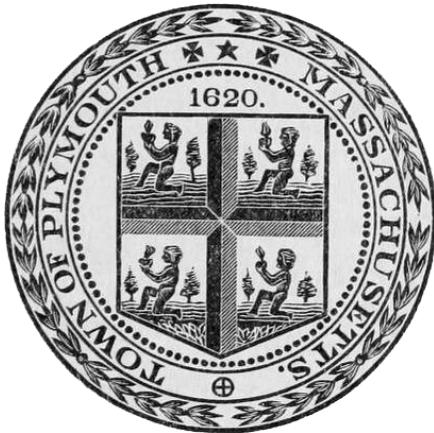




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Final Report



October 2022

TOWN OF
PLYMOUTH
MASSACHUSETTS

Department of Public Works
New Facility Feasibility Study

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I. Introduction

The Town of Plymouth retained the services of Weston & Sampson to study existing operations and prepare long-term planning solutions for their Department of Public Works (DPW). The DPW includes nine divisions, as follows: Administration; Engineering; Highway; Water; Solid Waste; Parks/Forestry; Cemetery/Crematory; Facilities; and Vehicle Maintenance. At the time of this report, Vehicle Maintenance programming includes maintenance operations for the DPW, the Fire Department and the School Department. DPW operations are currently located at 159 Camelot Drive, and this will remain the location of the primary facility. The goal of the study was to develop an objective program of building and site features which are needed to cost effectively and efficiently support the services offered by the DPW to the community. The study included inspecting the existing facilities, identifying deficiencies, interviewing staff, identifying current and future needs, developing conceptual alternatives, evaluating the preferred conceptual alternatives with the DPW, preparing a phasing schedule, and preparing budget cost estimates for the preferred alternative.

II. Space Needs Assessment

The Project Team prepared a program assessment to identify current and future needs of the DPW. The assessment includes a kick-off discussion with key workforce staff to learn first-hand any current program deficiencies in the existing facilities which can be addressed in a new facility. The staff interviews were conducted with references to Weston & Sampson's knowledge of common/typical industry practices, as appropriate, as well as familiarity with proven solutions implemented in other recently completed public works facility projects. A copy of our Staff Interview Notes and User Group Program Needs Analysis are included in Appendix A.

Operational Analysis

The operational analysis was completed through the inspection and observation of the existing facilities and operations which are used to support the DPW's operations, and a determination of the functional inadequacies and space limitations of the existing building and site.

The existing operations are conducted out of the existing facility located at 159 Camelot Drive. This facility occupies a total site area of approximately 9.25 acres. The facility consists of a primary building constructed in 1990, a secondary building (Parks/Forestry) built in 1988, a fueling facility, a salt shed and brine tank, a fabric canopy structure for material storage, bulk material storage bins and multiple storage containers. There is large number of vehicles and equipment stored outside throughout the site. As a result, there are several operational inefficiencies which impact the level of service that the DPW is able to provide to the community. The following is a summary of some of

the deficiencies/inefficiencies associated with the existing facility which impact day-to-day operations:

- DPW has outgrown the existing facility, which is undersized and unable to efficiently support current operations which results in high value vehicles and equipment being stored outdoors or tightly fit into undersized storage areas. This impacts response times during cold and inclement weather events. It also contributes to the rapid deterioration of high value Town owned equipment and increases vehicle maintenance costs.
- The employee facilities are undersized and lack adequate supervisor office space, conference room, storage areas, and code compliant Men's and Women's toilet/locker facilities. A lunch room is located in the vehicle storage/shop area, and lockers are located in vehicles storage areas.
- The facilities do not have a vehicle wash facility to properly care for vehicles which are exposed to corrosive chemicals. This decreases vehicle life expectancy and increases vehicle maintenance costs.
- Responsibilities have increased significantly over the years (but the facilities have not).
- Undersized facility lacks adequate office space and file storage areas. The office area does not have proper separation from the adjacent vehicle storage area resulting in unwanted migration of engine exhaust when vehicles are started within the building.
- Inadequate storage of small equipment and materials.
- Facilities do not meet current codes
- Inadequate working conditions including:
 - Poor ventilation
 - Inadequate lighting
 - Confined workshop areas
 - Inadequate facilities for state mandated training
 - Non-ADA compliant facilities
- Efficiency of operations and employee safety are negatively impacted.

These deficiencies directly impact operations and the efficiency of service that the DPW is able to provide to the town.

Preliminary Programming Interviews

The staff interviews conducted by the Project Team focused on identifying all DPW functions that will occupy the new facility and understanding the operations and services that will occur on the site. The discussion addressed staffing requirements and space needs for shop operations, fleet maintenance, parts and materials, equipment, and vehicles. In addition, the project team evaluated operational efficiencies and space-saving measures that can be incorporated into a new facility. A supplemental interview with the Fleet Manager was conducted by The Project Team's equipment

specialists, further discussed the Vehicle Maintenance division's specific equipment needs in a new facility. A summary of the departmental organization and fleet inventory is as follows:

DPW Staffing Summary

Division	Fulltime	Parttime	Future	TOTAL
1. Administration	4			4
2. Engineering	8		2	10
3. Highway	34		10	44
4. Water	23			23
5. Solid Waste	5	1		6
6. Parks/Forestry	21	5	3	29
7. Cemetery/Crematory	11	1	4	16
8. Facilities	14		3	17
9. Vehicle Maintenance	5		4*	9
Total	125	7	26	158

* Includes 2 future mechanics for Fire, 1 for School, and 1 for DPW.

Fleet Inventory Summary

Type	#	Type	#
Extra Large Vehicles	1	Large Equipment	19
Large Vehicles	31	Medium Equipment	9
Small Vehicles	58	Small Equipment	26
Attachments (i.e., plows)	49	Extra Small Equipment	14

There are a total of 207 vehicles, equipment, and attachments in the Fleet Inventory. This listing does not include small support equipment such as pumps, hand tools, etc. However, provisions for storage of these types of items have been included in the final program.

A full itemization of the Town's fleet is included in Appendix B.

Space Needs & Room Data Sheets

The data obtained from the operations analysis and interviews were compiled and analyzed by Weston & Sampson. The process included developing a comprehensive space allocation matrix of individual rooms and spaces for each major facility function including offices, office support areas, employee facilities (lockers, showers, toilets), utility support spaces, workshops and material storage, fleet maintenance, vehicle wash space, and fleet storage. The analysis also included development of diagrammatic, generic floor plans and 3D views for each individual room or space included in the program matrix.

The space needs assessment identified an initial program requirement of approximately 121,000 square feet. This initial program assumed that all vehicles and equipment would be stored in an enclosed and minimally heated vehicle storage garage. The Space Needs Assessment is included in Appendix C. The Room Data Sheets are included in Appendix D. The following table provides a breakdown of the programmatic space needs:

Program:	Area (sf)
Offices & Office Support Areas (DPW)	9,800
Offices & Office Support Areas (Engineering)	3,000
Employee Facilities & Utilities	8,150
Workshops & Material Storage	13,400
Fleet Maintenance (DPW)	17,300
Fleet Maintenance (Fire)	3,050
Fleet Maintenance (School)	1,250
Wash Bay	2,500
Equipment & Vehicle Storage	63,000
Total Building Area	121,450
Existing Facilities to Remain	29,800
New Construction Total	91,650

Review meetings with the DPW helped to distinguish an understanding of each divisions' space needs in a new facility and all potential user groups' who may utilize the facility's services (i.e., fuel, fleet maintenance, salt storage, etc.). This information is used as a guideline for developing conceptual design alternatives.

III. Conceptual Design Alternatives

Based on the results of the final space needs assessment, the Project Team prepared conceptual site plan options for the development of a new DPW Facility.

The conceptual plans were prepared with the following operational considerations in mind:

- Existing structures to remain.
- Zoning setbacks.
- Limit public interaction with building orientation.
- Arrange interior space to provide efficient circulation patterns.
- Provide full access and safe vehicle movement around the perimeter of the facility.
- Allow for Town-wide Fueling Facility

- Maintain safe and functional access to/from the salt/sand operations area.
- Provide bulk material storage area with adequate yard area for large vehicle maneuvering.
- Attempt to segregate small/public vehicle traffic from heavy truck traffic.
- Providing adequate parking for public and employees.

A Zoning & Permitting memorandum is included Appendix E.

Initial site plan layouts were conceptualized by preparing “Block Building Plans”. These Block Building Plans were developed for each of the major space categories for the new facility, including the following:

- Administration & Office Support Areas
- Engineering
- Employee Facilities
- Workshops
- Vehicle Maintenance
- Vehicle/Equipment Storage
- Wash Bay
- Fueling facility
- Salt Storage
- Bulk Material Storage Bins

The configuration and size of the planning “blocks” were developed by assembling the individual rooms identified during the space needs assessment and appropriate circulation and grossing factors. The initial concepts were developed utilizing the approved space needs program.

Multiple initial conceptual site plans were prepared and reviewed with the DPW to better understand the city’s priorities for a new facility and solicit feedback on site layout preferences. Based on the feedback received from the DPW, a preferred concept was selected. The preferred Concept Plan is included in Appendix F.

IV. Phasing Plan

To aid the Town with options for potentially funding the overall project in parts, phasing opportunities were evaluated for the preferred concept. The overall facility was divided into sub-groupings of functional areas for purposes of a 3-phase approach to construction, as follows:

- PHASE 1
 - Office / Office Support
 - Salt Shed

- Fueling
- Bulk Material Storage
- PHASE 2
 - Employee Facilities (renovation)
 - Fleet Maintenance
 - Partial Vehicle/Equipment Storage
 - Wash Bay
 - Shops and Material Storage (renovation)
- PHASE 3
 - Reminder of Vehicle/Equipment Storage
 - Storage Canopy

An overall Phasing Plan depicting the 3-phase approach and colored by phase is included in Appendix G. Plans showing phasing opportunities for the preferred concept are included in Appendix H.

V. Schedule

Schedules were developed for both a single project, and also for the phased approach; each are included in Appendix I.

VI. Order of Magnitude Costs

Conceptual cost estimates were prepared for the preferred conceptual plan using square foot costs based on historical data for similar DPW facilities. In general, the cost estimate assumes cost effective building systems, finishes, and equipment for new construction as described below:

- Construction of a new pre-engineered metal building with partial masonry wall finish and concrete protection wall for the vehicle storage, maintenance area, wash bay, and shops.
- Factory foam insulated architectural metal wall panels with improved exterior finish system and standing seam metal roofing.
- Primary industrial support equipment for vehicle maintenance operations.
- Site improvements, including storm water management, utilities, fencing, and paving upgrades.
- Contingency allowance for unanticipated design/construction costs, pending final design.
- Pricing contingencies to account for the early nature of the project.

A full build-out for all programmatic space needs in a single consolidated facility resulted in an estimated cost of approximately \$92 million. To aid the Town with potentially funding the project in parts, the Project Team also prepared a phased project approach. The cost estimates are included in Appendix J.

Our estimated costs for new building construction and site improvements are based on costs of similar construction for which bid prices are available, supplemented by cost data obtained from published sources. It is assumed that the project will be publicly bid under Chapter 149 requirements. Prices are based on 2022 costs and the cost estimates account for annual escalation. Additional consideration for escalation should be included once a final project timeline has been established by the Town.

Due to the preliminary nature of the development of the design for this project, many budget items are based on general building costs per square foot, with site development costs per acre. Estimates include a design contingency to allow for scope adjustments identified during design development. In addition, the estimate includes a construction contingency to account for potential unforeseen conditions which may be discovered during construction.

Using data from recently completed/bid DPW facilities, a comparison graph for total construction cost per square foot is also included in Appendix K.

Town of Plymouth
Department of Public Works
New Facility Feasibility Study
Final Report

Appendix A

Staff Interview Notes
&
User Group Program Needs

Project: New Department of Public Works Facility
Address: Camelot Drive, Plymouth, MA 02360
Date: March 21, 2022
Subject: Staff Interview Meeting Notes
Attendees: *Town of Plymouth:* Jonathan Beder, Sheila Sgarzi, Tim Balboni, Nick Faiella, Ken King, Jodie Volta
CHA: Jake Zelikman
Weston & Sampson: Jeff Alberti, Tony Wespiser, Kristin Kowalik-Grillo, Sam Peach, Della Donahue

STAFFING SUMMARY:

Division / Department	Admin	Workforce	Future	Seasonal	TOTAL
1. Administration	4*				4
2. Engineering	8		2	Potential intern	10
3. Highway	2	32	10		44
4. Water	6**	17			23
5. Solid Waste	1***	5			6
6. Parks / Forestry	2	19	3	5	29
7. Cemetery / Crematory	3***	9	4		16
8. Facilities	3	11	3		17
9. Vehicle Maintenance		5	4****		9
TOTAL:	29	98	26	5	158

*Includes: DPW Director, Assistant Director, Office Manager, and Safety Officer

**Includes Billing Manager and Cross Connection Meter Reader

***Includes part-time employee

**** Includes 2 new mechanics for Fire Maintenance, 1 for School maintenance, 1 future growth

OVERVIEW OF DIVISIONS:

Administration

- Staffing: DPW Director, Assistant Director, Office Manager, Safety Officer.
- Frequent interaction between Director & Asst. Director – locate offices near each other
- Billing for solid waste, water, and sewer – reads and data collection, then sent to finance
 - o Actual billing is contracted out, therefore no specialty paper needs
- Highway, Solid Waste, Water, and Engineering have the most public interaction.
- Request for all technology capabilities throughout facility.
- If renovating existing, challenge: balancing admin area, private manager offices, public interaction, and outside views / exterior wall access; occupied vs. unoccupied space.
- Emphasis on operations center.
- Emphasis on file storage – active & archive.

Engineering (Sheila Sgarzi)

- Staffing: Town Engineer, Admin Assistant, (6) Engineering Staff, (2) Future
- Currently located at Town Hall – in discussion whether to move division to new DPW.
 - o Town Hall office space is about 3,500 SF – (6) private offices, a large open floor space (unused space), additional layout area, storage closets, and a public service counter (i.e. for permitting).
- Engineering is Admin front facing (street opening permits etc.) – must have public access window.
- (39) flat files + (9) future = (48) flat files, (31) file cabinets, (2) hanging plan files, (10) bookcases.
- Secure survey equipment storage – currently have 560 SF.
- (1) Ford Explorer for surveying - ideally stored in garage or under canopy.
- May or may not be included depending how things unfold.
 - o Break out their specific program to help inform decisions down the road.
 - o Interaction with DPW would be good, but they work with Town Hall, too.

Highway (Tim Balboni)

- Staffing: Highway Manager, Admin Assistant, (32) field staff.
 - o 4:32 field staff are foreman.
 - o (1) female in Highway.
 - o (10-15) futures – variety of positions; mostly field staff, some managers.
- Involves a fair amount of public interaction.
- Each foreman currently occupies a Conex box-worth of tool storage.
- Request for meeting space.
- Emphasis on operation center /snow/storm operations – manned by managers and foremen.
 - o Large, 16' x 20'; flexible, multifunctional space for all divisions.
- Proximity to Parks for most of the year.
- Need access to file storage.
- Snow plow contractor interface over the phone – no interaction at the facility itself.

Water (Peter Gordon)

- Staffing: Superintendent, Assistant Superintendent, (2) Admin Assistants, Billing Manager, Cross Connection Meter Reader, and (17) field staff (2 are foremen)
- Water needs its own public facing element – must have public access window.
- Water is divided into Maintenance, Meter Reader, and Pump Station – want to consolidate.
- No water meter testing.
- Emphasis on meeting space/conference room (can be shared amongst other divisions).
- Shared foremen office (2) – separate from Highway & Parks foremen.
- Looking for a better inventory of materials.

Solid Waste

- Staffing: (5) total staff – (3) Transfer Station Attendants (never at DPW), (2) Roll-Off Drivers.
- Frequent public interaction.
- Shares Admin Assistant with Fleet (PT).
- (2) Packers and (2) roll-off trucks must be stored in a separate, well-ventilated, bay.
- Waste and Water are the only divisions where the public pay – enterprise funding.
- Minimal facility interaction.

Parks / Forestry (Nick Faiella)

- Staffing: Superintendent, Admin Assistant, (19) field staff.
 - o 3:19 field staff are foreman.
 - o 5:19 field staff are specifically trees.
 - o (2-4) futures – variety of positions
 - o (5) seasonal
- Large scale tree trimming operation.
- Maintains of 35 parks and beaches.
- Some file storage needed.
- Efficiency and speed are essential to division – 24/7 mobility.
- Would like to add a tree and small shrub nursery.
- Would like to have greenhouse.
- See printout from Nick on Parks & Forestry for more information.

Cemetery / Crematory (Ken King)

- Staffing: Superintendent + (3) staff works at crematory.
 - o (8) full time staff will work at DPW (4 future).
 - o No seasonal staff.
- No Cemetery Admin space at DPW.
- Tools and equipment are scattered across town, needs to be consolidated.

Facilities (Building Maintenance)

- Staffing: Manager, Operations Manager, Admin Assistant, (8) custodians, (3) craftsman.
 - o (4) custodians at Town Hall.
 - o (1) custodian at Memorial Hall.
 - o (2) custodians at DPW.
 - o (1) floater custodian.
 - o 1:3 craftsman is an apprentice.

- Carpentry shop currently at Cedarville.
- Not enough storage spread across multiple sites.
- Weekly drop-offs of cleaning supplies to Cedarville (too much back and forth).
- Potential new positions: Electrician, Plumber, HVAC.

Fleet Maintenance

- Staffing: (5) mechanics.
- Mechanics report to Assistant Director.
- Maintains all DPW, Town Hall, Police Department vehicles.
- Potentially Fire Department and Schools will be added to Fleet Maintenance.
 - o Fire would need 1 heavy duty bay with access to bridge crane
 - o School would need 1 light duty bay
- Mechanics perform metal fabrication, stickers.
- Keep Highway away and out of bays.
- Current floor drains clog and flood bays.

SPACE NEEDS ASSESSMENT:

OFFICE & OFFICE SUPPORT	
Name of Space	Description
Vestibule/Waiting	<p>Public Vestibule leading into a Public Lobby:</p> <ul style="list-style-type: none"> - (3) Teller windows (General DPW, Engineering, Water and Solid Waste). - Shared coverage at window. - Public WC. - (2-3) Public computer stations. - Public meeting room w/ access from Public Lobby and Admin area. - Space for 6 people waiting.
Reception Area	<ul style="list-style-type: none"> - Secure open counter (no glass divider).
Admin Area	<ul style="list-style-type: none"> - DPW: Open office layout for (6) workstations and (2) futures. - Engineering: (1) admin assistant & service window - Admin should be centralized to all divisions.
Offices (private, shared, open)	<ul style="list-style-type: none"> - Single offices (will be located on 1st and 2nd floor per interaction with public). - DPW Director and Office Manager can be on 2nd floor. <p>Private:</p> <ul style="list-style-type: none"> - DPW Director - Assistant Director - Office Manager - Safety Officer - Town Engineer - Highway Manager - Water Superintendent - Water Assistant Superintendent - Billing Manager - Cross Connection Meter Reader - Parks & Forestry Superintendent - Facilities Manager - Facilities Operations Manager <p>Shared:</p> <ul style="list-style-type: none"> - Highway and Parks Foremen (7) - Water Foreman (2) <p>Open:</p> <ul style="list-style-type: none"> - Admin Area (7) - Engineering Area (8) – separate area close to admin area.
Conference Room	<ul style="list-style-type: none"> - Small Conference Room: 8-10 ppl. - Large Conference Room: 15-20 ppl. - Small meeting room: 5-8 ppl (can be used for morning meeting spot).
Copy / Mail Room	<ul style="list-style-type: none"> - Copy/File/Mail Room, Engineering plotters can be located here

File Storage	<ul style="list-style-type: none"> - Active file storage. - Archive file storage. - Engineering: <ul style="list-style-type: none"> o (39) flat files + (9) future = (48) flat files, (31) file cabinets, (2) hanging plan files, (10) bookcases.
Layout Area	<ul style="list-style-type: none"> - Layout table for Engineering area near or on top of flat files. - Reference area/alcove (bookcases) for Engineering.
Toilet Facility (admin and/or public)	<ul style="list-style-type: none"> - Admin Men's and Women's WC.
Break Room	<ul style="list-style-type: none"> - Admin Break Room and/or Kitchenette.
Storage	<ul style="list-style-type: none"> - Survey storage room (locked). - General storage room.

EMPLOYEE FACILITIES	
Name of Space	Description
Male Locker Room	<ul style="list-style-type: none"> - Lockers: (112) full height 18" x 24" (Might have to go with 18"x18" to fit). (16) half height 18" x 18". (10-15) full height 18" x 18" for future. - Men's Locker room, shower, toilets, locker area - No lockers for seasonal workers. - (5) 12" 1/2 height lockers for seasonal workers.
Female Locker Room	<ul style="list-style-type: none"> - All staff to have lockers (including Admin). - Women's Locker room, shower, toilets, locker area.
Mudroom / Laundry	<ul style="list-style-type: none"> - Wet Gear area or room adjacent to locker rooms. - Laundry Room: commercial grade washer (dryer?). - Mechanics uses a uniform service, need drop-off/pick-up area.
Muster Room	<ul style="list-style-type: none"> - Muster Room: to fit (50) ppl. <ul style="list-style-type: none"> o (2) Refrigerators o (2) Microwaves (min) o (2) Sinks (1 regular depth and 1 ADA) o Stove top o Oven o Dishwasher o Vending machine(s) o Permanent coffee maker o Perimeter counter for extra seating o Ice machine requirements
Training / Storm Event Room	<ul style="list-style-type: none"> - Storm Event Room – can also be used as extra meeting room. - Primarily used by Highway.
SCADA Room	<ul style="list-style-type: none"> - SCADA Office. - Hardwired technology = no data racks; multiple monitors, - multiple desks
Storage Rooms	<ul style="list-style-type: none"> - Cot storage near Muster and/or Storm Event Room

WORKSHOPS & MATERIAL STORAGE	
Name of Space	Description
Highway Shop	<ul style="list-style-type: none"> - (4) Foremen trucks to be able to be parked inside. - Storage for foremen's toolboxes. - (2) OH doors. - Mezzanine storage. - Outdoor/canopy storage: traffic light and accessory storage, large cone storage.
Sign Shop	<ul style="list-style-type: none"> - Highway – (2) staff. - Fabricates all signs for town. - Bay with OH door. - Line painting equipment – (3) machines. - Room with workstations, plotters, materials storage approx. 15'x25'. - Full-size plotter.
Water Shop	<ul style="list-style-type: none"> - One large bay, one OH door. - Cage storage, lockable. - Shop sink. - Hydrant maintenance. - Work bench for meter repair. - Canopy storage for materials (PVC, pipes, hydrants). - Compressor. - Looking for a better inventory of materials. - Copper must be stored in a lockable closet / secure location.
Parks & Forestry Shop	<ul style="list-style-type: none"> - Two shops, two OH doors: <ul style="list-style-type: none"> o One for Parks. o One for Forestry. - Cage storage, lockable for small equipment. - Maintenance work bench in Forestry shop.
Cemetery Shop	<ul style="list-style-type: none"> - Equipment storage. - Vehicle storage. - Storage place for pallets of concrete, grass seeds and fertilizer. - Storage for plywood sheets. - Soil storage, 5'x8' dump trailer (inside).
Carpentry Shop	<ul style="list-style-type: none"> - Facilities Carpentry Shop. - Adjacent to General Facilities Shop. - Storage for stock in carpentry. - Work benches. - Close to Sign Shop.
General Facilities Shop	<ul style="list-style-type: none"> - Storeroom adjacent to general shop for cleaning supplies, HEPA filters, dry goods, and misc. items. - Future electrical, HVAC, and plumbing shop. - 500-800 SF – cleaning storage on mezzanine.
Small Equipment Repair Shop	<ul style="list-style-type: none"> - A workshop alcove within Fleet Maintenance.

FLEET MAINTENANCE	
Name of Space	Description
Maintenance Bays (quantity & sizes)	<ul style="list-style-type: none"> - (11) maintenance bays: (4)heavy duty bays (21'x75') (4) light duty bays (19'x45'), (1) light duty bay for inspections,(1) heavy duty for fire maintenance, (1) light duty bay for school maintenance. - Fabrication bay (welding) 1/2 wall separation, with crane. - They have 4 mobile rotary lifts will get 6 more. - Possible inground lift and post lifts (Tyler to meet with mechanic). - 5-ton Bridge crane needed for fire and heavy duty bays. - Possible radiant floors.
Mechanic's computer station	<ul style="list-style-type: none"> - Shared workstation with computers set up for each mechanic - Room would also have space to store reference material
Fluids Room	<ul style="list-style-type: none"> - New Fluids: <ul style="list-style-type: none"> o 10W-30, 15w-40, 5W-30, 5W-20, 0W-20, 5W-20 Dexos, Hyd. Fluid, red antifreeze, green anti-freeze, GM Anti-freeze, Ford Anti-freeze, windshield washer fluid, ATF. - Waste Fluids: <ul style="list-style-type: none"> o Waste oil, waste antifreeze - They currently pay to dispose of waste oil, would like to look at getting a waste oil burner for secondary heating and to reduce cost for oil disposal. - A parts storage rack in the lube room for misc/ small volume fluids bought by the gallon or in boxes. -
Parts / Material Storage	<ul style="list-style-type: none"> - Combine parts and filter rooms (double current size). - Police parts kept separate in caged off area. - Storage for old police parts to be auctioned. - Cages for mechanics to keep personal toolboxes.
Tire Storage / Repair Area	<ul style="list-style-type: none"> - Tire storage: 50ft Linear feet of large tires stored on ground. One 50x8ft box container full of small tire, 30-40 police tires. - They would like to have two tire maintenance areas, one for police and one for DPW. Each tire station would have a balancer, changer, and inflation cage.
Hydraulic Hose Workshop	<ul style="list-style-type: none"> - Hydraulic hose shop and ventilation system. - Makes own hydraulic line.
Mechanics Office	<ul style="list-style-type: none"> - Head Mechanics office - (2) additional mechanics if fire apparatus relocates here
Inspection Area	<ul style="list-style-type: none"> - Inspection area, workstation, and storage.
Toilet	<ul style="list-style-type: none"> - Mechanics WC. - Wash-off/shop sink.
Compressor Room	<ul style="list-style-type: none"> - Compressed air room.

WASH AREA	
Name of Space	Description
Wash Bay	<ul style="list-style-type: none"> - Fully automatic is ideal. - At least automatic undercarriage wash.
Equipment Wash Room	

FLEET STORAGE	
Name of Space	Description
Indoor Storage	<ul style="list-style-type: none"> - Pending fleet verification.
Canopy Storage	<ul style="list-style-type: none"> - Pending fleet verification.

SITE AMENITIES:

- Fuel Island
 - Only new canopy needed.
- Salt Shed:
 - Size: 5000 ton (min.)
 - Average 8000 ton/year.
 - Canopy for sander body storage (16+10).
 - Improve circulation and loading arrangement (loading ramp).
- Bulk Material Bins:
 - Highway:
 - CMU blocks and bricks
 - Crushed stone
 - 20' pipes
 - Castings
 - Manholes and catch basins
 - Parks & Forestry:
 - Mulch (85 cubic yards)
 - Clay

User Group Program Needs

Plymouth, MA

6/7/2022

		Type	Private Office	Workstation in Shared Office	Lockers	Muster	Parking
DPW Administration 4 FT	Director	Admin	✓		Half		1
	Assistant Director	Admin	✓		Half		1
	Office Manager	Admin	✓		Half		1
	Safety Officer	Admin	✓		Half		1
Engineering 8 FT 2 F	Town Engineer	Admin	✓		Half		1
	Administrative Assistant	Admin		✓	Half		1
	Civil Engineer	Admin	✓		Half		1
	Transportation Engineer	Admin	✓		Half		1
	Water & Wastewater Engineer	Admin	✓		Half		1
	Survey/GIS Technician	Admin	✓		Half		1
	Town Surveyor	Admin	✓		Half		1
	Civil Engineer Technician	Admin	✓		Half		1
	Future	Admin	✓		Half		1
	Future	Admin	✓		Half		1
Solid Waste 5 FT 1 PT	Administrative Assistant (shared w/ Fleet)	Part Time		✓	Half		1
	Roll-Off Driver	Workforce			Full		1
	Roll-Off Driver	Workforce			Full		1
	Transfer Station Attendant	Workforce					
	Transfer Station Attendant	Workforce					
	Transfer Station Attendant	Workforce					
Cemetery & Crematory 11 FT 1 PT 4 F	Superintendent	Admin					1
	Administrative Assistant	Admin					
	Administrative Secretary	Part Time					
	Staff	Workforce			Full	1	1
	Staff	Workforce			Full	1	1
	Staff	Workforce			Full	1	1
	Staff	Workforce			Full	1	1
	Staff	Workforce			Full	1	1
	Staff	Workforce			Full	1	1
	Vacancy	Workforce			Full	1	1
	Vacancy	Workforce			Full	1	1
	Vacancy	Workforce			Full	1	1
	Future	Workforce			Full	1	1
	Future	Workforce			Full	1	1
	Future	Workforce			Full	1	1
	Future	Workforce			Full	1	1

User Group Program Needs

Plymouth, MA

6/7/2022

User Group Program Needs

Plymouth, MA

6/7/2022

		Type	Private Office	Workstation in Shared Office	Lockers	Muster	Parking
Facilities 14 FT 3 F	Manager	Admin	✓		Half		1
	Operations Manager	Admin	✓		Half		1
	Administrative Assistant	Admin		✓	Half		1
	Custodian - Town Hall	Workforce					
	Custodian - Town Hall	Workforce					
	Custodian - Town Hall	Workforce					
	Custodian - Town Hall	Workforce					
	Custodian - Memorial Hall	Workforce					
	Custodian - DPW	Workforce			Full		1
	Custodian - DPW	Workforce			Full		1
	Custodian - Floater	Workforce			Full		1
	Craftsman	Workforce			Full		1
	Craftsman	Workforce			Full		1
	Apprentice Craftsman	Workforce			Full		1
	Future (Electrician)	Workforce			Full		1
	Future (Plumber)	Workforce			Full		1
	Future (HVAC)	Workforce			Full		1
Fleet Maintenance (DPW) 5 FT 4 F	Mechanic	Workforce	✓		Full	1	1
	Mechanic	Workforce		✓	Full	1	1
	Mechanic	Workforce		✓	Full	1	1
	Mechanic	Workforce		✓	Full	1	1
	Mechanic	Workforce		✓	Full	1	1
	Future (DPW)	Workforce			Full	1	1
	Future (Fire)	Workforce			Full	1	1
	Future (Fire)	Workforce			Full	1	1
	Future (Schools)	Workforce			Full	1	1

TOTALS:	Admin 29	Office 22	Workstation 20	Full Locker 114	Muster 108.5	Staff Parking 148
	Workforce 122			Half Locker 33		Visitor Parking 10
	Part Time 7					

Full = 24" x 18", full length
Half = 12" x 12" and/or stacked

6 workstations - DPW admin area
1 workstations - Engineering admin area
7 workstations - shared foreman office
2 workstations - shared foreman office (Water)
4 workstations - mechanic's office (DPW)

Town of Plymouth
Department of Public Works
New Facility Feasibility Study
Final Report

Appendix B

Fleet Inventory

WSE ID #	TOWN ID #	DIVISION	MODEL TYPE	MAKE / MODEL	SIZE	FLEET TYPE	LENGTH	WIDTH	HEIGHT	INSIDE	FLOOR	CANOPY	OUTSIDE	COMMENTS
1	W47	WATER	1-TON DUMP	FORD F550	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
2	W414	WATER	6-WHEEL DUMP	MACK	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
3	W416	WATER	10-WHEEL DUMP	MACK 700	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
4	W412	WATER	BACKHOE	CAT 430E	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
5	W413	WATER	BACKHOE	JCB	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
6		WATER	COMPRESSOR	CPS185	VARIABLES	ATTACHMENT	13' - 0"	5' - 0"	5' - 0"		✓			
7		WATER	COMPRESSOR	IR185	VARIABLES	ATTACHMENT	12' - 0"	5' - 0"	5' - 0"		✓			
8	W411	WATER	MINI EXCAVATOR	KUBOTA KX057-4	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
9		WATER	PICK UP		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
10		WATER	PICK UP		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
11	W40	WATER	PICK UP	FORD F150	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
12	W41	WATER	PICK UP	FORD F550	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
13	W42	WATER	PICK UP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
14	W44	WATER	PICK UP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
15	W45	WATER	PICK UP	CHEVY SILVERADO	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
16	W46	WATER	PICK UP	CHEVY SILVERADO	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
17	W48	WATER	PICK UP	FORD F250	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
18	W49	WATER	PICK UP	FORD F250	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
19	W440	WATER	PICK UP	FORD F150	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
20	W441	WATER	PICK UP	CHEVY SILVERADO	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
21		WATER	TRAILER	EAGER BEAVER	VARIABLES	ATTACHMENT	32' - 0"	9' - 0"	3' - 0"			✓		
22		WATER	TRAILER		VARIABLES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
23	W442	WATER	TRAILER	NORTHERN BAY	VARIABLES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
24	W444	WATER	TRAILER	CAM UTILITY	VARIABLES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
25		WATER	VALVE TRAILER		VARIABLES	ATTACHMENT	15' - 0"	7' - 0"	5' - 0"		✓			
26	CAR 13	SOLID WASTE	CAR	FORD INTERCEPTOR	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
27		SOLID WASTE	EXCAVATOR		LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
28	95	SOLID WASTE	EXCAVATOR	KOMATSU	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
29	94	SOLID WASTE	LOADER	JOHN DEERE	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
30		SOLID WASTE	PICK UP		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
31	96	SOLID WASTE	PICK UP	CHEVY SILVERADO	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
32		SOLID WASTE	ROLL OFF		LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				

WSE ID #	TOWN ID #	DIVISION	MODEL TYPE	MAKE / MODEL	SIZE	FLEET TYPE	LENGTH	WIDTH	HEIGHT	INSIDE	FLOOR	CANOPY	OUTSIDE	COMMENTS
33	91	SOLID WASTE	ROLL OFF	MACK	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
34	92	SOLID WASTE	ROLL OFF	MACK	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
35	97	SOLID WASTE	TRACTOR	KUBOTA	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
39	T64	PARKS & FORESTRY		INTERNATIONAL	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
36	P25	PARKS & FORESTRY	1-TON DUMP	FORD F550 SD	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
37	P26	PARKS & FORESTRY	1-TON DUMP	FORD F550	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
38	P28	PARKS & FORESTRY	1-TON DUMP	INTL. TERRASTAR	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				36' LONG
40		PARKS & FORESTRY	BRUSH MOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
41	T63	PARKS & FORESTRY	BUCKET	FORD F550 SD	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
42	T62	PARKS & FORESTRY	CHIP TRUCK	FORD F550	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
43	T610	PARKS & FORESTRY	CHIPPER	BANDIT	VARIES	ATTACHMENT	17' - 0"	6' - 0"	5' - 0"			✓		
44	T611	PARKS & FORESTRY	CHIPPER	VERMEER	VARIES	ATTACHMENT	17' - 0"	6' - 0"	5' - 0"			✓		
45		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
46		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
47		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
48		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
49		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
50		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
51		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
52		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
53		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
54		PARKS & FORESTRY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
55		PARKS & FORESTRY	LEAF VACC		VARIES	ATTACHMENT	11' - 0"	6' - 0"	5' - 0"		✓			
56	P20-P23	PARKS & FORESTRY	PICK UP	FORD F150	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
57	P21	PARKS & FORESTRY	PICK UP	FORD F150	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
58	P24	PARKS & FORESTRY	PICK UP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
59	S50	PARKS & FORESTRY	PICK UP	FORD F150	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
60	T61	PARKS & FORESTRY	PICK UP	FORD F150	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
61	T65	PARKS & FORESTRY	PICK UP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
62		PARKS & FORESTRY	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
63		PARKS & FORESTRY	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
64		PARKS & FORESTRY	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			

WSE ID #	TOWN ID #	DIVISION	MODEL TYPE	MAKE / MODEL	SIZE	FLEET TYPE	LENGTH	WIDTH	HEIGHT	INSIDE	FLOOR	CANOPY	OUTSIDE	COMMENTS
65		PARKS & FORESTRY	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
66		PARKS & FORESTRY	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
67		PARKS & FORESTRY	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
68	T612	PARKS & FORESTRY	TRACTOR	KUBOTA	MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"			✓		
69	P2	PARKS & FORESTRY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
70	P2A	PARKS & FORESTRY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
71	P2B	PARKS & FORESTRY	TRAILER	CARRY UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
72	P2C	PARKS & FORESTRY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
73	P2D	PARKS & FORESTRY	TRAILER	SCAG UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
74	P2E	PARKS & FORESTRY	TRAILER	DOWNEAST	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
75	P210	PARKS & FORESTRY	TRAILER		VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
76	P212	PARKS & FORESTRY	TRAILER		VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
77	P213	PARKS & FORESTRY	TRAILER	EASTERN UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
78	P222	PARKS & FORESTRY	TRAILER		VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
79	P230	PARKS & FORESTRY	TRAILER	PEQUE	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
80	P231	PARKS & FORESTRY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
81	24	PARKS & FORESTRY	UTILITY CART	GATOR	SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
82		HIGHWAY	1-TON DUMP		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
83	H31	HIGHWAY	1-TON DUMP	FORD F550	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
84	H39	HIGHWAY	1-TON DUMP	FORD F550	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
85	H302	HIGHWAY	1-TON DUMP	FORD	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
86	H315	HIGHWAY	1-TON DUMP	FORD F250	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
87	H342	HIGHWAY	1-TON DUMP	FORD F550	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
88	H345	HIGHWAY	1-TON DUMP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
89	H346	HIGHWAY	1-TON DUMP	CHEVY SILVERADO	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
90	H347	HIGHWAY	1-TON DUMP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
91	H348	HIGHWAY	1-TON DUMP	CHEVY SILVERADO	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
92	H355	HIGHWAY	1-TON DUMP	CHEVY SILVERADO	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
93		HIGHWAY	6-WHEEL DUMP		LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
94		HIGHWAY	6-WHEEL DUMP		LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
95		HIGHWAY	6-WHEEL DUMP		LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
96		HIGHWAY	6-WHEEL DUMP		LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				

WSE ID #	TOWN ID #	DIVISION	MODEL TYPE	MAKE / MODEL	SIZE	FLEET TYPE	LENGTH	WIDTH	HEIGHT	INSIDE	FLOOR	CANOPY	OUTSIDE	COMMENTS
97	H32	HIGHWAY	6-WHEEL DUMP	MACK GR42F	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
98	H35	HIGHWAY	6-WHEEL DUMP	INTERNATIONAL	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
99	H36	HIGHWAY	6-WHEEL DUMP	MACK GR42F	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
100	H307	HIGHWAY	6-WHEEL DUMP	INTERNATIONAL	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
101	H309	HIGHWAY	6-WHEEL DUMP	INTERNATIONAL	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
102		HIGHWAY	10-WHEEL DUMP		LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
103	H33	HIGHWAY	10-WHEEL DUMP	MACK	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
104	H37	HIGHWAY	10-WHEEL DUMP	MACK 700	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
105	H308	HIGHWAY	10-WHEEL DUMP	MACK GU713	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
106	H330	HIGHWAY	10-WHEEL DUMP	MACK	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
107	H331	HIGHWAY	10-WHEEL DUMP	MACK GU713	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
108	H340	HIGHWAY	10-WHEEL DUMP	INTERNATIONAL	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
109	H311	HIGHWAY	BACKHOE	KOMATSU	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
110	H318	HIGHWAY	BACKHOE	CAT 430F2	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
111	H337	HIGHWAY	BUCKET	FORD F550	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
112	H351	HIGHWAY	CHIPPER	VERMEER	VARIES	ATTACHMENT	13' - 0"	6' - 0"	5' - 0"		✓			
113	H316	HIGHWAY	COMPRESSOR	INGERSOLL RAND	VARIES	ATTACHMENT	12' - 0"	6' - 0"	5' - 0"		✓			
114	H320	HIGHWAY	COMPRESSOR		VARIES	ATTACHMENT	12' - 0"	6' - 0"	5' - 0"		✓			
115	H354	HIGHWAY	COMPRESSOR		VARIES	ATTACHMENT	12' - 0"	6' - 0"	5' - 0"		✓			
116	H358	HIGHWAY	EMERGENCY TRAILER		VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
117	H328	HIGHWAY	EXCAVATOR	KUBOTA	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
118	H357	HIGHWAY	EXCAVATOR	CAT	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
119	H321	HIGHWAY	GRADER	KOMATSU	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
120	H322	HIGHWAY	GRADER	JOHN DEERE	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		37' LONG
121	H370	HIGHWAY	LIGHT TOWER	WANCO	VARIES	ATTACHMENT	10' - 0"	5' - 0"	5' - 0"		✓			
122	H317	HIGHWAY	LOADER	JOHN DEERE 544L	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
123	H319	HIGHWAY	LOADER	JOHN DEERE	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
124	H359	HIGHWAY	MESSAGE BOARD		VARIES	ATTACHMENT	10' - 0"	5' - 0"	5' - 0"		✓			
125	H360	HIGHWAY	MESSAGE BOARD		VARIES	ATTACHMENT	10' - 0"	5' - 0"	5' - 0"		✓			
126	H365	HIGHWAY	MESSAGE BOARD	WANCO UTILITY	VARIES	ATTACHMENT	10' - 0"	5' - 0"	5' - 0"		✓			
127	H366	HIGHWAY	MESSAGE BOARD	WANCO UTILITY	VARIES	ATTACHMENT	10' - 0"	5' - 0"	5' - 0"		✓			
128	H367	HIGHWAY	MESSAGE BOARD	WANCO UTILITY	VARIES	ATTACHMENT	10' - 0"	5' - 0"	5' - 0"		✓			

WSE ID #	TOWN ID #	DIVISION	MODEL TYPE	MAKE / MODEL	SIZE	FLEET TYPE	LENGTH	WIDTH	HEIGHT	INSIDE	FLOOR	CANOPY	OUTSIDE	COMMENTS
129	H368	HIGHWAY	MESSAGE BOARD	WANCO	VARIES	ATTACHMENT	10' - 0"	5' - 0"	5' - 0"		✓			
130	H371	HIGHWAY	MESSAGE BOARD	WANCO	VARIES	ATTACHMENT	10' - 0"	5' - 0"	5' - 0"		✓			
131	H324	HIGHWAY	MINI EXCAVATOR	KUBOTA	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
132	H334	HIGHWAY	PACKER	MACK	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
133	H338	HIGHWAY	PACKER	INTERNATIONAL	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
134	H369	HIGHWAY	PAINT TRAILER	NVAE	VARIES	ATTACHMENT	13' - 0"	5' - 0"	5' - 0"		✓			
135	H312	HIGHWAY	ROLLER	DRESSER 5 TON	MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"		✓			
136	H313	HIGHWAY	ROLLER	DRESSER	SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
137	H327	HIGHWAY	ROLLER	CAT CB14B	SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
138	H314	HIGHWAY	SKID STEER	JOHN DEERE	MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"		✓			
139	H333	HIGHWAY	SKID STEER	JOHN DEERE	MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"		✓			
140	M821	HIGHWAY	SKID STEER	KOMATSU	MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"		✓			
141	H30	HIGHWAY	SUV	FORD EXPLORER	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
142	H303	HIGHWAY	SWEEPER		LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"	✓				
143	H304	HIGHWAY	SWEEPER		MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"		✓			
144	H310	HIGHWAY	SWEEPER	SIDEWALK	SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
145	H336	HIGHWAY	SWEEPER	PELICAN ELGIN	MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"		✓			
146		HIGHWAY	TRAILER		VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
147	H329	HIGHWAY	TRAILER	HUDSON	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
148	H350	HIGHWAY	TRAILER		VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
149	H352	HIGHWAY	TRAILER		VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
150	H353	HIGHWAY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
151	H361	HIGHWAY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
152	H362	HIGHWAY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
153	H363	HIGHWAY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
154	H364	HIGHWAY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
155	H341	HIGHWAY	VACTOR TRUCK	MACK	X-LARGE	VEHICLE	43' - 0"	11' - 0"	10' - 0"	✓				
156	83	FLEET	CAR	FORD INTERCEPTOR	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
158		FLEET	FORKLIFT		MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"		✓			
157	86	FLEET	FORKLIFT		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
159	82	FLEET	PICK UP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
160	84	FLEET	PICK UP	FORD	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				

WSE ID #	TOWN ID #	DIVISION	MODEL TYPE	MAKE / MODEL	SIZE	FLEET TYPE	LENGTH	WIDTH	HEIGHT	INSIDE	FLOOR	CANOPY	OUTSIDE	COMMENTS
161	85	FLEET	PICK UP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
162	87	FLEET	PICK UP	FORD F150	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
163	88	FLEET	SUV	FORD EXPLORER	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
164	89	FLEET	SUV	FORD EXPLORER	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
		FACILITIES	CAR		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
166		FACILITIES	PICK UP	FORD F150	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
167		FACILITIES	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
168		FACILITIES	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
169		FACILITIES	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
170		FACILITIES	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
171		FACILITIES	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
172		FACILITIES	SNOW BLOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
173	805	FACILITIES	SUV	FORD EXPLORER	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
174	807	FACILITIES	SUV	FORD EXPLORER	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
175	806	FACILITIES	TRAILER		VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"		✓			
176	800	FACILITIES	VAN	FORD TRANSIT	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
177	803	FACILITIES	VAN	FORD TRANSIT	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
178	808	FACILITIES	VAN	FORD E350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
179		ENGINEERING	CAR		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
180		ENGINEERING	SUV		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
181		CEMETERY	BRUSH MOWER		X-SMALL	EQUIPMENT	4' - 0"	3' - 0"	3' - 0"		✓			
182	C70	CEMETERY	CAR	FORD ESCAPE	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
183		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
184		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
185		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
186		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
187		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
188		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
189		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
190		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
191		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
192		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			

WSE ID #	TOWN ID #	DIVISION	MODEL TYPE	MAKE / MODEL	SIZE	FLEET TYPE	LENGTH	WIDTH	HEIGHT	INSIDE	FLOOR	CANOPY	OUTSIDE	COMMENTS
193		CEMETERY	COMMERCIAL MOWER		SMALL	EQUIPMENT	8' - 0"	6' - 0"	4' - 0"		✓			
194		CEMETERY	MINI EXCAVATOR		LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
195	C75	CEMETERY	MINI EXCAVATOR	JOHN DEERE	LARGE	EQUIPMENT	24' - 0"	9' - 0"	10' - 0"			✓		
196	C71	CEMETERY	PICK UP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
197	C73	CEMETERY	PICK UP	FORD F350	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
198	C76	CEMETERY	PICK UP	CHEVY SILVERADO	SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
199	C77	CEMETERY	SKID STEER	JOHN DEERE	MEDIUM	EQUIPMENT	16' - 0"	8' - 0"	10' - 0"		✓			
200	C7A	CEMETERY	TRAILER	SCAG UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
201	C7B	CEMETERY	TRAILER	CAM UTILITY	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
202	C711	CEMETERY	TRAILER	DOWNEAST	VARIES	ATTACHMENT	20' - 0"	8' - 0"	5' - 0"			✓		
203		CEMETERY	XL PICK UP	FORD F550	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
204		CEMETERY	XL PICK UP	FORD F550	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
205		CEMETERY	XL PICK UP	FORD SUPER DUTY	LARGE	VEHICLE	30' - 0"	11' - 0"	10' - 0"	✓				
206		ADMIN	SUV		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				
207		ADMIN	SUV		SMALL	VEHICLE	20' - 0"	8' - 0"	8' - 0"	✓				

	INSIDE	FLOOR	CANOPY	OUTSIDE
EXTRA LARGE VEHICLE	1	1	0	0
LARGE VEHICLE	31	31	0	0
SMALL VEHICLE	58	58	0	0
LARGE EQUIPMENT	19	1	0	18
MEDIUM EQUIPMENT	9	0	8	1
SMALL EQUIPMENT	26	0	26	0
EXTRA SMALL EQUIPMENT	14	0	14	0
ATTACHMENT	49	0	17	32
TOTAL	207	91	65	51
				0

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Appendix C

Space Needs Summary

Building Requirements

Area	Description	Size (SF)	Ref #	Room / Area length	Dimensions width	Dimensions size
Office & Office Support Areas (DPW)	Public Lobby & Vestibule	468	A1	26	18	468
	Small Public Consulting Room	100	A1	10	10	100
	Public Restroom	56	A1	8	7	56
	DPW Admin Open Office (8 admin staff)	1,100	A2	22	50	1,100
	DPW Director	252	A4	18	14	252
	Assistant Director	192	A5	16	12	192
	Office Manager	192	A5	16	12	192
	Safety Officer	192	A5	16	12	192
	Highway Manager	180	A6	15	12	180
	Water Superintendent	180	A6	15	12	180
	Water Assistant Superintendent	180	A6	15	12	180
	Billing Manager	180	A6	15	12	180
	Cross Connection Meter Reader	180	A6	15	12	180
	Parks & Forestry Superintendent	180	A6	15	12	180
	Facilities Manager	180	A6	15	12	180
	Facilities Operations Manager	180	A6	15	12	180
	Highway / Parks Shared Foreman Office (7 Staff)	240	A7.1	20	12	240
	Water Shared Foreman Office (2 Staff)	144	A7.2	12	12	144
	SCADA Operations Room	352	A8	22	16	352
	Large Conference Room (15-20 ppl)	540	A9	30	18	540
	Small Conference Room (8-10 ppl)	320	A10	20	16	320
	Copy/File/Mail Area	360	A11	20	18	360
	Active File Storage	224	A12.1	16	14	224
	Archive File Storage	196	A12.2	14	14	196
	Kitchenette / Break Room	168	A14	14	12	168
	Small Storage Closet	48	A15	8	6	48
	Large Storage Closet	120	A16	12	10	120
	Admin Toilet Facilities	152	A17	8	19	152
	Subtotal:	6,856				
	Area Grossing Factor (10%):	686				
	Circulation (30%):	2,262				
	TOTAL:	9,804				
Offices & Office Support Areas (Engineering)	Engineering Admin / Reception Area (1 admin)	168	A18	12	14	168
	Engineer Office (x8)	800	A19	10	10	100
	Town Engineer	192	A5	16	12	192
	Engineering Layout Room / File Storage	560	A20	28	20	560
	Kitchen Alcove	50	A21	5	10	50
	Toilet Facilities	152	A17	8	19	152
	Survey Equipment Closet	192	A22	12	16	192
	Subtotal:	2,114				
	Area Grossing Factor (10%):	211				
	Circulation (30%):	698				
	TOTAL:	3,023				

Building Requirements

Area	Description	Size (SF)	Ref #	Room / Area length	Dimensions width	Dimensions size
Employee Facilities	Male Locker/Shower/Toilet	1,953	B1	31	63	1,953
	Female Locker/Shower/Toilet	500	B2	20	25	500
	Laundry Room	120	B3	12	10	120
	Sanitation / Wash-Off Area	96	B4	12	8	96
	Muster Room (50 ppl)	1,260	B5	42	30	1,260
	Break/Training / Muster Room Storage Closet	72	B5	12	6	72
	Storm Event Room	224	B7	14	16	224
	Cot Storage Room	80	B8	10	8	80
	Subtotal:	4,305				
	Area Grossing Factor (10%):	431				
	Circulation (30%):	1,421				
	TOTAL:	6,156				
Utility Rooms	Main Janitor Closet	42	U1	7	6	42
	Secondary Janitor Closet	36	U2	6	6	36
	Tel/Data Room	100	U3	10	10	100
	Main Electrical Room	320	U4	20	16	320
	Secondary Electrical Room	168	U5	14	12	168
	Plumbing/Fire Protection Room	216	U6	18	12	216
	Main Mechanical Room	320	U4	20	16	320
	Secondary Mechanical Room	168	U5	14	12	168
	Elevator Machine Room	24	U7	6	4	24
	Subtotal:	1,394				
	Area Grossing Factor (10%):	139				
	Circulation (30%):	460				
	TOTAL:	1,993				
Work Shops & Material Storage	Highway Shop	2,475	C1	55	45	2,475
	Sign Shop	660	C2	22	30	660
	Water Shop	2,475	C3	55	45	2,475
	Brass Storage	100	C3.1	10	10	100
	Parks & Forestry Shop	2,475	C4	55	45	2,475
	Cemetery Shop	1,350	C5	45	30	1,350
	Carpentry Shop	1,386	C6	42	33	1,386
	Facilities Supply Storage	600	C7	20	30	600
	Facilities Tool Crib	100	C8	10	10	100
	Subtotal:	11,621				
	Area Grossing Factor (5%):	581				
	Circulation (10%):	1,220				
	TOTAL:	13,422				

Building Requirements

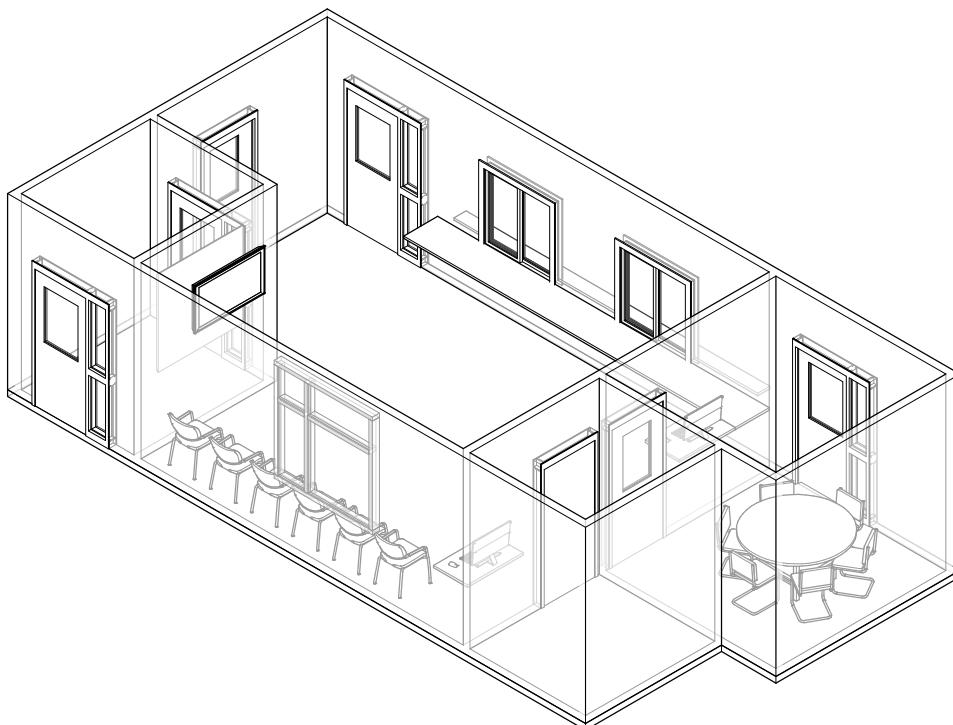
Area	Description	Size (SF)	Ref #	Room / Area length	width	Dimensions size
Fleet Maintenance (DPW)	Light Duty Bay 1 (Police)	770	D1.1	22	35	770
	Light Duty Bay 2 (Police)	770	D1.1	22	35	770
	Light Duty Bay 3 (DPW)	770	D1.1	22	35	770
	Light Duty Bay 4 (DPW)	770	D1.1	22	35	770
	Heavy Duty Bay 1	1,320	D1.1	22	60	1,320
	Heavy Duty Bay 2	1,320	D1.1	22	60	1,320
	Heavy Duty Bay 3	1,320	D1.1	22	60	1,320
	Heavy Duty Bay 4	1,320	D1.1	22	60	1,320
	Long Term Maintenance Bay	1,320	D1.1	22	60	1,320
	Inspection Bay	1,320	D1.1	22	60	1,320
	Welding Area	450	D1.1	30	15	450
	Fluid Storage Room	360	D2.1	24	15	360
	Parts Storage Room (DPW)	900	D3.1	30	30	900
	Parts Storage Room (Police)	400	D3.2	20	20	400
	Tire Storage Area (DPW)	300	D4	12	25	300
	Tire Storage Area (Police)	300	D4	12	25	300
	Tire Repair Area	120	D5	10	12	120
	Hydraulic Hose Shop	100	D6	10	10	100
	Small Equipment Repair Shop	180	D7	18	10	180
	Mechanic's Tool Cribs (5 cribs each 8x10)	400	D8	8	50	400
	Inspection Equipment Storage	84	D9	7	12	84
	Head Mechanic's Office	144	D10.1	12	12	144
	Shared Mechanic's Office / Reference Room	192	D10.2	12	16	192
	Toilet Facility	56	D11	8	7	56
	Compressor Room	(on Mezz)		18	10	180
		Subtotal:	14,986			
		Area Grossing Factor (5%):	749			
		Circulation (10%):	1,574			
		TOTAL:	17,309			
Fleet Maintenance (Fire)	XL Maintenance Bay	2,000	D1.2	25	80	2,000
	Fluid Storage	168	D2.2	12	14	168
	Parts Storage	480	D3.3	20	24	480
	Subtotal:	2,648				
	Area Grossing Factor (5%):	132				
	Circulation (10%):	278				
	TOTAL:	3,058				

Building Requirements

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Appendix D

Room Data Sheets



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CERAMIC TILE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

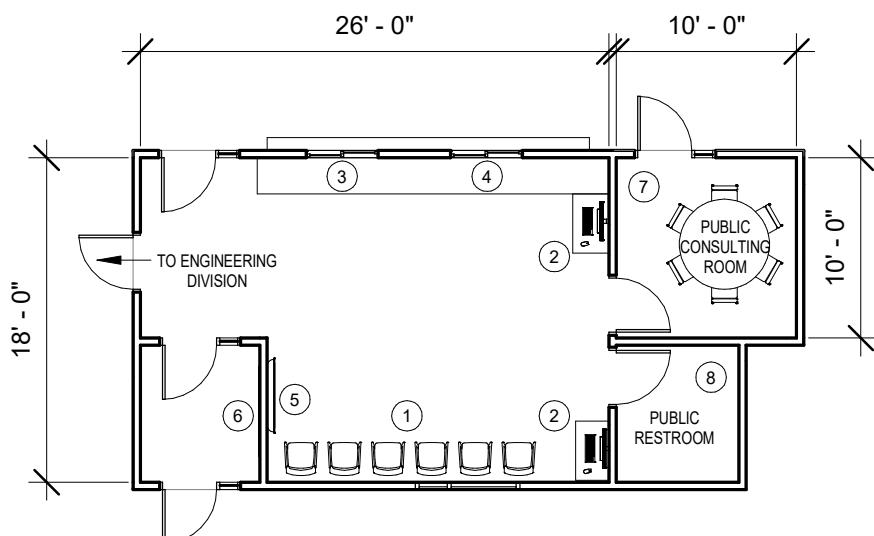
TEL / DATA OUTLET JACKS

HEATING / COOLING

OCCUPANCY SENSORS
FOR LIGHTING CONTROLS

NATURAL LIGHTING W/ WINDOWS

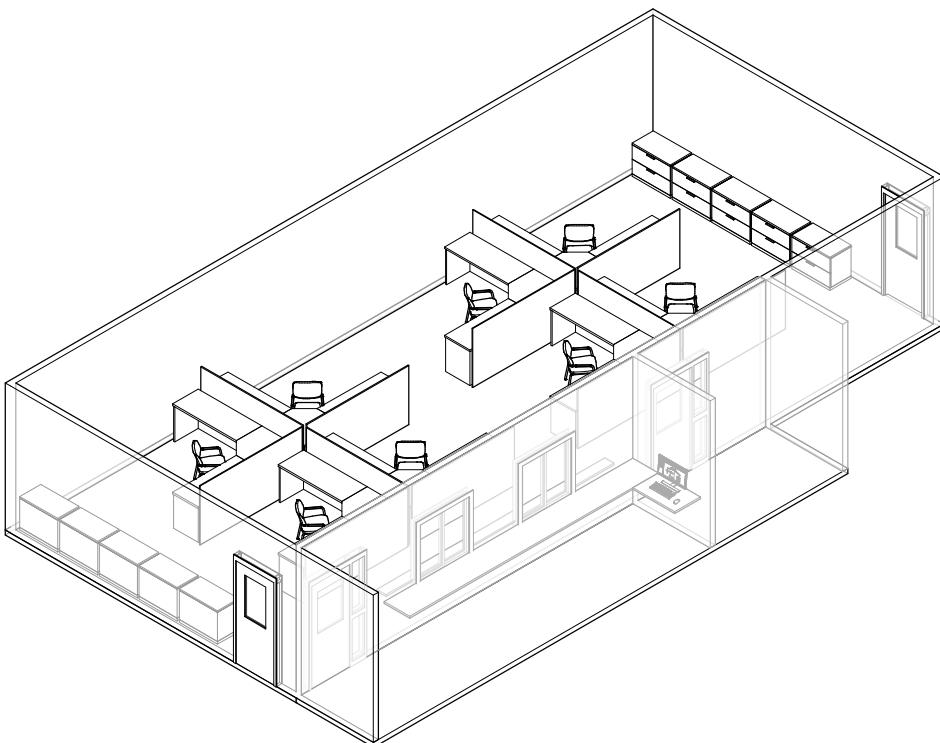
COMPONENTS:



PUBLIC LOBBY, CONSULTING ROOM & RESTROOM - 624 SF

3/32" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET TILE

MEP/DATA REQUIREMENTS:

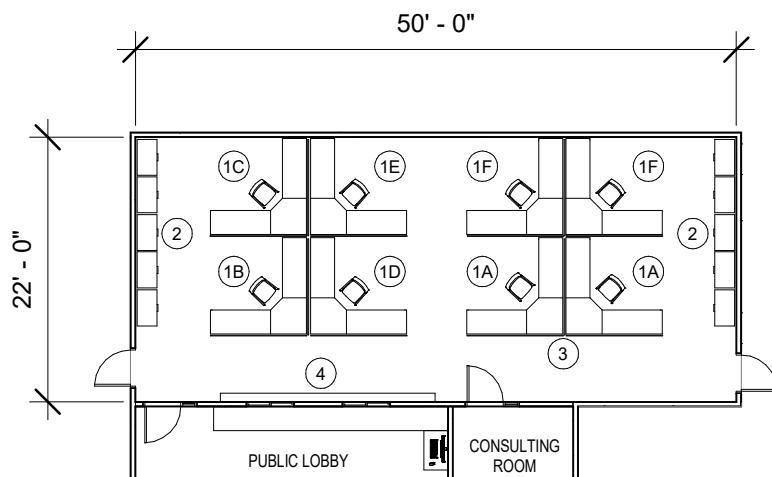
DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING



DPW ADMIN OPEN OFFICE - 1,100 SF

1/16" = 1'-0"

COMPONENTS:

1. (8) 8' X 8' WORK STATIONS:

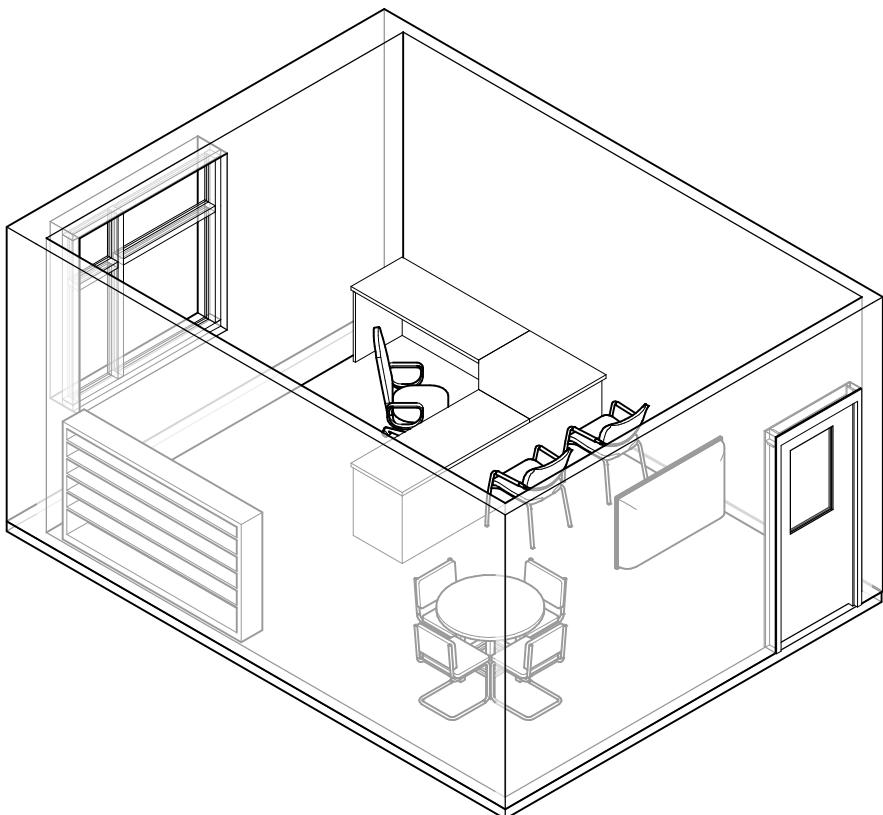
- A. (2) WATER ADMIN
- B. HIGHWAY ADMIN
- C. PARKS/FORESTRY ADMIN
- D. SOLID WASTE ADMIN
- E. FACILITIES/FLEET ADMIN
- F. (2) FUTURE ADMIN

2. FILE STORAGE

3. PARTITION

4. (2) RECEPTION WINDOWS
& COUNTER

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET

MEP/DATA REQUIREMENTS:

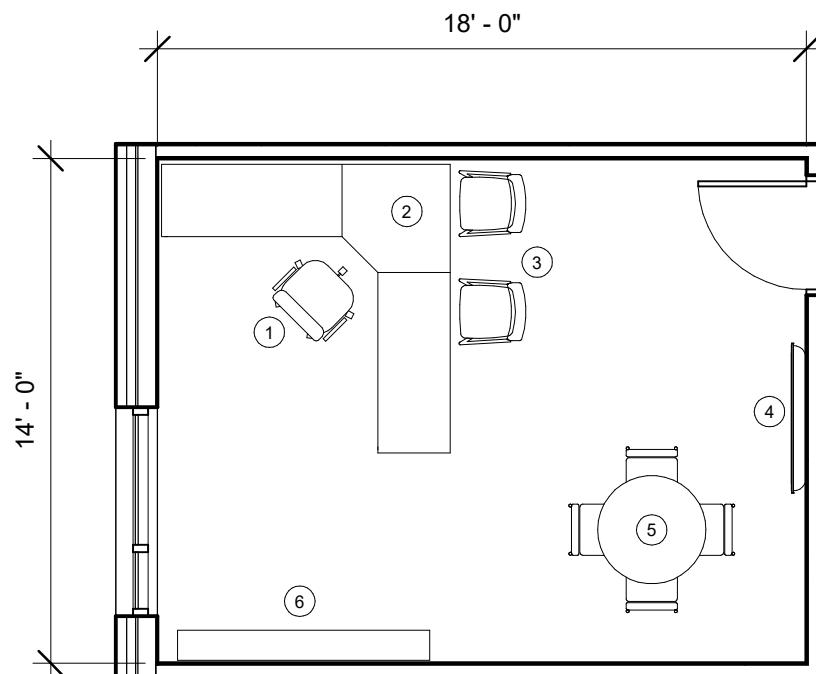
DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING



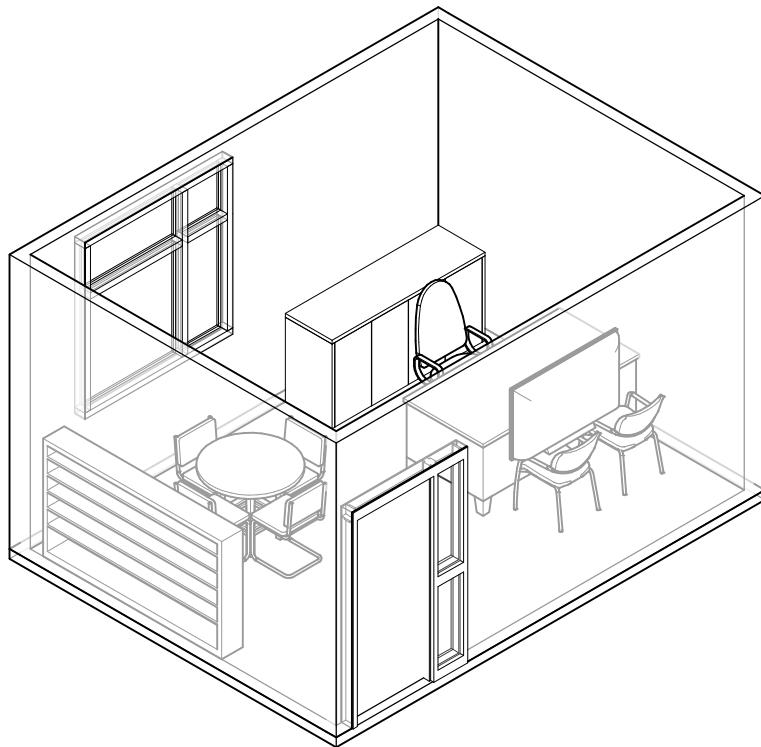
COMPONENTS:

1. EXECUTIVE CHAIR
2. EXECUTIVE DESK
3. (2) GUEST CHAIRS
4. TV MONITOR
5. MEETING TABLE & (4) CHAIRS
6. BOOKCASE

DPW DIRECTOR'S OFFICE - 252 SF

3/16" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET

MEP/DATA REQUIREMENTS:

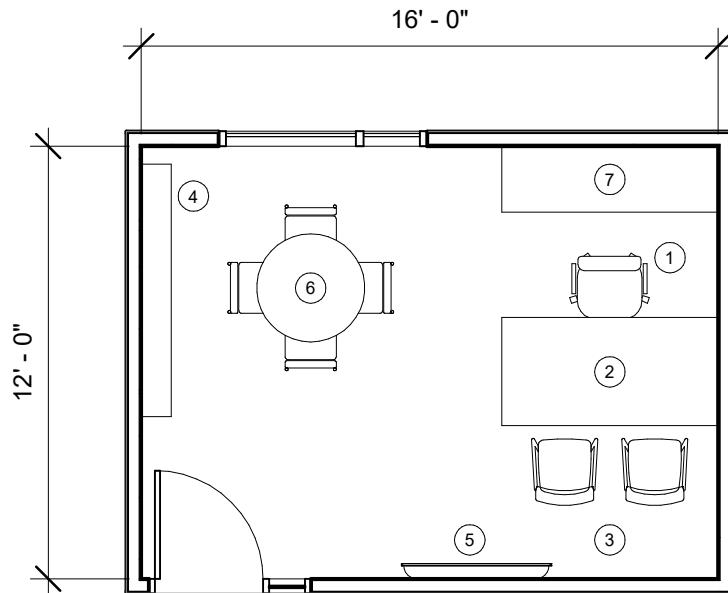
DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING



PRIVATE OFFICE - 192 SF

3/16" = 1'-0"

COMPONENTS:

1. EXECUTIVE CHAIR

2. WORKSTATION

3. (2) GUEST CHAIRS

4. BOOKCASE /
FILE CABINETS

5. TV MONITOR

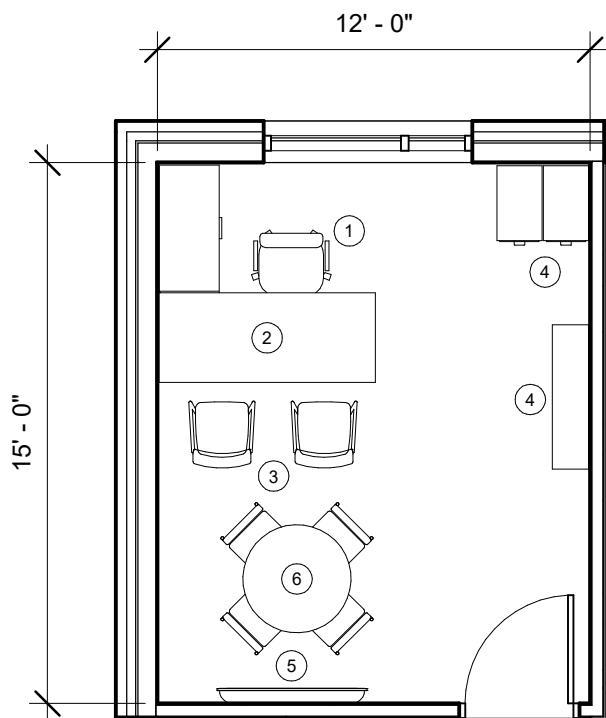
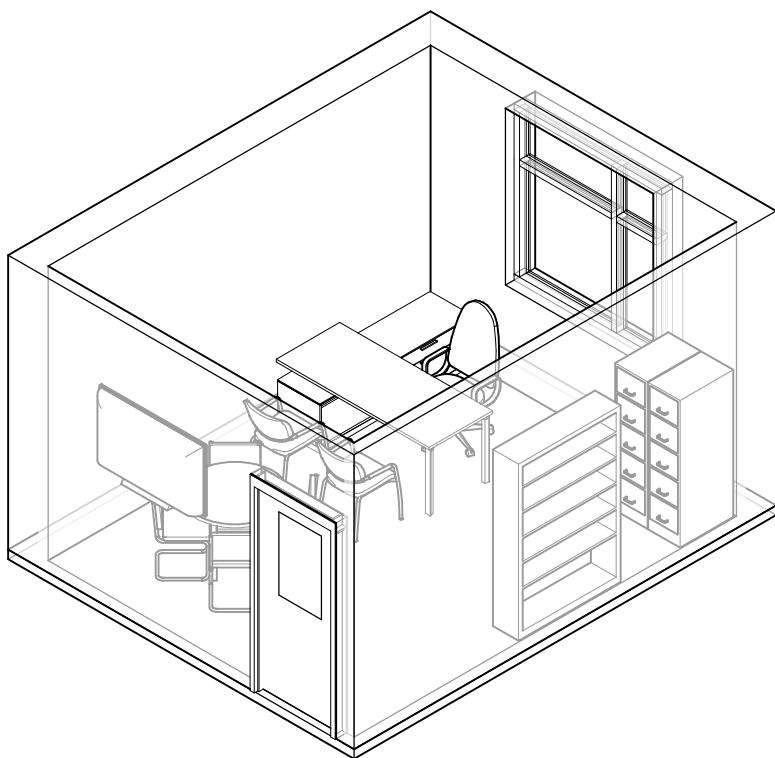
6. SMALL MEETING TABLE
AND (4) CHAIRS

7. CREDENZA

POSITIONS OFFICE APPLIES TO:

- ASSISTANT DIRECTOR
- OFFICE MANAGER
- SAFETY OFFICER
- TOWN ENGINEER

DRAFT



PRIVATE OFFICE - 180 SF
3/16" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

COMPONENTS:

1. EXECUTIVE CHAIR

2. WORKSTATION

3. (2) GUEST CHAIRS

4. BOOKCASE /
FILE CABINETS

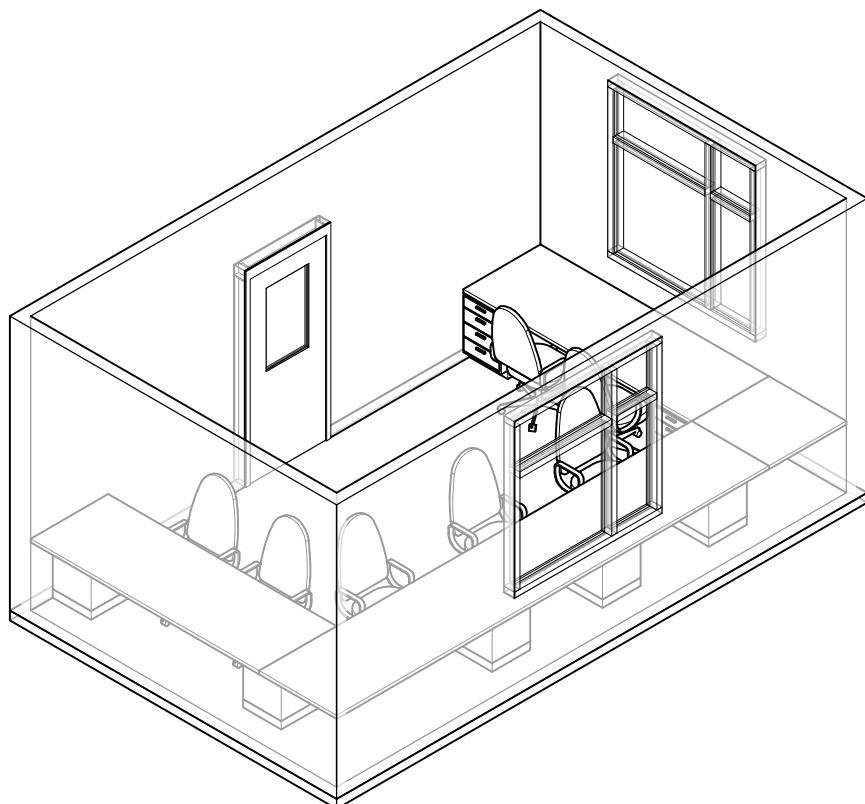
5. TV MONITOR

6. SMALL MEETING TABLE
& (4) CHAIRS

POSITIONS OFFICE APPLIES TO:

- HIGHWAY MANAGER
- WATER SUPERINTENDENT
- WATER ASSIST. SUPER.
- BILLING MANAGER
- METER READER
- PARKS/FORESTRY SUPER.
- FACILITIES MANAGER
- FACILITIES OPS. MANAGER

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

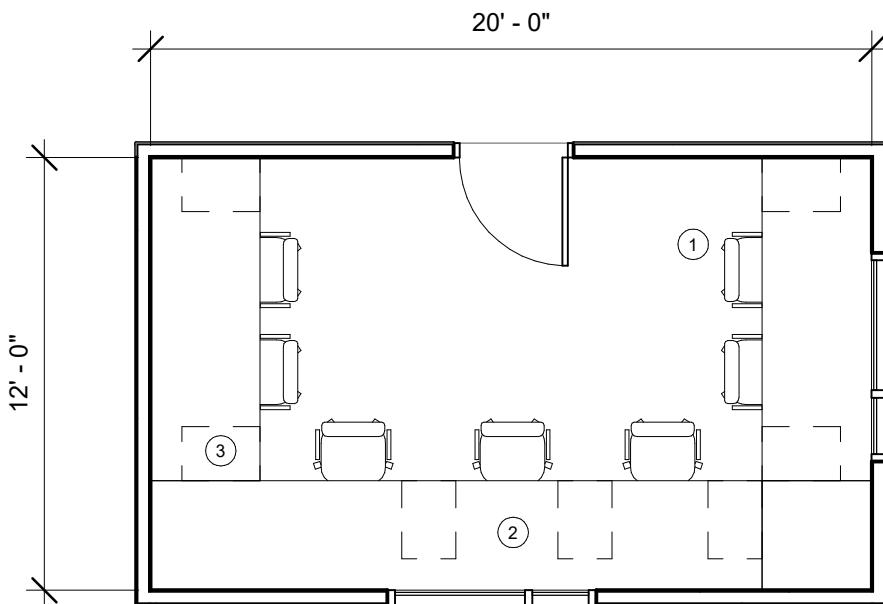
NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

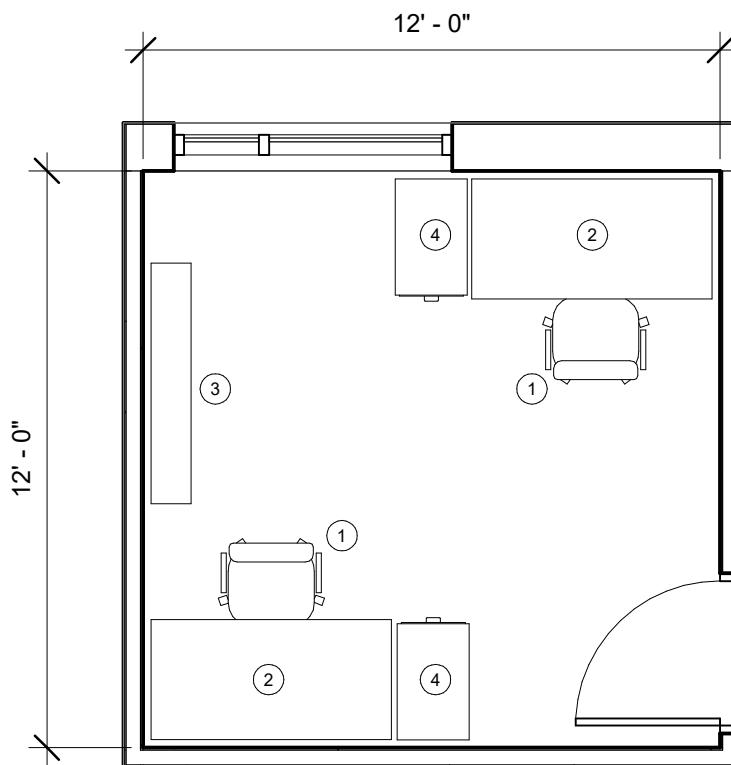
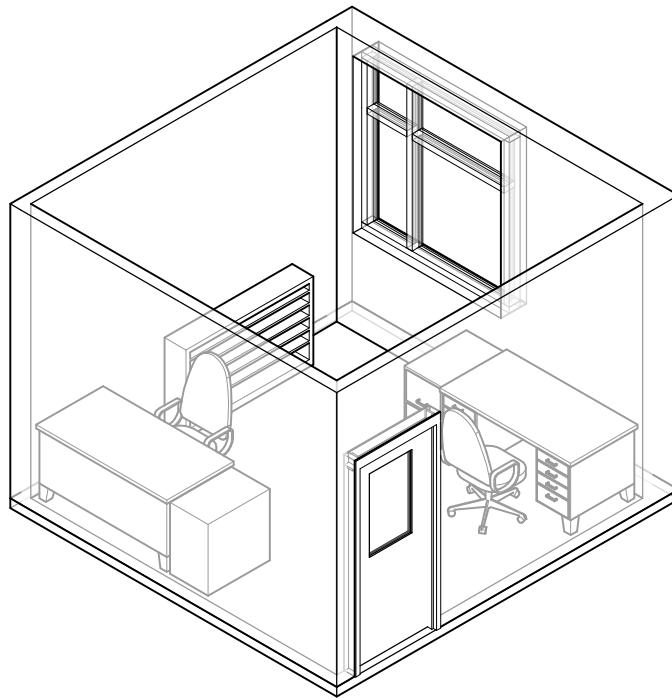
COMPONENTS:

1. (7) EXECUTIVE CHAIRS
2. (7) WORKSTATIONS
3. FILE CABINETS



HIGHWAY/PARKS - SHARED FOREMAN OFFICE - 240 SF
3/16" = 1'-0"

DRAFT



WATER SHARED FOREMAN OFFICE - 144 SF
 $1/4" = 1'-0"$

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

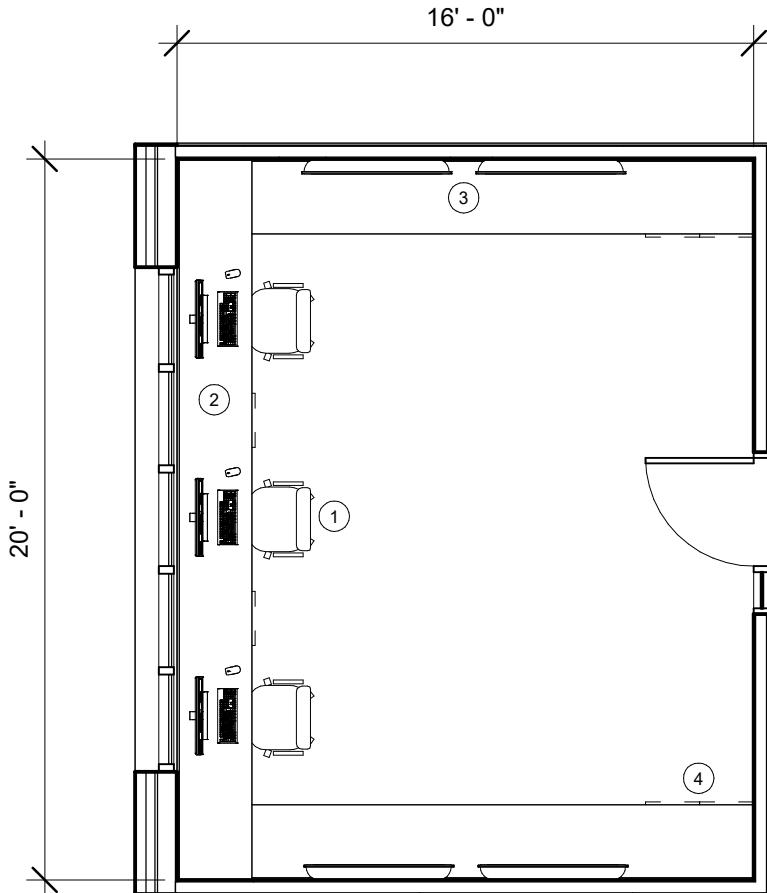
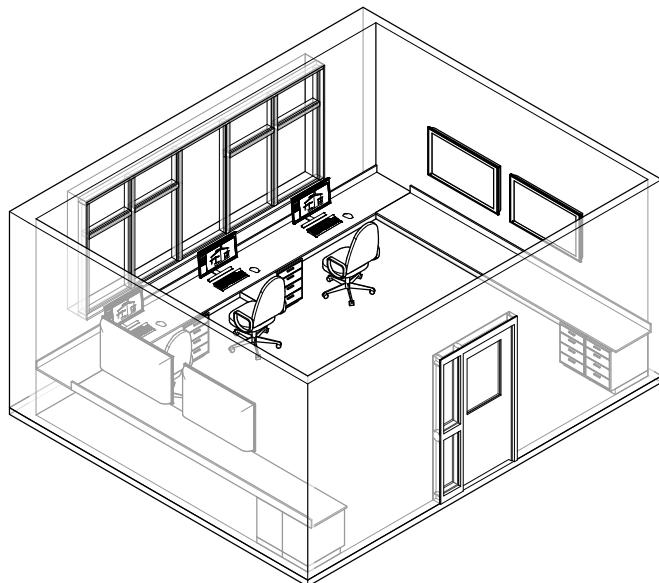
OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

COMPONENTS:

1. (2) EXECUTIVE CHAIRS
2. (2) WORKSTATIONS
3. BOOKCASE
4. FILE CABINET

DRAFT



SCADA OPERATIONS ROOM - 352 SF

3/16" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET TILE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

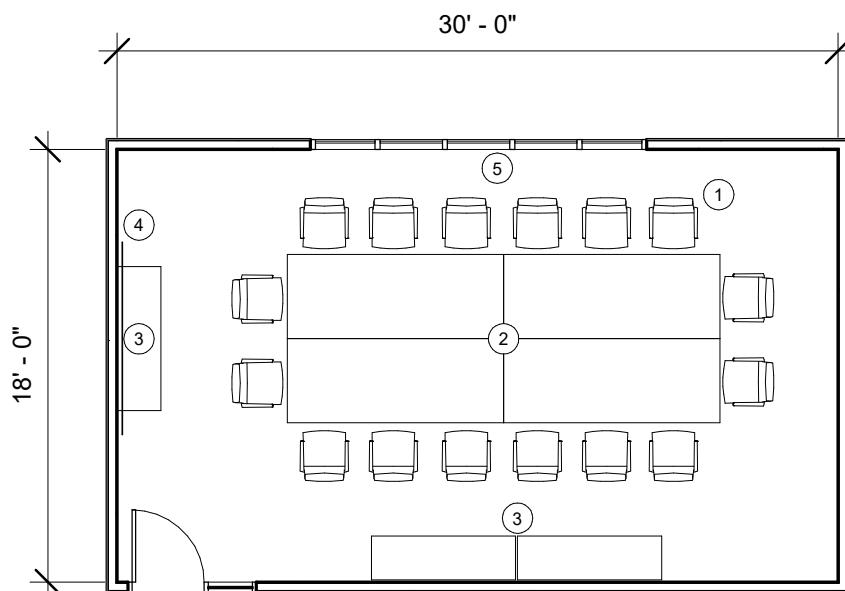
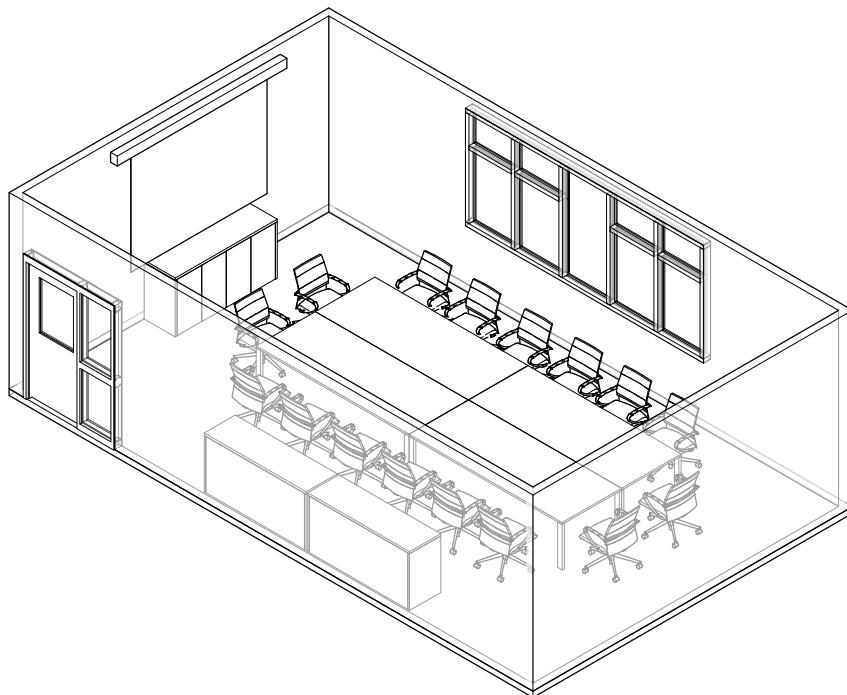
OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

COMPONENTS:

1. (3) EXECUTIVE CHAIRS
2. (3) WORKSTATIONS
3. TV MONITORS
4. FILE CABINETS

DRAFT



LARGE CONFERENCE ROOM - 540 SF

1/8" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET TILE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

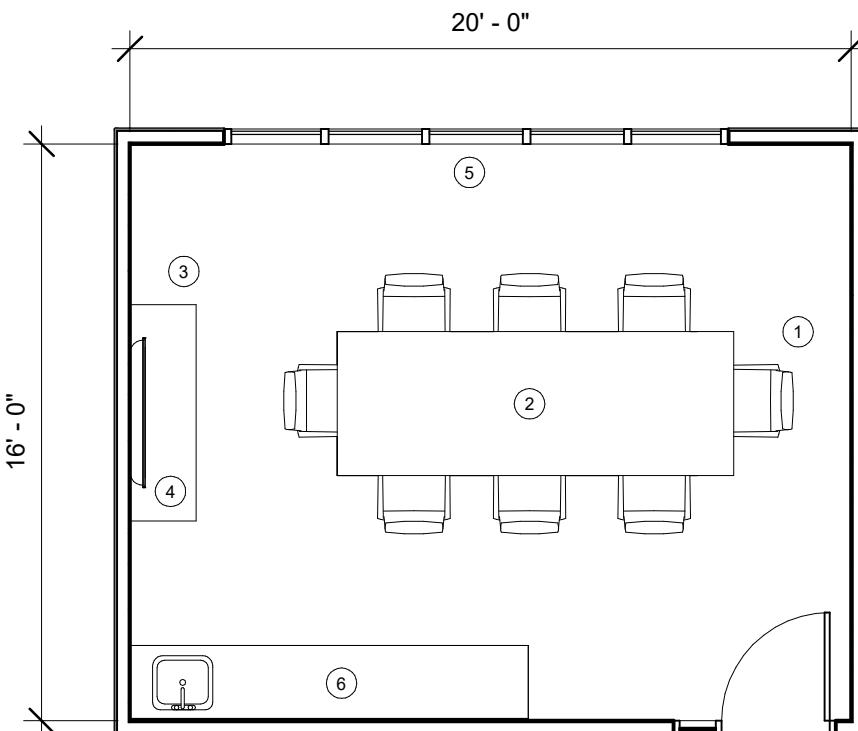
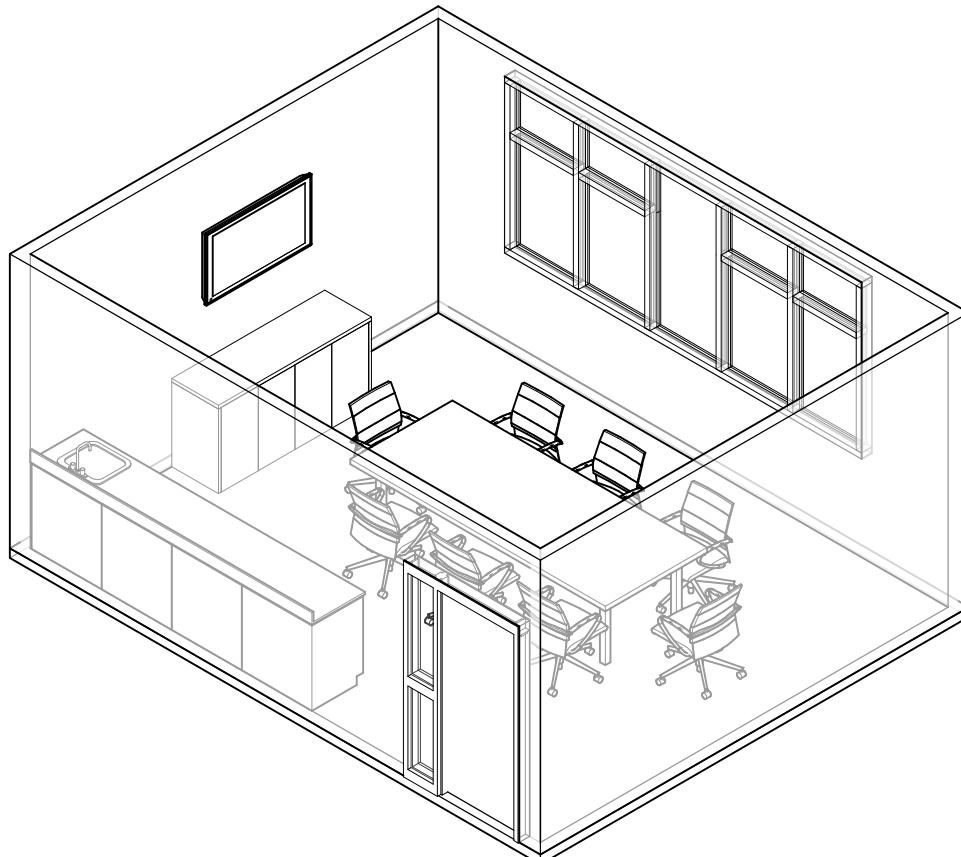
OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

COMPONENTS:

1. (16) EXECUTIVE CHAIRS
2. CONFERENCE TABLE W/
CENTRAL POWER/DATA
CONSOLE
3. CREDENZA
4. PROJECTION SCREEN
5. ROOM DARKENING SHADES
FOR PRESENTATION

DRAFT



SMALL CONFERENCE ROOM - 320 SF

3/16" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET TILE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

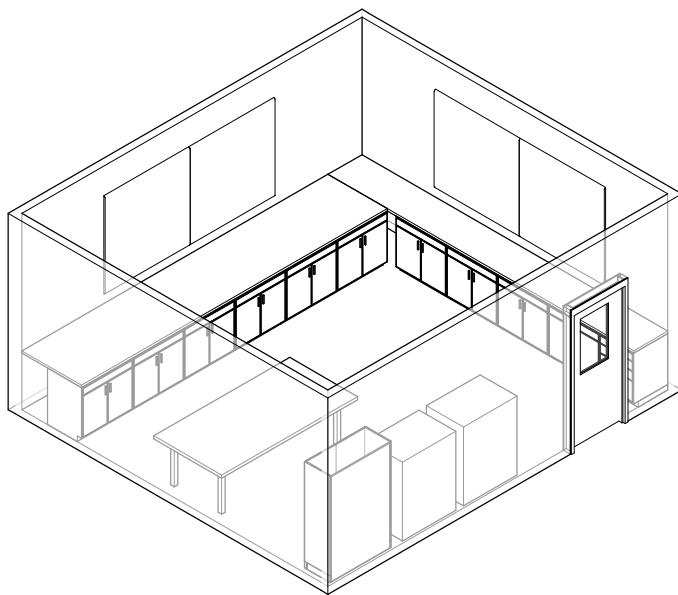
OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

COMPONENTS:

1. (8) EXECUTIVE CHAIRS
2. CONFERENCE TABLE W/
CENTRAL POWER/DATA
CONSOLE
3. CREDENZA
4. LARGE FORMAT TV/MONITOR
5. ROOM DARKENING SHADES
FOR PRESENTATION
6. KITCHENETTE W/ SINK
AND UC FRIDGE

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET TILE

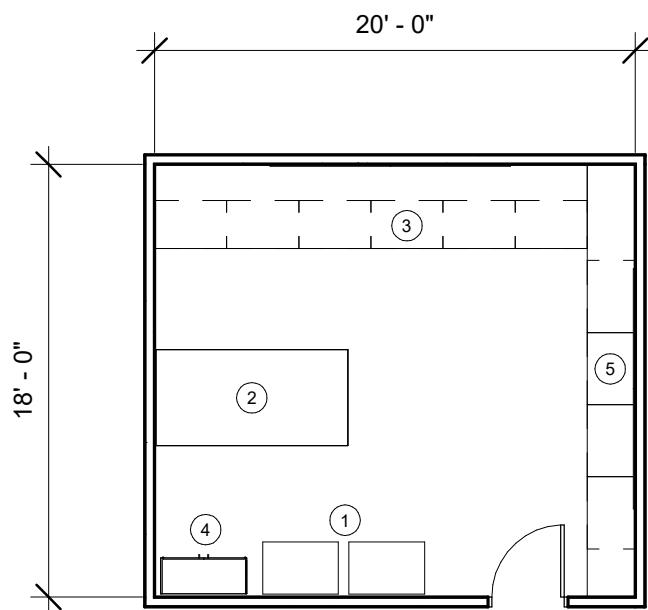
MEP/DATA REQUIREMENTS:

HEATING

COOLING

DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS



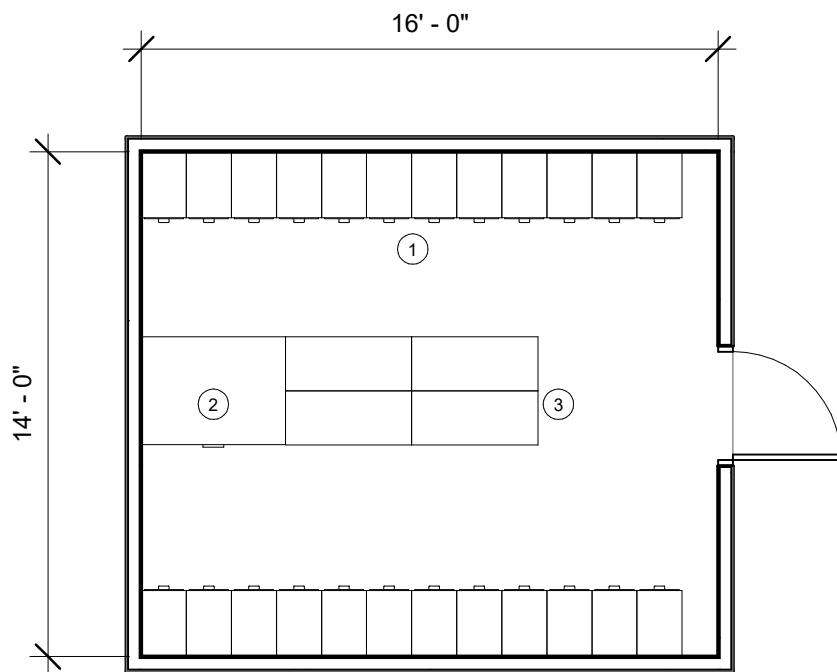
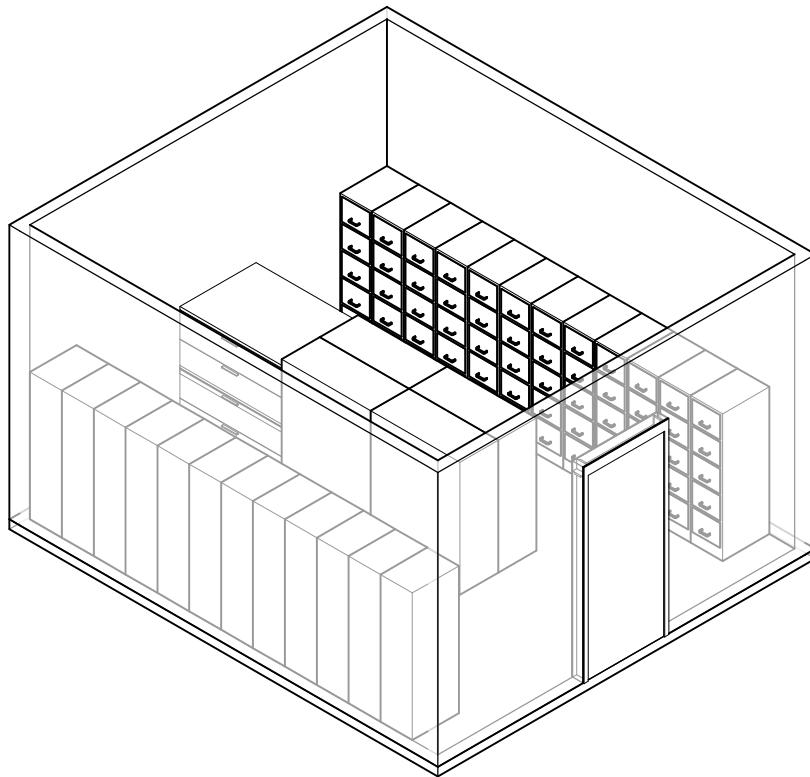
COMPONENTS:

1. STANDARD PRINTER/ COPIER / SCANNER
2. LAYOUT TABLE
3. WORK COUNTER & BASE CABINETS (BELOW)
4. STORAGE
5. BULLETIN BOARD

COPY/ FILE/ MAIL ROOM - 360 SF

1/8" = 1'-0"

DRAFT



ACTIVE FILE STORAGE - 224 SF

3/16" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET

MEP/DATA REQUIREMENTS:

HEATING

COOLING

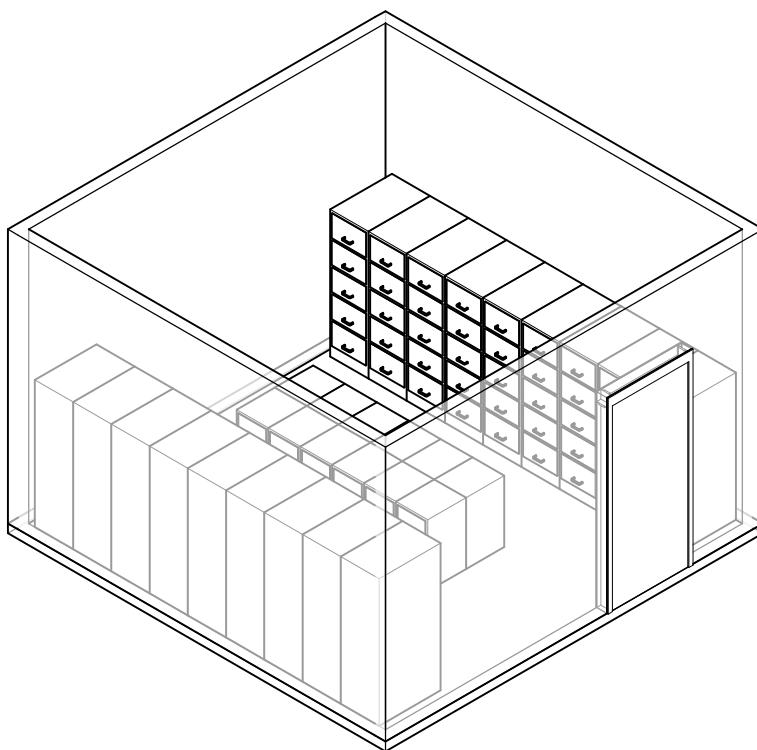
DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS

COMPONENTS:

1. (24) 5-DRAWER FILE CABINETS
2. (4) FLAT FILES,
STACKED 3-HIGH
3. (4) LATERAL FILE CABINETS
42" W x 18" D x 54" H

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GEB, PAINTED

FLOORS: CARPET

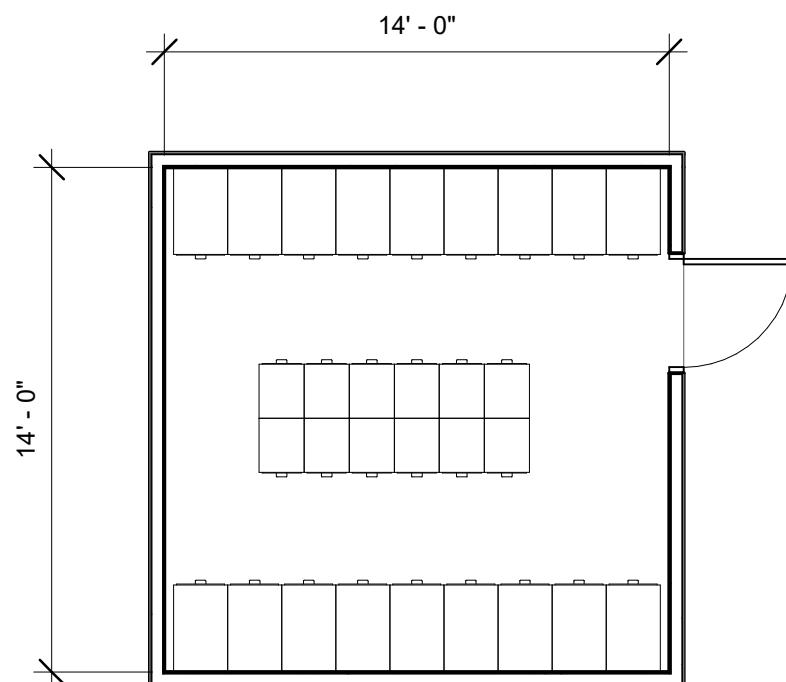
MEP/DATA REQUIREMENTS:

HEATING

COOLING

DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS



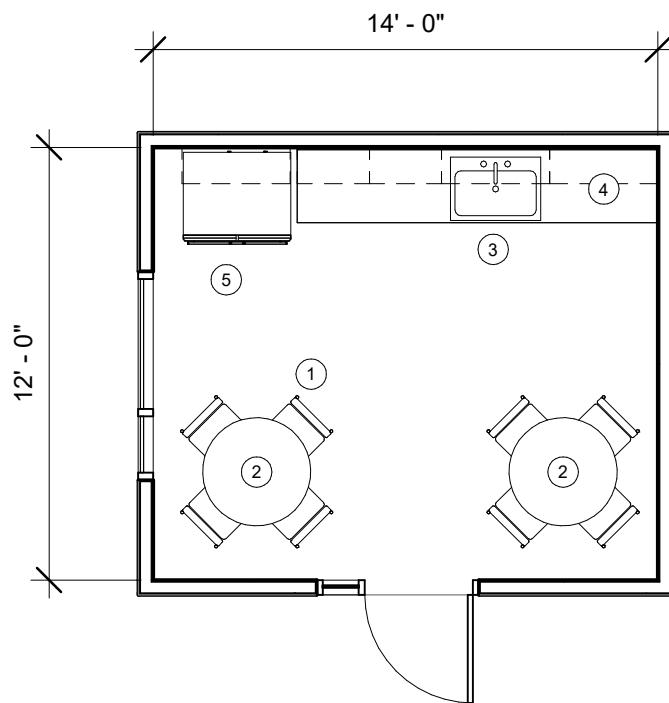
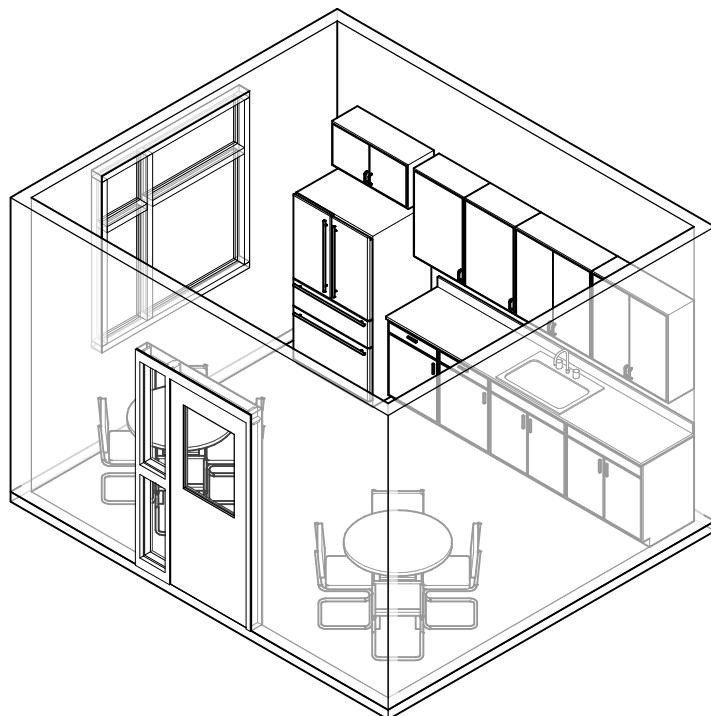
ARCHIVE FILE STORAGE - 196 SF

3/16" = 1'-0"

COMPONENTS:

1. FILE CABINETS

DRAFT



KITCHENETTE / BREAK ROOM - 168 SF
 $3/16" = 1'-0"$

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

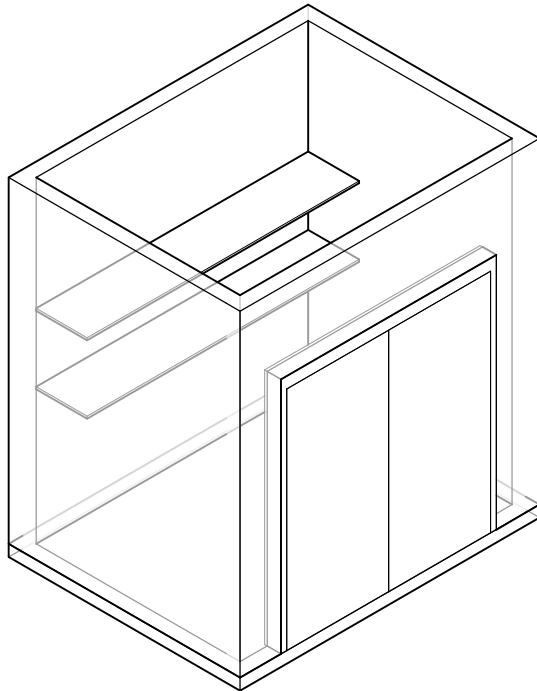
OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

COMPONENTS:

1. (8) CHAIRS
2. (2) 36" DIA TABLE
3. STAINLESS STEEL KITCHEN SINK
4. BASE CABINETS, COUNTER, & WALL HUNG CABINETS
5. REFRIGERATOR

DRAFT



ROOM FINISHES:

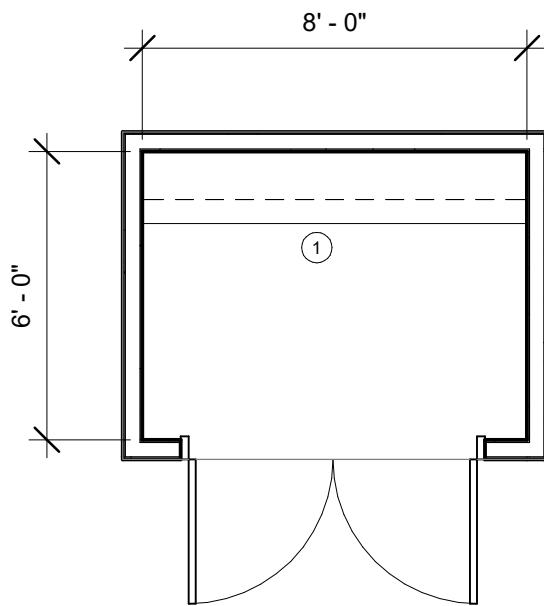
CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

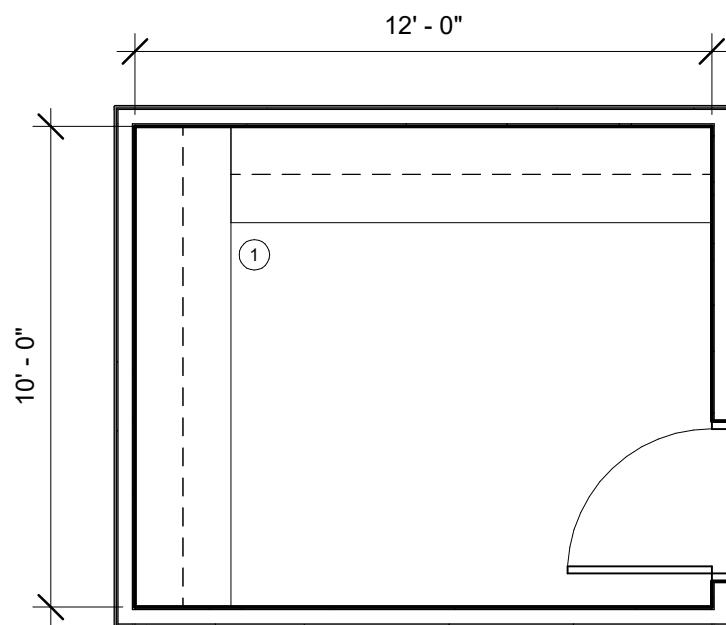
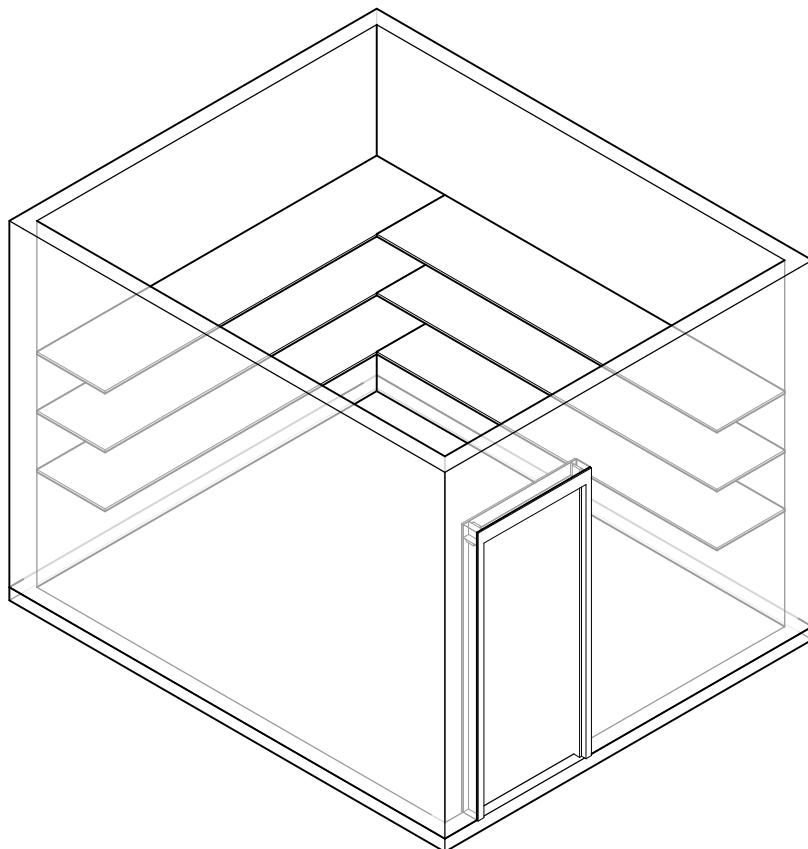


SMALL STORAGE CLOSET - 48 SF
1/4" = 1'-0"

COMPONENTS:

1. WALL MOUNTED SHELVING

DRAFT



LARGE STORAGE CLOSET - 120 SF

1/4" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

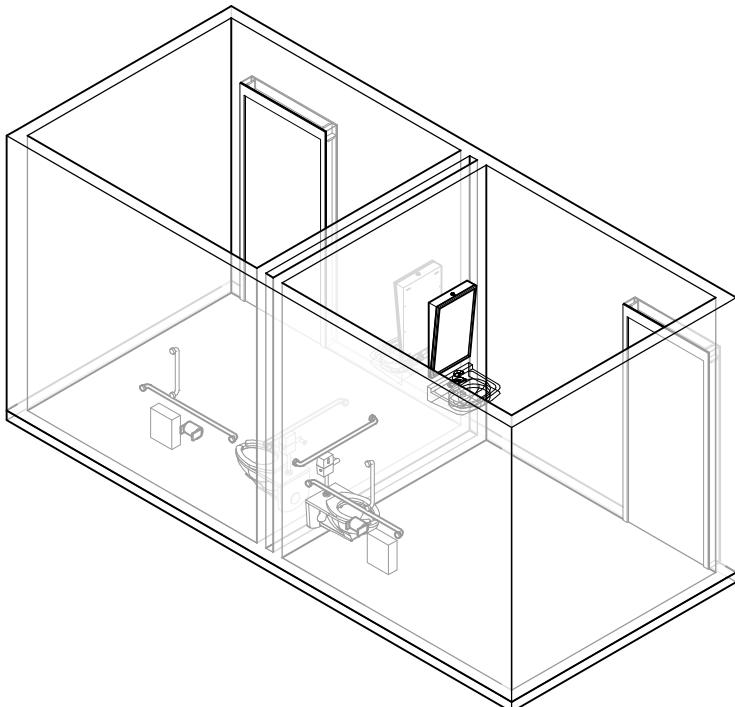
MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

COMPONENTS:

1. WALL MOUNTED SHELVING

DRAFT



ROOM FINISHES:

CEILING: MOISTURE RESISTANT ACT TILE

WALLS: CERAMIC TILE / GWB, PAINTED

FLOORS: CERAMIC TILE

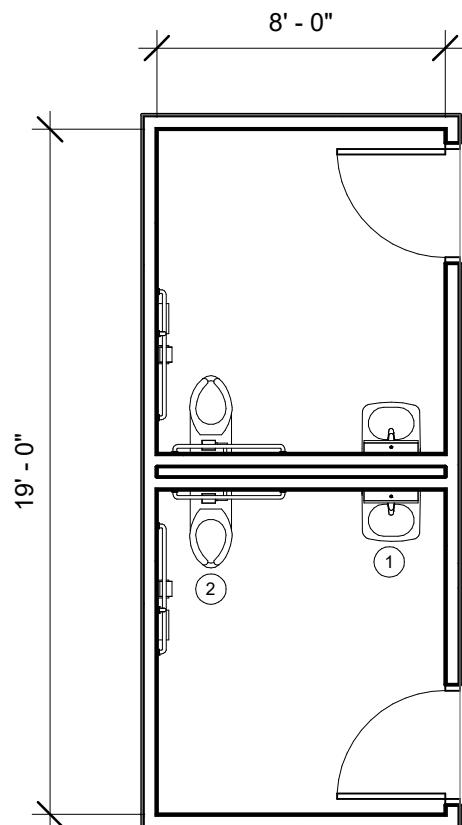
MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL / DATA OUTLET JACKS

HEATING / COOLING

OCCUPANCY SENSORS
FOR LIGHTING CONTROLS

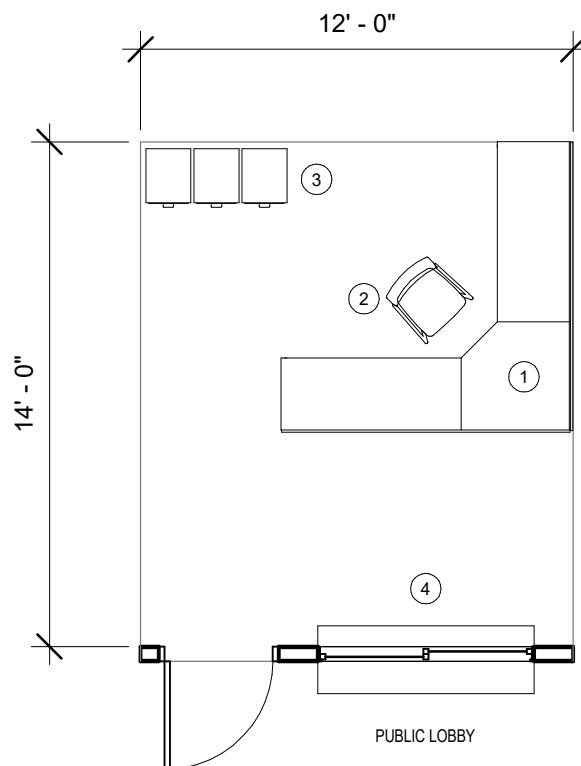
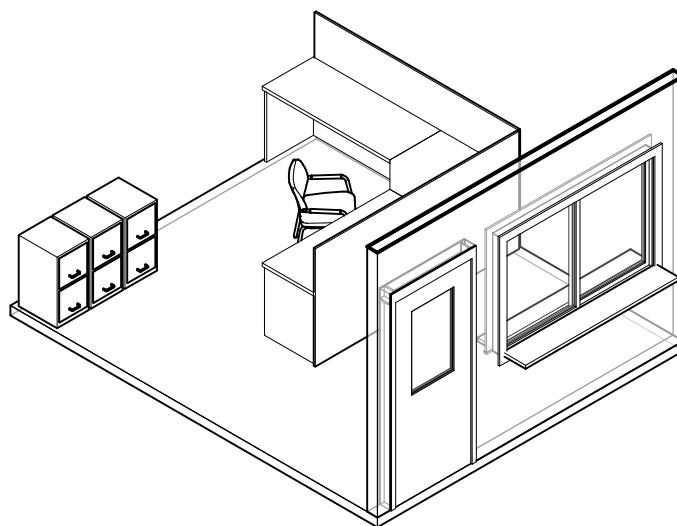


COMPONENTS:

1. (2) WALL HUNG SINK
2. (2) WALL HUNG TOILET

ADMIN TOILET FACILITIES - 152 SF
3/16" = 1'-0"

DRAFT



ENGINEERING ADMIN / RECEPTION AREA - 168 SF
 $3/16" = 1'-0"$

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET TILE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL / DATA OUTLET JACKS

HEATING / COOLING

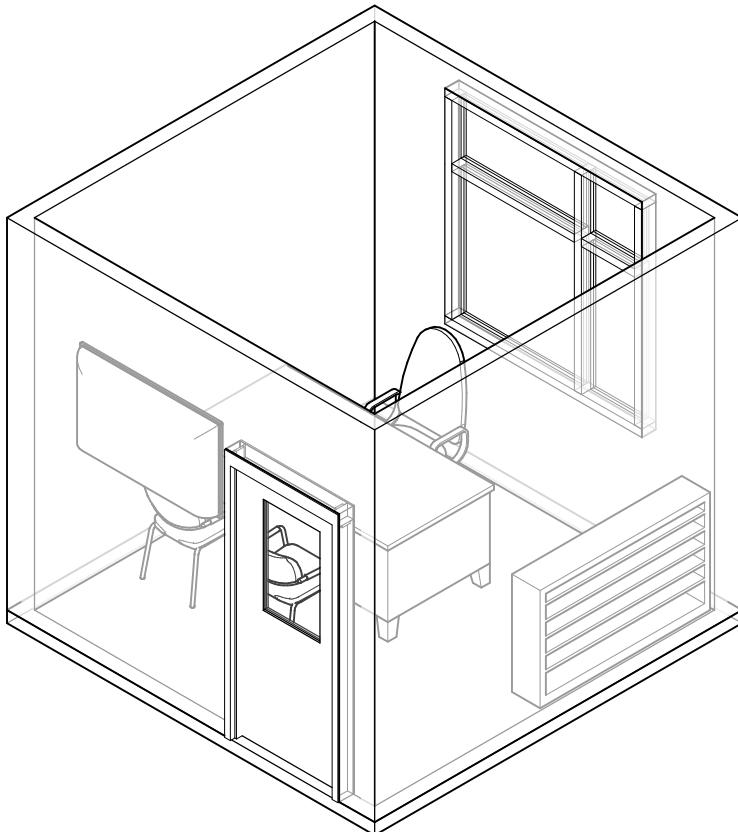
OCCUPANCY SENSORS
FOR LIGHTING CONTROLS

NATURAL LIGHTING W/ WINDOWS

COMPONENTS:

1. WORKSTATION
2. EXECUTIVE CHAIR
3. FILE STORAGE
4. RECEPTION WINDOW

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET TILE

MEP/DATA REQUIREMENTS:

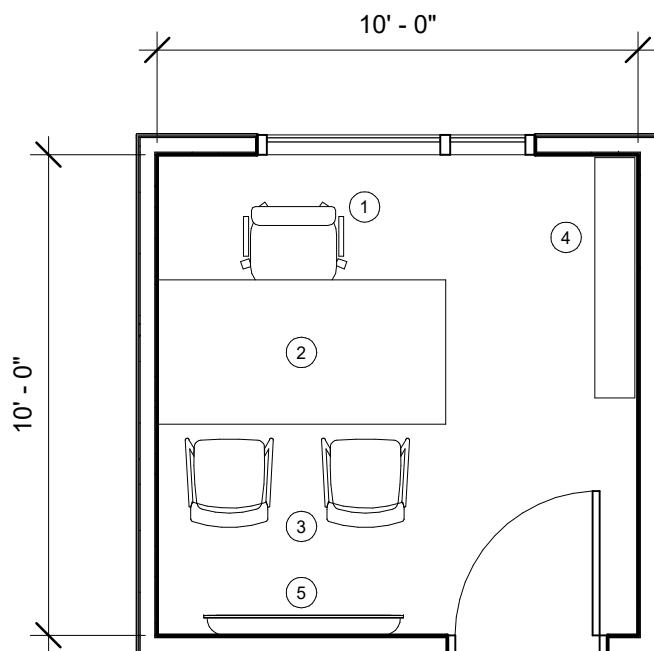
DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING



COMPONENTS:

1. EXECUTIVE CHAIR

2. WORKSTATION

3. GUEST CHAIRS

4. BOOKCASE /
FILE CABINETS

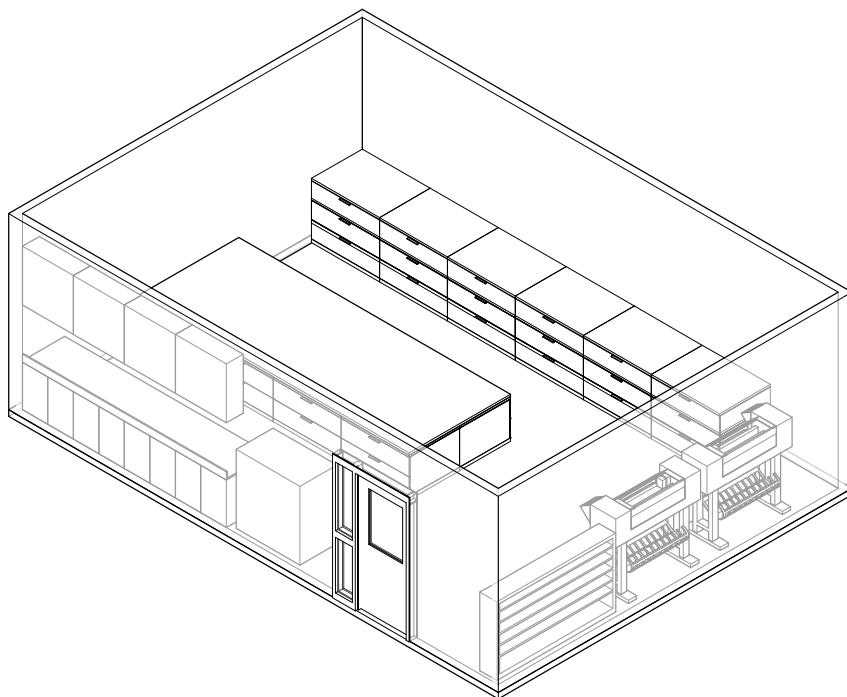
5. TV MONITOR

APPLIES TO 8 ENGINEER STAFF

ENGINEER STAFF OFFICE - 100 SF

1/4" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: CARPET TILE

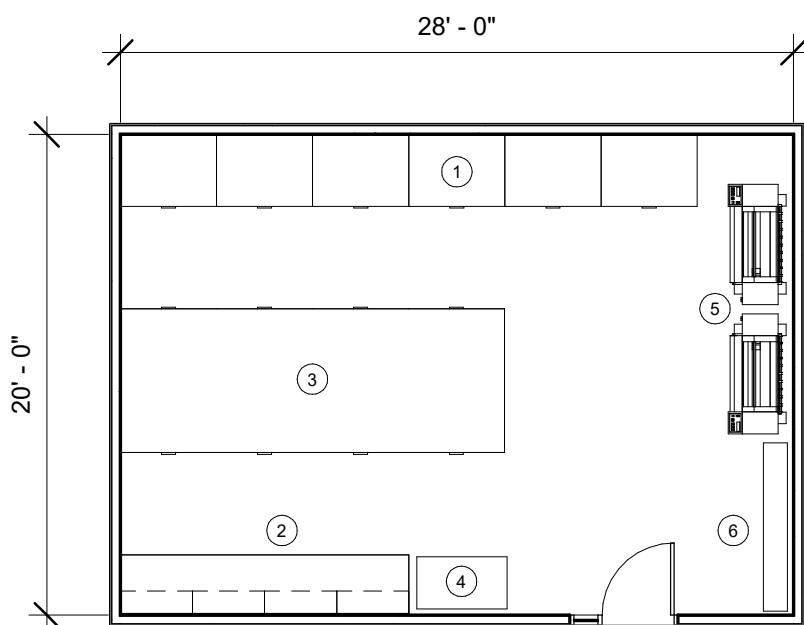
MEP/DATA REQUIREMENTS:

HEATING

COOLING

DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS

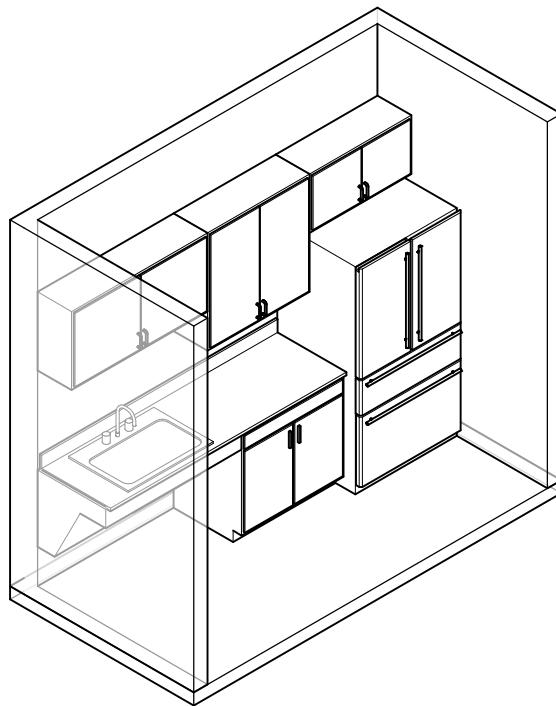


COMPONENTS:

1. (18) FLAT FILES, STACKED, 3-HIGH
2. WORK COUNTER, FILE CABINETS (BELOW) & SUPPLY CABINETS (ABOVE)
3. LAYOUT TABLE & (16) FLAT FILES (BELOW)
4. STANDARD PRINTER/ COPIER / SCANNER
5. LARGE FORMAT PRINTER
6. STORAGE SHELVES

ENGINEERING LAYOUT ROOM / FILE STORAGE - 560 SF
 $1/8" = 1'-0"$

DRAFT



ROOM FINISHES:

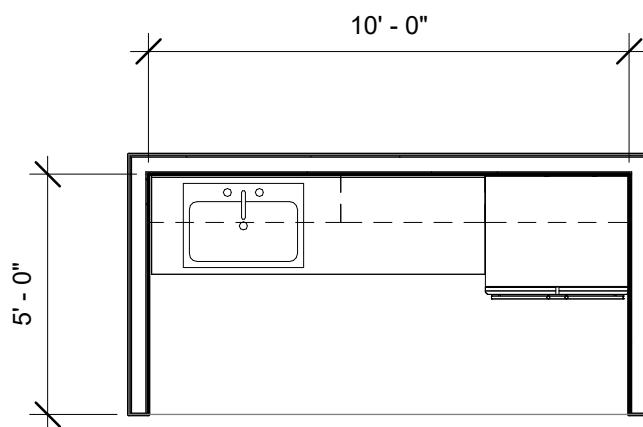
CEILING: GYP, PAINTED

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

GFI ELECTRICAL OUTLETS

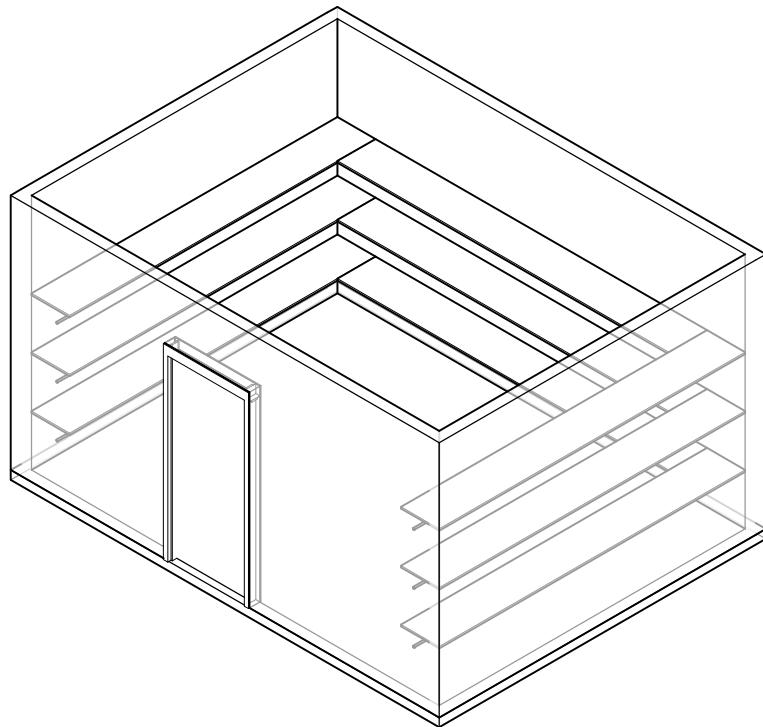


KITCHEN ALCOVE - 50 SF
1/4" = 1'-0"

COMPONENTS:

1. BASE CABINETS, COUNTER, & WALL HUNG CABINETS
2. SINK
3. KITCHENETTE APPLIANCES (i.e. Microwave, mini-fridge, etc.)

DRAFT



ROOM FINISHES:

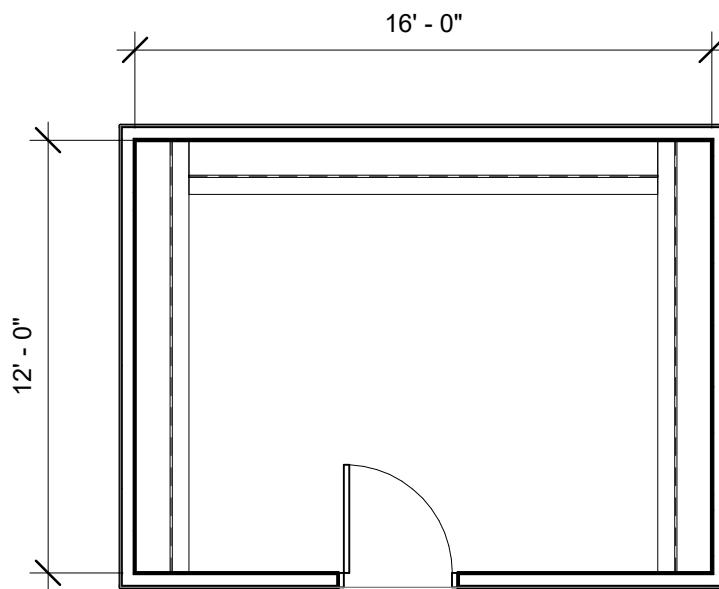
CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS



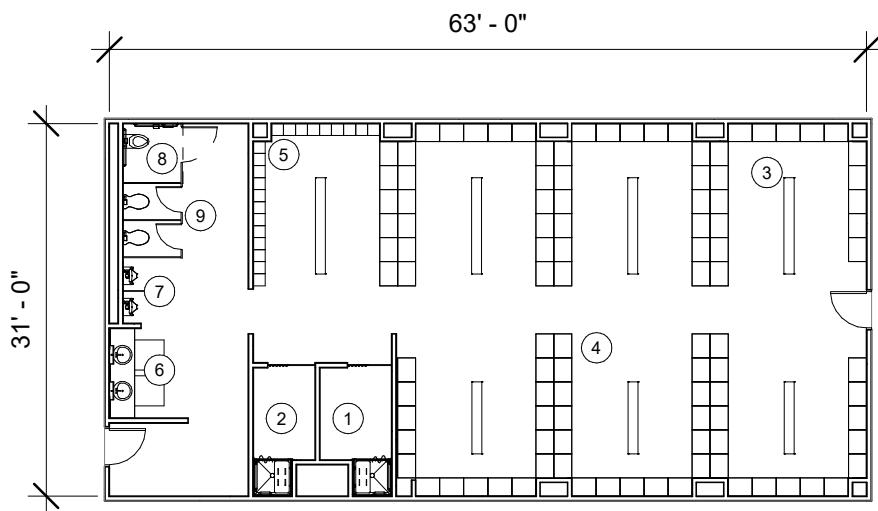
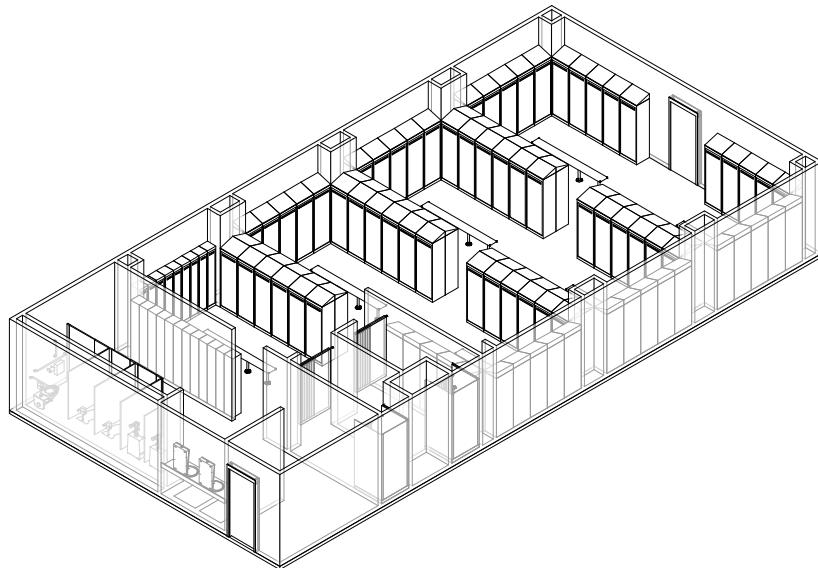
COMPONENTS:

1. WALL MOUNTED SHELVING

SURVEY EQUIPMENT ROOM - 192 SF

3/16" = 1'-0"

DRAFT



MALE LOCKER ROOM - 1,953 SF
1/16" = 1'-0"

ROOM FINISHES:

CEILING: MOISTURE RESISTANT ACT TILE

WALLS: METAL PANEL / CONCRETE, PAINTED

FLOORS: RESINOUS EPOXY

MEP/DATA REQUIREMENTS:

GFI ELECTRICAL OUTLETS

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

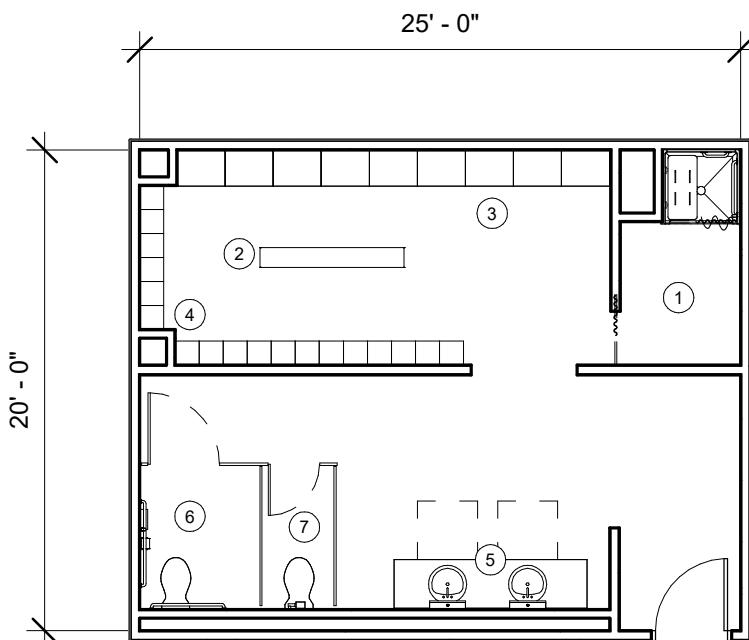
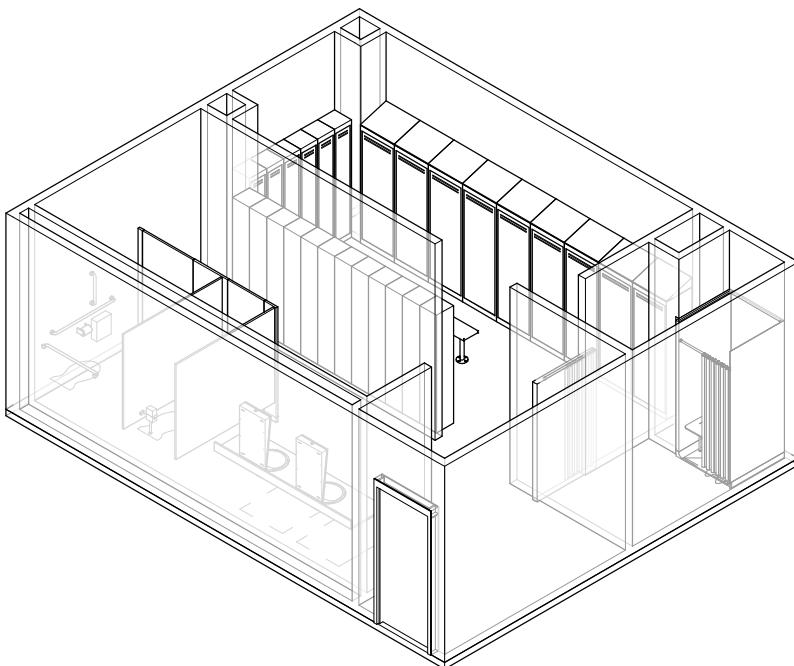
HEATING

COOLING

COMPONENTS:

1. ADA SHOWER STALL
2. STANDARD SHOWER STALL
3. BENCH
4. (106) 18" X 24" LOCKERS
5. (42) 12" X 12" STACKED SEASONAL LOCKERS
6. COUNTER, SINKS & MIRRORS
7. (2) WALL HUNG URINAL
8. ADA STALL
9. (2) STANDARD STALL

DRAFT



FEMALE LOCKER ROOM - 500 SF

1/8" = 1'-0"

ROOM FINISHES:

CEILING: MOISTURE RESISTANT ACT TILE

WALLS: METAL PANEL / CONCRETE, PAINTED

FLOORS: RESINOUS EPOXY

MEP/DATA REQUIREMENTS:

GFI ELECTRICAL OUTLETS

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

HEATING

COOLING

COMPONENTS:

1. ADA SHOWER STALL

2. BENCH

3. 9 18" X 24" LOCKERS

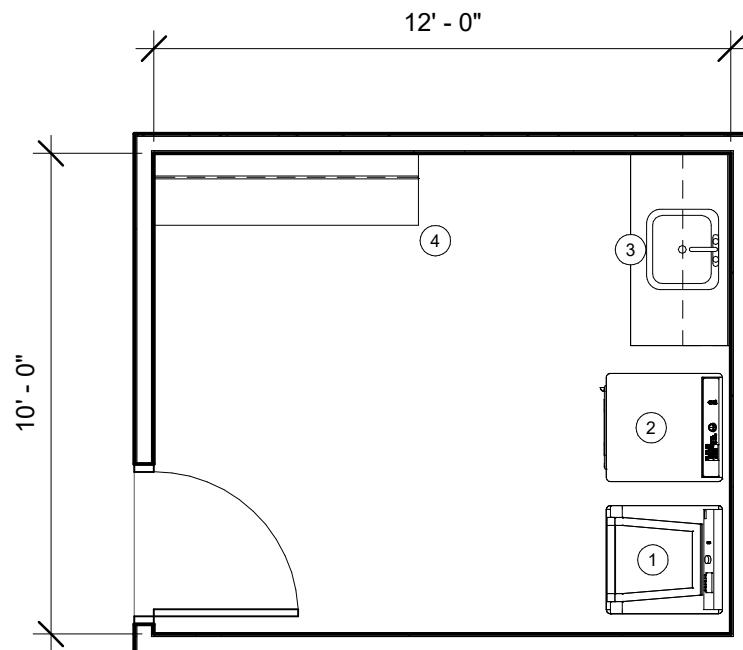
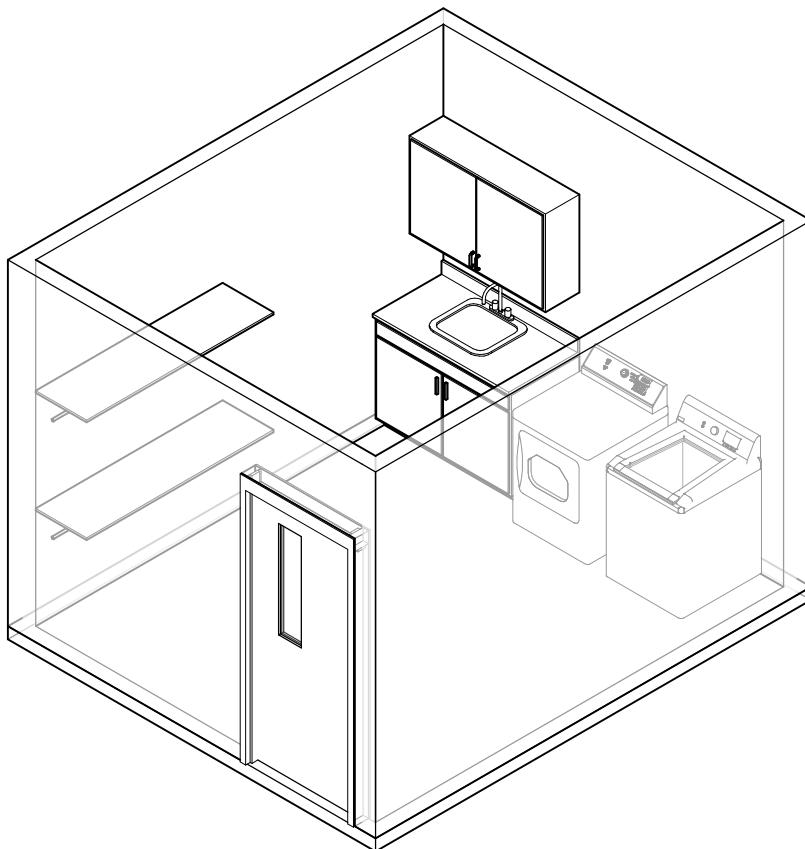
4. 18 12" X 12" SEASONAL LOCKERS

5. COUNTER, SINK & MIRROR

6. ADA STALL

7. STANDARD STALL

DRAFT



LAUNDRY ROOM - 120 SF

1/4" = 1'-0"

ROOM FINISHES:

CEILING: MOISTURE RESISTANT ACT TILE

WALLS: METAL PANEL / CONCRETE, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

GFI ELECTRICAL OUTLETS

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

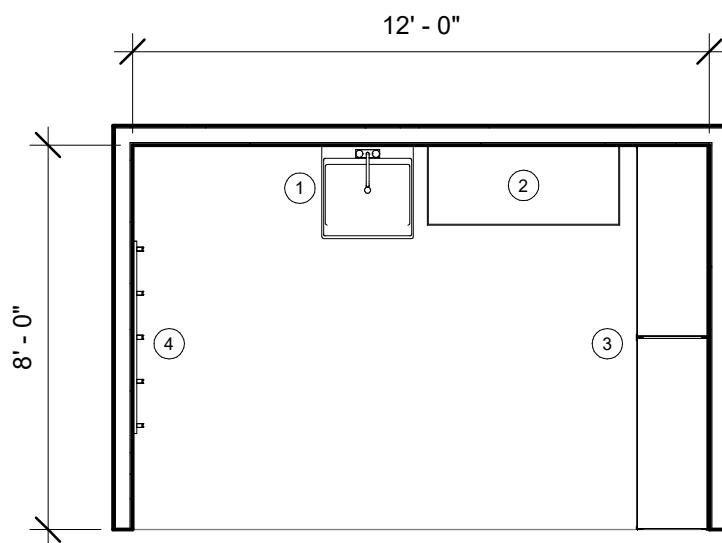
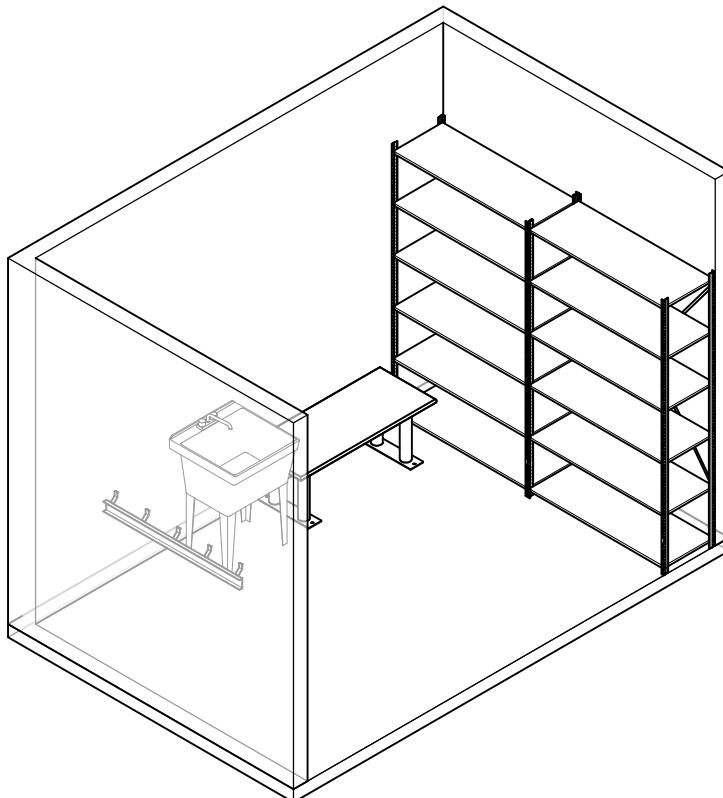
HEATING

COOLING

COMPONENTS:

1. CLOTHES WASHER
2. CLOTHES DRYER
3. COUNTER, SINK, & CABINETS (BELOW & ABOVE)
4. WALL MOUNTED UNIFORM RACK

DRAFT



SANITATION / WASH-OFF AREA - 96 SF

1/4" = 1'-0"

ROOM FINISHES:

CEILING: MOISTURE RESISTANT ACT TILE

WALLS: METAL PANEL / CONCRETE, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

GFI ELECTRICAL OUTLETS

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

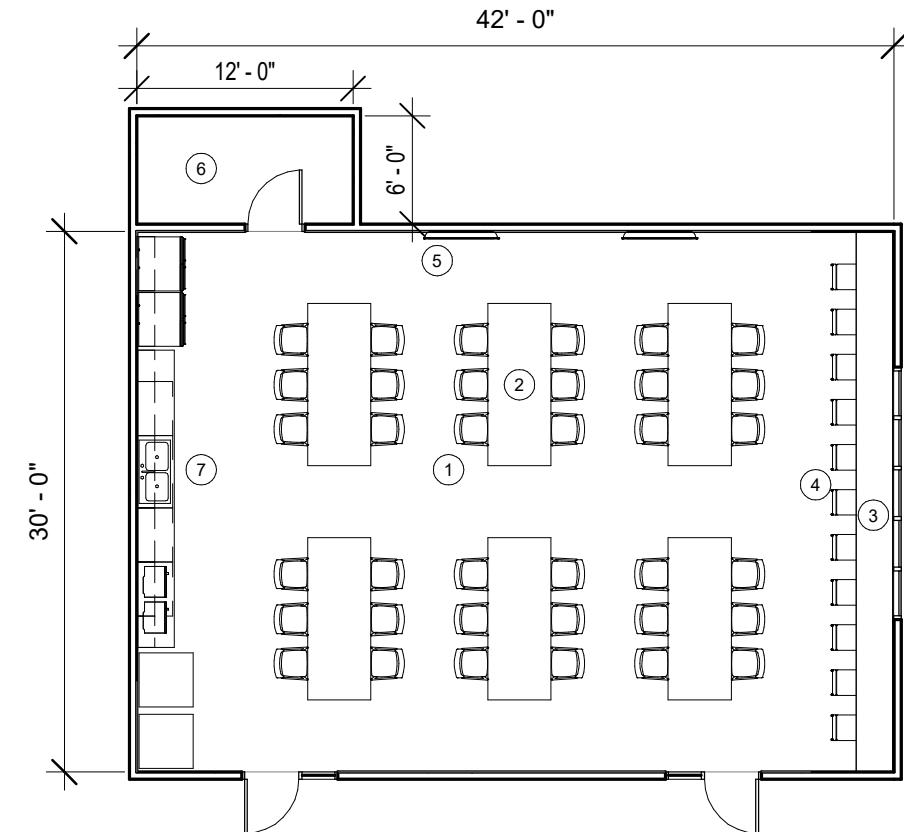
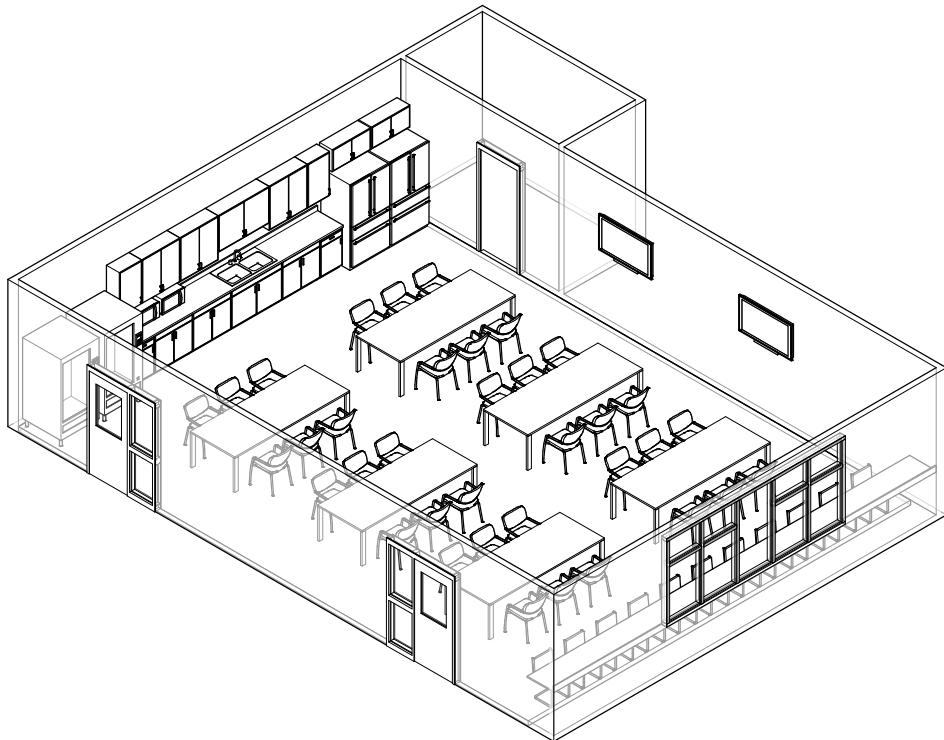
HEATING

COOLING

COMPONENTS:

1. UTILITY SINK
2. BENCH
3. UNIFORM SHELVING
4. WALL MOUNTED UNIFORM RACK

DRAFT



MUSTER ROOM - 1,332 SF

3/32" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

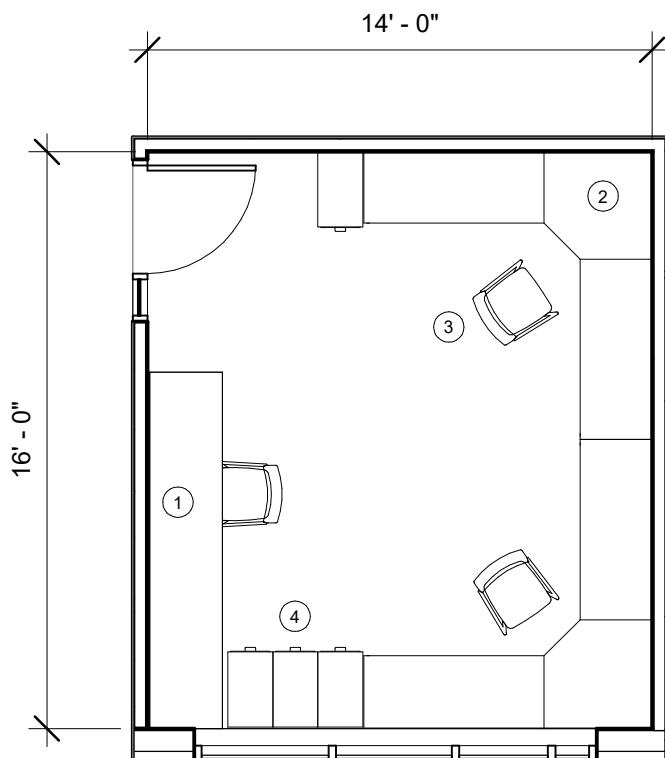
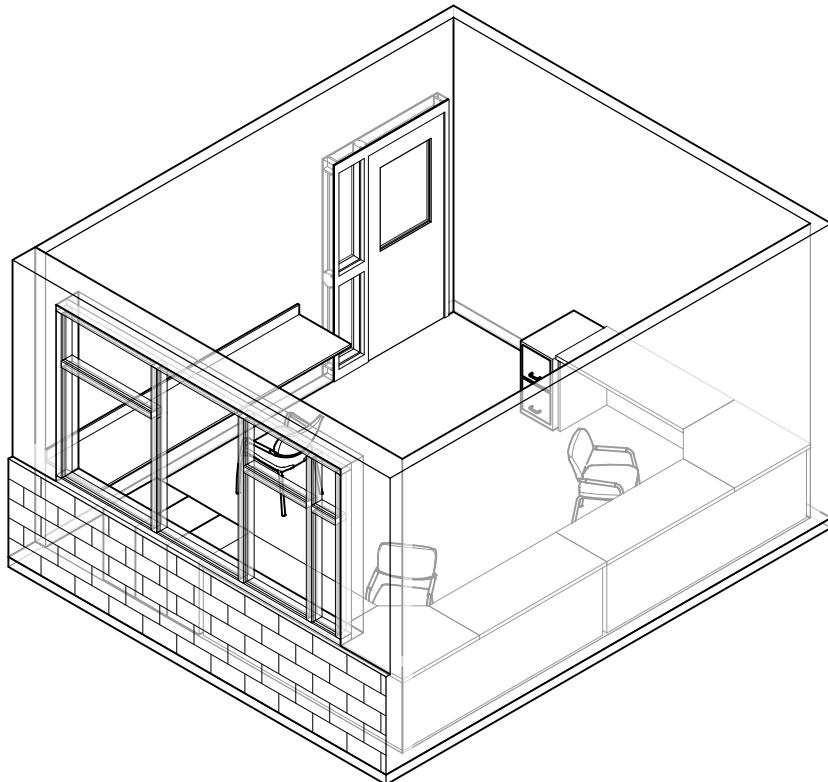
OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

COMPONENTS:

1. (36) TASK CHAIRS
2. (6) TABLES
3. COUNTERTOP
4. (11) HIGHTOP CHAIRS
5. WALL MOUNTED TELEVISION
6. STORAGE CLOSET
7. KITCHEN, INCLUDES (TBD):
 - SOLID SURFACE COUNTERS
 - BASE & WALL CABINETS
 - STAINLESS STEEL SINK
 - (2) REFRIGERATOR
 - DISHWASHER
 - ELECTRIC COOKTOP W/ HOOD
 - WALL OVEN
 - (2) MICROWAVES
 - (2) VENDING MACHINES

DRAFT



STORM EVENT ROOM - 224 SF

3/16" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

HEATING

COOLING

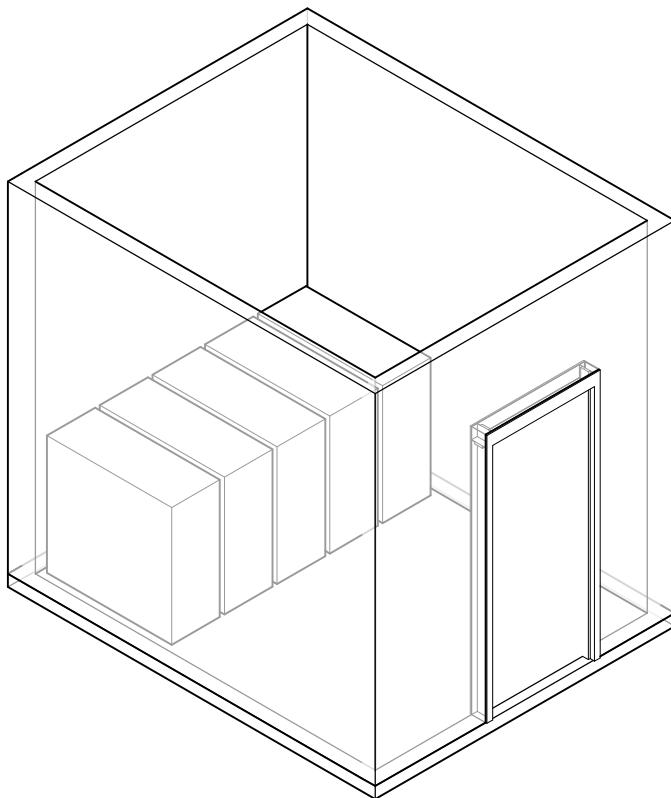
DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS

COMPONENTS:

1. WORKTOP
2. (2) WORK STATIONS
3. (3) EXECUTIVE CHAIRS
4. FILE CABINETS

DRAFT



ROOM FINISHES:

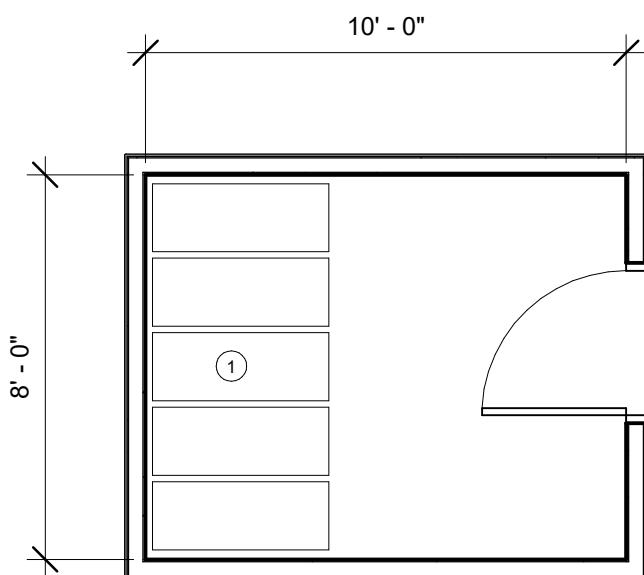
CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS



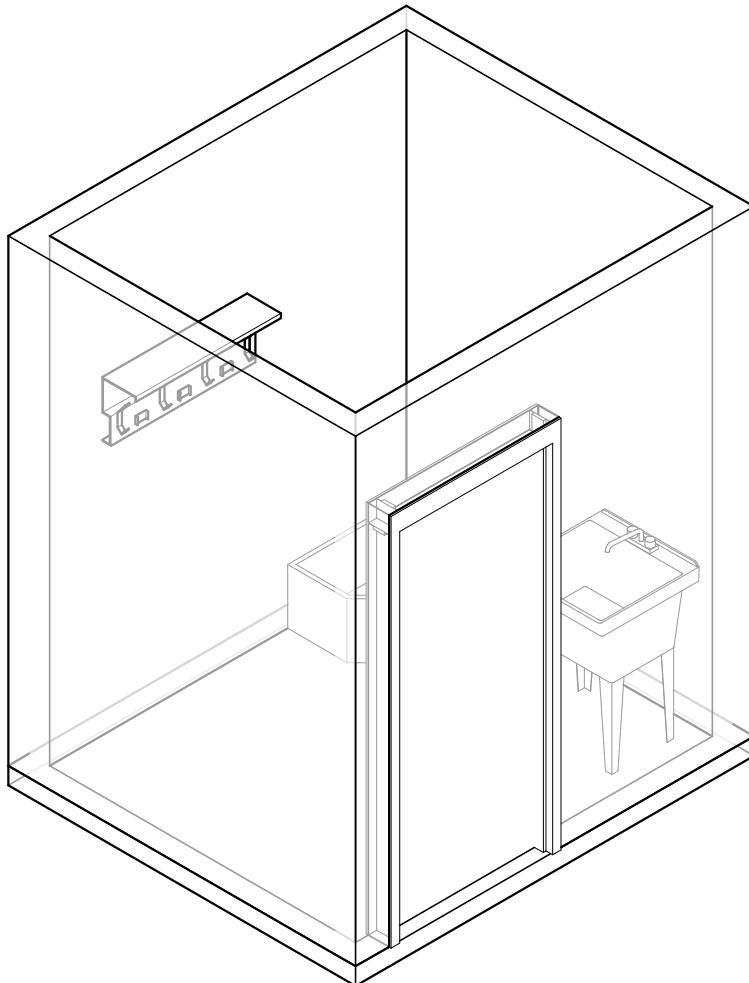
COT STORAGE CLOSET - 80 SF

$1/4" = 1'-0"$

COMPONENTS:

1. COT STORAGE

DRAFT



ROOM FINISHES:

CEILING: MOISTURE RESISTANT ACT TILE

WALLS: CMU, PAINTED

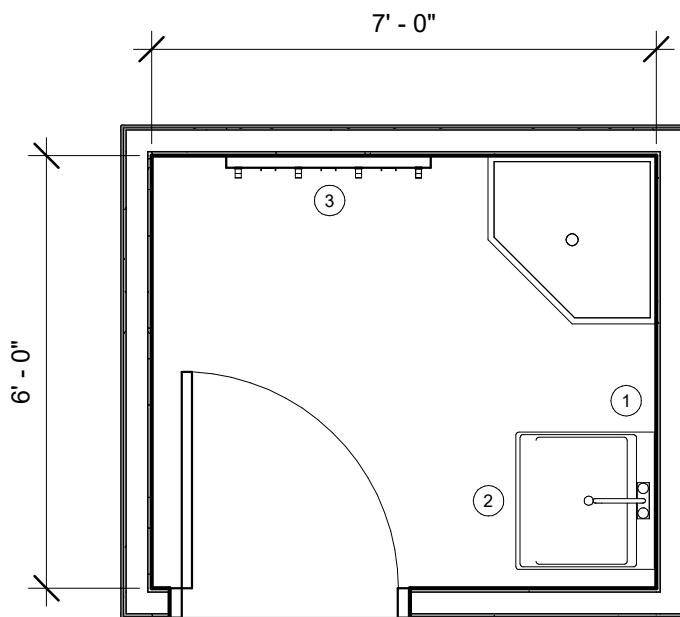
FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

GFI DUPLEX ELECTRICAL OUTLETS

COMPONENTS:

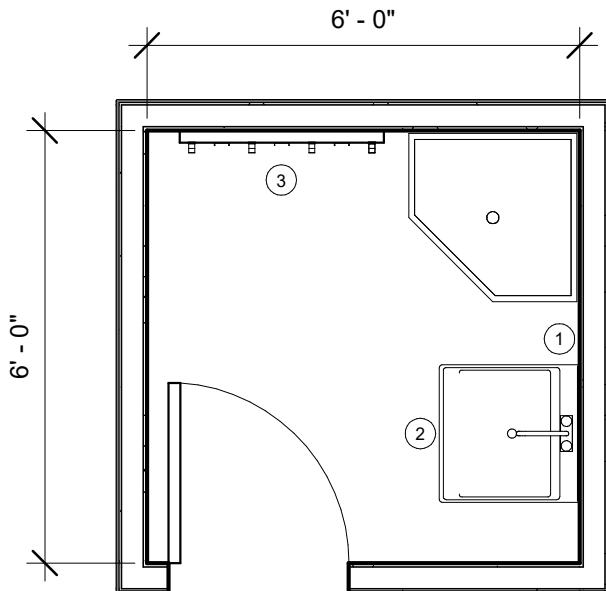
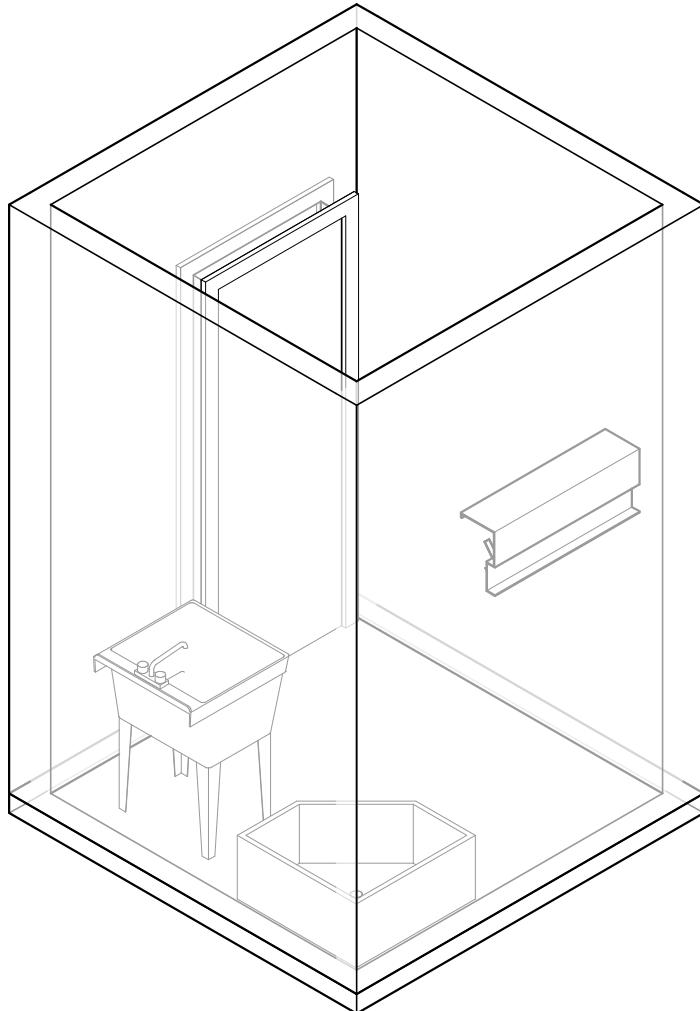
1. FRP PANELING AT SINK
2. UTILITY SINK
3. UTILITY SHELF W/ MOP & BROOM HOLDERS



MAIN JANITOR CLOSET - 42 SF

3/8" = 1'-0"

DRAFT



SECONDARY JANITOR CLOSET - 36 SF

3/8" = 1'-0"

ROOM FINISHES:

CEILING:

WALLS:

FLOORS:

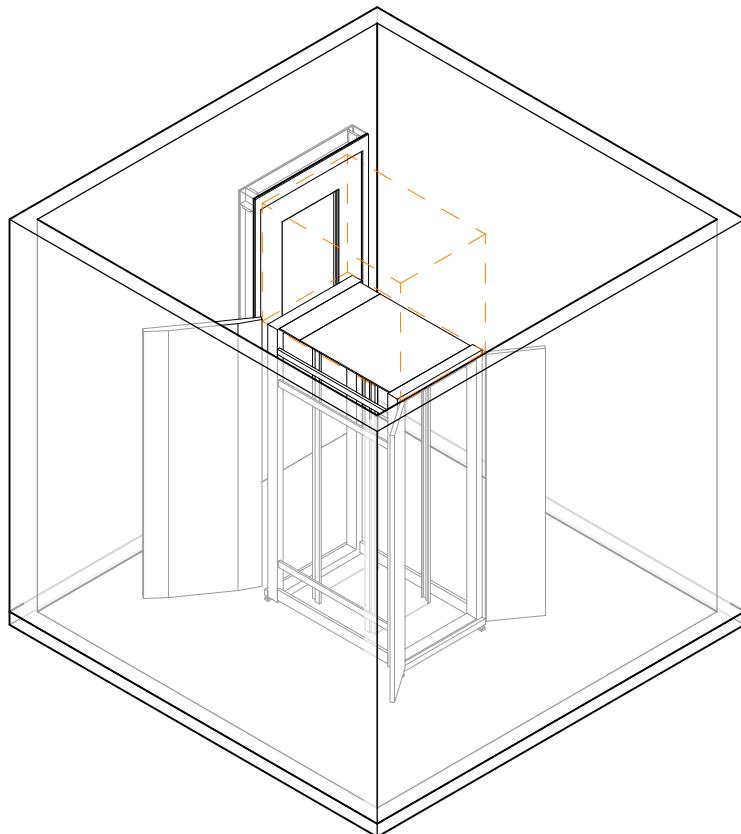
MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

COMPONENTS:

1. FRP PANELING AT SINK
2. UTILITY SINK
3. UTILITY SHELF W/ MOP & BROOM HOLDERS

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

WALLS: CERAMIC TILE / GWB,
PAINTED

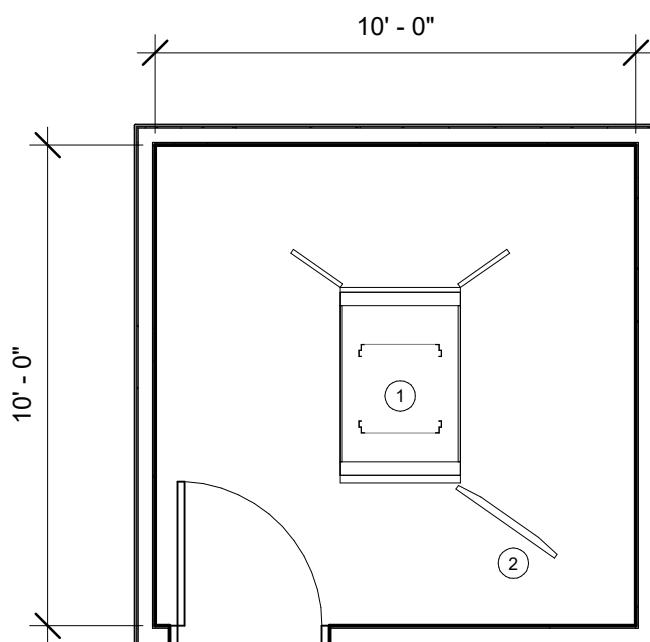
FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS

RACK-MOUNTED POWER



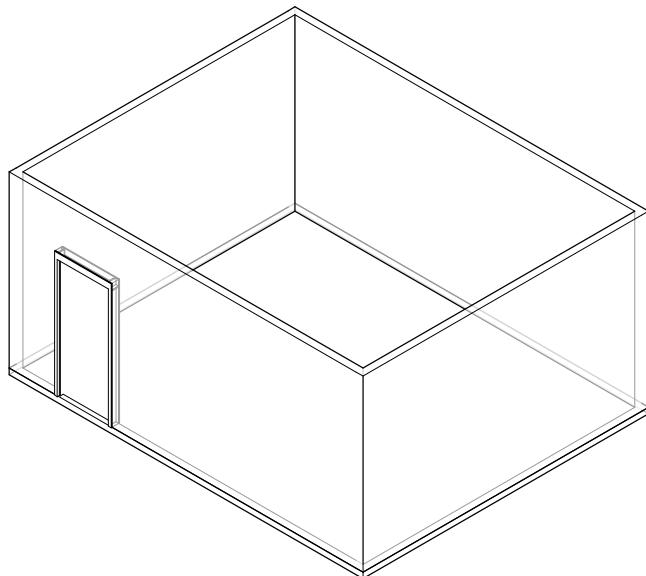
COMPONENTS:

1. DATA RACK
2. PLYWOOD BACK BOARD FOR
BUILDING SYSTEM
COMPONENTS (SECURITY,
CABLE, ETC.)

TEL / DATA ROOM - 100 SF

1/4" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

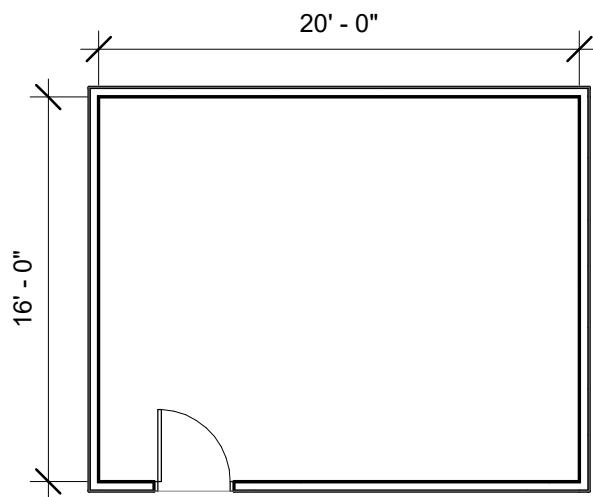
WALLS: GWB, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

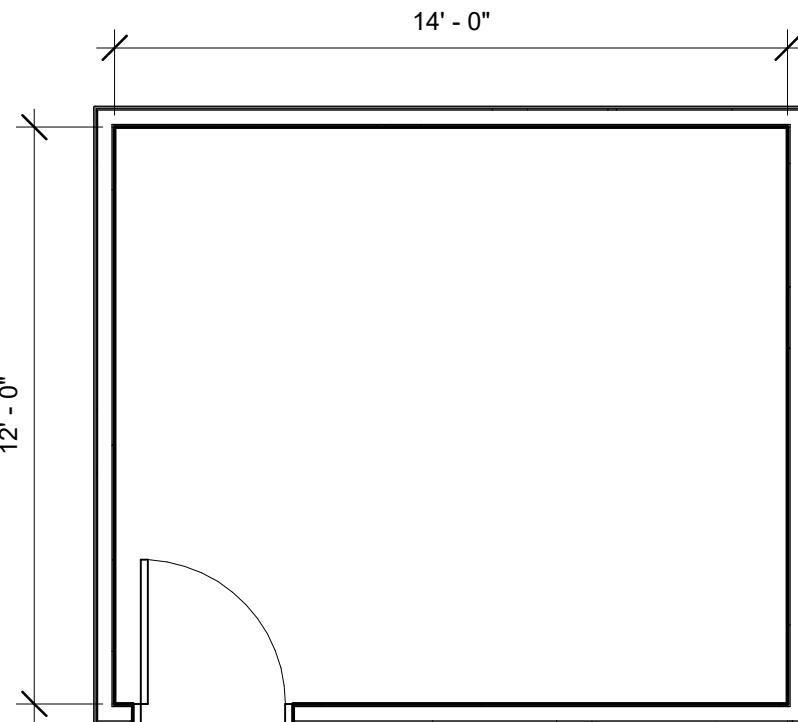
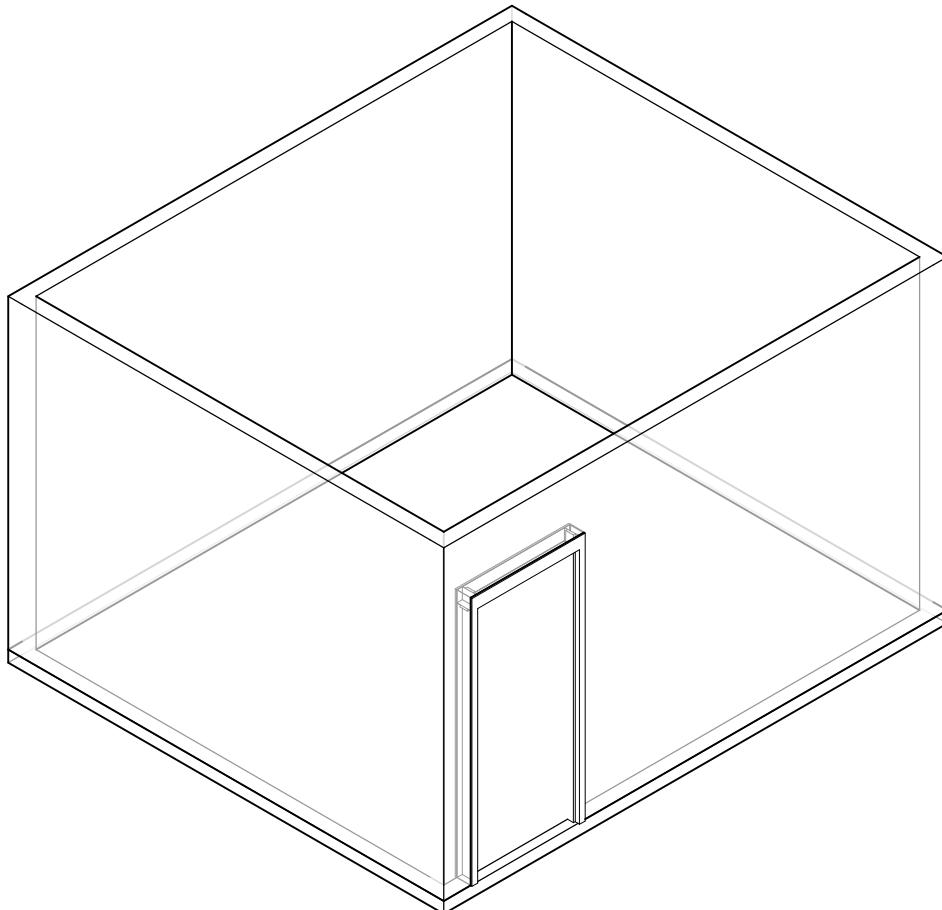
DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS



MAIN MECHANICAL / ELECTRIC ROOM - 224 SF
1/8" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING:

WALLS:

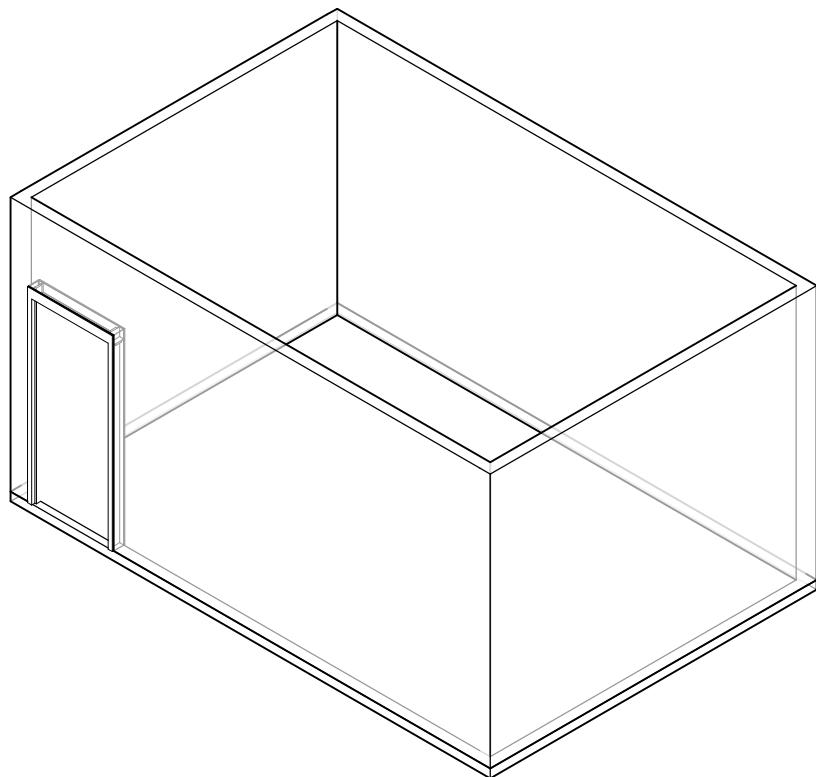
FLOORS:

MEP/DATA REQUIREMENTS:

COMPONENTS:

SECONDARY MECHANICAL / ELECTRICAL ROOM - 168 SF
1/4" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

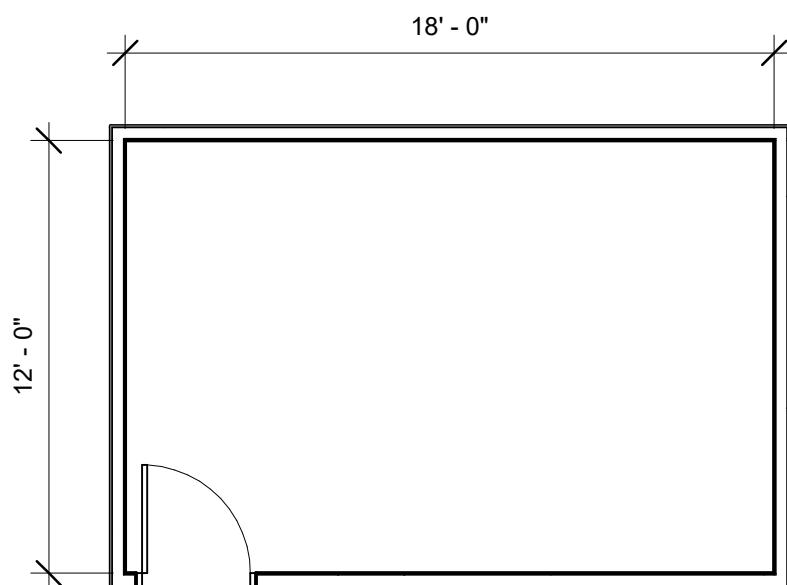
WALLS: GWB, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

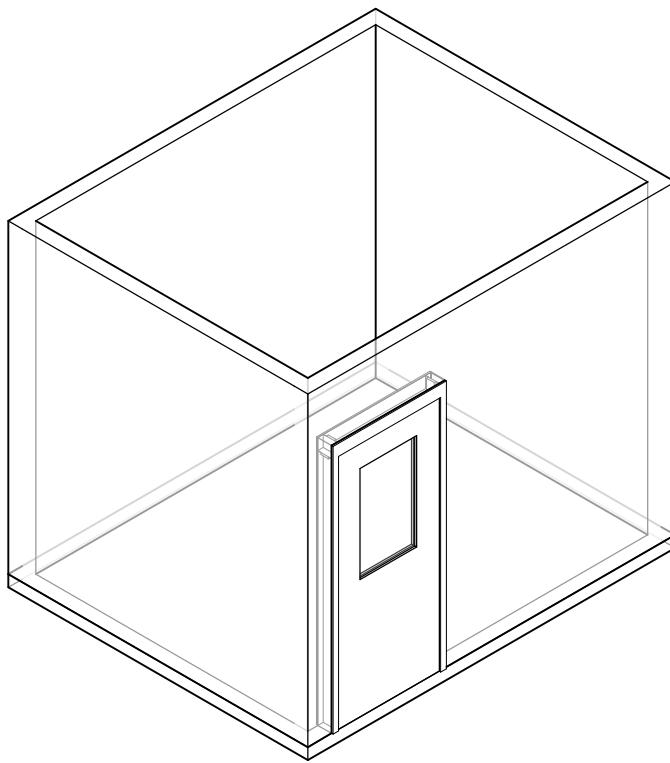
DATA OUTLET JACKS



COMPONENTS:

PL / FIRE PROTECTION ROOM - 216 SF
3/16" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: ACT TILE

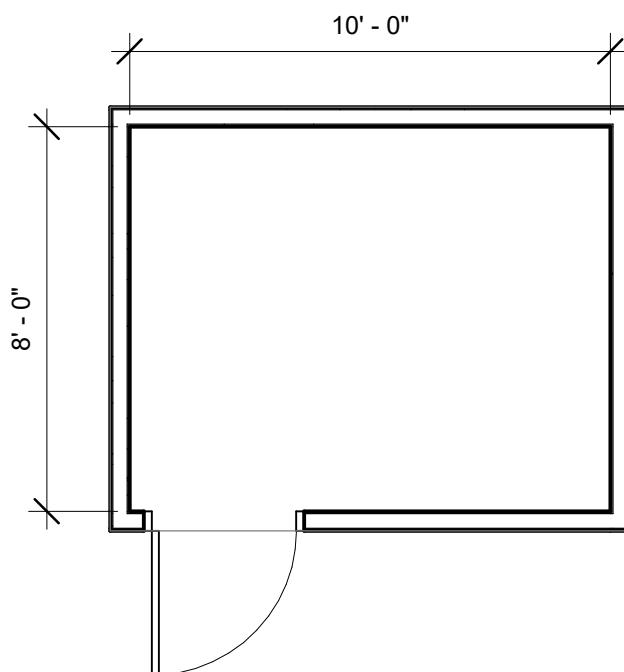
WALLS: GWB, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS

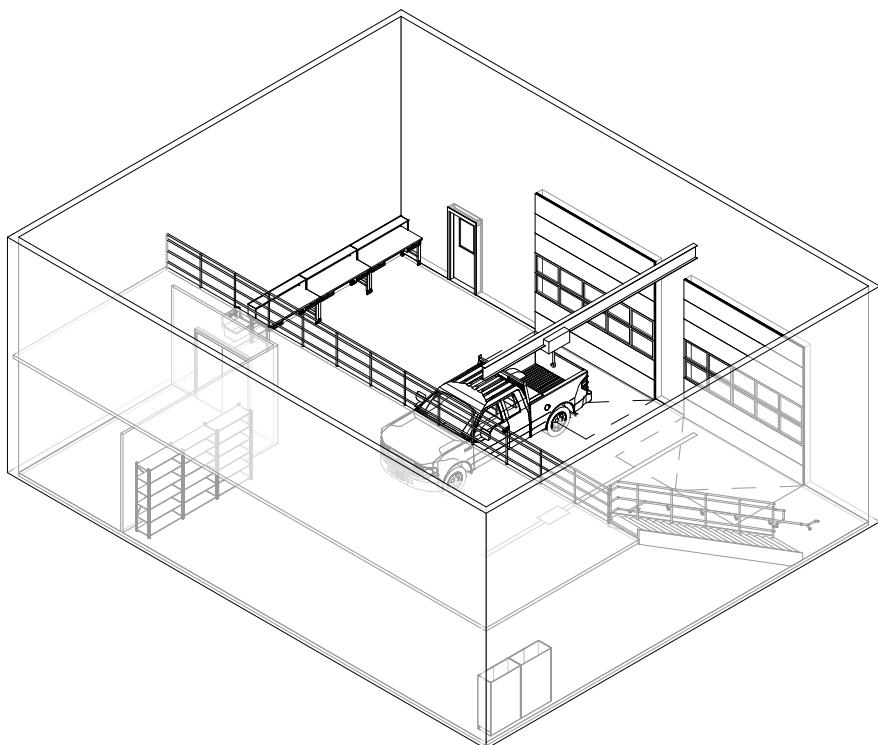


COMPONENTS:

ELEVATOR ROOM - 80 SF

1/4" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

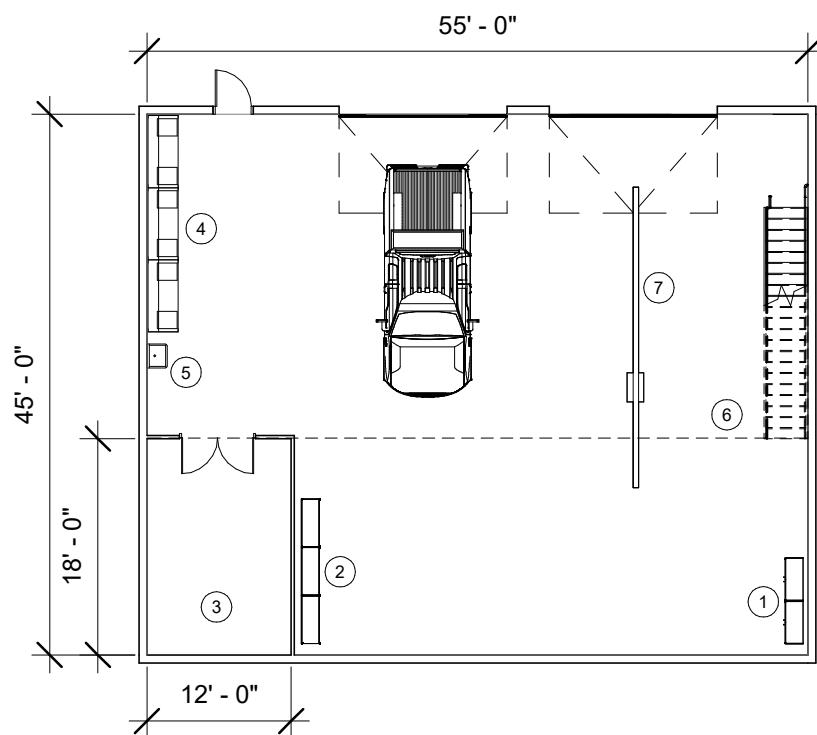
WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

HEATING / COOLING

DUPLEX ELECTRICAL OUTLETS



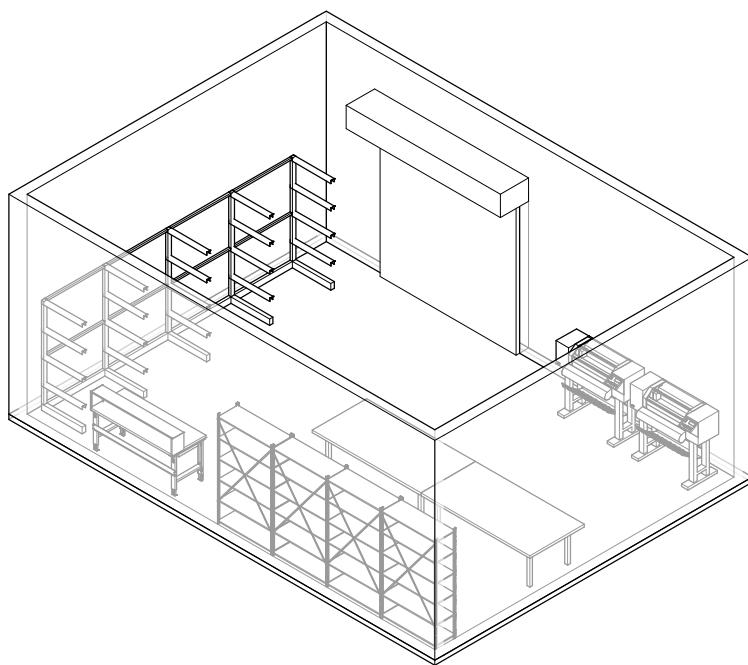
COMPONENTS:

1. (2) FLAMMABLE STORAGE CABINETS
2. (3) UTILITY STORAGE
3. HAND TOOL STORAGE CRIB
4. WORK BENCH
5. SHOP SINK
6. MEZZANINE ABOVE
7. 1-TON MONO RAIL

HIGHWAY SHOP - 2,475 SF

1/16" = 1'-0"

DRAFT



ROOM FINISHES:

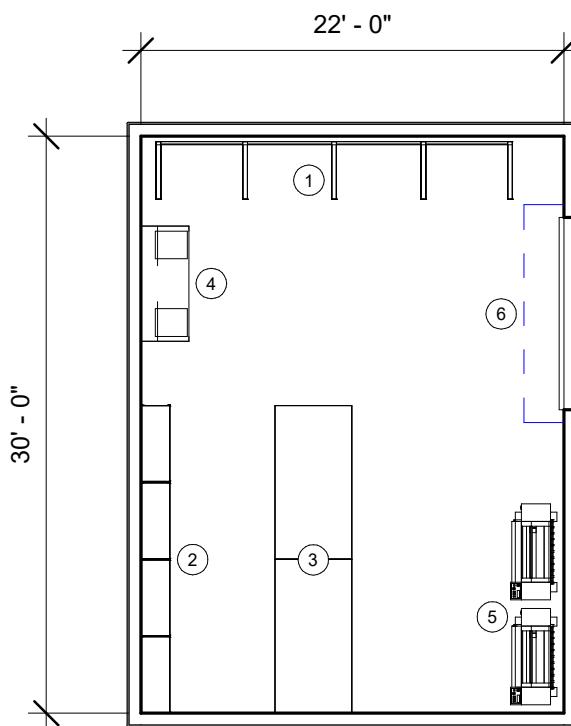
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: RESILIENT FLOORING

MEP/DATA REQUIREMENTS:

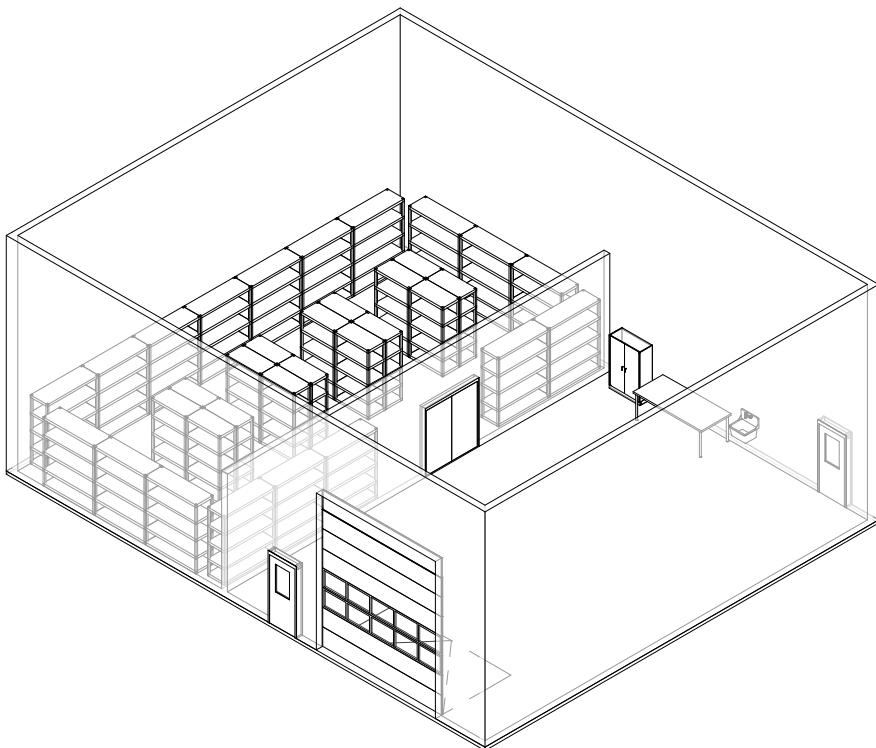
- HEATING / COOLING
- COMPRESSED AIR PROVISIONS
- DUPLEX ELECTRICAL OUTLETS
- DATA OUTLET JACKS



SIGN SHOP - 660 SF

1" = 10'-0"

DRAFT



ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

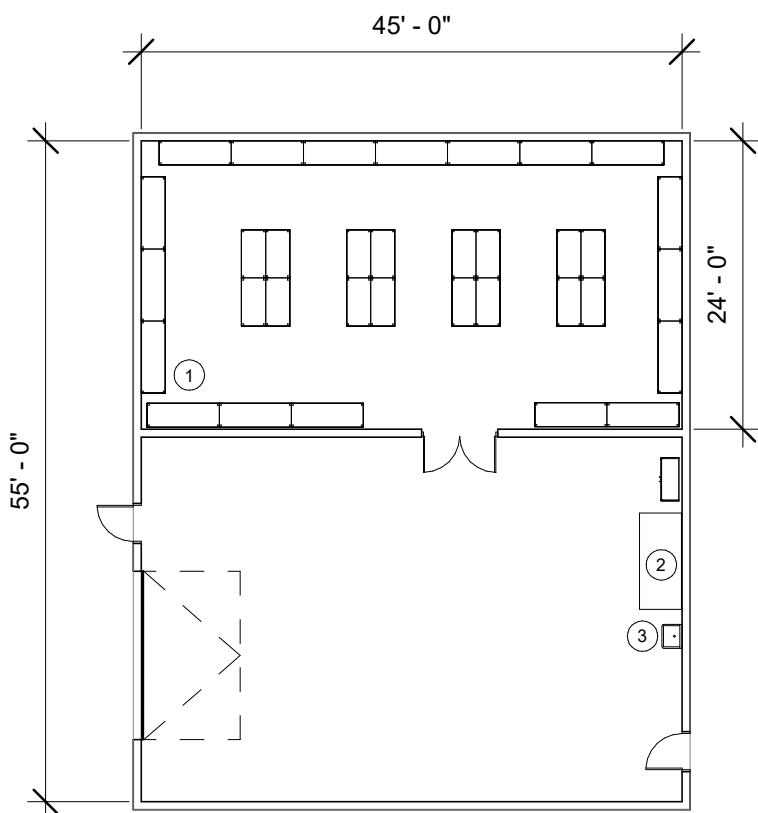
WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

HEATING / COOLING

DUPLEX ELECTRICAL OUTLETS



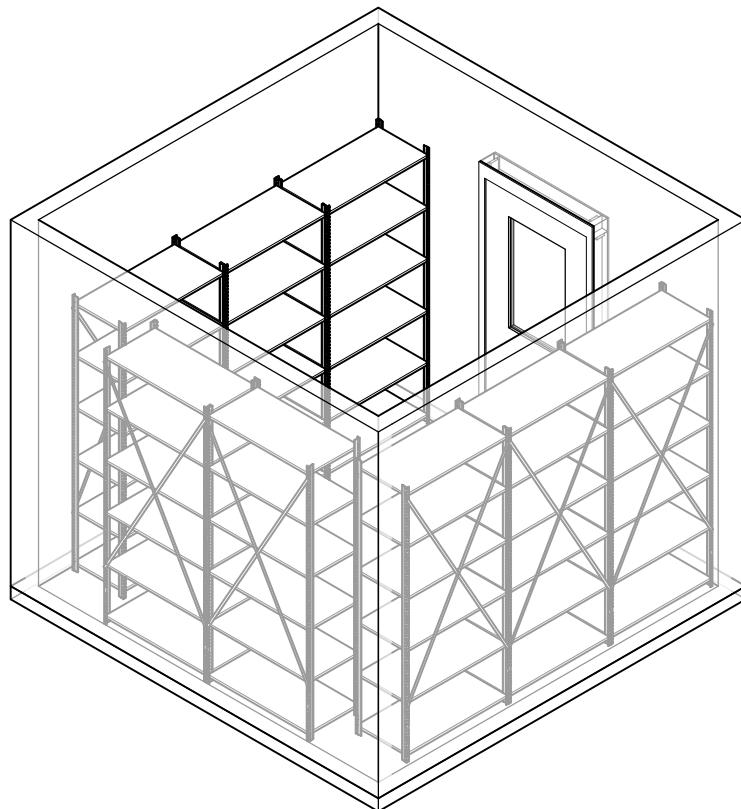
WATER SHOP - 2,475 SF

1/16" = 1'-0"

COMPONENTS:

1. UTILITY SHELVING
2. WORKBENCH
3. SHOP SINK

DRAFT



ROOM FINISHES:

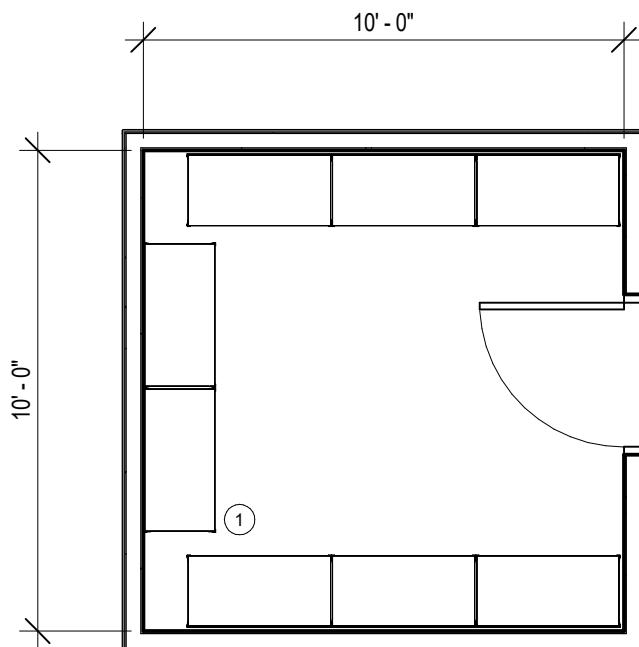
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

- DUPLEX ELECTRICAL OUTLETS



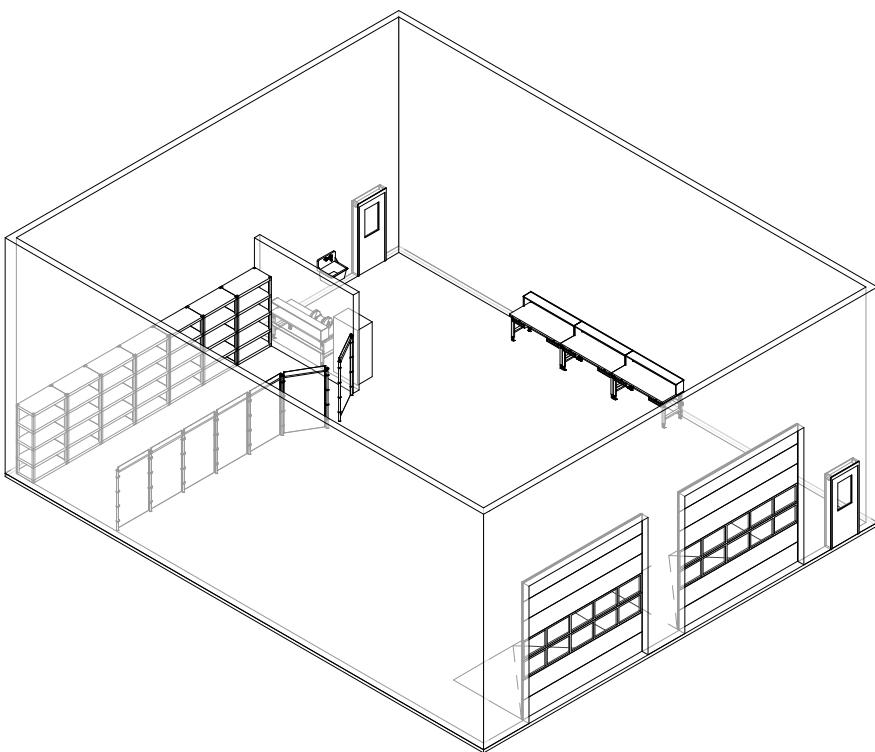
COMPONENTS:

1. UTILITY SHELVING

BRASS STORAGE - 100 SF

1/4" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

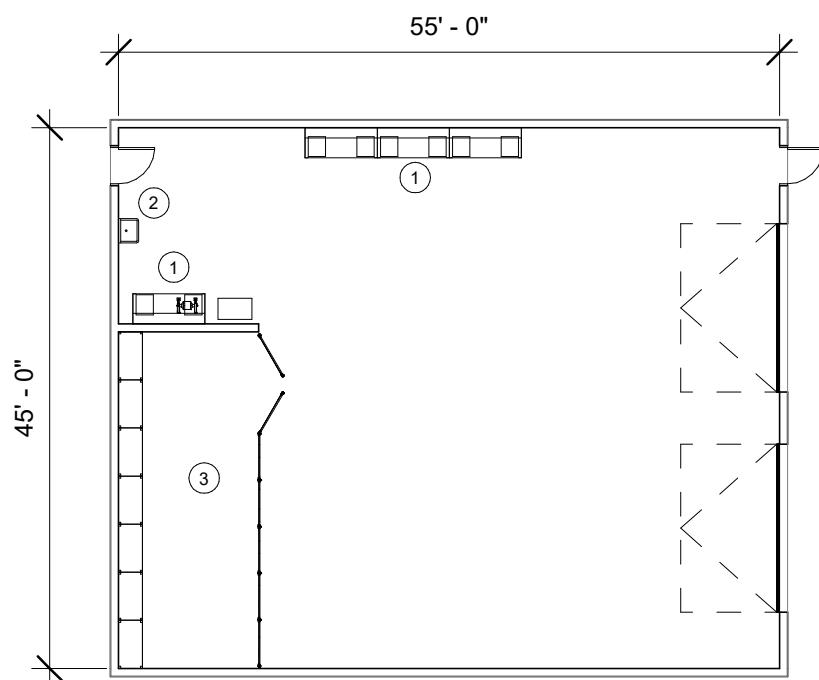
FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

HEATING / COOLING

DUPLEX ELECTRICAL OUTLETS

DUST COLLECTION



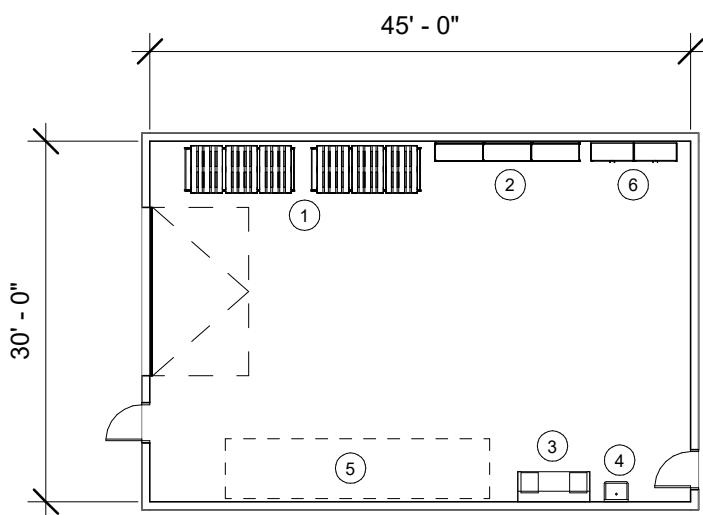
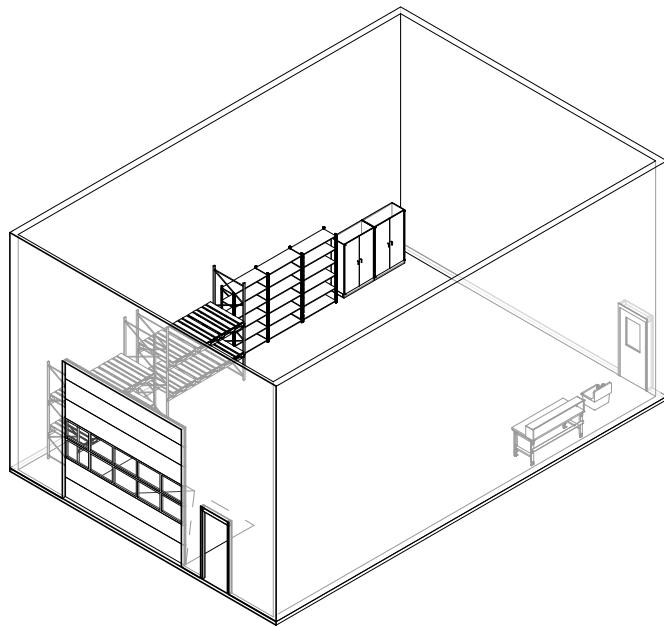
COMPONENTS:

1. FORESTRY WORK BENCH WITH BLADE SHARPENING
2. SHOP SINK
3. MATERIAL & SMALL EQUIP. STORAGE

PARKS & FORESTRY SHOP - 2,475 SF

1/16" = 1'-0"

DRAFT



CEMETERY SHOP - 1,350 SF

1/16" = 1'-0"

ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

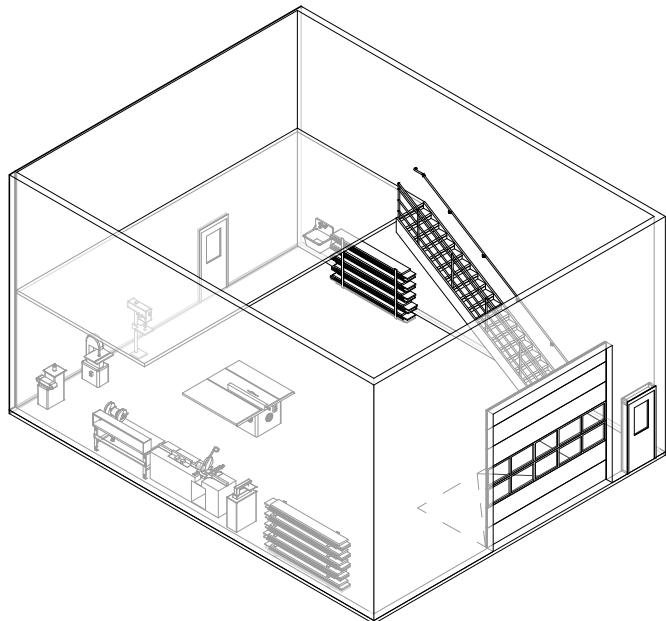
MEP/DATA REQUIREMENTS:

- HEATING / COOLING
- DUPLEX ELECTRICAL OUTLETS

COMPONENTS:

1. PALLET SHELVING
2. UTILITY SHELVING
3. WORK TABLE
4. UTILITY SINK
5. PALLET STORAGE
6. (2) FLAMMABLE STORAGE CABINETS

DRAFT



ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

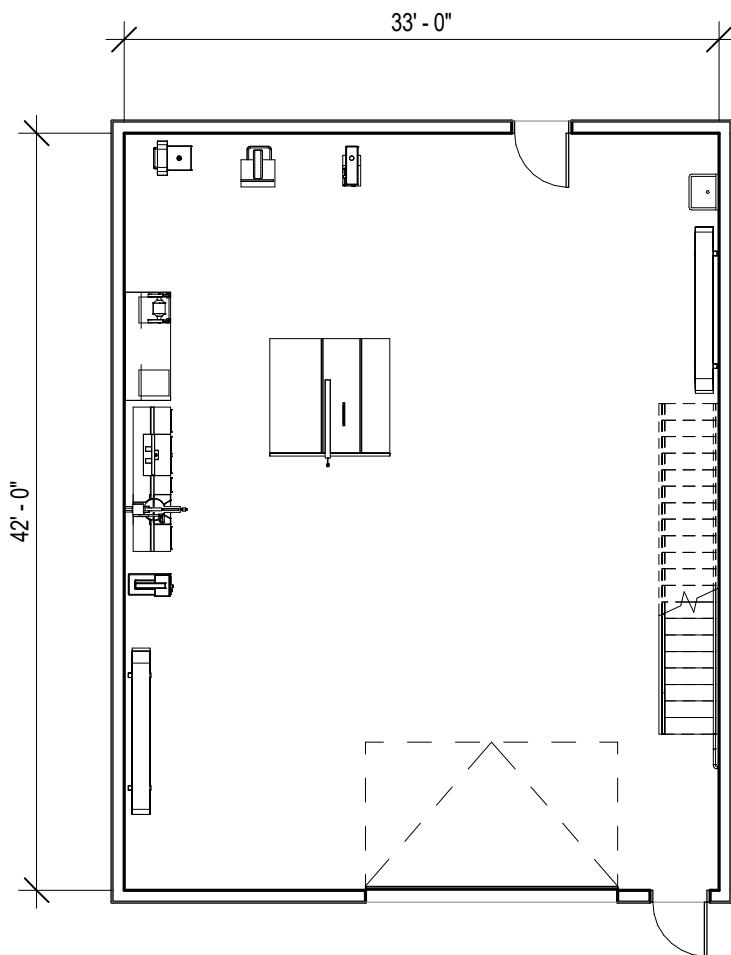
FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

HEATING / COOLING

DUPLEX ELECTRICAL OUTLETS

DUST COLLECTION



CARPENTRY SHOP - 1,386 SF

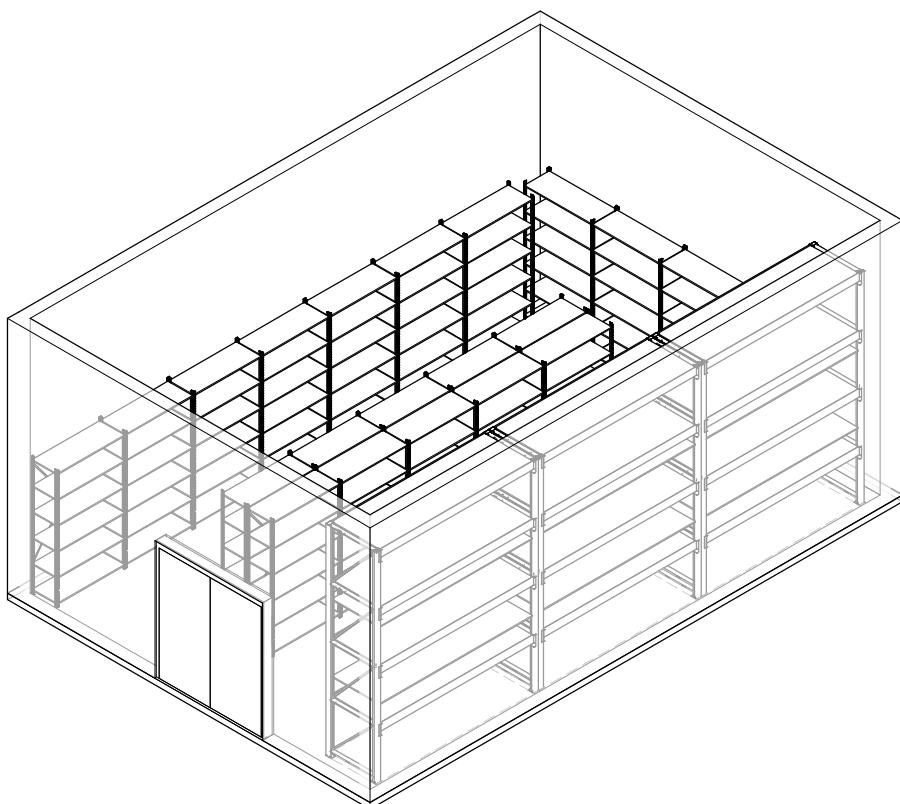
3/32" = 1'-0"

COMPONENTS:

CARPENTRY EQUIPMENT TBD

* GENERIC LAYOUT
TO BE VERIFIED

DRAFT



ROOM FINISHES:

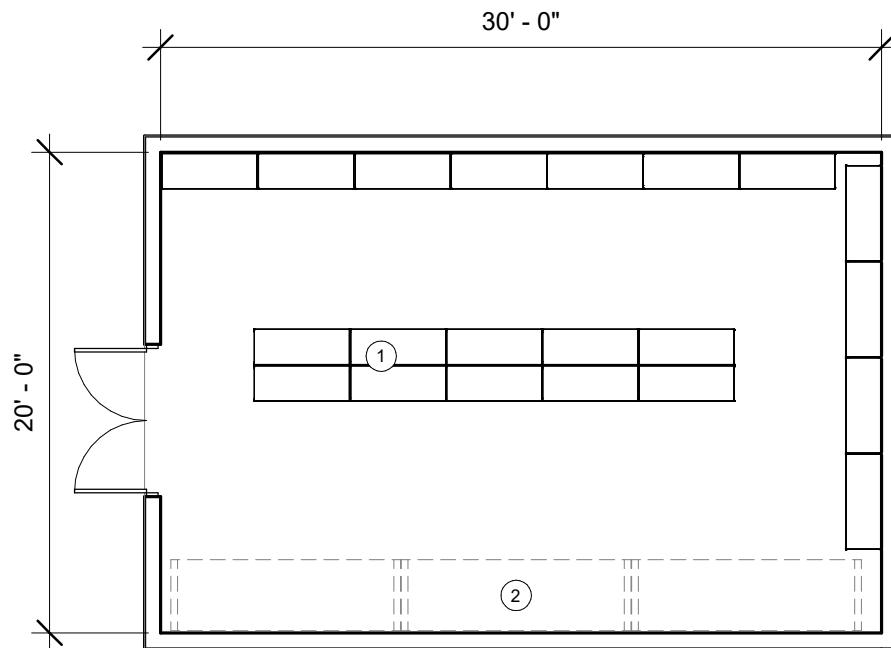
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED OR WIRE CAGE

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS



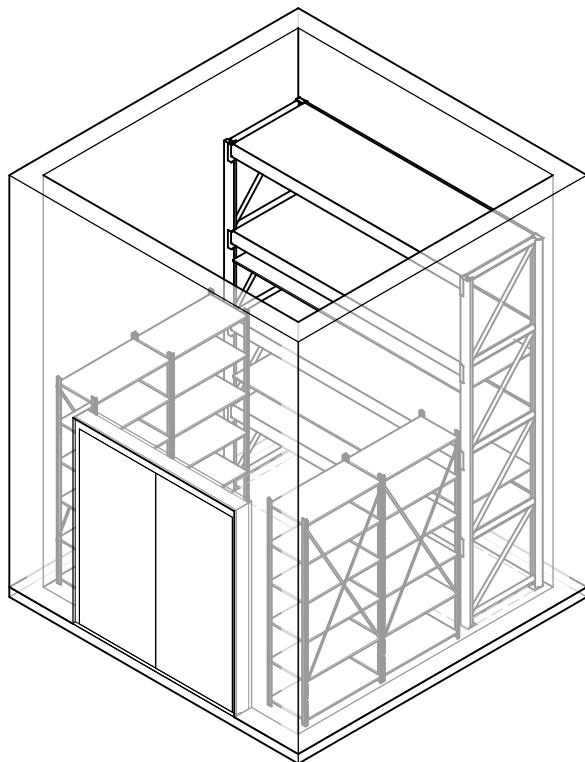
COMPONENTS:

1. UTILITY SHELVING
2. 3' DEEP HEAVY DUTY STORAGE SHELVING

FACILITIES SUPPLY STORAGE - 600 SF

1/8" = 1'-0"

DRAFT



ROOM FINISHES:

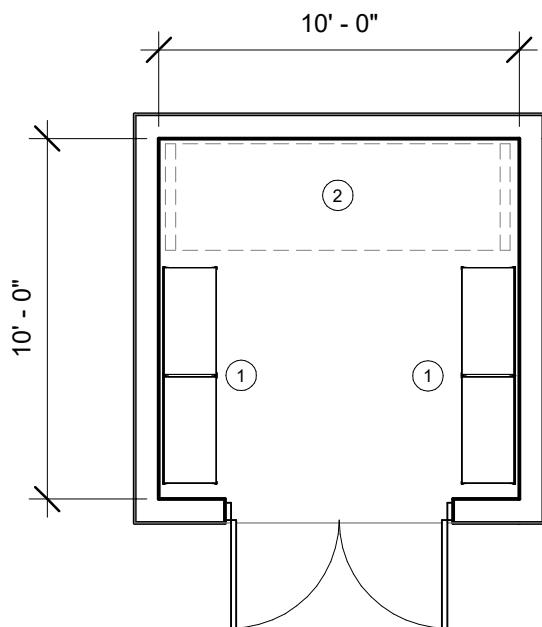
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED OR
WIRE CAGE

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

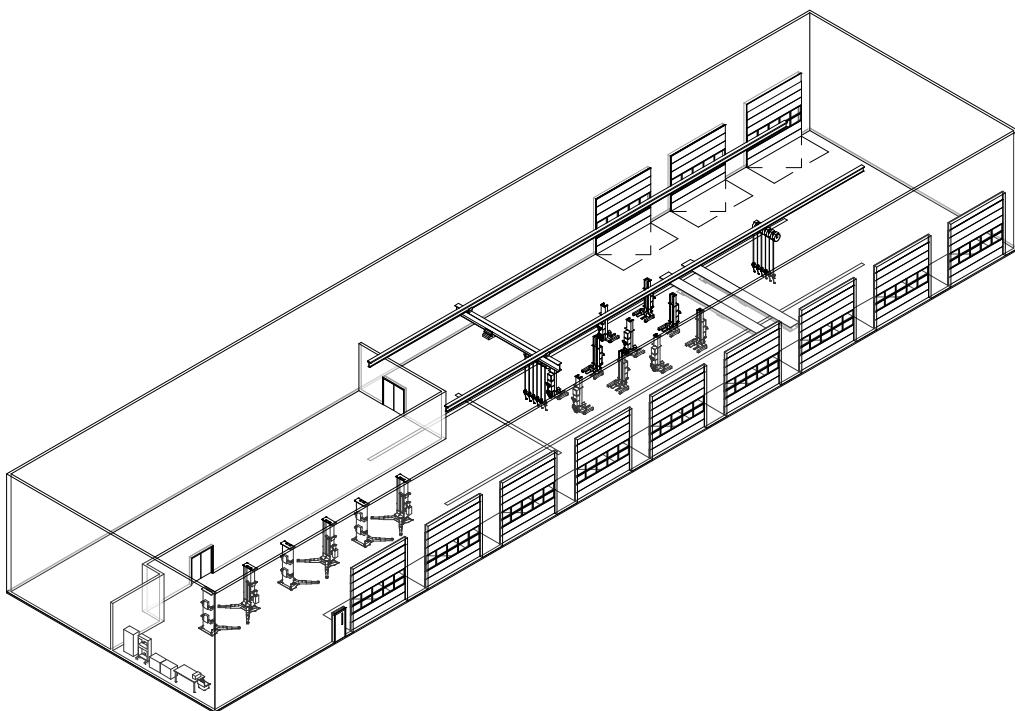


COMPONENTS:

1. UTILITY SHELVING
2. 3' DEEP HEAVY DUTY
STORAGE SHELVING

FACILITIES TOOL CRIB - 100 SF
3/16" = 1'-0"

DRAFT



ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

WALLS: METAL PANEL / CONCRETE, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

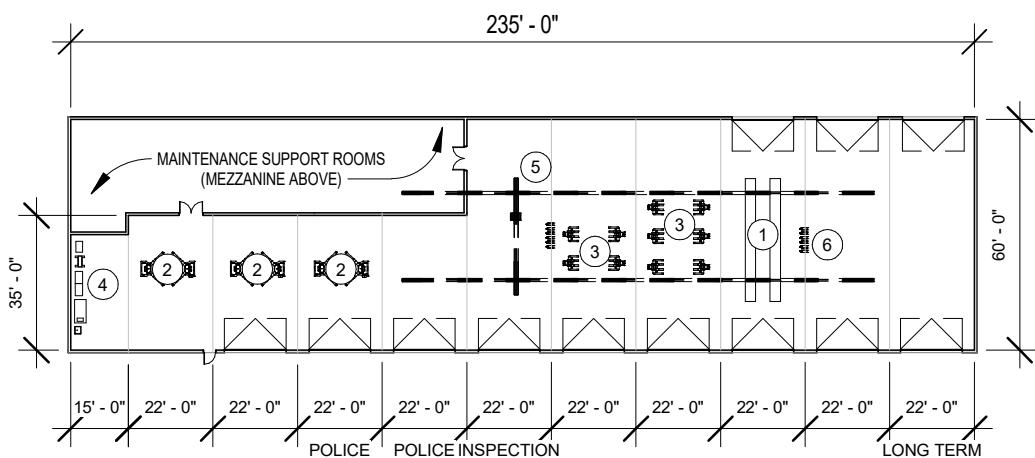
HEATING (RADIANT FLOOR)

DUPLEX ELECTRICAL OUTLETS

SPECIALITY EQUIP. ELECTRICAL OUTLETS

DATA OUTLET JACKS

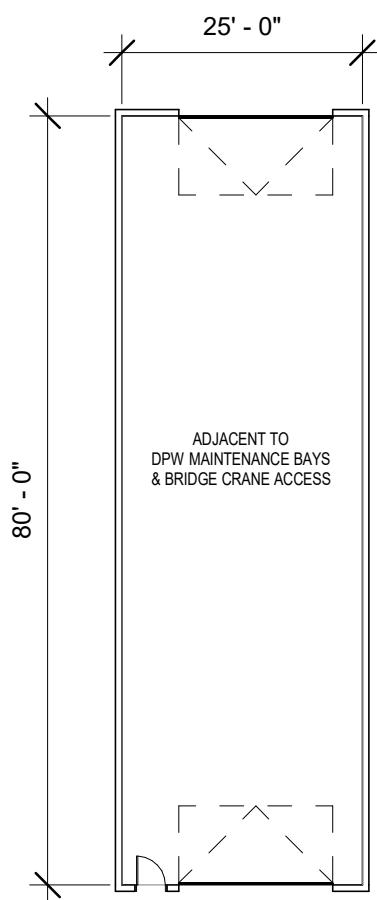
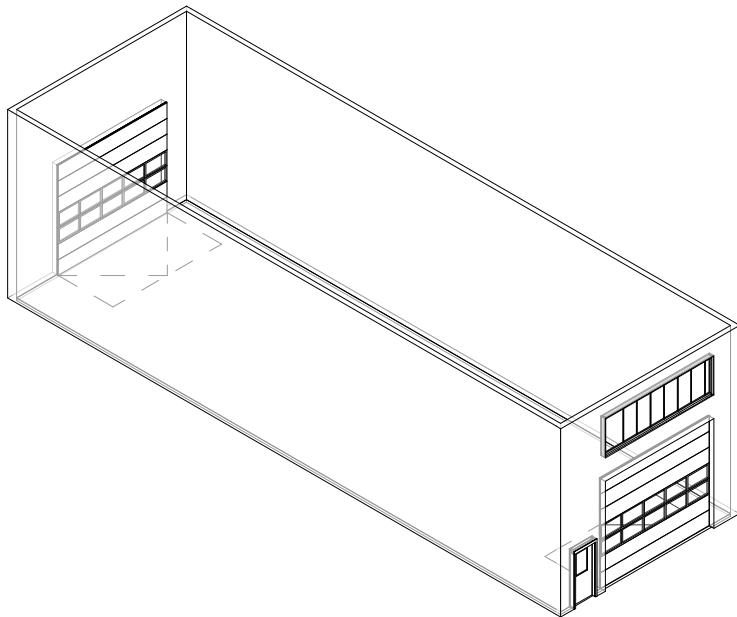
VENTILATION



DPW MAINTENANCE BAYS - 10,130 SF

1" = 50'-0"

DRAFT



XL MAINTENANCE BAY - 2,000
1" = 20'-0"

ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

WALLS: METAL PANEL / CONCRETE, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

HEATING (RADIANT FLOOR)

DUPLEX ELECTRICAL OUTLETS

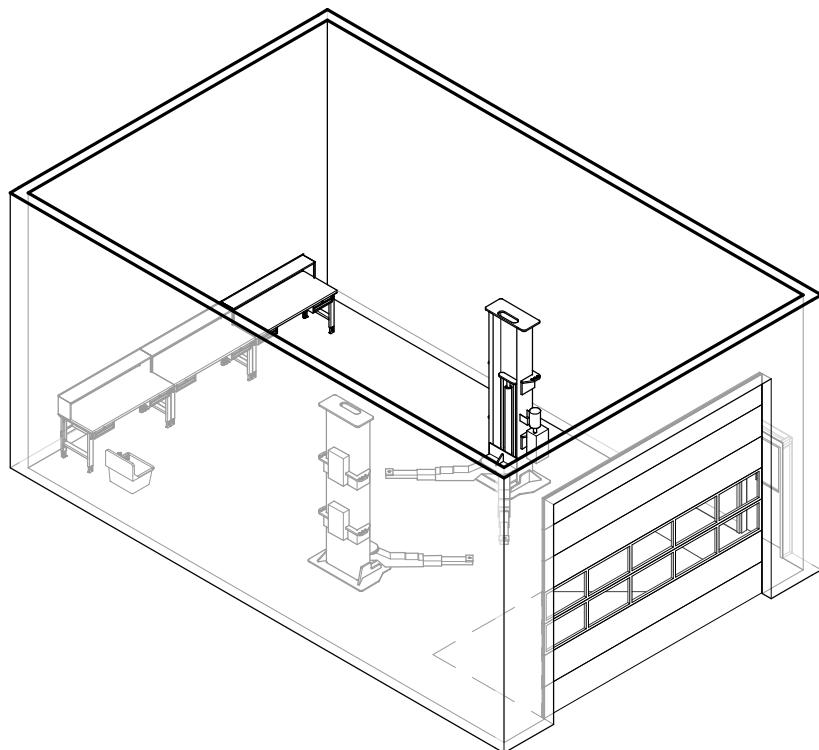
SPECIALITY EQUIP. ELECTRICAL OUTLETS

DATA OUTLET JACKS

VENTILATION

COMPONENTS:

DRAFT



ROOM FINISHES:

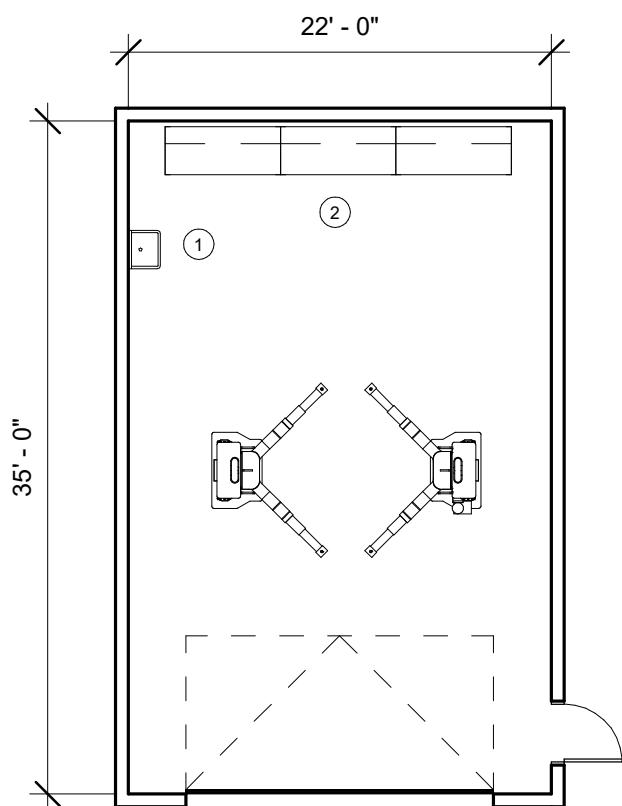
CEILING: OPEN TO STRUCTURE

WALLS: METAL PANEL / CONCRETE, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

- HEATING (RADIANT FLOOR)
- DUPLEX ELECTRICAL OUTLETS
- SPECIALTY EQUIP. ELECTRICAL OUTLETS
- DATA OUTLET JACKS
- VENTILATION



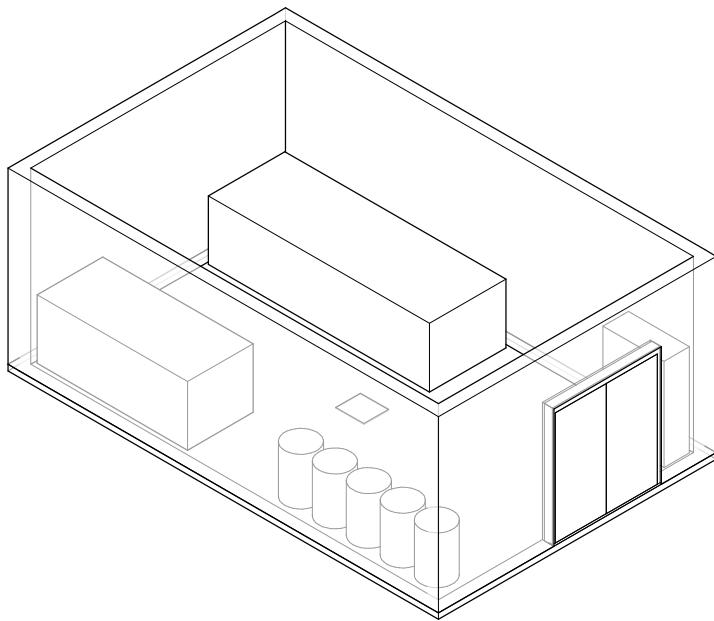
COMPONENTS:

1. SHOP SINK
2. WORK BENCH

LIGHT DUTY BAY - 770 SF

1" = 10'-0"

DRAFT



ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

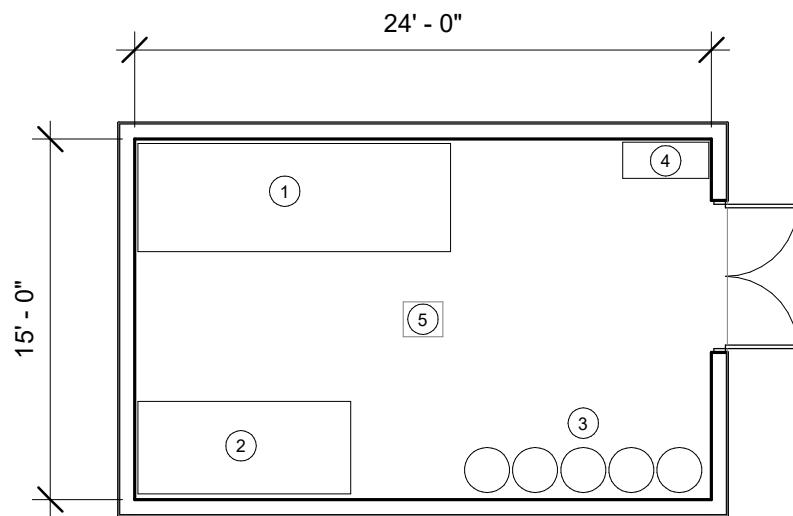
WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

- HEATING
- GFI ELECTRICAL OUTLETS
- DEDICATED EXHAUST SYSTEM
- COMPRESSED AIR FOR PNEUMATIC PUMPS
- CONTAINMENT SUMP

COMPONENTS:



1. NEW FLUID COMPARTMENT TANK (1,800 GALLONS)

2. WASTE FLUID COMPARTMENT TANK (1,000 GALLONS)

3. 55 GALLON DRUMS

- GREEN ANTI FREEZE
- GM ANTI FREEZE
- FORD ANTI FREEZE
- RED ANTI FREEZE
- WIND SHIELD WASHER FLUID

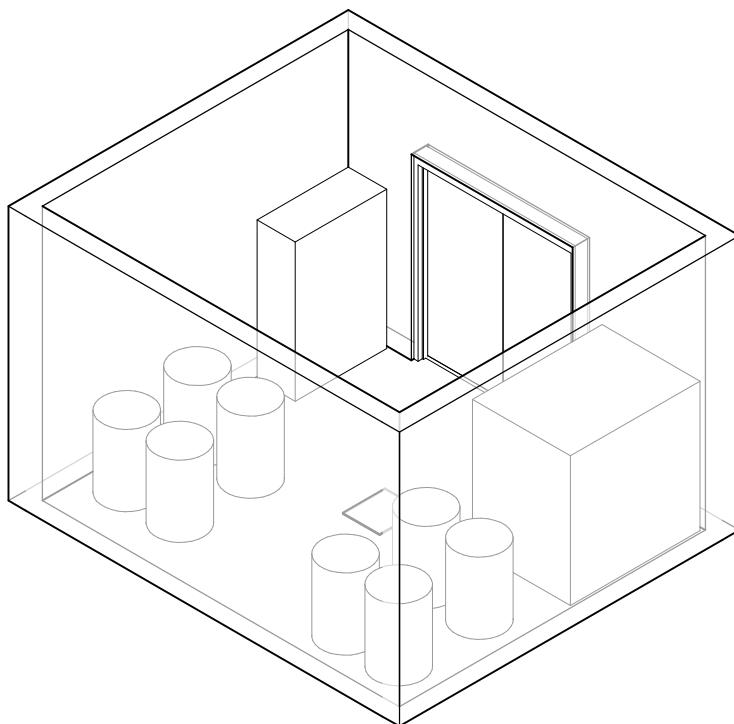
4. PARTS STORAGE RACK FOR MISC. GALLON JUGS

5. FLUID STORAGE ROOM SUMP

FLUID STORAGE (DPW) - 360 SF

1/8" = 1'-0"

DRAFT



ROOM FINISHES:

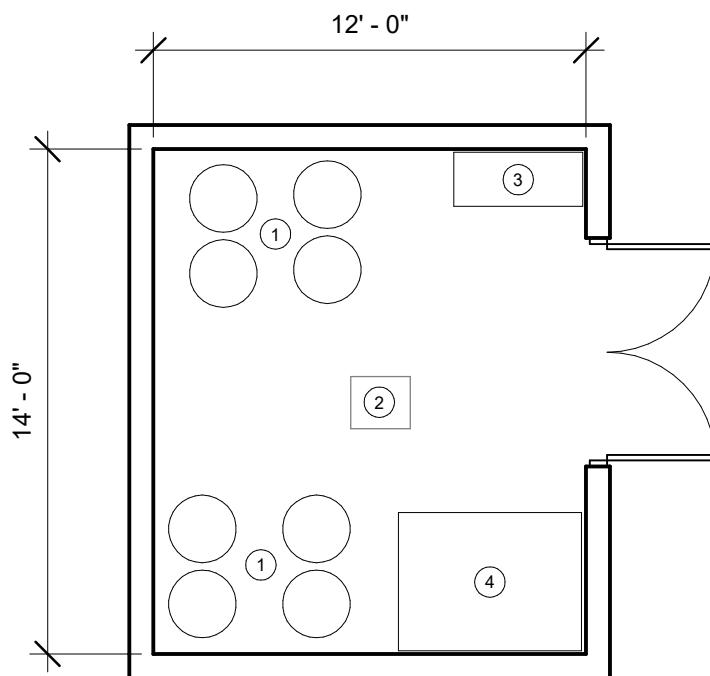
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

- HEATING
- GFI ELECTRICAL OUTLETS
- DEDICATED EXHAUST SYSTEM
- COMPRESSED AIR FOR PNEUMATIC PUMPS
- CONTAINMENT SUMP

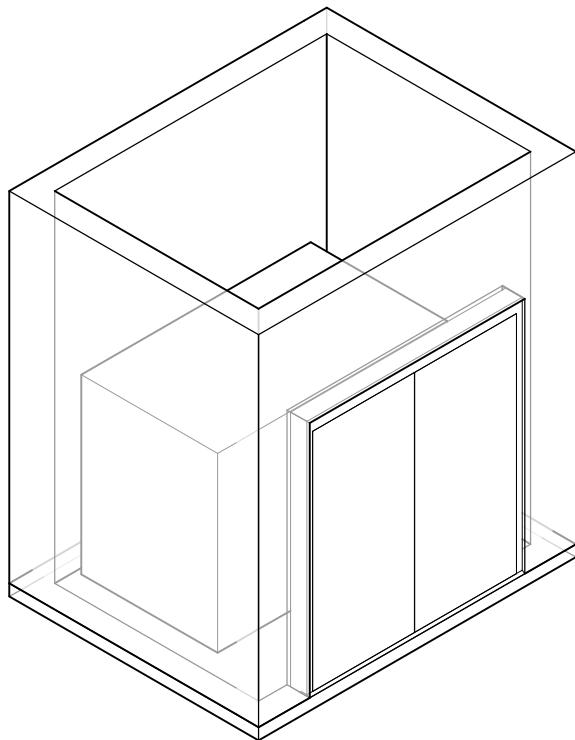


COMPONENTS:

1. 55 GAL FLUID STORAGE DRUM
2. FLUID SPILL CONTAINMENT SUMP
3. FLAMMABLE STORAGE CABINET
4. WASTE OIL

FLUID STORAGE (FIRE) - 168 SF
 $3/16" = 1'-0"$

DRAFT



ROOM FINISHES:

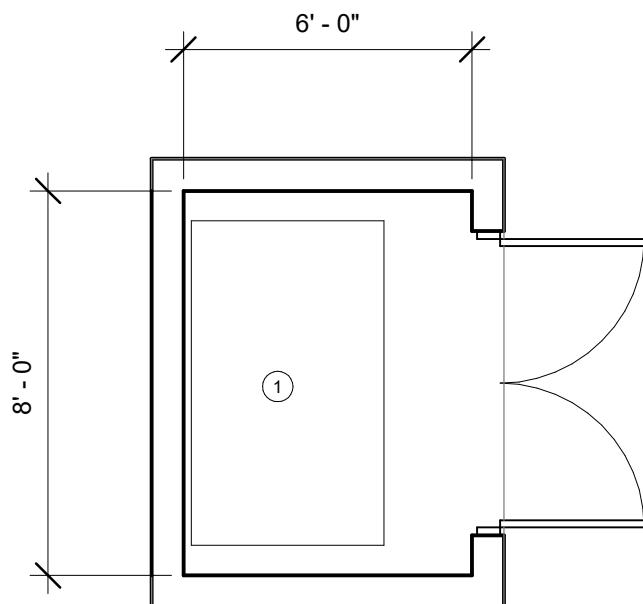
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

- HEATING
- GFI ELECTRICAL OUTLETS
- DEDICATED EXHAUST SYSTEM
- COMPRESSED AIR FOR PNEUMATIC PUMPS
- CONTAINMENT SUMP

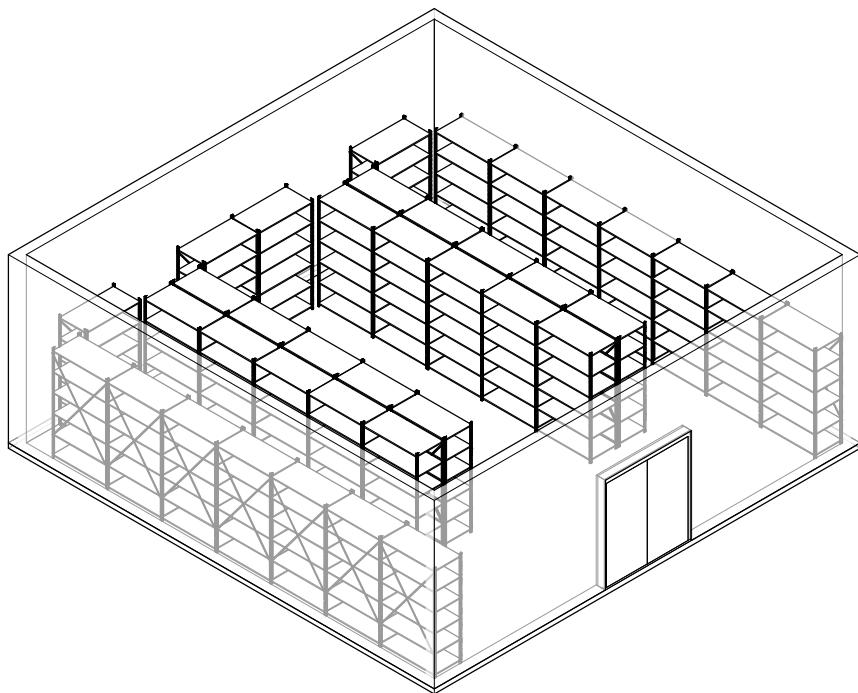


COMPONENTS:

1. FLUID CONTAINMENT, TBD

FLUID STORAGE (SCHOOL) - 48 SF
1/4" = 1'-0"

DRAFT



ROOM FINISHES:

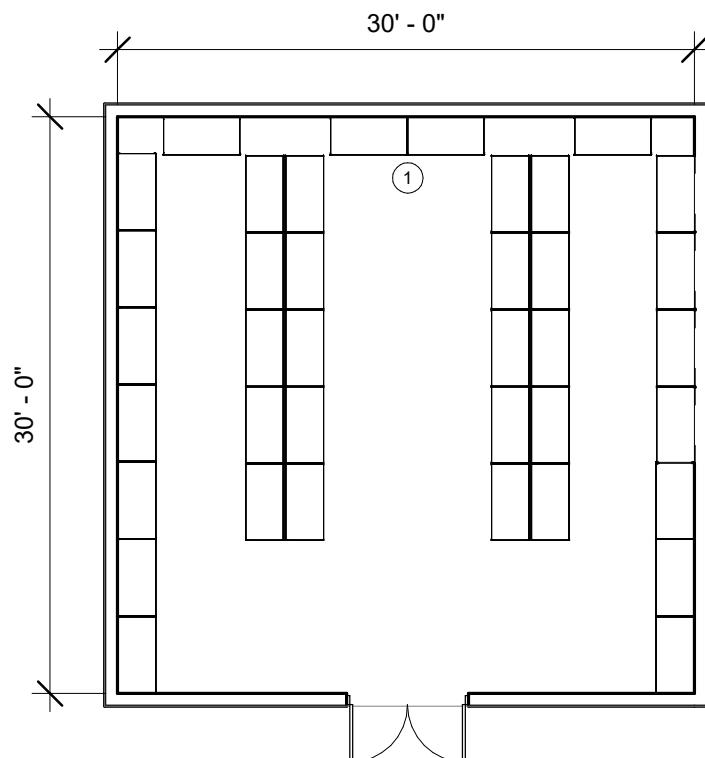
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

- DUPLEX ELECTRICAL OUTLETS



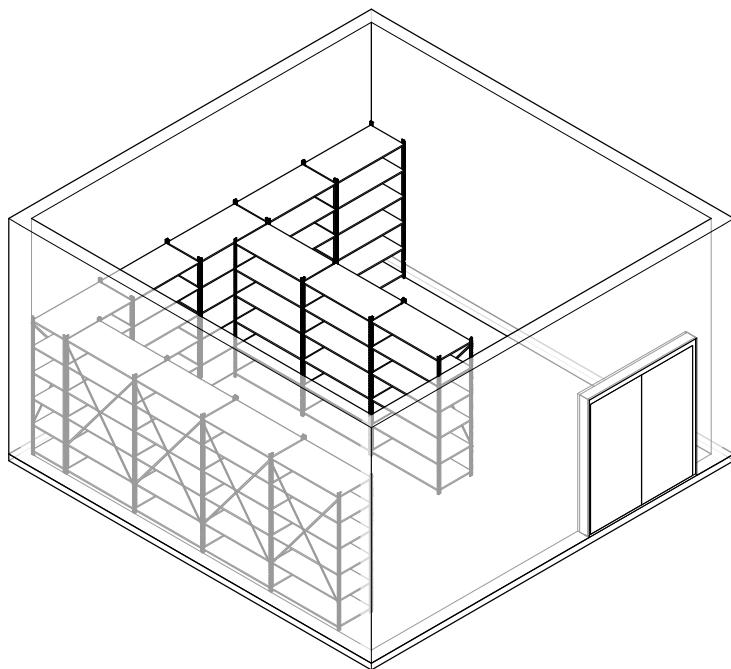
COMPONENTS:

1. (38) UTILITY SHELVING

PARTS STORAGE ROOM (DPW) - 900 SF

1" = 10'-0"

DRAFT



ROOM FINISHES:

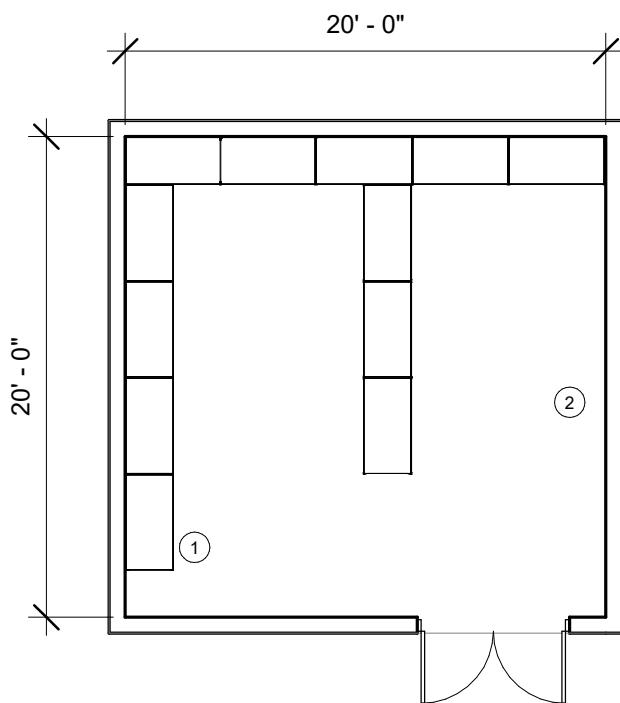
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

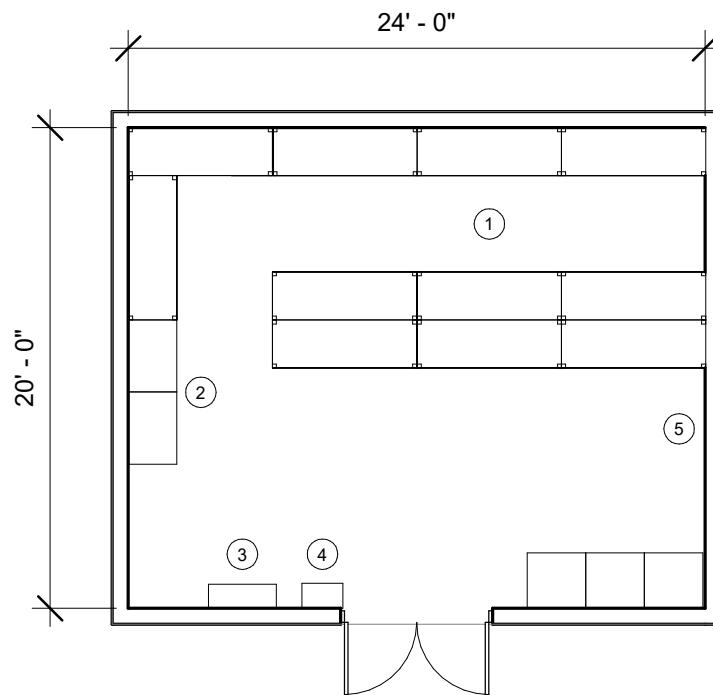
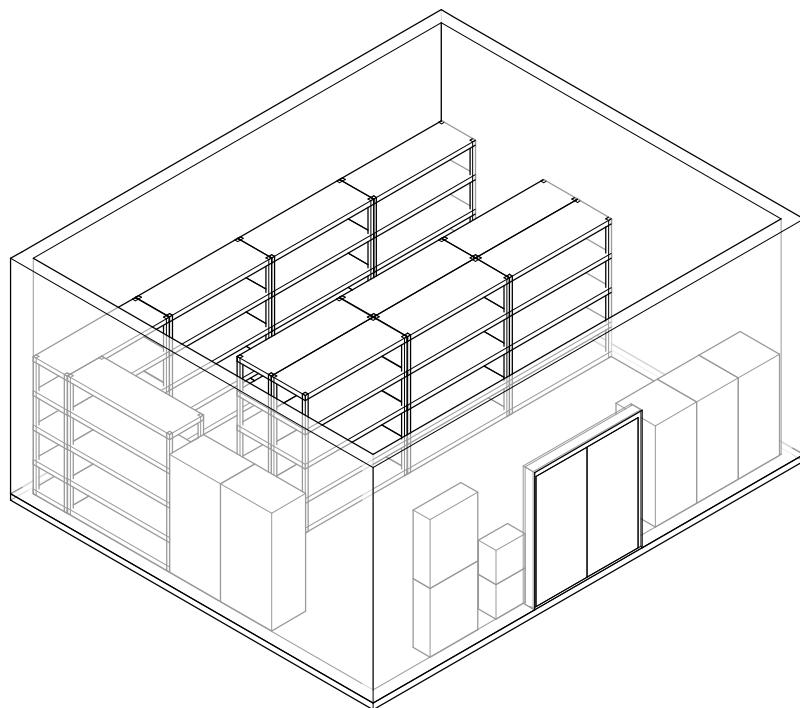


COMPONENTS:

1. UTILITY SHELVING
2. FLOOR STORAGE

PARTS STORAGE ROOM (POLICE) - 400 SF
1/8" = 1'-0"

DRAFT



PARTS STORAGE ROOM (FIRE) - 480 SF
 $1/8'' = 1'-0''$

ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

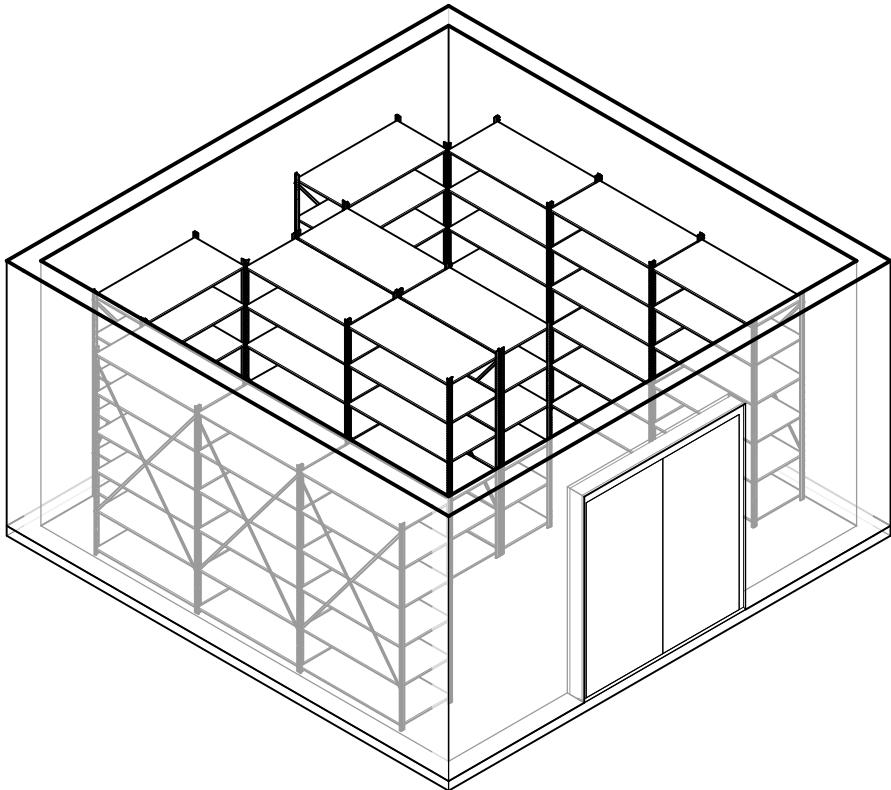
MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

COMPONENTS:

1. (14) 72" W X 24" D UTILITY SHELVING
2. LOCKING STORAGE CABINETS
3. SMALL PARTS CUBBIES
4. SLIDING SMALL PARTS DRAWER
5. COMPONENT DRAWERS

DRAFT



ROOM FINISHES:

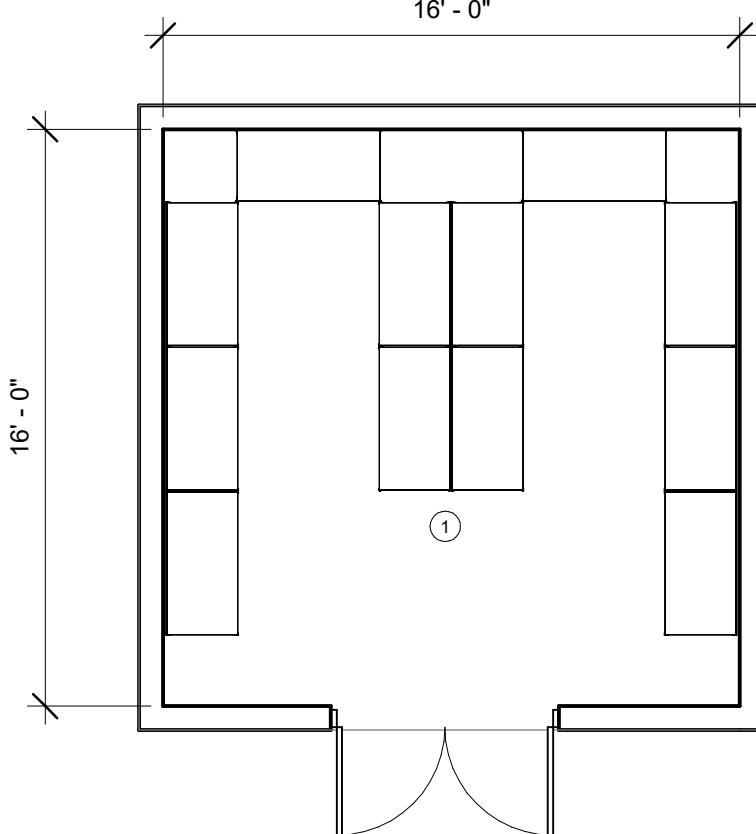
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

- DUPLEX ELECTRICAL OUTLETS



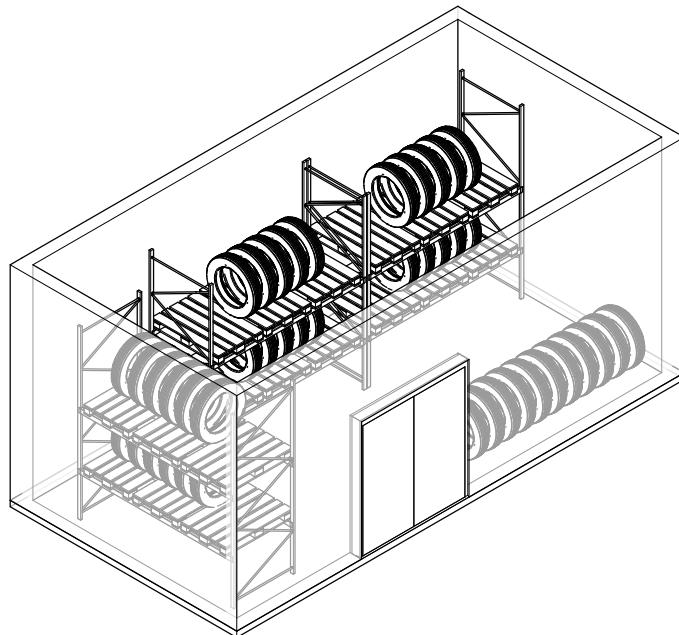
COMPONENTS:

1. UTILITY SHELVING

PARTS STORAGE ROOM (SCHOOL) - 256 SF

3/16" = 1'-0"

DRAFT



ROOM FINISHES:

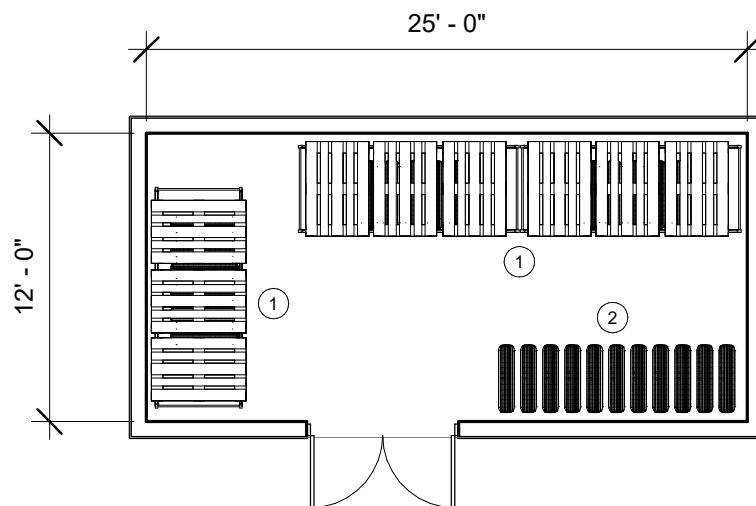
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS



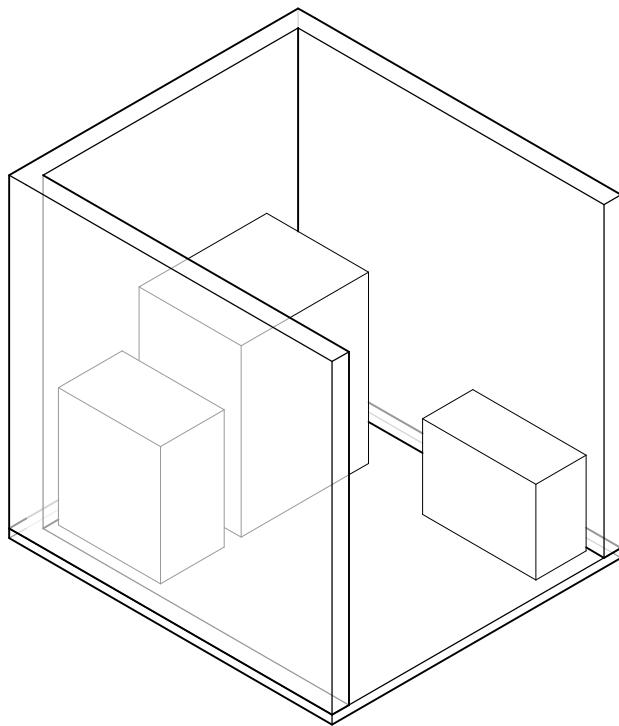
TIRE STORAGE AREA - 300 SF

1/8" = 1'-0"

COMPONENTS:

1. TIRE STORAGE RACKS
2. FLOOR STORAGE FOR LARGE TIRES

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ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

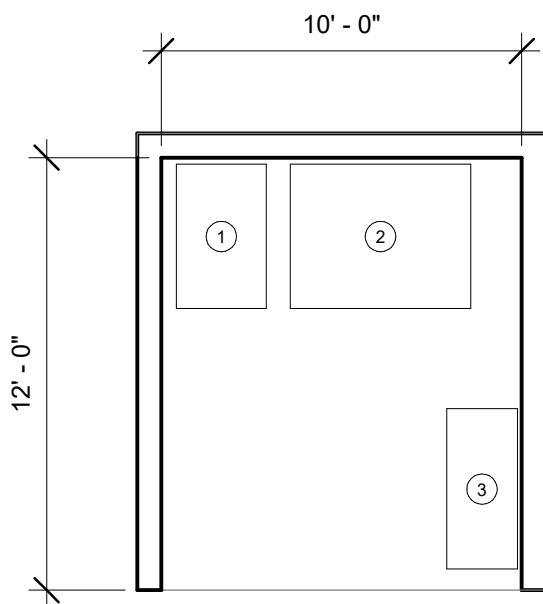
WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

DATA OUTLET JACKS



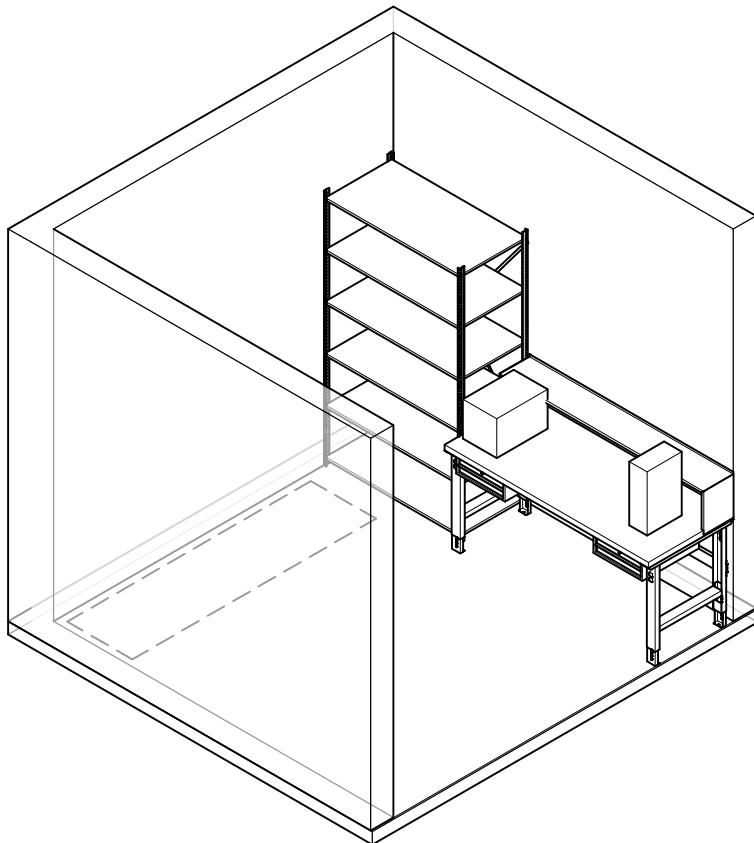
COMPONENTS:

1. TIRE INFLATION MACHINE
2. TIRE CHANGER MACHINE
3. TIRE BALANCER

TIRE REPAIR AREA - 120 SF

3/16" = 1'-0"

DRAFT



ROOM FINISHES:

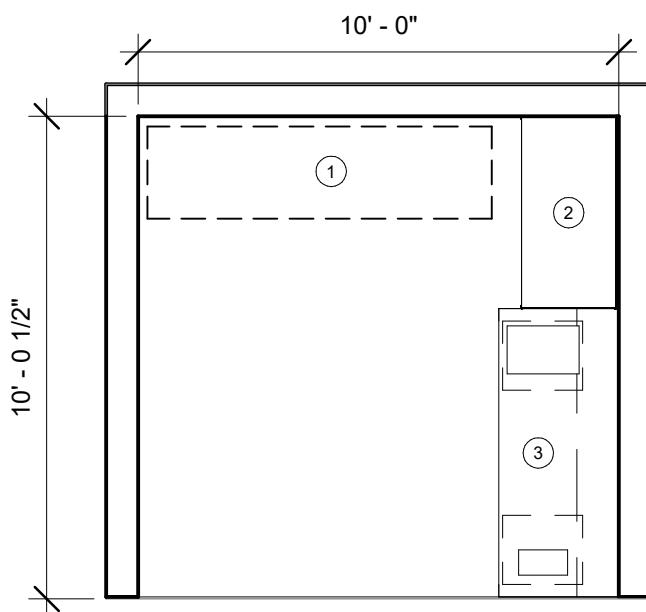
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

- HEATING / COOLING
- DUPLEX ELECTRICAL OUTLETS



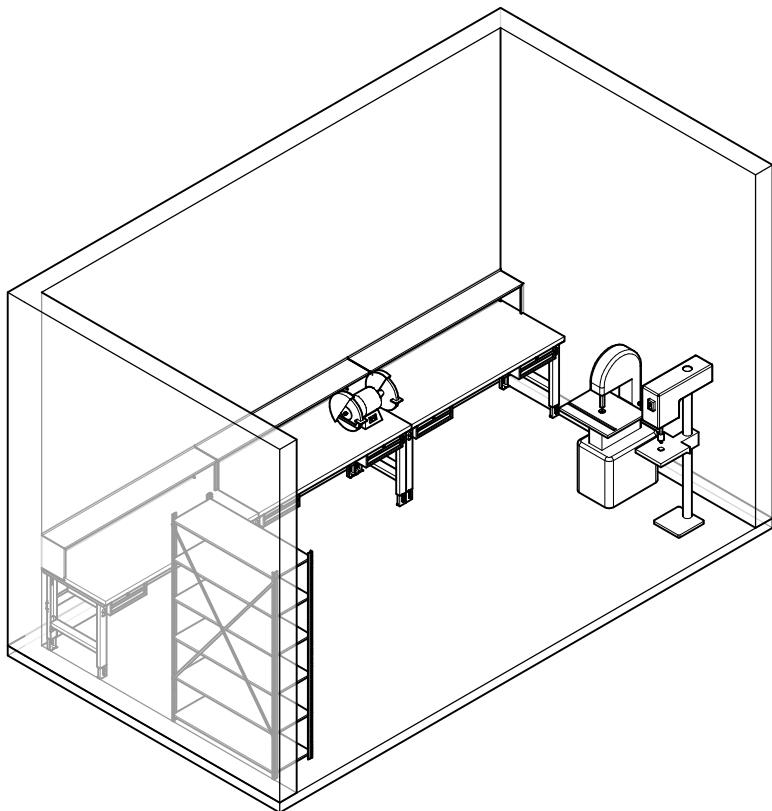
COMPONENTS:

1. (3) HANGING REELS FOR HOSES
2. CHOP SAW WORKBENCH
3. (3) UTILITY SHELVING FOR PARTS STORAGE

HYDRAULIC HOSE SHOP - 100 SF

1/4" = 1'-0"

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ROOM FINISHES:

CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED

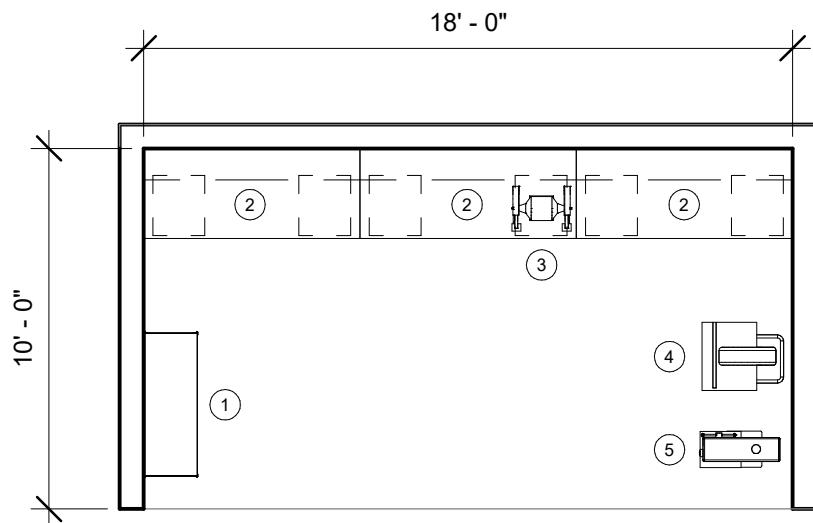
FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

HEATING / COOLING

DUPLEX ELECTRICAL OUTLETS

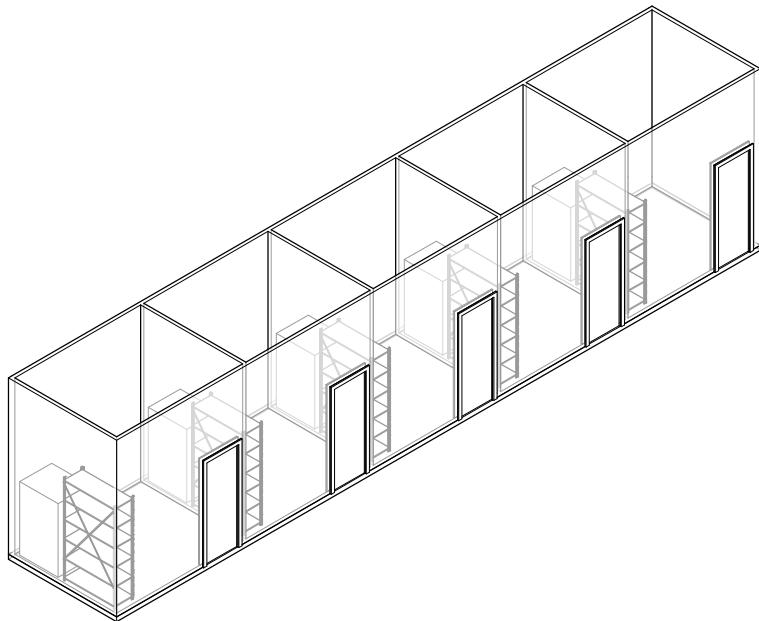
DUST COLLECTION



SMALL EQUIPMENT REPAIR SHOP - 180 SF

3/16" = 1'-0"

DRAFT



ROOM FINISHES:

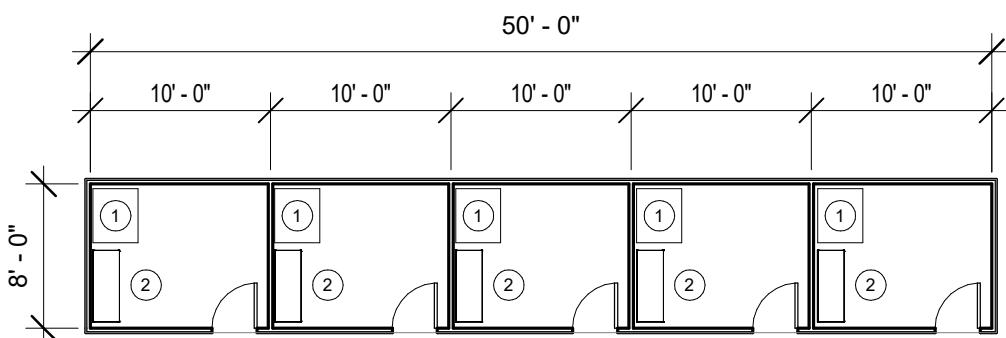
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED OR WIRE CAGE

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

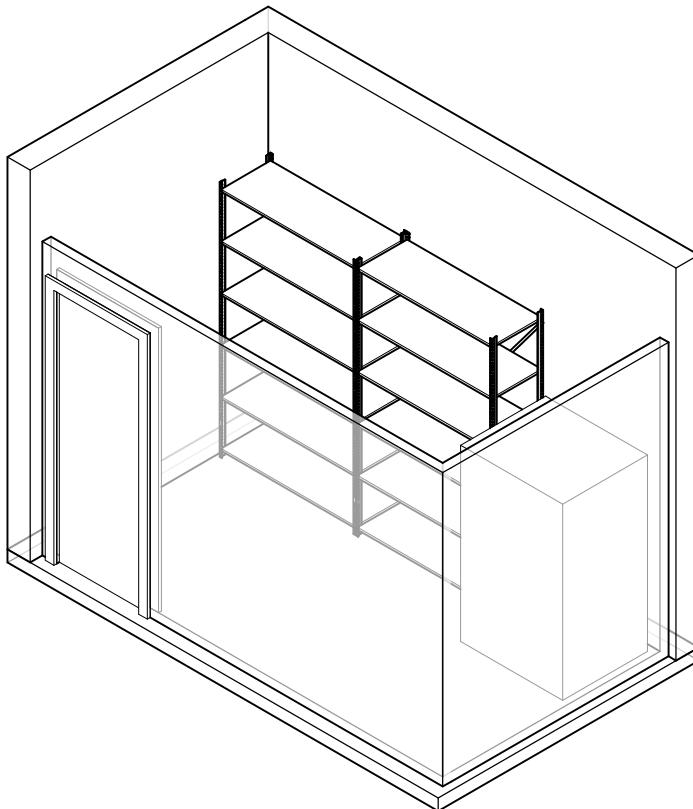
- DUPLEX ELECTRICAL OUTLETS



MECHANIC'S TOOL CRIB - 400 SF

3/32" = 1'-0"

DRAFT



ROOM FINISHES:

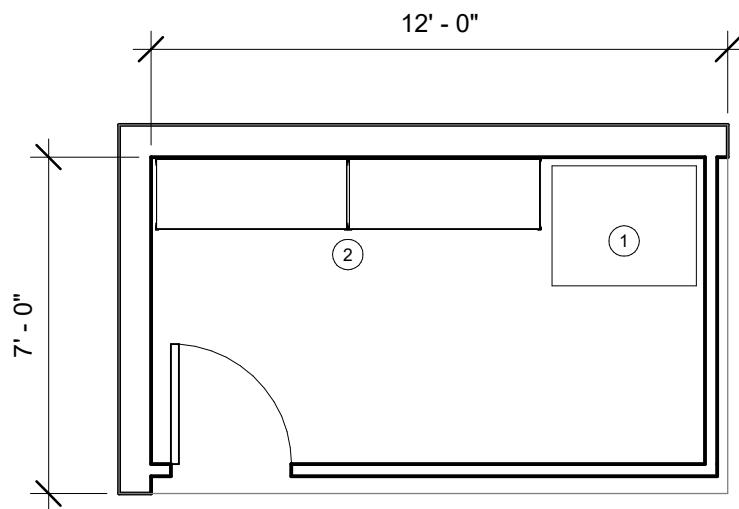
CEILING: OPEN TO STRUCTURE

WALLS: CMU, PAINTED /
WIRE MESH

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS



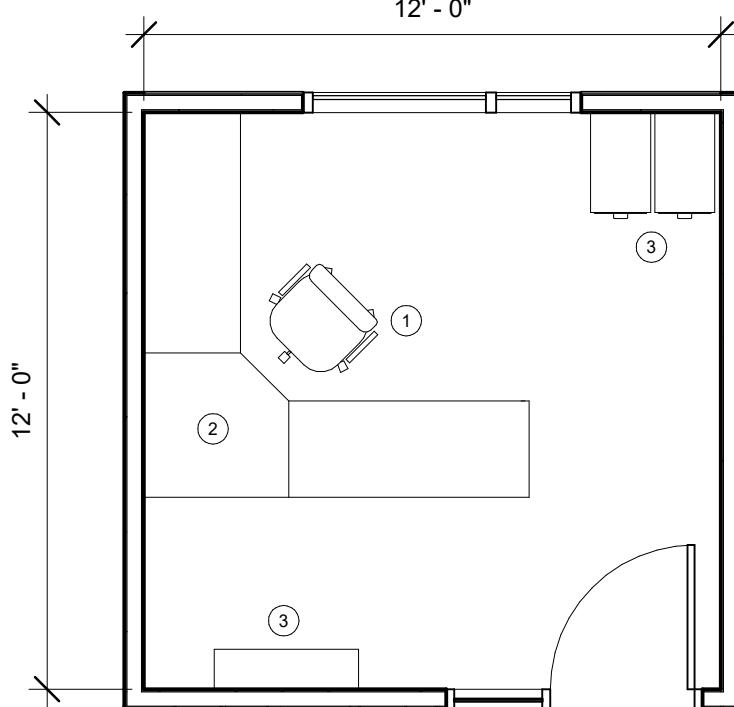
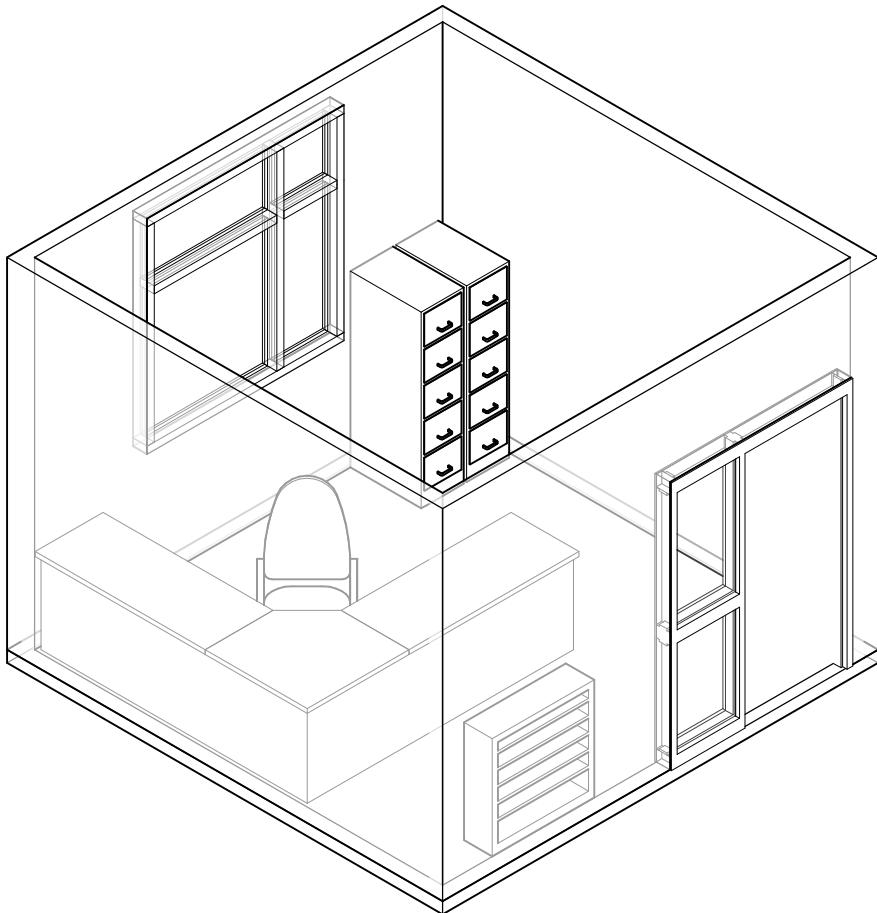
INSPECTION AREA - 84 SF

1/4" = 1'-0"

COMPONENTS:

1. WORKBENCH
 2. SPACE FOR COMPUTER STATION
- * LOCK CAPABILITIES
FOR SECURITY

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HEAD MECHANIC'S OFFICE - 144 SF

1/4" = 1'-0"

ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

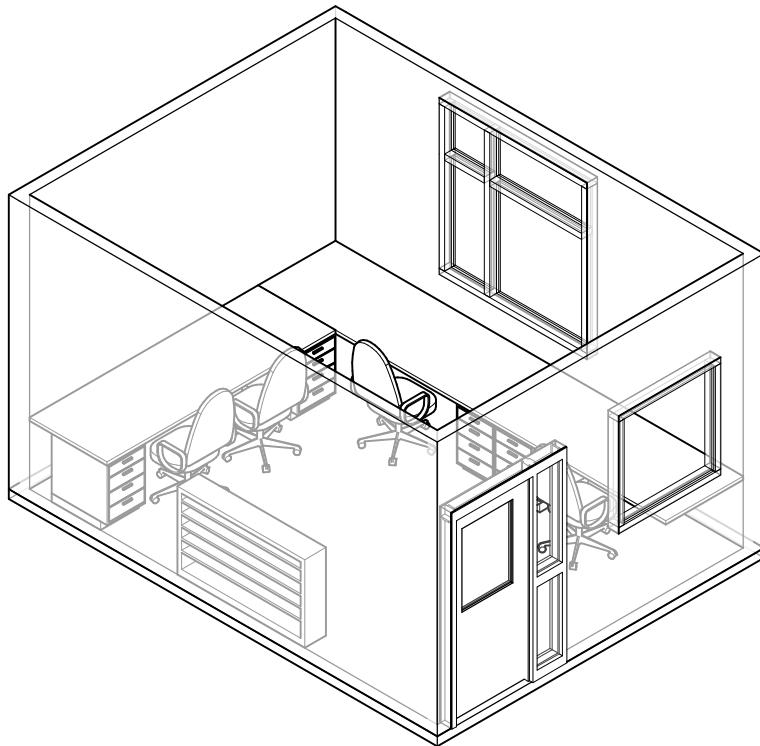
COMPONENTS:

1. EXECUTIVE CHAIR

2. WORKSTATION

3. BOOKCASE /
FILE CABINETS

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ROOM FINISHES:

CEILING: ACT TILE

WALLS: GWB / CMU, PAINTED

FLOORS: LINOLEUM

MEP/DATA REQUIREMENTS:

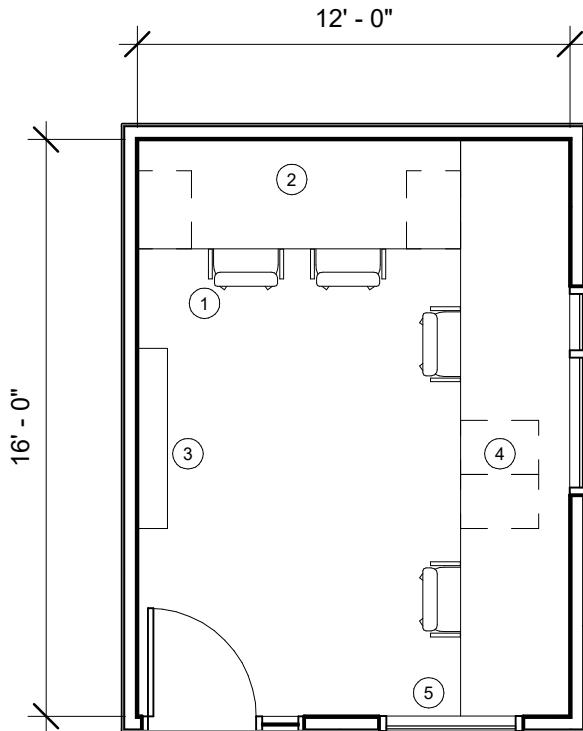
DUPLEX ELECTRICAL OUTLETS

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR
LIGHTING CONTROLS

HEATING / COOLING

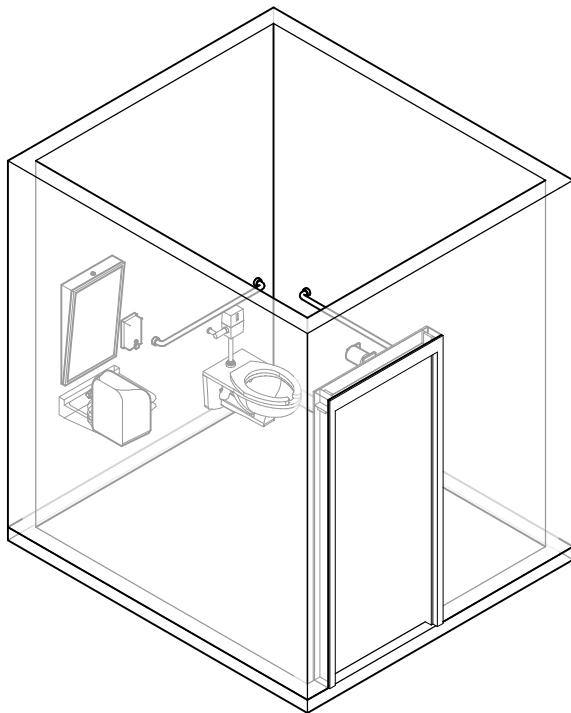


COMPONENTS:

1. (2) EXECUTIVE CHAIRS
2. (2) WORKSTATIONS
3. BOOKCASE
4. FILE CABINET
5. WINDOW VIEWING TO
MAINTENANCE BAYS

SHARED MECHANIC'S OFFICE / REFERENCE ROOM - 192 SF
3/16" = 1'-0"

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ROOM FINISHES:

CEILING: MOISTURE RESISTANT ACT TILE

WALLS: CERAMIC TILE / GWB, PAINTED

FLOORS: RESINOUS EPOXY

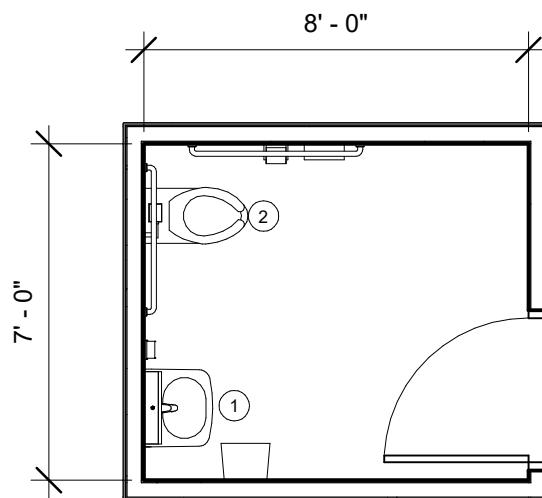
MEP/DATA REQUIREMENTS:

DUPLEX ELECTRICAL OUTLETS

TEL / DATA OUTLET JACKS

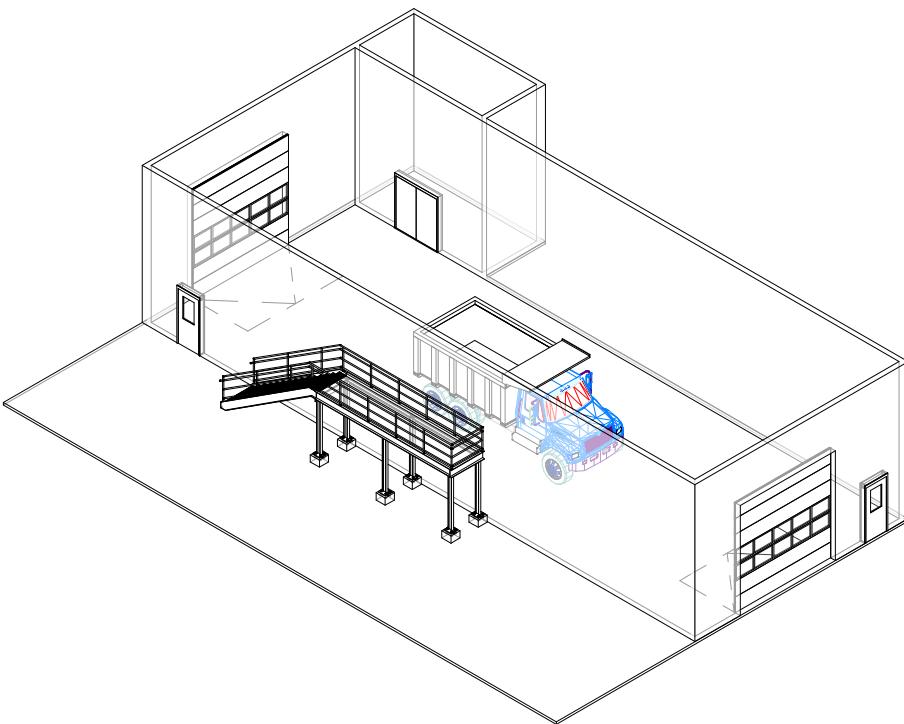
HEATING / COOLING

OCCUPANCY SENSORS
FOR LIGHTING CONTROLS



MECHANIC TOILET FACILITY - 56 SF
1/4" = 1'-0"

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ROOM FINISHES:

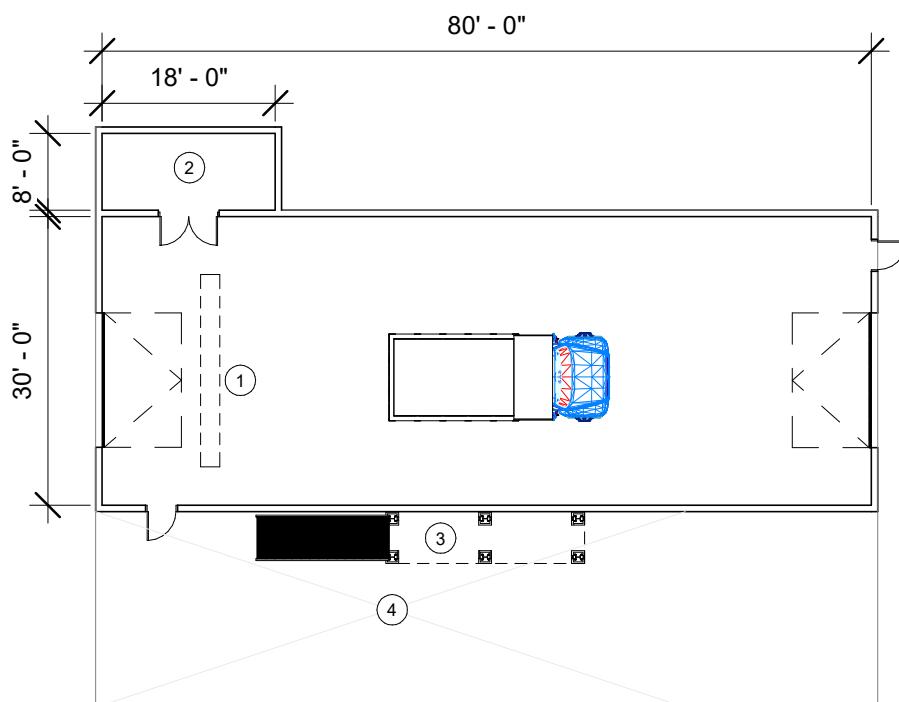
CEILING: PVC PANEL

WALLS: PVC PANEL

FLOORS: SEALED CONCRETE

MEP/DATA REQUIREMENTS:

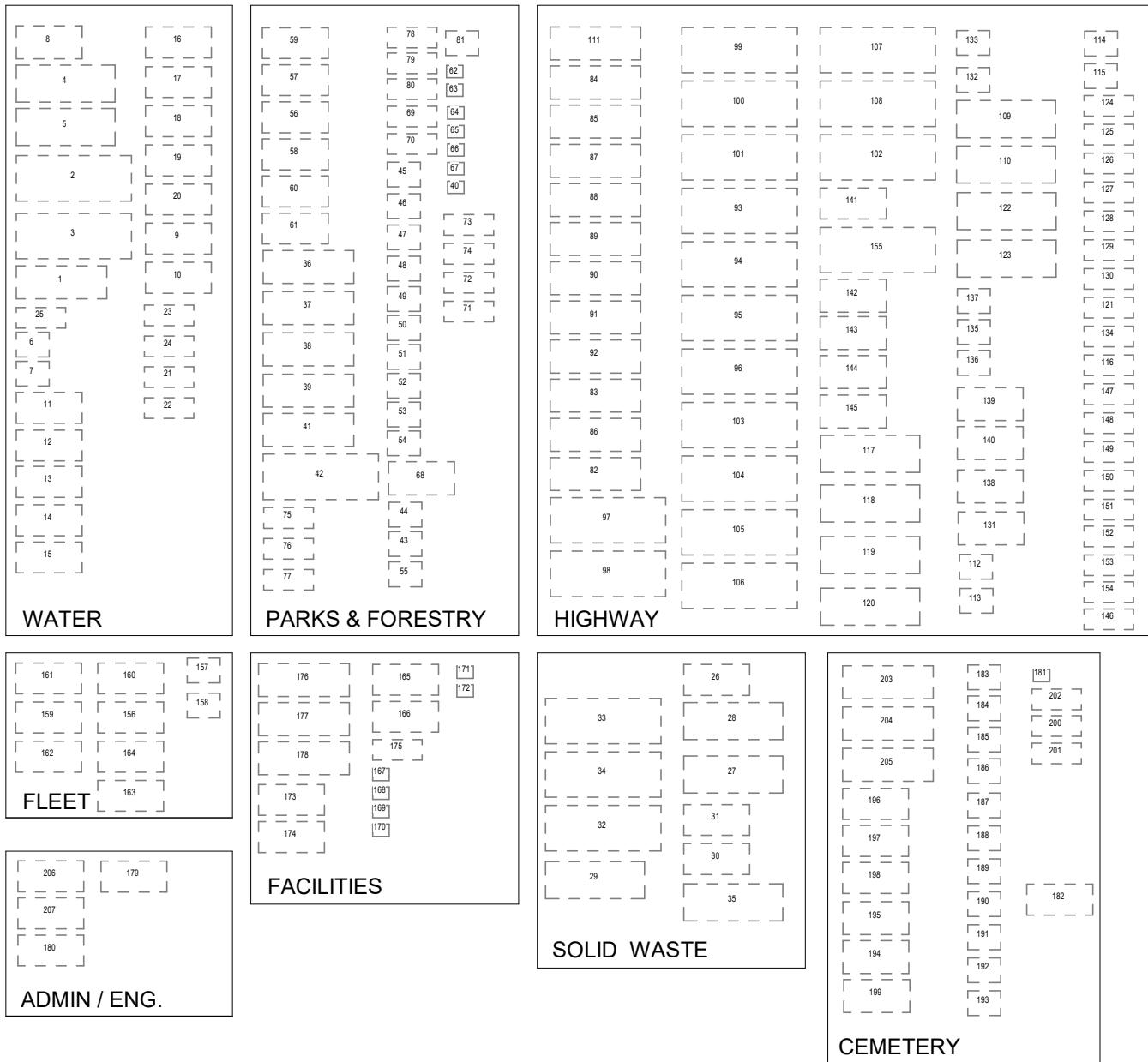
- HEATING
- GFI ELECTRICAL OUTLETS
- VENTILATION
- WATERPROOF DEVICES
- 2" WATER SUPPLY



WASH BAY - 2,536 SF

1" = 20'-0"

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PLMOUTH FLEET OVERVIEW (PENDING VERIFICATION)

1" = 40'-0"

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Town of Plymouth
Department of Public Works
New Facility Feasibility Study
Final Report

Appendix E

Zoning & Permitting Memorandum

M E M O R A N D U M

TO: File
FROM: Colleen Kennedy
DATE: May 4, 2022
SUBJECT: Plymouth Public Works Zoning and Permitting Review

SITE INFORMATION:

Parameter	Information	Notes:
Site Address:	159 & 169 Camelot Drive	Two (2) lots
Map/Lot:	83-23-13 & 83-23-14	
Size (acres):	4.747 AC & 2.497 AC	
Zoning District	Light Industrial, LI	
Book/Page:	12694-339 & 35483-034	

ZONING INFORMATION:

Zoning District: Light Industrial, LI

Zoning Map Date: Amended 2012 Fall

Zoning By-Law Date: Amended April 2019

Overlay Districts:

District	Applicable	Notes:
Aquifer Protection District (AA)	YES	Area 3 - Contributing Areas to Significant Recreational Water Bodies, shown on the Town Acquire Protection Map
Floodplain District (FP)	NO	Zone X is not included within the FP District
Cordage Park Smart Growth District (CPSGD)	NO	

Obery Street Overlay District (OSOD)	NO	
Municipal Wastewater District (MWD)	YES	

DIMENSIONAL REGULATIONS:

DIMENSION	Required	159 Camelot Dr	169 Camelot Dr	Notes
Min. Lot Area (s.f.)	40,000	108,769	206,779	
Min. Lot Width (ft.)	200'	300'	200'	
Min. Lot Depth (ft.)	150'	600'	330	
Min. Side Yard (ft.)	30'	50'	50'	
Min. Front Yard (ft.)	50'	188'	53'	
Min. Rear Yard (ft.)	30'	100'	150'	
Lot Coverage (Buildings, %)	50	~7.88%	~25.16	Lots Together ~13.83%
Floor Area Ratio	0.75	Unk.	Unk.	
Building Height (ft.)	35'	Unk.	Unk.	Salt Shed is on 169 Camelot Drive
Buffer	50'	Y	Y	

Note:

Two or more Lots in common ownership, whether or not contiguous, may be considered as one Lot for the Maximum Lot coverage and Parking requirements.

PERMITTING SUMMARY:

- 1) Notice of Intent: Town of Plymouth Conservation Commission and MassDEP
Required for any project work that is within the 100-foot wetland buffer zone.
- 2) Special Permits Required in Aquifer Protection District (Area 3): Town of Plymouth Special Permit Granting Authority, SPGA:
 - Permanent removal, or re-grading of the existing soil cover, which results in a finished grade at a level less than five (5) feet above the historical high groundwater. **(To be confirmed in Schematic Stormwater Design & Geotechnical Test Pit Exploration).**
 - All uses that retain less than 30% of the site's area in its natural state. **(Percentage to be confirmed in Schematic Design Site Layout).**
 - Uses which render impervious more than 15% or 2,500 square feet of any lot or parcel, whichever is greater that do not provide artificial recharge for additional runoff resulting from the impervious surfaces. **(Percentage/area to be confirmed in Schematic Design Site Layout).**

- Motor vehicle service facilities, repair facilities or car washes as a primary use or accessory to other primary uses.
 - The storage of more than 5,000 gallons of gasoline, oil, or similar petroleum products (**Applicable if above ground gasoline/diesel storage tanks greater than 5,000 gal are proposed in this project.**)
 - All uses that store fuel or oil in quantities greater than 500 gallons. (**Applicable if proposed Liquid Storage Room/Vehicle Maintenance Garage will be designed to hold greater than 500 gal.**)
 - Storage and/or transmission of petroleum or refined petroleum products in excess of 500 gallons. (**Applicable if proposed Liquid Storage Room/Vehicle Maintenance Garage will be designed to hold greater than 500 gal of petroleum products.**)
 - Storage of liquid Hazardous or Toxic materials and/or liquid petroleum products in quantities greater than normal household use.
 - Facilities that generate, treat, store, or dispose of Hazardous waste.
 - Storage of sodium chloride, chemically treated abrasives or other chemicals used for the removal of ice and snow on roads in quantities greater than for normal individual household use, provided such storage is within a Structure designed to prevent the generation and escape of contaminated runoff and/or leachate.
 - Disposal or stockpiling of snow or ice.
- 3) Stormwater Management Plan, submit in conjunction with Special Permit Application and Notice of Intent Required for projects involving development of new land uses and alteration or redevelopment of existing land uses. Submittal includes a Pre-Application Submittal, and Application Submittal that includes a Stormwater Management Plan, and Erosion and Sediment Control Plan, Operation & Maintenance Strategy.

OTHER SITE CONSIDERATIONS:

- 1) Site Plan Review is exempt from this project because special permit submittals are required. Per *section 203-15. B* of the zoning bylaw, applications are exempt from site plan review when a Use or Structure which requires Special Permit or Variance has been obtained.
- 2) An assumption has been made that a new Department of Public Works Facility will be categorized as the Regulated Use or "Public Safety Building" which does not require a special permit in the LI Zoning District, and not a "Town Building and Use" that does require a special permit in the LI Zoning District.
- 3) This zoning and permitting analysis review, does not include construction permits such as Building, Electrical, Demo permits, etc.
- 4) A portion of this parcel is located within FEMA Zone X. Zone X is not the jurisdictional 100-year flood zone. It is the 500-year flood zone, which is not protected by the Wetlands Protection Act.
- 5) The entire parcel is located within Aquifer Protection District Area 3 "Contributing Areas to Significant Recreational Water Bodies." This Area prohibits the use of sodium chloride for ice control. Proposing signs for "No Salt Area" can be considered for final site layout pavement design.

DESIGN AND PERMITTING CONSIDERATIONS:

Zoning Bylaw of the Town of Plymouth	
Dimensional Table 11/17/2017	
C Institutional	
10 Public Safety Buildings - Y, permitted by right, Required for LI District	No Permit is required for Public Safety Building
11 Town Building and Use - SP, Special Permit Required for LI District	Special Permit required for Town Building or Town Use.
E Industrial	
12 Earth Removal, Incidental - Y permitted by right, Required for LI District	No permit is required for Earth Removal work that is incidental to constriction
Dimensional Table - footnotes	
7. All Districts – Exceptions to 35-ft. maximum Height:	
Special Permit for Additional Height – In addition to §202-6 requirements, subject to the following additional SPGA findings: ii. A demonstrated public benefit may be realized only by additional Height.	Special Permit is required for a Building Height above 35' in the LI District
7d. LI/WF d. LI within the Light Industrial Building Height Overlay District - 60 ft., subject to the following Special Setback conditions, according to Structure Height: i. Structure up to 45 ft. - minimum 400 ft. Setback, including 250-ft. Buffer from a Residential District boundary line. ii. Structure between the lesser of 46 ft. and 60 ft. - minimum 500 ft. Setback, including 300-ft. Buffer from a Residential District boundary line. iii. Otherwise by Special Permit (see 7 above).	Special Permit is required for a Building Height above 35' in the LI District
8. LI/WF - Two or more Lots in common ownership, whether or not contiguous, may be considered as one Lot for the following purposes: a. Maximum Lot coverage/maximum GFA. b. Parking requirements. c. On a Lot of 5 or more acres which was in existence on April 10, 1980, and not then devoted to Single-Family residential use, no more than 50% of total GFA of all Structures may be in residential use and the GFA in residential use on such lot shall not exceed 30% of such total GFA.	Both parcels, 159 & 169 Camelot Drive, are owned by the Town of Plymouth
203-15. Site Plan Review.	
A. General Requirement. The Planning Board shall review Development Plans and other plans for all Building and Zoning Permit applications and plans filed with the Building Commissioner, except as noted below, for the purpose of assuring that the proposal complies with the Planning Board Design Guidelines.	
B. Exemptions. The following applications and plans are exempt from Site Plan Review: 1. Use or Structure for which a required Special Permit or Variance has been obtained.	This Project requires multiple special permits for Uses in the Aquifer Protection Area 3
Article VI	
206-1. Aquifer Protection Overlay District (APOD)	
D. Establishment and Delineation of Aquifer Protection District	
1. The Aquifer Protection District includes the aquifer itself, the land above the aquifer and the aquifer's most Significant recharge areas consisting of:	

c. Area 3. Contributing Areas to significant Recreational Water Bodies: the area contiguous or noncontiguous to recreational lakes, water bodies or tributaries thereto in which ground or surface water flow is in the direction of and contributory to the lake, water body or tributary as displayed on the Aquifer Protection Map.	
G. Allowed Uses. Allowed uses in the Aquifer Protection District are set forth in the Table and are subject to the following:	
1. Allowed uses shall include a system of stormwater management which is consistent with the Town of Plymouth's Stormwater Design Guidelines and the DEP Stormwater Management Standards and Design Guidelines, as amended, and which shall be designed to prevent untreated discharges to wetland and surface waters; preserve hydrologic conditions that closely resemble predevelopment conditions; reduce or prevent flooding by managing peak discharges and volumes of runoff; minimize erosion and sedimentation; result in no significant degradation of groundwater quality; and reduce suspended solids and other pollutants to improve water quality and provide increased protection of sensitive natural resources.	Stormwater Design -to follow Town of Plymouth's Stormwater Design Guidelines
2. Uses which render impervious more than fifteen percent (15%) or 2,500 square feet of any lot, whichever is greater, shall provide artificial recharge for additional runoff resulting from the impervious surfaces.	Design Parameter - Impervious Area Coverage & stormwater recharge requirement
H. Special Permit Uses subject to the following:	
2. Expansion of existing nonconforming uses shall not be granted unless the SPGA expressly finds that such expansion shall result in no net change, or a net improvement to existing conditions with respect to water quality and groundwater recharge over the existing use, and in no case shall such permit be issued for a prohibited use under this Section of the Bylaw.	Need confirmation with SPGA that Department of Public Works Building is a permitted use "Public Safety Building"
a. All uses that store fuel or oil in quantities greater than 500 gallons	Special Permit required for Fuel Storage above 500 gal
c. All uses that as a result of site work have grades of less than five feet (5') above maximum groundwater elevation	
d. All uses that retain less than thirty percent (30%) of the site's area in its natural state (except as required for a single-family residence)	
4. Special Permits issued for uses in Paragraph H (3) above shall be subject to the following conditions:	
a. Car washes must recycle water at the facility in a manner consistent with other local, state and federal regulations.	Design Parameter: Vechile Wash Bay
5. For uses which include the storage, handling or use of toxic or hazardous materials in quantities greater than normal household quantities, and where storage is for or incidental to:	
i. Waste oil retention facilities required by statute, rule or regulations	Design Parameter: Waste Oil Tank
And provided that storage must be:	
i. Above ground level; AND	Spill and Prevention Containment Control Requirements
ii. On an impervious surface; AND	
iii. Either in container(s) or above-ground tank(s) within a building or outdoors in covered container(s) or above ground tank(s) in an area that has a containment system designed and operated to contain a spill of 110% of the total volume of the single largest container.	
206-1. Aquifer Protection District (AA) Use Table	
5. e. Permanent removal, or re-grading of the existing soil cover, which results in a finished grade at a level less than five (5) feet above the historical high groundwater, except ten (10) feet for earth removal as specified in §203-2(C)(4)(i) or unless as otherwise specified in this Table.	Area 3 - SP, Special Permit Required

8. Minor Road repair and overlay, including total reconstruction or expansion, or road improvements when performed by a municipal entity; however, no expansion may take place in an Area 1.	Area 3 - A, Allowed Use
9. The laying of drinking water, sewer or drainage lines, or repair, replacement or expansion of existing structures and piping.	Area 3 - A, Allowed Use
14. All uses that retain less than 30% of the site's area in its natural state (except as required for a single-family or two-family residence and additions and/or accessory uses thereto), unless as otherwise specified in this Table.	Area 3 - SP, Special Permit Required
15. Uses which render impervious more than 15% or 2,500 square feet of any lot or parcel, whichever is greater that do not provide artificial recharge for additional runoff resulting from the impervious surfaces	Area 3 - SP, Special Permit Required
23. Motor vehicle service facilities, repair facilities or car washes as a primary use or accessory to other primary uses.	Area 3 - SP, Special Permit Required
26. Storage of liquid petroleum products, as an accessory use, in normal Household Quantities including for emergency generators.	Area 3 - A, Allowed Use
27. Storage of liquid petroleum products greater than in normal Household Quantities, unless as otherwise restricted in this Table.	Area 3 - A, Allowed Use
28. Waste oil retention facilities unless approved by the Board of Health or required by G. L. c.21, §52AA	Area 3 - A, Allowed Use
29. The storage of more than 5,000 gallons of gasoline, oil or similar petroleum products	Area 3 - SP, Special Permit Required
30. All uses that store fuel or oil in quantities greater than 500 gallons, unless as otherwise specified in this Table.	Area 3 - SP, Special Permit Required
31. Petroleum, fuel oil, and heating oil Bulk Stations and Terminals including, but not limited to, those listed under SIC codes 5983 and 5171, not including liquefied petroleum gas. SIC Codes are established by the U.S. Office of Management and Budget and may be determined by referring to Office of Management and Budget and may be determined by referring to the publication "Standard Industrial Classification Manual".	Area 3 - P, Prohibited Use
32. Storage and/or transmission of petroleum or refined petroleum products in excess of 500 gallons.	Area 3 - SP, Special Permit Required
33. Storage and/or transmission of petroleum or refined petroleum products, for normal household use, outdoor maintenance, and heating of a structure; waste oil retention facilities required by statute, rule, or regulation; emergency generators required by statute, rule or regulation; and treatment works approved under 314 CMR 5.00 for treatment of ground or surface waters, provided that storage listed above is in freestanding containers within buildings or above ground with secondary containment adequate to contain a spill the size of the container's total storage capacity. Storage tanks may be located within a building or other special enclosure which is sealed so that any leakage is trapped and may be removed without entering into the ground.	Area 3 - A, Allowed Use
34. Storage of liquid Hazardous or Toxic materials and/or liquid petroleum products in quantities greater than normal household use, unless otherwise specified in this Table.	Area 3 - SP, Special Permit Required
35. Replacement of existing tanks or existing systems for the keeping, dispensing or storing of gasoline, if in compliance with all applicable laws	Area 3 - A, Allowed Use
36. Facilities that generate, treat, store, or dispose of Hazardous waste unless as otherwise specified in this Table.	Area 3 - P, Prohibited Use
40. The use of sodium chloride for ice control.	Area 3 - P, Prohibited Use
41. Storage of sodium chloride , chemically treated abrasives or other chemicals used for the removal of ice and snow on roads in quantities greater than for normal individual household use, provided such storage is within a Structure designed to prevent the generation and escape of contaminated runoff and/or leachate.	Area 3 - SP, Special Permit Required

42. Disposal or stockpiling of snow or ice brought in from outside the Aquifer Protection District.	Area 3 - P, Prohibited Use
43. Disposal or stockpiling of snow or ice.	Area 3 - SP, Special Permit Required

Town of Plymouth Wetlands Rules & Regulations	
Section 9 - Additional Regulations for Coastal and Inland Wetlands	
P. Buffer Zone	
(a) "No-Touch Buffer Zone (0 ft to 35ft)" The area 35 feet landward of a delineated resource area. Other than the establishment of a buffer strip (See Section 5 Definition "No Touch Buffer Zone (0 ft to 35ft)"), any development, alteration, filling, dredging, or removal of soil or vegetation is prohibited within this undisturbed area. The above may be allowed if the Commission grants a waiver as described under §11 of these Regulations.	35' No Touch Zone
(b) "No-Build Buffer Zone (35ft to 50 ft)" The area between 35 to 50 feet landward of a delineated resource area. The above may be allowed if the Commission grants a waiver as described under §11 of these Regulations.	50' No-Build Zone
(c) "Outer Buffer Zone" The area between 50 to 100 feet landward of a delineated resource area. The Commission may allow activities within this area provided the Applicant demonstrates that there are no practical alternatives to locating the activity within this Outer Buffer Zone. In the preparation of the alternatives analysis to make this showing the Applicant shall use the "Avoid – Minimize – Mitigate" calculus and describe the process in the Project Narrative. The above may be allowed if the Commission grants a waiver as described under §11 of these Regulations.	100' Wetland Buffer
2. Proposed Minor activities within a Previously Disturbed Area, Outer Buffer Zone and outside any area specified in this Section shall not be subject to regulation but are subject to notification of the Conservation Commission prior to undertaking. Minor activities include the following: <ul style="list-style-type: none"> • Fencing provided it does not constitute a barrier to wildlife movement (e.g., the bottom of the fence is greater than 8" above the ground surface). • Above ground pools which occupy less than 100 square feet. • Planting native vegetation. • Activities that are temporary/seasonal in nature and have negligible impacts and are necessary for planning and design purposes as determined by the Plymouth Conservation Commission, Staff or representative. 	Minor Activities Description
E. Slope/Grades Near Inland Wetlands	
Side slopes within a Resource Area or Buffer Zone shall have a finished grade according to the following: <ol style="list-style-type: none"> 1. No greater than a 3:1 slope for grassed and mulched slopes. 2. No greater than a 2:1 slope for all stone rip-rapped slopes. Stone used for riprap will be hard, durable, angular in shape; resistant to weathering, free from overburden, spoil shale and organic material, and shall be from 4 inches to 8 inches in diameter. Neither breadth nor thickness of a single stone should be less than one-third its length. Round stone is not acceptable. The Commission strongly encourages a 3:1 slope unless the rip-rapped slope will eliminate the proposal for wetland filling. 	Design Parameter - Grading Requirements

Chapter 196 Wetlands Protection, Town of Plymouth	
196-4 Jurisdiction	
No person shall remove, fill, dredge or alter within 100 feet of the following resource areas: a surface body of water, vegetated wetlands or unvegetated wetland; any bank, freshwater wetlands, coastal wetland, coastal bank, beach, dune, flat, marsh, meadow, bog, swamp, or isolated land subject to flooding; lands adjoining the ocean, any estuary, creek, river, stream (whether intermittent or continuous, natural, or man-made), pond or lake; any land under said waters; or any land subject to tidal action, coastal action, coastal storm flowage or flooding, as defined by the Federal Emergency Management Agency, within the Town of Plymouth on the Plymouth County, Massachusetts Flood Insurance Rate Maps as amended, on file with the Town Clerk, and related documents, except as provided in 196-6 and 196-7 or as permitted by the Conservation Commission in 196-8.	Notice of Intent is Required for work within the 100' Buffer Zone

Town of Plymouth Stormwater Design Guidelines	
2.0 Submittal Requirements	
Projects involving development of new land uses and alteration or redevelopment of existing land uses must meet storm water management requirements and are subject to review under various bylaws, rules, and regulations in the Town of Plymouth.	Redevelopment and new construction projects are required to submit a Stormwater Management Plan
2.1 Pre-Application Submittal Requirements	
The Pre-Application Cover Sheet (Appendix A), shall be submitted by the Applicant prior to filing the application (see Section 2.2) to the Town Engineering Department, with copies to the Environmental Management Division of DPW, Planning Department, Conservation Commission and Health Department.	Per-Application Submittal Requirements
2.2 Application Submittal Requirements	
A. Stormwater Management Plan	
The Stormwater Management Plan shall be submitted with either a Building Permit, Site Plan Approval request, Subdivision, Conservation Permit, Health Department Permit or Special Permit Application, whichever is applicable	Applicability Submittal Requirements
3.0 Design Performance Criteria	
2. Site Planning	
Low impact development (LID) techniques must be incorporated into redevelopment projects in the Town.	
Appendix B CLOSED SYSTEM DETENTION WORKSHEET	Appendix B required for stormwater closed system detention calculations

310 CMR DEPARTMENT OF ENVIRONMENTAL PROTECTION:

10.55: Bordering Vegetated Wetlands (Wet Meadows, Marshes, Swamps and Bogs)	
(2) Definition, Critical Characteristics and Boundary	
a) Bordering Vegetated Wetlands are freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes	The parcel is located in proximity to wetlands
(4) General Performance Standards.	
(a) Where the presumption set forth in 310 CMR 10.55(3) is not overcome, any proposed work in a Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of said area.	Notice of Intent Required for work within the 100' Buffer Zone

Town of Plymouth
Department of Public Works
New DPW Facility
Zoning and Permitting Memorandum

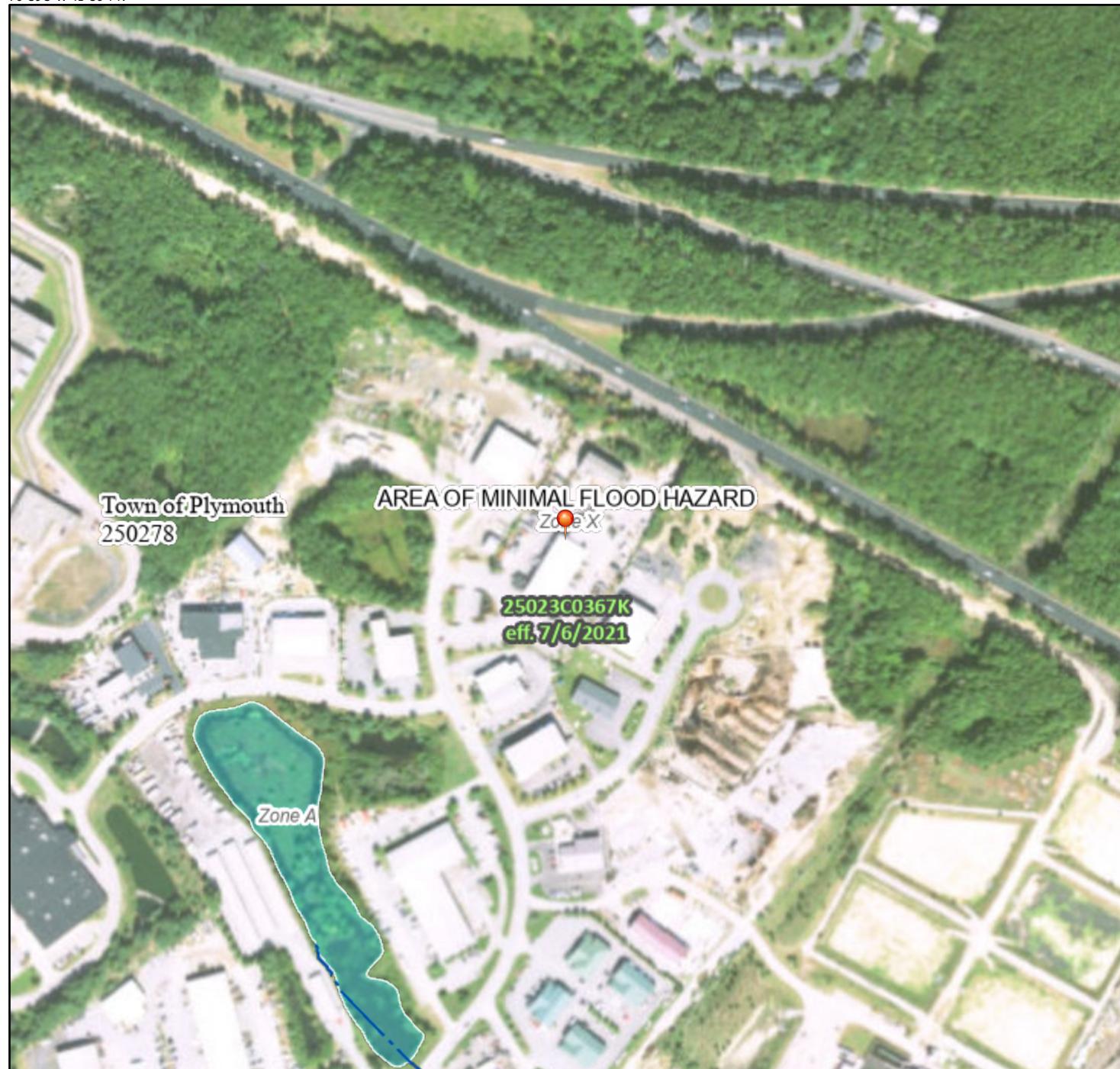
ATTACHMENT A

FEMA Map

National Flood Hazard Layer FIRMette



70°39'3"W 41°56'4"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X

- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs

- Area of Undetermined Flood Hazard Zone D

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation

- 8 - - - Coastal Transect

- ~~~ 513 ~~~ Base Flood Elevation Line (BFE)

- Limit of Study

- Jurisdiction Boundary

- Coastal Transect Baseline

- Profile Baseline

- Hydrographic Feature

- Digital Data Available

- No Digital Data Available

- Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

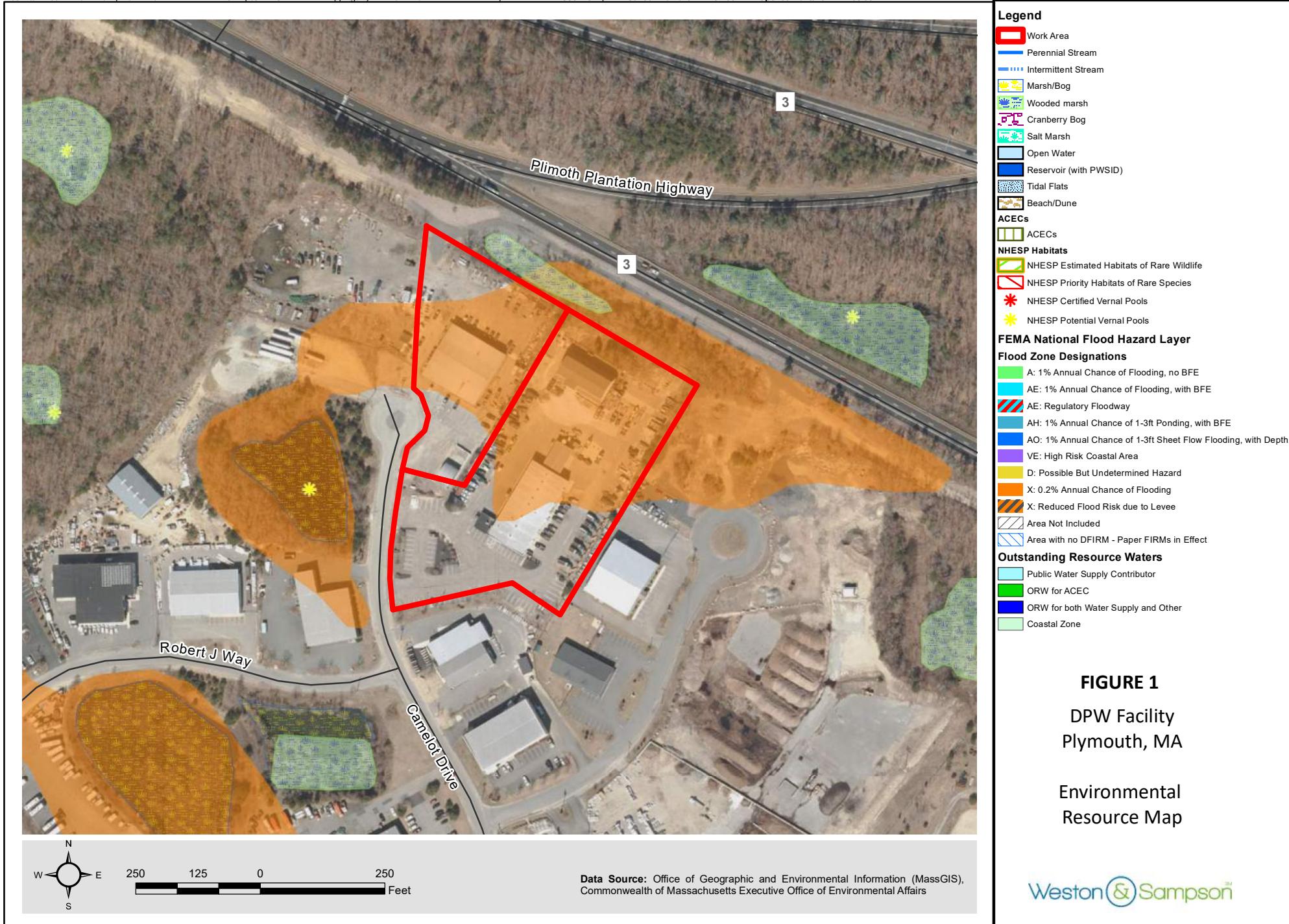
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/4/2022 at 9:33 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

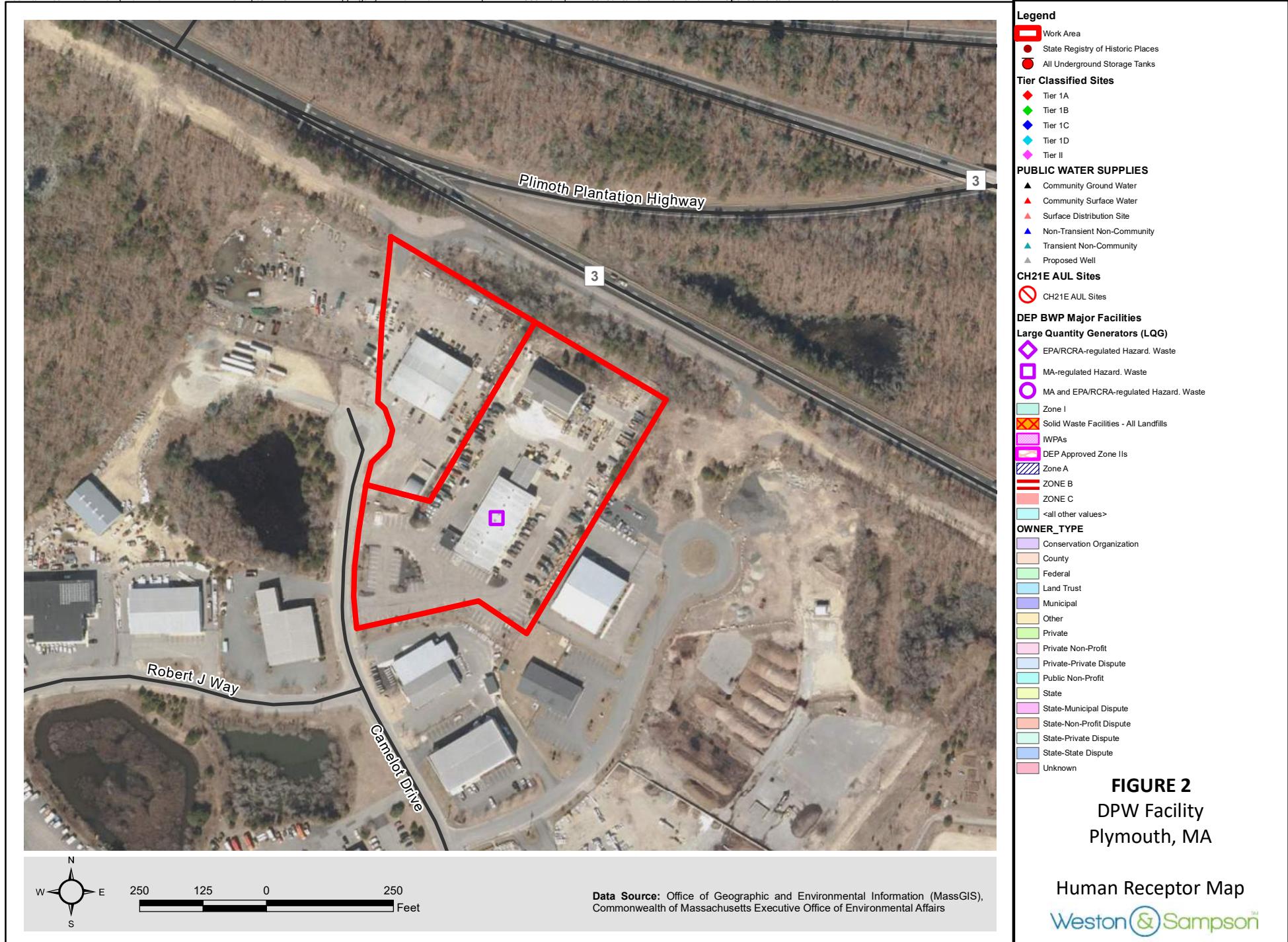
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Town of Plymouth
Department of Public Works
New DPW Facility
Zoning and Permitting Memorandum

ATTACHMENT B

Receptor Maps

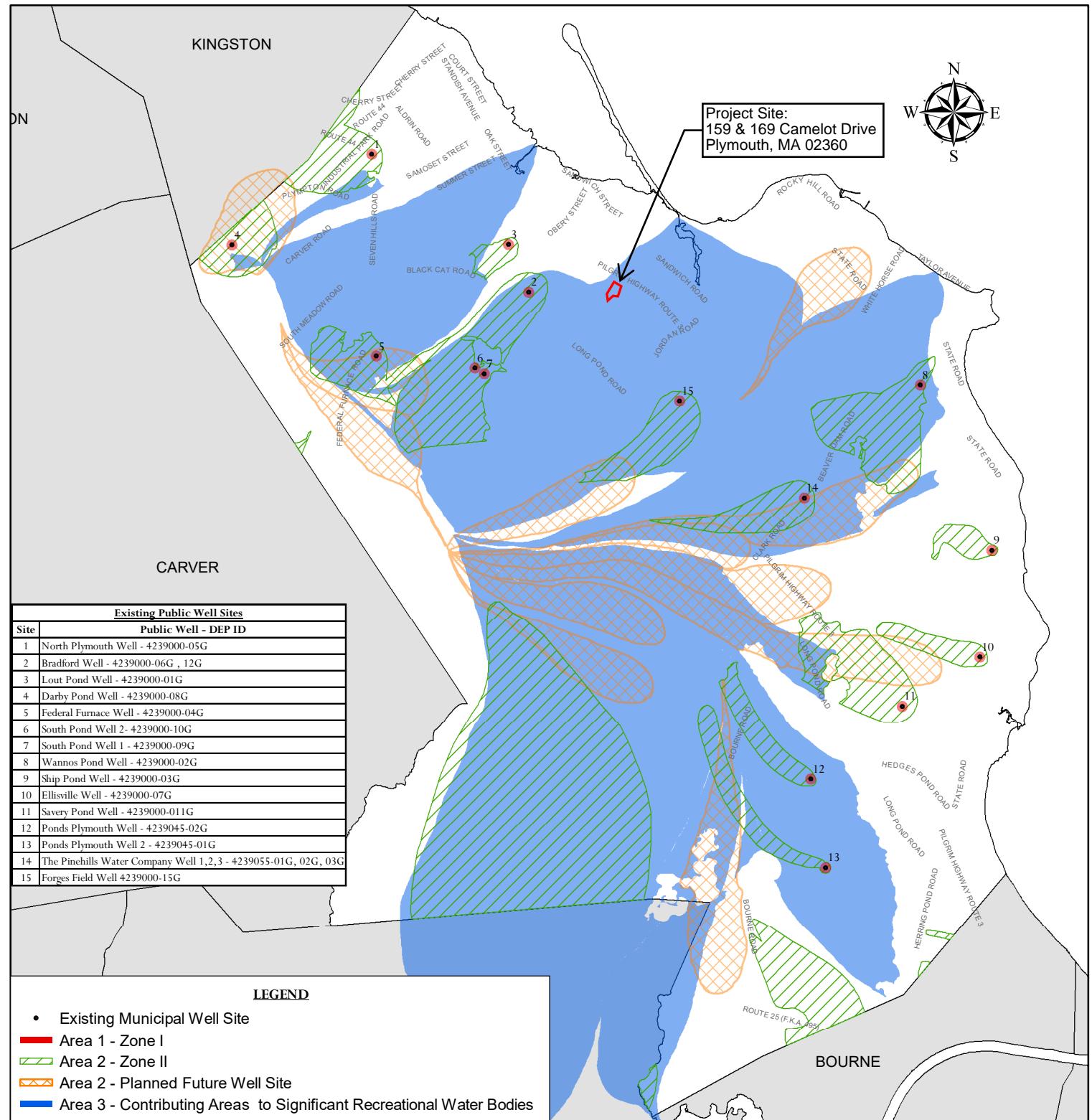




Town of Plymouth
Department of Public Works
New DPW Facility
Zoning and Permitting Memorandum

ATTACHMENT C

Aquifer Protection Map



Data Sources

Area 1 (Zone I) is DEP approved 400ft radius around the well site.
 Area 2 (Zone II) downloaded from MA GIS and approved by DEP.
 Area 2 (Planned Future Well Site) and Area 3 (Contributing Areas to Significant Recreational Water Bodies) were delineated using the United States Geological Survey Plymouth-Carver Aquifer groundwater model, Reference Water-Resources Investigations Report 90-4204. The groundwater model was updated as part of the 2007 Water System Master Plan relevant to Water Supply Withdrawals.
 The Eel River contributing area was developed in 2006 as part of the Plymouth Harbor watershed delineation with the following sources Measured Groundwater Contour Map (90-4204), Simulated Groundwater Contour Map, USGS Topographic Quadrangle Images.
 Delineations conducted by Horsley Witten Group, updated by Environmental Partners

Aquifer Protection Map

October 2020

Town of Plymouth

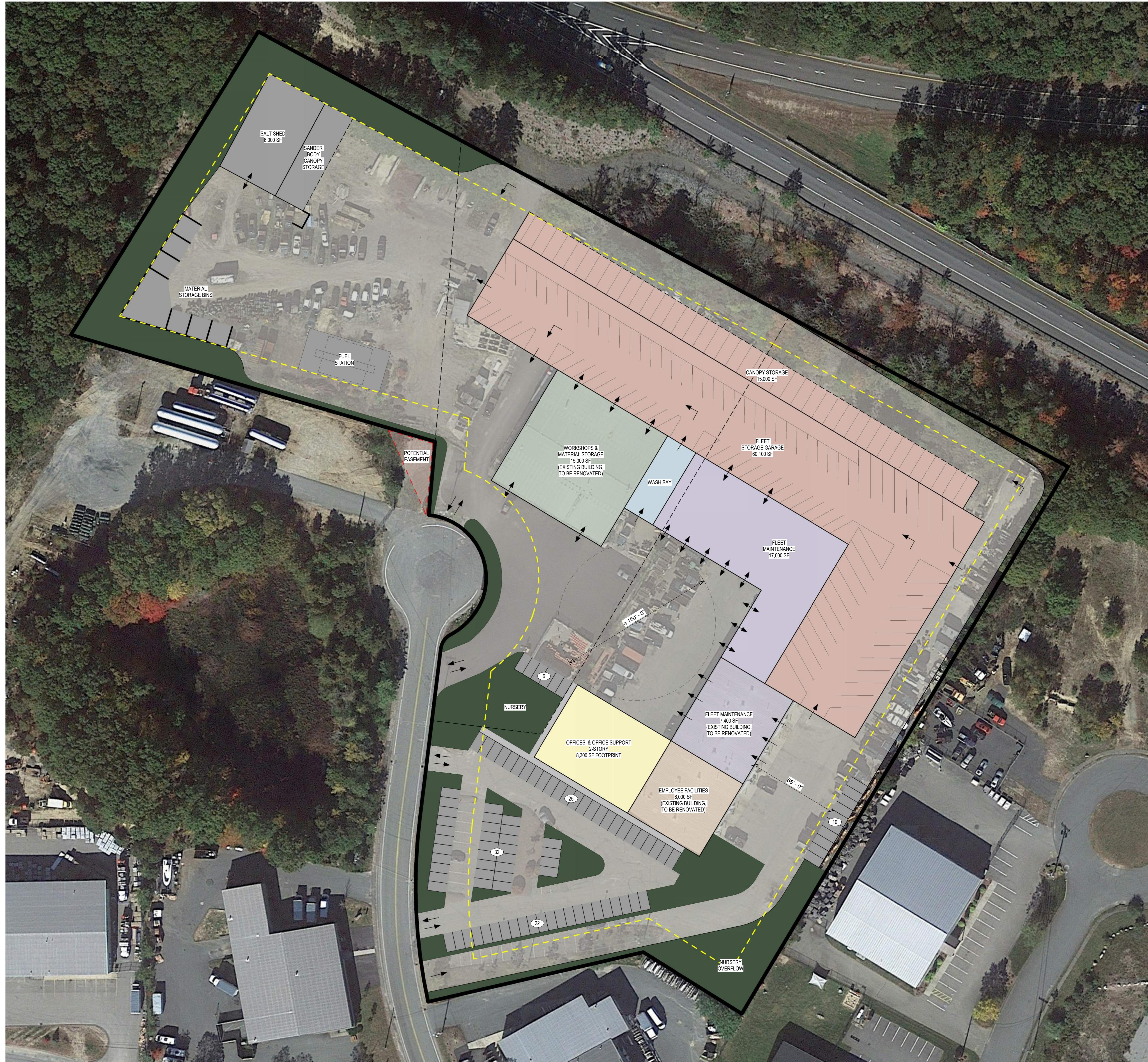


0 5,500 11,000 22,000 Feet

Town of Plymouth
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New Facility Feasibility Study
Final Report

Appendix F

Preferred Conceptual Plan



PROPOSED PROGRAM LEGEND:		
	OFFICES & OFFICE SUPPORT AREAS, UTILITIES ROOMS	= 15,100 SF
	EMPLOYEE FACILITIES	= 6,200 SF
	WORKSHOPS & MATERIAL STORAGE	= 13,400 SF
	FLEET MAINTENANCE	= 21,600 SF
	WASH BAY	= 2,500 SF
	FLEET STORAGE	= 63,000 SF
	CANOPY	= 15,000 SF*

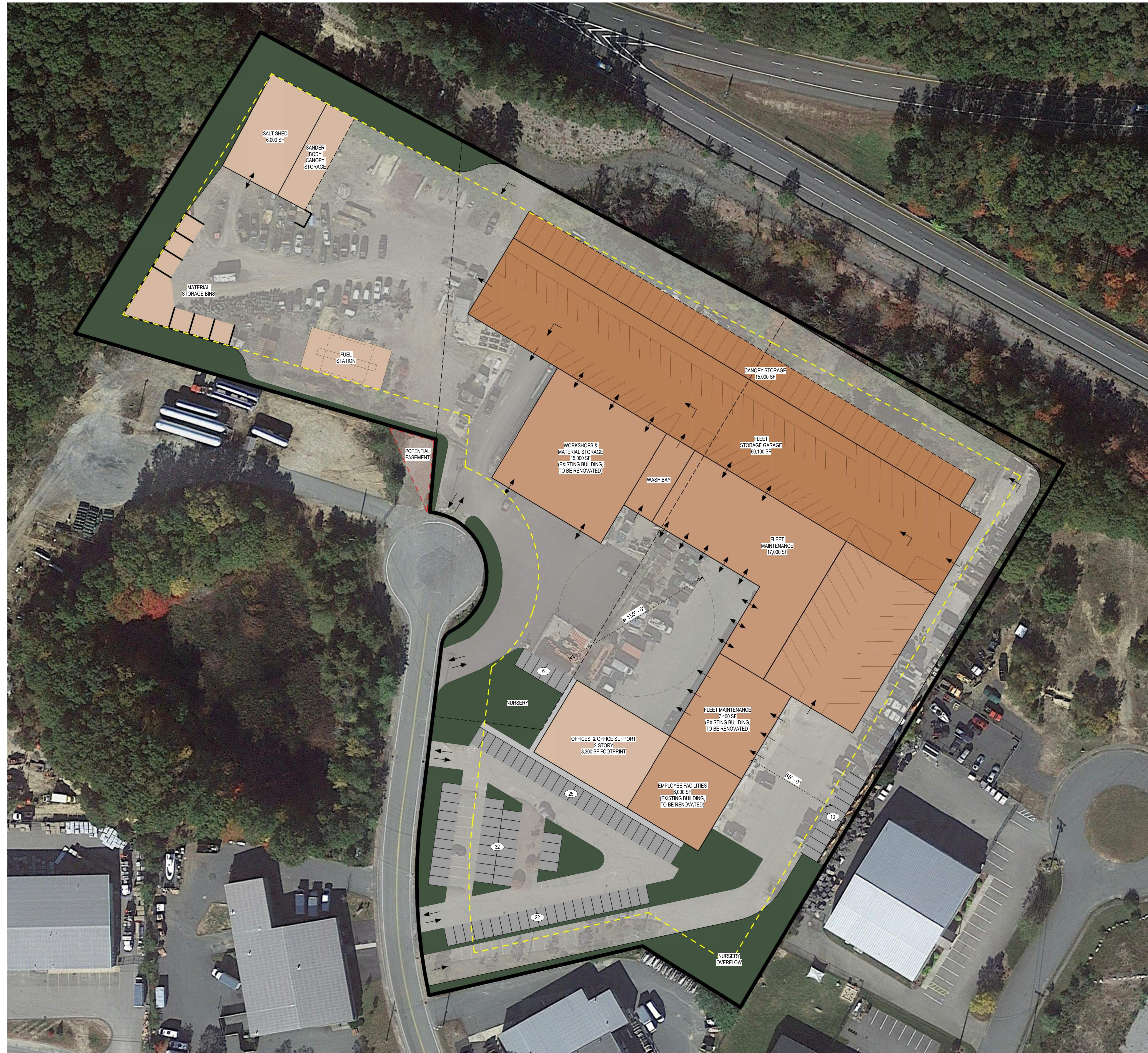
*NOT INCLUDED IN DPW BUILDING TOTAL

DPW BUILDING TOTAL = 121,800 SF

Town of Plymouth
Department of Public Works
New Facility Feasibility Study
Final Report

Appendix G

Phasing Plan



PROPOSED PHASING LEGEND:	
	PHASE I: BUILD OFFICES & PARTIAL EMPLOYEE FACILITIES, SALT SHED, FUEL ISLAND, BULK MATERIAL BINS.
	PHASE II: DEMO EXISTING SALT SHED & FUEL ISLAND, BUILD WASH BAY & PARTIAL VEHICLE MAINTENANCE & STORAGE, RELOCATE OPERATIONS, RENOVATE EXISTING BUILDINGS.
	PHASE III: BUILD REMAINING VEHICLE / EQUIPMENT STORAGE & CANOPY.

Town of Plymouth
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New Facility Feasibility Study
Final Report

Appendix H

Phasing Opportunities

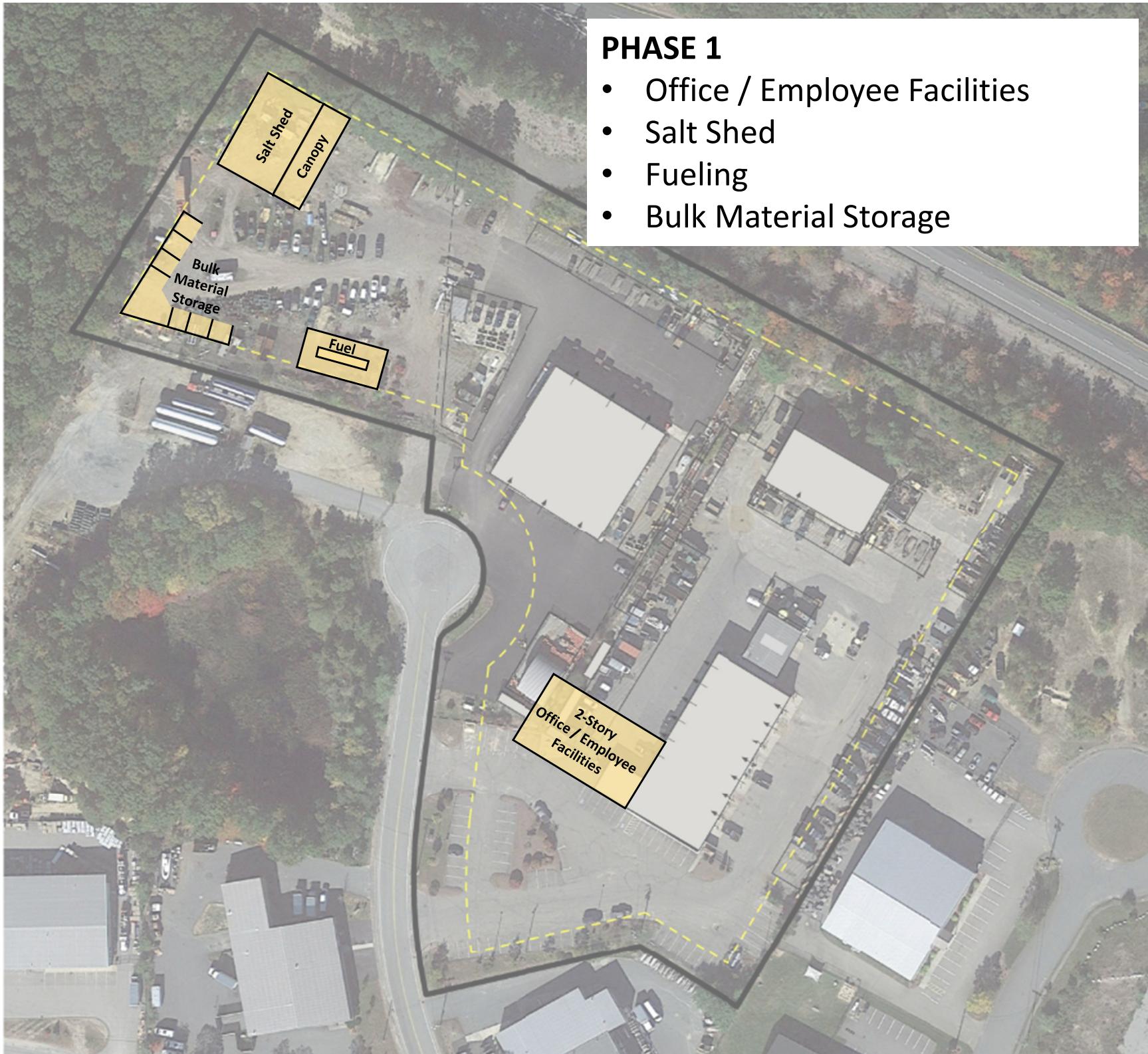
Preferred Concept
(3-Phase Approach)

EXISTING CONDITIONS



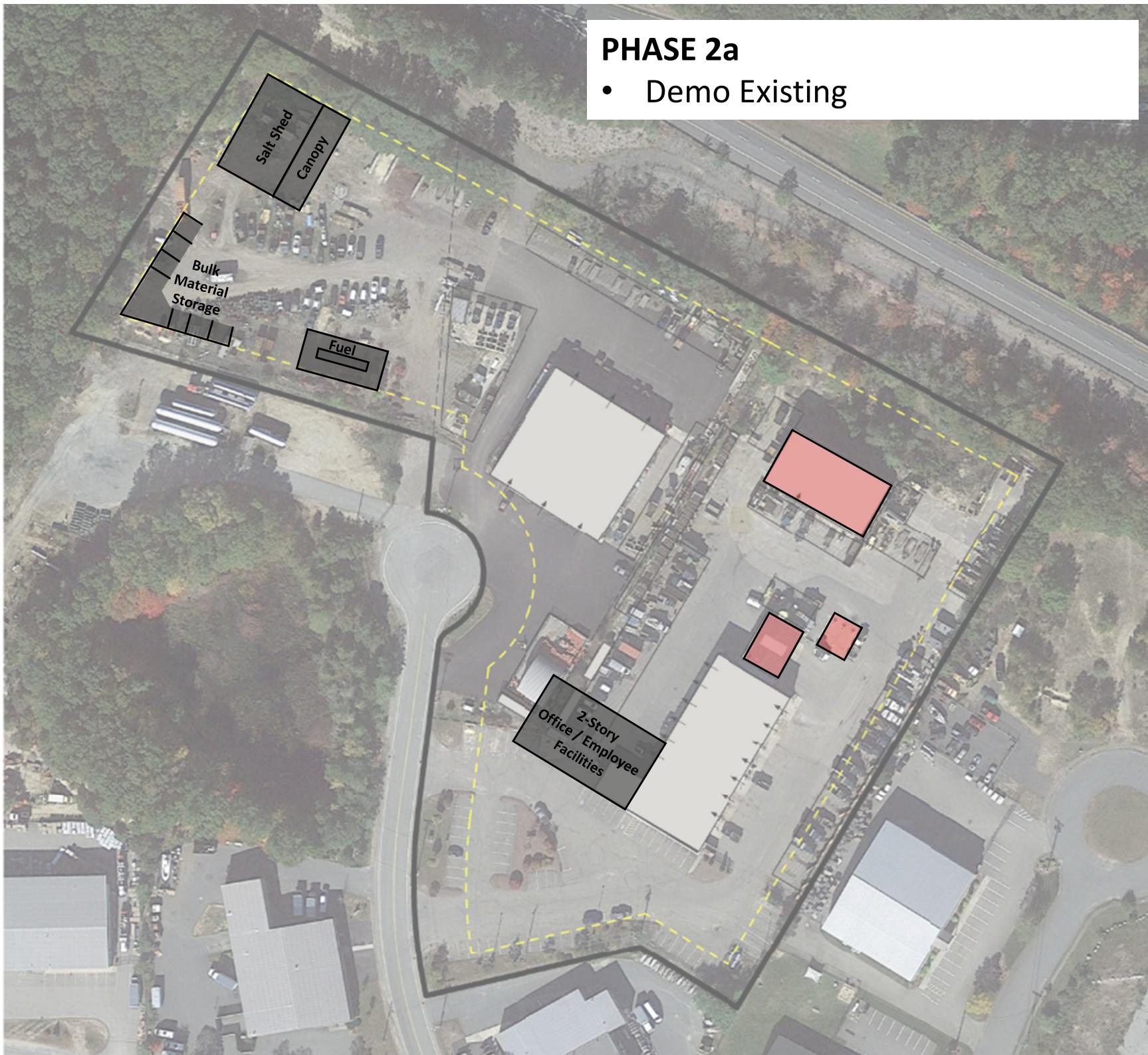
PHASE 1

- Office / Employee Facilities
- Salt Shed
- Fueling
- Bulk Material Storage



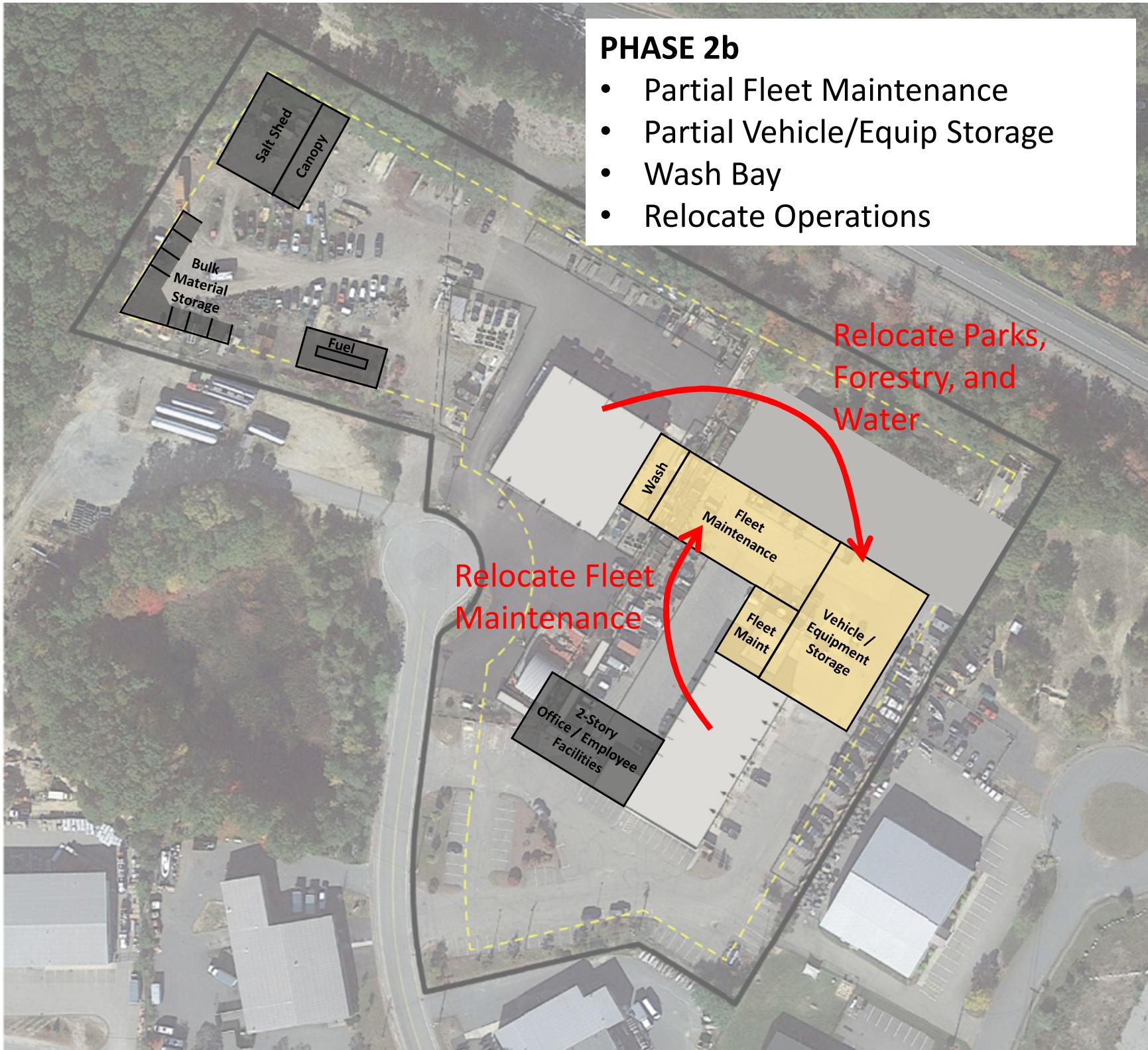
PHASE 2a

- Demo Existing



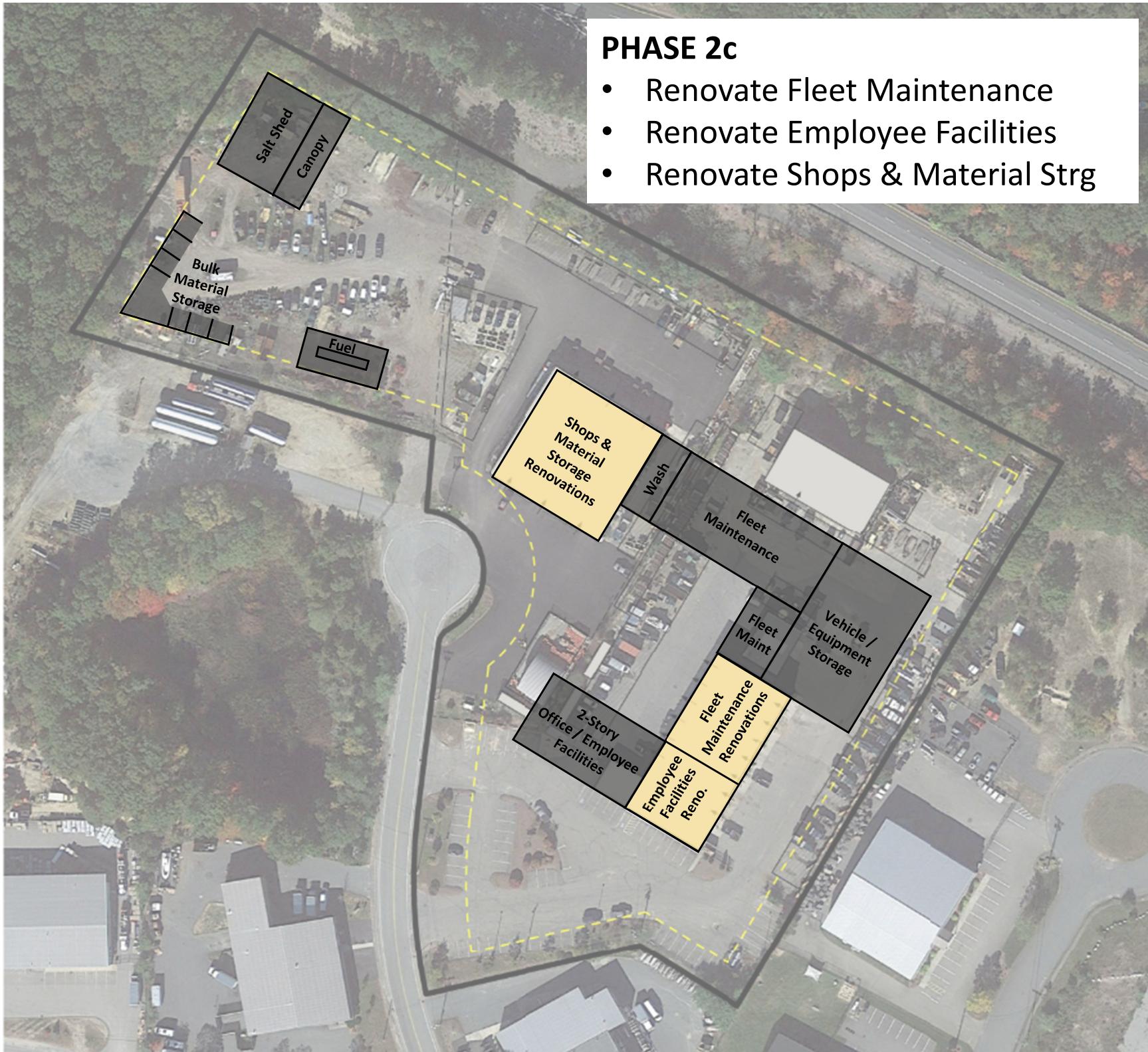
PHASE 2b

- Partial Fleet Maintenance
- Partial Vehicle/Equip Storage
- Wash Bay
- Relocate Operations



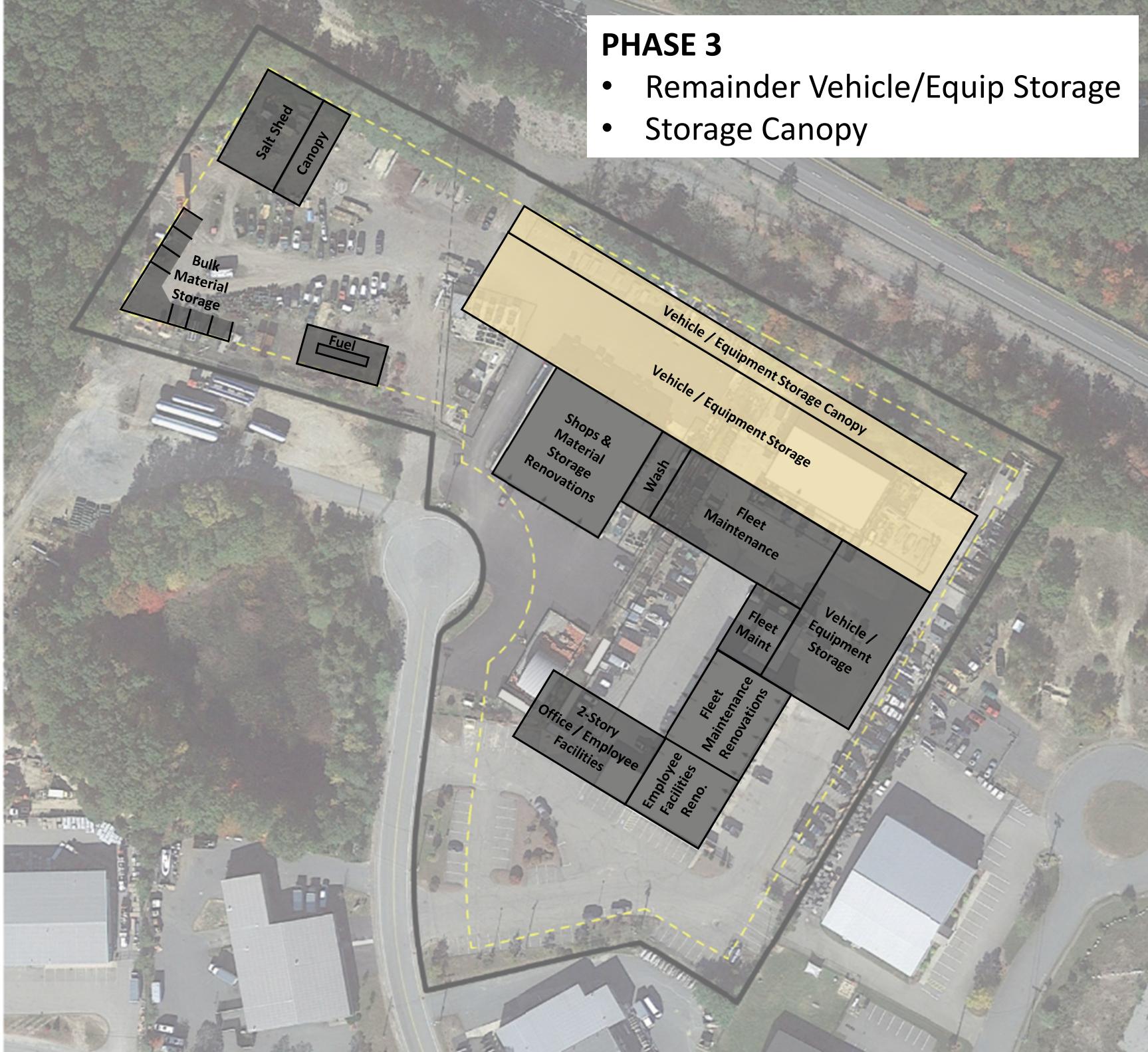
PHASE 2c

- Renovate Fleet Maintenance
- Renovate Employee Facilities
- Renovate Shops & Material Strg

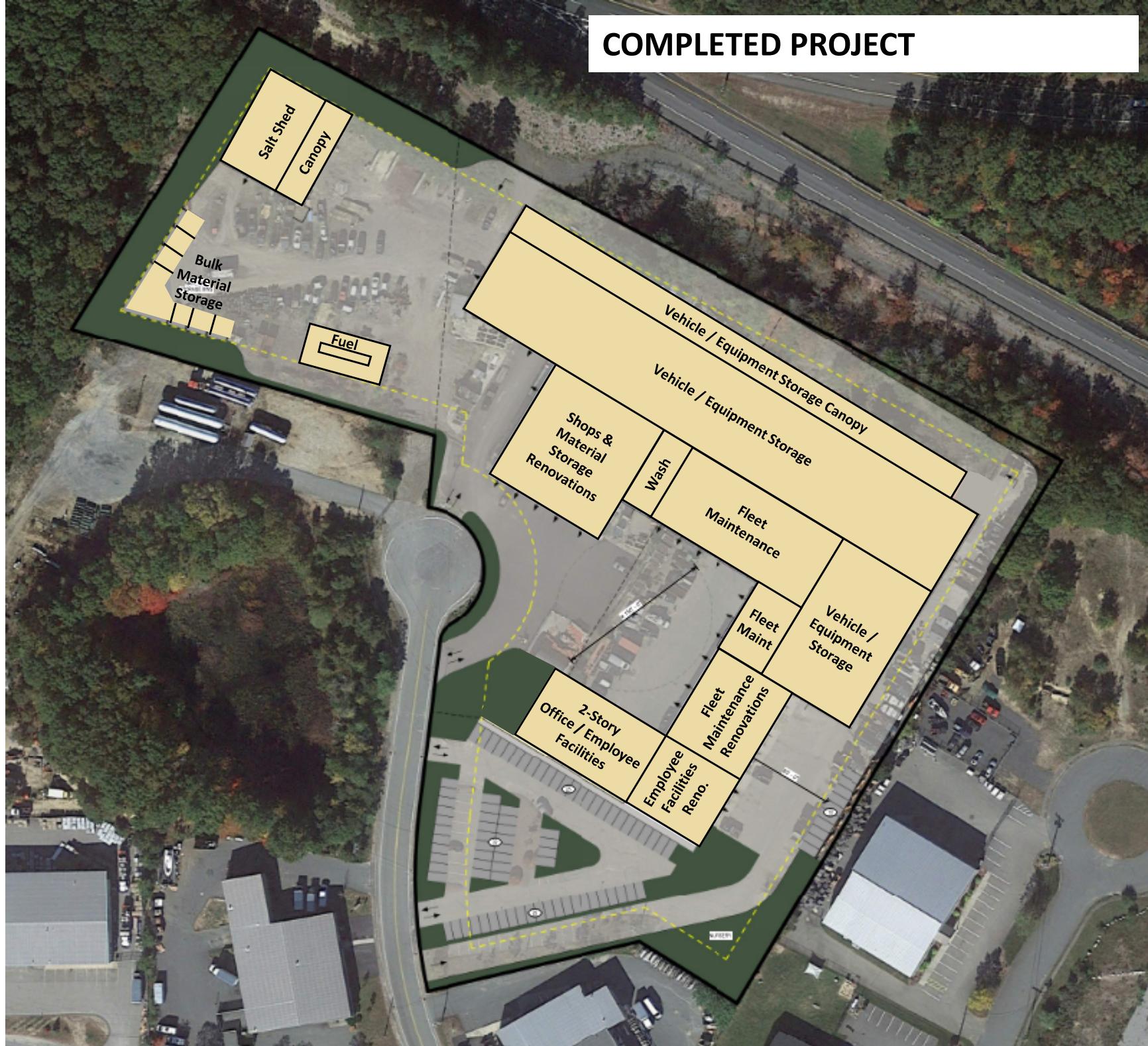


PHASE 3

- Remainder Vehicle/Equip Storage
 - Storage Canopy



COMPLETED PROJECT



Town of Plymouth
Department of Public Works
New Facility Feasibility Study
Final Report

Appendix I

Schedule

Plymouth DPW Facility Consolidated Schedule

6/10/2022

Plymouth DPW Facility Phased Schedule

6/10/2022

Town of Plymouth
Department of Public Works
New Facility Feasibility Study
Final Report

Appendix J

Order of Magnitude Costs

**Town of Plymouth
New DPW Facility
SUMMARY - Budget Total Project Cost**

PHASED PROJECT APPROACH

6/10/2022

Description	Summary of Work Program Included	Building Sizes (SF)	Construction Costs	Soft Costs	Total Cost
DPW Facility - Phase 1	Office & Office Support, Salt Shed, Fuel Island, Bulk Material Storage, and Partial Yard Development	16,600 SF 2-story, 6,000 sf salt shed, and 3,000 salt shed canopy	\$15,436,780	\$4,528,908	\$19,965,687
DPW Facility - Phase 2	Employee Facilities, Fleet Maintenance, Shops, Wash Bay, Partial Vehicle/Equipment Storage Garage, and Partial Yard Development	35,300 SF new, 28,400 SF renovation	\$36,160,492	\$8,884,506	\$45,044,997
DPW Facility - Phase 3	Remainder of Vehicle/Equipment Storage Garage, Canopy, and Remainder of Yard Development	44,600 SF enclosed and 15,000 SF building canopy	\$28,431,517	\$6,602,776	\$35,034,293
TOTAL PHASES 1, 2, AND 3:			\$80,028,789	\$20,016,190	\$100,044,978

DPW CONSOLIDATED PROJECT APPROACH

1/10/2019

Description	Summary of Work Program Included	Size (SF)	Construction Costs	Soft Costs	Total Cost
DPW Facility	Office, Office Support, Employee Facilities, Fleet Maintenance, Shops, Wash Bay, Vehicle/Equipment Storage Garage, Salt Shed, Canopies, Salt Shed, Yard Development	96,500 new and 28,400 renovation (with 6,000 SF salt shed, 3,000 SF salt shed canopy, 15,000 SF building canopy)	\$74,037,862	\$18,378,140	\$92,416,002

Town of Plymouth
Department of Public Works
New DPW Facility
Final Report

Single Consolidated Project Approach

Single Consolidated Facility

Date: 06/10/2022

Plymouth DPW Facility

Weston & Sampson

Costs per SF base on Year: 2022

New Building Construction		Size (SF)	Cost/SF	Cost
Administration -Offices/ Office Support		16,600	\$ 492	\$ 8,174,205
Vehicle Maintenance (not including equipment)		17,000	\$ 346	\$ 5,882,446
Wash		2,800	\$ 654	\$ 1,832,165
Vehicle/Equipment Storage		60,100	\$ 273	\$ 16,396,986
Ground Improvements (based on 1st floor area)		88,200	\$ 35	\$ 3,111,062
Assumed Mezzanines Area		15,000	\$ 163	\$ 2,445,655
Open Canopy Storage (SF)		15,000	\$ 126	\$ 1,889,615
(Insert "X" below if applicable)				
Elevator / Egress Stair		X	\$ 450,956	\$ 450,956
New Construction Building Size and Cost Subtotals:		96,500		\$ 40,183,089
Building Cost per SF:		416		
Renovation		Size (SF)	Cost/SF	Cost
Full Employee Facilities Interior Fit-out		6,000	\$ 410	\$ 2,459,040
Maintenance Renovations (clean/h&v/elec/walls)		7,400	\$ 358	\$ 2,645,648
Shops Renovation (clean/h&v/elec/walls)		15,000	\$ 202	\$ 3,024,750
Renovation Subtotal:		28,400		\$ 8,129,438
Building Cost per SF (Renovation):		286		
Industrial Equipment		Size (SF)	Unit Price	Cost
		QTY	(Insert "X" below if applicable)	
-Fully Automatic Vehicle Wash with Rolling Gantry		1	X	\$ 680,000
- Heavy Duty Drive Inground Lift		1	X	\$ 225,000
- Heavy Duty Drive on Platform Vehicle Lift		1	X	\$ 190,000
- Heavy Duty Mobile Column Lifts (6 Induvial Portable Columns)		1	X	\$ 145,000
- Two Post vehicle lift (16,000 lb capacity minimum)		1	X	\$ 60,000
- Bridge Crane		2	X	\$ 108,000
- Overhead Fluid Distribution and Waste Fluid Collection System		1	X	\$ 115,000
- Miscellaneous Shop and Support Equipment		1	X	\$ 75,000
- Storage Shelving / Benches / Racks		1	X	\$ 60,000
- Exhaust Removal System (2 units)		1	X	\$ 60,000
Industrial Equipment Subtotal:				\$ 1,826,000
Fuel System		Size (SF)	Cost/SF	Cost
		QTY	(Insert "X" below if applicable)	
- New Aboveground Tanks		1	X	\$ 85,000
-Equipment (pumps, dispensers, fuel management, tank monitoring, etc)		1	X	\$ 255,000
-Fuel Island Canopy		1	X	\$ 115,000
-Fuel Island Fire Suppression		1	X	\$ 45,000
-Concrete tank pad & drive pad		1	X	\$ 60,000
-Fuel Island Electrical		1	X	\$ 50,000
Fuel System Subtotal:				\$ 610,000

Single Consolidated Facility

Date: 06/10/2022

Plymouth DPW Facility



Costs per SF base on Year: 2022

Site Development	Size	Cost/SF	Cost
Site Development (acres) (assumes level site with no contamination, existing structures/utilities, etc.)	7.5	\$ 625,000	\$ 4,687,500
Salt/Sand Sheds (SF)	6,000	\$ 170	\$ 1,020,000
Salt/Sand Sheds Canopy (SF)	3,000	\$ 75	\$ 225,000
	(Insert "X" below if applicable)		
Specialty Site Work (e.g. steep grades, retaining walls, buried stumps, etc.)	x	\$ 350,000	\$ 350,000
Total Site Work:			\$ 6,282,500

Escalation and Design Contingency

Subtotal Bldg, Equip, & Site:	\$ 57,031,027
Design Contingency (8%):	\$ 4,562,482
Escalation (8%) to: 2023	\$ 4,927,481
Escalation (6%) to: 2024	\$ 3,991,259
Escalation (5%) to: 2025	\$ 3,525,612
Total Escalation & Design Contingency:	\$ 17,006,835
Total Construction:	\$ 74,037,862
Total Construction Cost/SF:	\$ 593

Owner's Soft Costs

A&E Fees (design, bid, const.)	(Assume 10% of Const. Value)	\$ 7,403,786
A&E Special Services	(Assume 1.5% of Const. Value)	\$ 1,110,568
Owner's Project Manager Fees	(Assume 4% of Const. Value)	\$ 2,961,514
Furnishings (FFE)	Allowance	\$ 400,000
Communication. / Low Voltage System	Allowance	\$ 600,000
Temporary Facilities	Allowance	\$ 500,000
Printing Cost - Advertisement	Allowance	\$ 10,000
Legal Costs	Allowance	\$ 50,000
Utility Backcharges	Allowance	\$ 50,000
Commissioning	Allowance	\$ 100,000
Moving Costs	Allowance	\$ 50,000
Construction Tests & Inspections	Allowance	\$ 200,000
Owner's Contingency	Allowance	\$ 500,000
Construction Contingency (6%)	Allowance	\$ 4,442,272
Total Soft Costs:		\$ 18,378,140
TOTAL PROJECT COST		\$ 92,416,002

Town of Plymouth
Department of Public Works
New DPW Facility
Final Report

Phased Project Approach

Phased Approach - Phase 1

Date: 06/10/2022

Plymouth DPW Facility - PHASE 1



Costs per SF base on Year: 2022

New Building Construction		Size (SF)	Cost/SF	Cost
Administration -Offices/ Office Support		16,600	\$ 492	\$ 8,174,205
Ground Improvements (based on 1st floor area)		8,300	\$ 35	\$ 292,764
Elevator / Egress Stair		X	\$ 450,956	\$ 450,956
New Construction Building Size and Cost Subtotals:		16,600		\$ 8,917,925
Building Cost per SF:		537		
Fuel System		Size (SF)	Cost/SF	Cost
		QTY	(Insert "X" below if applicable)	
-New Aboveground Tanks	1	X	\$ 85,000	\$ 85,000
-Equipment (pumps, dispensers, fuel management, tank monitoring, etc)	1	X	\$ 255,000	\$ 255,000
-Fuel Island Canopy	1	X	\$ 115,000	\$ 115,000
-Fuel Island Fire Suppression	1	X	\$ 45,000	\$ 45,000
-Concrete tank pad & drive pad	1	X	\$ 60,000	\$ 60,000
-Fuel Island Electrical	1	X	\$ 50,000	\$ 50,000
Fuel System Subtotal:				\$ 610,000
Site Development		Size	Cost/SF	Cost
Site Development (acres) (assumes level site with no contamination, existing structures/utilities, etc.)		2.5	\$ 625,000	\$ 1,562,500
Salt/Sand Sheds (SF)		6,000	\$ 170	\$ 1,020,000
Salt/Sand Sheds Canopy (SF)		3,000	\$ 75	\$ 225,000
(Insert "X" below if applicable)				
Specialty Site Work (e.g. buried stumps, etc.)		X	\$ 150,000	\$ 150,000
Total Site Work:				\$ 2,957,500
Escalation and Design Contingency				
Subtotal Bldg, Equip, & Site:				\$ 12,485,425
Design Contingency (8%):				\$ 998,834
Escalation (8%) to: 2023				\$ 1,078,741
Escalation (6%) to: 2024				\$ 873,780
Total Escalation & Design Contingency:				\$ 2,951,355
Total Construction:				\$ 15,436,780
Owner's Soft Costs				
A&E Fees (design, bid, const.)		(Assume 10% of Const. Value)	\$	1,543,678
A&E Special Services		(Assume 1.5% of Const. Value)	\$	231,552
Owner's Project Manager Fees		(Assume 4% of Const. Value)	\$	617,471
Furnishings (FFE)		Allowance	\$	250,000
Communication. / Low Voltage System		Allowance	\$	250,000
Temporary Facilities		Allowance	\$	200,000
Printing Cost - Advertisement		Allowance	\$	10,000
Legal Costs		Allowance	\$	50,000
Utility Backcharges		Allowance	\$	50,000
Commissioning		Allowance	\$	50,000
Moving Costs		Allowance	\$	50,000
Construction Tests & Inspections		Allowance	\$	100,000
Owner's Contingency		Allowance	\$	200,000
Construction Contingency (6%)		Allowance	\$	926,207
Total Soft Costs:				\$ 4,528,908
TOTAL PROJECT COST				\$ 19,965,687

Phased Approach - Phase 2

Date: 06/10/2022

Plymouth DPW Facility - PHASE 2



Costs per SF base on Year: 2022

New Building Construction		Size (SF)	Cost/SF	Cost
Vehicle Maintenance (not including equipment)		17,000	\$ 346	\$ 5,882,446
Wash		2,800	\$ 654	\$ 1,832,165
Vehicle/Equipment Storage		15,500	\$ 273	\$ 4,228,840
Ground Improvements (based on 1st floor area)		35,300	\$ 35	\$ 1,245,130
Assumed Mezzanines Area		8,000	\$ 163	\$ 1,304,349
New Construction Building Size and Cost Subtotals:		35,300		\$ 14,492,930
Building Cost per SF:		411		
Renovation		Size (SF)	Cost/SF	Cost
Full Employee Facilities Interior Fit-out		6,000	\$ 410	\$ 2,459,040
Maintenance Renovations (clean/h&v/elec/walls)		7,400	\$ 358	\$ 2,645,648
Shops Renovation (clean/h&v/elec/walls)		15,000	\$ 202	\$ 3,024,750
Renovation Subtotal:		28,400		\$ 8,129,438
Building Cost per SF (Renovation):		286		
Industrial Equipment		Size (SF)	Unit Price	Cost
		QTY	(Insert "X" below if applicable)	
-Fully Automatic Vehicle Wash with Rolling Gantry		1	X	\$ 680,000
- Heavy Duty Drive Inground Lift		1	X	\$ 225,000
- Heavy Duty Drive on Platform Vehicle Lift		1	X	\$ 190,000
- Heavy Duty Mobile Column Lifts (6 Induvial Portable Columns)		1	X	\$ 145,000
- Two Post vehicle lift (16,000 lb capacity minimum)		1	X	\$ 60,000
- Bridge Crane		1	X	\$ 108,000
- Overhead Fluid Distribution and Waste Fluid Collection System		1	X	\$ 115,000
- Miscellaneous Shop and Support Equipment		1	X	\$ 75,000
- Storage Shelving / Benches / Racks		1	X	\$ 60,000
- Exhaust Removal System (2 units)		1	X	\$ 60,000
Industrial Equipment Subtotal:				\$ 1,718,000
Site Development		Size	Cost/SF	Cost
Site Development (acres) (assumes level site with no contamination, existing structures/utilities, etc.)		3.5	\$ 625,000	\$ 2,187,500
Total Site Work:				\$ 2,187,500
Escalation and Design Contingency				
		Subtotal Bldg, Equip, & Site:		\$ 26,527,868
		Design Contingency (8%):		\$ 2,122,229
		Escalation (8%) to: 2023		\$ 2,292,008
		Escalation (6%) to: 2024		\$ 1,856,526
		Escalation (5%) to: 2025		\$ 1,639,932
		Escalation (5%) to: 2026		\$ 1,721,928
Total Escalation & Design Contingency:				\$ 9,632,623
		Total Construction:		\$ 36,160,492
Owner's Soft Costs				
A&E Fees (design, bid, const.)		(Assume 10% of Const. Value)		\$ 3,616,049
A&E Special Services		(Assume 1.5% of Const. Value)		\$ 542,407
Owner's Project Manager Fees		(Assume 4% of Const. Value)		\$ 1,446,420
Furnishings (FFE)		Allowance		\$ 150,000
Communication. / Low Voltage System		Allowance		\$ 250,000
Temporary Facilities		Allowance		\$ 200,000
Printing Cost - Advertisement		Allowance		\$ 10,000
Legal Costs		Allowance		\$ 50,000
Utility Backcharges		Allowance		\$ 50,000
Commissioning		Allowance		\$ 50,000
Moving Costs		Allowance		\$ 50,000
Construction Tests & Inspections		Allowance		\$ 100,000
Owner's Contingency		Allowance		\$ 200,000
Construction Contingency (6%)		Allowance		\$ 2,169,630
Total Soft Costs:				\$ 8,884,506
TOTAL PROJECT COST				\$ 45,044,997

Phased Approach - Phase 3

Date: 06/10/2022

Plymouth DPW Facility - PHASE 3



Costs per SF base on Year: 2022

New Building Construction		Size (SF)	Cost/SF	Cost
Vehicle/Equipment Storage		44,600	\$ 273	\$ 12,168,146
		44,600	\$ 35	\$ 1,573,167
		7,000	\$ 163	\$ 1,141,306
		15,000	\$ 126	\$ 1,889,615
New Construction Building Size and Cost Subtotals:		44,600		\$ 16,772,234
Building Cost per SF:		376		
Industrial Equipment		Size (SF)	Unit Price	Cost
		QTY	(Insert "X" below if applicable)	
- Bridge Crane		1	X	\$ 108,000
Industrial Equipment Subtotal:				\$ 108,000
Site Development		Size	Cost/SF	Cost
Site Development (acres) (assumes level site with no contamination, existing structures/utilities, etc.)		1.5	\$ 625,000	\$ 937,500
			(Insert "X" below if applicable)	
Specialty Site Work (e.g. steep grades, retaining walls, buried stumps, etc.)		x	\$ 200,000	\$ 200,000
Total Site Work:				\$ 1,137,500
Escalation and Design Contingency				
Subtotal Bldg, Equip, & Site:				\$ 18,017,734
Design Contingency (8%):				\$ 1,441,419
Escalation (8%) to: 2023				\$ 1,556,732
Escalation (6%) to: 2024				\$ 1,260,953
Escalation (5%) to: 2025				\$ 1,113,842
Escalation (5%) to: 2026				\$ 1,169,534
Escalation (5%) to: 2027				\$ 1,228,011
Escalation (5%) to: 2028				\$ 1,289,411
Escalation (5%) to: 2029				\$ 1,353,882
Total Escalation & Design Contingency:				\$ 10,413,783
Total Construction:				\$ 28,431,517
Total Construction Cost/SF:				\$ 637
Owner's Soft Costs				
A&E Fees (design, bid, const.)		(Assume 10% of Const. Value)	\$	2,843,152
A&E Special Services		(Assume 1.5% of Const. Value)	\$	426,473
Owner's Project Manager Fees		(Assume 4% of Const. Value)	\$	1,137,261
Communication. / Low Voltage System		Allowance	\$	100,000
Temporary Facilities		Allowance	\$	100,000
Printing Cost - Advertisement		Allowance	\$	10,000
Legal Costs		Allowance	\$	50,000
Utility Backcharges		Allowance	\$	50,000
Commissioning		Allowance	\$	30,000
Construction Tests & Inspections		Allowance	\$	50,000
Owner's Contingency		Allowance	\$	100,000
Construction Contingency (6%)		Allowance	\$	1,705,891
Total Soft Costs:				\$ 6,602,776
TOTAL PROJECT COST				\$ 35,034,293

Town of Plymouth
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New Facility Feasibility Study
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Appendix K

DPW Cost Database

Plymouth DPW Facility Price Comparison to Recent Projects



