floor. Work under the vehicles has to be performed by using kreepers. This method makes the mechanic more susceptible to injuries, such as tools or parts falling and bumping the head while under the vehicle. The maintenance bay is crowded with tools and parts and fluids. The current configuration does not allow the servicing of more than 1-2 vehicles at a time.

The motor oil tanks located in the garage area should be protected from vehicle impact by the installation of bollards. The potential exists for a vehicle to come in contact with one of the tanks and either knock it over or rupture the side, spilling oil all over the floor. However, the installation of bollards will further restrict the use of the bay.

The area used for the wash bay was not constructed for this type of activity. The walls are lined with painted plywood 8 feet up the wall and vinyl faced insulation for the remainder of the wall. The plywood and insulation will absorb water and moisture. The walls shall be of a mold and mildew resistant and nonabsorbent material. Washing of vehicles and equipment inside of the building should stop until such time as the appropriate materials are installed and electrical devices protected.

Mechanical Systems

The existing heating and ventilation systems within the building appears to be part of the original construction with the exception of the fuel oil tank. A new above ground fuel oil tank was installed a few years ago. The boiler supply and return lines run along the outside of the building from the tank to the boiler. The lines are insulated to prevent oil from gelling during severe cold spells. The mechanical room has an exterior door and the oil lines run under the door. This is a tripping hazard and is also subject to damaging the piping system. The piping is required to be protected from physical damage.

Replacement of the heating system should be planned in the very near future. The boiler has been repaired on several occasions over the years. There also had been complaints of uneven heating within the building.

Repair bays are required to be continuously ventilated at the rate of 1.5 cfm per square foot, minimum per the State Building Code. In addition to the continuous ventilation requirement, direct capture of the vehicle exhaust ventilation system is required. The only ventilation in the building is an in-wall exhaust fan at the gable ends. The fans must be turned on manually.

Plumbing Systems

Sanitary Services

Sanitary services are provided by an on-site septic system. The septic system is being pumped on a regular basis along with the oil separator. The location of the leaching fields is not exactly known. There are no septic as-built records available.

The garage bays originally had a trench drain running down the center of the building. The majority of this drain has been removed and replaced with several floor drains. The original plans indicate they are piped to an oil separator outside of the building.

Water Supply

Domestic water is supplied by an on-site well with the controls located within the mechanical room. The employees have complained of odors coming from the water.

Electrical Systems

The public works complex is supplied by a 200 amp, single phase overhead service. This service also supplies power to the cold storage building, dog kennel and fuel dispenser. Several sub-panels are present within the building. The size of the service appears to be adequate for the complex at the current time. Future renovations may require the upgrade of the electrical service to handle any additional loads.

The majority of the exits signs and emergency lights are not functioning. The fixtures should be replaced with LED type exit signs and emergency lights. This type of fixture consumes a lot less electricity than other types of fixtures and has a longer life expectancy.

Several of the panels within the building are not properly labeled. The electrical code requires panels and disconnects to be labeled. This is a safety feature in the event of an emergency and for routine maintenance.

The fluorescent light fixtures are of the old T12 style. This type of bulb and ballast consumes more energy than the T5 style. Lighting retrofit is recommended.

The wash bay is not properly wired. All of the wiring methods and devices are not listed for wet locations as required by the National Electrical Code. This includes the electrical panel that is located adjacent to the exterior door. All electrical devices and wiring methods are to be suitable for wet locations in a wash bay.

In the event of a power outage, emergency power is supplied by the connection of a tractor with PTO to the building on the south east side corner of the building and activating the 200 Amp manual transfer switch. The building is used during emergencies and major storms since it is the responsibility of public works to make sure the town roads are clear of debris, snow and ice and safe for passage. For the department to function properly and more efficiently an emergency generator should be installed at the facility with an automatic transfer switch.

Fire Alarm System

Many devices have been replaced for the fire alarm system over the years. In a few areas the manual pull stations have items stored in front of them rendering them inaccessible in the event of an emergency. It was also observed a manual pull station was installed in the middle of a wall (south side of the garage bays). This device is not required in this location and should be removed.

Cold Storage Building

Architectural / Structural

This approximately 3,008 square foot building has been added onto over time. The exact dates are unknown except for the original building was built in 1967. The building is similar to post and beam construction with wood roof trusses. The building is unheated. The roll-off truck and other vehicles currently occupy this building along with road maintenance equipment, such as signs, cones, fencing, etc.

Egress from the building is inadequate. The location of the door does not provide for proper egress from remote areas of the building.

An old box trailer is located on the back side of the building with direct access from two points inside of the building. The trailer is used for storage. Ingress and egress from this trailer is unsafe due to floor level changes (14"). The trailer has an opening at the end that allows birds and other animals to enter the building.

The roof trusses are showing signs of stress. Several of the joints have started to separate. The framing is resting directly on the concrete floor and is in very close proximatey to the exterior grade. This is causing decay in the perimeter lumber. Also the concrete floor is broken and spalling in several locations.

Generally, the department requires the storage of many gasoline cans and other flammable liquids as part of their daily business. The current storage facilities are filled to capacity and additional flammable liquid cabinets should be purchased in the near future as the budget allows.

Mechanical Systems

The spaces heaters within the building are not operational. The heaters and all associated wiring and piping should be removed. On the rear of the building is a copper gas line that runs down the building. This gas line is not properly supported. The gas line shall be removed.

Electrical Systems

Power is supplied underground from the Garage/Office Building and enters the building in the vicinity of the kennel where it travels along the bottom cord of the roof trusses to a 200 amp panel approximately 40 feet away. The panel cover has several screws missing and open nock-outs. The electrical code requires a disconnect at the nearest point of entry to a building. This disconnect can be either inside or outside of the building. All indications is this work was done when the office was constructed in 1982. Prior to this date power was supplied overhead from a pole

across the street to a meter box and a main disconnect. The overhead lines, meter socket and main disconnect are still present. This equipment should be removed.

Exit signs and emergency lighting are not present in the building. Emergency lighting is required by the state building code as are exit signs.

Lighting within the building are four (4) foot fluorescent light fixtures. These fixtures are also of the T12 type lamps. Replacement of the light fixtures is not recommended at this time.

Several areas have abandoned wiring left exposed. Some of these wires are coming from receptacles. Each outlet device should be inspected and any deficiencies corrected by a licensed electrician.

Dog Kennel

Architectural / Structural

The kennel is of masonry construction and is attached to the cold storage building. The kennel is comprised of 10 stalls, five on each side with outdoor access. The outdoor runs are covered to help protect the animals from the elements. The construction of the cover is insufficient. The roof is framed with 2x4's with signs of rot and is supported on the outer edge by the kennel fencing.

A portion of the cold storage building is used for the kennel. This area has food storage, lp-gas fired furnace, electric water heater, and sink.

Repairs and renovations may require compliance with the current state requirements for dog pounds. Currently the facility is grandfathered due to its age.

Mechanical Systems

The kennel is heated by a LP-Gas fired warm air furnace that is in reasonably good condition, installed in 1995. The furnace is more than likely oversized for the space but the kennel has many areas of air infiltration. The fuel is supplied by an above ground tank 8-10 feet away from the building. The gas line has been damaged and not properly protected and should be repaired or replaced.

The LP-tank has rust spots in many areas that need to be cleaned and painted. The emergency contact information was deteriorated on the tank and needs to be replaced. Also the tank is surrounded by combustible ground cover which is in violation of NFPA 58. This is an area that will need immediate attention.

Plumbing Systems

The kennel is equipped with a trench drain, both inside and outside the building. The trench drain is used for cleaning purposes. At the end of each trench drain is a PVC pipe that runs underground to a septic system with two drywells.

Water is supplied from the garage/office building underground. The burial depth of this piping is inadequate. It has been reported that the water line freezes on a regular basis during the winter.

Electrical Systems

The wiring methods used on the exterior of the building are not code compliant. Several areas are wired with NM cable. This type of cable is listed for use indoors only. Also several light fixtures and associated boxes are also not listed for the environments they are being used in. The sheathing on the cables has either deteriorated due to prolong exposure to sunlight or been damaged. Rewiring all of the exterior light fixtures is needed.

Fueling Station

Architectural / Structural

The fueling station is a Convault tank with storage for 4,000 gallons of diesel fuel and 2,000 gallons of gasoline, installed in 1999. This is an above ground tank on a concrete slab. Maneuvering for fueling is cumbersome for larger vehicles due to the location of the pumps and driveway access.

Employees are assigned a gas key in order to be able to refuel a vehicle. This allows for the tracking of who is refueling which vehicles. The current software allows the department to track many items but the use of this feature is cumbersome and susceptible to user input errors. The tracking of mileage would allow the tracking of fuel consumption for each vehicle and for scheduling routine maintenance of the vehicles. If the program was updated and the key station was within an enclosure, then this feature would be beneficial.

The tanks are sufficient for the current operations. When the tanks are half full a call is placed to have them refilled. The refueling occurs on average once a month.

Electrical Systems

The fueling station appears to be wired and functioning correctly. An emergency stop button is located on the key entry station. The installation of an exterior light would be beneficial as fueling is required during the evening hours. The light can be controlled by a photocell or occupancy sensor.

Pole Canopies

Architectural / Structural

There are two (2) of these canopy structures on the property. They are constructed out of telephone poles set into the ground with a steel and wood framed roof and corrugated metal roof panels. Originally they provided shelter for the sanders that went into the back of the trucks. Currently there is only the need for a few sanders for the smaller trucks since the larger trucks are self-contained. Various pieces of equipment are also being stored under the canopies.

The canopies are at the end of their useful life. Several of the poles are damaged, roof framing is either rusting or rotted. The majority of the steel beams are attached to the poles by a single bolt. Standard beam connections are at least two (2) bolts per connection. The two pole canopies should be removed.

Various Outbuildings

Architectural / Structural

Behind the dog kennel is a 12x20 and 8x16 wood framed storage sheds. These structures are used for the storage of various road work items such as signs and barriers. The 12x20 shed is in good condition. The 8x16 shed has been on site the longest and is showing signs of wear. The 12x20 storage shed could be relocated to another facility that is in need of a small storage building once renovations and additions are completed on the property.

Sand / Salt Storage Building

Architectural / Structural

This building was reconstructed in 2004 for the storage of salt and the sand/salt mixture. Currently, the sand product is stored outside in the weather. The capacity of the current building is around one winter storm. This requires deliveries of sand and salt on a regular basis and the possibility exists for a shortage of material in the event of a heavy storm or a multi-day storm.

The use of the sand and salt mixtures will be diminishing due to state and federal mandates. The department will be switching over to a calcium chloride product that melts ice and snow at lower temperatures than the current sand/salt mixture. This newer product will require less cleanup along the town roads since sand will not be used. The storage of this new product would have to be inside out of the weather. A new storage facility is recommended. The facility should be sized for the storage of approximately half a season use of product. This would allow the town to purchase in bulk at a discount.

It has been estimated that the annual usage of road treatment is 4,500 tons of the sand and salt mixture. Based on the annual usage a 6,000 square foot building would have the capacity to hold approximately ¾ of the annual usage.

The new storage building should be located centrally in town for easy access during winter storms. Another benefit to a central facility would be the elimination of the storage facility on Salt Box Road and Old Colchester Road. One possible location that has been discussed is Burnt Hill Park. The new storage facility should include lean-too structures to accommodate the storage of a payloader, sanders and plow blades. This would free up a significant area at the current facility.

Lower Transfer Office Building

Architectural / Structural

A wood framed pre-built structure that is ten (10) feet by twelve (12) feet in size. This building is for an attendant to track and direct visitors of the transfer station to the proper locations for the disposal of items into the proper bins. Access into the building is on a sloping drive which is unsafe.

Mechanical Systems

The building is heated and cooled by a thru-wall electric heat pump. This is a suitable solution for a small structure.

Electrical Systems

Power is supplied from the main transfer office building by means of a PVC conduit run along the top of the retaining wall. The conduit has several broken supports and in other areas no support exists. As a result, the conduit has separated at the main office building. This situation allows water to enter the conduit and junction box resulting in deterioration of the insulation on the wiring and wire splices.

Oil / Anti-freeze Fluid Building

Architectural / Structural

This is a three (3) sided wood framed structure with roof trusses and a concrete slab. The building is used for the collection of batteries, waste oil and anti-freeze from the residents of Hebron. The building is in good condition and appears to meet the requirements of the transfer station.

Main Transfer Office Building

Architectural / Structural

The building is of wood framed construction and only suitable for use by one person. The building allows the attendant to observe what items are being disposed of into the compactor.

Access and egress from the building is a safety issue. The building has a storm door that swings out over the stairs. The state building code does not allow a door to swing over stairs. In addition to the door swing, no landing is present at the top of the stairs, no guardrails, and no handrails. Proper landings, guardrails and handrails are required. The structure is exempt from all accessibility requirements of the state building code due to its size and function.

Mechanical Systems

The building is heated and cooled by a thru-wall electric heat pump. This is a suitable solution for a small structure.

Electrical Systems

An overhead service is provided from the street to the building. This overhead service provides the electricity to the building, compactor and the lower transfer office building. There appears to be no issues with the installation.

Department Space Needs

The department is in much need of additional space and vehicle maintenance bays with vehicle lifts. The garage/office building and the cold storage buildings are classified as nonconforming buildings by the town zoning regulations. These two buildings encroach into the front yard setback line as established by the zoning regulations. Additions to the buildings would require a variance from the Zoning Board of Appeals. Also due to the location of the buildings on the site and the current topography, an addition would further restrict vehicle circulation around the property.

Previous reports have suggested the construction of a new public works complex more central within town. This is the ideal situation and construction could be done without affecting the current activities of the department. The development and construction of a new complex is estimated at $5 million dollars, excluding land acquisition. The most practical option is the renovation and expansion of the current facilities with the road treatment product stored in a central location within the town.

The following table is the department space needs;

Administration

Reception	240 sf	Service counter
Director Office	240 sf	Small meetings for 4-6
Formen's Office	160 sf	
Meeting Room	240 sf	for 14-16 people
File Storage		

Employee Lounge Area

Men's Room		
Women's Room		
Lockers	15-20 employees	
Showers	2-male, 1-female	
Lunch Room	240 sf	14-16 employees
Rest Area	6 bunks	Used for employees to rest after shifts

Vehicle Service Shop

Vehicle Bay	20 ft x 40 ft min.	w/vehicle lifts, min 2 bays
Mechanic's Office	150 sf	
Tool crib		
Parts Storage		

Kennel

Indoor kennel	5 stalls
Outdoor Run	5 stalls
Quarentine Area	1 stall
Cat / Small Animals	4 stalls

Cold Storage
Tool storage .....
Road signs / barriers.....

Equipment for inside storage
Front End Loader .....
Backhoe.....
Roll off Truck .....
Mason Dump Truck .....
Tri-Axle Truck.....
Dual Axle Truck .....
Bobcat .....
Machine Attachments .....
Utility Trailers.....
Sanders.....Relocate to central salt storage facility

Miscellaneous Items
Vehicle Wash Bay.....1- bay

Recommendations

The public works facility is in desperate need of additional space and more efficient working conditions. Development of a master plan with phased construction should be the main priority in addition to the items listed under 0-1 year.

There has been discussions about purchasing the land to the south that is owned by Connecticut Light & Power. The negotiations should be reopened to determine the possibility of obtaining the land or the possibility of purchasing a portion of the land to the north owned by Camp Connecticut.

I. Garage / Office Building - Repair and replace emergency lights and exits signs as required with LED type fixtures

II. Garage / Office Building - Remove all stored items that are in front of the fire alarm devices

III. Kennel/Cold Storage – Correct LP-tank and gas lines

IV. Cold Storage – Install exist signs and emergency lights with LED type fixtures

V. Cold Storage – Purchase flammable liquids storage cabinets

VI. Cold Storage / Kennel – Install main disconnect and correct wiring methods

VII. Transfer Station – Repair damaged electrical at main building

VIII. Transfer Station – Correct life safety issues (install landing, guardrails, handrails)

IX. Central road treatment product storage facility with sander storage

X. Garage / Office Building - Replace the metal roof and insulation

XI. Garage / Office Building - Repair metal siding, insulation including overhead doors and man doors

XII. Garage / Office Building - Replace the boiler and controls

XIII. Garage / Office Building – Oil tank bollard protection within the building

XIV. Garage / Office Building - Lighting retrofit/replacement

XV. Garage / Office Building – Ventilation system

XVI. Garage / Office Building – Upgrade electrical service and install generator and automatic transfer switch

XVII. Garage / Office Building – Wash Bay reconstruction (floor drain, electrical, frp wall panels, storage cabinet, etc.)

XVIII. Design and construction of a new public works facility and transfer station at the current location

XIX. Demolition of pole canopies

XX. Salt storage facility design and construction

XXI. Transfer Station – New attendant offices

XXII. Fuel canopy weather protection enclosure

Town Facility Needs:
A Report to the Board of Selectmen
And the Citizens of Hebron

William Cox
Robert Dean
Sylvia Grzybowski
Gail Hughes
Brian Lessard
William Moorcroft

Introduction and Background

The Facilities Study Committee first met on December 18, 2002. Selectman William Cox convened the Committee. Its members included: Gail Hughes from the Board of Education; Will Moorcroft from the Planning and Zoning Commission; Brian Lessard from the Board of Finance; and citizens-at-large Robert Dean and Sylvia Grzybowski. Since December 2002, the committee has met nine times to evaluate space needs for various town facilities and formulate recommendations to the Board of Selectmen for meeting those needs.

To assist in its evaluation, the committee received reports from several individuals.

- On January 7, 2003, Michael O'Leary presented the Plan of Conservation and Development, prepared by the Planning and Zoning Commission. Together with Planning & Zoning commission members Natalie Wood and Dave Schoolcraft, he discussed the findings of their recent research for the Education Section of the Plan of Conservation and Development.

- On February 4, 2003, and again on June 17, 2003, Robert E. Lee presented evidence supporting the necessity of expanding or replacing the Town Hall buildings.

- On February 11, 2003, School Board Chair Nicole Bernabo, Vice Chair Joanne Yeterian, Hebron Elementary School Principal Paul Sales, and School Superintendent Dr. William Silver, presented the committee with anticipated facility needs for the elementary schools.

- On May 14, 2003, Andrew Tierney presented the space needs of the Public Works department.

The committee met again on June 9th, June 17th, September 25th, October 21st, and November 19th to review the work to date and prepare its recommendations to the board of Selectmen.

The Facilities Study Committee did not contact the Central Office Committee (COC) or RHAM Board of Education to present facilities needs. However, we are aware that there are needs for the COC. The existing building contract for the COC expires in August 2004. The COC is currently pursuing short term space within RHAM High School for the Hebron and RHAM Board administration personnel.

Long term educational administrative space needs can be incorporated into either a Hebron Town Hall expansion project (or new construction), or a new elementary school building. Both of these facility needs are discussed in this report.

Transmittal to the Board of Selectmen and the Citizens of Hebron.

The Facilities Study Committee hereby presents its overview recommendations for land acquisition and town facility development to the Board of Selectmen and the citizens of Hebron.

It must be emphasized that our recommendations are made independent of financial consideration. Our report is based solely on our identification of space and facility needs. It is intended to be a preliminary guide to assist the Town in advance planning for possible new town facilities. How the various projects might be financed is a question beyond the scope of this committee, and must obviously be left to the Boards of Selectmen, Finance, and Education, and ultimately, to the Hebron voters.

William Cox	Gail Hughes
Robert Dean	Brian Lessard
Sylvia Grzybowski	William Moorcroft

November 19, 2003

Hebron Educational Facility Needs

Hebron currently has two elementary schools. Gilead Hill School is for pre-Kindergarten through second grade, and Hebron Elementary School is for third grade through sixth grade. Hebron has seen significant residential growth over the past 10 years. The majority of this growth has been families with young children. Due to this growth, there has been a steady increase in the elementary school population.

The design capacity for pre-kindergarten through sixth grade at the two schools combined is 1,048 students. The enrollment for the current year (2003-2004) is 1,139 students (1,044 Full Time Equivalent; pre-kindergarten and kindergarten students are counted as one-half students as they attend only half a day).

The Hebron Board of Education prepares detailed enrollment projections. Based on these projections, both schools, and particularly Hebron Elementary School, will have severe space problems over the next 10 years. The combined enrollment is projected to be 1,211 by the 2008-2009 academic year. That will result in an increase above design capacity of approximately 180 students. Enrollment in Hebron elementary schools is projected to be 1,293 by the 2013-2014 school year. That is approximately 260 students over current capacity. Such growth appears to support a new elementary school in the next 8 years. Looking far into the future, these current trends indicate a level of growth that could support yet another new school in approximately twenty years.

The Hebron Board of Education has explored various alternatives to respond to the overcrowding issue. There are 33 classrooms at Gilead Hill School, and 29 (including 4 portables) classrooms at Hebron Elementary School. In response to the large enrollment, the class sizes for the current year (2003-2004) are above the recommended level in the Educational Specifications for several grade levels. Two of the "special" subjects (i.e., Music, Art, Physical Education, Spanish, Challenge & Enrichment, etc.) are being delivered "on a cart." The "special" teacher comes into the regular classroom, rather than having the students move to a separate classroom, in order to free up those rooms for grade level classrooms. There is a need for as many as eight additional classrooms by 2006-2007. The number of additional students puts stress on the core facilities of the buildings in other ways such as cafeteria space, bathroom facilities, Art room, Music room, Gymnasium, etc. due to the limitations on core facilities. The possibility of adding on to the existing schools has been explored by the School Board. The current facilities' sites are not deemed suitable for further expansion.

Recommendations:

Current Needs (0-3 years): This is currently being addressed by the Town Modular Building Committee.

Short Term Needs (3-8 years): Based on the above information, the Facilities Study Committee recommends that a feasibility study, utilizing professional consultants, be conducted within a year to assess the need for a new elementary school. This feasibility study should also lay out possible scenarios for the town to consider, including the provision of space for educational administration staff.

The Facilities Study Committee recommends that all possible alternatives should be considered including additional regionalization of the elementary program. Conversely, the study should also explore whether the growth of the Hebron student population would support its own K-12 program and what the facilities implication of such a decision would be. The study should explore available State of Connecticut funding sources, and conduct a careful examination of the property tax impacts of all options considered.

Based on the anticipated results of the feasibility study and current student growth projections, the Facilities Study Committee anticipates that additional elementary educational space will need to be constructed.

Longer Range Needs (greater than 8 years): There is a likely need for expansion of the RHAM Middle and High schools during this time period. There could also be a need for additional elementary school space.

Hebron Town Hall Facility Needs

Hebron's Town offices currently consist of 2 facilities, the Town Hall, built in 1964 and expanded in 1981, and the Horton House, built circa 1866, and acquired by the Town in 1988. The facilities are used by 28 employees and the Probate Judge and Probate Clerk. The Horton House (2 levels plus a basement) is 2705 sq. ft; the Town Hall (2 levels) is 6,626 square feet. There are 48 parking spaces plus 5 handicapped spaces. The office complex sits on 2.9 acres. An additional .87 acres to the north was acquired in 1998.

Housing the town offices in the current facilities is inefficient and inconvenient for the public. Departments that work together on a regular basis should be located next to each other. Instead they are scattered throughout the complex.

The Horton House, built as a physician's home/office in the mid 1800's and featuring seven fireplaces and wide plank flooring, is not conducive to an efficient government operation.
The Town Hall has a severe lack of adequate meeting space for the many town boards and commissions that meet on a regular basis. Community groups also need meeting space for day and evening functions. Juggling the existing meeting spaces (one room at the Town Hall with a capacity of 39 and a smaller conference room at Horton House that holds 8 people) and using the library's community room cause logistical problems, and preclude community group access to needed meeting room space.

There is inadequate storage space to serve the existing staff. File cabinets holding documents, grand list books, and maps are tucked into whatever space is available. In several instances, files are sometimes stored separate from the staff using them. This includes the departments of Finance, Building and Planning, Tax Assessor, and Tax Collector.

Many departments need additional office space to work effectively. These include Parks & Recreation, Probate Office, Registrar of Voters and Finance departments. There is no waiting room space for visitors to the Town Hall. People must stand in the halls while waiting to conduct business.

These space needs will continue to worsen as the town grows.

Future Needs

Five meeting rooms are needed at the Town Hall to accommodate groups ranging from 10 persons, to a larger capacity room holding 75-100. Common sense dictates that the multiple departments of the town staff be housed in a single facility. The public could easily meet with appropriate officials and the staff's efficiency and productivity would be improved by easy access to data and other departments.

As part of improving efficiencies and cost savings, any long range plan for housing town-wide services should look at combining school administrative staff, police department functions and emergency operations center in one location. There are many similarities in functions and cost sharing opportunities between school administration and town administration (payroll, purchasing, budget administration, data storage, filing, computer services, telephone system, heating and cooling costs,). In many communities, sharing facilities has reduced infrastructure and operational costs as well as improved communications between the public and administrative bodies.

Town Office and Meeting Room Space Options:
Two basic alternatives – with significant options - exist for meeting the short and longer range office and meeting room space needs of Hebron's town government:

1. Expand the existing Town Hall, using the lot to the north that was purchased in 1998. This would require a connection to the sewers as the septic system is located in this area. The current Town Hall has about 6,626 square feet. It is estimated that this figure would double when consolidating the staff from the Horton House and adding meeting rooms. A ***working rough estimate*** is a cost in the neighborhood of $1,000,000 ($175/sq. ft.). There appears to be room for additional parking onsite to meet the expansion needs.

2. Construct a New Town Hall. A New Town Hall with approximately 11,400 square feet (double the current Town Hall space). A ***working rough estimate*** is a cost in the neighborhood of $2,250,000, not including land purchase or site development. The Village Green District on Main Street (Route 66) is expected to become a reality in 2004. The Town could procure a parcel of land in a central location for a Municipal Building. Because of the traffic generated by town office buildings, such a location would help make the Village Green District attractive to commercial development.

3. The present combined Town of Hebron and Regional District Eight school administration offices (known as the 'COC', short for Central Office Committee) estimate their space needs at about 4,000 square feet. A ***working rough estimate*** is a cost in the neighborhood of $700,000, not including land purchase or site development.

4. Combining both the town and school administration offices would very likely result in lower construction, operation and maintenance costs, and possible shared operational staff positions.

Recommendations:
Based on the above information, the Facilities Study Committee recommends that a feasibility study utilizing professional consultants be conducted within a year to document the need for a new or expanded Town Hall. This feasibility study should lay out possible scenarios for the town to consider, including the provision of space

for educational administration staff. The study should also explore available State of Connecticut funding sources, possible future uses of the Horton House, and careful examination of the property tax impacts of all options considered.

Hebron Public Works Facility Needs

Public Works' current facilities are located at 550 Old Colchester Road, at the southern most part of town, on a fourteen (14) acre rectangular-shaped parcel, the site of a former gravel pit. This town-owned parcel is abutted by Camp Connecticut to the north and west and Northeast Utilities to the south. A large wooded parcel is across the street to the east.

Not only does this site house all of Public Works' major buildings and equipment, but it also is the site of the town's closed landfill and current transfer station. Of the 14-acre site, the landfill encompasses about eight (8) acres, leaving six (6) acres to accommodate buildings, equipment, materials and the transfer station. Five hundred feet of road frontage does allow the site to safely utilize two curb cuts onto Old Colchester Road.

Services provided today by the fifteen member Public Works department include road maintenance and reconstruction, solid waste disposal, snow and ice removal, maintenance of town buildings and grounds, animal control, trail maintenance and construction, vegetation control, vehicular maintenance, site improvement and construction activities, and drainage maintenance and improvements.

The entire Public Works operational facilities are restricted to a six-acre portion of the aforementioned fourteen-acre parcel. The eight-acre town landfill, operated from 1962 until it was closed and then capped in 1995, cannot be utilized or altered in any manner. The landfill, capped with clay and then topsoil, requires monitoring wells and mowing twice per year.

The remaining site encompasses several structures including the 100' x 60' steel maintenance / office garage; a 100'x 40' cement block cold storage (80'x 40') / animal control building (40'x20'); a 20'x 20' salt shed; and two jet hangers 70'x 10' and 60'x 10' in size. The site also includes above ground propane, gasoline and diesel tanks, an underground oil tank and septic system, and an area for outdoor storage of construction materials, sand and gravel, and some equipment. The Town is in the process of obtaining an industrial permit for storm water discharge at the site.

The 1,980 square foot maintenance / office building is in adequate condition, but is considered significantly undersized. The equipment bay area is crowded, lacks lifts, has inadequate lighting, is height restrictive and has little room for parts inventory storage. The building lacks a training or meeting room and has inadequate lunch and shower areas. There is also a reported lack of office and record storage space.

The cold storage / animal control building is in a less adequate condition than the maintenance / office building, but is more adequately meeting space needs. The animal control portion of the building includes ten kennel canine enclosures with heated indoor / outdoor access and short run areas. While animal control does occasionally house cats, a segregated area designated for cats does not exist.

The salt shed is in poor condition, and is inadequate for its intended uses. The CIP process has approved a new salt storage shed, but construction has been postponed until resolution of the site expansion and or relocation has occurred. All salt and sand/salt mix is required to be covered from the elements. Maintenance of larger supplies of salt and sand / salt mix is desired but not possible at this time. Sand may be and is left outdoors. Construction materials are generally not covered. The town does store a small quantity of salt / sand at a satellite location in the north end of town on Salt Box Road.

Equipment required for solid waste disposal includes a new roll-off truck, a backhoe, and fifteen roll-off bins. The transfer station employs one full-time and one part-time employee during the week and weekend. While the physical condition of the transfer station is adequate, the facility is considered overcrowded and inadequate in terms of space for the future. A new roll-off truck will be needed in the near future.

The extreme south-end location of the current facilities results in a lengthy, inefficient response time to other areas of the town since vehicles, personnel and nearly all road and construction materials are stationed here. The department is currently analyzing property in the central area of town to accommodate its operations, with the exception of solid waste disposal and animal control. A four to ten acre site is desirable to meet its current and future needs. The department seeks to construct a new 100'x 80' maintenance / office garage, a 120'x 60' salt storage shed and two 100'x 60' cold storage buildings. Current facilities of the animal control department could expand on the current site.

With the desired relocation of the public works complex, the current site for the transfer station would be adequate for future needs as the outdoor areas occupied by materials and equipment could be utilized for an expanded solid waste disposal operation. The current buildings on-site could continue to house equipment and could provide an opportunity to expand the town's recycling program.

Recommendations:

Current Needs (within 6 months): Commence negotiations to acquire the Northeast Utilities property to the south or a portion thereof to alleviate overcrowding.

Short Term Needs (1-2 years): Acquire the adjacent Northeast Utilities property to expand operations at the existing site.

Mid to Long Range Needs (5-15 years): Form a site development committee to identify properties in the central area of town to relocate the primary operations of the department. Sites should be selected to ensure future expansion opportunities of the department so they can relocate to a more central and efficient location, with an emphasis on potential shared site uses such as recreation or other public facility needs.

Parks & Recreation Facility Needs

Parks, ball fields, beaches, lakes, hiking trails, bike trails, swimming pools, golf courses, and organized recreational programs are vitally needed resources to the people of Hebron. These resources provide residents with many leisure-time activities in pleasant and safe surroundings. Hebron residents rely on a combination of public school facilities (both indoor and outdoor), town parks, state parks, state forests, and private facilities for both active and passive forms of recreation.

High quality open space and recreational facilities are similar to good education programs in that they provide economic benefits to a community in the form of increased property values. This applies, of course, to nearby properties. But when a town's facilities and parks are perceived as exceptionally well thought out and attractive, there is often a more general 'desirability effect' which results in widespread increases in property values and tax revenues. Public and private open spaces also provide tax revenues in excess of municipal services that these properties demand, and therefore are among the best land uses in terms of cost-benefit analysis. Attractive open space and recreation opportunities also offer enhanced quality of life, personal fulfillment, and good old fashioned fun.

Active Recreation:
The Hebron Parks and Recreation Commission evaluated the existing public recreational facilities in the Town and estimated the present and future need for ball fields and sports facilities, based on state and national evaluation standards. Their work, as reflected in the 1999 Master Plan, found that the Town of Hebron was already experiencing deficiencies in the number of sports facilities available for public use. The Master Plan found a deficiency of two indoor basketball courts and one soccer field. By 2009, the Master Plan indicated the need for soccer and baseball/softball fields was expected to grow by at least two fields of each type.

Since that time, participation in youth soccer has almost doubled. Much of that growth is occurring in the younger age groups, which can use more basic playing fields, such as those at Lions Park and Old Colchester Road. The space problem intensifies as the younger boys and girls move up to more competitive leagues which require better fields.

Overall participation in baseball has grown about 5% annually since 1999. However, a stronger growth rate has occurred in T-ball and the younger age groups. Current estimates by baseball officials indicate a five year need for between one and two ninety foot (length of baseline) baseball fields, two 60 foot fields, two fifty foot (T-ball) fields, and one softball field.

The implication of current soccer, baseball, and softball trends is a need for additional ball fields, far beyond what was anticipated in 1999.

Passive Recreation:
The Hebron Parks and Recreation Commission defines passive recreation as recreational activities that require minimal or no alteration to the environment to accommodate them. Passive recreational activities vary in physical intensity and often do not require specialized training or equipment. Passive recreation is beneficial to the community as a whole, as people of all ages, physical abilities, and proficiency levels can participate and enjoy the same facility. Passive recreational sports differ from "organized sports" or active recreation in that they are not usually organized into competitive leagues.

Hebron is fortunate to have Gay City and Airline Trail State Parks. Walking, jogging, hiking, and biking are favorite pursuits of many town residents, not to mention swimming and bird-watching. As Hebron acquires and develops property for active recreation, it must continue to include opportunities for passive recreational activities.

Johnson Farm Property:
An exciting opportunity is near. After a multi-year process, the Town of Hebron has approved the purchase of the former Johnson Farm property at a truly attractive price for open space and recreational use.

***Recommendations*:**

Current Needs (within 6 months): Complete the purchase of the Johnson Farm property for active and passive recreation. Hebron's Open Space Land Acquisition Fund is available to pay for the purchase of this property.

Short Term Needs (1-2 years): We recommend that a consultant be hired to work with the town and other interested parties to develop alternative plans for the design and long-term development of a recreational complex on the Johnson Farm property. Such a planning project should consider the many active and passive recreational needs of the town, while maintaining a careful sensitivity to the unique environmental qualities of the property.

Mid-Range Needs (2-5 years): Working with the same team of interested parties, the town should prepare a strategic plan for the longer-term development of active recreational sites in the north central area of town. Potential sites should be considered for their potential as multi-field sports complexes. If an appropriate site(s) becomes available, purchase should occur within this time frame, again utilizing the Open Space Fund.

Mid to Long Range Needs (5-10 years): Purchase multi-field site(s), and begin a staged development process to meet the evolving active and passive recreational needs of Hebron.

Connecticut River Coastal Conservation District, Inc.

June 6, 2012

Mr. Michael O'Leary, Town Planner
Town of Hebron
15 Gilead Street
Hebron, CT 06248

Re: Wetlands Investigation on the CL&P property south of the Town Public Works Complex on Old Colchester Road

Dear Mr. O'Leary,

The Town of Hebron requested assistance from the Connecticut River Coastal Conservation District to determine if regulated wetlands and watercourses are located on the above referenced property. A portion of the CL&P property adjacent to the public works property is being considered for expansion of the public works facility. During a previous site visit conducted by Hebron Town Officials, water was observed at the ground surface at this location.

The CL&P property is a 32 acre wooded parcel, with frontage on Old Colchester Road. The topography along the road and northeastern corner of the property is steep and slopes towards the site. The northern and northeastern portion of the property where the soil investigation was conducted was relatively flat. However, according to Hebron Town Officials the property was mined in the past, and the existing land formations show evidence (depressions and high points) of this activity.

The site investigation was conducted on May 7, 2012. In attendance were: John Soderberg, Inland Wetlands Agent, from the Town of Hebron; Tom Fenton, Engineer from Nathan L. Jacobson & Associates, Inc.; David Askew from North Central Conservation District; and Kelly Starr from the Connecticut River Coastal Conservation District.

Methods and Findings

Soils were inspected to a depth of 20 inches. Soil colors were compared to the Munsell Color Chart and observed for redoximorphic features, which indicate soil saturation. The area inspected was generally limited to the base of the slope and 100-150 feet into the adjacent wooded area. Results of soil borings were conclusive, so additional investigation was unnecessary.

Based on the topography and soil conditions, we concur with the observation by town staff that the area appears to have been mined for gravel. The soil profile in mined areas lacks a typical topsoil and subsoil horizon. Only the substratum remains. In many areas, there is observable saturation to the soil surface. Based on these observations, the majority of the area contains soils that meet the definition of wetland under CT state statute, consisting of (altered) poorly-drained or very poorly-drained soil. Due to the inconsistent nature of the past mining operation,

there are many small upland inclusions within the wetland. However, these inclusions are too small to map as upland soils.

Please contact us if you have any questions. Thank you for the opportunity to comment.

Sincerely,

David Askew
Registered Professional Soil Scientist

Kelly Starr
Natural Resource Specialist

ATTACHMENT "D"

Town of Hebron
Department of Public Works Facility

Preliminary Program
Draft #1
November 5, 2012

Prepared by
CME Associates, Inc.

HEBRON DEPARTMENT OF PUBLIC WORKS
PRELIMINARY PROGRAMMING DOCUMENT

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Town of Hebron, recognizing that the existing Department of Public Works facility at 550 Old Colchester Road in Amston provides inadequate space for normal operations and protection of equipment, engaged the services of CME Associates, Inc. to prepare a space needs analysis for use as a planning tool that will guide the future development of a new facility. The study included an inspection of existing facilities, interviews with DPW personnel, documentation of deficiencies, research into potential future growth trends and recommendations for space required to meet future demand and to address operational and functional deficiencies.

Consisting of almost 37 square miles, the Town Hebron is home to about 8,600 residents. Given its location within commuting distance of several major urban environments, the fact that state parks provide attractive recreational opportunities, that the population is well educated with a high median income and a strong school system, it is expected that Hebron will continue to experience rapid growth. Planning for this growth within the DPW service areas will be critical for the generation of a viable long range plan that serves the Town for decades.

The DPW takes care of all public properties (except schools, firehouses and cemeteries) including town office buildings, maintenance buildings, parks and park buildings, and seventy seven miles of paved and dirt roads, public sidewalks, and the transfer station. Specialized equipment is necessary to build and repair roads, install drainage and maintain the roads particularly in the winter time. Signage and road safety equipment is integral to DPW work. Critically, all of these expensive supplies and equipment need to be stored and maintained efficiently so that their value can be maintained over time.

Storage facilities for equipment are lacking at present. Additional storage bays for highway trucks are most desirable. In addition, facilities for DPW personnel are severely deficient which affects the safety and well being of these town employees. Code upgrades are also necessary to provide for compliance with current accessibility and energy codes.

An investment in improved and expanded DPW facilities in the town of Hebron will be a cost saving measure in the long term as current investment in equipment will be preserved as the equipment will be properly stored and maintained under optimal conditions.

EXISTING CONDITIONS SURVEY

Figure 1: Current DPW location adjacent to the Transfer Station. Approximately one quarter of the 19.6 acre site is currently developed for DPW use while adjacent green space in the lower area of the photo is the former town landfill.

Site Description

Located on the southern edge of town bordering Colchester, the DPW portion of the site contains a wide variety of uses. The main building houses administrative offices, vehicle maintenance and vehicle storage uses. This building was constructed to replace the earlier main building directly across the parking yard which now serves as vehicle and equipment storage. Open canopies shelter other equipment which includes backhoes, front end loaders and sanders as well as dump trucks. The site is also used for stockpiling of road maintenance material such as loam, sand and gravel. In addition, a salt shed provides cover for road salt and winter mix. An area of the site allows for storage of concrete drainage structures and drainage pipe. In addition, there is a fueling facility consisting of a concrete vault housing 2,000 gallon gasoline tank and an

underground 4,000 gallon diesel fuel tank. At present a dog pound is also housed on the site although it is unclear if the pound will be incorporated into an improved DPW site.

The main entrance to the site is off of Old Colchester Road on the north side of the property. A large area of asphalt paving spans between the original DPW garage and the later building to the south, serving two-way vehicular traffic. The present stacking configuration of the garage bays necessitates backing out into this major circulation path within the site. Parking for employees is relegated to a lot at the north of the property, remote from the support facilities.

Site circulation to remote material and equipment storage appears to work well, with a change in grade facilitating delivery of sand at the upper grade and loading at the lower level. Paved drives connect the material storage areas, and a gated drive connection to the transfer station facilitates DPW work at that adjacent site.

Figure 2: The main building on the site houses DPW administration, maintenance and storage bays. The public entrance is to the left in the photograph.

Figure 3: Fulfilling many roles, the Old Colchester Road site hosts the dog pound adjacent to the original DPW facility which has been added on to over time.

Figure 4: The Salt Shed houses salt on the right hand side and a winter mix of sand and salt on the left. Sand is stockpiled adjacent to the shed while stone for chip sealing is seasonally stored in the large paved area in front of the shed.

Figure 5: Two shed roof canopy structures provide some shelter for construction equipment. The lack of enclosed garage space means that half of the town's fleet is exposed to the weather.

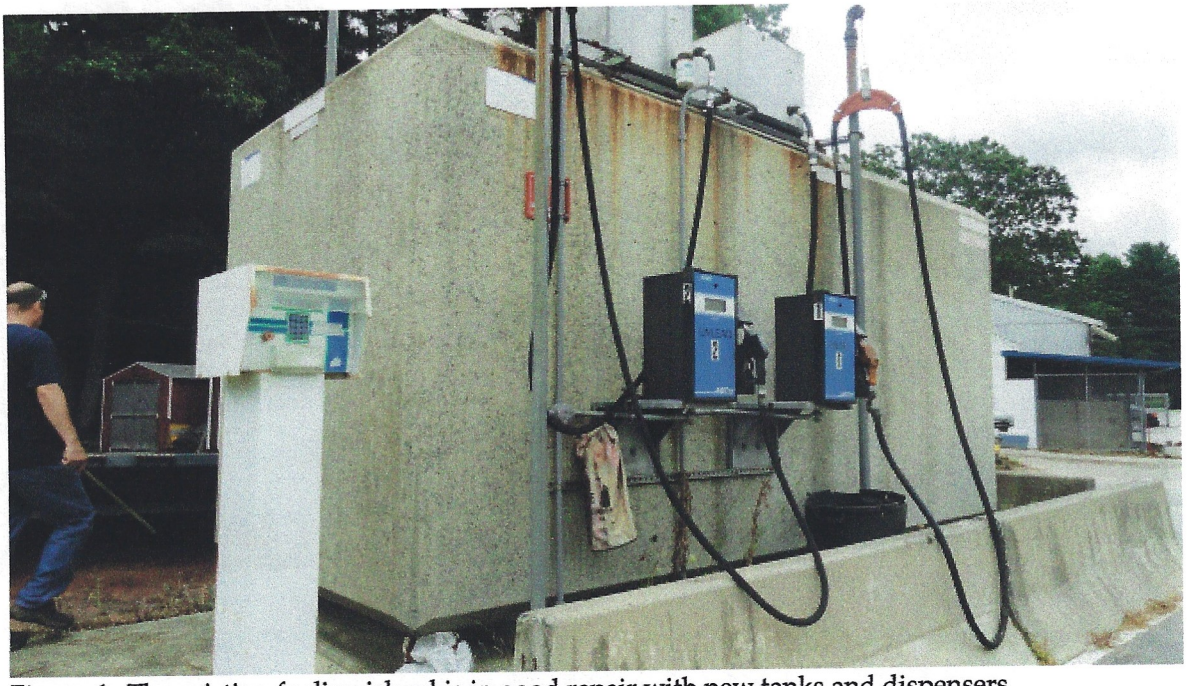


Figure 6: The existing fueling island is in good repair with new tanks and dispensers.

Figure 7: Plows are stored in an open area where they can easily be installed as needed.

Figure 8: An easily accessible area for storage of drainage structures and conduit should be maintained in the proposed new facility.

Figure 9: Areas for stockpiling of various materials is a necessity for a new facility.

Figure 10: Sign storage and traffic control equipment is stored in remote areas of the current site. A sign shop is currently in a remote and unheated building. In a new facility, the sign shop should be incorporated into the main building. The propane tank serves the dog pound. Space should be allocated for a new stand alone generator that will serve the entire facility.

Figure 11: The main building at 550 Old Colchester Road is a metal building housing equipment bays, maintenance bays, administration offices and support facilities.

Administrative Facility Description

The existing 50 deep x 100 foot wide metal building contains 4 vehicle bays, each bay 2 vehicles deep. Three minimally heated vehicle storage bays are open to each other while the forth bay serves as a mechanics bay and is separated from the other bays by a full height partition which allows the space to be heated. Adjacent to the mechanics bay are the administrative offices, break room, toilet rooms and mechanical room. Facilities in the Administrative areas are utilized by the thirteen current employees with the expectation that additional employees should be accommodated in the future building.

Administrative Facility Deficiencies

- The DPW Director and the Administrative Assistant share an office area. The Director should have a private office and access to an area for conferencing and privacy for human resources issues.
- Visitors to the building have no place to wait until they can be addressed.
- There is no storage area for office supplies. Many supplies are stored in the shower stall of the women's toilet room.
- Toilet rooms presently serve a single occupant.
- There are no locker or changing rooms. Some lockers are currently housed in the main corridor of the administrative area while others line the wall in the mechanic's bay.
- There are no bunk rooms. Currently when necessary during storm situations, drivers sleep in their vehicles.
- The break room is very small, accommodating 3 people at a table, with minimal kitchen facilities and no day room area.
- The Administration area is not totally ADA compliant.

Figure 12: The main entrance corridor shared by visitors and employees alike is crowded with lockers, appliances and files for which there is no space elsewhere.

Figure 13: Limited and barely accessible Break Room facilities include seating for three. The room is shared as an overflow office space. Since there is no space for it, the refrigerator resides in the adjacent hallway.

Maintenance Facility Description

The first bay beyond the Administrative area is the double deep maintenance bay. As the bay is not a drive thru, the rear is taken up with a work bench the full width of the bay. Commercial grade tool boxes are stored on one side adjacent to the work bench. The bay width is additionally squeezed by a bank of lockers near the overhead door entrance and adjacent to the man door entrance from the Administrative area. There is a lack of efficiency in the stacked bay configuration as the interior vehicle is unable to egress until the exterior oriented vehicle is able to be moved.

Figure 13: The narrow side aisles to not facilitate access to vehicles for repair.

Figure 14: Tool storage and workbenches further inhibit access to the vehicles

Figure 15: Parts storage in the mezzanine provides secure storage of items used with minimal frequency.

Figure 16: Frequently used small parts are stored in a room adjacent to the maintenance bay. This storage area could be incorporated into the larger storage area in a secure room accessible to the maintenance bays.

Vehicle Storage Bays

The main concerns with the current vehicle storage bays are that they are not drive-thru bays which facilitate efficient movement of individual vehicles without the need to relocate other vehicles. In addition, the vehicle storage bays are not high enough to allow for raising of the dump truck bodies to allow for access to the truck bed. The depth of the current bays is also limiting as equipment is by necessity, parked up against exterior walls which can sustain damage. The lack of sufficient depth also inhibits movement between vehicles parked front to back and between the vehicles and exterior walls. Garage door opening should be at least 14 feet wide and high to allow for proper clearances. A wash bay should be included in the new facility that will double as a drive-thru storage bay. Code compliant grey water storage and particle separators should be incorporated into the wash bay design.

Figure 17: Minimal aisle clearances endanger equipment and building.

Figure 18: Limited clearances endanger wall surfaces, building structure and wall mounted utilities as well as limiting passage of personnel.

Figure 19: Equipment stored in the side access aisle further limits access to vehicles in the wash bay.

Figure 20: While the tire storage and oil recycling is adjacent to the maintenance Bay, there is not enough tire storage at present. Storage of equipment adjacent to the vehicle storage floor areas impedes circulation and potentially jeopardizes the condition of the vehicles and supplies.

Figure 21: New vehicle storage bays should be higher than the existing bays to facilitate access to equipment without damaging building structure.

HEBRON DEPARTMENT OF PUBLIC WORKS
PRELIMINARY BUILDING PROGRAM
FACILITY GOALS AND OBJECTIVES

Goals

- Design a Department of Public Works facility that meets the current and anticipated future needs of the Town of Hebron.
- Design a facility that ensures the safety and protection of DPW employees, equipment and resources.
- Integrate environmentally friendly and energy efficient materials and systems into the building design to the greatest extent possible.

Objectives

- Site the building(s) to accommodate safety, security, and accessibility of DPW personnel and the public;
- Provide site features that address environmental conservation and storm water best practices.
- Provide building features that insure user comfort, safety and accessibility.
- Incorporate operational efficiencies to insure the timely delivery of DPW services.
- Provide covered storage facilities for materials that are environmentally hazardous.

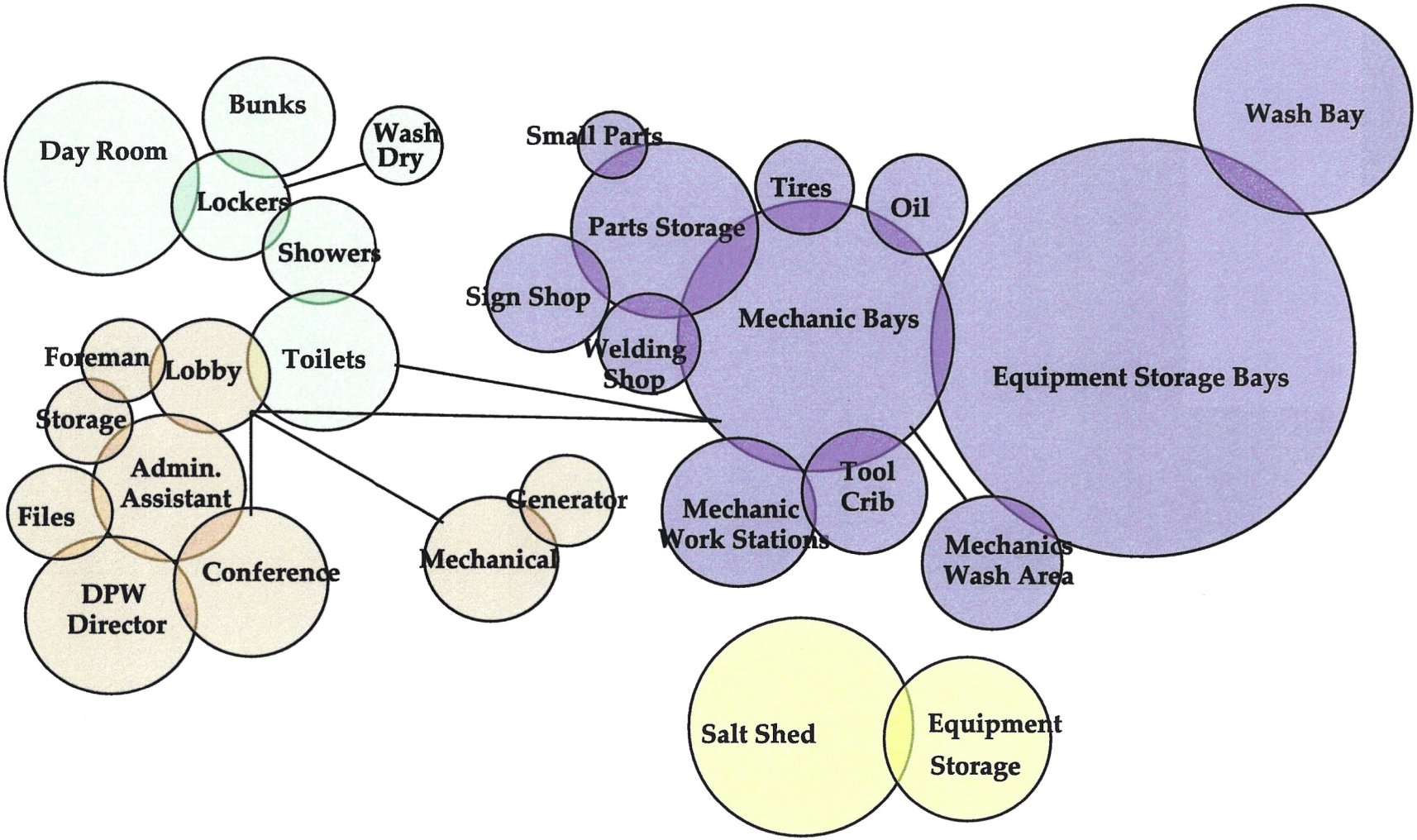
Site Considerations

- Separate circulation of DPW vehicles and public/visitor vehicles.
- Accommodate parking for 20 employees and two public spaces.
- Include water oil separator and holding tank to support wash bay activity.
- Provide septic system and septic field.
- Provide well to support domestic use and wash bay activity.
- Provide space for two automatic propane stand-by generators with automatic transfer switch.
- Provide area for buried propane storage tank.
- Provide material storage containment facilities.
- Provide space and circulation for a stand alone Salt Shed where product can be stored and loaded under cover.

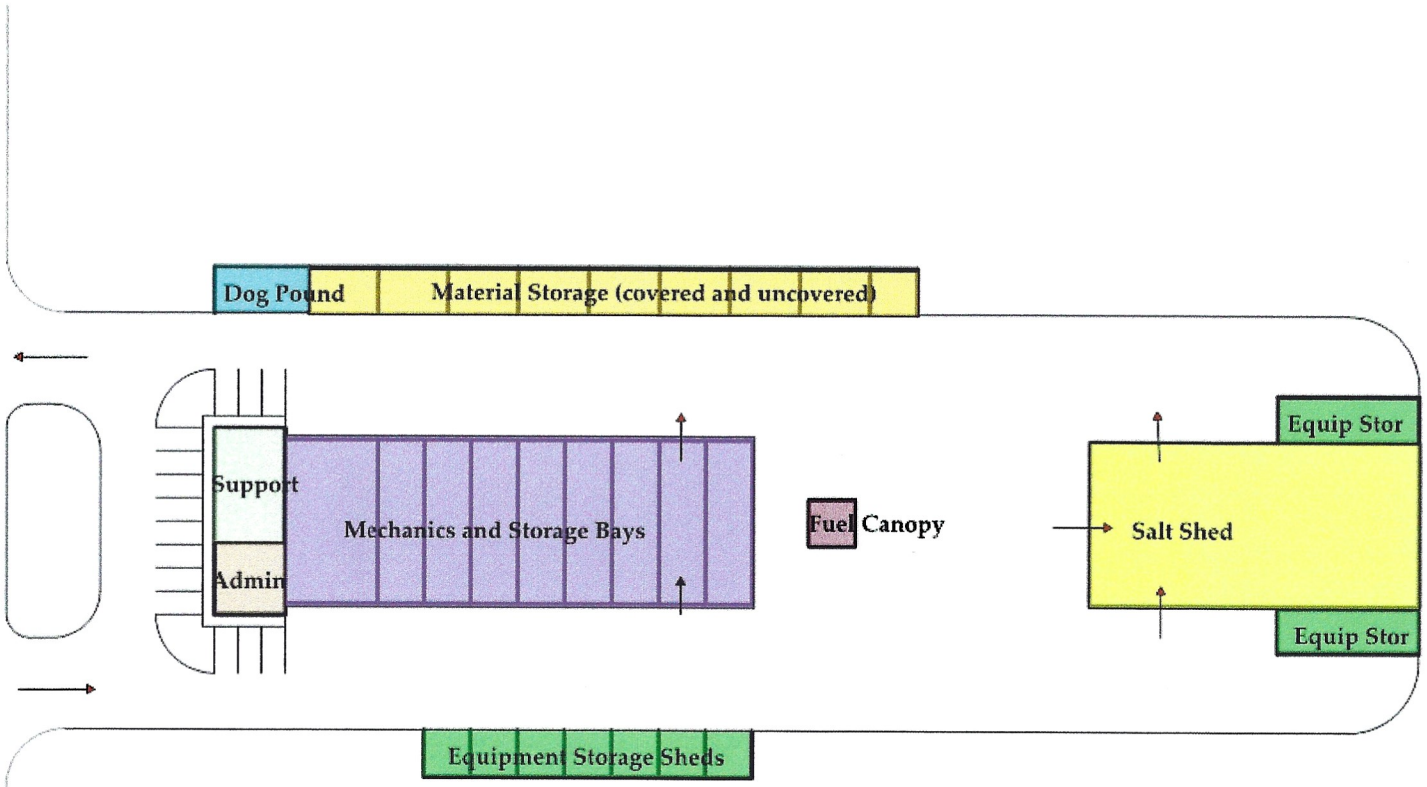
HEBRON DEPARTMENT OF PUBLIC WORKS
PRELIMINARY BUILDING PROGRAM
TABULATED SPACE NEEDS

Space Name			Existing SF		Proposed SF
Administrative Facilities					
Public Lobby			84		150
Administrative Assistant's Office			80		200
DPW Director's Office			80		250
Foreman			0	2 @ 75	150
Mechanics work stations			0	3 @ 75	225
Conference/Training Room			40		300
File Storage			0		80
Supply Storage and Copy Room			0		150
	Subtotal	284		1,505	
Support Facilities					
Day Room with Kitchen			180		350
Men's Bunk Room			0		150
Women's Bunk Room			0		150
Toilet Rooms			160	2 @ 144	288
Showers			64	2 @ 140	280
Locker Room			0		180
Storage			0		300
Mechanical Room			160		200
Washer Dryer Room			0		100
	Subtotal	564		1,998	
Equipment Facilities					
Mechanics Bay		2 @ 500	1,000	4 @ 900	3,600
Small Parts Storage			1,000		200
Large Parts Storage			200		400
Tire Storage			200		200
Equipment Storage Bays		4 @ 500	2,000	10 @ 700	7,000
Wash Bay		2 @ 500	1,000	2 @ 700	1,400
Tool Box Storage			0		75
Paint Room/Storage			0		50
Welding Shop			0		150
Tool Crib			0		225
Hydraulic Parts Storage			0		50

Oil/Hydraulic Fluid Storage					150
Mechanics wash area					250
Sign Shop and Storage			200		600
	Subtotal	5,400		13,750	
Total of Enclosed Square Footage			**6,248**		**17,853**
Salt Shed Building			**1,000**		**10,400**
Covered Equipment Storage			**3,600**		**6,800**



HEBRON CT DPW - PROPOSED SPACE ADJACENCIES



HEBRON CT DPW - IDEAL SITE ADJACENCIES

Scale - 1" = 60'

Approximate acreage required = 5

HEBRON DEPARTMENT OF PUBLIC WORKS
CONCEPTUAL SITE BUILDOUT PLAN

APPENDIX

TOWN OF HEBRON
POPULATION GROWTH NARRATIVE

Overall town population is expected to continue its growth, though at a slower pace than the period between 1990-2010, which saw Hebron's population increase from just over 7,000 residents to nearly 10,000, and an increase of over 1,000 households. Fitting in with long-term, statewide trends, the population is projected to age significantly, with Hebron seeing gross decreases in school-age residents (under 24 years) and working-age residents (25-64); both population declines are projected to be counterbalanced by a significant increase in senior-citizen (65+) populations.

From a housing standpoint, the town does project to add to its household base, though not necessarily at the same rate or of the same type as in decades previous. Over the past several decades, the size of households in Hebron has diminished, but only slightly, from approximately 2.9 in 1990 to 2.8 in 2010. This trend will likely accelerate over the next 15-20 years as the population ages and the number of children in Hebron shrinks. The reduction in household size and the aging of the population will combine to create a reduced demand for the type of housing that drove Hebron's growth over the last several decades- that of the 2400-square foot single-family residence on 2-5 acres of property. Instead, Hebron will see more growth in smaller and multi-family residences.

The Hebron Village Green project envisions the creation of a large, mixed-use development on approximately 170 acres of land just south of Route 66 and east of Route 85 in the center of Hebron. Master plans have been developed, infrastructure is being extended and regulations are being put in place to make this plan a reality. The development of Hebron Village Green is the town's key economic development and house expansion target, and carries an occupancy horizon approximately compatible with the above population projections. The Village Green includes the addition of 49 conventional apartments, 44 age-restricted (elderly) apartments, 24 "active-adult" condominiums, and six new single-family homes. The overall development will also seek to add over 200,000 square feet of office space, 51,000 square feet of retail space, a new 35,000 square foot grocery store, a 35,000 square foot fitness center, and 7,500 square feet of restaurants. Several thousand feet of new roadway, sidewalk and parking area will be constructed to serve this development, but it will be on an "infill" basis within close proximity to the core of town and its resources. All of these developments will also be well connected by road, sidewalk, and trail networks, which will also link to Main Street and the existing business and civic center of Hebron. The total result of this project will be to dominate the economic and residential development throughout Hebron over the next fifteen years. Once built-out and fully occupied, it is likely that the Village Green will spur additional higher-density (apartment and condo) residential development on nearby properties, but the horizon for that is probably beyond 2025.

Connecticut Population Projections 2015-2025

June 1, 2012 edition

Note: The 2015-2025 Population Projections are in the process of being refined which may result in a few of the estimates being updated. We welcome your input on these projections as we develop the finalized versions. The finalized versions will include downloadable data and a summary report.

The Connecticut State Data Center provides population projections to assist state agencies, non-profit organizations, businesses, governments, and centers/organizations to identify potential population changes into the future. These projections are created based upon several datasets and while these estimates are developed based on multiple data sources, actual population changes may vary from these projections. To assist in planning, analysis, and decision making, the population projections provide three estimates for 2015, 2020, and 2025 based on differences in fertility rate. These three estimates are provided to provide users with a visualization of the potential variance of the population based on changes in the population's fertility rate which is often influenced by socioeconomic factors.

Sources	How to Cite
1990, 2000, 2010 Population data provided by U.S. Census Bureau 2000 to 2010 Birth and Mortality data by Connecticut town provided by the Connecticut Department of Public Health Rowland, D. T. (2003). *Demographic methods and concepts*. Oxford: Oxford University Press. Smith, S. K., Tayman, J., & Swanson, D. A. (2001). *State and local population projections: Methodology and analysis*. New York: Kluwer Academic/Plenum Publishers. Spectrum DemProj software provided by Futures Institute	APA 6th Edition Connecticut State Data Center at the University of Connecticut Libraries Map and Geographic Information Center - MAGIC. (2012). *Connecticut State Data Center - Population Projections 2015 - 2025*. Retrieved from http://ctsdc.uconn.edu/projections.h

Name	Year	Fertility	Age	Male	Female	Total
Hebron	2015	Medium Fertility	Under 5 years	212	203	415
Hebron	2015	Medium Fertility	35 to 39 years	202	234	436
Hebron	2015	Medium Fertility	5 to 9 years	257	261	518
Hebron	2015	Medium Fertility	40 to 44 years	340	423	763
Hebron	2015	Medium Fertility	10 to 14 years	455	411	866
Hebron	2015	Medium Fertility	45 to 49 years	490	510	1000
Hebron	2015	Medium Fertility	15 to 19 years	564	463	1027

Hebron	2015	Medium Fertility	50 to 54 years	486	515	1001
Hebron	2015	Medium Fertility	20 to 24 years	316	262	578
Hebron	2015	Medium Fertility	55 to 59 years	453	491	944
Hebron	2015	Medium Fertility	25 to 29 years	119	91	210
Hebron	2015	Medium Fertility	60 to 64 years	328	346	674
Hebron	2015	Medium Fertility	30 to 34 years	126	151	277
Hebron	2015	Medium Fertility	65 to 69 years	275	275	550
Hebron	2015	Medium Fertility	70 to 74 years	156	159	315
Hebron	2015	Medium Fertility	75 to 79 years	89	99	188
Hebron	2015	Medium Fertility	80 and over	75	119	194
Hebron	2015	Medium Fertility	Total	4943	5013	9956

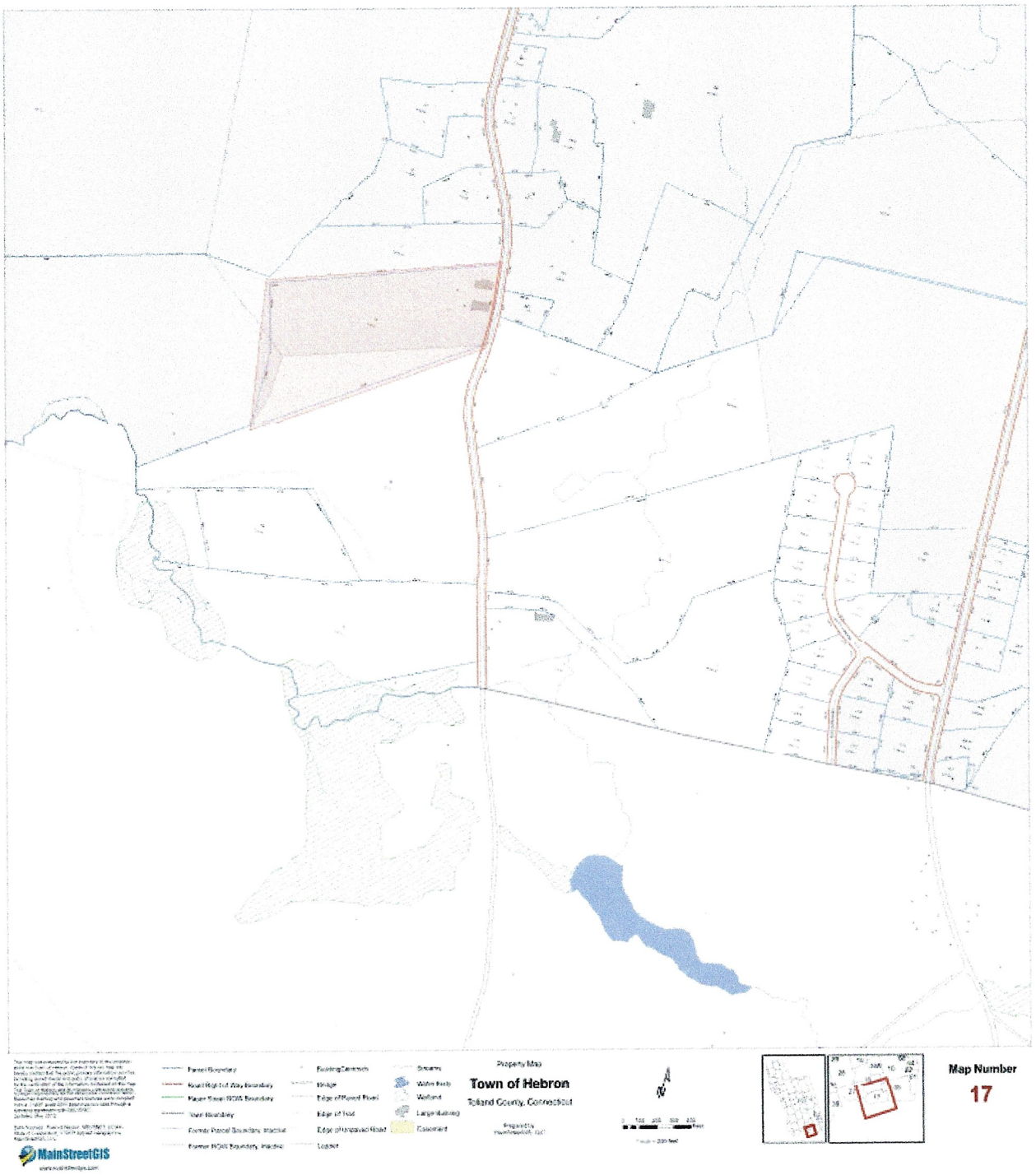
Name	Year	Fertility	Age	Male	Female	Total
Hebron	2020	Medium Fertility	Under 5 years	201	192	393
Hebron	2020	Medium Fertility	5 to 9 years	233	226	459
Hebron	2020	Medium Fertility	10 to 14 years	307	305	612
Hebron	2020	Medium Fertility	15 to 19 years	492	430	922
Hebron	2020	Medium Fertility	20 to 24 years	518	405	923
Hebron	2020	Medium Fertility	25 to 29 years	231	186	417
Hebron	2020	Medium Fertility	30 to 34 years	97	84	181
Hebron	2020	Medium Fertility	35 to 39 years	171	217	388
Hebron	2020	Medium Fertility	40 to 44 years	263	309	572
Hebron	2020	Medium Fertility	45 to 49 years	385	456	841
Hebron	2020	Medium Fertility	50 to 54 years	504	517	1021
Hebron	2020	Medium Fertility	55 to 59 years	471	507	978
Hebron	2020	Medium Fertility	60 to 64 years	417	470	887
Hebron	2020	Medium Fertility	65 to 69 years	286	318	604
Hebron	2020	Medium Fertility	70 to 74 years	229	252	481
Hebron	2020	Medium Fertility	75 to 79 years	120	138	258
Hebron	2020	Medium Fertility	80 and over	92	136	228
Hebron	2020	Medium Fertility	Total	5017	5148	10165

Name	Year	Fertility	Age	Male	Female	Total
Hebron	2025	Medium Fertility	Under 5 years	237	227	464
Hebron	2025	Medium Fertility	5 to 9 years	222	215	437
Hebron	2025	Medium Fertility	10 to 14 years	283	270	553
Hebron	2025	Medium Fertility	15 to 19 years	344	325	669
Hebron	2025	Medium Fertility	20 to 24 years	446	371	817
Hebron	2025	Medium Fertility	25 to 29 years	433	328	761
Hebron	2025	Medium Fertility	30 to 34 years	210	178	388
Hebron	2025	Medium Fertility	35 to 39 years	143	149	292
Hebron	2025	Medium Fertility	40 to 44 years	233	292	525
Hebron	2025	Medium Fertility	45 to 49 years	309	343	652
Hebron	2025	Medium Fertility	50 to 54 years	401	465	866
Hebron	2025	Medium Fertility	55 to 59 years	489	510	999
Hebron	2025	Medium Fertility	60 to 64 years	434	487	921
Hebron	2025	Medium Fertility	65 to 69 years	370	439	809
Hebron	2025	Medium Fertility	70 to 74 years	240	293	533
Hebron	2025	Medium Fertility	75 to 79 years	178	219	397
Hebron	2025	Medium Fertility	80 and over	121	174	295
Hebron	2025	Medium Fertility	Total	5093	5285	10378

Projected Age-Group Demographic Trends, 2005-2025, Town of Hebron

Year	Total Population (or projection)	Population 0-24 years old	Population 25-64 years old	Population 65+ years old
2005	9,361	3,115	5,627	619
2010	9,828	3,923	4,530	1,375
2015	9,956	3,404	5,305	1,247
2020	10,165	3,309	5,285	1,571
2025	10,378	2,940	5,404	2,034
Pct. Change, 2005-2025	**10.9%**	**-5.5%**	**-4.0%**	**228.6%**

Data sources for historic population from U.S. Census Bureau and the Connecticut Economic Resource Center (CERC). Population projections from Connecticut State Data Center.



HEBRON DEPARTMENT OF PUBLIC WORKS
PRESENT LOCATION
550 OLD COLCHESTER ROAD
Property shown shaded in red

FACILITIES NEED MATRIX

PUBLIC WORKS, TOWN OF HEBRON, CT

02739 10

June 14,2011

Space	Area (SF)	No. of staff	Desk/Chair	Computer Station	Drafting Table	Work Station	Counter	Conference Table/Chairs	Work bench	Tool Storage	Parts Bins	Secure Area	Storage cabinets/files	Computer Connectivity	Printer	Copier	Fax	Postage Meter	Sink	Stove	Refrigerator	Bunks	Toilet/Urinal	Lavatory	Lockers	Shower	Ventilation	Heat	Air-conditioning	Telephone	Gas	Electrical	Hot Water	Cold water	Comments/Description
Public Works Director	225	1	X	X		X		Sm						X													X	X	X	X		X			
General Office/Admin. Assist. Dispatcher	175	1	X	X		X		X						X	X	X	X	X									X	X	X	X		X			
Public Reception	150						X																				X	X	X			X			
Engineering Technicien																																			
Engineer																																			
Foreman (1)	150	2	2	X		2								X													X	X	X	X		X			
Mechanics (1)	225	3	3	X		3								X													X	X	X	X		X			
Conference Room/ Training Room	300	12						X						X													X	X	X	X		X			
Supply Storage/Print	150						X							X													X	X	X	X		X			
Repair Office/Misc. Equipment Repair									X	X																	X	X		X		X			Both bays have lifts
Emergency shower/ eyewash	75																						X		X		X	X				X	X	X	
Repair Bays (5) 20' X 40' (2) 14' X 30'	1600								X	X				X					X								X	X				X			1 bay with lift, overhead reels/droplight/supply of 15W40 & 5W20 oil, hydraulic fluid (1 per two bays), water spigot at bays, exhaust for trucks (now through open doors), tie-down location in floors at bays poured concrete (front and rear) Repair bay benches with dedicated direct light on benches Beams and chain falls (electric) on two bays
Repair Bays (2) Small Vehicle (each at 12' X 30')	840								X	X				X													X	X				X			1 bay with lift
Tool box storage	75																															X			Secure storage for tool boxes for three mechanics
Wash Bay (1)	650																										X	X				X	X	X	
Paint Room/Storage	50																										X	X				X			
Welding Shop	150								X	X			X														X	X				X			
Machine Shop									X	X			X														X	X				X			
Small Engine Repair									X	X																		X				X			Secure
Tool Crib	225											X																							
Small Parts Storage	200											X															X	X				X			
Large Parts Storage	400											X															X	X				X			

Space	Area (SF)	No. of staff	Desk/Chair	Computer Station	Drafting Table	Work Station	Counter	Conference Table/Chairs	Work bench	Tool Storage	Parts Bin	Secure	Storage Cabinet/Files	Computer Connectivity	Printer	Copier	Fax	Postage Meter	Sink / dishwasher	Stove	Refrigerator	Washer/dryer	Toilet/Urinal	Lavatory	Lockers	Shower		Ventilation	Heat	Air-conditioning	Telephone	Gas	Electrical	Hot Water	Cold water	
Hydraulic parts storage	50											X																X	X				X			
Oil/Hydraulic Fluid/ Paint Storage	150											X																X	X				X			Hoses. Two large flammable storage cabinets in fire secure room. 2300 gal – hydraulic oil 55 gal – ATF 55 gal – motor oil (5W30 and 5W20)
Mechanics wash area for road crews and mechanics	50																							X								X	X	X	
Toilets/Shower/ Lockers (in toilet)	200																						X	X	X	X		X	X	X			X	X	X	Male/Female
Sign Shop/Storage	600											X																				X			
Break Room	385	20						X											X	X	X	X						X	X	X	X	X	X	X	X	
Kitchen in Break Room	See Above																																			
Men's Room	100																						X	X				X	X	X			X	X	X	
Ladies' Room	100																						X	X				X	X	X			X	X	X	
Rest Area	150																						X	X	X	X		X	X	X			X			Bikes, treadmill
General Supplies Storage	300											X																X	X				X			
Facilities Maintenance Storage												X																X	X				X			Customer Safety Office. Now 40X60. Supplies take up 40X30
New Tire Storage	100											X																X					X			Immediately off repair area including the tire machine and balancing. Store 15-20 tires (tire storage must be secure)
Vehicle Storage Bays	16,800																																X			Some will be repair bays
Shoring/Trench Box																																				Weather storage - secure
Mechanical/Electrical/ Compressor	150											X																X					X			Piped to small engine repair, tire machine, repair bays, exterior for tire inflation on vehicles
Waste Oil/Waste anti-freeze/old tires																																				Storage until picked up by outside vendor
												X																					X			Storage of bags and bins. Delivered by palletized on Town trucks - dock

Sealed floors in vehicle areas with trench drain. Striping on floors to be done before sealing the surface.
Fueling Station

TOWN OF HEBRON
VEHICLE/EQUIPMENT LISTING

PLATE #	YEAR	VEHICLE/EQUIPMENT DESCRIPTION	VIN/SERIAL NO.
1	2009	GMC SIERRA PICK UP	1GTHK59639E141775
2	2006	INTERNATIONAL 4 X 2 7400	1HTWDAAR06J301777
3	1998	FORD CROWN VICTORIA DK BLUE	2FALP71WXWX141496
4	2012	GMC SIERRA 4WD REG. CAB PICKUP	1GT323CG4CF111587
5	2008	GMC 3500 MASON DUMP	1GDJK34678E138899
6	2008	FORD CROWN VIC - POLICE INTERCEPTOR - GRAY	2FAFP71V08X178639
7	1998	INTERNATIONAL 4900 DUMP TRUCK	1HTSDADROWH548590
8	1997	FORD LTD CROWN VICTORIA - SILVER	2FALP71W5VX189506
9	2009	INTERNATIONAL 7400 4X2	1HTWDAZR19J126903
10	1991	GMC DUMP TRUCK - MODEL TC7H042	1GDP7H1J1MJ508988
11	1989	GMC CAT - T3208 DUMP TRUCK	1GDP7D1YOKV508508
12	1988	GMC CAT - T3208 DUMP TRUCK MODEL TJ8C042	1GDP8C1Y3JV600945
13	2001	FORD CROWN VICTORIA GRAY	2FAFP71H71X199817
14		SUPERLINER TRAILER / BLACK / BOBCAT	
15	2005	KENWORTH ROLLOFF TRUCK	1NKDXBEX65J096487
16	1970	SNOWCO 2 WHEEL TRAILER ID #3754	
17	2009	JOHN DEERE 5075M TRACTOR	LV5075M160198
18	2007	INTERNATIONAL 7600 SBA 6X4	1HTWYSBT57J462857
19	2005	FORD CROWN VICTORIA / CHARCOAL	2FAHP71W35X117709
20	1978	CAT PAYLOADER - MODEL #930	41K8088
21	1995	DODGE RAM 1/2 TON PICKUP TRUCK	1B7HC16Y7SS187421
22	1984	GMC FLAT BED	1GDJK34M5EV540964
23	1996	BRUSH BANDIT CHIPPER - JOHN DEERE	4FMUS1518TR010575
24	2005	INTERNATIONAL 7400 4X2	1HTWDAAR05J004393
25	1983	20 TON EAGER BEAVER TRAILER	1120HA20XDT200208
26	2003	INTERNATIONAL 7400 4X2	1HTWDADR63J066258
27	2009	CARRY ON TRAILER	4YMUL121X9V017941
28	1988	6 TON EAGER BEAVER TRAILER	11205L109JS030002
29	2009	INGERSOL RAND P-185 AIR COMPRESSOR	407268UBTD09
30	1994	INT'L LANDSCAPE TRAILER MODEL - U-16E	1ZFUF1624RB003329
31	2012	INTERNATIONAL 7600 SBA 4X2	1HTWDAZR3CJ672206
32	2005	FORD RANGER	1FTZR45E15PA98351
33	1995	410 BACKHOE/LOADER	T0410DG804994
34	1992	KOHLER GENERATOR/TRAILER UNIT #2OROZJ61	S/N - 350127
35	1992	FERREE TRAILER MODEL #M610	S/N - 918433
36	1995	GMC DUMP TRUCK PLOW	1GDP7H1J5SJ525161
37	1996	544 JOHN DEERE LOADER	DW544GD557931
38	1998	TIGER TRACTOR MOWER MODEL 6400	S/N - TBF-0627 MK-1444
39	1998	BROOM BEAR SWEEPER	1FVGHJBA7XH989493
40	2000	FORD F550	1FDAF57F5YEA88323
41	2001	FORD F550	1FDAF57F11EB11683
42	1988	FORD 8000 BUCKET TRUCK	1FDYK82A2JVA507769
43	1987	REMEQ LANDSCAPE TRAILER	2REA257C9X2Y54775
44	2003	FORD F-250 SUPER CAB 4X4 P.U.	1FTNX21L43EA62756
45	2005	INTERNATIONAL 7400 4X2	1HTWDAAR05J004392
46	2006	INTERNATIONAL 4 X 2 7400	1HTWDAAR26J301778
47	2006	FORD / SUPREME SENIOR VAN	1FDWE35P86DA44618

TOWN OF HEBRON
VEHICLE/EQUIPMENT LISTING

48	1992	FERREE TRAILER MADEL # M610	sn 918433
49	2007	GMC COLORADO PICKUP - SCHOOL - WAYNE	1GTDT149178150640
50	1999	FORD Explorer - Building Inspector	1FMZU34X8XUA20340
51	2000	Kenworth T800 Tri-Axel	1NKDL60XXYJ866348
52	2007	GMC 4500 4X4 6 WHEELER	1GDE5C3987F418196
53	2008	Kaufman Trailer	5VGFB18208L001936
54	2008	Ford F-250 - Park & Rec	1FTNF21548EC92602
55	1997	GMC 4X4 MASON DUMP TRUCK	1GDJK34F9VF025042
56	2009	GMC YUKON / Fire Marshall	1GKFK23029R221530
57	2006	FORD E-450 SUPREME SENOIOR VAN	1FDXE45P36DA36145
58	2012	JOHN DEERE 410J BACKHOE/LOADER	1T0410JXLBD210609
	1973	JOHN DEERE BACKHOE MODEL # T35231	S/N - 00196302
	1999	REMEQ LANDSCAPE TRAILER	2REA257C9X2Y54775

BUILDING PROGRAM

Space name: PUBLIC LOBBY

Occupancy: 2

Functional Activity Description: Entrance lobby with seating for two

Size: 10 x 15

Flexibility and Expandability: connects multiple functions

Adjacencies

Primary: Administrative Offices, Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: 2 chairs and side table

Technical/Telecommunications Requirements: none

Fenestration: natural light desirable

Space Finishes: heavy duty floor and wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: front door lockable. Pass key required for entrance to other spaces off of lobby.

Additional requirements:

BUILDING PROGRAM

Space name: ADMINISTRATIVE ASSISTANT'S/DISPATCHER OFFICE

Occupancy: 2

Functional Activity Description: General office space for administrative assistant and dispatcher

Size: 12 x 16

Flexibility and Expandability: open office area

Adjacencies

Primary: public lobby, DPW director, conference

Secondary: support facilities, file storage, supply storage, copy room

Furnishings: 1 desk and chair with computer station
1 work station
Small conference table and 2 chairs
3 bookcases
Counter with secure sliding window to public lobby

Technical/Telecommunications Requirements: Public works host server, network hub and UPS

Fenestration: natural light desirable

Space Finishes: carpeted floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting, task lighting

Security requirements: Pass key required for entrance.

Additional requirements: coat closet, bulletin board

BUILDING PROGRAM

Space name: DPW DIRECTOR'S OFFICE

Occupancy: 1

Functional Activity Description: private office with conference area

Size: 12 x 20

Flexibility and Expandability: combined office area and conference area

Adjacencies

Primary: administrative assistant, conference

Secondary: support facilities, copy room, mechanics and storage bays

Furnishings: 1 desk and chair with computer station
Credenza
Small conference table and 4 chairs
2 bookcases
Work bench
Drafting table
1 file cabinet

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer and printer

Fenestration: natural light desirable

Space Finishes: carpeted floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting, task lighting

Security requirements: Pass key required for entrance.

Additional requirements: coat closet, bulletin board

BUILDING PROGRAM

Space name: FOREMAN

Occupancy: 2

Functional Activity Description: open office area with 2 workstations

Size: 10 x 15

Flexibility and Expandability: open space

Adjacencies

Primary: Administrative Offices, Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: 2 desks with computer returns
2 chairs
Small conference table with 3 chairs

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer

Fenestration: natural light desirable

Space Finishes: carpeted floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: Pass key required for entrance.

Additional requirements: coat closet and bulletin board

BUILDING PROGRAM

Space name: MECHANIC'S WORK STATIONS

Occupancy: 3

Functional Activity Description: open office area with work stations for 3

Size: 15 x 15

Flexibility and Expandability: open office

Adjacencies

Primary: Mechanics and Storage bays, Parts Storage

Secondary: Administration and Support Facilities

Furnishings: 3 work stations with computer return
3 chairs
2 file cabinets
Drafting table
Storage cabinet
4 bookcases
2 workbenches

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer and printer

Fenestration: natural light desirable

Space Finishes: carpeted floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: Pass key required for entrance

Additional requirements:

BUILDING PROGRAM

Space name: CONFERENCE/TRAINING ROOM

Occupancy: 12

Functional Activity Description: conference room with seating for twelve around a conference table

Size: 15 x 20

Flexibility and Expandability: flexible meeting and presentation space

Adjacencies

Primary: Administrative Offices, Public Lobby

Secondary: Support Facilities

Furnishings: 12 conference chairs
Conference table large enough for 12
White board
Projection Screen
Projector
Credenza

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer

Fenestration: natural light desirable

Space Finishes: carpeted floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: Pass key required for entrance off of lobby.

Additional requirements:

BUILDING PROGRAM

Space name: FILE STORAGE

Occupancy: 0

Functional Activity Description: secure file storage room

Size: 8 x 10

Flexibility and Expandability:

Adjacencies

Primary: Administrative Offices

Secondary: Copy room

Furnishings: 6- 5 drawer lateral files

Technical/Telecommunications Requirements: none

Fenestration: none required

Space Finishes: carpeted floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: Pass key required for entrance.

Additional requirements:

BUILDING PROGRAM

Space name: SUPPLY STORAGE AND COPY ROOM

Occupancy: 0

Functional Activity Description: room for storage of supplies and copy equipment

Size: 10 x 15

Flexibility and Expandability:

Adjacencies

Primary: Administrative Offices

Secondary: Mechanics Work Stations

Furnishings: 2 storage cabinets
Copy machine
Work table
Shelving

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer

Fenestration: not required

Space Finishes: carpeted floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: none

Additional requirements: none

BUILDING PROGRAM

Space name: DAY ROOM AND KITCHEN

Occupancy: 20

Functional Activity Description: Open room with living room area, dining area and kitchen

Size: 18 x 20

Flexibility and Expandability: flexible space

Adjacencies

Primary: Administrative Offices, Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: 2 couches
3 side tables
Television
Dining Table with seating for 10
Full Kitchen

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer

Fenestration: natural light desirable

Space Finishes: combination carpet and VCT flooring, painted gwb walls, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: none

Additional requirements: adjacent to exterior cooking space

BUILDING PROGRAM

Space name: MEN'S BUNK ROOM

Occupancy: 4

Functional Activity Description: sleeping facilities for 4 persons

Size: 10 x 15

Flexibility and Expandability:

Adjacencies

Primary: Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: 4 twin beds
Clothes hanging

Technical/Telecommunications Requirements: none

Fenestration:

Space Finishes: carpet, painted gwb, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: WOMEN'S BUNK ROOM

Occupancy: 4

Functional Activity Description: sleeping facility for 4 persons

Size: 10 x 15

Flexibility and Expandability:

Adjacencies

Primary: Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: 4 twin beds
Clothes storage

Technical/Telecommunications Requirements: none

Fenestration: natural light desirable

Space Finishes: carpet, painted qwb, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: TOILET ROOMS

Occupancy: 3

Functional Activity Description: Staff toilet rooms

Size: 8 x 18

Flexibility and Expandability: none

Adjacencies

Primary: Administrative Offices, Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: toilet stalls/urinals
sinks

Technical/Telecommunications Requirements: none

Fenestration: none

Space Finishes: tile floors, tile walls, qwb ceiling

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: SHOWER ROOM (2)

Occupancy: 1 per room

Functional Activity Description: shower room with dressing area

Size: 5 x 14 each

Flexibility and Expandability: none

Adjacencies

Primary: Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: Shower
Bench
Clothing storage

Technical/Telecommunications Requirements: none

Fenestration: none

Space Finishes: tile floor, tile walls, gwb ceiling

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: privacy lock

Additional requirements:

BUILDING PROGRAM

Space name: LOCKERS

Occupancy:

Functional Activity Description: locker room for storage of personal belongings

Size: 10 x 18

Flexibility and Expandability:

Adjacencies

Primary: toilet rooms, showers, bunk rooms

Secondary: Mechanics and Storage bays

Furnishings: 20 lockers
Benches

Technical/Telecommunications Requirements: none

Fenestration: none required

Space Finishes: carpet, painted gwb, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: STORAGE

Occupancy:

Functional Activity Description: Facility supply storage to support day room and support services

Size: 15 x 20

Flexibility and Expandability:

Adjacencies

Primary: Administrative Offices, Support Facilities, Conference Room

Secondary:

Furnishings: Shelving

Technical/Telecommunications Requirements: none

Fenestration: none required

Space Finishes: VCT floor, painted gwb walls, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: MECHANICAL ROOM

Occupancy:

Functional Activity Description: Room for heating and cooling equipment, electrical panels and ATS, telephone panels and computer servers

Size: 10 x 20

Flexibility and Expandability: separate rooms for telephone and computer equipment

Adjacencies

Primary: Administrative Offices, Support Facilities, generator

Secondary: Mechanics and Storage bays

Furnishings: none

Technical/Telecommunications Requirements: Public works host server, network hub and UPS

Fenestration: not required

Space Finishes: sealed concrete floor, gwb walls, gwb ceiling

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: WASHER/DRYER ROOM

Occupancy:

Functional Activity Description: room for cleaning of clothing etc.

Size: 10 x 10

Flexibility and Expandability:

Adjacencies

Primary: Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: standard washing machine
Standard dryer
Shelving for supply storage

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: VCT, painted gwb walls, ATC ceiling

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: MECHANIC'S BAY (2 double bays)

Occupancy: 2

Functional Activity Description: double bay drive-thru

Size: 20 x 45

Flexibility and Expandability:

Adjacencies

Primary: Parts Storage, Tire Storage, Welding Shop, Tool Box Storage, Tool Crib, Hydraulic Parts Storage, Oil/Hydraulic Fluid Storage

Secondary: Mechanics work stations, Storage bays

Furnishings: work bench
Sink
Tool storage
2 bays with lifts
Overhead reels/Droplight/supply of 15W40 and 5W20 oil and hydraulic fluid (1 per two bays)
Vehicle exhaust system

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer

Fenestration: not required

Space Finishes: sealed concrete floor, walls for hanging storage

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and ventilated

Illumination: indirect or direct lighting. Task lighting at benches

Security requirements: lockable

Additional requirements: water spigot at each bay, tie down locations

BUILDING PROGRAM

Space name: SMALL PARTS STORAGE

Occupancy:

Functional Activity Description: Storage room for small parts inventory

Size: 10 x 20

Flexibility and Expandability:

Adjacencies

Primary: Mechanics work stations and mechanic's bays

Secondary: large parts storage

Furnishings: shelving

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor, heavy duty walls for storage shelving

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: LARGE PARTS STORAGE

Occupancy:

Functional Activity Description: Storage for large parts inventory

Size: 20 x 20

Flexibility and Expandability: flexible space with shelving and aisle access

Adjacencies

Primary: Mechanic's work stations, Mechanic's bays

Secondary:

Furnishings: free standing heavy duty shelving

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor, heavy duty wall finish

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: TIRE STORAGE

Occupancy:

Functional Activity Description: Secure room with tire racks

Size: 10 x 20

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bays

Secondary:

Furnishings: tire racks

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: ventilated

Illumination: indirect or direct lighting

Security requirements: secure

Additional requirements:

BUILDING PROGRAM

Space name: EQUIPMENT STORAGE BAYS (7 double deep bays including wash bay)

Occupancy:

Functional Activity Description: Open garage storage area for heavy equipment

Size: 20 x 35

Flexibility and Expandability: addition of future bays should be considered

Adjacencies

Primary: Mechanic's Bay

Secondary: Wash Bay

Furnishings:

Technical/Telecommunications Requirements: none

Fenestration: natural light provided by windows in garage doors

Space Finishes: sealed concrete floors and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable.

Additional requirements:

BUILDING PROGRAM

Space name: WASH BAY (1 bay of double drive-thru vehicle storage bay)

Occupancy:

Functional Activity Description: storage bay that also functions as a wash bay

Size: 20 x 35

Flexibility and Expandability:

Adjacencies

Primary: Storage Bays

Secondary: Mechanic's bays

Furnishings:

Technical/Telecommunications Requirements: none

Fenestration: natural light provided by windows in overhead doors

Space Finishes: sealed concrete floor and waterproof wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements: Hot and cold water, overhead swinging hose arm.

BUILDING PROGRAM

Space name: TOOL BOX STORAGE

Occupancy:

Functional Activity Description: Secure storage area for mechanics personal tool boxes.

Size: 8 x 9

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Work Stations, Mechanic's Bays

Secondary:

Furnishings:

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: PAINT ROOM/STORAGE

Occupancy:

Functional Activity Description: Storage room for paint supplies

Size: 6 x 8

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bay, Sign Storage

Secondary:

Furnishings: shelving

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and ventilated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: WELDING SHOP

Occupancy:

Functional Activity Description: workshop with equipment for welding

Size: 10 x 15

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bays

Secondary: Tool room

Furnishings: work bench
Tool storage

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and ventilated

Illumination: indirect or direct lighting

Security requirements: secure

Additional requirements:

BUILDING PROGRAM

Space name: TOOL CRIB

Occupancy:

Functional Activity Description: Secure room for small tool storage

Size: 15 x 15

Flexibility and Expandability:

Adjacencies

Primary: Storage Bays

Secondary:

Furnishings:

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable.

Additional requirements:

BUILDING PROGRAM

Space name: HYDRAULIC PARTS STORAGE

Occupancy:

Functional Activity Description: Secure storage room for hydraulic parts

Size: 10 x 5

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bays

Secondary:

Furnishings: shelving

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and ventilated

Illumination: indirect or direct lighting

Security requirements: lockable.

Additional requirements:

BUILDING PROGRAM

Space name: OIL/HYDRAULIC FLUID STORAGE AREA

Occupancy:

Functional Activity Description: Secure, fire proof room for storage of hydraulic fluids

Size: 10 x 15

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bays

Secondary:

Furnishings: Hoses
Flammable storage cabinets
2,300 gallon hydraulic oil
55 gallon ATF
55 gallon motor oil (5W30 and 5W20)

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and ventilated

Illumination: indirect or direct lighting

Security requirements: secure

Additional requirements:

BUILDING PROGRAM

Space name: MECHANICS WASH AREA

Occupancy: 2

Functional Activity Description: Rooms for toileting and showering dedicated to road crews and mechanics

Size: 10 x 25

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bays, Storage Bays

Secondary:

Furnishings: water closet, urinal, lavatory and shower

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: tiled floor and wall finishes, gwb ceiling

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated, cooled and ventilated

Illumination: indirect or direct lighting

Security requirements: privacy locks

Additional requirements:

BUILDING PROGRAM

Space name: SIGN SHOP AND STORAGE

Occupancy:

Functional Activity Description: Secure storage and workroom

Size: 20 x 30

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bays, Support Facilities

Secondary: Storage bays

Furnishings:

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: workroom heated

Illumination: indirect or direct lighting

Security requirements: Secure

Additional requirements:

CME Architecture, Inc. • CME Associates, Inc.

Architecture • Engineering • Environmental Science • Land Surveying • Planning • Construction Services

Big firm Ability, Small firm Agility.™

East Hartford, CT • Woodstock, CT • Southbridge, MA

Toll Free 1.888.291.3227 www.cmeengineering.com

Town of Hebron, Connecticut
Department of Public Works Facility

Building and Site Program
January 28, 2013

Prepared by
CME Associates, Inc.
32 Crabtree Lane
Woodstock, CT 06281

HEBRON DEPARTMENT OF PUBLIC WORKS
PRELIMINARY PROGRAMMING DOCUMENT

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Recognizing that the existing Department of Public Works facility at 550 Old Colchester Road in Amston provides inadequate space for normal operations and protection of equipment, the Town of Hebron engaged the services of CME Associates, Inc. to prepare a space needs analysis for use as a planning tool that will guide the future development of a new facility. The study included an inspection of existing facilities, interviews with DPW personnel, documentation of deficiencies, research into potential future growth trends and recommendations for space required to meet future demand and to address operational and functional deficiencies.

Consisting of almost 37 square miles, the Town Hebron is home to about 10,000 residents. Given its location within commuting distance of several major urban environments, the fact that state parks provide attractive recreational opportunities, that the population is well educated with a high median income and a strong school system, it is expected that Hebron will continue to experience rapid growth. Planning for this growth within the DPW service areas will be critical for the generation of a viable long range plan that serves the Town for decades.

The DPW takes care of all public properties (except schools, firehouses and cemeteries) including town office buildings, maintenance buildings, parks and park buildings, and seventy seven miles of paved and dirt roads, public sidewalks, and the transfer station. Specialized equipment is necessary to build and repair roads, install drainage and maintain the roads particularly in the winter time. Signage and road safety equipment is integral to DPW work. Critically, all of these expensive supplies and equipment need to be stored and maintained efficiently so that their value can be maintained over time.

Storage facilities for equipment are lacking at present. Additional storage bays for highway trucks are most desirable. In addition, facilities for DPW personnel are severely deficient which affects the safety and well being of these town employees. Code upgrades are also necessary to provide for compliance with current accessibility and energy codes.

An investment in improved and expanded DPW facilities in the town of Hebron will be a cost saving measure in the long term as current investment in equipment will be preserved as the equipment will be properly stored and maintained under optimal conditions.

EXISTING CONDITIONS SURVEY

Figure 1: Current DPW location adjacent to the Transfer Station. Approximately one quarter of the 19.6 acre site is currently developed for DPW use while adjacent green space in the lower area of the photo is the former town landfill.

Site Description

Located on the southern edge of town bordering Colchester, the DPW portion of the site contains a wide variety of uses. The main building houses administrative offices, vehicle maintenance and vehicle storage uses. This building was constructed to replace the earlier main building directly across the parking yard which now serves as vehicle and equipment storage. Open canopies shelter other equipment which includes backhoes, front end loaders and sanders as well as dump trucks. The site is also used for stockpiling of road maintenance material such as loam, sand and gravel. In addition, a salt shed provides cover for road salt and winter mix. An area of the site allows for storage of concrete drainage structures and drainage pipe. In addition, there is a fueling facility consisting of a concrete vault housing a 2,000 gallon gasoline tank and a 4,000

gallon diesel fuel tank. At present a dog pound is also housed on the site although it is unclear if the pound will be incorporated into an improved DPW site.

The main entrance to the site is off of Old Colchester Road on the east side of the property. A large area of asphalt paving spans between the original DPW garage and the later building to the south, serving two-way vehicular traffic. The present stacking configuration of the garage bays necessitates backing out into this major circulation path within the site. Parking for employees is relegated to a lot at the north of the property, remote from the support facilities.

Site circulation to remote material and equipment storage appears to work well, with a change in grade facilitating delivery of sand at the upper grade and loading at the lower level. Paved drives connect the material storage areas, and a gated drive connection to the transfer station facilitates DPW work at that adjacent site.

Figure 2: The main building on the site houses DPW administration, maintenance and storage bays. The public entrance is to the left in the photograph.

Figure 3: Fulfilling many roles, the Old Colchester Road site hosts the dog pound adjacent to the original DPW facility which has been added on to over time.

Figure 4: The Salt Shed houses salt on the right hand side and a winter mix of sand and salt on the left. Sand is stockpiled adjacent to the shed while stone for chip sealing is seasonally stored in the large paved area in front of the shed.

Figure 5: Two shed roof canopy structures provide some shelter for construction equipment. The lack of enclosed garage space means that half of the town's fleet is exposed to the weather.

Figure 6: The existing fueling island can be renovated with new dispensers, pumps and fuel management system.

Figure 7: Plows are stored in an open area where they can easily be installed as needed.

Figure 8: An easily accessible area for storage of drainage structures and conduit should be maintained in the proposed new facility.

Figure 9: Areas for stockpiling of various materials is a necessity for a new facility.

Figure 10: Sign storage and traffic control equipment is stored in remote areas of the current site. A sign shop is currently in a remote and unheated building. In a new facility, the sign shop should be incorporated into the main building. The propane tank serves the dog pound. Space should be allocated for a new stand alone generator that will serve the entire facility.

Figure 11: The main building at 550 Old Colchester Road is a metal building housing equipment bays, maintenance bays, administration offices and support facilities.

Administrative Facility Description

The existing 50 deep x 100 foot wide metal building contains 4 vehicle bays, each bay 2 vehicles deep. Three minimally heated vehicle storage bays are open to each other while the forth bay serves as a mechanics bay and is separated from the other bays by a full height partition which allows the space to be heated. Adjacent to the mechanics bay are the administrative offices, break room, toilet rooms and mechanical room. Facilities in the Administrative areas are utilized by the thirteen current employees with the expectation that additional employees should be accommodated in the future building.

Administrative Facility Deficiencies

- The DPW Director and the Administrative Assistant share an office area. The Director should have a private office and access to an area for conferencing and privacy for human resources issues.
- Visitors to the building have no place to wait until they can be addressed.
- There is no storage area for office supplies. Many supplies are stored in the shower stall of the women's toilet room.
- Toilet rooms presently serve a single occupant.
- There are no locker or changing rooms. Some lockers are currently housed in the main corridor of the administrative area while others line the wall in the mechanic's bay.
- There are no bunk rooms. Currently when necessary during storm situations, drivers sleep in their vehicles.
- The break room is very small, accommodating 3 people at a table, with minimal kitchen facilities and no day room area.
- The Administration area is not totally ADA compliant.

Figure 12: The main entrance corridor shared by visitors and employees alike is crowded with lockers, appliances and files for which there is no space elsewhere.

Figure 13: Limited and barely accessible Break Room facilities include seating for three. The room is shared as an overflow office space. Since there is no space for it, the refrigerator resides in the adjacent hallway.

Maintenance Facility Description

The first bay beyond the Administrative area is the double deep maintenance bay. As the bay is not a drive thru, the rear is taken up with a work bench the full width of the bay. Commercial grade tool boxes are stored on one side adjacent to the work bench. The bay width is additionally squeezed by a bank of lockers near the overhead door entrance and adjacent to the man door entrance from the Administrative area. There is a lack of efficiency in the stacked bay configuration as the interior vehicle is unable to egress until the exterior oriented vehicle is able to be moved.

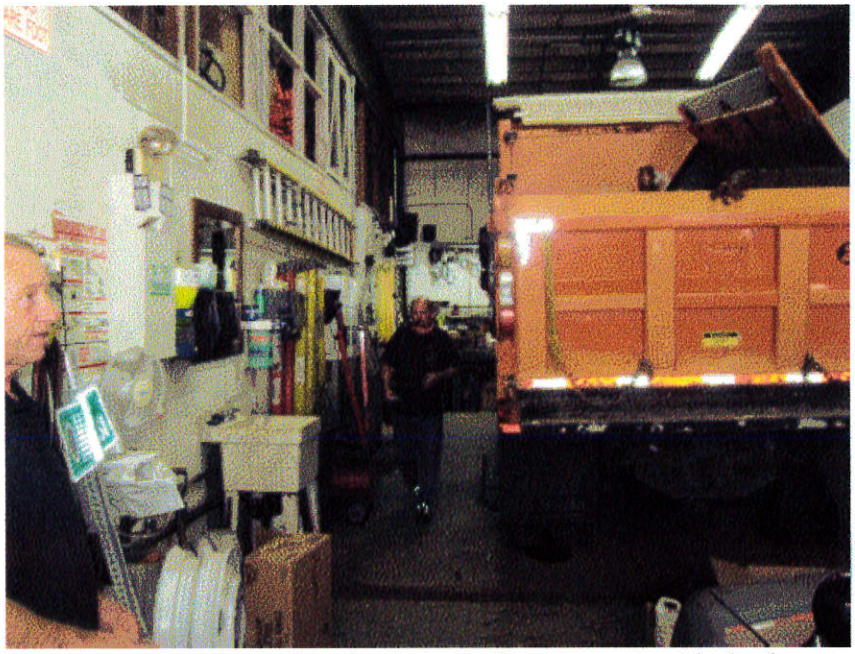


Figure 13: The narrow side aisles to not facilitate access to vehicles for repair.

Figure 14: Tool storage and workbenches further inhibit access to the vehicles

Figure 15: Parts storage in the mezzanine provides secure storage of items used with minimal frequency.

Figure 16: Frequently used small parts are stored in a room adjacent to the maintenance bay. This storage area could be incorporated into the larger storage area in a secure room accessible to the maintenance bays.

Vehicle Storage Bays

The main concerns with the current vehicle storage bays are that they are not drive-thru bays which facilitate efficient movement of individual vehicles without the need to relocate other vehicles. In addition, the vehicle storage bays are not high enough to allow for raising of the dump truck bodies to allow for access to the truck bed. The depth of the current bays is also limiting as equipment is by necessity, parked up against exterior walls which can sustain damage. The lack of sufficient depth also inhibits movement between vehicles parked front to back and between the vehicles and exterior walls. Garage door opening should be at least 14 feet wide and high to allow for proper clearances. A wash bay should be included in the new facility that will double as a drive-thru storage bay. Code compliant grey water storage or particle separators should be incorporated into the wash bay design depending upon the availability of sanitary sewer.

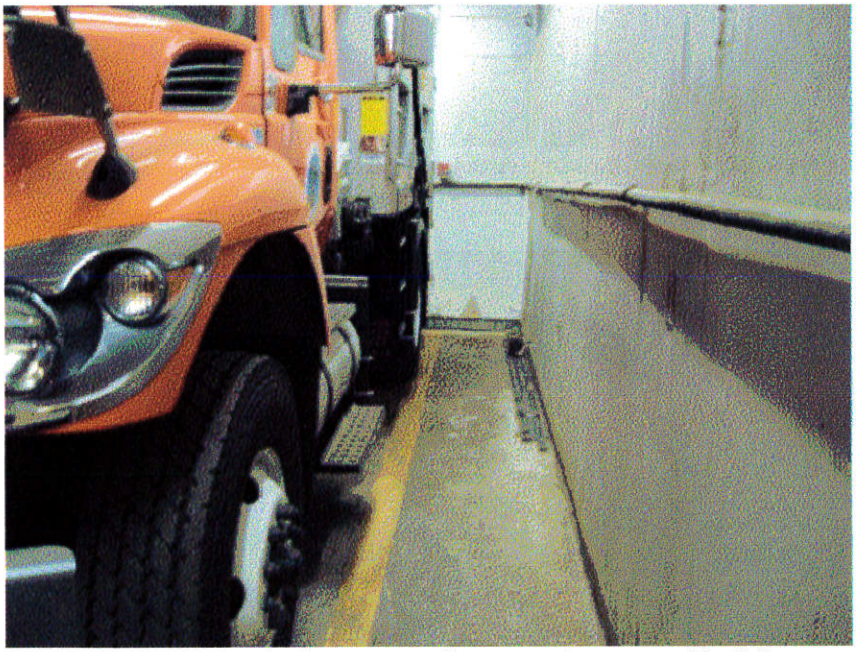


Figure 17: Minimal aisle clearances endanger equipment and building.

Figure 18: Limited clearances endanger wall surfaces, building structure and wall mounted utilities as well as limiting passage of personnel.

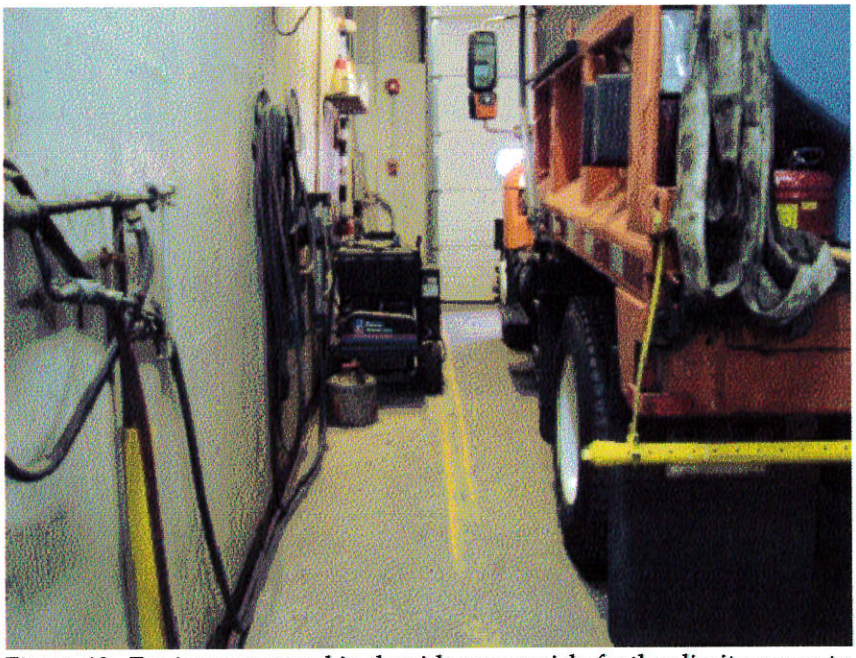


Figure 19: Equipment stored in the side access aisle further limits access to vehicles in the wash bay.

Figure 20: While the tire storage and oil recycling is adjacent to the maintenance Bay, there is not enough tire storage at present. Storage of equipment adjacent to the vehicle storage floor areas impedes circulation and potentially jeopardizes the condition of the vehicles and supplies.

Figure 21: New vehicle storage bays should be higher than the existing bays to facilitate access to equipment without damaging building structure.

HEBRON DEPARTMENT OF PUBLIC WORKS
PRELIMINARY BUILDING PROGRAM
FACILITY GOALS AND OBJECTIVES

Goals

- **Design a Department of Public Works facility that meets the current and anticipated future needs of the Town of Hebron.**
- **Design a facility that ensures the safety and protection of DPW employees, equipment and resources.**
- **Integrate environmentally friendly and energy efficient materials and systems into the building design to the greatest extent possible.**

Objectives

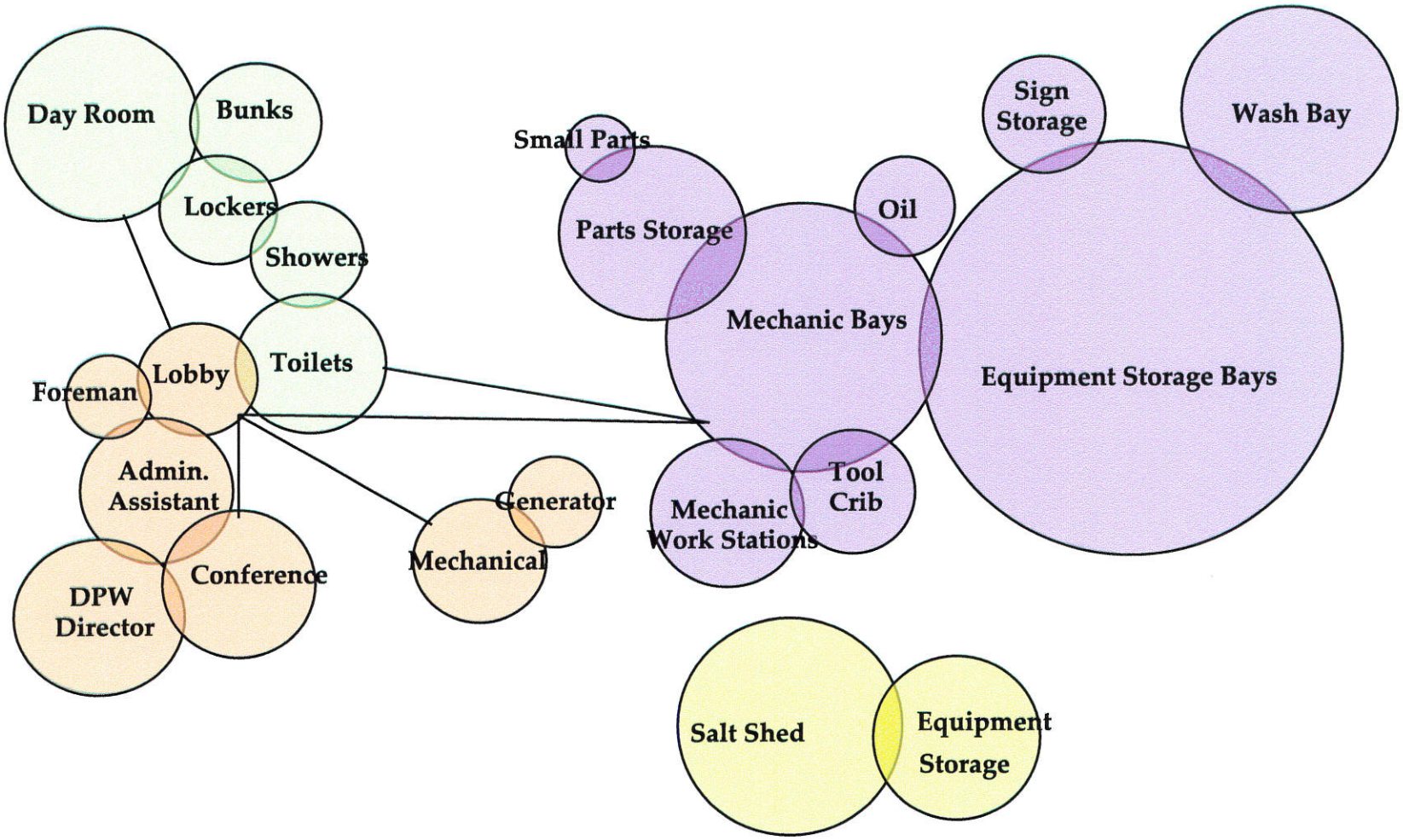
- **Site the building(s) to accommodate safety, security, and accessibility of DPW personnel and the public;**
- **Provide site features that address environmental conservation and storm water best practices.**
- **Provide building features that insure user comfort, safety and accessibility.**
- **Incorporate operational efficiencies to insure the timely delivery of DPW services.**
- **Provide covered storage facilities for materials that are environmentally hazardous.**

Site Considerations

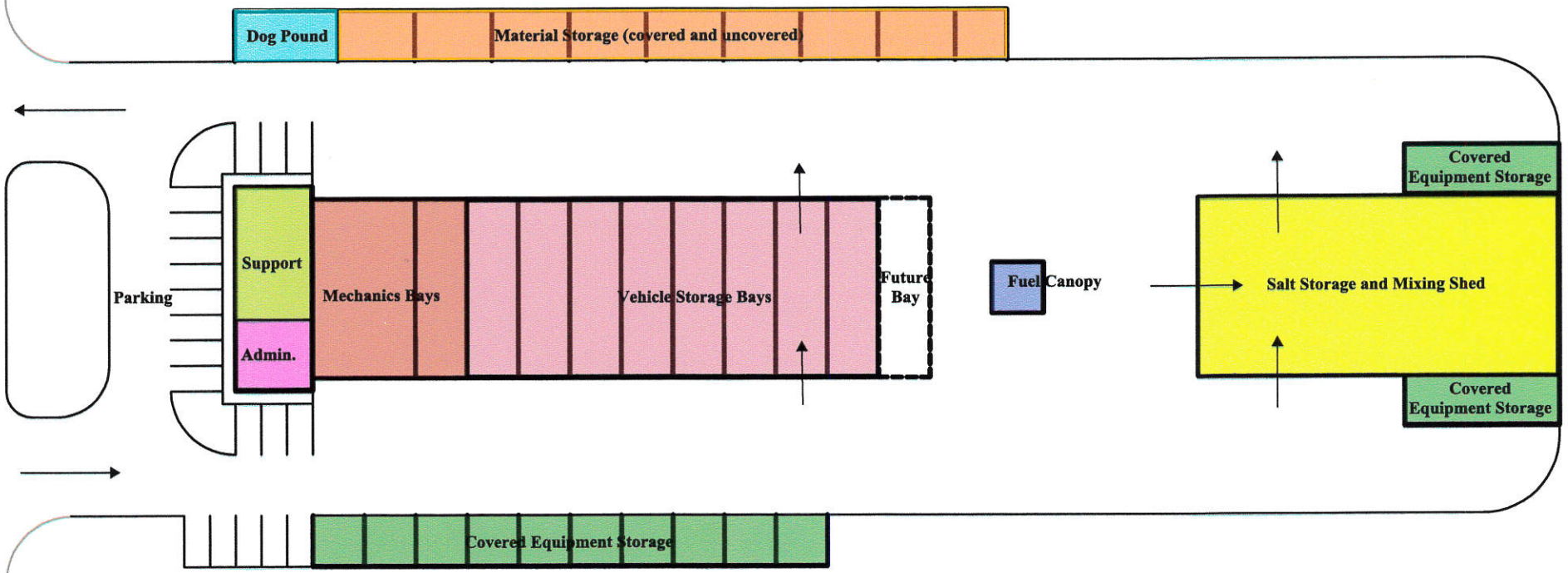
- **Separate circulation of DPW vehicles and public/visitor vehicles.**
- **Accommodate parking for 17 employees and two public spaces.**
- **Include water oil separator or holding tank to support wash bay activity.**
- **Provide septic system and septic field.**
- **Provide well to support domestic use and wash bay activity.**
- **Provide space for two automatic propane stand-by generators with automatic transfer switch.**
- **Provide area for buried propane storage tank.**
- **Provide material storage containment facilities.**
- **Provide space and circulation for a stand alone Salt Shed where product can be stored and loaded under cover.**

HEBRON DEPARTMENT OF PUBLIC WORKS
PRELIMINARY BUILDING PROGRAM
TABULATED SPACE NEEDS

Space Name		Existing SF		Proposed SF
Administrative Facilities				
Public Lobby		84		150
Administrative Assistant Office		80		200
DPW Director's Office		80		240
Foreman		0		120
Mechanics Workstations		0		225
Subtotal		**244**		**1,505**
Support Facilities				
Day Room/Kitchen/Laundry		180		360
Men's Bunk Room		0		150
Women's Bunk Room		0		150
Toilet Rooms (2)		160		240
Showers		64		140
Lockers		0		180
Mechanical Room		160		200
Subtotal		**564**		**1,420**
Equipment Facilities				
Mechanics Bays	2@500	1,000	4@700	2,800
Small Parts Storage		1,000		1,000
Large Parts Storage		200		400
Tire Storage		160		160
Equipment Storage Bays	4@500	2,000	15@700	10,500
Wash Bay	2@500	1,000	1@700	700
Tool Box Storage		0		75
Paint Room Storage		0		50
Tool Crib		0		225
Oil/Hydraulic Fluid Storage		40		80
Sign Storage		200		600
Subtotal		**5,600**		**16,590**
Total of Enclosed SF		**6,408**		**19,515**
Salt Shed Building		**1,000**		**10,400**
Covered Exterior Equipment Storage		**3,600**		**6,800**
Total Built Facilities		**11,008**		**36,715**



HEBRON CT DPW - PROPOSED SPACE ADJACENCIES



HEBRON CT DPW - IDEAL SITE ADJACENCIES

Not to Scale

HEBRON DEPARTMENT OF PUBLIC WORKS
GRAPHIC COMPARISON OF EXISTING AND PROPOSED BUILDING FOOTPRINT

APPENDIX

TOWN OF HEBRON
POPULATION GROWTH NARRATIVE

Overall town population is expected to continue its growth, though at a slower pace than the period between 1990-2010, which saw Hebron's population increase from just over 7,000 residents to nearly 10,000, and an increase of over 1,000 households. Fitting in with long-term, statewide trends, the population is projected to age significantly, with Hebron seeing gross decreases in school-age residents (under 24 years) and working-age residents (25-64); both population declines are projected to be counterbalanced by a significant increase in senior-citizen (65+) populations.

From a housing standpoint, the town does project to add to its household base, though not necessarily at the same rate or of the same type as in decades previous. Over the past several decades, the size of households in Hebron has diminished, but only slightly, from approximately 2.9 in 1990 to 2.8 in 2010. This trend will likely accelerate over the next 15-20 years as the population ages and the number of children in Hebron shrinks. The reduction in household size and the aging of the population will combine to create a reduced demand for the type of housing that drove Hebron's growth over the last several decades- that of the 2400-square foot single-family residence on 2-5 acres of property. Instead, Hebron will see more growth in smaller and multi-family residences.

The Hebron Village Green project envisions the creation of a large, mixed-use development on approximately 170 acres of land just south of Route 66 and east of Route 85 in the center of Hebron. Master plans have been developed, infrastructure is being extended and regulations are being put in place to make this plan a reality. The development of Hebron Village Green is the town's key economic development and house expansion target, and carries an occupancy horizon approximately compatible with the above population projections. The Village Green includes the addition of 49 conventional apartments, 44 age-restricted (elderly) apartments, 24 "active-adult" condominiums, and six new single-family homes. The overall development will also seek to add over 200,000 square feet of office space, 51,000 square feet of retail space, a new 35,000 square foot grocery store, a 35,000 square foot fitness center, and 7,500 square feet of restaurants. Several thousand feet of new roadway, sidewalk and parking area will be constructed to serve this development, but it will be on an "infill" basis within close proximity to the core of town and its resources. All of these developments will also be well connected by road, sidewalk, and trail networks, which will also link to Main Street and the existing business and civic center of Hebron. The total result of this project will be to dominate the economic and residential development throughout Hebron over the next fifteen years. Once built-out and fully occupied, it is likely that the Village Green will spur additional higher-density (apartment and condo) residential development on nearby properties, but the horizon for that is probably beyond 2025.

Connecticut Population Projections 2015-2025

June 1, 2012 edition

Note: The 2015-2025 Population Projections are in the process of being refined which may result in a few of the estimates being updated. We welcome your input on these projections as we develop the finalized versions. The finalized versions will include downloadable data and a summary report.

The Connecticut State Data Center provides population projections to assist state agencies, non-profit organizations, businesses, governments, and centers/organizations to identify potential population changes into the future. These projections are created based upon several datasets and while these estimates are developed based on multiple data sources, actual population changes may vary from these projections. To assist in planning, analysis, and decision making, the population projections provide three estimates for 2015, 2020, and 2025 based on differences in fertility rate. These three estimates are provided to provide users with a visualization of the potential variance of the population based on changes in the population's fertility rate which is often influenced by socioeconomic factors.

Sources	**How to Cite**
1990, 2000, 2010 Population data provided by U.S. Census Bureau 2000 to 2010 Birth and Mortality data by Connecticut town provided by the Connecticut Department of Public Health Rowland, D. T. (2003). *Demographic methods and concepts*. Oxford: Oxford University Press. Smith, S. K., Tayman, J., & Swanson, D. A. (2001). *State and local population projections: Methodology and analysis*. New York: Kluwer Academic/Plenum Publishers. Spectrum DemProj software provided by Futures Institute	APA 6th Edition Connecticut State Data Center at the University of Connecticut Libraries Map and Geographic Information Center - MAGIC. (2012). *Connecticut State Data Center - Population Projections 2015 - 2025*. Retrieved from http://ctsdc.uconn.edu/projections.h

Name	Year	Fertility	Age	Male	Female	Total
Hebron	2015	Medium Fertility	Under 5 years	212	203	415
Hebron	2015	Medium Fertility	35 to 39 years	202	234	436
Hebron	2015	Medium Fertility	5 to 9 years	257	261	518
Hebron	2015	Medium Fertility	40 to 44 years	340	423	763
Hebron	2015	Medium Fertility	10 to 14 years	455	411	866
Hebron	2015	Medium Fertility	45 to 49 years	490	510	1000
Hebron	2015	Medium Fertility	15 to 19 years	564	463	1027

Hebron	2015	Medium Fertility	50 to 54 years	486	515	1001
Hebron	2015	Medium Fertility	20 to 24 years	316	262	578
Hebron	2015	Medium Fertility	55 to 59 years	453	491	944
Hebron	2015	Medium Fertility	25 to 29 years	119	91	210
Hebron	2015	Medium Fertility	60 to 64 years	328	346	674
Hebron	2015	Medium Fertility	30 to 34 years	126	151	277
Hebron	2015	Medium Fertility	65 to 69 years	275	275	550
Hebron	2015	Medium Fertility	70 to 74 years	156	159	315
Hebron	2015	Medium Fertility	75 to 79 years	89	99	188
Hebron	2015	Medium Fertility	80 and over	75	119	194
Hebron	2015	Medium Fertility	Total	4943	5013	9956

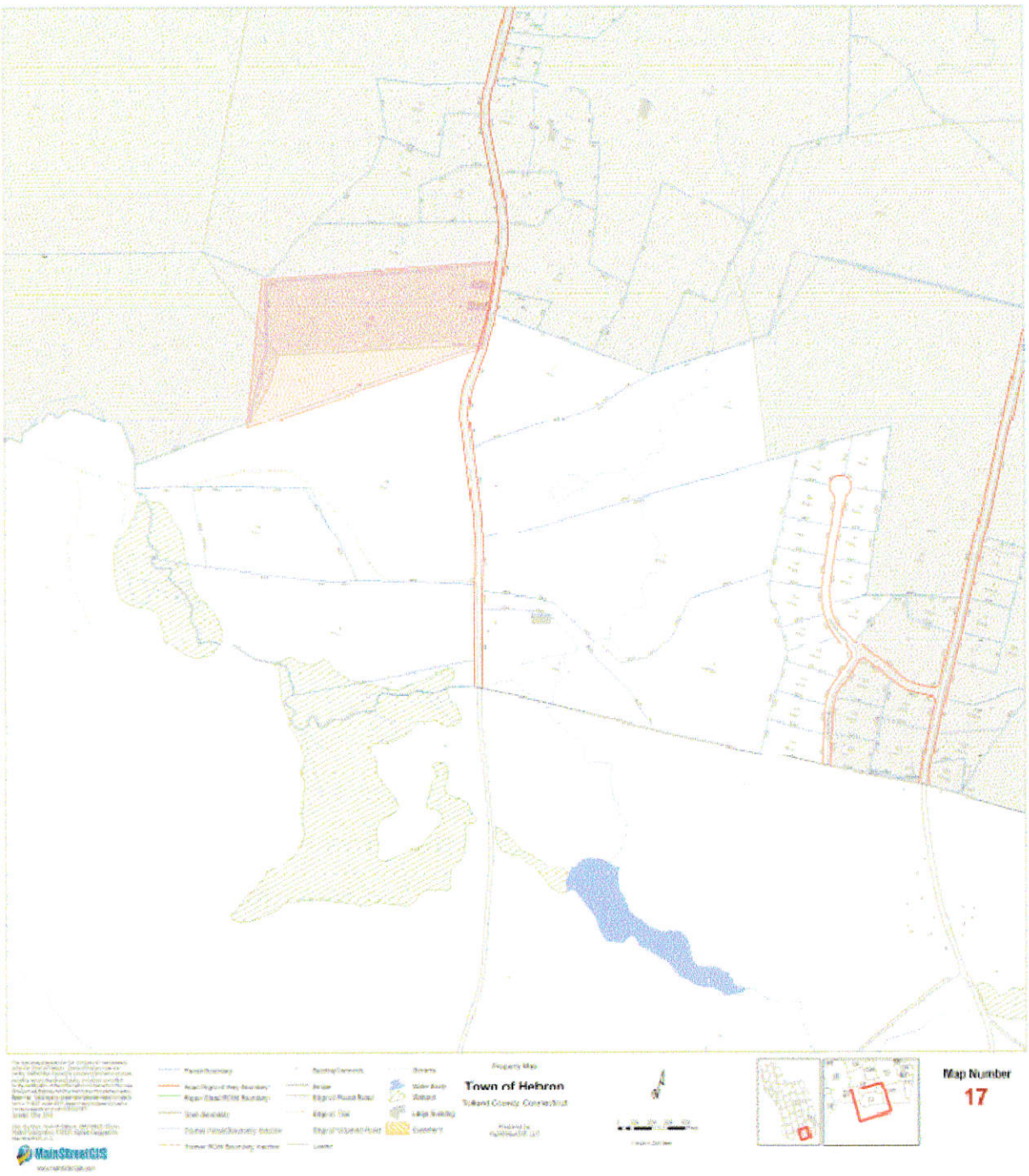
Name	Year	Fertility	Age	Male	Female	Total
Hebron	2020	Medium Fertility	Under 5 years	201	192	393
Hebron	2020	Medium Fertility	5 to 9 years	233	226	459
Hebron	2020	Medium Fertility	10 to 14 years	307	305	612
Hebron	2020	Medium Fertility	15 to 19 years	492	430	922
Hebron	2020	Medium Fertility	20 to 24 years	518	405	923
Hebron	2020	Medium Fertility	25 to 29 years	231	186	417
Hebron	2020	Medium Fertility	30 to 34 years	97	84	181
Hebron	2020	Medium Fertility	35 to 39 years	171	217	388
Hebron	2020	Medium Fertility	40 to 44 years	263	309	572
Hebron	2020	Medium Fertility	45 to 49 years	385	456	841
Hebron	2020	Medium Fertility	50 to 54 years	504	517	1021
Hebron	2020	Medium Fertility	55 to 59 years	471	507	978
Hebron	2020	Medium Fertility	60 to 64 years	417	470	887
Hebron	2020	Medium Fertility	65 to 69 years	286	318	604
Hebron	2020	Medium Fertility	70 to 74 years	229	252	481
Hebron	2020	Medium Fertility	75 to 79 years	120	138	258
Hebron	2020	Medium Fertility	80 and over	92	136	228
Hebron	2020	Medium Fertility	Total	5017	5148	10165

Name	Year	Fertility	Age	Male	Female	Total
Hebron	2025	Medium Fertility	Under 5 years	237	227	464
Hebron	2025	Medium Fertility	5 to 9 years	222	215	437
Hebron	2025	Medium Fertility	10 to 14 years	283	270	553
Hebron	2025	Medium Fertility	15 to 19 years	344	325	669
Hebron	2025	Medium Fertility	20 to 24 years	446	371	817
Hebron	2025	Medium Fertility	25 to 29 years	433	328	761
Hebron	2025	Medium Fertility	30 to 34 years	210	178	388
Hebron	2025	Medium Fertility	35 to 39 years	143	149	292
Hebron	2025	Medium Fertility	40 to 44 years	233	292	525
Hebron	2025	Medium Fertility	45 to 49 years	309	343	652
Hebron	2025	Medium Fertility	50 to 54 years	401	465	866
Hebron	2025	Medium Fertility	55 to 59 years	489	510	999
Hebron	2025	Medium Fertility	60 to 64 years	434	487	921
Hebron	2025	Medium Fertility	65 to 69 years	370	439	809
Hebron	2025	Medium Fertility	70 to 74 years	240	293	533
Hebron	2025	Medium Fertility	75 to 79 years	178	219	397
Hebron	2025	Medium Fertility	80 and over	121	174	295
Hebron	2025	Medium Fertility	Total	5093	5285	10378

Projected Age-Group Demographic Trends, 2005-2025, Town of Hebron

Year	Total Population (or projection)	Population 0-24 years old	Population 25-64 years old	Population 65+ years old
2005	9,361	3,115	5,627	619
2010	9,828	3,923	4,530	1,375
2015	9,956	3,404	5,305	1,247
2020	10,165	3,309	5,285	1,571
2025	10,378	2,940	5,404	2,034
Pct. Change, 2005-2025	**10.9%**	**-5.5%**	**-4.0%**	**228.6%**

Data sources for historic population from U.S. Census Bureau and the Connecticut Economic Resource Center (CERC). Population projections from Connecticut State Data Center.



HEBRON DEPARTMENT OF PUBLIC WORKS
PRESENT LOCATION
550 OLD COLCHESTER ROAD
Property shown shaded in red

FACILITIES NEED MATRIX

PUBLIC WORKS, TOWN OF HEBRON, CT

02739.13

June 14,2011

Space	Area (SF)	No. of staff	Desk/Chair	Computer Station	Drafting Table	Work Station	Counter	Conference Table/Chairs	Work bench	Tool Storage	Parts Bins	Secure Area	Storage cabinets/files	Computer Connectivity	Printer	Copier	Fax	Postage Meter	Sink	Stove	Refrigerator	Bunks	Toilet/Urinal	Lavatory	Lockers	Shower	Ventilation	Heat	Air-conditioning	Telephone	Gas	Electrical	Hot Water	Cold water	Comments/Description
Public Works Director	225	1	X	X		X		Sm						X													X	X	X	X		X			
General Office/Admin. Assist. Dispatcher	175	1	X	X		X		X						X	X	X	X	X									X	X	X	X		X			
Public Reception	150						X																				X	X	X			X			
Engineering Technician																																			
Engineer																																			
Foreman (1)	150	2	2	X		2								X													X	X	X	X		X			
Mechanics (1)	225	3	3	X		3								X													X	X	X	X		X			
Conference Room/ Training Room	300	12						X						X													X	X	X	X		X			
Supply Storage/Print	150						X							X													X	X	X	X		X			
Repair Office/Misc. Equipment Repair									X	X																	X	X		X		X			Both bays have lifts
Emergency shower/ eyewash	75																							X		X	X				X	X	X	
Repair Bays (5) 20' X 40' (2) 14' X 30'	1600								X	X				X					X								X	X				X			1 bay with lift, overhead reels/droplight/supply of 15W40 & SW20 oil, hydraulic fluid (1 per two bays), water spigot at 1 bays, exhaust for trucks (flow through open doors), tie-down location in floors at bays poured concrete (front and rear) Repair bay benches with dedicated direct light on benches Beams and chain falls (electric) on two bays
Repair Bays (2) Small Vehicle (each at 12' X 30')	840								X	X				X													X	X				X			1 bay with lift
Tool box storage	75																															X			Secure storage for tool boxes for three mechanics
Wash Bay (1)	650																															X	X	X	
Paint Room/Storage	50																										X	X				X			
Welding Shop	150								X	X			X														X	X				X			
Machine Shop									X	X			X														X	X				X			
Small Engine Repair									X	X																	X	X				X			
Tool Crib	225											X																X				X			Secure
Small Parts Storage	200											X															X	X				X			
Large Parts Storage	400											X															X	X				X			

Space	Area (SF)	No. of staff	Desk/Chair	Computer Station	Drafting Table	Work Station	Counter	Conference Table/Chairs	Work bench	Tool Storage	Parts Bin	Secure	Storage Cabinet/Files	Computer Connectivity	Printer	Copier	Fax	Postage Meter	Sink / dishwasher	Stove	Refrigerator	Washer/dryer	Toilet/Urinal	Lavatory	Lockers	Shower		Ventilation	Heat	Air-conditioning	Telephone	Gas	Electrical	Hot Water	Cold water	
Hydraulic parts storage	50											X																X	X				X			
Oil/Hydraulic Fluid/ Paint Storage	150											X																X	X				X			Hazmat. Two large flammable storage cabinets in fire secure room 2300 gal – hydraulic oil 55 gal – ATF 55 gal – motor oil (5W30 and 5W20)
Mechanics wash area for road crews and mechanics	50																							X								X	X	X	
Toilets/Showers/ Lockers (in toilet)	200																						X	X	X	X		X	X	X			X	X	X	Male/Female
Sign Shop/Storage	600											X																					X			
Break Room	385	20					X												X	X	X	X						X	X	X	X	X	X	X	X	
Kitchen in Break Room	See Above																																			
Men's Room	100																						X	X				X	X	X			X	X	X	
Ladies' Room	100																						X	X				X	X	X			X	X	X	
Rest Area	150																						X	X	X	X		X	X	X			X			Bikes, treadmill
General Supplies Storage	300											X																X	X				X			
Facilities Maintenance Storage												X																X	X				X			Customer Safety Office. Now 40X60. Supplies take up 40X60
New Tire Storage	100											X																X					X			Immediately off repair area including the tire machine and balancing. Store 15-20 tires (tire storage must be secure)
Vehicle Storage Bays	16,800																																X			Some will be repair bays
Shoring/Trench Box																																				Weather storage - secure
Mechanical/Electrical/ Compressor	150											X																X					X			Piped to small engine repair, tire machine, repair bays, exterior for tire inflation on vehicles
Waste Oil/Waste anti-freeze/old tires																																				Storage until picked up by outside vendor
												X																					X			Storage of bags and bins. Delivered by palletized on Town trucks - dock

Sealed floors in vehicle areas with trench drain. Striping on floors to be done before sealing the surface.
Fueling Station

TOWN OF HEBRON
VEHICLE/EQUIPMENT LISTING

PLATE #	YEAR	VEHICLE/EQUIPMENT DESCRIPTION	VIN/SERIAL NO.
1	2009	GMC SIERRA PICK UP	1GTHK59639E141775
2	2006	INTERNATIONAL 4 X 2 7400	1HTWDAAR06J301777
3	1998	FORD CROWN VICTORIA DK BLUE	2FALP71WXWX141496
4	2012	GMC SIERRA 4WD REG. CAB PICKUP	1GT323CG4CF111587
5	2008	GMC 3500 MASON DUMP	1GDJK34678E138899
6	2008	FORD CROWN VIC - POLICE INTERCEPTOR - GRAY	2FAFP71V08X178639
7	1998	INTERNATIONAL 4900 DUMP TRUCK	1HTSDADROWH548590
8	1997	FORD LTD CROWN VICTORIA - SILVER	2FALP71W5VX189506
9	2009	INTERNATIONAL 7400 4X2	1HTWDAZR19J126903
10	1991	GMC DUMP TRUCK - MODEL TC7H042	1GDP7H1J1MJ508988
11	1989	GMC CAT - T3208 DUMP TRUCK	1GDP7D1YOKV508508
12	1988	GMC CAT - T3208 DUMP TRUCK MODEL TJ8C042	1GDP8C1Y3JV600945
13	2001	FORD CROWN VICTORIA GRAY	2FAFP71H71X199817
14		SUPERLINER TRAILER / BLACK / BOBCAT	
15	2005	KENWORTH ROLLOFF TRUCK	1NKDXBEX65J096487
16	1970	SNOWCO 2 WHEEL TRAILER ID #3754	
17	2009	JOHN DEERE 5075M TRACTOR	LV5075M160198
18	2007	INTERNATIONAL 7600 SBA 6X4	1HTWYSBT57J462857
19	2005	FORD CROWN VICTORIA / CHARCOAL	2FAHP71W35X117709
20	1978	CAT PAYLOADER - MODEL #930	41K8088
21	1995	DODGE RAM 1/2 TON PICKUP TRUCK	1B7HC16Y7SS187421
22	1984	GMC FLAT BED	1GDJK34M5EV540964
23	1996	BRUSH BANDIT CHIPPER - JOHN DEERE	4FMUS1518TR010575
24	2005	INTERNATIONAL 7400 4X2	1HTWDAAR05J004393
25	1983	20 TON EAGER BEAVER TRAILER	1120HA20XDT200208
26	2003	INTERNATIONAL 7400 4X2	1HTWDADR63J066258
27	2009	CARRY ON TRAILER	4YMUL121X9V017941
28	1988	6 TON EAGER BEAVER TRAILER	11205L109JS030002
29	2009	INGERSOL RAND P-185 AIR COMPRESSOR	407268UBTD09
30	1994	INT'L LANDSCAPE TRAILER MODEL - U-16E	1ZFUF1624RB003329
31	2012	INTERNATIONAL 7600 SBA 4X2	1HTWDAZR3CJ672206
32	2005	FORD RANGER	1FTZR45E15PA98351
33	1995	410 BACKHOE/LOADER	T0410DG804994
34	1992	KOHLER GENERATOR/TRAILER UNIT #2OROZJ61	S/N - 350127
35	1992	FERREE TRAILER MODEL #M610	S/N - 918433
36	1995	GMC DUMP TRUCK PLOW	1GDP7H1J5SJ525161
37	1996	544 JOHN DEERE LOADER	DW544GD557931
38	1998	TIGER TRACTOR MOWER MODEL 6400	S/N - TBF-0627 MK-1444
39	1998	BROOM BEAR SWEEPER	1FVGHJBA7XH989493
40	2000	FORD F550	1FDAF57F5YEA88323
41	2001	FORD F550	1FDAF57F11EB11683
42	1988	FORD 8000 BUCKET TRUCK	1FDYK82A2JVA507769
43	1987	REMEQ LANDSCAPE TRAILER	2REA257C9X2Y54775
44	2003	FORD F-250 SUPER CAB 4X4 P.U.	1FTNX21L43EA62756
45	2005	INTERNATIONAL 7400 4X2	1HTWDAAR05J004392
46	2006	INTERNATIONAL 4 X 2 7400	1HTWDAAR26J301778
47	2006	FORD / SUPREME SENIOR VAN	1FDWE35P86DA44618

TOWN OF HEBRON
VEHICLE/EQUIPMENT LISTING

48	1992	FERREE TRAILER MADEL # M610	sn 918433
49	2007	GMC COLORADO PICKUP - SCHOOL - WAYNE	1GTDT149178150640
50	1999	FORD Explorer - Building Inspector	1FMZU34X8XUA20340
51	2000	Kenworth T800 Tri-Axel	1NKDL60XXYJ866348
52	2007	GMC 4500 4X4 6 WHEELER	1GDE5C3987F418196
53	2008	Kaufman Trailer	5VGFB18208L001936
54	2008	Ford F-250 - Park & Rec	1FTNF21548EC92602
55	1997	GMC 4X4 MASON DUMP TRUCK	1GDJK34F9VF025042
56	2009	GMC YUKON / Fire Marshall	1GKFK23029R221530
57	2006	FORD E-450 SUPREME SENOIOR VAN	1FDXE45P36DA36145
58	2012	JOHN DEERE 410J BACKHOE/LOADER	1T0410JXLBD210609
59	1973	JOHN DEERE BACKHOE MODEL # T35231	S/N - 00196302
60	1999	REMEQ LANDSCAPE TRAILER	2REA257C9X2Y54775
61		Mason Dump same as #5 above	
62		Two Rollers	

Vehicles and equipment requiring covered and heated storage

Vehicles and equipment requiring covered storage

Fifteen heated vehicles/equipment bays are required to meet present needs.

Eleven covered exterior spaces are required to meet current needs.

BUILDING PROGRAM

Space name: PUBLIC LOBBY

Occupancy: 2

Functional Activity Description: Entrance lobby with seating for two

Size: 10 x 15

Flexibility and Expandability: connects multiple functions

Adjacencies

Primary: Administrative Offices, Support Facilities, Toilet Rooms (accessible to transfer station workers)

Secondary: Mechanics and Storage bays

Furnishings: 2 chairs and side table

Technical/Telecommunications Requirements: none

Fenestration: natural light desirable

Space Finishes: heavy duty floor and wall finishes (no carpet)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: front door lockable. Pass key required for entrance to other spaces off of lobby. Programmable key system.

Additional requirements:

BUILDING PROGRAM

Space name: ADMINISTRATIVE ASSISTANT

Occupancy: 1

Functional Activity Description: General office space for administrative assistant

Size: 12 x 16

Flexibility and Expandability: open office area

Adjacencies

Primary: public lobby, DPW director, conference

Secondary: support facilities, file storage, supply storage, copy room

Furnishings: 1 desk and chair with computer station
Fuel Management System computer
5 – 5 drawer file cabinets
3 bookcases
2 metal storage cabinets in closet with room for coats
Copier
Counter with secure sliding window to public lobby

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, radio for dispatch

Fenestration: natural light desirable

Space Finishes: tiled floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting, task lighting

Security requirements: Pass key required for entrance.

Additional requirements: storage closet, bulletin board

BUILDING PROGRAM

Space name: DPW DIRECTOR'S OFFICE

Occupancy: 1

Functional Activity Description: private office with conference area

Size: 12 x 20

Flexibility and Expandability: combined office area and conference area

Adjacencies

Primary: administrative assistant, conference

Secondary: support facilities, copy room, mechanics and storage bays

Furnishings: 1 desk and chair with computer station
Credenza
Small conference table and 4 chairs
2 bookcases
Work bench
Drafting table
1 file cabinet

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer and printer

Fenestration: natural light desirable

Space Finishes: tiled floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting, task lighting

Security requirements: Pass key required for entrance.

Additional requirements: coat closet, bulletin board

BUILDING PROGRAM

Space name: FOREMAN

Occupancy: 1

Functional Activity Description: open office area with 1 workstation

Size: 10 x 12

Flexibility and Expandability: open space

Adjacencies

Primary: Administrative Offices, Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: 1 desk with computer returns
1 desk chair
Small conference table with 4 chairs

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer

Fenestration: natural light desirable

Space Finishes: tiled floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: Pass key required for entrance.

Additional requirements: coat closet and bulletin board

BUILDING PROGRAM

Space name: MECHANIC'S WORK STATIONS

Occupancy: 3

Functional Activity Description: open office area with work stations for 3

Size: 15 x 15

Flexibility and Expandability: open office

Adjacencies

Primary: Mechanics and Storage bays, Parts Storage

Secondary: Administration and Support Facilities

Furnishings: 3 work stations with computer return
3 chairs
2 file cabinets
Drafting table
Storage cabinet
4 bookcases

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer and printer

Fenestration: natural light desirable

Space Finishes: tiled floor, painted gwb, vinyl base, acoustic tile ceiling (ATC)

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: Pass key required for entrance

Additional requirements:

BUILDING PROGRAM

Space name: DAY ROOM AND KITCHEN

Occupancy: 12

Functional Activity Description: Open room with living room area, dining area and kitchen

Size: 18 x 20

Flexibility and Expandability: flexible space

Adjacencies

Primary: Administrative Offices, Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: Television
Dining/ Conference Table with seating for 12
Full Kitchen
Washer/Dryer within closet

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, land line, computer

Fenestration: natural light desirable

Space Finishes: VCT flooring, painted gwb walls, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: none

Additional requirements:

BUILDING PROGRAM

Space name: MEN'S BUNK ROOM

Occupancy: 4

Functional Activity Description: sleeping facilities for 4 persons

Size: 10 x 15

Flexibility and Expandability:

Adjacencies

Primary: Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: 4 twin beds
Clothes hanging

Technical/Telecommunications Requirements: none

Fenestration:

Space Finishes: tile floor, painted gwb, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: WOMEN'S BUNK ROOM

Occupancy: 4

Functional Activity Description: sleeping facility for 4 persons

Size: 10 x 15

Flexibility and Expandability:

Adjacencies

Primary: Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: 4 twin beds
Clothes storage

Technical/Telecommunications Requirements: none

Fenestration: natural light desirable

Space Finishes: tiled floor, painted qwb, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: TOILET ROOMS (2)

Occupancy: 2

Functional Activity Description: Staff toilet rooms

Size: 8 x 15 each

Flexibility and Expandability: none

Adjacencies

Primary: Administrative Offices, Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: toilet stalls/urinals
sinks

Technical/Telecommunications Requirements: none

Fenestration: none

Space Finishes: tile floors, tile walls, qwb ceiling

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: SHOWER ROOM (2)

Occupancy: 1 per room

Functional Activity Description: shower room with dressing area

Size: 5 x 14 each

Flexibility and Expandability: none

Adjacencies

Primary: Support Facilities

Secondary: Mechanics and Storage bays

Furnishings: Shower
Bench
Clothing storage

Technical/Telecommunications Requirements: none

Fenestration: none

Space Finishes: tile floor, tile walls, gwb ceiling

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: privacy lock

Additional requirements:

BUILDING PROGRAM

Space name: LOCKERS

Occupancy:

Functional Activity Description: locker room for storage of personal belongings

Size: 10 x 18

Flexibility and Expandability:

Adjacencies

Primary: toilet rooms, showers, bunk rooms

Secondary: Mechanics and Storage bays

Furnishings: 20 lockers, 2' wide x 5' tall
Small bench

Technical/Telecommunications Requirements: none

Fenestration: none required

Space Finishes: carpet, painted gwb, ATC

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: MECHANICAL ROOM

Occupancy:

Functional Activity Description: Room for heating and cooling equipment, electrical panels and ATS, telephone panels and computer servers

Size: 10 x 20

Flexibility and Expandability: separate rooms for telephone and computer equipment

Adjacencies

Primary: Administrative Offices, Support Facilities, generator

Secondary: Mechanics and Storage bays

Furnishings: none

Technical/Telecommunications Requirements: Public works host server, network hub and UPS

Fenestration: not required

Space Finishes: sealed concrete floor, gwb walls, gwb ceiling

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and cooled

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: MECHANIC'S BAY (2 double bays)

Occupancy: 2

Functional Activity Description: one double bay drive-thru

Size: 20 x 70 each double bay

Flexibility and Expandability:

Adjacencies

Primary: Parts Storage, Tire Storage, Welding bench with hood, Tool Box Storage, Tool Crib, Hydraulic Parts Storage, Oil/Hydraulic Fluid Storage, Eye Wash Station/Medical cabinet

Secondary: Mechanics work stations, Storage bays

Furnishings: work bench
Welding bench with fume hood
Sink
Tool storage
2 bays with lifts (1 truck lift, 1 small lift)
Overhead reels/Droplight/supply of 15W40 and 5W20 oil and hydraulic fluid (1 in center of two bays)
Vehicle exhaust system

Technical/Telecommunications Requirements: Public works host server, network hub and UPS, 2 line -land line, intercom connection to offices.

Fenestration: not required

Space Finishes: sealed concrete floor, walls for hanging storage

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and ventilated

Illumination: indirect or direct lighting. Task lighting at benches

Security requirements: lockable

Additional requirements: water spigot across from sink, tie down locations

BUILDING PROGRAM

Space name: SMALL PARTS STORAGE

Occupancy:

Functional Activity Description: Storage room for small parts inventory

Size: 10 x 20

Flexibility and Expandability:

Adjacencies

Primary: Mechanics work stations and mechanic's bays; incorporate hydraulic storage; accessible to parts vendors

Secondary: large parts storage

Furnishings: shelving

Hydraulics storage area 10 x 10

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor, heavy duty walls for storage shelving

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: LARGE PARTS STORAGE

Occupancy:

Functional Activity Description: Storage for large parts inventory

Size: 20 x 20

Flexibility and Expandability: flexible space with shelving and aisle access

Adjacencies

Primary: Mechanic's work stations, Mechanic's bays

Secondary:

Furnishings: free standing heavy duty shelving
Flammable storage cabinets
Hydraulic hoses

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor, heavy duty wall finish

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: TIRE STORAGE

Occupancy:

Functional Activity Description: Secure area with tire racks

Size: 4 x 40

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bays

Secondary:

Furnishings: tire racks to accommodate passenger and light truck tires on the wall with larger tires on the floor below.

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: ventilated

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: EQUIPMENT STORAGE BAYS (7 double deep bays including wash bay)

Occupancy:

Functional Activity Description: Open garage storage area for heavy equipment

Size: 20 x 35 each bay, or 20 x 70 each double deep bay

Flexibility and Expandability: addition of future bays should be considered

Adjacencies

Primary: Mechanic's Bay

Secondary: Wash Bay

Furnishings: wash bay equipment, man doors to exterior

Technical/Telecommunications Requirements: none

Fenestration: natural light provided by windows in garage doors

Space Finishes: sealed concrete floors and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable.

Additional requirements:

BUILDING PROGRAM

Space name: WASH BAY (1 bay of double drive-thru vehicle storage bay)

Occupancy:

Functional Activity Description: storage bay that also functions as a wash bay

Size: 20 x 35

Flexibility and Expandability:

Adjacencies

Primary: Storage Bays

Secondary: Mechanic's bays

Furnishings: curtain separation from adjacent bays

Technical/Telecommunications Requirements: none

Fenestration: natural light provided by windows in overhead doors

Space Finishes: sealed concrete floor and waterproof wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements: Hot and cold water, overhead swinging hose arm.

BUILDING PROGRAM

Space name: TOOL BOX STORAGE

Occupancy:

Functional Activity Description: Secure storage area for mechanics personal tool boxes.

Size: 8 x 9

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Work Stations, Mechanic's Bays

Secondary:

Furnishings:

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements:

BUILDING PROGRAM

Space name: PAINT ROOM/STORAGE

Occupancy:

Functional Activity Description: Storage room for paint supplies

Size: 6 x 8

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bay, Sign Storage

Secondary:

Furnishings: shelving

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and ventilated

Illumination: indirect or direct lighting

Security requirements: lockable

Additional requirements: 2 hr fire rated room or fire rated cabinets

BUILDING PROGRAM

Space name: TOOL CRIB

Occupancy:

Functional Activity Description: Secure room for small tool storage

Size: 15 x 15

Flexibility and Expandability:

Adjacencies

Primary: Storage Bays

Secondary:

Furnishings: industrial shelving for chain saws, hand saws and drills

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated

Illumination: indirect or direct lighting

Security requirements:

Additional requirements:

BUILDING PROGRAM

Space name: OIL/HYDRAULIC FLUID STORAGE AREA

Occupancy:

Functional Activity Description: Secure area for storage of hydraulic fluids

Size: 10 x 20

Flexibility and Expandability:

Adjacencies

Primary: Mechanic's Bays, accessible to bulk delivery truck

Secondary: if in a separate room should have access to exterior

Furnishings:

55 gallon ATF
55 gallon John Deere hydraulic oil
2-275 gal tanks (1 hydraulic/1 engine oil)

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes; floor level containment system.

Accessibility: yes

Acoustics: normal

Environmental Conditions: heated and ventilated

Illumination: indirect or direct lighting

Security requirements: secure

Additional requirements:

BUILDING PROGRAM

Space name: SIGN STORAGE

Occupancy:

Functional Activity Description: Secure storage and workroom

Size: 20 x 30

Flexibility and Expandability:

Adjacencies

Primary: Storage bays

Secondary:

Furnishings: Shelving

Technical/Telecommunications Requirements: none

Fenestration: not required

Space Finishes: sealed concrete floor and heavy duty wall finishes

Accessibility: yes

Acoustics: normal

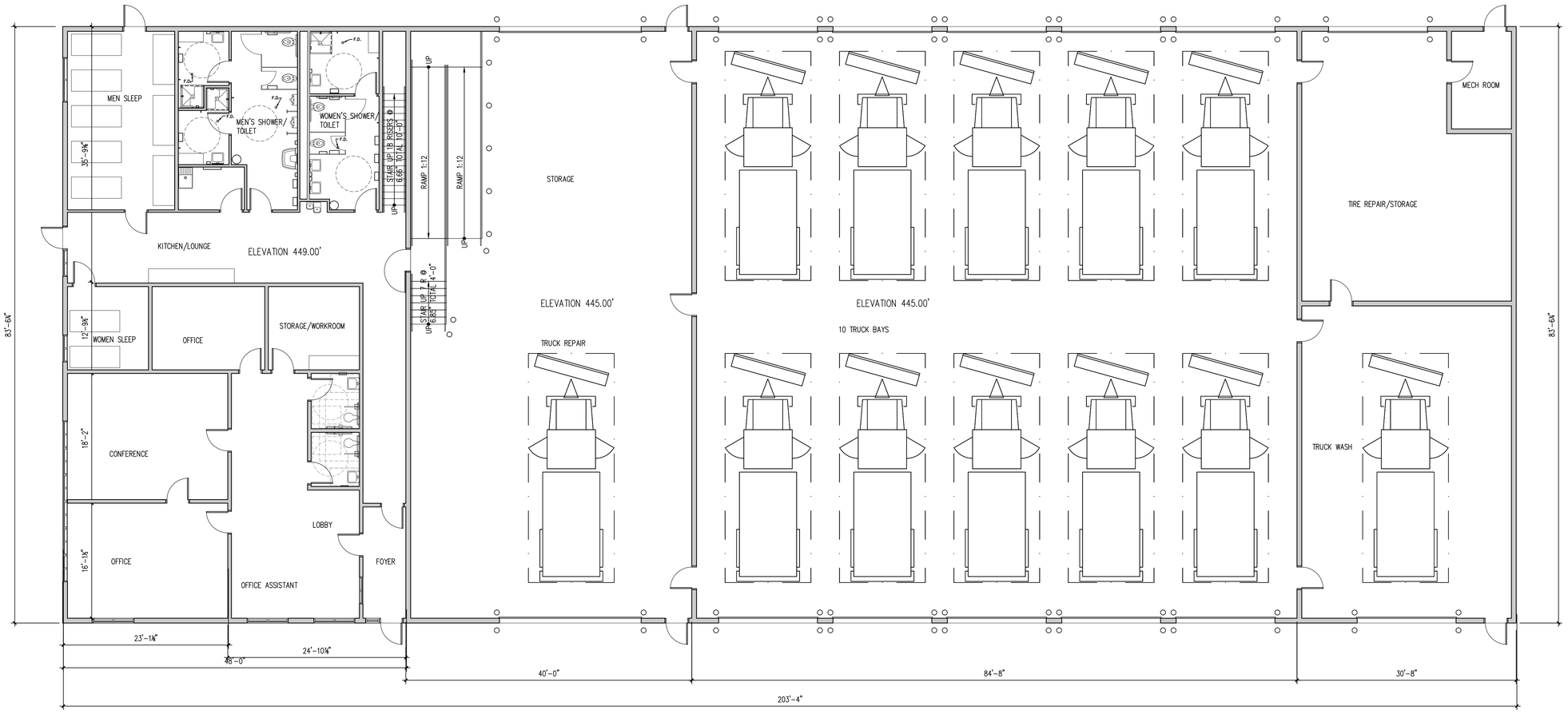
Environmental Conditions:

Illumination: indirect or direct lighting

Security requirements: Secure and enclosed

Additional requirements:


CME



1 FLOOR PLAN
1/8" = 1'-0"

TOTAL AREA 16,820 S.F.
PLAN 1 OPTION A

BL Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

150 Tr□m□ll S□□□□, 6□ Floor
Har□ord, CT 0610□
(860) 24□-2200
(860) 24□-2400 Fa□

HEBRON DEPARTMENT OF PUBLIC WORKS
550 COLCHESTER ROAD
AMSTON, CT

REVISIONS
No. Date Desc.

Designed
Drawn
Checked
Approved
Scale
Project No. 09D1384-N
Date 03/20/2015

CAD File: XA09D1384-N-PLAN

Title
FLOOR PLAN
OPTION 1 A

Sheet No.
A1.01A

Xref (s): : BDP9D1384

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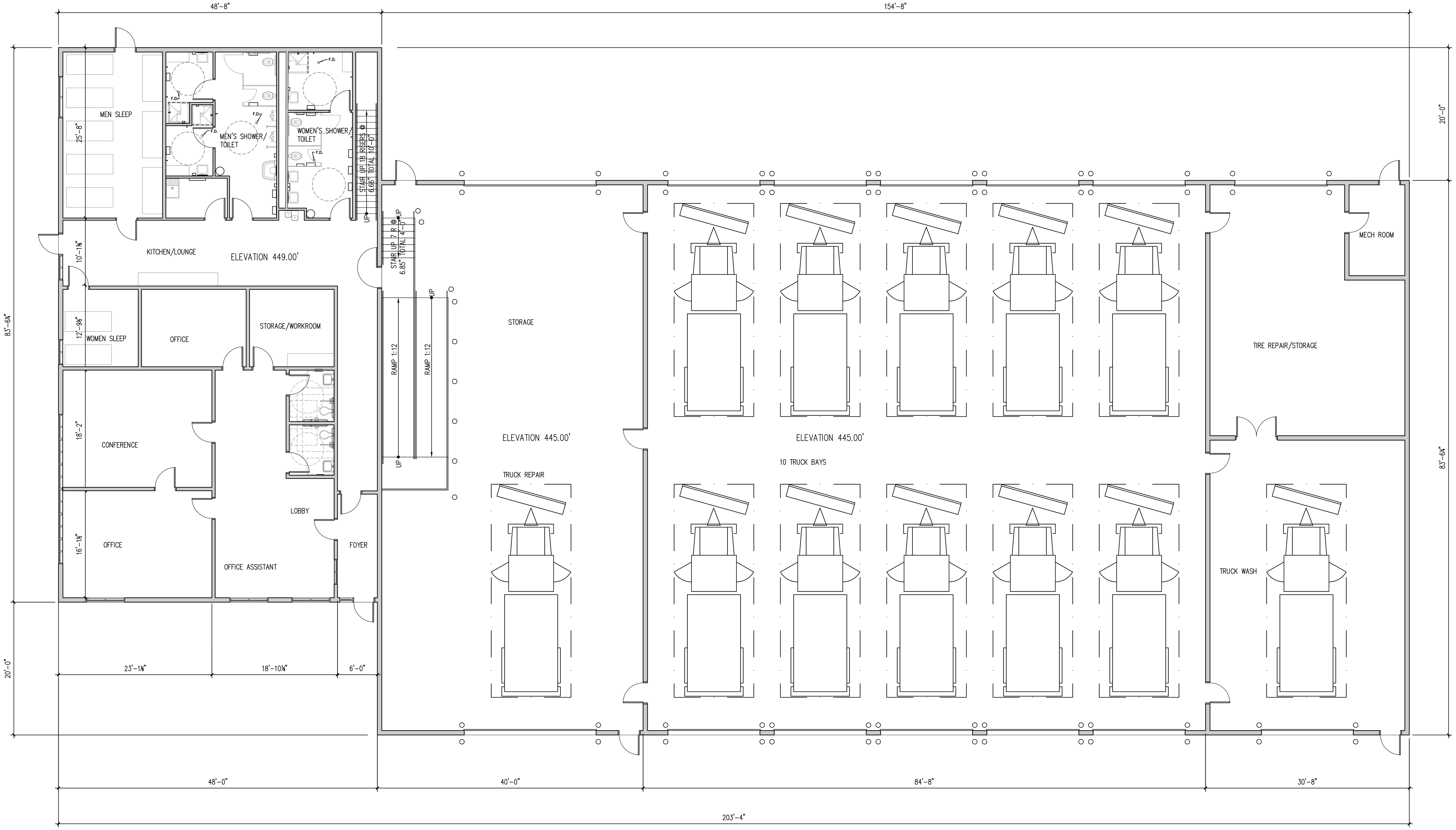

1 FLOOR PLAN
1/8" = 1'-0"

TOTAL AREA 17,000 S.F.
PLAN 1 OPTION B

BL Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

150 Tr□m□□ll S□r□□□, 6□□ Floor
Har□□ord, CT 0610□
(860) 24□-2200
(860) 24□-2400 Fa□

HEBRON DEPARTMENT OF PUBLIC WORKS
550 COLCHESTER ROAD
AMSTON, CT

REVISIONS
No. Date Desc.

Designed
Drawn
Checked
Approved
Scale
Project No. 09D1384-N
Date 03/20/2015
CAD File: XA09D1384-N-PLAN

Title
FLOOR PLAN
OPTION 1 B

Sheet No.
A1.01B

Xref (s): : BDP0D1384

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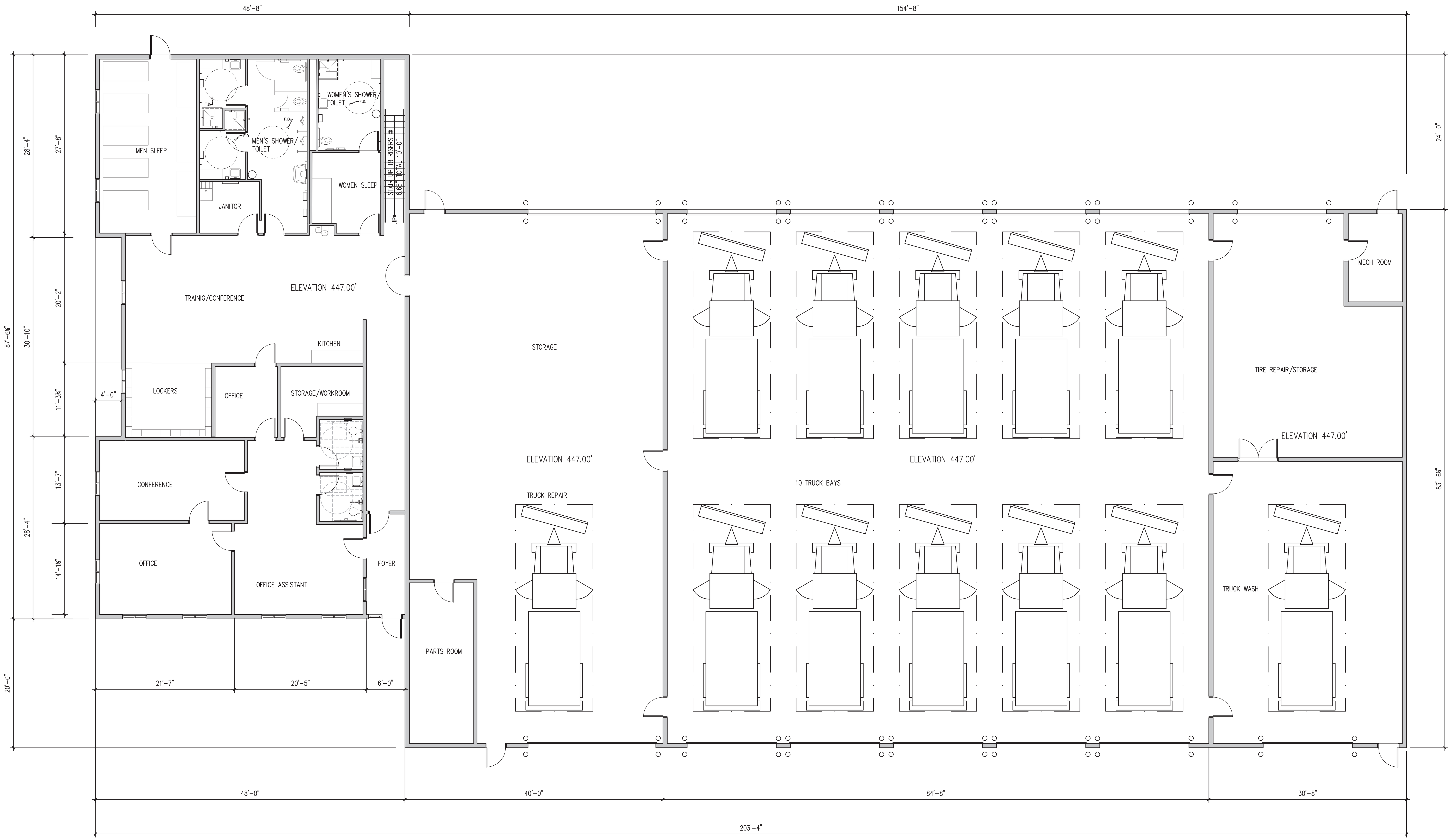


① FLOOR PLAN
1/8" = 1'-0"

BL Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

150 Trumbull Street, 6th Floor
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

HEBRON DEPARTMENT OF PUBLIC WORKS
550 COLCHESTER ROAD
AMSTON, CT

REVISIONS
No. Date Desc.

Designed
Drawn
Checked
Approved
Scale
Project No. 09D1384-N
Date 03/20/2015
CAD File: XA09D1384-N-PLAN

Title
FLOOR PLAN
OPTION 1 B

Sheet No.
A1.01

ATTACHMENT "O"

Feasibility Study

DEPARTMENT OF PUBLIC WORKS

John Horton Boulevard Extension
HEBRON, CONNECTICUT

Prepared for:
The Town of Hebron

Prepared by:

BL Companies

100 Constitution Plaza
Hartford, CT

September 25, 2017

BL09D1384-N

EXECUTIVE SUMMARY

TABLE OF CONTENTS

I – INTRODUCTION

The Town of Hebron commissioned BL Companies to develop functional conceptual building plans and elevations for the proposed new location of the Department of Public Works Garage to be located on the proposed extension to John Horton Boulevard, in Hebron. The existing facility is located at 550 Old Colchester Road, Hebron, CT, approximately three miles south of the Town Center.

The existing facility consists of several buildings that were built as need arose in order to accommodate Public Works trucks and equipment storage. The site also houses a transfer station, dog pound and truck repair and wash facilities. It is anticipated that the Pound and Transfer Station will remain at their present location, and that the new location will house the new DPW Garage, the administrative functions of the department, a cold storage facility and a salt shed, as well as the work yard for the staging of the various DPW activities.

This report seeks to address space allocation for the assessed needs developed in conjunction with the administration and staff of the Department, as well as input from other Town administrators. The main purpose of this study is to develop building plan requirements for a new Department of Public Works Garage complex, encompassing the activities described above.

This Study was performed in conjunction with the offices of Nathan L. Jacobson & Associates, Inc., who developed the site parameters for the facility, and the layout of the proposed John Horton Town Facilities campus, that may eventually house a Town Government Center and Fire Station.

The need to relocate to a new site and replace existing buildings with new facilities had been determined through a previous study performed by CME Associates, which concluded that the existing buildings were insufficient in size or function to address the needs of a modern Department of Public Works, as well as the determination by Jacobson & Associates that the existing location was too small and congested to accommodate the necessary construction of new facilities and improvements to the existing facilities without unacceptable disruption to the function of the Department. A study of the work necessary to bring the existing buildings into compliance with current standards was performed in 2015 by BL Companies, concluding that the existing buildings had reached the end of their useful life, and were in need of replacement.

II – BUILDING PROGRAMMATIC REQUIREMENTS

A. Space and Needs Development

The space and needs program for the facility were developed from data provided by Town and Department staff and administrators, as well as data derived from the previous Preliminary Program Report.

B. Programmatic Categories

1. Vehicle Storage and Repair

Vehicle Storage: 7,000 SF

This will be an enclosed heated space. The garage will have ten parking spaces for plow trucks with snow plows. The garage parking will be developed so that the parking of one vehicle will not interfere with the movement of others.

Finishes: sealed concrete floor, CMU wainscot wall, insulated metal panel wall, insulated metal roof.

Vehicle Repair: 3,250 SF

This area will house a repair garage in a vehicle bay. This area will also house a 250 SF Parts Room

Finishes: sealed concrete floor, CMU wainscot wall, insulated metal panel wall, insulated metal roof.

Truck Wash Bay: 1,300 SF

This area will house a washing bay.

Finishes: sealed concrete floor, glazed masonry walls, insulated metal roof with liner.

Tire Storage Area: 1,000 SF

Finishes: sealed concrete floor, CMU wainscot wall, insulated metal panel wall, insulated metal roof.

2. Administration

Offices: 3,100 SF

These facilities will include a DPW Director's Office, an Assistant Director's Office, an Administrative Assistant's Office, Lobby/Waiting Area, Work Room, Storage Room, Toilets, Kitchenette, and a Meeting Room.

Finishes: Offices, Lobby/Waiting Area, Meeting Room will be provided with carpet tile flooring, painted walls, suspended acoustical ceiling. Work Room and Storage Room will be provided with vinyl composition tile Flooring, painted walls, suspended acoustical ceiling. Toilets will be provided with ceramic tile floor and wainscots, and painted drywall ceilings.

Furnishings: Toilet areas will be provided with accessories.

3. Staff and Support Spaces

Day Room/Training/Lockers: 1,200 SF

This area is intended for training, meeting and gathering space for the members of the department. It will be provided with residential-type cooking appliances.

Finishes: Vinyl composition tile flooring, painted gypsum board walls, acoustical ceiling tile.

Furnishings: None scheduled.

Men Toilets, Showers and Sleeping Area: 850 SF

This area houses the Men's Sleeping Area and multiple-occupant Toilet and Shower.

Finishes: Athletic carpet flooring in sleeping area, ceramic tile elsewhere, concrete masonry and gypsum board walls, with ceramic tile wainscot at Toilet and Shower areas, acoustical ceiling throughout.

Furnishings: Toilet and Shower areas will be provided with accessories and privacy partitions.

Women Toilets, Showers and Sleeping Area: 300 SF

This area houses the Women's Sleeping Area and single-occupant Toilet and Shower.

Finishes: Athletic carpet flooring in sleeping area, ceramic tile elsewhere, concrete masonry and gypsum board walls, with ceramic tile wainscot at Toilet and Shower areas, acoustical ceiling throughout.

Furnishings: Toilet and Shower area will be provided with accessories.

Upper Level Storage: 3,500 sf

Finishes: Resilient flooring, moisture resistant painted gypsum walls.

Furnishings: None scheduled.

4. Accessory Buildings

Cold Storage: 4,000 SF

This will be an enclosed un-heated space. The storage facility will have five bays for seasonal equipment, tools and heavy-duty repair supplies.

Finishes: sealed concrete floor, CMU wainscot wall, non-insulated metal panel wall, non-insulated metal roof.

Salt Storage: 10,000 SF

This will be a covered un-heated space. The salt storage facility will have a single bay containing salt storage and a mixing pad.

Finishes: sealed concrete floor, concrete stem wall with upper louvers for ventilation, non-insulated metal roof.

C. Space Program Summary – Garage and Administration Building

The following Table illustrates the Net Square Feet building area required to fulfill the programmatic needs of Department of Public Works, with a gross building area of 18,700 square feet.

Category	Room	No	Room Area	Subtotal	Notes
Vehicle Storage & Repair	Vehicle Parking	10	700	7,000	
Vehicle Storage & Repair	Vehicle Repair	1	3,000	3,000	
Vehicle Storage & Repair	Parts Room	1	250	250	
Vehicle Storage & Repair	Truck Wash	1	1,300	1,300	
Vehicle Storage & Repair	Tire Storage	1	1,000	1,000	Provide High Hazard Fire Protection
Subtotal Net		-	-	12,550	
Unaccounted Area		-	-	50	
Total Net Area		**-**	**-**	**12,600**	**NSF**
Category	**Room**	**No**	**Room Area**	**Subtotal**	**Notes**
Administration	Director's Office	1	500	500	Includes Conference Area
Administration	Assistant Director	1	280	280	Includes Conference Area
Administration	Administrative Assistant	1	150	150	
Administration	Lobby	1	100	100	
Administration	Meeting Room	1	850	850	Sized for Department meetings
Administration	Open Office	1	500	500	
Administration	Storage and Files	1	550	550	
Administration	Toilets	1	150	150	
Subtotal Net				3,080	
Unaccounted Area				20	
Total Net Area				**3,100**	**NSF**
Category	**Room**	**No**	**Room Area**	**Subtotal**	**Notes**
Support Spaces	Lockers	1	200	200	
Administration	Training/Day Room	1	850	850	
Administration	Kitchen	1	150	150	
Administration	Men Sleep Area	1	450	450	
Administration	Men Toilets and Showers	1	400	400	
Administration	Women Sleep Area	1	150	150	
Administration	Women Toilets and Showers	1	150	150	
Administration	Janitor	1	80	80	
Subtotal Net				2,430	
Unaccounted Area				170	
Total Net Area				**2,600**	**NSF**
Category	**Room**	**No**	**Room Area**	**Subtotal**	**Notes**
Miscellaneous	Upper Level Storage	1	3,500	3,500	
Subtotal Net		-	-	3,500	
Unaccounted Area		-	-	-	
Total Net Area		**-**	**-**	**3,500**	**NSF**
	NET AREA			18,300	Does not include Upper Level
	UNASSIGNED AREA (%)			2	Percent
	UNASSIGNED AREA (SF)			366	SF
	TOTAL GROSS			**18,666**	**SF**

III – DRAWINGS

The following conceptual drawings illustrate solutions to the space and needs parameters described in the remainder of this study. These drawings are attached at the end of this document, and include:

A1.01 Garage and Administration Building Floor Plan
A2.01 Garage and Administration Building Elevations
A2.02 Cold Storage Floor Plan and Elevations
A2.03 Salt Storage Floor Plan and Elevations

IV – PROJECT DESCRIPTION

This project description addresses building elements not otherwise described in the remainder of this study. The elements associated with this project are described in the following sections of this report, and form the basis for the opinion of probable cost for the project.

The project consists of the proposed approximately 18,700 square-foot building. The concept developed for this study is based on the necessity to simplify the existing dispatching of the apparatus from the facility and to maintain vehicles indoors in inclement weather. To that end, all new bays will be drive through. The remainder of the facility is designed around that premise.

Major building elements which were analyzed as part of this study are described in the following narrative.

A. Architectural Considerations

The building layout is based on the Department's vision to comply with the space and needs requirements of this study while presenting to the street a façade that is not representative of the activities happening within the building.

To that end, the one-story building is intended to present a pedestrian-scale front onto the street, offset to obstruct the view of the yard and activities happening behind the building. The main apparent building contains the administrative functions of the facility, and those that would be visited by the public. This area is accessed by means of the main entry.

A further portion of the building houses the remainder of the Department spaces, including vehicle storage, repair, and wash bays.

Defined architectural elements of this building consist of the following:

1. In general, the building construction will consist of a pre-engineered structure for the vehicle areas, and conventional steel stud construction for the remainder of the building, offset to render the building less industrial in nature. Vehicle areas will be finishes as described earlier in the report. Areas that will sustain extended use will be constructed with abuse or impact-resistant gypsum board, and some walls will be constructed with concrete masonry.

2. Roof materials will consist of standing seam metal roofing at pitched portions of the roof.

3. Exterior service and utility doors will be galvanized hollow metal doors with continuous hinges. Garage doors will be insulated sectional metal doors. Interior service doors will be constructed of hollow metal. Windows will be thermally broken aluminum units, with insulated low "E" glazing; entrances at the building lobbies will be constructed of similar material.

4. The building will be constructed of type II-B construction (noncombustible unprotected). The entire facility will be provided with an automatic fire suppression system (sprinklers).

5. The building will be fully accessible to persons with disabilities, in compliance with the requirements of the State of Connecticut Building Code, and will comply with the standards established in the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

B. Structural Design Considerations

There have been no geotechnical site investigations performed on the existing site, as previous construction confirms that the underlying soils can support the use of conventional spread footings.

New slabs-on-grade will be 6" thick, reinforced with 6x6-W1.4xW1.4 or fiber mesh. Slabs-on-grade will be constructed on one layer of permeable fill and a vapor barrier to protect the slab and floor finishes from potential moisture problems related to infiltration from underground sources.

The majority of new roof structure will be pre-engineered steel frames with purlin roof supports.

Walls will be metal stud backup for office areas and CMU at the vehicle areas. Masonry will require grouting and vertical rebar at 48" on center maximum with additional reinforcing around openings.

Lintels for masonry walls will be precast elements of a thickness to match the wythe containing it. Lintels of steel or cold form will be used as necessary in other situations.

At this time, no unusual architectural elements are known to be programmed for the project (self-supported/detached canopies, roof-top sculptures, decorative site walls, etc.). Site retaining walls may be required depending on site constraints and the final site grading.

C. HVAC, Plumbing and Fire Protection Systems Considerations

1. Design Criteria

The HVAC design will comply with the requirements of the 2012 International Energy Code, as it is anticipated to be adopted in 2016 and will be a regulatory requirement when this building is constructed.

2. General HVAC Requirements

A new boiler plant and pumps will be provided to supply hot water heating to the existing spaces and the addition. New distribution piping will supply the hot water to new unit heaters, cabinet heaters, radiation and heating coils.

Toilets, Showers, Locker Rooms and Kitchens will be mechanically ventilated. The active Apparatus Rooms will be provided with general exhaust.

The Administrative Facilities will be provided with air conditioning.

3. Ventilation

All ventilation and air conditioning in office areas will be through a Variable Refrigerant Flow system, fed from a pad-mounted condensing unit.

4. Plumbing Systems

Plumbing fixtures will be mounted on wall carriers to minimize floor penetrations. Current water use guidelines will be incorporated into the design. All new toilet rooms will be designed to be accessible to persons with disabilities.

5. Fire Protection

The building will be completely sprinklered as required by the building code. The system will be a hydraulically calculated, wet pipe system. All associated electronic aspects of the fire protection system will be fully interfaced with the fire alarm system. A fire pump is not anticipated at this time.

D. Electrical and Fire Alarm Systems Considerations

1. Electric Service

A new 120/208 volt, 3 phase service to the Fire Department will be provided. The service will be 400 amps. A new distribution panel and two branch circuit panels will also be provided.

2. Standby Power

The facility will have one generator supplying standby power for the building. The generator will be sized to serve 100 percent of the entire building load.

3. Power Distribution System

The power distribution equipment will be installed in an electrical distribution room and in electrical closets distributed throughout the facility, in the mechanical room and in the kitchen.

4. Lighting

Typically, lighting fixtures will be specified providing illumination levels in accordance with IESNA standards and ASHRAE 90.1 for various spaces. The design intent for lighting in each space is described below.

Indoor lighting fixtures will generally be fluorescent troffers with energy-saving T8 lamps and electronic ballasts. Alternatively, the use of LED fixtures will be investigated during the design phase of this project.

5. Fire Alarm

The fire alarm will be fully addressable and comply with the requirements of NFPA 72, the Connecticut Fire Code and the requirements of the Town of Hebron Fire Marshal. The system will be comprised of a fire alarm control panel, annunciator panel, initiation devices, notification appliances, and voice control, circuit modules and power supply.

The annunciator panel display will indicate the room number that tripped the alarm. Notification will automatically be sent to the local fire department upon an alarm.

E. Telecommunications and Security System Considerations

Telecommunications: A Communications Network Infrastructure will encompass the data, telephone, and CATV Systems, and a PA system. The building will be designed to accommodate the communications building entry point.

Security: The building will be provided with a dedicated point of access alarm system. The security system will have the ability of be be field programmed to turn on and off on a schedule or be manually overridden with a personal identification number. The system will also be equipped with a remote access to activate or deactivate off site. In the event of an alarm, a signal will be sent the Hebron Police Department.

Telephone: The building will be provided with a telephone system. Phones will be digital type and equipped with an integrated voice mail system.

PA systems: The building will include a public address system integrated with the building telephone system. The public address system will include dedicated speakers and a programmable announcement tone. Speakers will be sized based on the size of the space and the ambient noise levels.

Computer Network: The computer network will be from a centralized server with Cat 6e cable horizontal distribution. The building will also be provided with wireless routers.

Clocks: There will be a centralized system in the building.

V – OPINION OF PROBABLE CONSTRUCTION AND PROJECT COSTS

The following opinions of costs are calculated as a function of the scheduled and anticipated construction assemblies and components for the building, site development and on-site work associated with the construction of this facility. These elements are factored by construction section line item costs on a square foot of assembly cost, resulting in a probable cost for the entire project.

The opinions of costs are based on the project elements described in this submittal, and are based on a single-bid method of delivery system.

The presented opinions of construction costs are based on year 2017 dollars, extrapolated to 2018 dollars. They exclude additional escalation costs and contingencies, which are incorporated into the soft costs portion of the project budget.

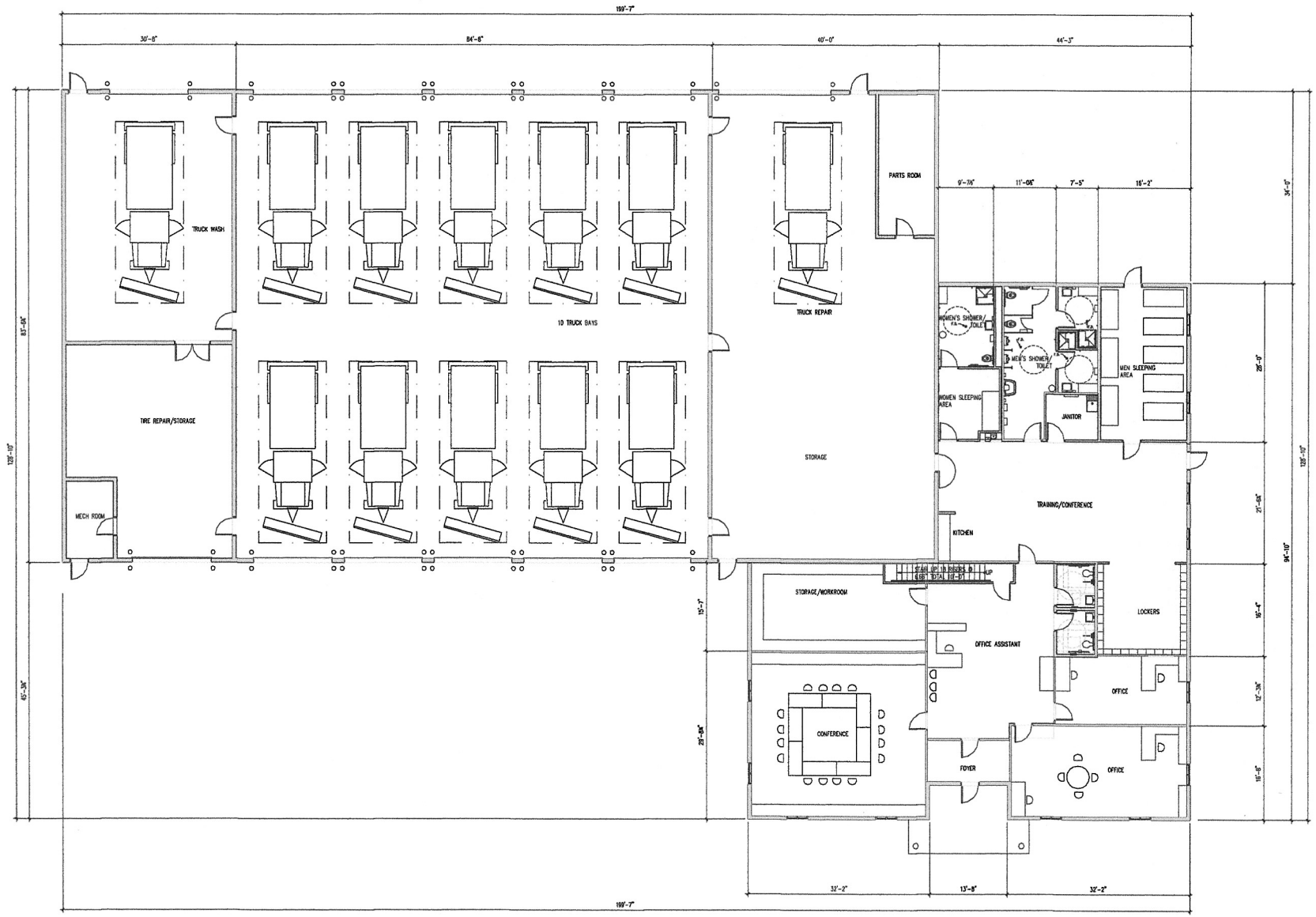
The probable costs are summarized as follow, and further described in the following pages:

		2017 Cost	2018 Cost
Building Only - Main Building	**Probable Construction Cost**	$ 4,409,921.88	$ 4,630,417.97
Building Only - Cold Storage	**Probable Construction Cost**	$ 635,224.00	$ 666,985.20
Building Only - Salt Storage	**Probable Construction Cost**	$ 1,724,356.80	$ 1,810,574.64
	Subtotal Building Construction	$ 6,769,502.68	$ 7,107,977.81
	Soft Costs	$ 1,110,928.81	$ 1,166,475.25
	Probable Project Cost	$ 7,880,431.49	$ 8,274,453.07

	Building Only - Main Building						
	Attic Storage			3,500	Square Feet		
	Office Area			5,700	Square Feet		
	Garage Area			13,000	Square Feet		
	Building Footprint			18,666	Square Feet		
	Total Area			22,166	Square Feet		
	Construction Square Foot Costs				**$198.95**	**$208.90**	
Code	Division Name	Quantity	Unit	Unit Cost	2017 Cost	2018 Cost	
01	General Conditions	22,166	SF	$ 30.00	$ 664,980.00	$ 698,229.00	
	Bond	2	PCT	$ 4,975,394.00	$ 99,507.88	$ 104,483.27	
	Permit	1	EA	$ 8,600.00	$ 8,600.00	$ 9,030.00	
03	Concrete	18,666	SF	$ 45.00	$ 839,970.00	$ 881,968.50	
04	Masonry	18,666	SF	$ 6.00	$ 111,996.00	$ 117,595.80	
05	Metals	18,666	SF	$ 5.00	$ 93,330.00	$ 97,996.50	
06	Wood, Plastics and Composites	5,700	SF	$ 5.00	$ 28,500.00	$ 29,925.00	
07	Thermal & Moisture protection	22,166	SF	$ 14.00	$ 310,324.00	$ 325,840.20	
08	Openings	22,166	SF	$ 13.00	$ 288,158.00	$ 302,565.90	
09	Finishes	5,700	SF	$ 50.00	$ 285,000.00	$ 299,250.00	
10	Specialties	5,700	SF	$ 3.00	$ 17,100.00	$ 17,955.00	
11	Equipment	5,700	SF	$ 9.00	$ 51,300.00	$ 53,865.00	
13	Special Construction	22,166	SF	$ 70.00	$ 1,551,620.00	$ 1,629,201.00	
21	Fire Suppression	22,166	SF	$ 6.00	$ 132,996.00	$ 139,645.80	
22	Plumbing	5,700	SF	$ 6.00	$ 34,200.00	$ 35,910.00	
23	HVAC	22,166	SF	$ 8.00	$ 177,328.00	$ 186,194.40	
26	Electrical	22,166	SF	$ 12.00	$ 265,992.00	$ 279,291.60	
28	Telecommunications	5,700	SF	$ 20.00	$ 114,000.00	$ 119,700.00	
	Opinion of Probable Construction Cost				**$ 4,409,921.88**	**$ 4,630,417.97**	
Soft Costs	Professional Fees	5%		$ 4,409,921.88	$ 220,496.09	$ 231,520.90	
Soft Costs	Town Administrative Costs	1%		$ 4,409,921.88	$ 44,099.22	$ 46,304.18	
Soft Costs	Furniture, Furnishings and Equipment	5,700	SF	$ 10.00	$ 57,000.00	$ 59,850.00	
Soft Costs	Land Acquisition	-	Acres	$ -	$ -	$ -	
Soft Costs	Relocation Costs	1	LS	$ 10,000.00	$ 10,000.00	$ 10,500.00	
Soft Costs	Utility Fees	1	LS	$ 8,000.00	$ 8,000.00	$ 8,400.00	
Soft Costs	Contingency	10%		$ 4,409,921.88	$ 440,992.19	$ 463,041.80	
	Total Opinion of Probable Soft Cost				**$ 780,587.50**	**$ 819,616.88**	
	Opinion of Probable Project Cost				**$ 5,190,509.38**	**$ 5,450,034.85**	
	Notes:						
1	Costs based on RS Means Building Construction Cost Data, updated for regional costs and Prevailing Wage requirements						

	Building Only - Cold Storage						
	Building Footprint			4,000	Square Feet		
	Total Area			4,000	Square Feet		
	Construction Square Foot Costs				**$158.81**	**$166.75**	
Code	Division Name	Quantity	Unit	Unit Cost	2017 Cost	2018 Cost	
01	General Conditions	4,000	SF	$ 20.00	$ 80,000.00	$ 84,000.00	
	Bond	2	PCT	$ 701,200.00	$ 14,024.00	$ 14,725.20	
	Permit	1	EA	$ 1,200.00	$ 1,200.00	$ 1,260.00	
03	Concrete	4,000	SF	$ 45.00	$ 180,000.00	$ 189,000.00	
04	Masonry	4,000	SF	$ 6.00	$ 24,000.00	$ 25,200.00	
05	Metals	4,000	SF	$ 5.00	$ 20,000.00	$ 21,000.00	
08	Openings	4,000	SF	$ 13.00	$ 52,000.00	$ 54,600.00	
13	Special Construction	4,000	SF	$ 70.00	$ 280,000.00	$ 294,000.00	
26	Electrical	4,000	SF	$ 6.00	$ 24,000.00	$ 25,200.00	
28	Telecommunications	4,000	SF	$ 10.00	$ 40,000.00	$ 42,000.00	
	Opinion of Probable Construction Cost				**$ 635,224.00**	**$ 666,985.20**	
Soft Costs	Professional Fees	3%		$ 635,224.00	$ 19,056.72	$ 20,009.56	
Soft Costs	Town Administrative Costs	1%		$ 635,224.00	$ 6,352.24	$ 6,669.85	
Soft Costs	Furniture, Furnishings and Equipment	-	SF	$ 10.00	$ -	$ -	
Soft Costs	Land Acquisition	-	Acres	$ -	$ -	$ -	
Soft Costs	Relocation Costs	-	LS	$ -	$ -	$ -	
Soft Costs	Utility Fees	-	LS	$ -	$ -	$ -	
Soft Costs	Contingency	10%		$ 635,224.00	$ 63,522.40	$ 66,698.52	
	Total Opinion of Probable Soft Cost				**$ 88,931.36**	**$ 93,377.93**	
	Opinion of Probable Project Cost				**$ 724,155.36**	**$ 760,363.13**	
	Notes:						
1	Costs based on RS Means Building Construction Cost Data, updated for regional costs and Prevailing Wage requirements						

	Building Only - Salt Storage						
	Building Footprint			9,960	Square Feet		
	Total Area			9,960	Square Feet		
	Construction Square Foot Costs				**$173.13**	**$181.78**	
Code	Division Name	Quantity	Unit	Unit Cost	2017 Cost	2018 Cost	
01	General Conditions	9,960	SF	$ 20.00	$ 199,200.00	$ 209,160.00	
	Bond	2	PCT	$ 1,885,840.00	$ 37,716.80	$ 39,602.64	
	Permit	1	EA	$ 3,400.00	$ 3,400.00	$ 3,570.00	
03	Concrete	9,960	SF	$ 65.00	$ 647,400.00	$ 679,770.00	
04	Masonry	9,960	SF	$ 6.00	$ 59,760.00	$ 62,748.00	
05	Metals	9,960	SF	$ 5.00	$ 49,800.00	$ 52,290.00	
08	Openings	9,960	SF	$ 7.00	$ 69,720.00	$ 73,206.00	
13	Special Construction	9,960	SF	$ 70.00	$ 697,200.00	$ 732,060.00	
26	Electrical	9,960	SF	$ 6.00	$ 59,760.00	$ 62,748.00	
28	Telecommunications	9,960	SF	$ 10.00	$ 99,600.00	$ 104,580.00	
	Opinion of Probable Construction Cost				**$ 1,724,356.80**	**$ 1,810,574.64**	
Soft Costs	Professional Fees	3%		$ 1,724,356.80	$ 51,730.70	$ 54,317.24	
Soft Costs	Town Administrative Costs	1%		$ 1,724,356.80	$ 17,243.57	$ 18,105.75	
Soft Costs	Furniture, Furnishings and Equipment	-	SF	$ 10.00	$ -	$ -	
Soft Costs	Land Acquisition	-	Acres	$ -	$ -	$ -	
Soft Costs	Relocation Costs	-	LS	$ -	$ -	$ -	
Soft Costs	Utility Fees	-	LS	$ -	$ -	$ -	
Soft Costs	Contingency	10%		$ 1,724,356.80	$ 172,435.68	$ 181,057.46	
	Total Opinion of Probable Soft Cost				**$ 241,409.95**	**$ 253,480.45**	
	Opinion of Probable Project Cost				**$ 1,965,766.75**	**$ 2,064,055.09**	
	Notes:						
1	Costs based on RS Means Building Construction Cost Data, updated for regional costs and Prevailing Wage requirements						



N

1 FLOOR PLAN
1/8" = 1'-0"

BL Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

150 Trumbull Street, 6th Floor
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

HEBRON DEPARTMENT OF PUBLIC WORKS
JOHN HORTON BOULEVARD EXTENSION
HEBRON, CT

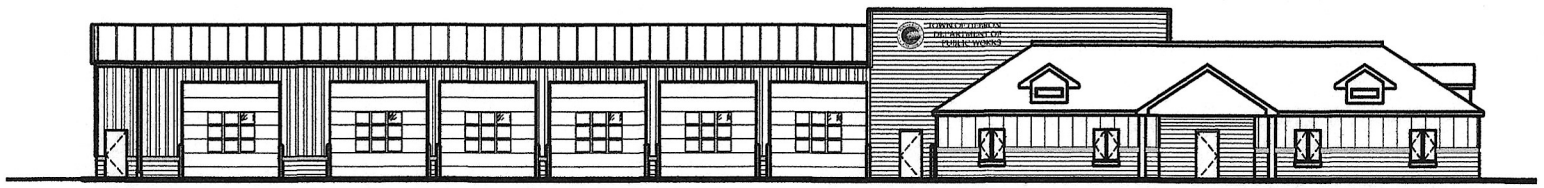
REVISIONS No.	Date	Desc.

Designed	NS
Drawn	NS
Checked	DJR
Approved	DJR
Scale	09D1384-N
Project No.	09D1384-N
Date	09/06/2017
CAD File:	XA09D138401

Title
FLOOR PLAN

Sheet No.
A1.01

Xref (s): 09P901384



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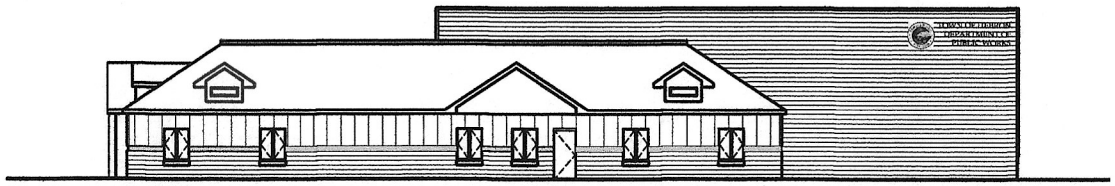
1/8" = 1'-0"



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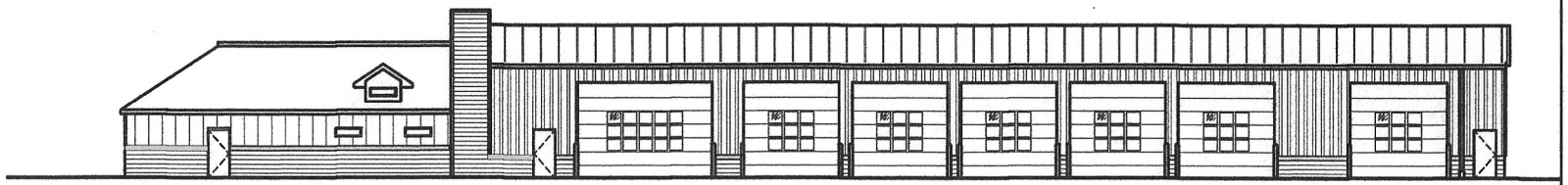

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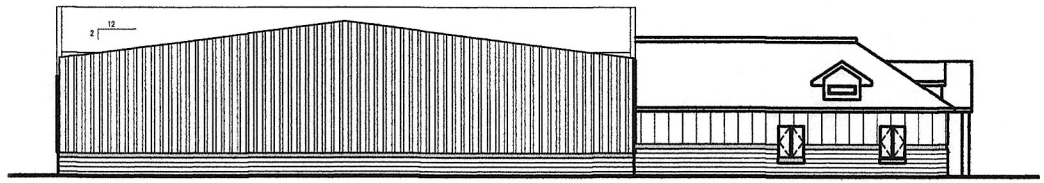

4 NORTH ELEVATION
1/8" = 1'-0"

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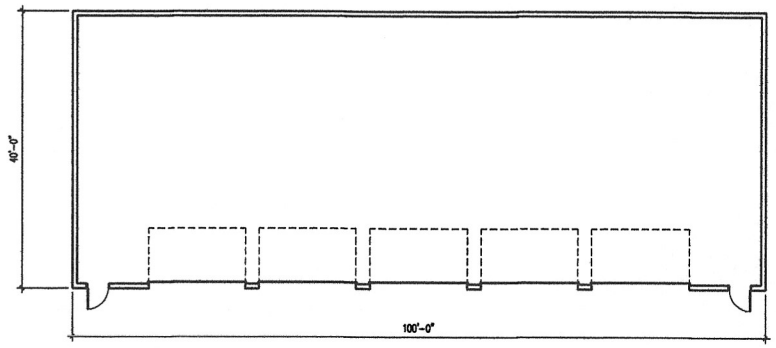
HEBRON DEPARTMENT OF PUBLIC WORKS
JOHN HORTON BOULEVARD EXTENSION
HEBRON, CT

No.	Date	Revisions Desc.

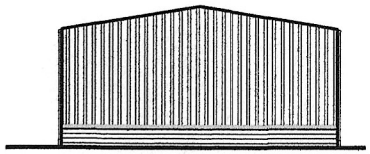
Designed	NS
Drawn	NS
Checked	DJR
Approved	DJR
Scale	0901384--N
Project No.	0901384--N
Date	08/08/2017
CAD File:	XV0901384001

Title
ELEVATIONS - GARAGE AND ADMINISTRATION BUILDING

Sheet No.
A2.01



1 FLOOR PLAN
1/8" = 1'-0"



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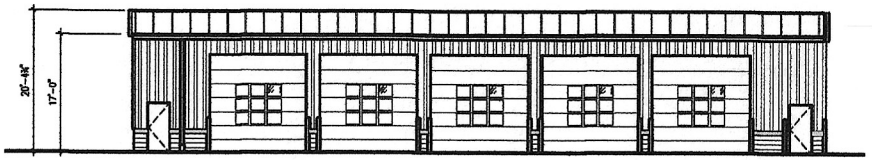

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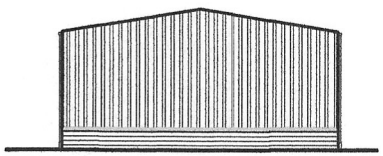
1/8" = 1'-0"



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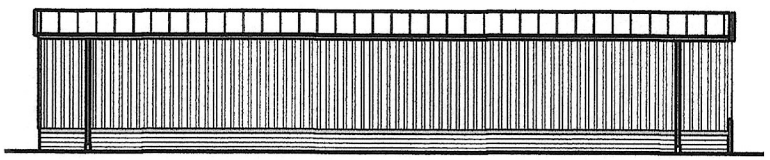
1/8" = 1'-0"



4 ELEVATION
1/8" = 1'-0"

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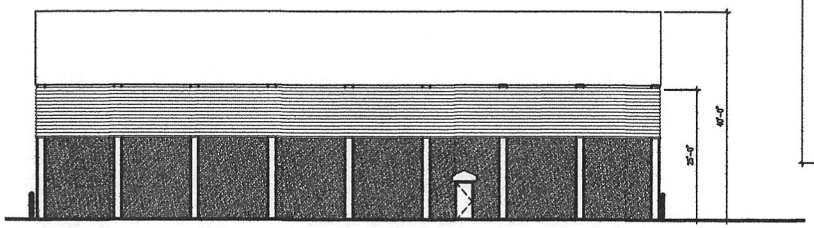
HEBRON DEPARTMENT OF PUBLIC WORKS
JOHN HORTON BOULEVARD EXTENSION
HEBRON, CT

REVISIONS
No. Date Rem.

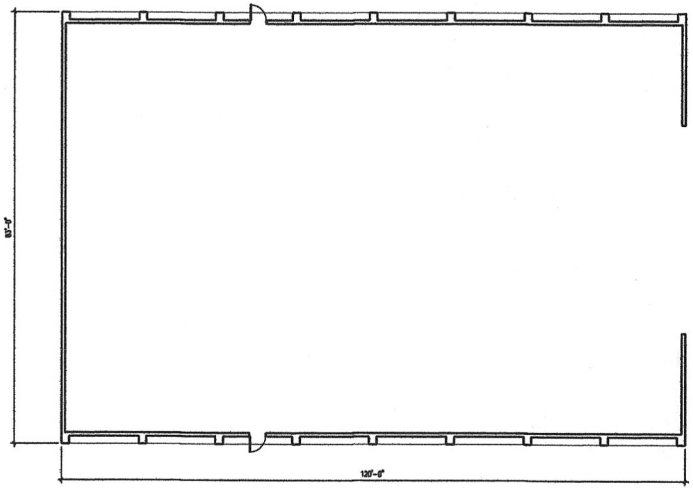
Designed	NS
Drawn	NS
Checked	DJR
Approved	DJR
Scale	0001384-N
Project No.	0001384-N
Date	09/06/2017
CAD File:	XV0001384G2

Title
COLD STORAGE
FLOOR PLAN
AND ELEVATIONS

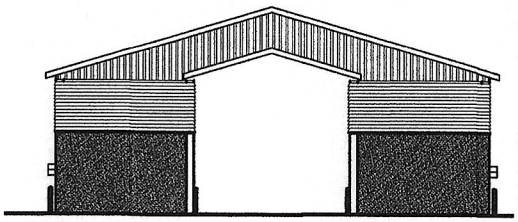
Sheet No.
A2.02



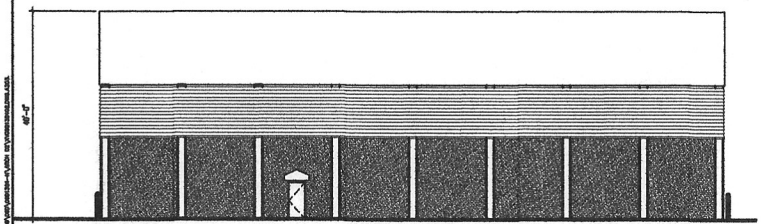
5 ELEVATION
3/32" = 1'-0"



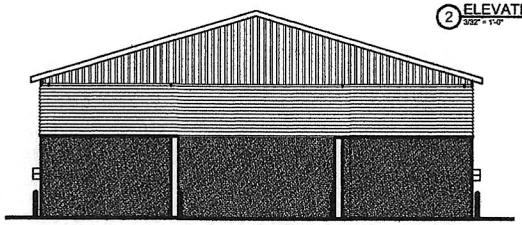
1 FLOOR PLAN
3/32" = 1'-0"



2 ELEVATION
3/32" = 1'-0"



4 ELEVATION
3/32" = 1'-0"



3 ELEVATION
3/32" = 1'-0"

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ENVIRONMENTAL
LAND SURVEYING

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Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

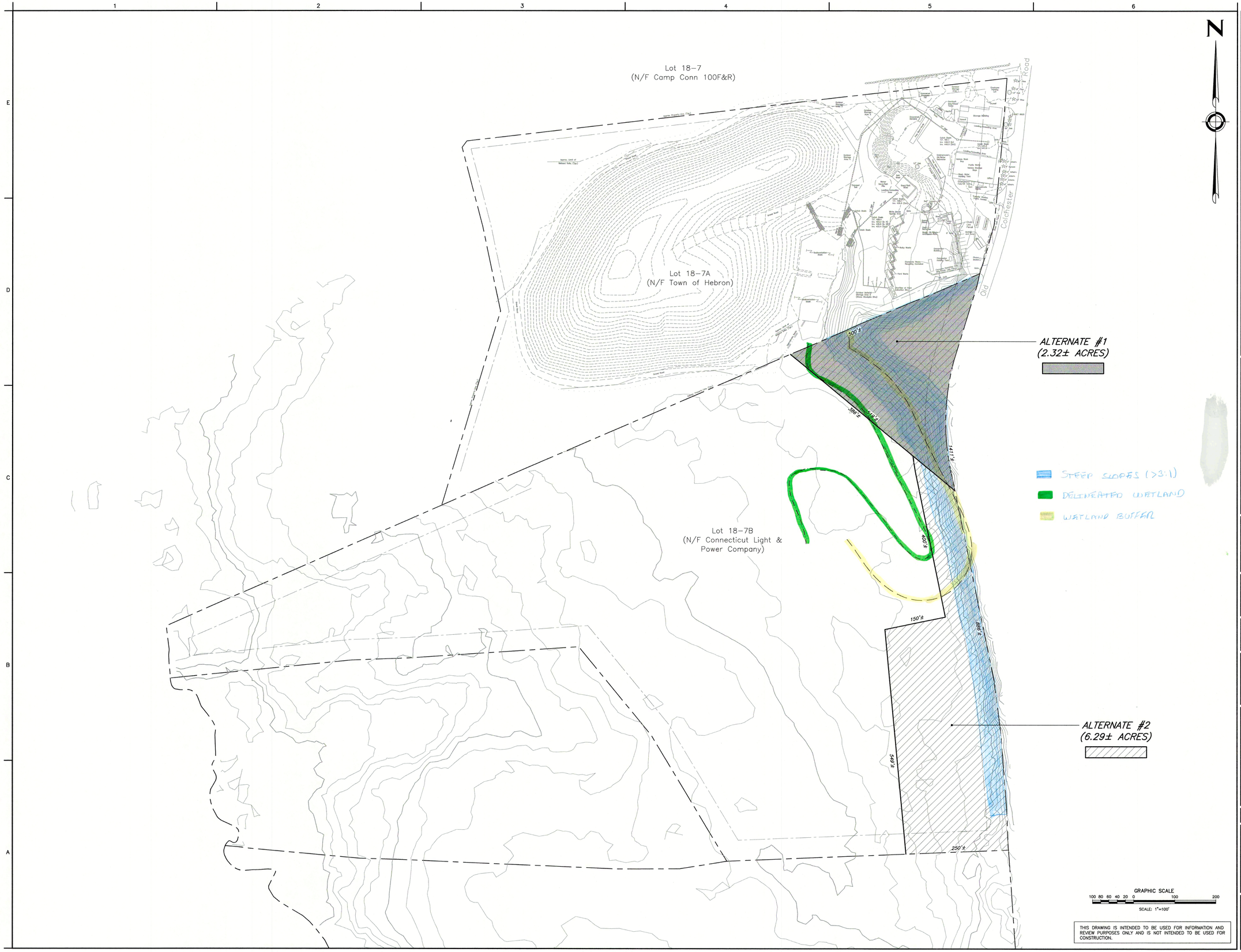
HEBRON DEPARTMENT OF PUBLIC WORKS
JOHN HORTON BOULEVARD EXTENSION
HEBRON, CT

REVISIONS
No. Date Item

Designed	NS
Drawn	NS
Checked	DJR
Approved	DJR
Scale	0901384--N
Project No.	0901384--N
Date	09/06/2017
CAD File:	XV0801384G2

TITLE
SALT SHED
FLOOR PLAN
AND ELEVATIONS

Sheet No.
A2.03



NOTES:

1. In General, Lower Case Text Identifies Existing Features/Conditions.
2. IN GENERAL, ***UPPER CASE TEXT IDENTIFIES PROPOSED FEATURES/CONDITIONS*** UNLESS OTHERWISE SPECIFIED.
3. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. THIS PLAN IS A DATA ACCUMULATION PLAN AND WAS COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.
4. REFERENCE IS MADE TO THE FOLLOWING DRAWINGS:

   "HEBRON MUNICIPAL LANDFILL CLOSURE PLAN, PREPARED FOR: TOWN OF HEBRON", SHEETS G1, DATE: 6-19-96, PREPARED BY: PARE ENGINEERING CORPORATION.

   "PUBLIC WORKS DEPARTMENT, OLD COLCHESTER ROAD, PROPOSED ABOVE GROUND FUEL STORAGE TANK", SHEET 1, DATE: JUNE 1999, PREPARED BY: NATHAN L. JACOBSON AND ASSOCIATES, INC.

   "TOWN OF HEBRON, TRANSFER STATION, IMPROVEMENT LOCATION PLAN", SHEET 1 OF 1, DATE: 5-20-98, PREPARED BY: NATHAN JACOBSON AND ASSOCIATES, INC.
5. UNDERGROUND UTILITIES, STRUCTURES AND OTHER FACILITIES DEPICTED HEREON HAVE BEEN COMPILED FROM RECORD DRAWINGS AND FIELD LOCATIONS OF ABOVE GROUND FACILITIES AND MARKOUTS. ALL UNDERGROUND FACILITY LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE ONLY AND ALL FACILITIES MAY NOT BE SHOWN.

TOWN OF
HEBRON, CONNECTICUT

PUBLIC WORKS /
TRANSFER STATION
EXPANSION

LAND ACQUISITION PLAN

CONCEPTUAL

Nathan L. Jacobson & Associates, Inc.
86 Main Street P.O. Box 337
Chester, Connecticut 06412-0337
Tel: (860) 526-9591 Fax: (860) 526-5416
www.nlja.com
Consulting Civil and Environmental Engineers Since 1972

NOT VALID WITHOUT ORIGINAL SEAL

THOMAS H. FENTON, P.E.
CT REGISTRATION No. 14400

REVISIONS

No.	DESCRIPTION	DATE

DATE:	MAY 2015
SCALE:	1"=100'
PROJECT No.:	06480052
CADD FILE:	06480052-Overall
DESIGNED:	THF
DRAWN:	AJG
CHECKED:	-

SHEET No.:
1 OF 1

THIS DRAWING IS INTENDED TO BE USED FOR INFORMATION AND REVIEW PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.

N

(7) MATERIAL STORAGE BINS

OUTDOOR STORAGE

(2) SENIOR BUS PARKING SPACES

SALT SHED
F.F. 436.00

COVERED STORAGE AREA
F.F. 430

OUTDOOR STORAGE

FUEL TANK

(6) SPARE CONTAINERS

GARAGE
F.F. 447.00

OFFICE
F.F. 447.00

EQUIPMENT STORAGE
F.F. 446.00

BULKY WASTE

BULKY WASTE

BRUSH

BRUSH

MSW

RECYCLE

RECYCLE

MSW

METAL

(2) ELECTRONICS

SWAP AREA

WHITE GOODS

TIRES

ANTI-FREEZE/ WASTE OIL

(2) CLOTHING DONATION BOXES

ATTENDANT BUILDING

Sedimentation Basin

Sedimentation Basin

Approx. Limit of Wetland Soils (Typ.)

Approximate Swale

Riprap

Riprap

Old Colchester Road

GRAPHIC SCALE
20 10 0 20 40
SCALE: 1"=20'

TOWN OF HEBRON
PUBLIC WORKS EXPANSION FEASIBILITY STUDY
CONCEPTUAL SITE PLAN

DATE: 06-22-15

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Chester, Connecticut 06412-0337
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TOWN OF HEBRON
PUBLIC WORKS EXPANSION FEASIBILITY STUDY
CONCEPTUAL SITE PLAN

DATE: 06-22-15

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Tel: (860) 526-9591 Fax: (860) 526-5416
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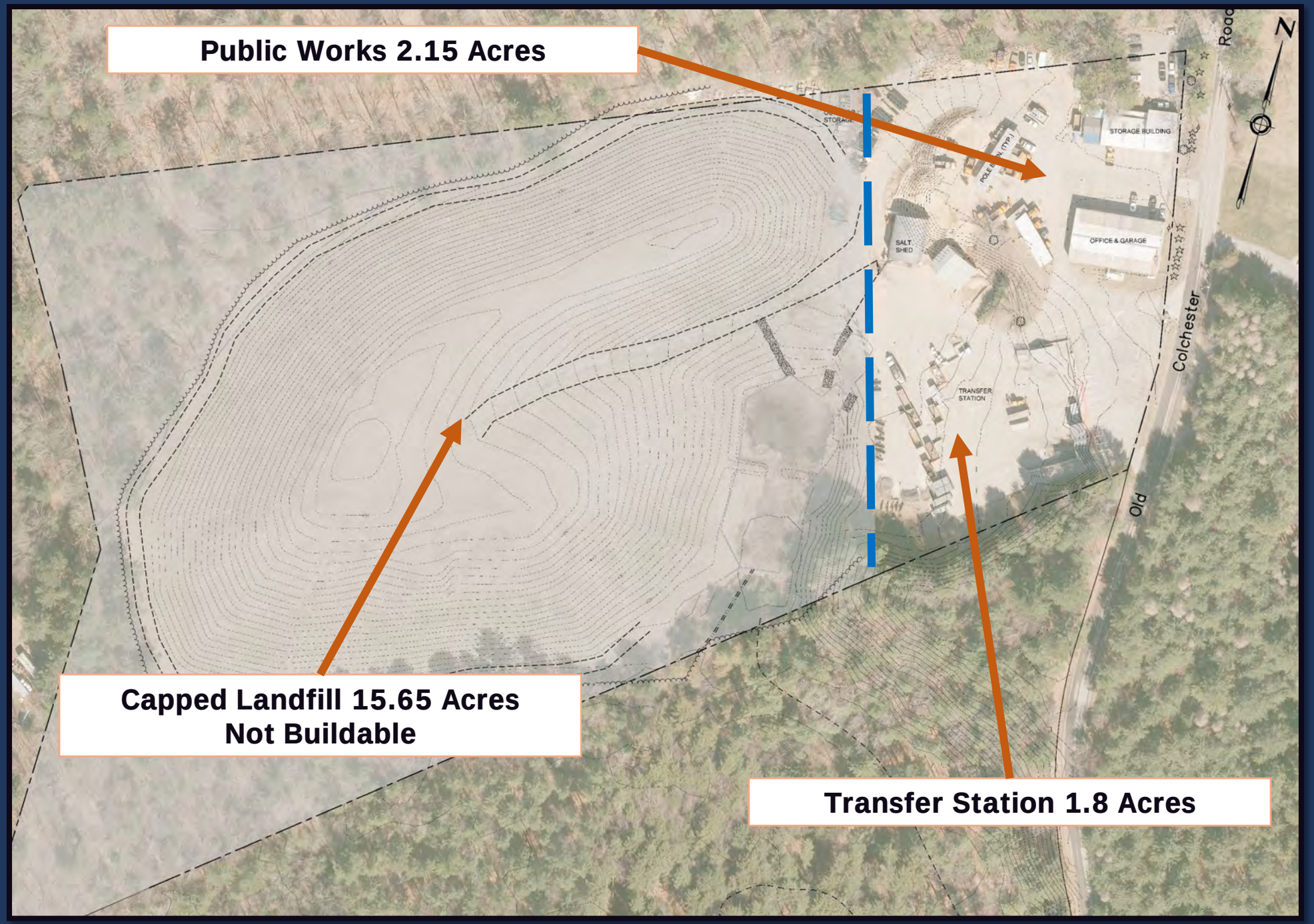
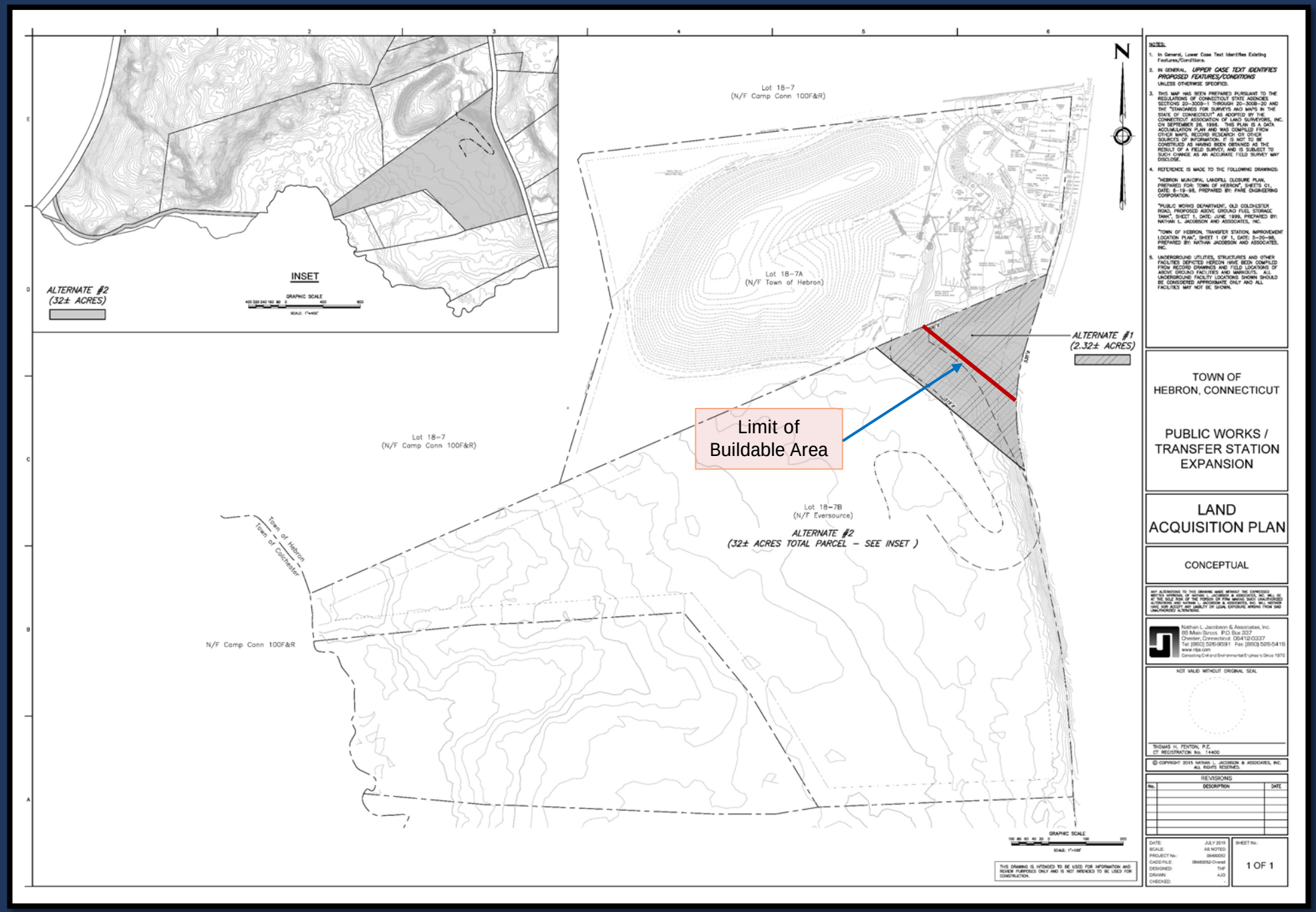
Existing Site

Old Colchester Road
Total Site Area:
19.6 Acres




INSET
ALTERNATE #2
(32± ACRES)
GRAPHIC SCALE
Lot 18-7
(N/F Camp Conn 100F&R)
Lot 18-7A
(N/F Town of Hebron)
ALTERNATE #1
(2.32± ACRES)
Limit of
Buildable Area
Lot 18-7
(N/F Camp Conn 100F&R)
Lot 18-7B
(N/F Eversource)
ALTERNATE #2
(32± ACRES TOTAL PARCEL – SEE INSET)
Town of Hebron
Town of Colchester
N/F Camp Conn 100F&R
N
GRAPHIC SCALE
NOTES:
1. In General, Lower Case Text Identifies Existing Features/Conditions.
2. IN GENERAL, UPPER CASE TEXT IDENTIFIES PROPOSED FEATURES/CONDITIONS UNLESS OTHERWISE SPECIFIED.
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TOWN OF
HEBRON, CONNECTICUT
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TRANSFER STATION
EXPANSION
LAND
ACQUISITION PLAN
CONCEPTUAL
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CT REGISTRATION No. 14400
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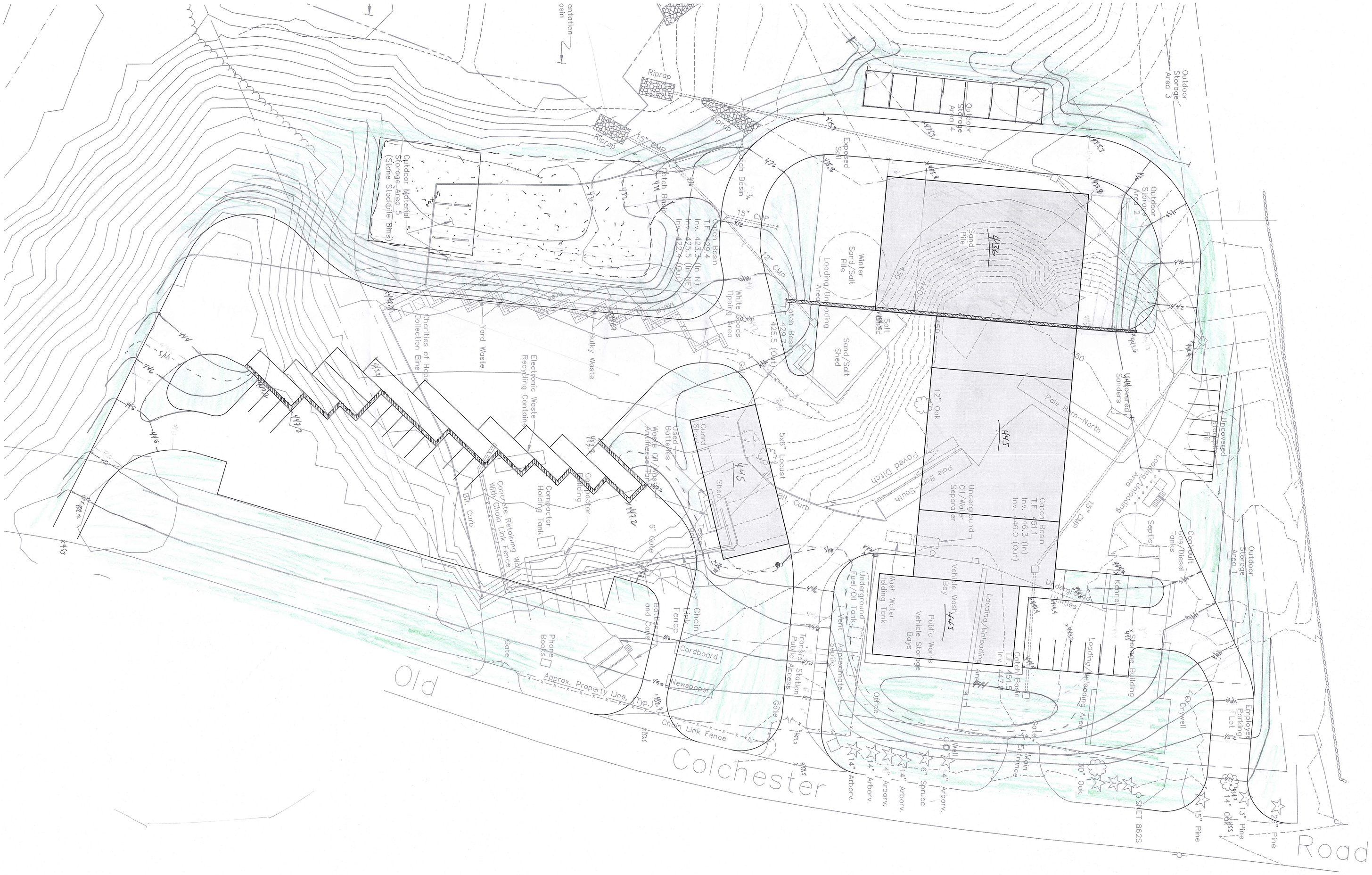
REVISIONS
No.
DESCRIPTION
DATE
DATE: JULY 2015
SCALE: AS NOTED
PROJECT No.: 06480052
CADD FILE: 06480052-Overall
DESIGNED: THF
DRAWN: AJG
CHECKED:
SHEET No.:
1 OF 1
THIS DRAWING IS INTENDED TO BE USED FOR INFORMATION AND REVIEW PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.

- 8FT ELEVATION DIFFERENCE BETWEEN PUBLIC PLATFORM AND CONTAINER PLATFORM ONLY BECAUSE TOPOGRAPHY SUPPORTED IT. LESS THAN 8FT DIFFERENCE CAN BE ACCOMPLISHED WITH MINOR LAYOUT ADJUSTMENTS.
- PUBLIC ROUTE MIGHT WANT TO BE REVERSED FROM WHAT IS SHOWN BECAUSE MAJORITY OF TRAFFIC IS COMING FROM NORTH. CONTAINER LAYOUT SHOULD BE MIRRORED IF REVERSED.



TOWN OF HEBRON
PUBLIC WORKS EXPANSION FEASIBILITY STUDY
CONCEPTUAL SITE PLAN
DATE: 06-22-15

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Tel: (860) 526-9591 Fax: (860) 526-5416
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ATTACHMENT "O"

Feasibility Study

DEPARTMENT OF PUBLIC WORKS

John Horton Boulevard Extension
HEBRON, CONNECTICUT

Prepared for:
The Town of Hebron

Prepared by:

BL Companies

100 Constitution Plaza
Hartford, CT

September 25, 2017

BL09D1384-N

EXECUTIVE SUMMARY

TABLE OF CONTENTS

I – INTRODUCTION

The Town of Hebron commissioned BL Companies to develop functional conceptual building plans and elevations for the proposed new location of the Department of Public Works Garage to be located on the proposed extension to John Horton Boulevard, in Hebron. The existing facility is located at 550 Old Colchester Road, Hebron, CT, approximately three miles south of the Town Center.

The existing facility consists of several buildings that were built as need arose in order to accommodate Public Works trucks and equipment storage. The site also houses a transfer station, dog pound and truck repair and wash facilities. It is anticipated that the Pound and Transfer Station will remain at their present location, and that the new location will house the new DPW Garage, the administrative functions of the department, a cold storage facility and a salt shed, as well as the work yard for the staging of the various DPW activities.

This report seeks to address space allocation for the assessed needs developed in conjunction with the administration and staff of the Department, as well as input from other Town administrators. The main purpose of this study is to develop building plan requirements for a new Department of Public Works Garage complex, encompassing the activities described above.

This Study was performed in conjunction with the offices of Nathan L. Jacobson & Associates, Inc., who developed the site parameters for the facility, and the layout of the proposed John Horton Town Facilities campus, that may eventually house a Town Government Center and Fire Station.

The need to relocate to a new site and replace existing buildings with new facilities had been determined through a previous study performed by CME Associates, which concluded that the existing buildings were insufficient in size or function to address the needs of a modern Department of Public Works, as well as the determination by Jacobson & Associates that the existing location was too small and congested to accommodate the necessary construction of new facilities and improvements to the existing facilities without unacceptable disruption to the function of the Department. A study of the work necessary to bring the existing buildings into compliance with current standards was performed in 2015 by BL Companies, concluding that the existing buildings had reached the end of their useful life, and were in need of replacement.

II – BUILDING PROGRAMMATIC REQUIREMENTS

A. Space and Needs Development

The space and needs program for the facility were developed from data provided by Town and Department staff and administrators, as well as data derived from the previous Preliminary Program Report.

B. Programmatic Categories

1. Vehicle Storage and Repair

Vehicle Storage: 7,000 SF

This will be an enclosed heated space. The garage will have ten parking spaces for plow trucks with snow plows. The garage parking will be developed so that the parking of one vehicle will not interfere with the movement of others.

Finishes: sealed concrete floor, CMU wainscot wall, insulated metal panel wall, insulated metal roof.

Vehicle Repair: 3,250 SF

This area will house a repair garage in a vehicle bay. This area will also house a 250 SF Parts Room

Finishes: sealed concrete floor, CMU wainscot wall, insulated metal panel wall, insulated metal roof.

Truck Wash Bay: 1,300 SF

This area will house a washing bay.

Finishes: sealed concrete floor, glazed masonry walls, insulated metal roof with liner.

Tire Storage Area: 1,000 SF

Finishes: sealed concrete floor, CMU wainscot wall, insulated metal panel wall, insulated metal roof.

2. Administration

Offices: 3,100 SF

These facilities will include a DPW Director's Office, an Assistant Director's Office, an Administrative Assistant's Office, Lobby/Waiting Area, Work Room, Storage Room, Toilets, Kitchenette, and a Meeting Room.

Finishes: Offices, Lobby/Waiting Area, Meeting Room will be provided with carpet tile flooring, painted walls, suspended acoustical ceiling. Work Room and Storage Room will be provided with vinyl composition tile Flooring, painted walls, suspended acoustical ceiling. Toilets will be provided with ceramic tile floor and wainscots, and painted drywall ceilings.

Furnishings: Toilet areas will be provided with accessories.

3. Staff and Support Spaces

Day Room/Training/Lockers: 1,200 SF

This area is intended for training, meeting and gathering space for the members of the department. It will be provided with residential-type cooking appliances.

Finishes: Vinyl composition tile flooring, painted gypsum board walls, acoustical ceiling tile.

Furnishings: None scheduled.

Men Toilets, Showers and Sleeping Area: 850 SF

This area houses the Men's Sleeping Area and multiple-occupant Toilet and Shower.

Finishes: Athletic carpet flooring in sleeping area, ceramic tile elsewhere, concrete masonry and gypsum board walls, with ceramic tile wainscot at Toilet and Shower areas, acoustical ceiling throughout.

Furnishings: Toilet and Shower areas will be provided with accessories and privacy partitions.

Women Toilets, Showers and Sleeping Area: 300 SF

This area houses the Women's Sleeping Area and single-occupant Toilet and Shower.

Finishes: Athletic carpet flooring in sleeping area, ceramic tile elsewhere, concrete masonry and gypsum board walls, with ceramic tile wainscot at Toilet and Shower areas, acoustical ceiling throughout.

Furnishings: Toilet and Shower area will be provided with accessories.

Upper Level Storage: 3,500 sf

Finishes: Resilient flooring, moisture resistant painted gypsum walls.

Furnishings: None scheduled.

4. Accessory Buildings

Cold Storage: 4,000 SF

This will be an enclosed un-heated space. The storage facility will have five bays for seasonal equipment, tools and heavy-duty repair supplies.

Finishes: sealed concrete floor, CMU wainscot wall, non-insulated metal panel wall, non-insulated metal roof.

Salt Storage: 10,000 SF

This will be a covered un-heated space. The salt storage facility will have a single bay containing salt storage and a mixing pad.

Finishes: sealed concrete floor, concrete stem wall with upper louvers for ventilation, non-insulated metal roof.

C. Space Program Summary – Garage and Administration Building

The following Table illustrates the Net Square Feet building area required to fulfill the programmatic needs of Department of Public Works, with a gross building area of 18,700 square feet.

Category	Room	No	Room Area	Subtotal	Notes
Vehicle Storage & Repair	Vehicle Parking	10	700	7,000	
Vehicle Storage & Repair	Vehicle Repair	1	3,000	3,000	
Vehicle Storage & Repair	Parts Room	1	250	250	
Vehicle Storage & Repair	Truck Wash	1	1,300	1,300	
Vehicle Storage & Repair	Tire Storage	1	1,000	1,000	Provide High Hazard Fire Protection
Subtotal Net		-	-	12,550	
Unaccounted Area		-	-	50	
Total Net Area		**-**	**-**	**12,600**	**NSF**
Category	**Room**	**No**	**Room Area**	**Subtotal**	**Notes**
Administration	Director's Office	1	500	500	Includes Conference Area
Administration	Assistant Director	1	280	280	Includes Conference Area
Administration	Administrative Assistant	1	150	150	
Administration	Lobby	1	100	100	
Administration	Meeting Room	1	850	850	Sized for Department meetings
Administration	Open Office	1	500	500	
Administration	Storage and Files	1	550	550	
Administration	Toilets	1	150	150	
Subtotal Net				3,080	
Unaccounted Area				20	
Total Net Area				**3,100**	**NSF**
Category	**Room**	**No**	**Room Area**	**Subtotal**	**Notes**
Support Spaces	Lockers	1	200	200	
Administration	Training/Day Room	1	850	850	
Administration	Kitchen	1	150	150	
Administration	Men Sleep Area	1	450	450	
Administration	Men Toilets and Showers	1	400	400	
Administration	Women Sleep Area	1	150	150	
Administration	Women Toilets and Showers	1	150	150	
Administration	Janitor	1	80	80	
Subtotal Net				2,430	
Unaccounted Area				170	
Total Net Area				**2,600**	**NSF**
Category	**Room**	**No**	**Room Area**	**Subtotal**	**Notes**
Miscellaneous	Upper Level Storage	1	3,500	3,500	
Subtotal Net		-	-	3,500	
Unaccounted Area		-	-	-	
Total Net Area		**-**	**-**	**3,500**	**NSF**
	NET AREA			18,300	Does not include Upper Level
	UNASSIGNED AREA (%)			2	Percent
	UNASSIGNED AREA (SF)			366	SF
	TOTAL GROSS			**18,666**	**SF**

III – DRAWINGS

The following conceptual drawings illustrate solutions to the space and needs parameters described in the remainder of this study. These drawings are attached at the end of this document, and include:

A1.01 Garage and Administration Building Floor Plan
A2.01 Garage and Administration Building Elevations
A2.02 Cold Storage Floor Plan and Elevations
A2.03 Salt Storage Floor Plan and Elevations

IV – PROJECT DESCRIPTION

This project description addresses building elements not otherwise described in the remainder of this study. The elements associated with this project are described in the following sections of this report, and form the basis for the opinion of probable cost for the project.

The project consists of the proposed approximately 18,700 square-foot building. The concept developed for this study is based on the necessity to simplify the existing dispatching of the apparatus from the facility and to maintain vehicles indoors in inclement weather. To that end, all new bays will be drive through. The remainder of the facility is designed around that premise.

Major building elements which were analyzed as part of this study are described in the following narrative.

A. Architectural Considerations

The building layout is based on the Department's vision to comply with the space and needs requirements of this study while presenting to the street a façade that is not representative of the activities happening within the building.

To that end, the one-story building is intended to present a pedestrian-scale front onto the street, offset to obstruct the view of the yard and activities happening behind the building. The main apparent building contains the administrative functions of the facility, and those that would be visited by the public. This area is accessed by means of the main entry.

A further portion of the building houses the remainder of the Department spaces, including vehicle storage, repair, and wash bays.

Defined architectural elements of this building consist of the following:

1. In general, the building construction will consist of a pre-engineered structure for the vehicle areas, and conventional steel stud construction for the remainder of the building, offset to render the building less industrial in nature. Vehicle areas will be finishes as described earlier in the report. Areas that will sustain extended use will be constructed with abuse or impact-resistant gypsum board, and some walls will be constructed with concrete masonry.

2. Roof materials will consist of standing seam metal roofing at pitched portions of the roof.

3. Exterior service and utility doors will be galvanized hollow metal doors with continuous hinges. Garage doors will be insulated sectional metal doors. Interior service doors will be constructed of hollow metal. Windows will be thermally broken aluminum units, with insulated low "E" glazing; entrances at the building lobbies will be constructed of similar material.

4. The building will be constructed of type II-B construction (noncombustible unprotected). The entire facility will be provided with an automatic fire suppression system (sprinklers).

5. The building will be fully accessible to persons with disabilities, in compliance with the requirements of the State of Connecticut Building Code, and will comply with the standards established in the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

B. Structural Design Considerations

There have been no geotechnical site investigations performed on the existing site, as previous construction confirms that the underlying soils can support the use of conventional spread footings.

New slabs-on-grade will be 6" thick, reinforced with 6x6-W1.4xW1.4 or fiber mesh. Slabs-on-grade will be constructed on one layer of permeable fill and a vapor barrier to protect the slab and floor finishes from potential moisture problems related to infiltration from underground sources.

The majority of new roof structure will be pre-engineered steel frames with purlin roof supports.

Walls will be metal stud backup for office areas and CMU at the vehicle areas. Masonry will require grouting and vertical rebar at 48" on center maximum with additional reinforcing around openings.

Lintels for masonry walls will be precast elements of a thickness to match the wythe containing it. Lintels of steel or cold form will be used as necessary in other situations.

At this time, no unusual architectural elements are known to be programmed for the project (self-supported/detached canopies, roof-top sculptures, decorative site walls, etc.). Site retaining walls may be required depending on site constraints and the final site grading.

C. HVAC, Plumbing and Fire Protection Systems Considerations

1. Design Criteria

The HVAC design will comply with the requirements of the 2012 International Energy Code, as it is anticipated to be adopted in 2016 and will be a regulatory requirement when this building is constructed.

2. General HVAC Requirements

A new boiler plant and pumps will be provided to supply hot water heating to the existing spaces and the addition. New distribution piping will supply the hot water to new unit heaters, cabinet heaters, radiation and heating coils.

Toilets, Showers, Locker Rooms and Kitchens will be mechanically ventilated. The active Apparatus Rooms will be provided with general exhaust.

The Administrative Facilities will be provided with air conditioning.

3. Ventilation

All ventilation and air conditioning in office areas will be through a Variable Refrigerant Flow system, fed from a pad-mounted condensing unit.

4. Plumbing Systems

Plumbing fixtures will be mounted on wall carriers to minimize floor penetrations. Current water use guidelines will be incorporated into the design. All new toilet rooms will be designed to be accessible to persons with disabilities.

5. Fire Protection

The building will be completely sprinklered as required by the building code. The system will be a hydraulically calculated, wet pipe system. All associated electronic aspects of the fire protection system will be fully interfaced with the fire alarm system. A fire pump is not anticipated at this time.

D. Electrical and Fire Alarm Systems Considerations

1. Electric Service

A new 120/208 volt, 3 phase service to the Fire Department will be provided. The service will be 400 amps. A new distribution panel and two branch circuit panels will also be provided.

2. Standby Power

The facility will have one generator supplying standby power for the building. The generator will be sized to serve 100 percent of the entire building load.

3. Power Distribution System

The power distribution equipment will be installed in an electrical distribution room and in electrical closets distributed throughout the facility, in the mechanical room and in the kitchen.

4. Lighting

Typically, lighting fixtures will be specified providing illumination levels in accordance with IESNA standards and ASHRAE 90.1 for various spaces. The design intent for lighting in each space is described below.

Indoor lighting fixtures will generally be fluorescent troffers with energy-saving T8 lamps and electronic ballasts. Alternatively, the use of LED fixtures will be investigated during the design phase of this project.

5. Fire Alarm

The fire alarm will be fully addressable and comply with the requirements of NFPA 72, the Connecticut Fire Code and the requirements of the Town of Hebron Fire Marshal. The system will be comprised of a fire alarm control panel, annunciator panel, initiation devices, notification appliances, and voice control, circuit modules and power supply.

The annunciator panel display will indicate the room number that tripped the alarm. Notification will automatically be sent to the local fire department upon an alarm.

E. Telecommunications and Security System Considerations

Telecommunications: A Communications Network Infrastructure will encompass the data, telephone, and CATV Systems, and a PA system. The building will be designed to accommodate the communications building entry point.

Security: The building will be provided with a dedicated point of access alarm system. The security system will have the ability of be be field programmed to turn on and off on a schedule or be manually overridden with a personal identification number. The system will also be equipped with a remote access to activate or deactivate off site. In the event of an alarm, a signal will be sent the Hebron Police Department.

Telephone: The building will be provided with a telephone system. Phones will be digital type and equipped with an integrated voice mail system.

PA systems: The building will include a public address system integrated with the building telephone system. The public address system will include dedicated speakers and a programmable announcement tone. Speakers will be sized based on the size of the space and the ambient noise levels.

Computer Network: The computer network will be from a centralized server with Cat 6e cable horizontal distribution. The building will also be provided with wireless routers.

Clocks: There will be a centralized system in the building.

V – OPINION OF PROBABLE CONSTRUCTION AND PROJECT COSTS

The following opinions of costs are calculated as a function of the scheduled and anticipated construction assemblies and components for the building, site development and on-site work associated with the construction of this facility. These elements are factored by construction section line item costs on a square foot of assembly cost, resulting in a probable cost for the entire project.

The opinions of costs are based on the project elements described in this submittal, and are based on a single-bid method of delivery system.

The presented opinions of construction costs are based on year 2017 dollars, extrapolated to 2018 dollars. They exclude additional escalation costs and contingencies, which are incorporated into the soft costs portion of the project budget.

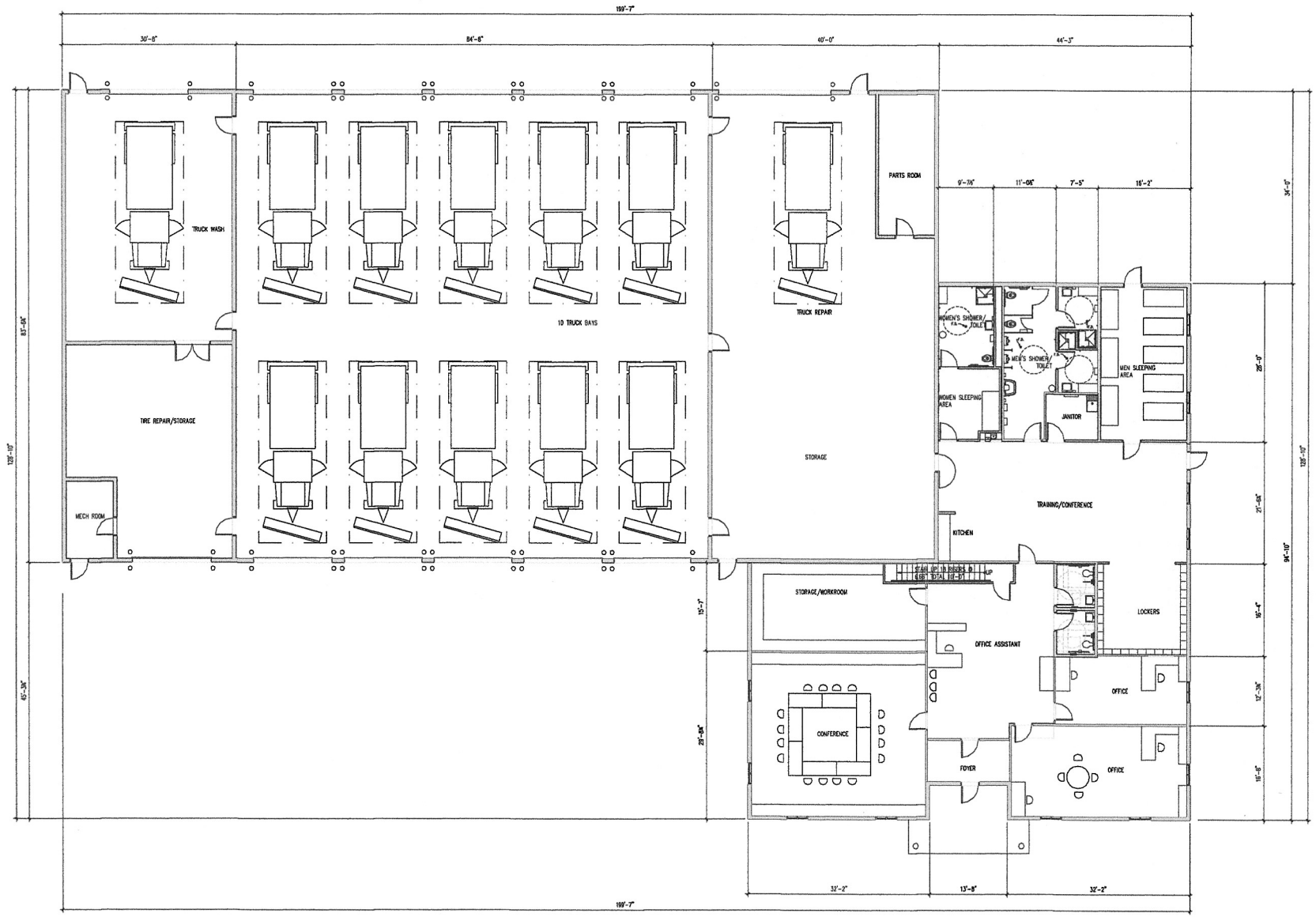
The probable costs are summarized as follow, and further described in the following pages:

		2017 Cost	2018 Cost
Building Only - Main Building	**Probable Construction Cost**	$ 4,409,921.88	$ 4,630,417.97
Building Only - Cold Storage	**Probable Construction Cost**	$ 635,224.00	$ 666,985.20
Building Only - Salt Storage	**Probable Construction Cost**	$ 1,724,356.80	$ 1,810,574.64
	Subtotal Building Construction	$ 6,769,502.68	$ 7,107,977.81
	Soft Costs	$ 1,110,928.81	$ 1,166,475.25
	Probable Project Cost	$ 7,880,431.49	$ 8,274,453.07

	Building Only - Main Building						
	Attic Storage			3,500	Square Feet		
	Office Area			5,700	Square Feet		
	Garage Area			13,000	Square Feet		
	Building Footprint			18,666	Square Feet		
	Total Area			22,166	Square Feet		
	Construction Square Foot Costs				**$198.95**	**$208.90**	
Code	Division Name	Quantity	Unit	Unit Cost	2017 Cost	2018 Cost	
01	General Conditions	22,166	SF	$ 30.00	$ 664,980.00	$ 698,229.00	
	Bond	2	PCT	$ 4,975,394.00	$ 99,507.88	$ 104,483.27	
	Permit	1	EA	$ 8,600.00	$ 8,600.00	$ 9,030.00	
03	Concrete	18,666	SF	$ 45.00	$ 839,970.00	$ 881,968.50	
04	Masonry	18,666	SF	$ 6.00	$ 111,996.00	$ 117,595.80	
05	Metals	18,666	SF	$ 5.00	$ 93,330.00	$ 97,996.50	
06	Wood, Plastics and Composites	5,700	SF	$ 5.00	$ 28,500.00	$ 29,925.00	
07	Thermal & Moisture protection	22,166	SF	$ 14.00	$ 310,324.00	$ 325,840.20	
08	Openings	22,166	SF	$ 13.00	$ 288,158.00	$ 302,565.90	
09	Finishes	5,700	SF	$ 50.00	$ 285,000.00	$ 299,250.00	
10	Specialties	5,700	SF	$ 3.00	$ 17,100.00	$ 17,955.00	
11	Equipment	5,700	SF	$ 9.00	$ 51,300.00	$ 53,865.00	
13	Special Construction	22,166	SF	$ 70.00	$ 1,551,620.00	$ 1,629,201.00	
21	Fire Suppression	22,166	SF	$ 6.00	$ 132,996.00	$ 139,645.80	
22	Plumbing	5,700	SF	$ 6.00	$ 34,200.00	$ 35,910.00	
23	HVAC	22,166	SF	$ 8.00	$ 177,328.00	$ 186,194.40	
26	Electrical	22,166	SF	$ 12.00	$ 265,992.00	$ 279,291.60	
28	Telecommunications	5,700	SF	$ 20.00	$ 114,000.00	$ 119,700.00	
	Opinion of Probable Construction Cost				**$ 4,409,921.88**	**$ 4,630,417.97**	
Soft Costs	Professional Fees	5%		$ 4,409,921.88	$ 220,496.09	$ 231,520.90	
Soft Costs	Town Administrative Costs	1%		$ 4,409,921.88	$ 44,099.22	$ 46,304.18	
Soft Costs	Furniture, Furnishings and Equipment	5,700	SF	$ 10.00	$ 57,000.00	$ 59,850.00	
Soft Costs	Land Acquisition	-	Acres	$ -	$ -	$ -	
Soft Costs	Relocation Costs	1	LS	$ 10,000.00	$ 10,000.00	$ 10,500.00	
Soft Costs	Utility Fees	1	LS	$ 8,000.00	$ 8,000.00	$ 8,400.00	
Soft Costs	Contingency	10%		$ 4,409,921.88	$ 440,992.19	$ 463,041.80	
	Total Opinion of Probable Soft Cost				**$ 780,587.50**	**$ 819,616.88**	
	Opinion of Probable Project Cost				**$ 5,190,509.38**	**$ 5,450,034.85**	
	Notes:						
1	Costs based on RS Means Building Construction Cost Data, updated for regional costs and Prevailing Wage requirements						

	Building Only - Cold Storage						
	Building Footprint			4,000	Square Feet		
	Total Area			4,000	Square Feet		
	Construction Square Foot Costs				**$158.81**	**$166.75**	
Code	Division Name	Quantity	Unit	Unit Cost	2017 Cost	2018 Cost	
01	General Conditions	4,000	SF	$ 20.00	$ 80,000.00	$ 84,000.00	
	Bond	2	PCT	$ 701,200.00	$ 14,024.00	$ 14,725.20	
	Permit	1	EA	$ 1,200.00	$ 1,200.00	$ 1,260.00	
03	Concrete	4,000	SF	$ 45.00	$ 180,000.00	$ 189,000.00	
04	Masonry	4,000	SF	$ 6.00	$ 24,000.00	$ 25,200.00	
05	Metals	4,000	SF	$ 5.00	$ 20,000.00	$ 21,000.00	
08	Openings	4,000	SF	$ 13.00	$ 52,000.00	$ 54,600.00	
13	Special Construction	4,000	SF	$ 70.00	$ 280,000.00	$ 294,000.00	
26	Electrical	4,000	SF	$ 6.00	$ 24,000.00	$ 25,200.00	
28	Telecommunications	4,000	SF	$ 10.00	$ 40,000.00	$ 42,000.00	
	Opinion of Probable Construction Cost				**$ 635,224.00**	**$ 666,985.20**	
Soft Costs	Professional Fees	3%		$ 635,224.00	$ 19,056.72	$ 20,009.56	
Soft Costs	Town Administrative Costs	1%		$ 635,224.00	$ 6,352.24	$ 6,669.85	
Soft Costs	Furniture, Furnishings and Equipment	-	SF	$ 10.00	$ -	$ -	
Soft Costs	Land Acquisition	-	Acres	$ -	$ -	$ -	
Soft Costs	Relocation Costs	-	LS	$ -	$ -	$ -	
Soft Costs	Utility Fees	-	LS	$ -	$ -	$ -	
Soft Costs	Contingency	10%		$ 635,224.00	$ 63,522.40	$ 66,698.52	
	Total Opinion of Probable Soft Cost				**$ 88,931.36**	**$ 93,377.93**	
	Opinion of Probable Project Cost				**$ 724,155.36**	**$ 760,363.13**	
	Notes:						
1	Costs based on RS Means Building Construction Cost Data, updated for regional costs and Prevailing Wage requirements						

	Building Only - Salt Storage						
	Building Footprint			9,960	Square Feet		
	Total Area			9,960	Square Feet		
	Construction Square Foot Costs				**$173.13**	**$181.78**	
Code	Division Name	Quantity	Unit	Unit Cost	2017 Cost	2018 Cost	
01	General Conditions	9,960	SF	$ 20.00	$ 199,200.00	$ 209,160.00	
	Bond	2	PCT	$ 1,885,840.00	$ 37,716.80	$ 39,602.64	
	Permit	1	EA	$ 3,400.00	$ 3,400.00	$ 3,570.00	
03	Concrete	9,960	SF	$ 65.00	$ 647,400.00	$ 679,770.00	
04	Masonry	9,960	SF	$ 6.00	$ 59,760.00	$ 62,748.00	
05	Metals	9,960	SF	$ 5.00	$ 49,800.00	$ 52,290.00	
08	Openings	9,960	SF	$ 7.00	$ 69,720.00	$ 73,206.00	
13	Special Construction	9,960	SF	$ 70.00	$ 697,200.00	$ 732,060.00	
26	Electrical	9,960	SF	$ 6.00	$ 59,760.00	$ 62,748.00	
28	Telecommunications	9,960	SF	$ 10.00	$ 99,600.00	$ 104,580.00	
	Opinion of Probable Construction Cost				**$ 1,724,356.80**	**$ 1,810,574.64**	
Soft Costs	Professional Fees	3%		$ 1,724,356.80	$ 51,730.70	$ 54,317.24	
Soft Costs	Town Administrative Costs	1%		$ 1,724,356.80	$ 17,243.57	$ 18,105.75	
Soft Costs	Furniture, Furnishings and Equipment	-	SF	$ 10.00	$ -	$ -	
Soft Costs	Land Acquisition	-	Acres	$ -	$ -	$ -	
Soft Costs	Relocation Costs	-	LS	$ -	$ -	$ -	
Soft Costs	Utility Fees	-	LS	$ -	$ -	$ -	
Soft Costs	Contingency	10%		$ 1,724,356.80	$ 172,435.68	$ 181,057.46	
	Total Opinion of Probable Soft Cost				**$ 241,409.95**	**$ 253,480.45**	
	Opinion of Probable Project Cost				**$ 1,965,766.75**	**$ 2,064,055.09**	
	Notes:						
1	Costs based on RS Means Building Construction Cost Data, updated for regional costs and Prevailing Wage requirements						



N

1 FLOOR PLAN
1/8" = 1'-0"

BL Companies
ARCHITECTURE
ENGINEERING
ENVIRONMENTAL
LAND SURVEYING

150 Trumbull Street, 6th Floor
Hartford, CT 06103
(860) 249-2200
(860) 249-2400 Fax

HEBRON DEPARTMENT OF PUBLIC WORKS
JOHN HORTON BOULEVARD EXTENSION
HEBRON, CT

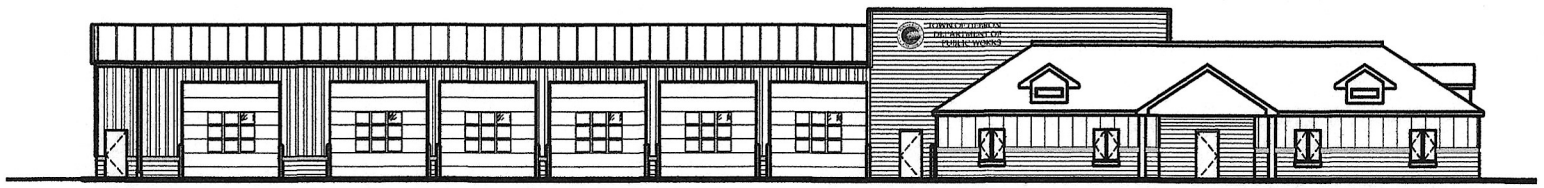
REVISIONS No.	Date	Desc.

Designed	NS
Drawn	NS
Checked	DJR
Approved	DJR
Scale	09D1384-N
Project No.	09D1384-N
Date	09/06/2017
CAD File:	XA09D138401

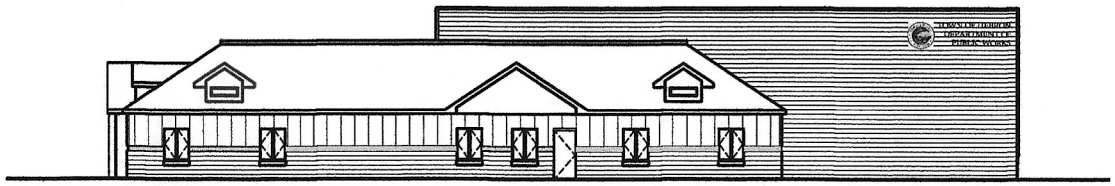
Title
FLOOR PLAN

Sheet No.
A1.01

Xref (s): 09P901384



1 WEST ELEVATION
1/8" = 1'-0"



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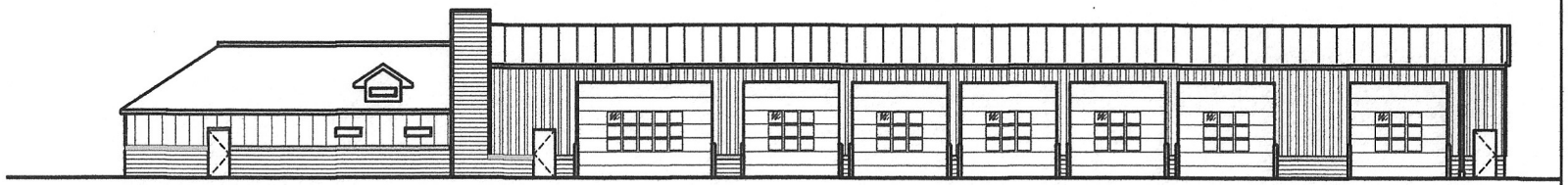

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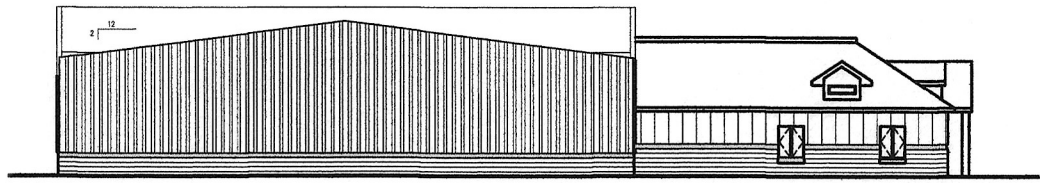

4 NORTH ELEVATION
1/8" = 1'-0"

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LAND SURVEYING

150 Trumbull Street, 6th Floor
Hartford, CT 06103
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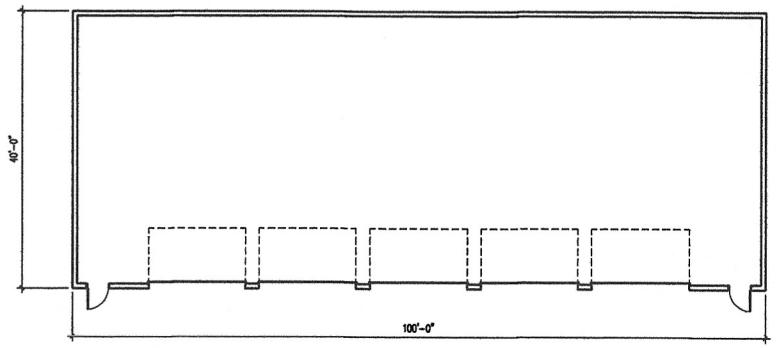
HEBRON DEPARTMENT OF PUBLIC WORKS
JOHN HORTON BOULEVARD EXTENSION
HEBRON, CT

No.	Date	Revisions Desc.

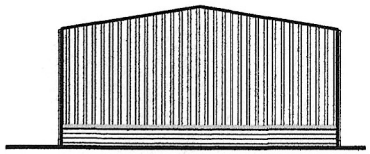
Designed	NS
Drawn	NS
Checked	DJR
Approved	DJR
Scale	0901384--N
Project No.	0901384--N
Date	08/08/2017
CAD File:	XV0901384001

Title
ELEVATIONS - GARAGE AND ADMINISTRATION BUILDING

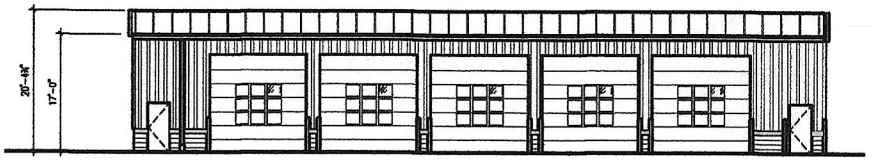
Sheet No.
A2.01



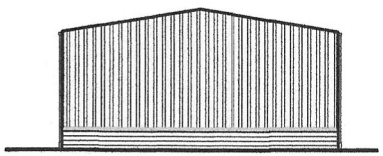
1 FLOOR PLAN
1/8" = 1'-0"



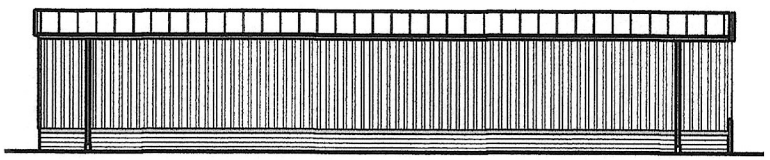
3 ELEVATION
1/8" = 1'-0"



2 ELEVATION
1/8" = 1'-0"



5 ELEVATION
1/8" = 1'-0"



4 ELEVATION
1/8" = 1'-0"

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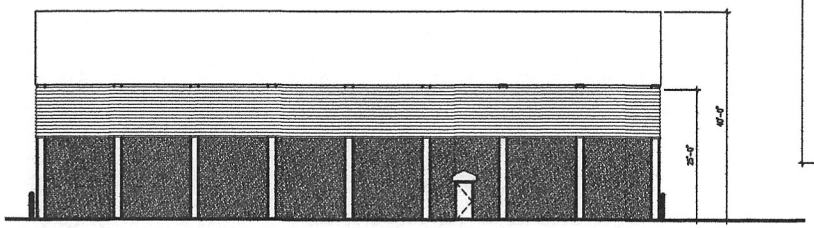
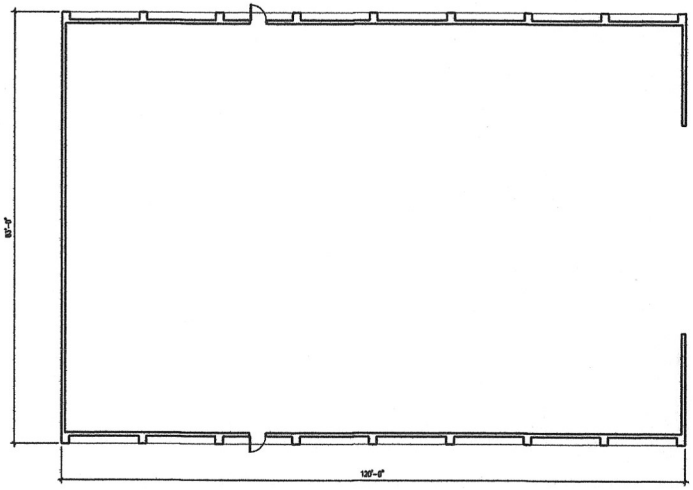
Approved	DJR
Scale	0001384-N
Project No.	0001384-N
Date	09/06/2017
CAD File:	XV0001384G2

Title
COLD STORAGE
FLOOR PLAN
AND ELEVATIONS

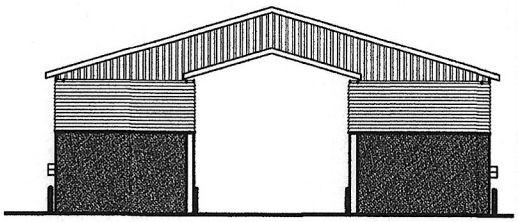
Sheet No.
A2.02



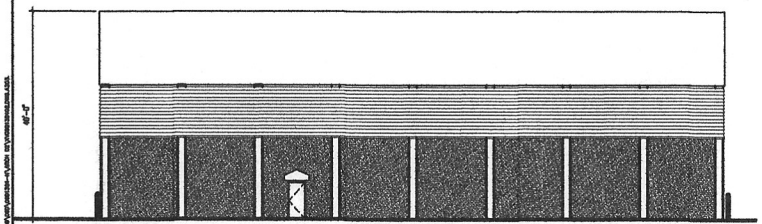
5 ELEVATION
3/32" = 1'-0"



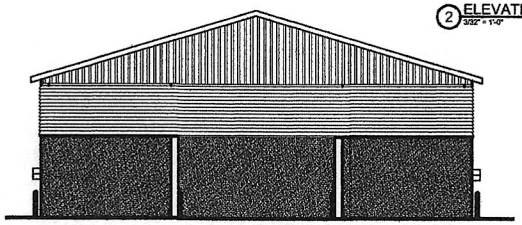
1 FLOOR PLAN
3/32" = 1'-0"



2 ELEVATION
3/32" = 1'-0"



4 ELEVATION
3/32" = 1'-0"



3 ELEVATION
3/32" = 1'-0"

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Date	09/06/2017
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TITLE
SALT SHED
FLOOR PLAN
AND ELEVATIONS

Sheet No.
A2.03

NOTES:

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. THIS PLAN IS A DATA ACCUMULATION PLAN AND WAS COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.
2. REFERENCE IS MADE TO THE FOLLOWING DRAWINGS:

   "HEBRON MUNICIPAL LANDFILL CLOSURE PLAN, PREPARED FOR: TOWN OF HEBRON", SHEETS C1, DATE: 6-19-96, PREPARED BY: PARE ENGINEERING CORPORATION.

   "PUBLIC WORKS DEPARTMENT, OLD COLCHESTER ROAD, PROPOSED ABOVE GROUND FUEL STORAGE TANK", SHEET 1, DATE: JUNE 1999, PREPARED BY: NATHAN L. JACOBSON AND ASSOCIATES, INC.

   "TOWN OF HEBRON, TRANSFER STATION, IMPROVEMENT LOCATION PLAN", SHEET 1 OF 1, DATE: 5-20-98, PREPARED BY: NATHAN JACOBSON AND ASSOCIATES, INC.
3. UNDERGROUND UTILITIES, STRUCTURES AND OTHER FACILITIES DEPICTED HEREON HAVE BEEN COMPILED FROM RECORD DRAWINGS AND FIELD LOCATIONS OF ABOVE GROUND FACILITIES AND MARKOUTS. ALL UNDERGROUND FACILITY LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE ONLY AND ALL FACILITIES MAY NOT BE SHOWN.

GRAPHIC SCALE
50 40 30 20 10 0 50 100
SCALE: 1"=50'

THIS DRAWING IS INTENDED TO BE USED FOR INFORMATION AND REVIEW PURPOSES ONLY AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.

TOWN OF HEBRON

PUBLIC WORKS / TRANSFER STATION

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HEBRON, CONNECTICUT

EXISTING CONDITIONS PLAN

PRESENTATION

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REVISIONS

No.	DESCRIPTION	DATE

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PROJECT No.:	06480052
CADD FILE:	06480052PRESENTATION
DESIGNED:	THF
DRAWN:	CEB
CHECKED:	-

SHEET No.:
1 OF 1