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WESTON & SAMPSON ENGINEERS, INC. 100 Foxborough Boulevard, Suite 250 Foxborough, MA 02035 tel: 508.698.3034

### **REPORT**

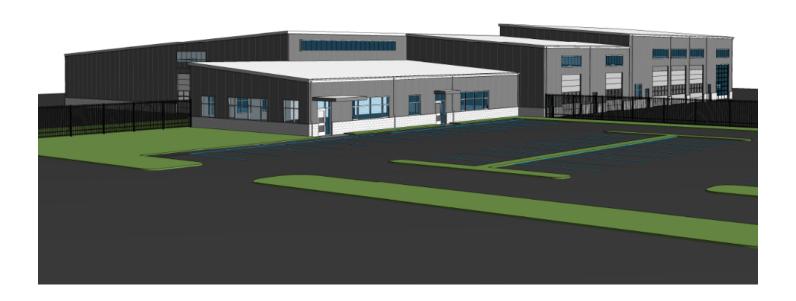
November 19, 2021

TOWN OF

### Wrentham

MASSACHUSETTS

Department of Public Works Facility Needs Assessment and Feasibility Study



## **Town of Wrentham**

Department of Public Works
Facility Needs Assessment and Feasibility Study
FINAL REPORT

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Facility Needs Assessment and Feasibility Study

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### I. Introduction

The Town of Wrentham retained the services of Weston & Sampson to prepare a feasibility study to identify the current and future needs of the Department of Public Works (DPW). 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 Department to the community. The study included inspecting existing facilities, identifying deficiencies, interviewing staff, identifying current and future needs, developing conceptual alternatives, evaluating the preferred conceptual alternatives with the DPW, and preparing budget cost estimates for the preferred alternative.

### **II. Space Needs Assessment**

The Project Team prepared a space needs assessment to identify the current and future needs of the Department of Public Works. The assessment included analyzing current deficiencies in the facility which need to be corrected with the construction of a new facility. The assessment also included interviewing key staff to learn first-hand the operational issues with the existing buildings and site. The staff interviews were supplemented with support by the project team's knowledge of industry practices and familiarity with solutions which have been successfully implemented on recently constructed public works facilities.

### Operational Analysis

The operational analysis was based on inspection of the existing facilities which are used to support the Department of Public Works' operations, and a determination of the functional inadequacies and space limitations of the existing buildings and site. The following is a summary of some of the deficiencies and/or inefficiencies associated with the existing facilities:

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- The Vehicle Storage facilities are undersized and are unable to efficiently support
  current operations, resulting in a large portion of the multi-million dollar fleet
  being stored outdoors. This impacts DPW response times during cold and
  inclement weather conditions. 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.
- 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.
- Inadequate working environment, including:
  - -Poor ventilation
  - -Inadequate lighting
  - -Confined workshop areas
  - -Inadequate facilities for state mandated training
  - -Non-ADA compliant facility

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

### **Staff Interviews**

The staff interviews conducted by the project team focused on identifying all DPW functions, identifying current deficiencies, and identifying current and future space requirements. In addition, the project team evaluated options to potentially incorporate other town departments/functions into a larger consolidated facility. The information obtained during these interviews included detailed accounts of space deficiencies in the existing facilities which affect day-to-day operations. A summary of the DPW organization and equipment inventory is as follows:

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Division/ Department	Admin	Workforce	Future	Seasonal	Locker	Parking
Administration	4	-	3*	-	3 half	Staff – 6 Visitor - 4
Engineering	-	-	2	-	-	2
Highway	ı	5	+/- 4	2	+/- 8 full 2 half	10
Water	1**	5	5	1	+/- 8 full 1 half	11
Cemetery / Parks	ı	3	4	2	+/- 6 full 2 half	7
Fleet Maintenance	-	2	-	-	2	2
Facilities***	1.5	2 PT janitors 1 FT technician	-	-	-	-
TOTAL:	5	15	+/- 18	5	+/- 24 full 8 half	42

<sup>\*</sup> Potential future IT personnel

### <u>Vehicles / Equipment Inventory (not including small support equipment)</u>

Large Vehicles: 31
Small Vehicles: 22
Equipment: 7
Towed Equipment: 10

Refer to **Section 1** for a copy of the staff interview notes and vehicle/equipment inventory list.

<sup>\*\*</sup> Potential need for a Water Admin Assistant

<sup>\*\*\*</sup> Likely not to be included in the new facility

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### Space Needs Assessment

The data obtained from the operations analysis and interviews were compiled and analyzed by Weston & Sampson. The analysis consisted of individually identifying the space needs for the operations of each function. The spaces were assembled into a space needs matrix identifying each space and providing a recommended program size. The space needs assessment identified an initial requirement of 70,447 square feet for DPW and Facilities as well as another 4,093 square feet for other Town departments (Planning/Zoning, Conservation, Board of Health, and Building/Inspection). This initial program assumed that all vehicles and equipment would be stored in an enclosed and minimally heated vehicle storage garage.

Recognizing that the overall size of the building has a significant impact on the cost, the results of the initial space needs were reviewed in detail by the Project Team and DPW staff to determine if the spaces could be reduced without negatively impacting operations. Based on input from DPW, the team determined that the additional Town department space needs should be removed from the program. In addition, the Team was able to go through several iterations to reduce, and in some cases combine, spaces in an effort to control the size and cost of the building program. The most significant reduction was achieved by modifying a portion of the fleet storage from enclosed space to open canopy storage. These reductions resulted in a modified space needs projection of 32,252 square feet. Refer to Section 2 for the space needs matrix and associated programming sketches.

### **III. Conceptual Design Alternatives**

Utilizing the results of the final space needs assessment, the Project Team prepared conceptual alternatives for the development of the existing Taunton Street site. The project team initially conducted a site assessment of the existing site to determine suitable areas to construct a new facility while allowing the existing facility to remain in operation. The assessment included conducting a human and environmental receptor analysis. The results

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of the existing conditions assessment are included in Section 3 of this report.

The alternatives were prepared with the following operational considerations in mind:

- Arrange interior space to provide efficient circulation patterns.
- Provide visual screening of DPW Yard operations from surrounding abutters.
- Attempt to segregate small/public vehicle traffic from heavy truck traffic.
- Providing adequate parking for public and employees.
- Provide full access and safe vehicle movement around the perimeter of the facility.
- Provide bulk material storage area with adequate yard area for large vehicle maneuvering.
- Maintain safe and functional access to/from the salt/sand operations area.
- Maintain a counterclockwise circulation pattern to promote safe turning movements for large vehicles.

The conceptual alternatives were prepared by developing "Block Building Plans". These Block Building Plans were developed for each of the major space categories for the new facility as follows:

- Office & Employee Facilities
- Shops
- Vehicle Maintenance
- Vehicle / Equipment Storage
- Wash Bay
- Canopy Storage

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. Five (5) initial concepts were developed utilizing the approved space needs program. Refer to **Section 4** for a copy of the initial alternatives.

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The advantages and disadvantages of each alternative were reviewed with the DPW. Based on input from the DPW, Option 4a was selected as the preferred alternative. A copy of the preferred alternative and associated overall building massing sketches are included in **Section 5** of this report.

### IV. Conceptual Cost Estimate

A conceptual cost estimate was prepared for the preferred alternative, 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 as identified in the estimate spreadsheet and as described as follows:

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

The 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, and prices are projected to 2023 using a standard escalation factor of 5%.

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The following is a summary of the anticipated total project costs:

Building Construction Costs:	\$11,040,000
Industrial Equipment:	\$605,000
Site Development:	\$2,235,000
Contingencies:	\$2,335,000
Escalation:	\$1,575,000
Soft Costs:	<u>\$2,900,000</u>
Site Development: Contingencies: Escalation:	\$2,235,000 \$2,335,000 \$1,575,000

TOTAL PROJECT COST: \$20,690,000

Additional escalation factors should be included if the Town does not move forward with bidding of the project in 2023. Escalation factors will vary depending on the construction market. The estimated costs include a market adjustment factor to account for the current volatile market associated with the ongoing pandemic. The duration and continued impact of this market volatility due to current raw material and supply chain shortages is uncertain and are subject to change. The results of the cost estimate, as well as a comparison of the cost to recent DPW projects, are included **Section 6 and Section 7** of this report.

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### Section 1

**Staff Interview Documentation** 



100 Foxborough Blvd., Suite 250 Foxborough, MA 02035

**Project:** New Department of Public Works Facility

Address: 360 Taunton Street, Wrentham, MA 02093

Date: November 12, 2020

**Subject:** Programming & Operations

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

The following programming requirements were developed from the Wrentham staff interviews conducted by Weston & Sampson personnel.

### **STAFF SUMMARY:**

Division/ Department	Admin	Workforce	Future	Seasonal	Locker	Parking
Administration	4	-	3*	-	3 half	Staff – 6 Visitor - 4
Engineering	-	-	2	-	-	2
Highway	-	5	+/- 4	2	+/- 8 full 2 half	10
Water	1**	5	5	1	+/- 8 full 1 half	11
Cemetery / Parks	-	3	4	2	+/- 6 full 2 half	7
Fleet Maintenance	-	2	-	-	2	2
Facilities***	1.5	2 PT janitors 1 FT technician	-	-	-	-
TOTAL:	5	15	+/- 18	5	+/- 24 full 8 half	42

<sup>\*</sup> Mentioned the need for future IT personnel

### **LAND USE GROUPS:**

Department/Committee	Location	Space Needs
Board of Health	Town Hall	4 members & 2 agents.
		Conference room
Building Inspection	350 Taunton St.	5 inspectors listed on
Building inspection	(adjacent to the DPW)	dept. page
Conconvation	70 Courth Stroot	Agent Office
Conservation	79 South Street	Admin Asst. Office
Diaming & Comm. Day	70 Courth Stroot	Director office
Planning & Comm. Dev.	79 South Street	Admin Asst. office

<sup>\*\*</sup> Town mentioned needing a Water Admin Assistant (part-time, maybe full-time)

<sup>\*\*\*</sup> Most likely not to be included in new facility, TBD



### **Space Needs Assessment:**

Office & Office Support				
Name of Space	Description			
Vestibule/Waiting	3-4 seats in waiting area			
Decembion Area	10/20 visitors/day			
Reception Area	Public counter, sliding window (security)			
	Open Office: Office Manager (Mary Ellen), Admin Assistant (UNFILLED), Water			
Admin Area	Admin Assistant (UNFILLED) → 3 workstations			
Aumin Area	[Or, private office for office manager]			
	Secure money lock box			
	Private:			
	Superintendent (Mike Lavin)			
	2. Assistant Director (UNFILLED)			
	3. Town Engineer (future)			
	4. Highway Manager (Ron)			
Offices	5. Highway Supervisor (Kevin Moranti) [or a workstation in Ron's office?]			
Offices	6. Water Manager (Dean Johnson)			
	7. Water Supervisor workstation [private or combined]			
	8. Cemetery & Parks Manager (Ray Rose)			
	9. C & P Supervisor office [or a workstation in Ray's Office)			
	➤ If Chad (Facilities) is included in new facility =			
	10. Private Office – Director of Facilities			
	11. Shared Office – 2 workstations			
Conference Room	Sized for 8-10 people, (doubles as Storm Event Room)			
Copy/Mail	Printer, cabinets, counter space			
File Storage	Close proximity to admin area			
Layout Area	Large format layout capabilities			
Toilet Facility	Public Toilet			
Kitchenette	Industry standard			
Supply Closet	See recycle bin requirements below			

- Admin distributes 35 gal recycle bins
  - o Keep 500 ct supply in storage, grab as needed.
  - o Program a small supply near admin area for efficiency



100 Foxborough Blvd., Suite 250 Foxborough, MA 02035

Employee Facilities				
Name of Space	Description			
Male Locker	18" x 36" W lockers, x 30			
Room	2 toilets, 2 urinals, 2 showers			
Female Locker	18" x 36" W lockers, x 4			
Room	2 toilets, 1 shower			
Mudroom /	Nice to have, but not essential			
Laundry				
	Sized for +/- 40 people			
Muster Room	Doubles as a training room			
	Oven and/or cooktop, refrigerator, microwave (x2), ice machine			
Janitor Closet	Industry standard			
Tel/Data Room	Industry standard			
Electrical Room	Per code			
PL/F Protection	Per code			
Mech. Room	Per code			

Workshops				
Name of Space	Description			
Shared Shop (Highway & Cemetery/Parks)	50' x 30' shop, 1 bay secure tool crib paint machines (2) Pallets of asphalt emulsion, crack seal machine, vibrators, plow blade racks (4 sizes), shovels/rakes/chainsaws Cemetery & Parks to use same shop space			
Water Shop	60' x 40' shop, 1 bay Storage needs: water meters, valves, etc. Meter test bench			
Facilities Shop Space	20' x 20', sign storage (out-source sign making, but have storage needs)			

• Overhead doors 16' T



Maintenance				
Name of Space	Description			
Maintenance Bays	4 bays / 1 drive-thru			
iviaintenance bays	1:4 welding bay			
Fluids Room	Currently have (9) 55 gal drums, wants 2 more → 11 drums			
Fiulus Roolli	Distribution system			
Parts / Material	Currently 20' x 20', not sufficient.			
Storage	Town wants 30' x 30'			
Tire Storage	No tire work. Keep majority outside, but a small supply on the floor			
Hydraulic Hose	Industry standard			
Shop Space				
Mechanics Office	2 workstations			
Reference Area	Industry standard			
Toilet	Single fixture uni-sex			
Compressor Room	Industry standard			

- Maintain other town group's fleet (i.e. police, fire)
  - o No school bus maintenance
- Radiant Flooring

Wash Area					
Name of Space	Name of Space Description				
	Auto undercarriage				
Wash Bay	Manual pressure washer				
	Movable ladders				
Wash Equipment	Industry standard				
Room					

Vehicle / Equipment Storage					
Name of Space Description					
Vehicle Storage	Support storage of multi-million dollar fleet (large, small, construction vehicles)				
Equipment Storage	All miscellaneous support equipment and plows				

- Facilities has (1) Explorer to store

Updated March 2021
\*\*all deleted staff updates from 2/24/2021 noted in strikethrough

	BAS					
Division	Staffing	Office	Workstation	Lockers	Muster	Parking
Administration	Superintendent/Director	✓		HALF	✓	✓
	Assistant Director	✓		HALF	✓	✓
	Office Manager		✓			✓
	Admin Assistant		√			✓
	Water Admin Assistant		✓			<b>√</b>
	(future) - Admin Assistant		4			4
	(future) - Admin Assistant		✓			4
	(future) Town Engineer	✓		HALF		✓
	(future) Town Engineer Admin Staff		✓			4
	(future) IT personnel		✓			✓
Highway	Highway Manager	✓		✓	✓	✓
	Highway Supervisor		√	✓	✓	✓
	Equip. Operator			✓	✓	✓
	Equip. Operator			✓	✓	✓
	Equip. Operator			✓	✓	✓
	(future) Technician			✓	✓	✓
	(future) Technician			✓	✓	✓
	(future) Technician			<b>√</b>	<b>√</b>	<b>√</b>
	(future) Technician			<b>√</b>	<b>√</b>	✓
	Seasonal			HALF	<b>√</b>	✓
	Seasonal			HALF	✓	✓
Water	Water Manager	✓		✓	✓	<b>√</b>
	Water Supervisor		✓	✓	✓	✓
	Technician			✓	✓	✓
	Technician			✓	✓	✓
	Technician			✓	✓	✓
	(future) Technician			✓	✓	✓
	(future) Technician			✓	✓	✓
	(future) Technician			<b>√</b>	<b>√</b>	<b>√</b>
	(future) Technician			<i></i>	<i></i>	· √
	(future) Technician			1	1	<i></i>
	Seasonal			HALF	· √	√
leet	Fleet Manager	✓		<b>√</b>	<b>√</b>	<b>√</b>
Maintenance	Technician			√	√	✓
	TOTAL	Office S: 6	Workstation 6	Full 21 Half 6	Muster 26	Parking 31

	ALTERNA	ATE		HALF HALF HALF HALF HALF HALF HALF HALF						
Division	Staffing	Office	Workstation	Lockers	Muster	Parking				
Planning /	Director	√				✓				
Zoning	Admin		<b>√</b>			✓				
Conservation	Director	<b>√</b>				\frac{1}{\sqrt{1}}				
	Admin		✓			✓				
	Admin		✓			✓				
Board of	Director	<b>√</b>				<b>√</b>				
Health	Admin		✓			✓				
	Director   J   Director   Director   Director   J   Director   Director   J   Director   Dire		✓							
	Admin		✓	HALF HALF HALF HALF HALF HALF HALF HALF	✓					
Building /	Director	✓		HALF		<b>√</b>				
Inspection	Admin		✓	HALF		✓				
	Admin		√	HALF		✓				
	Admin		√	HALF		✓				
	Admin		√	HALF		✓				
	Admin		√	HALF		✓				
	Admin		✓	HALF		✓				
Cemetery	C&P Manager	✓		✓	✓	✓				
& Parks	C&P Supervisor		✓	✓	✓	✓				
	Equip. Operator			✓	✓	✓				
	(future) Technician			✓	✓	✓				
	(future) Technician				✓	✓				
	(future) Technician				✓	✓				
	(future) Technician			✓	✓	✓				
	Seasonal			HALF	✓	✓				
	Seasonal			HALF	✓	✓				
Facilities	Director of Facilities	✓			✓	✓				
	Technician		✓	✓	✓	✓				
			√			✓				
	Janitor (PT)									
		Office	Workstation	Full	Muster	Parking				
	TOTALS	6	15	8	11	28				
				<u>Half</u>						
				9						

### Wrentham DPW Capital Rolling Stock

Veh.#	Туре	Manuf.	Model	Descript.	Tag #	Div.	Comments
??	LG EQ	JD	935	Tractor		Cemetery	
100	LG EQ	JD	740	Tractor Loader		Cemetery	OFF ROAD 9-5-18
302	LG V	Ford	L8000	6 whl dump	M87-340	Highway	
303	LG V	Ford	L8000	6 whl dump	M87-336	Highway	GONE
304	LG V	Ford	F550	Dump	M49-990	Highway	
305	LG V	Cat	936F	Loader	M28-49A	Highway	
306	LG V	Int.	2574	10 whl dump	M28-46A	Highway	
308	LG V	Ford	LT9000	10 whl dump	M93-609	Highway	GONE
311	LG V	JD	410D	Backhoe	M2845A	Highway	
312	LG V	Lotourneau		Grader	M46-749	Highway	OFF ROAD
313	LG V	Int.	2574	6 whl dump	M75-801	Highway	GONE
314	LG V	Elgin	S8366D	Sweeper	M55-264	Highway	
315	LG V	Int.	2574	6 whl dump	M87-338	Highway	GONE
320	LG V	MACK	GU712	DUMP TRUCK	M92-102	Highway	
331	LG V	Ford	F550	6 whl dump	M49-996	Highway	
337	LG V	Ford	L8501	Catch Basin	M55-218	Highway	
339	LG V	FORD	F550	1 TON	M96-001	Highway	3
342	LG V	Volvo	L70-F	Loader	M84-209	Highway	
322	LG V	MACK	GU713	10 whl dump	M13-45A	Highway	
369	LG V	FRHT	M2	SWEEPER	M1346A	Highway	MFR 2/2018
319	LG V	MACK	GU712	6 WHL DUMP	M99266	Highway	
225	LG V	FORD	F-550	UTILITY BODY	M95-095	Water	
226	LG V	Ford	E350	Cutaway	M87-152	Water	
227	LG V	MACK	GU712	DUMP TRUCK	M92-101	Water	
228	LG V	CAT	430 FIT	Backhoe	M86-760	Water	
231	LG V	MACK	GR42F	DUMP	M7779A	Water	IN SERVICE 3/9/20
302	S	HiWay	GIVIZI	SS sander	101777370	Highway	IN SERVICE S/ S/ EO
303	S	HiWay		SS sander		Highway	
306	S	HiWay		SS sander		Highway	
313	S	HiWay		SS sander		Highway	
315	S	HiWay		SS sander		Highway	
	S	HiWay		SS sander			
337 224	S	Downeaster		SS sander		Highway Water	
32	SM EQ	Whaker	880V	Roller	M55-289		
33	SM EQ	Muller	CM9H	Cement Mixer	M53-640	Highway	
					W33-640	Highway	IN SERVICE 7/2/40
400	SM EQ	kubota	zd1211-60	48" Mower		Highway	IN SERVICE 7/3/19
401	SM EQ	wright	mower	e-49s Mower		Highway	IN SERVICE 7/3/19
351	SM EQ	JD	4300	Tractor	MEE CO.	Cemetery	CONT
	SM V	Ford	F350	Utility	M55-261	building maint	GONE
<u>10</u>	SM V	FORD	F-350	UTILITY BODY	M95-094	central motors	
1	SM V	Chevy	Tahoe	SUV	M4625A	Highway	2015
	SM V	FORD	WINDSTAR	VAN	M68-048	Highway	GONE
30	SM V	FORD	F-350	pick up	M5195A	Highway	2015
309	SM V	Ford	F350	Pickup	M87-335	Highway	GONE
	SM V	ASV	RC.30	Skid Steer	M28-47A	Highway	GONE
324	SM V	HOLDER	C-270	TRACKLESS	M98-562	Highway	
	SM V	JD	8875	Skid Steer	M55-294	Highway	GONE
	SM V	JD	5410	Boom mower	M55-220	Highway	
	SM V	JD	5575	Skid Steer	M55-257	Highway	GONE
CAR-3	SM V	FORD	CROWN VIC	SEDAN	M69-328	Highway	NOT IN SERVICE

### Wrentham DPW Capital Rolling Stock

Veh.#	Туре	Manuf.	Model	Descript.	Tag#	Div.	Comments
370	SM V	caterpiller	239-D	SKID STEER	M4477A	Highway	IN SERVICE 10/2/19
371	SM V	caterpillar	262d3	SKID STEER	M3861A	Highway	IN SERVICE 10/2/19
2	SM V	Ford	Explorer	utility	M86-485	superintendent	
200	SM V	FORD	EXPLORA	UTIL	M93-609	Water	
20	SM V	FORD	f-250	PICK UP	M95-093	Water	
224	SM V	Ford	F350	Pickup	M1756A	Water	
229	SM V	Ford	F-350	Utility	M58-123	Water	GONE
230	SM V	FORD	TRANSIT	VAN	M4614A	Water	
40	SM V	FORD	f-250	PICK UP	M92-114	Cemetery	
41	SM V	FORD	F350	PICKUP	M87-151	Cemetery	
323	Т	CAM	TILT TRAILER	Trailer	M28-48A	Highway	
336	Т	YELLOW	TRAILER	Trailer	M55-422	Highway	
229	Т	homesteade	612 ht	Trailer	M72-523	Water	
233	TOW	WANCO		BIG SIGN BOARD	M98-568	Water	
229	TOW	WANCO		SMALL SIGN BOARD	M98-722	Water	
316	TOW	Br. Band.	250XP	Chipper	M93-606	Highway	
317	TOW	Leroi		Compressor	M58-121	Highway	GONE
350	TOW	FALCON	HOT BOX	TRAILER	M93-211	Highway	
368	TOW	DOOSAN	P-185	Compressor	M99-275	Highway	
232	TOW	MAGMUN	MLT3060M	LIGHT TOWER	M7778A	Water	
	24	Large Vehicle	е				
	22	Small Vehicle  Large Equipment  Small Equipment					
	2						
	5						
	3	Trailer					
	7	Towed					
	7	Sander					

## **Town of Wrentham**

Department of Public Works
Facility Needs Assessment and Feasibility Study
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### Section 2

**Space Needs Assessment** 

## Town of Wrentham Department of Public Works Space Needs Assessment Base Program 11/19/2021

**Building Requirements** 

		Rev 1	Rev 2	Rev 3	Rev 4	Rev 5		Room /	Area Di	mensions
Area	Description	Size (SF)	Ref#	length	width	size				
Office & Office	Vestibule/Public Lobby	288	288	288	210		A1	14	15	210
Support Areas	Admin Assistant Workstation	100	80	80	80		A2	10	8	80
••	Future Admin Assistant Workstation	100	80	-	-		A2	0	0	-
	Future Admin Assistant Workstation	100	80	1	-		A2	0	0	-
	Water Admin Assistant Workstation	100	80	80	80		A2	10	8	80
	Office Manager Workstation	120	120	100	100		A3	10	10	100
	Superintendent/Director Office	180	180	180	168		A4	12	14	168
	Assistant Director Office	144	144	144	120		A5	10	12	120
	IT Personnel Workstation	80	80	80	80		A6	10	8	80
	Town Engineer Office	180	180	180	168		A4	12	14	168
	Future Engineer Admin Workstation	100	80	-	-		A2	0	4 15 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 10 0 10 0 10 0 12 14 0 0 0 0 8 0 12 14 0 0 0 0 8 0 8 0 10 0 10 0 10 0 8 0 10 0	-
	Highway Manager Office	120	120	120	120	Total	A3	12	10	120
	Highway Supervisor Workstation	80	80	80	80	Below	A6	10	10	80
	Water Manager Office	120	120	120	120	Based	A3	12		120
	Water Supervisor Workstation	80	80	80	80	on	A6	10		80
	Cemetery & Parks Manager	120	120	1	-	Model	A3	0	0	-
	Cemetery & Parks Supervisor Workstation	80	80	-	-	DPW	A6	0	0	-
	Director of Facilities Office	120	-	-	-		A3	0	0	-
	Shared Technician Office	180	-	1	-		A7	0	0	-
	Conference Room / Storm Event Room	320	320	280	280		A8	14	20	280
	Copy/Mail Area	160	96	96	40		A9	4	10	40
	File Storage	224	224	224	120		A10	12	10 8 0 0 0 0 0 0 0 0 14 20 4 10 12 10 10 8 7 8 5 10	120
	Layout Area	300	252	216	80		A11	10		80
	Toilet Facility	56	56	56	56		A12	7		56
	Kitchenette	50	50	50	50		A13	5	10	50
	Supply Closet	90	80	80	80		A14	8	10	80
									width	
	Subtotal:	3,592	3,070	2,534	2,112					
	Area Grossing Factor (10%):	359	307	253	211		/			
	Circulation (30%):	1,185	1,013	836	348		15%	10 8 10 10 110 10 12 14 10 12 10 8 112 14 0 0 0 112 10 10 8 112 10 10 8 112 10 10 8 112 10 10 8 112 10 10 8 112 10 10 8 10 10 10 8 10 10 8 10 10 10 10 8 10 10 10 10 8 10 10 10 10 8 10		
	TOTAL:	5,137	4,390	3,624	2,672	2,500				
Employee	Male Locker/Shower/Toilet	840	676	676	650		B1	26	25	650
-mployee -acilities	Female Locker/Shower/Toilet	306	288	288	288		B2			288
aciiiles	Muster Room	1.008	840	840	572	Total	B3			572
	Mudroom/Laundry	80	48	48	-	Below	B4			- 312
	Janitors Closet	36	36	36	36	Based	B5			36
	Tel/Data Room	120	120	120	120	on	B6			120
	Electrical Room	280	252	252	168	Model	B7			168
	Lieduldai (100III	200	232	232	100	DPW	DI	12	14	100
	Subtotal:	2,670	2,260	2,260	1,834	D. **				
	Area Grossing Factor (10%):	267	226	226	183					
	Circulation (30%):	881	746	746	303		15%			
	TOTAL:	3,818	3,232	3,232	2,320	2,200				

## Town of Wrentham Department of Public Works Space Needs Assessment Base Program 11/19/2021

**Building Requirements** 

		Rev 1	Rev 2	Rev 3	Rev 4	Rev 5				imensions
Area	Description	Size (SF)	Size (SF)	Size (SF)	Size (SF)	Size (SF)	Ref#	length	width	size
Work Shops	Shared Shop (Highway & Cemetery/Parks)	1,386	1,260	1,260	1,740		C1	30	58	1,740
& Material	Sign Storage & Shop	400	280	-	-	Total	C2	0	0	-
	Water Workshop	1,386	1,260	1,260	1,740	Below	C1	30	58	1,740
	Facilities Workshop	1,386	1,260	-	-	Based	C1	0	0	-
	·					on				
	Subtotal:	4,558	4,060	2,520	3,480	Model				
	Area Grossing Factor (5%):	228	203	126	174	DPW				
	Circulation (10%):	479	426	265	110		3%			
	TOTAL:	5,264	4,689	2,911	3,764	3,480				
	TOTAL.	0,204	4,000	2,011	0,704	0,400				
Vehicle	Maintenance Bay	1,600	1,600	1,600	1,160		D1	20	58	1,160
Maintenance	Maintenance Bay	1,200	1,000	960	1,160		D1	20	58	1,160
	Maintenance Bay	1,200	1,000	960	1,040		D1	26	40	1,040
	Welding Bay	1,200	1,000	960	-		D1			-
	Fluids Room	224	224	224	224	Total	D2	14	16	224
	Parts/Material Storage	900	625	625	450	Below	D3	15	30	450
	Tire Storage	216	180	180	180	Based	D4	10	18	180
	Hydraulic Hose Shop Space	100	100	100	100	on	D5	10	10	100
	Mechanics Office	216	216	144	144	Model	D6	12	12	144
	Toilet Facility	56	56	56	56	DPW	D7	7	8	56
	Compressor Room	(on mezz)	(on mezz)	(on mezz)	(on mezz)					
	0.11.11	0.040	0.004	5.000	4.544					
	Subtotal:	6,912	6,001	5,809	4,514					
	Area Grossing Factor (5%):	346 726	300 630	290 610	226 308		6.5%		25 58 4 16	
	Circulation (10%):	720	630	610	306		0.5%			
	TOTAL:	7,983	6,931	6,709	5,048	5,065		25 58		
Wash Area	Wash Bay	1,650	1,400	1,250	1,450	Total	E1	25	58	1,450
Wasii 7 ii ca	Wash Equipment Room	100	100	100	64	Below	E1			64
	raon Equipment reom	100	100	100	0.1	Based			10	0.1
						on				
	Subtotal:	1,750	1,500	1,350	1,514	Model				
	Circulation:	n/a	n/a	n/a	n/a	DPW				
	TOTAL:	1,750	1,500	1,350	1,514	1,660				
	V I : I / F : 10	05.000	10.100	00.500	45.000			00	100	10.100
Vehicle &	Vehicle / Equipment Storage	25,000	16,128	22,560	15,960	<b>.</b>	F1	96	168	16,128
Equipment	Vehicle / Equipment Storage 2	18,800	-	-	-	Total	F2	0	0	-
Storage	Secure Tool Crib	400	(in V/E Stor)	(in V/E Stor)	(in V/E Stor)	Below		40		100
	Plumbing/Fire Protection Room	168	168	168	168	Based	B8	12	14	168
	Mechanical Room	320	288	288	(on mezz)	on Model	B9	16	18	288
	Subtotal:	44,688	16,584	23,016	16,128	DPW				
	Area Grossing Factor (5%):	2,234	829	1,151	806	DEW				
	Area Grossing Factor (5%).  Circulation:	2,234 n/a	n/a	1,131 n/a	n/a					
	-		-			40.455				
	TOTAL:	46,922	17,413	24,167	16,934	16,100				
	BASE TOTAL:	70,876	38,157	41,993	32,252	31,006				

Note - Programming sketches on the following pages represent the "Rev 1" program listed above. Refer to the space needs matrix above for modifications to these programming sketches to meet the final preferred space needs.

# Town of Wrentham Department of Public Works Space Needs Assessment Alternate Program 4/6/2020

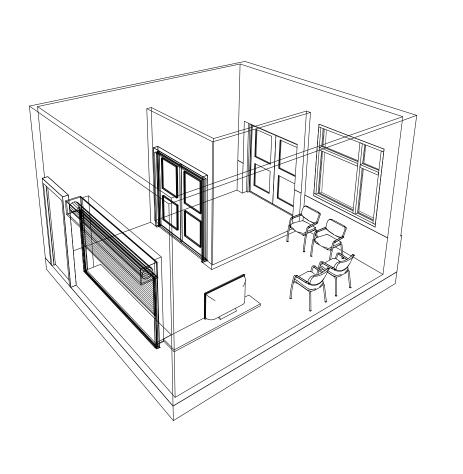
**Building Requirements** 

Area	Division	Description	Original Size (SF)	Rev 1 Size (SF)	Rev 2 Size (SF)	Room length		Dimensions size
70	Planning /	Director Office	144	144	144	12	12	144
	Zoning	Admin Workstation	80	80	80	10	.2	80
		additional (10%) public lobby	29	29	29	-	-	-
		additional (10%) copy/mail area	16	16	16	-	-	_
Admin &		additional (20%) layout area	60	60	60	-	-	-
Employee		additional (40%) file storage	90	90	90	-	-	-
Facilities		additional (10%) kitchenette	5	5	5	-	-	-
		additional (10%) toilet area	6	6	6	-	-	-
		additional conference room	224	224	224	14	16	224
		Subtotal:	653	653	653			
		Area Grossing Factor (10%):	65	65	65			
		Circulation (30%):	215	215	215			
		Planning / Zoning TOTAL:	934	934	934			
		Planning / Zoning TOTAL:	934	934	934			
	Conservation	Director Office	144	144	144	12	12	144
		Admin Workstation	80	80	80	10	8	80
		Admin Workstation	80	80	80	10	8	80
		additional (10%) public lobby	29	29	29	-	-	-
Admin &		additional (10%) copy/mail area	16	16	16	-	1	-
Employee		additional (10%) layout area	30	30	30	-	1	ı
Facilities		additional (10%) file storage	22	22	22	-	1	ı
		additional (10%) kitchenette	5	5	5	-	-	
		additional (10%) toilet area	6	6	6	-	-	-
		additional conference room	224	224	224	14	16	224
		Subtotal:	636	636	636			
		Area Grossing Factor (10%):	64	64	64			
		Circulation (30%):	210	210	210			
1								
		Conservation TOTAL:	909	909	909			

# Town of Wrentham Department of Public Works Space Needs Assessment Alternate Program 4/6/2020

**Building Requirements** 

_	<b>.</b>	<b>5</b>	Original	Rev 1	Rev 2			Dimension
Area	Division	Description	Size (SF)	Size (SF)	Size (SF)	length		size
	Board of	Director Office	144	144	144	12	12	14
	Health	Admin Workstation	80	80	80	10	8	3
		Admin Workstation	80	80	80	10	8	8
		Admin Workstation	80	80	80	10	8	8
		additional (10%) public lobby	29	29	29	-	-	-
Admin &		additional (10%) copy/mail area	16	16	16	-	-	-
Employee		additional (10%) layout area	30	30	30	-	-	-
acilities		File Storage	22	400	400	20	20	40
		additional (10%) kitchenette	5	5	5	-	-	-
		additional (10%) toilet area	6	6	6	-	-	-
		Subtotal:	492	869	869			
		Area Grossing Factor (10%):	49	87	87			
		Circulation (30%):	162	287	287			
		Board of Health TOTAL:	703	1,243	1,243			
	Building /	Director Office	144	144	144	12	12	14
	Inspection	Admin Workstation	80	80	80	10	8	8
	irispection	Admin Workstation	80	80	80	10	8	8
		Admin Workstation	80	80	80	10	8	8
		Admin Workstation	80	80	80	10	8	8
Admin,		Admin Workstation	80	80	80	10	8	8
Employee		Admin Workstation	80	80	80	10	8	8
=mployee =acilities &		additional (10%) public lobby	29	29	29	- 10	0	
Fleet Storage		additional (10%) public lobby	16	16	16		-	
-leet Storage		additional (10%) copyrnali area	30	30	30	-	-	
		File Storage	22	22	400	20	20	40
		additional (10%) kitchenette	5	5	5		- 20	- 40
		additional (10%) toilet area	6	6	6	-		<del>-</del>
		additional (10%) tollet area additional locker room area (50sf/person)	350	350	350	-	-	
		additional locker room area (50st/person)	350	350	350	-	-	-
		Subtotal:	1.082	1,081	1,459			
		Area Grossing Factor (10%):	108	1,001	146			
		Circulation (30%):	357	357	482			
		Circulation (30 %).	337	337	402			
		Building / Inspection TOTAL:	1,547	1,546	2,087			
		Building / mapecuali 101AL.	1,047	1,040	2,007			
		1						
		Planning / Zoning TOTAL:	934	934	934			
		Conservation TOTAL:	909	909	909			
		Board of Health TOTAL:	703	1,243	1,243			
		Building / Inspection TOTAL:	1,547	1,546	2,087			
		GRAND TOTAL:	4,093	4,633	5,173			
		CITATO TOTAL.	7,000	7,000	0, 170			



FLOORS: CERAMIC TILE

WALLS: GWB PAINTED

**CEILING:** ACT TILE

### **MEP/DATA REQUIREMENTS**

**DUPLEX ELECTRICAL OUTLETS** 

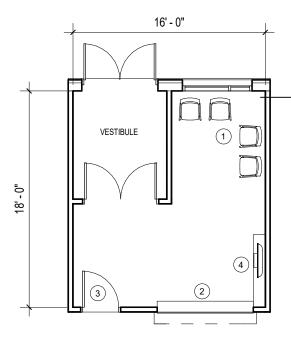
TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

**HEATING** 

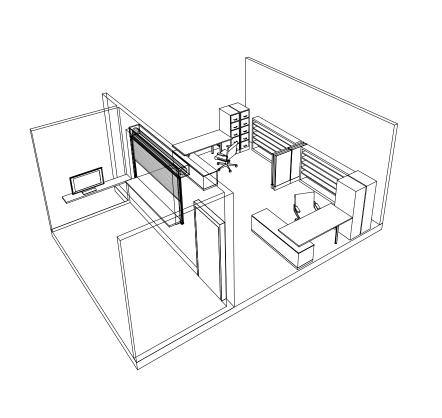
COOLING



Public Lobby - 288sf 1/8" = 1'-0"

### COMPONENTS:

- 1. (4) WAITING CHAIR
- 2. ROLL-UP SECURITY GRILL
- 3. ACCESS CONTROLLED DOOR
- 4. PUBLIC ACCESS COMPUTER STATION AS NEEDED



FLOORS: CARPET

WALLS: GWB PAINTED

**CEILING:** ACT TILE

### **MEP/DATA REQUIREMENTS**

**DUPLEX ELECTRICAL OUTLETS** 

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

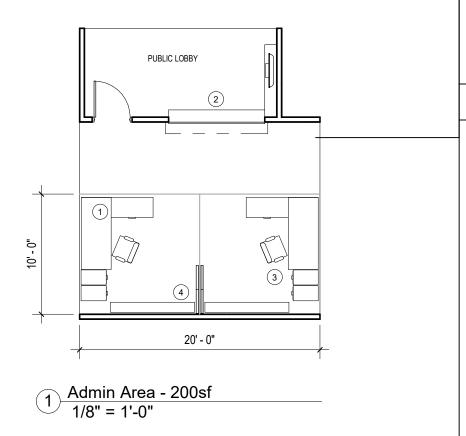
OCCUPANCY SENSORS FOR LIGHTING CONTROLS

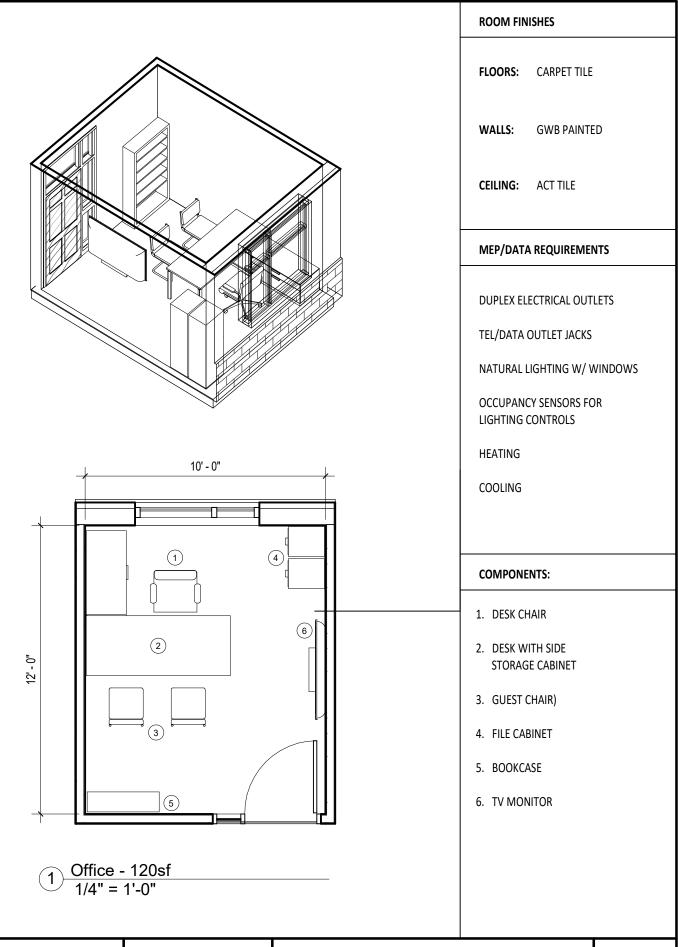
**HEATING** 

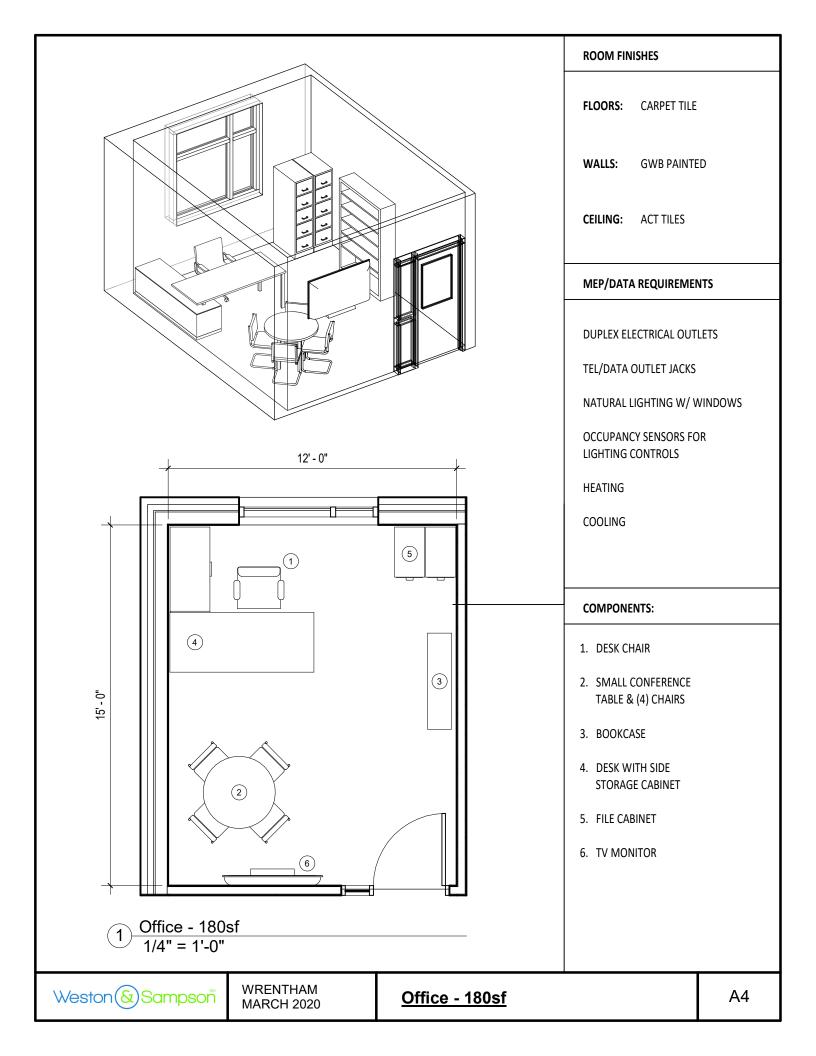
COOLING

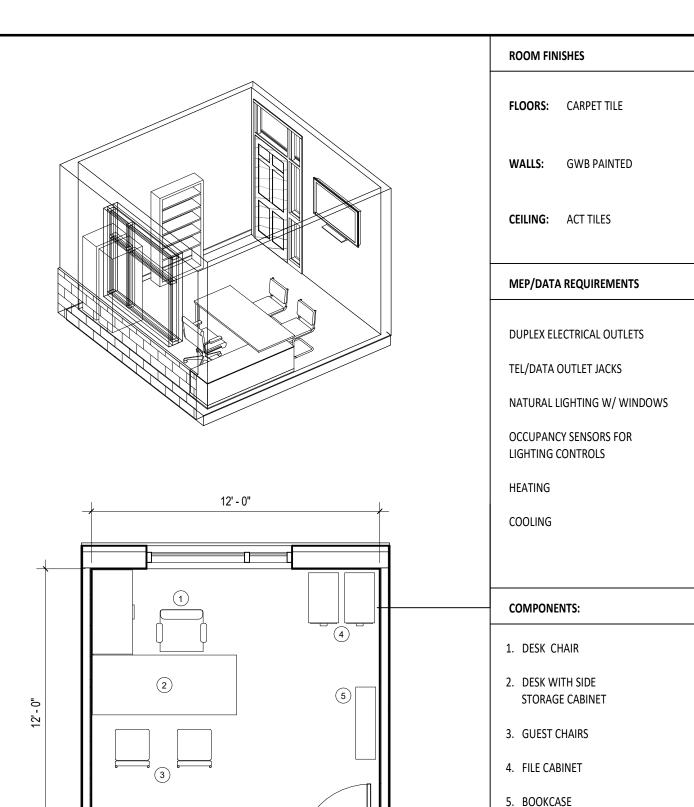


- 1. (2) WORK STATIONS
- 2. PUBLIC COUNTER
- 3. DESK CHAIR
- 4. BOOKCASE









Office - 144sf 1/4" = 1'-0" 6. TV MONITOR



**FLOORS:** CARPET TILES

WALLS: GWB PAINTED

**CEILING:** ACT TILES

### **MEP/DATA REQUIREMENTS**

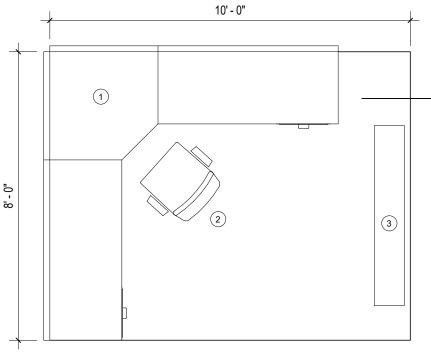
**HEATING** 

COOLING

**DUPLEX ELECTRICAL OUTLETS** 

TEL/DATA OUTLET JACKS

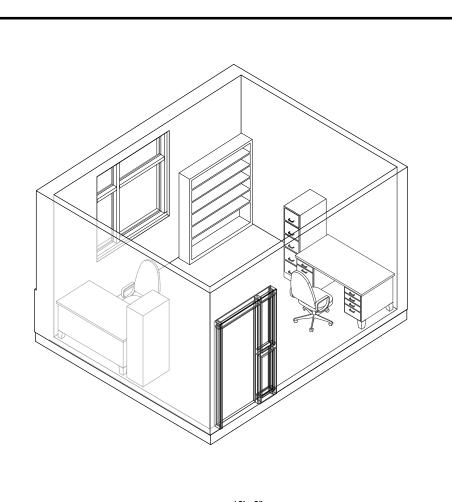
NATURAL LIGHTING W/ WINDOWS



### **COMPONENTS:**

- 1. DESK
- 2. TASK CHAIR
- 3. BOOKCASE

Supervisor Workstation - 80sf 3/8" = 1'-0"



FLOORS: VCT TILE

WALLS: GWB PAINTED

**CEILING:** ACT TILES

### **MEP/DATA REQUIREMENTS**

**DUPLEX ELECTRICAL OUTLETS** 

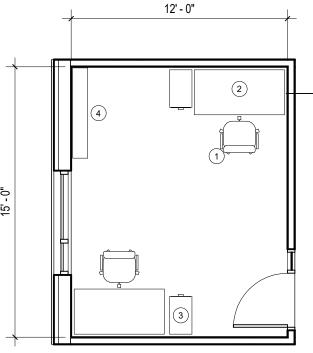
TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

**HEATING** 

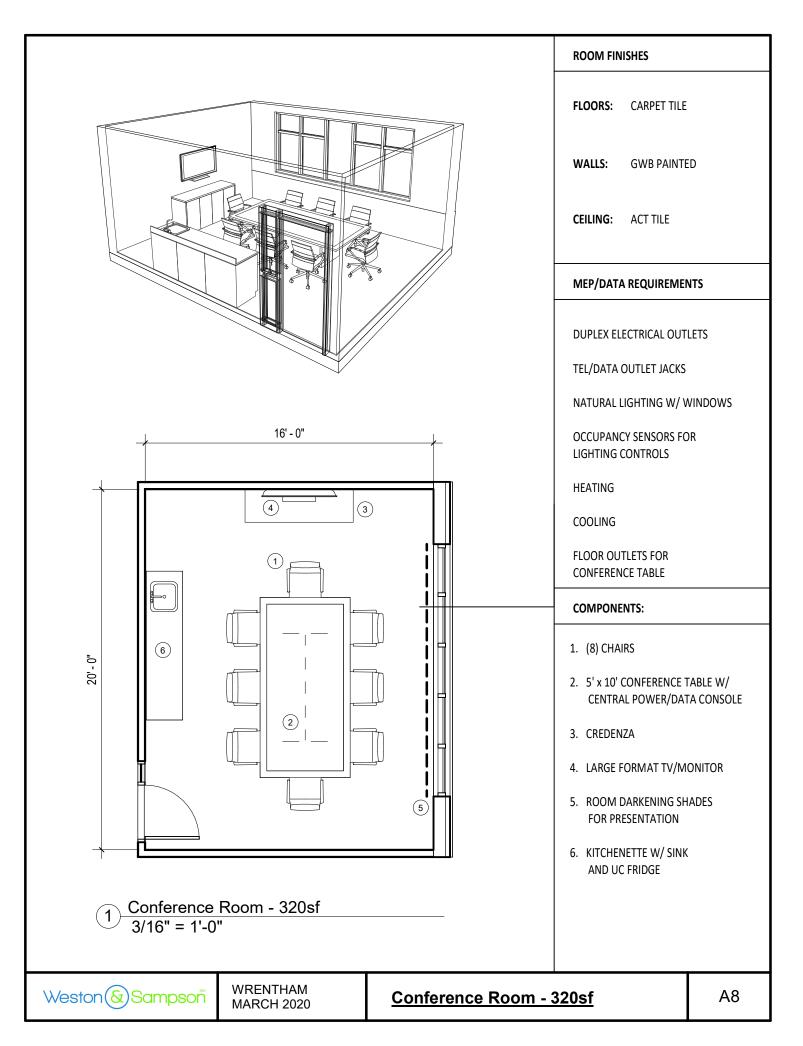
COOLING



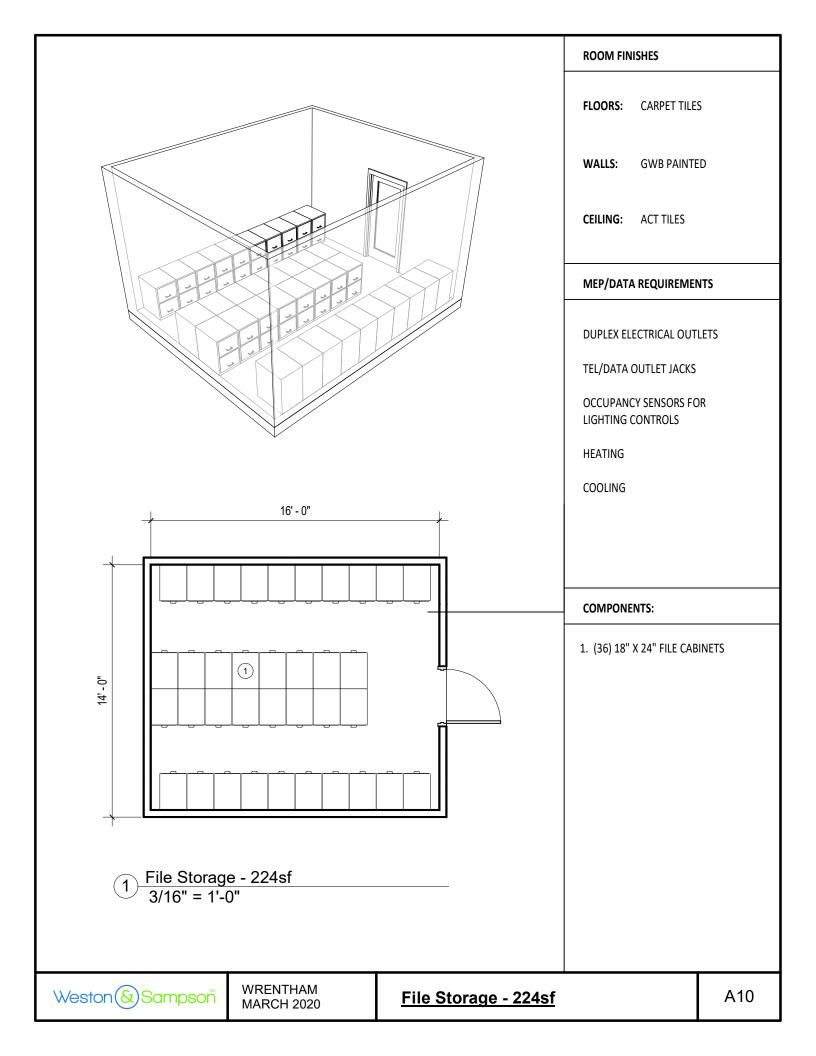
Shared Technician Office - 180sf 3/16" = 1'-0"

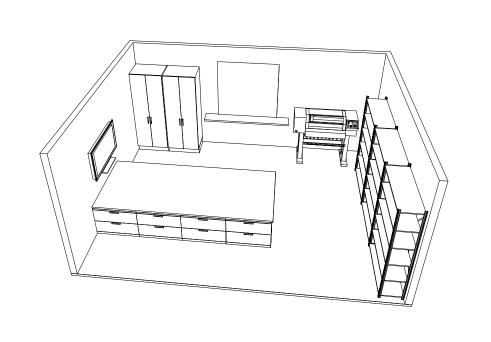
### **COMPONENTS:**

- 1. DESK CHAIR (2)
- 2. WORKSTATION (2)
- 3. FILE CABINET (2)
- 4. BOOKCASE



## **ROOM FINISHES** FLOORS: CARPET TILE WALLS: **GWB PAINTED CEILING: ACT TILE MEP/DATA REQUIREMENTS DUPLEX ELECTRICAL OUTLETS** TEL/DATA OUTLET JACKS OCCUPANCY SENSORS FOR LIGHTING CONTROLS **HEATING** COOLING 16' - 0" **COMPONENTS:** (3) 1. PRINTER (2) 2. WORK COUNTER 3. UPPER CABINETS 1 1) Copy/Mail Area - 160sf 3/16" = 1'-0"





**FLOORS:** CARPET TILES

WALLS: GWB PAINTED

**CEILING:** ACT TILES

### MEP/DATA REQUIREMENTS

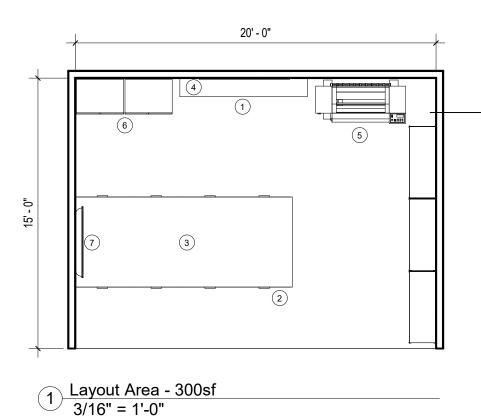
**DUPLEX ELECTRICAL OUTLETS** 

TEL/DATA OUTLET JACKS

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

**HEATING** 

COOLING



### **COMPONENTS:**

- 1. COUNTER TOP
- 2. (6) FLAT FILES
- 3. LAYOUT COUNTER TOP (ABOVE FLAT FILES)
- 4. DISPLAY BOARD
- 5. PLOTTER
- 6. SUPPLY CABINET
- 7. LARGE FORMAT TV/MONITOR

**FLOORS:** CERAMIC TILE

WALLS: CERAMIC TILE /

**GWB PAINTED** 

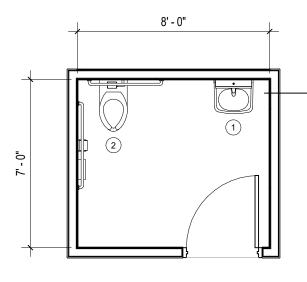
**CEILING:** ACT TILE

### **MEP/DATA REQUIREMENTS**

**HEATING** 

**COOLING** 

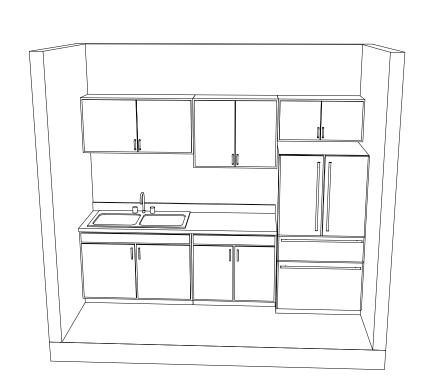
GFI DUPLEX ELECTRICAL OUTLETS



Toilet Facility - 56sf 1/4" = 1'-0"

### **COMPONENTS:**

- 1. WALL HUNG LAV
- 2. ADA TOILET



**FLOORS:** LINOLEUM SHEET

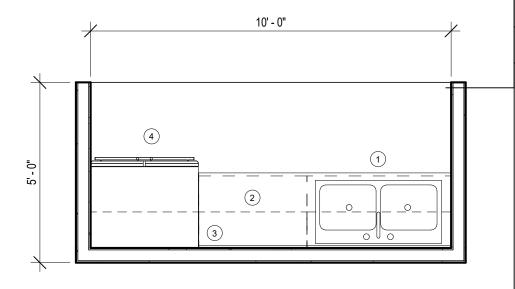
WALLS: GWB PAINTED

**CEILING:** ACT TILE

### **MEP/DATA REQUIREMENTS**

**DUPLEX ELECTRICAL OUTLETS** 

DATA OUTLET JACKS

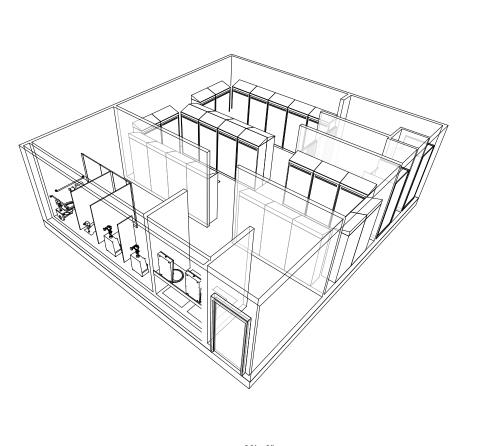


### COMPONENTS:

- 1. STAINLESS STEEL SINK
- 2. COUNTER & BASE CABINET (BELOW)
- 3. UPPER CABINETS (ABOVE)
- 4. STAINLESS STEEL REFRIGERATOR

Admin Kitchenette - 50sf 3/8" = 1'-0"

## **ROOM FINISHES** FLOORS: CARPET TILE WALLS: **GWB PAINTED CEILING:** ACT TILE **MEP/DATA REQUIREMENTS DUPLEX ELECTRICAL OUTLETS** DATA OUTLET JACKS 10' - 0" **COMPONENTS:** 1. WALL MOUNTED SHELVING 1 9' - 0" General Supply Closet - 90sf 1/4" = 1'-0" WRENTHAM Weston & Sampson **General Supply Closet - 90sf** A14 MARCH 2020



**FLOORS:** RESINOUS EPOXY

WALLS: CERAMIC TILE & GWB PAINTED

**CEILING:** MOISTURE RESISTANT

**ACT TILES** 

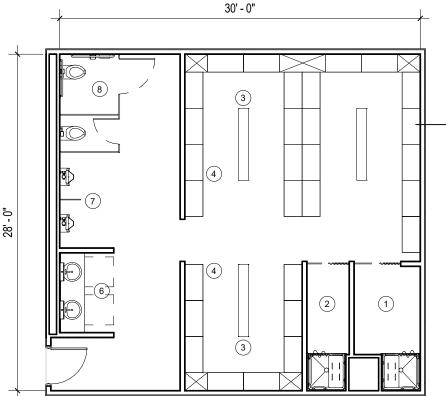
#### **MEP/DATA REQUIREMENTS**

GFI ELECTRICAL OUTLETS

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

**HEATING** 

**COOLING** 

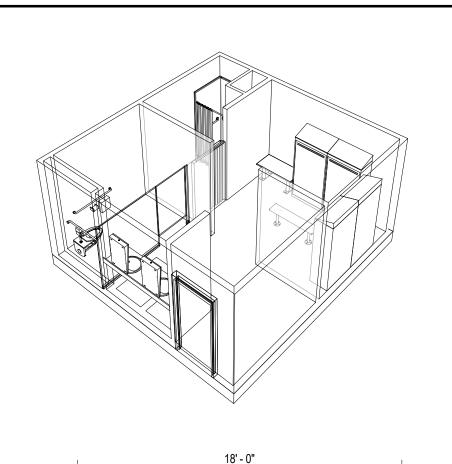


#### **COMPONENTS:**

- 1. ADA SHOWER STALL
- 2. STANDARD SHOWER STALLS
- 3. BENCH
- 4. (29) 18" X 36" LOCKERS
- 5. COUNTER, SINKS & MIRRORS
- 6. WALL HUNG URINALS
- 7 ADA STALL
- 8. STANDARD STALL

1/8" = 1'-0"

Male Locker/Shower/Toilet - 840sf



# 

**ROOM FINISHES** 

**FLOORS:** RESINOUS EPOXY

**WALLS:** CERAMIC TILE &

**GWB PAINTED** 

**CEILING:** MOISTURE RESISTANT

**ACT TILES** 

#### **MEP/DATA REQUIREMENTS**

**GFI ELECTRICAL OUTLETS** 

OCCUPANCY SENSORS FOR LIGHTING CONTROLS

**HEATING** 

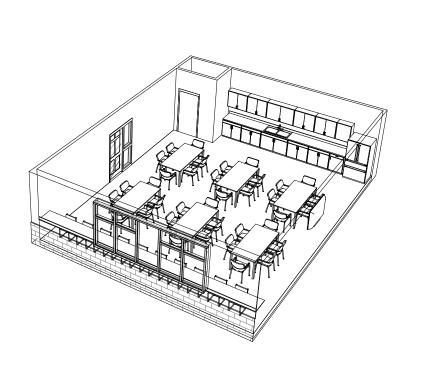
**COOLING** 

#### **COMPONENTS:**

- 1. ADA SHOWER STALL
- 2. ADA BENCH
- 3. STANDARD BENCH
- 4. 4) 18" X 36" LOCKERS
- 5. COUNTER, SINKS & MIRRORS
- 6. ADA STALL W/ WALL HUNG LAV

Female Locker/Showers/Toilet - 306sf

3/16" = 1'-0"



FLOORS: LINOLEUM

WALLS: GWB PAINTED

**CEILING:** ACT TILE

#### **MEP/DATA REQUIREMENTS**

**DUPLEX ELECTRICAL OUTLETS** 

TEL/DATA OUTLET JACKS

NATURAL LIGHTING W/ WINDOWS

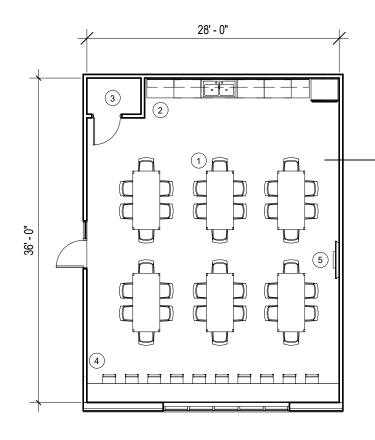
OCCUPANCY SENSORS FOR LIGHTING CONTROLS

HEATING

COOLING

#### **COMPONENTS:**

- 1. (6) TABLES & (36) TASK CHAIRS
- 2. KITCHEN, INCLUDES: (TBD)
  - SOLID SURFACE COUNTERS
  - BASE & WALL CABINETS
  - STAINLESS STEEL SINK
  - REFRIGERATOR
  - ELECTRIC COOKTOP W/ HOOD
  - MICROWAVE (2)
  - ICE MACHINE
- 3. STORAGE CLOSET
- 4. COUNTER & STOOLS
- 5. WALL MOUNTED TELEVISION



Muster Room - 1,008sf

3/32" = 1'-0"

FLOORS: RESINOUS

WALLS: GWB PAINTED

**CEILING:** ACT TILE

### MEP/DATA REQUIREMENTS

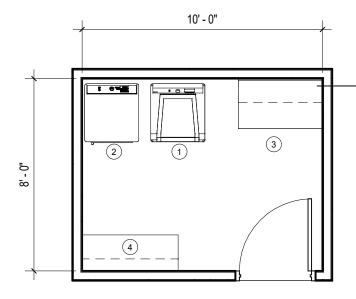
**HEATING** 

COOLING

**DUPLEX ELECTRICAL OUTLETS** 

DATA OUTLET JACKS

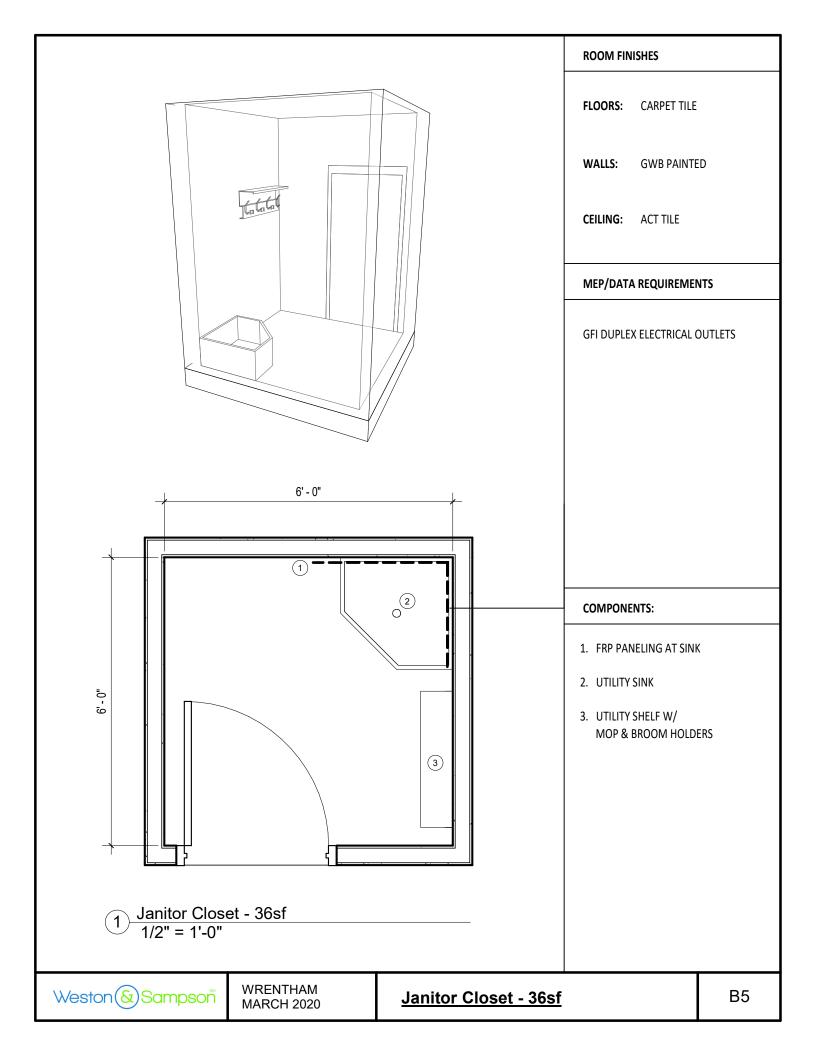
DRYER EXHAUST

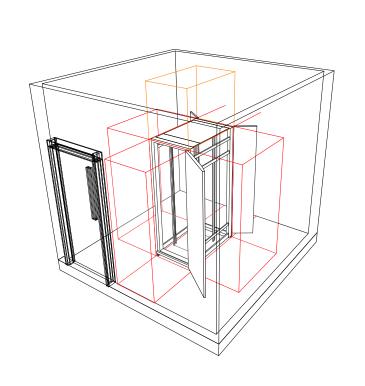


## 1 Laundry Room - 80sf 1/4" = 1'-0"

#### **COMPONENTS:**

- 1. WASHER MACHINE
- 2. DRYER MACHINE
- 3. COUNTER, SINK & CABINETS
- 4. UNIFORM RACK





**FLOORS:** SEALED CONCRETE

WALLS: GWB PAINTED

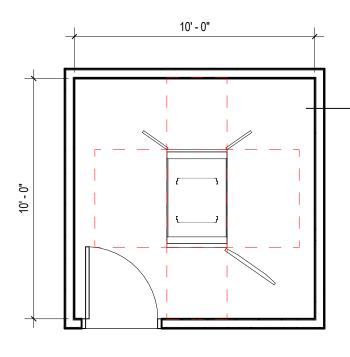
**CEILING:** OPEN TO ABOVE

### MEP/DATA REQUIREMENTS

**DUPLEX ELECTRICAL OUTLETS** 

DATA OUTLET JACKS

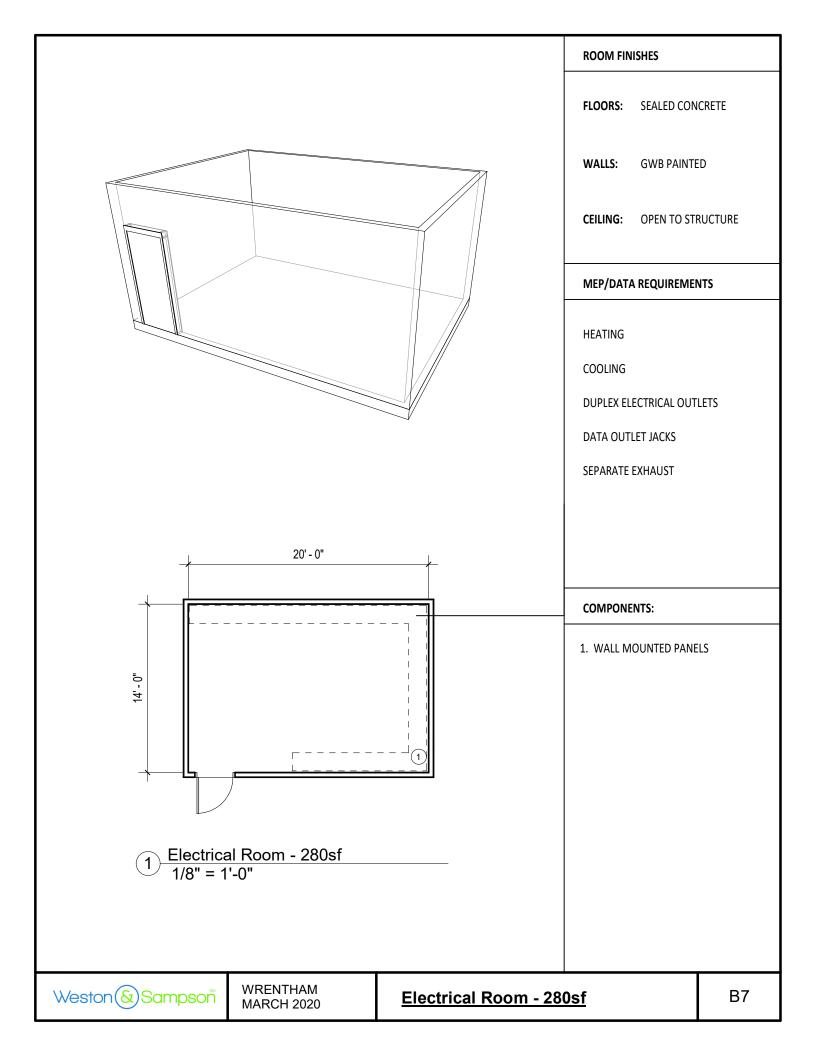
**RACK-MOUNTED POWER** 

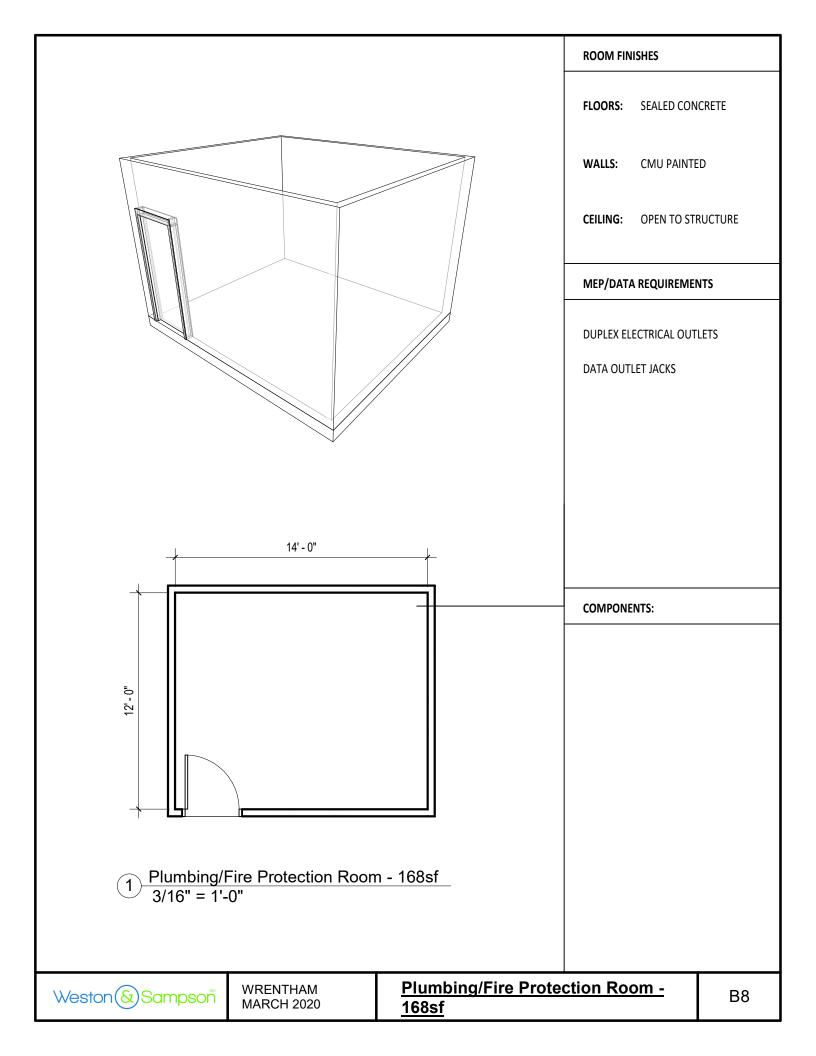


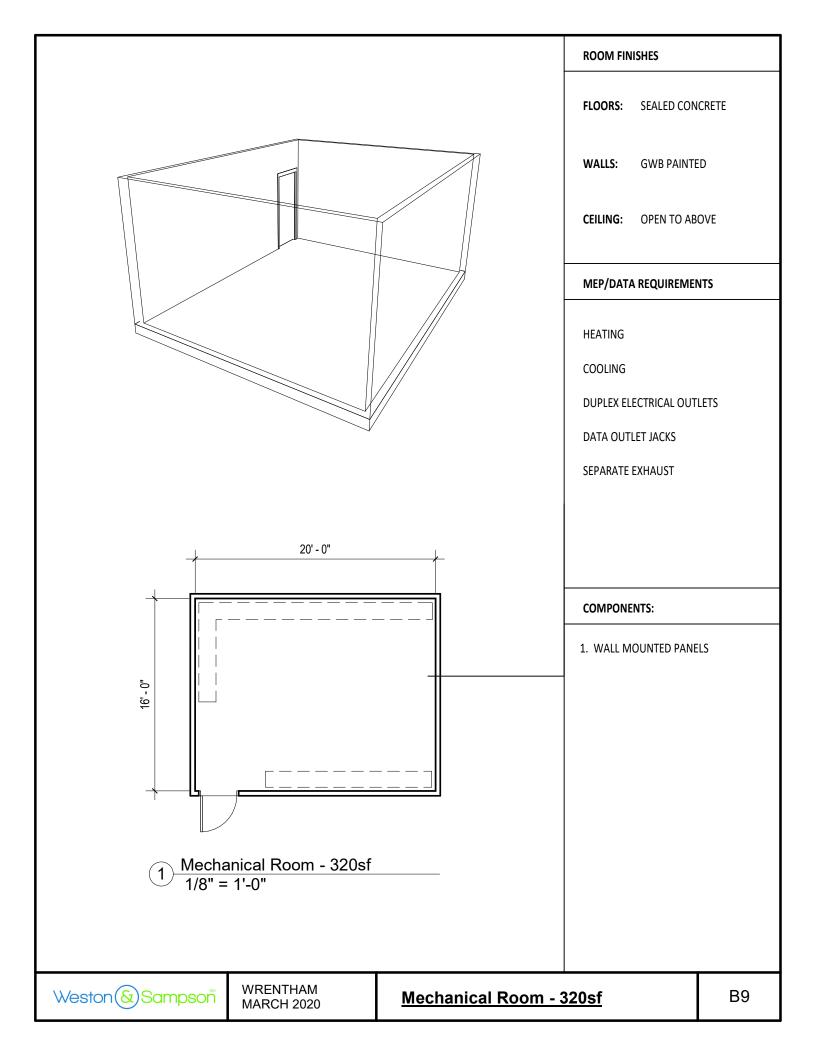
#### **COMPONENTS:**

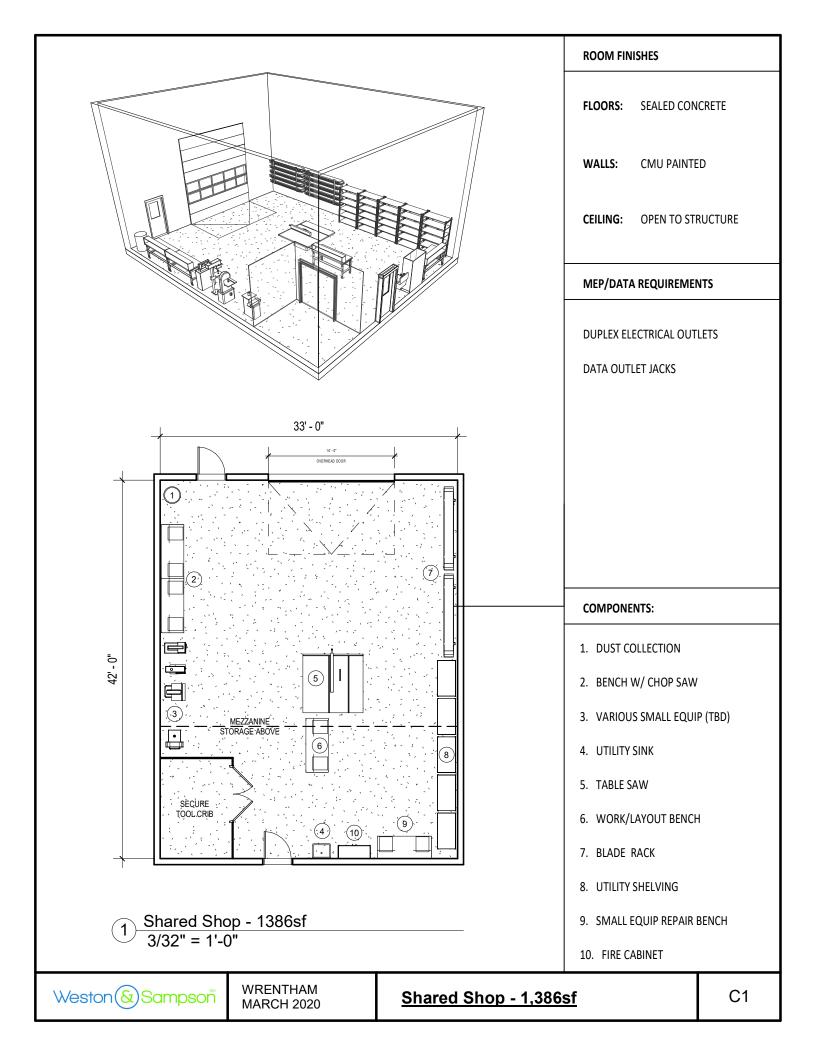
- 1. DATA RACK
- 2. PLYWOOD BACK BOARD FOR BUILDING SYSTEM COMPONENTS (SECURITY, CABLE, ETC.)

Tel / Data Room - 120sf 1/4" = 1'-0"









**FLOORS:** SEALED CONCRETE

WALLS: CMU PAINTED

**CEILING:** OPEN TO STRUCTURE

#### **MEP/DATA REQUIREMENTS**

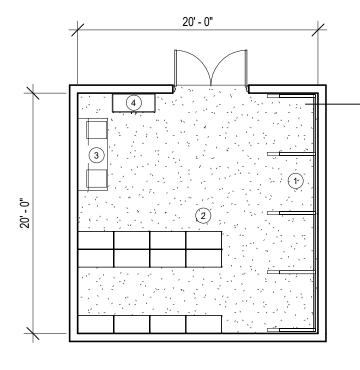
**HEATING** 

**COOLING** 

VENTILATION

**DUPLEX ELECTRICAL OUTLETS** 

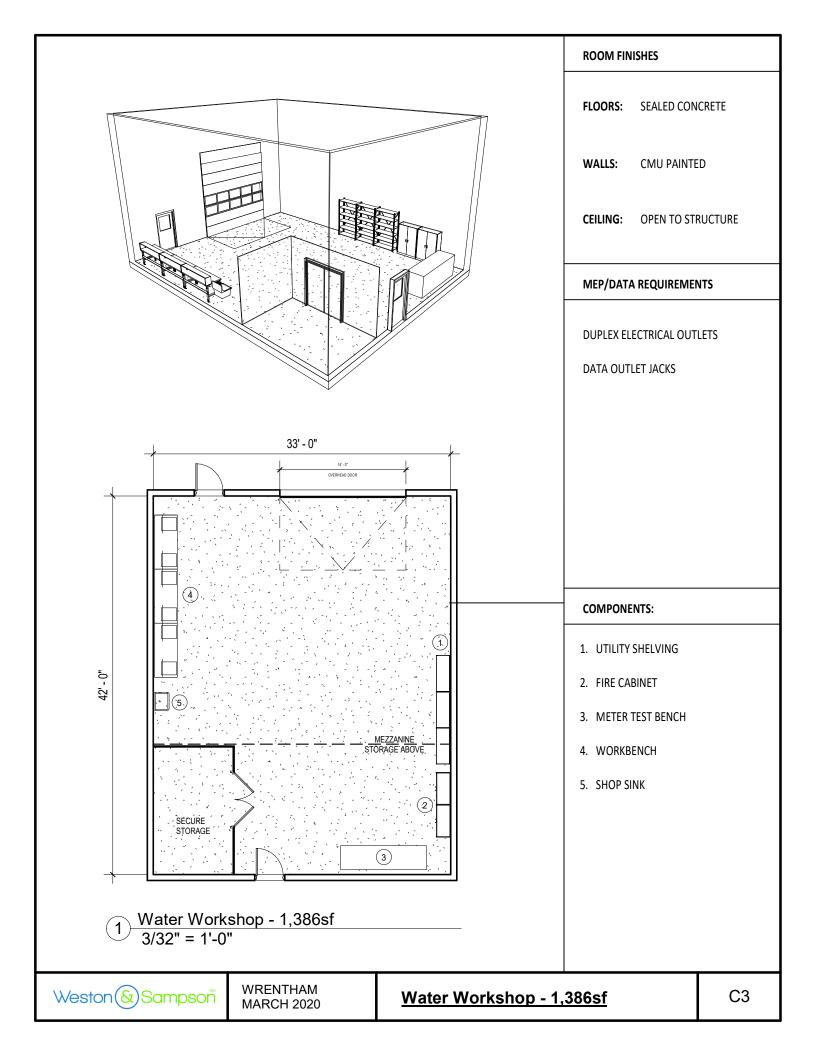
DATA OUTLET JACKS

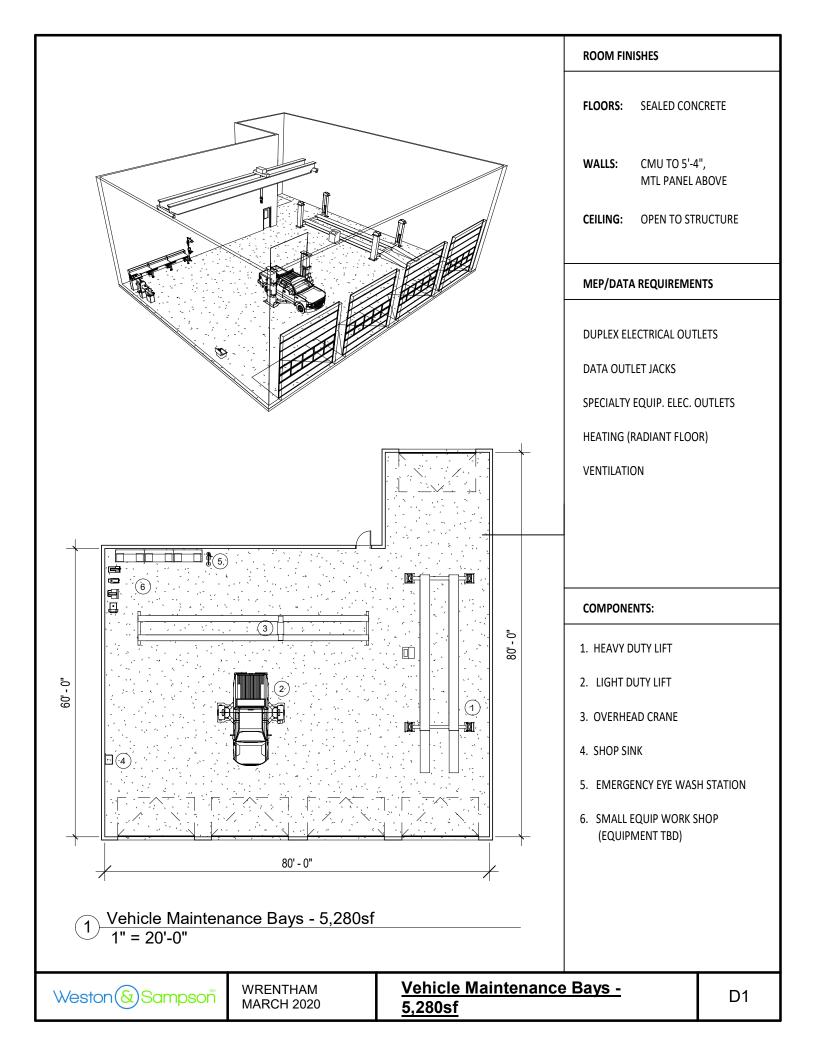


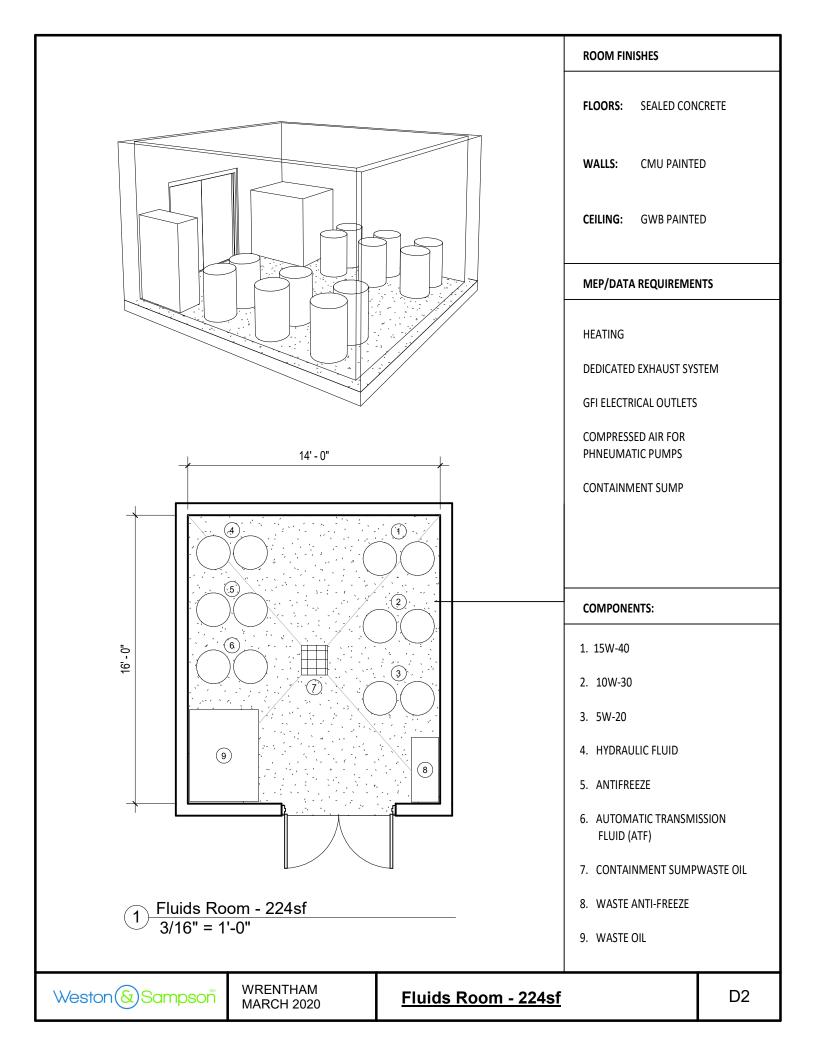
Facilities Sign Storage & Shop - 400sf 1/8" = 1'-0"

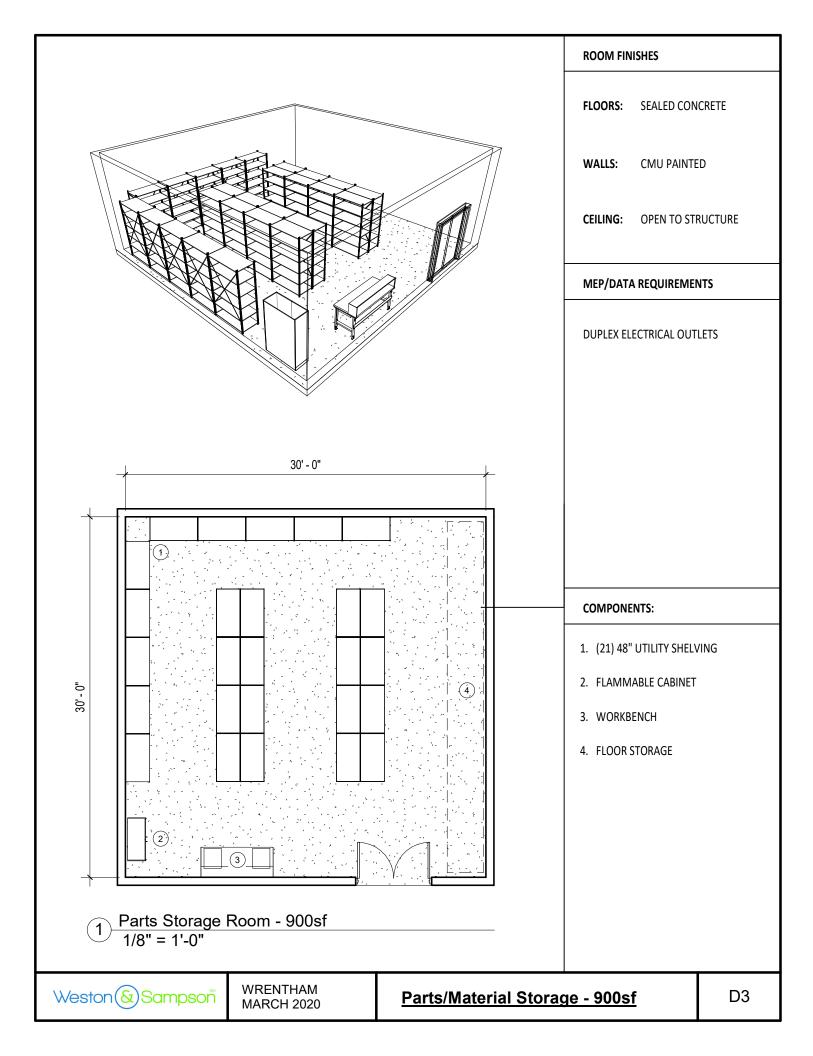
### COMPONENTS:

- 1. SIGN STORAGE RACKS
- 2. UTILITY SHELVINGE
- 3. WORKBENCH
- 4. SUPPLY CABINET









**FLOORS:** SEALED CONCRETE

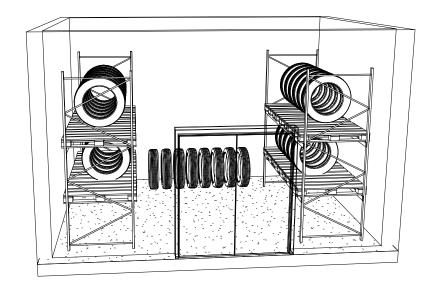
WALLS: CMU PAINTED

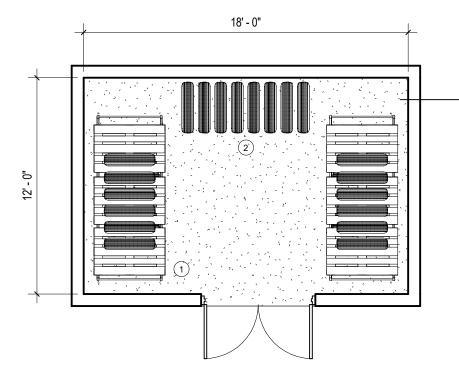
**CEILING:** OPEN TO STRUCTURE

#### **MEP/DATA REQUIREMENTS**

**DUPLEX ELECTRICAL OUTLETS** 

DATA OUTLET JACKS

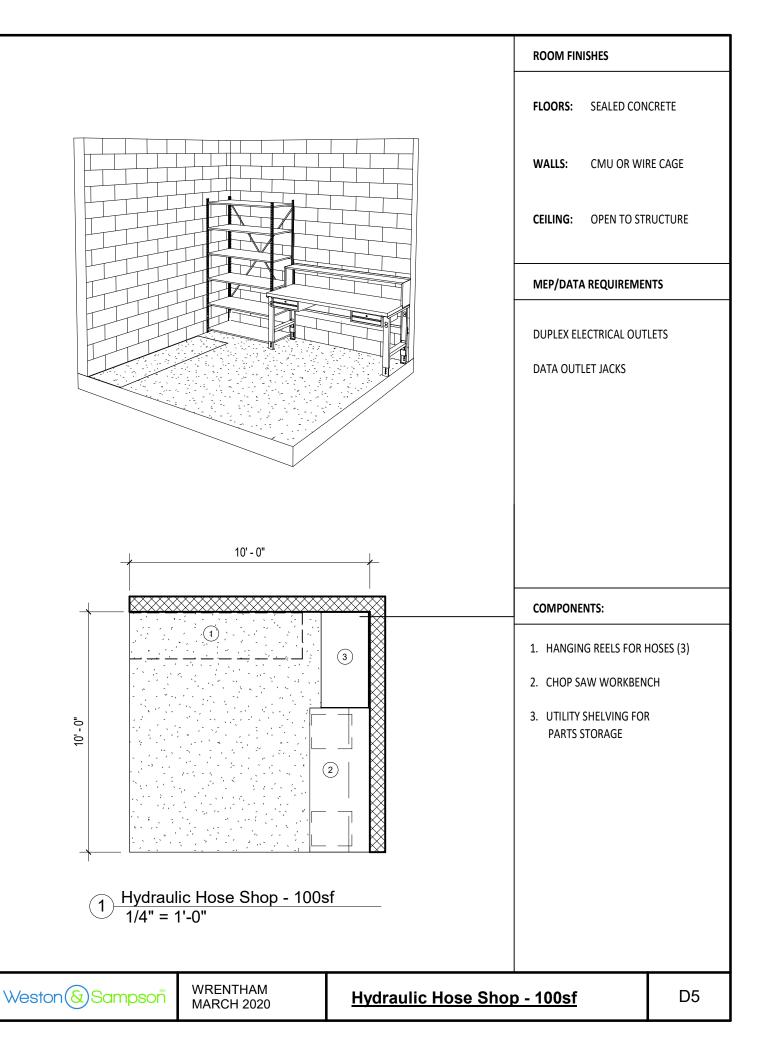


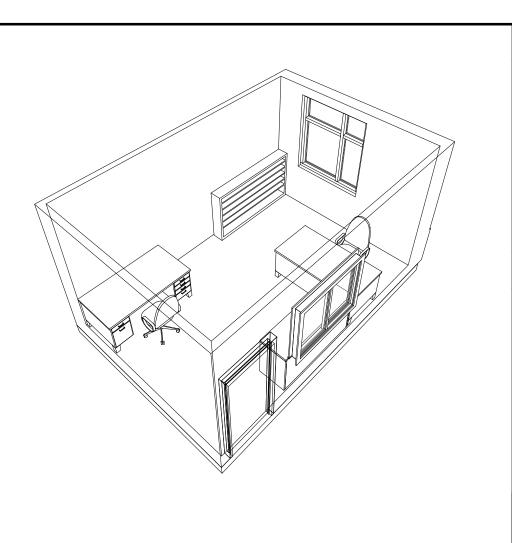


#### **COMPONENTS:**

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

Tire Storage - 216sf 3/16" = 1'-0"





FLOORS: LINOLEUM

WALLS: GWB PAINTED

**CEILING:** ACT TILES

#### **MEP/DATA REQUIREMENTS**

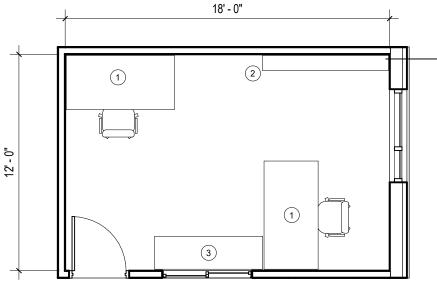
**DUPLEX ELECTRICAL OUTLETS** 

TEL/DATA OUTLET JACKS

**HEATING** 

COOLING

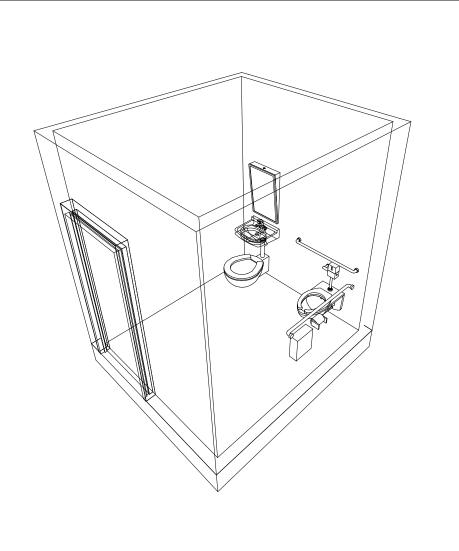
NATURAL LIGHTING W/ WINDOWS



Mechanic's Office/Reference Room - 216sf 3/16" = 1'-0"

#### **COMPONENTS:**

- 1. DESK
- 2. BOOKCASE
- 3. FILE CABINET



**FLOORS:** RESINOUS EPOXY

WALLS: CMU PAINTED

**CEILING:** ACT TILE

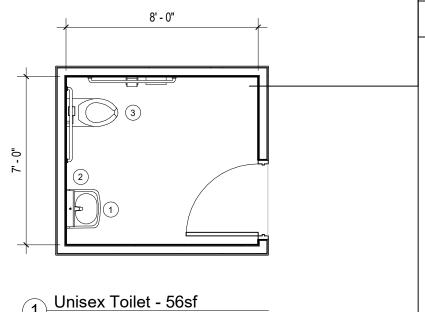
#### **MEP/DATA REQUIREMENTS**

**HEATING** 

COOLING

SEPARATE TOILET ROOM EXHAUST

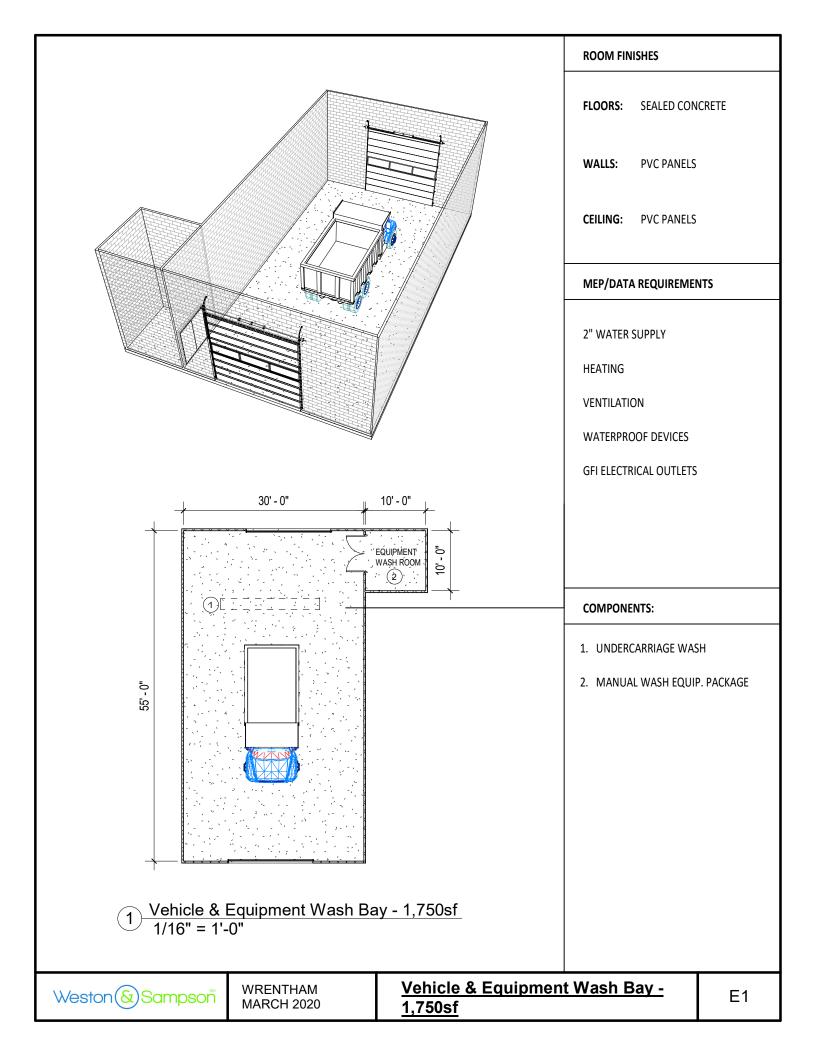
GFI DUPLEX ELECTRICAL OUTLETS

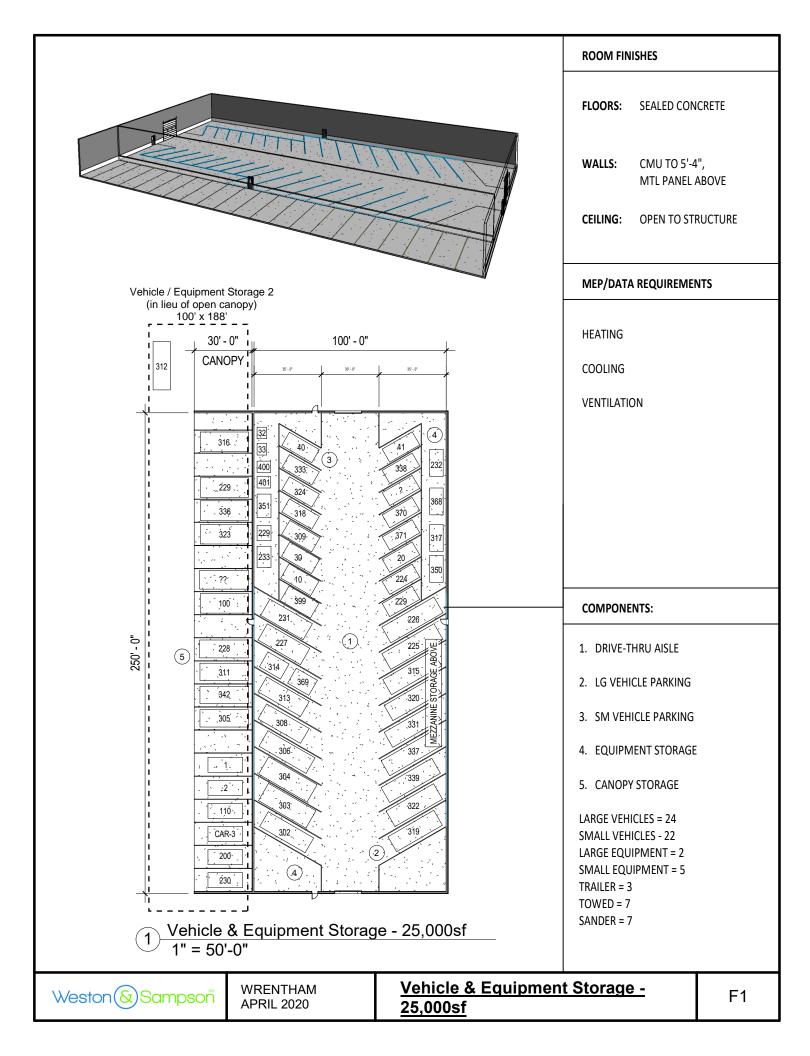


### COMPONENTS:

- 1. ADA SINK
- 2. MIRROR
- 3. ADA TOILET
- 4. GRAB BARS

1/4" = 1'-0"

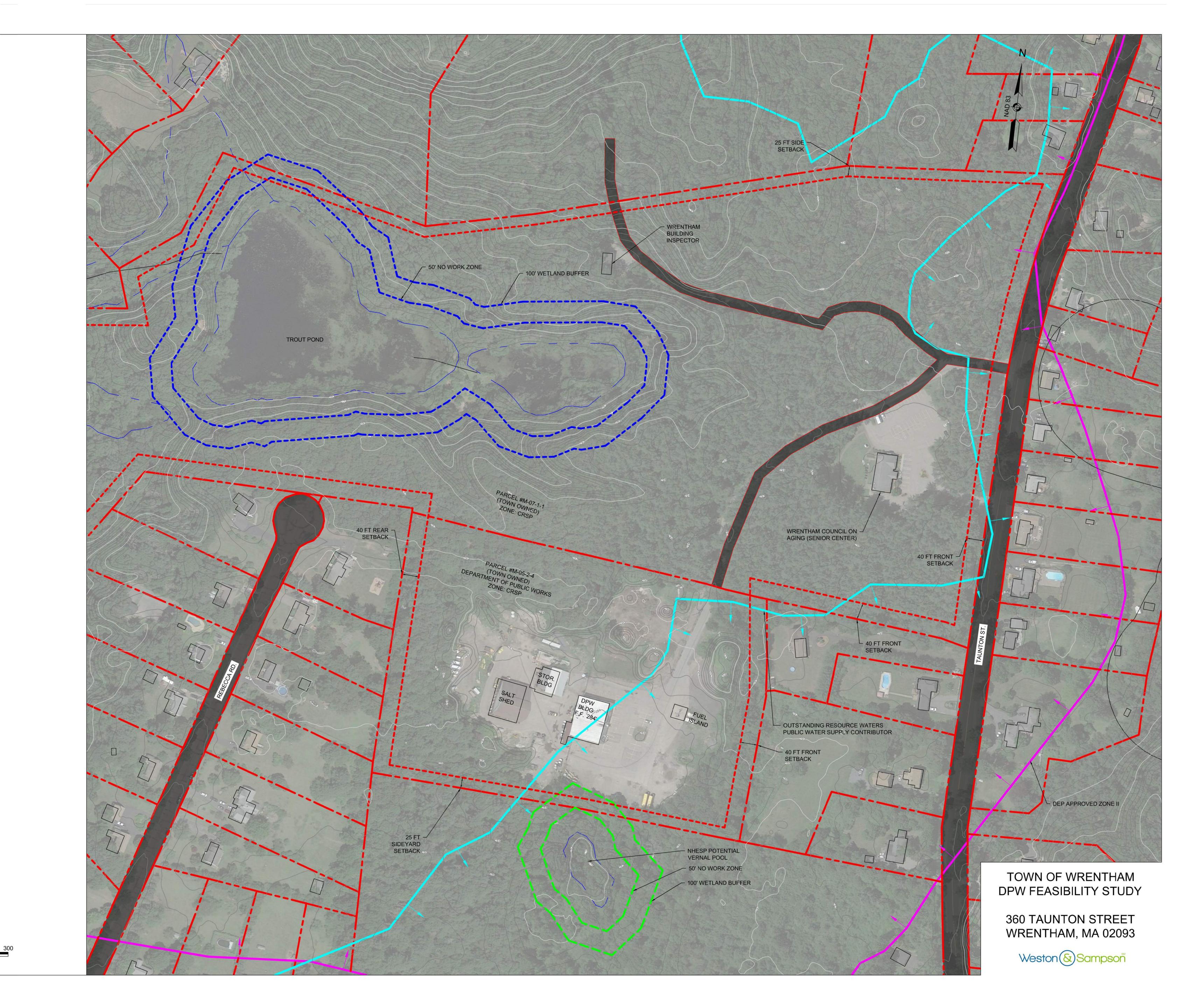




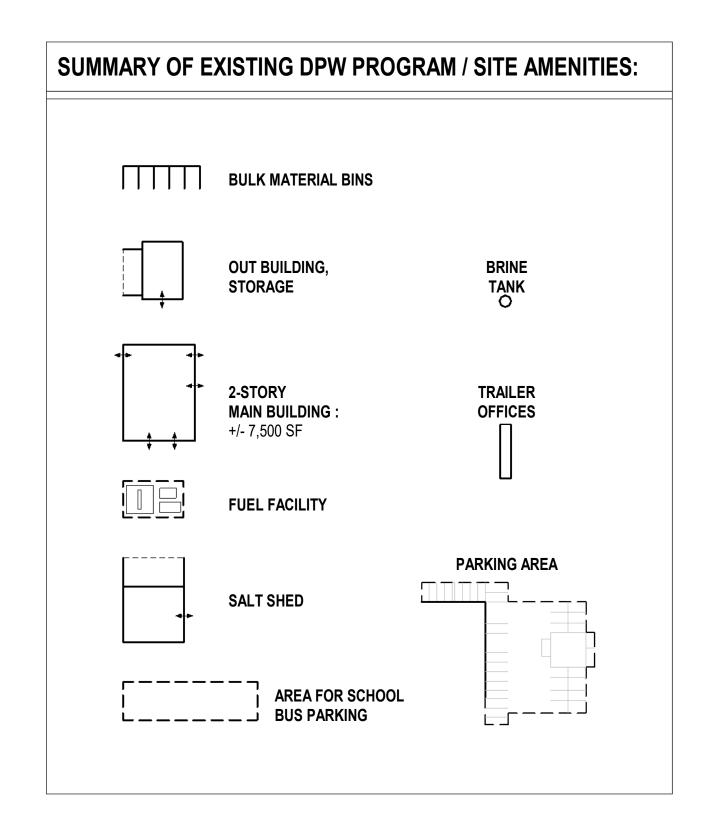
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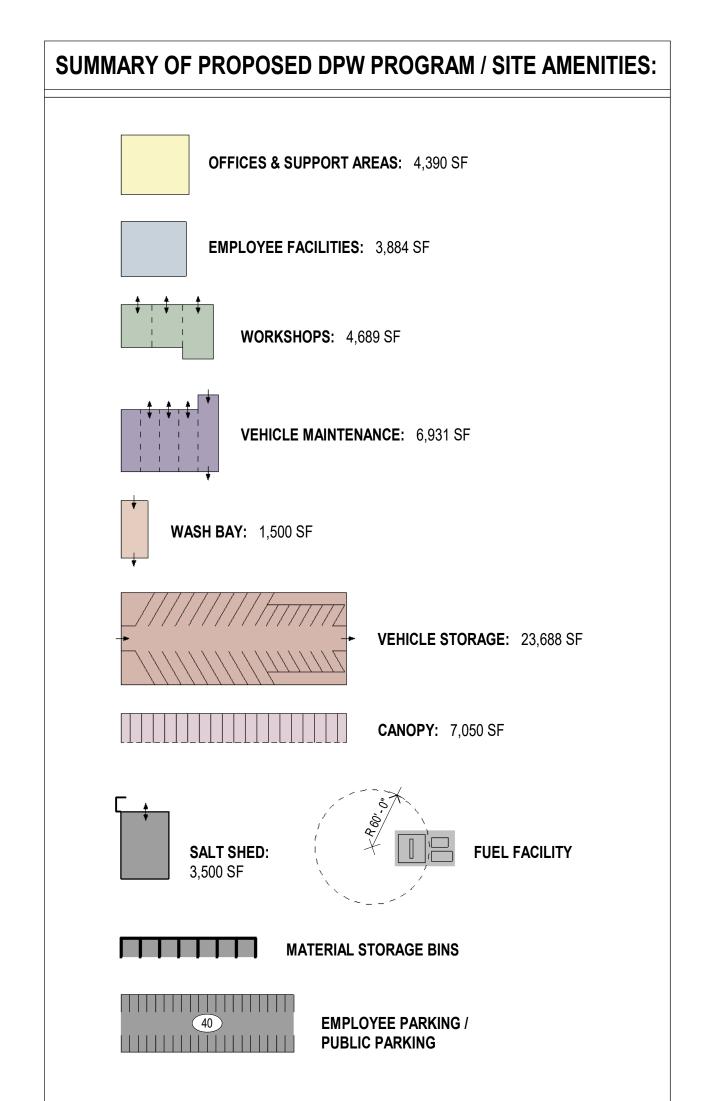
## **Section 3**

**Existing Site Assessment** 

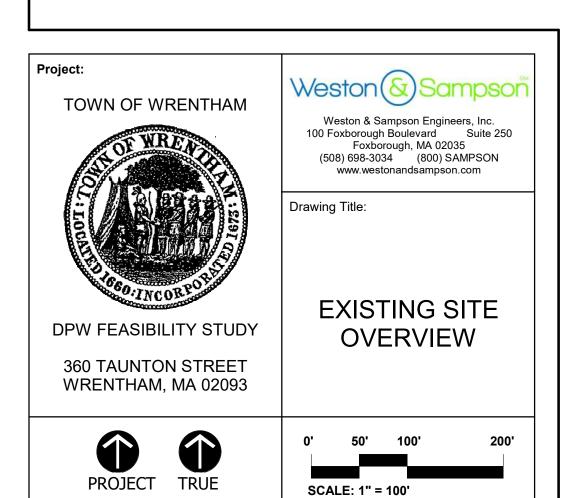


SCALE: 1" = 80'

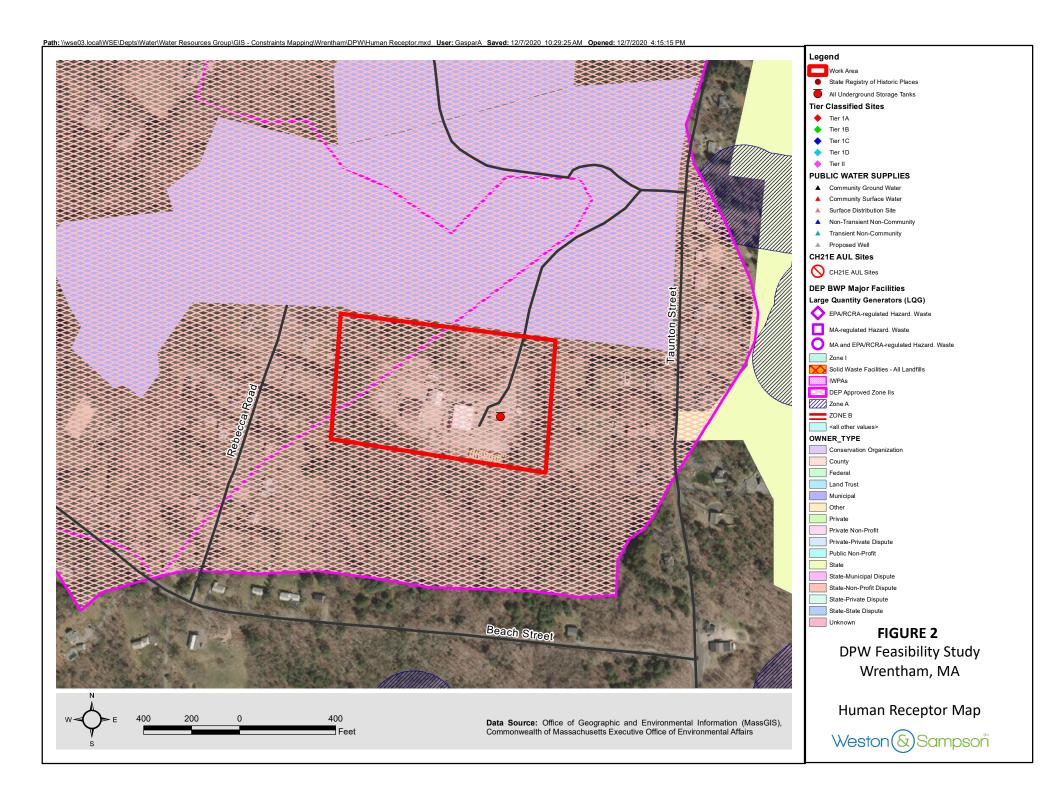








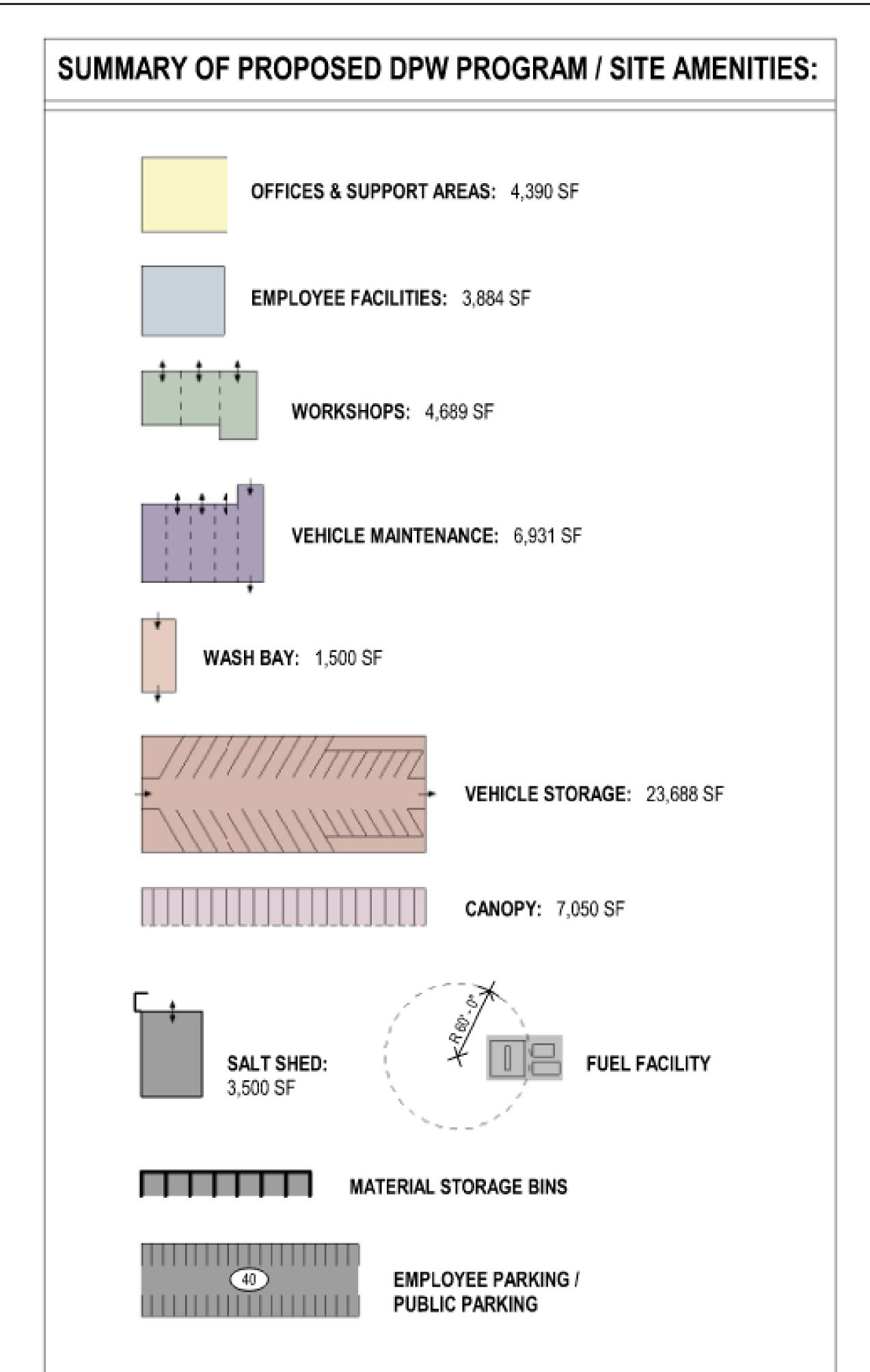
WESTON & SAMPSON COPYRIGHT 2019



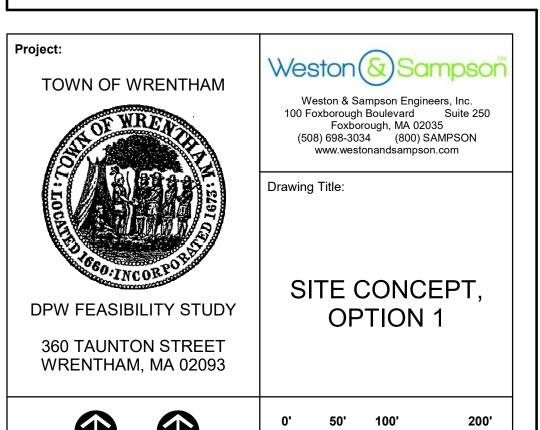
Department of Public Works
Facility Needs Assessment and Feasibility Study
FINAL REPORT

## Section 4

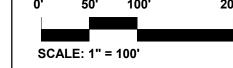
**Initial Conceptual Alternatives** 

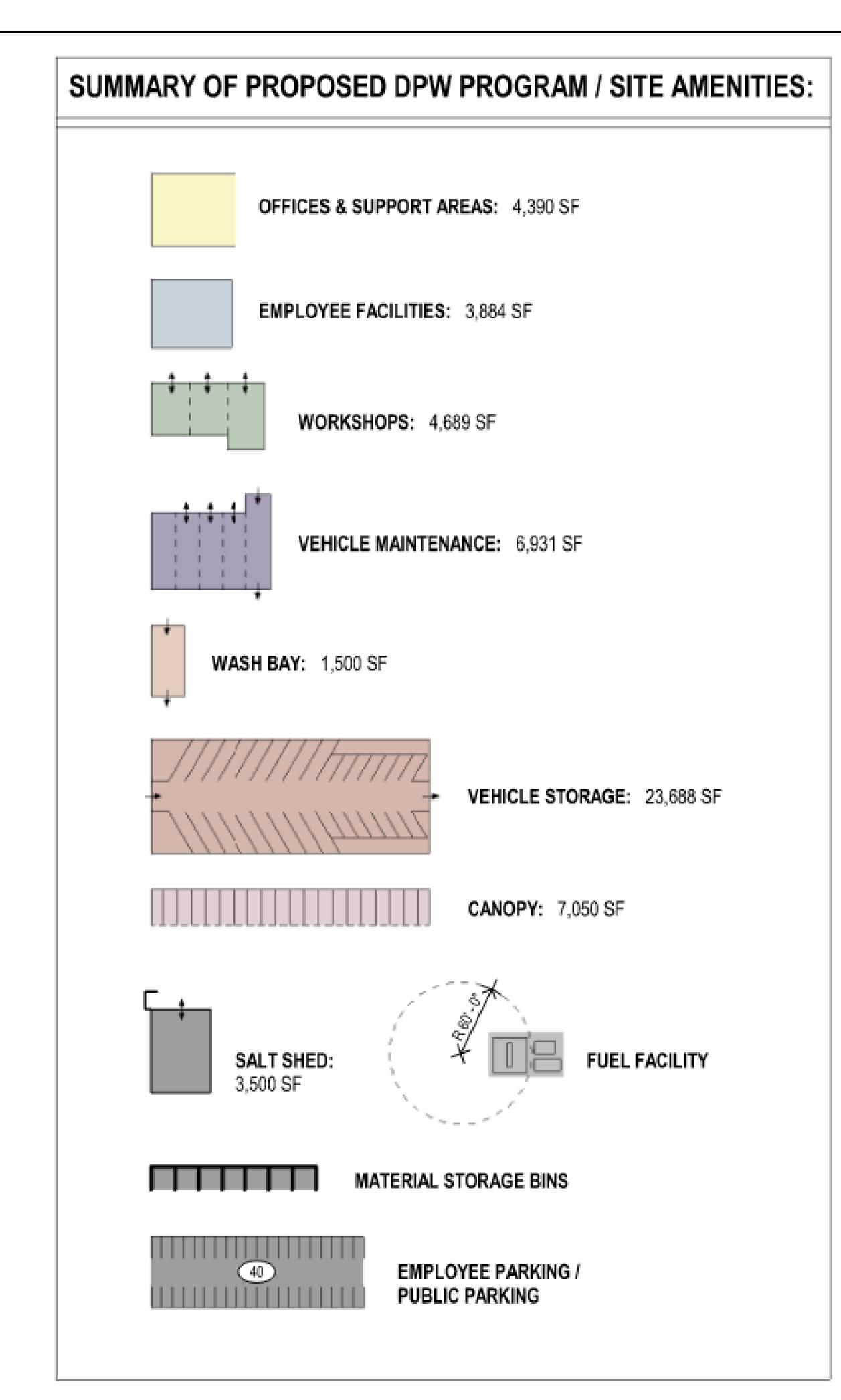




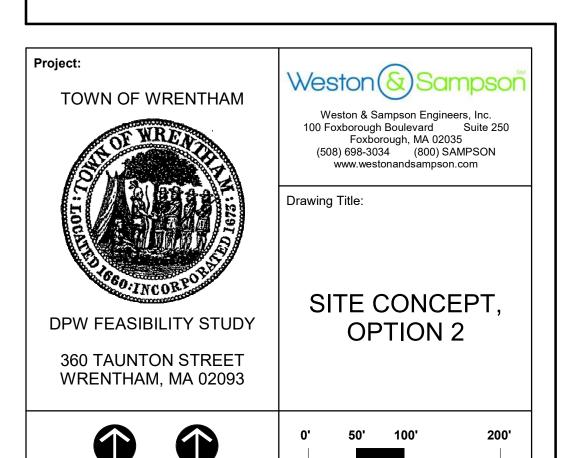




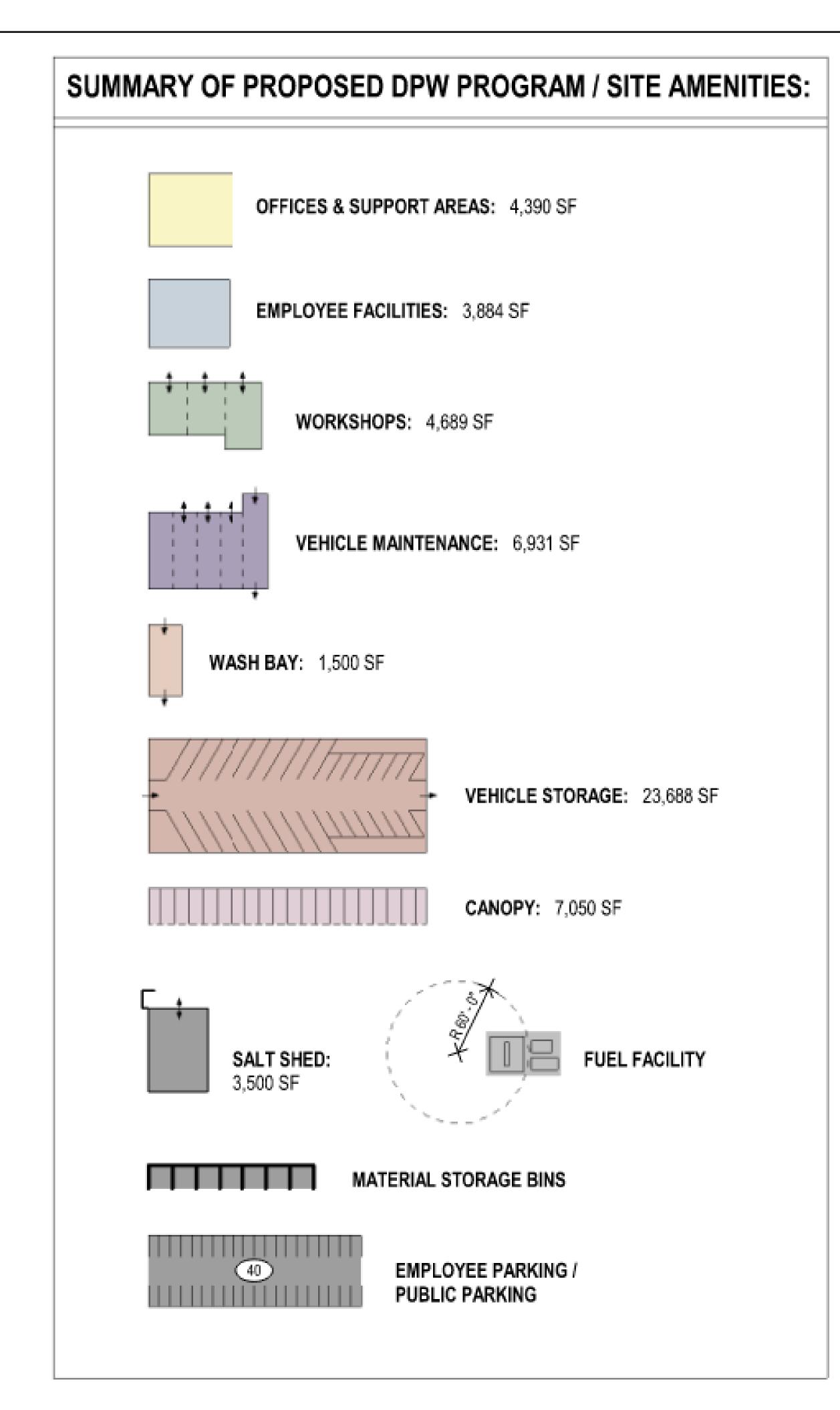








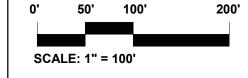


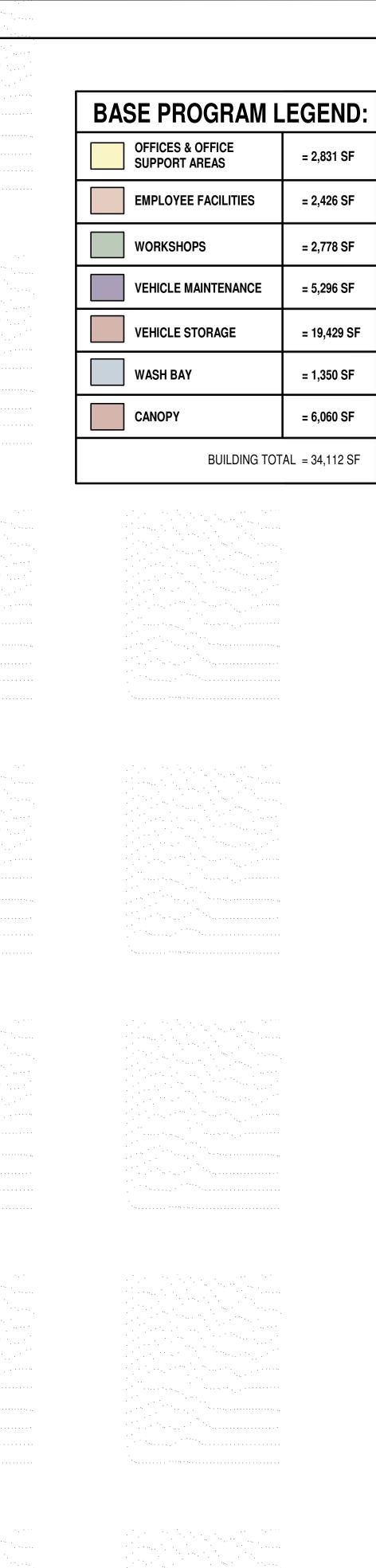




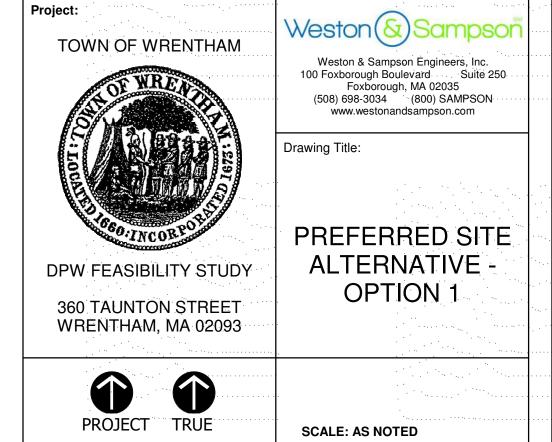








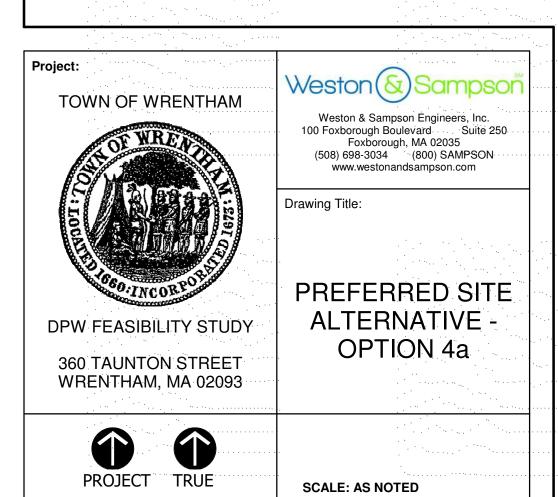




WESTON & SAMPSON COPYRIGHT 2019

BASE PROGRAM L	EGEND:
OFFICES & OFFICE SUPPORT AREAS	= 2,831 SF
EMPLOYEE FACILITIES	= 2,426 SF
WORKSHOPS	= 2,778 SF
VEHICLE MAINTENANCE	= 5,296 SF
VEHICLE STORAGE	= 19,429 SF
WASH BAY	= 1,350 SF
CANOPY	= 6,060 SF
BUILDING TOT	AL = 34,112 SF





WESTON & SAMPSON COPYRIGHT 2019

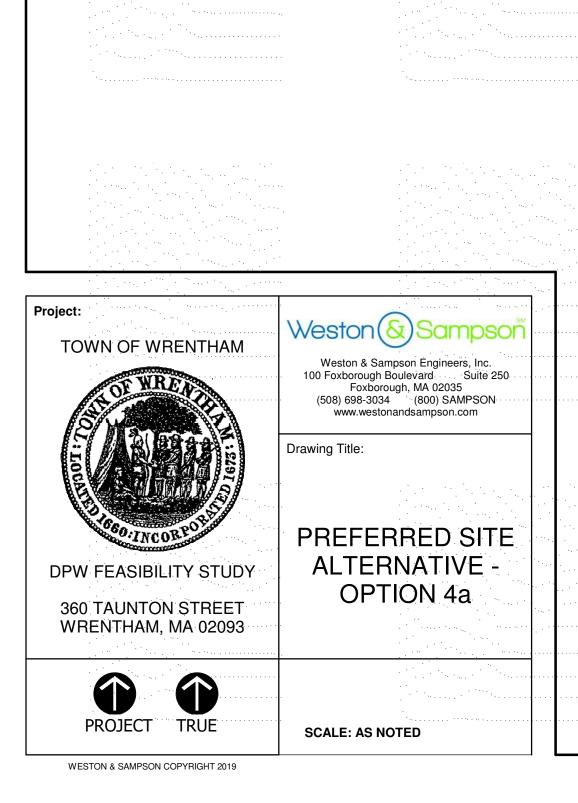
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## Section 5

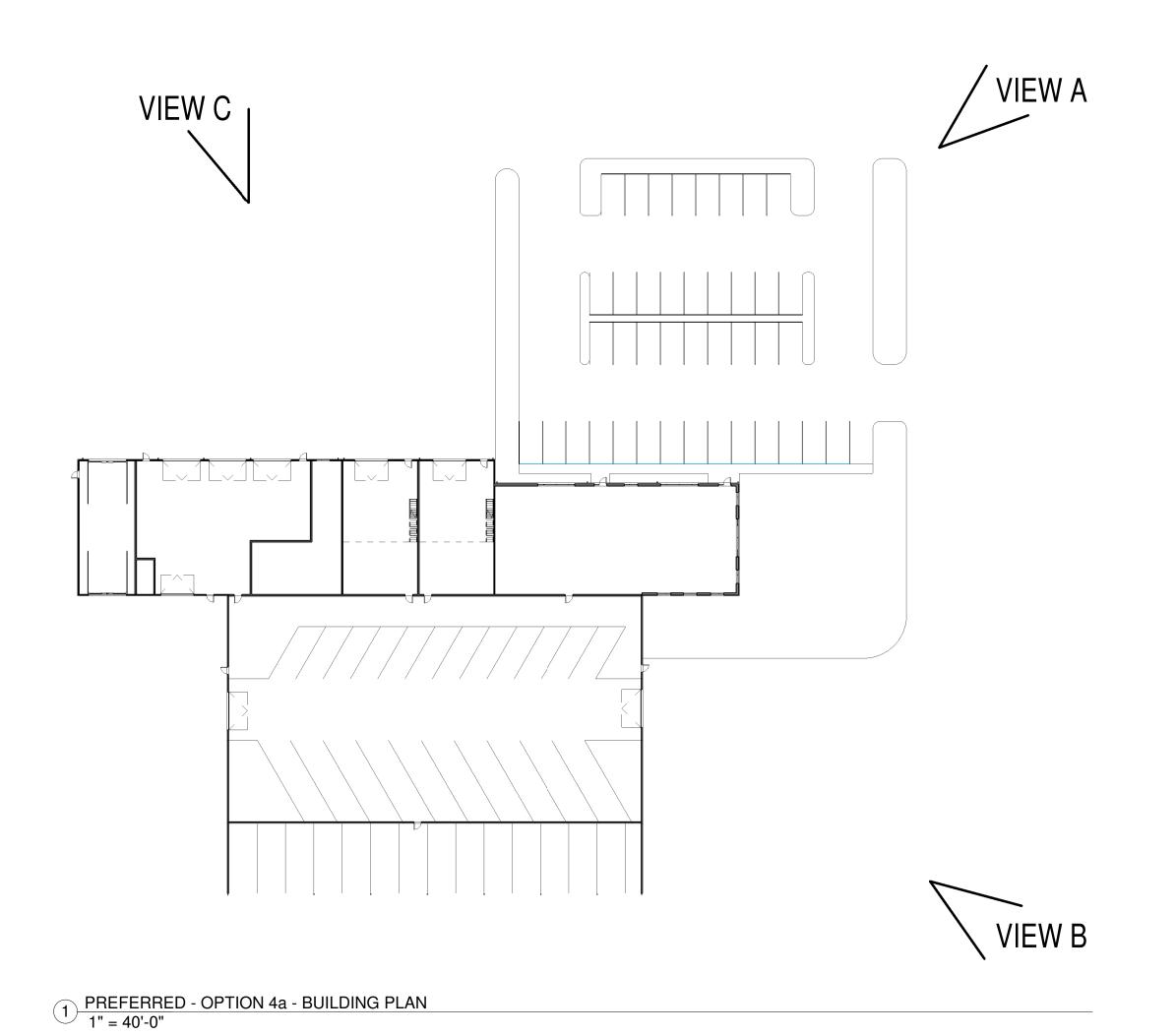
**Preferred Alternative & Massing Model** 

BASE PROGRAM L	EGEND:
OFFICES & OFFICE SUPPORT AREAS	= 2,672 SF
EMPLOYEE FACILITIES	= 2,320 SF
WORKSHOPS	= 3,764 SF
VEHICLE MAINTENANCE	= 5,048 SF
VEHICLE STORAGE	= 16,934 SF
WASH BAY	= 1,514 SF
CANOPY	= 5,300 SF











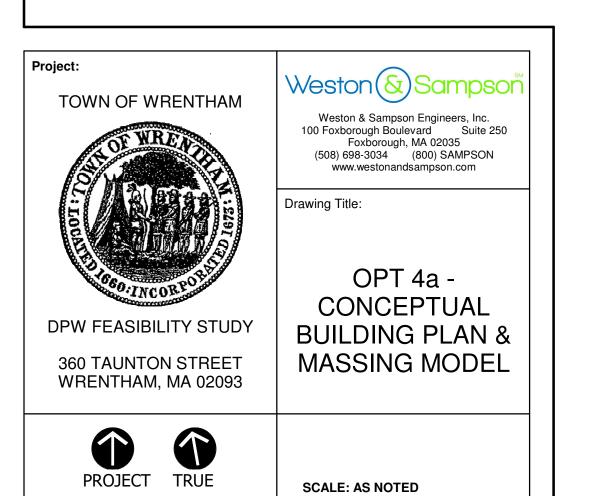
2 VIEW A - PREFERRED SITE ALTERNATIVE



3 VIEW B - PREFERRED SITE ALTERNATIVE



4 VIEW C - PREFERRED SITE ALTERNATIVE



Department of Public Works
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## Section 6

**Conceptual Cost Estimate** 

#### Town of Wrentham New Public Works Facility Budget Total Project Cost

11/19/2021

New Construction			(	2021 Cost/SF			
Area		Size (SF)	(w/	markups)		Cost	
Administration / Employee Facilities		4,720	\$	452	\$	2,133,440	
Shops		3,480	\$	317	\$	1,103,160	
Vehicle Maintenance (not including equipment)		5,065	\$	317	\$	1,605,605	
Wash		1,660	\$	595	\$	987,700	
Vehicle/Equipment Storage		16,100	\$	250	\$	4,025,000	
Added Cost for Specialty Foundations (based on 1st floor area)		31,025	\$	20	\$	620,500	
New Construction Subtotal:		31,025			\$	10,475,405	
Building Cost per SF:		338					
	Place a "x"						
Industrial Equipment			her	e if included			
- Wash Equipment	\$	84,000		Х	\$	84,000	
- Wash Equipment - Undercarriage Wash	\$	53,100		Х	\$	53,100	
- Heavy Duty Vehicle Lift (Fixed)	\$	128,000		X	\$	128,000	
- Heavy Duty Vehicle Lift (Portable)	\$	109,000					
- Light Duty Vehicle Lift (16,000 lb capacity minimum)	\$	40,000		X	\$	40,000	
- Bridge Crane	\$	73,500		Х	\$	73,500	
- Overhead Lubrication System	\$	80,000		Х	\$	80,000	
- Miscellaneous Shop and Support Equipment	\$	56,000		Х	\$	56,000	
- Storage Shelving / Benches / Racks	\$ \$	44,800		X	\$	44,800	
- Exhaust Removal System (2 units)  Industrial Equipment Subtotal:	Φ	44,000		X	\$ <b>\$</b>	44,000 <b>603,400</b>	
Fuel System					Ψ	003,400	
Fuel System Subtotal:	(Maintain and Reuse Existing) \$					-	
Building & Equipment Total:					\$	11,078,805	
Mezzanines		4,100	\$	130	\$	533,290	
Open Canopy Storage		6,475	\$	100	\$	650,725	
Site Development (acres) - assumes level site with no contamination, existing structures/utilities, etc.		3.5	\$	492,500	\$	1,723,752	
Specialty Site Work		1	\$	513,400	\$	513,400	
Salt/Sand Shed - Maintain Existing		-		129	\$	-	
		Subtotal Bldg	ı ı, Eqı	uip, & Site:	\$	14,499,972	
		Design Cor	nting	ency (6%):	\$	869,998	
		Escalation - 2022			\$	768,499	
		Escalation - 2023	•		\$	806,923	
		Total	Con	struction:	\$	16,945,392	
		Total Constru	ctior	n Cost/SF:		546	

#### Town of Wrentham New Public Works Facility Budget Total Project Cost

11/19/2021

Department of Public Works		
Budget Total Project Cost		
Owner's Soft Costs & Construction Contingencies		
A&E Fees (design, bid, const.)	\$ 1,694,539	(Assume 10% of Const. Value)
A&E Special Services	\$ 169,454	(Assume 1% of Const. Value)
Owner's Project Manager Fees	\$ 508,362	(Avg 3% of Const. Value)
Furnishings (FFE)	\$ 65,000	allowance
Communic. / Low Voltage System	\$ 150,000	allowance
Temporary Facilities	\$ -	allowance
Printing Cost - Advertisement	\$ 10,000	allowance
Legal Costs	\$ 20,000	allowance
Utility Backcharges	\$ 50,000	allowance
Commissioning	\$ 50,000	allowance
Moving Costs	\$ 20,000	allowance
Chapter 17 Test & Inspections	\$ 60,000	allowance
Owner's Contingency	\$ 100,000	allowance
Construction Contingency (5%)	\$ 847,270	allowance
	Tot	al Soft Costs: \$ 3,744,625
	TOTAL	PROJECT COST \$ 20,690,017

Construction Costs: \$ 13,366,072 Escalation Costs: \$ 1,575,422

Contingency Costs: \$ 2,337,768 11%

Soft Costs: \$ 2,897,355

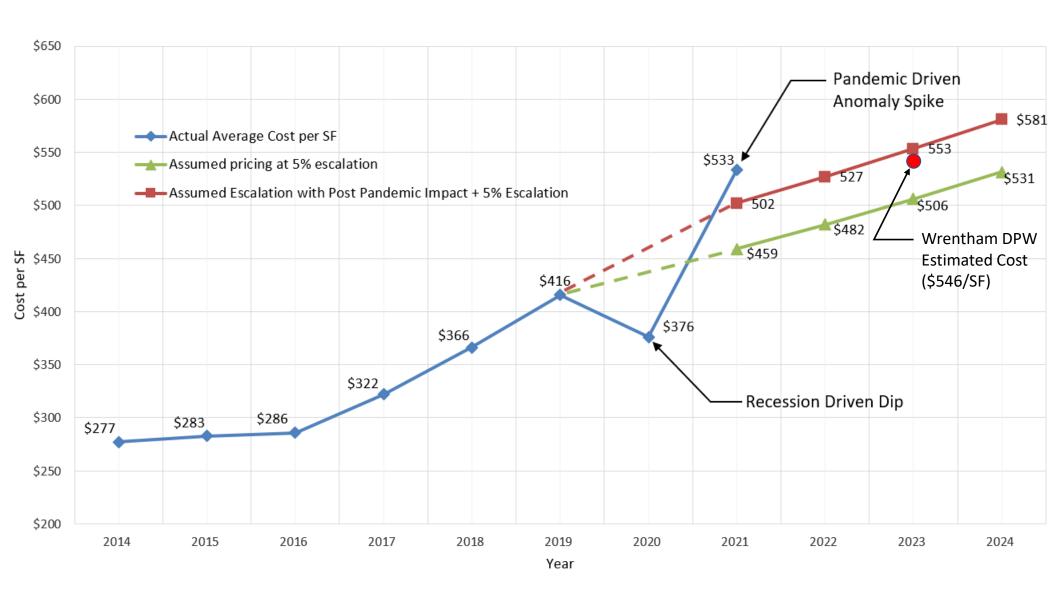
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## Section 7

**Cost Comparison to Recent DPW Facilities** 

#### Department of Public Works Facilities SUMMARY - Recent Cost Data CONSTRUCTION COST

Description	Size (SF)	Bid Date	Lo	w Bid Price	Average Bid Price	2014 Avg Cost per SF	2015 Avg Cost per SF	2016 Avg Cost per SF	2017 Avg Cost per SF	2018 Avg Cost per SF	2019 Avg Cost per SF	2020 Avg Cost per SF	2021 Avg Cost per SF
Wayland Public Works Facility	39,869	2014	\$	8,877,000	\$ 10,519,754	\$264							
Medford Public Works Facility	45,000	2014	\$	12,186,000	\$ 12,340,333	\$274							
Bourne Public Works Facility	39,040	2014	\$	10,441,002	\$ 11,063,598	\$283							
Norwood Public Works Facility	53,870	2014	\$	14,902,289	\$ 15,437,343	\$287							
Boylston Highway Facility	13,926	2015	\$	3,364,000	\$ 3,935,419		\$283						
Hopkinton Public Works Facility	42,410	2016	\$	11,532,000	\$ 12,112,833			\$286					
Orleans Public Works Facility	42,278	2017	\$	11,774,000	\$ 12,833,834				\$304				
Andover Municipal Services Facility	54,088	2017	\$	16,049,000	\$ 18,413,675				\$340				
Longmeadow Public Works Facility	44,858	2018	\$	12,707,000	\$ 14,773,364					\$329			
Rye Brook NY Public Works Facility	32,883	2018	\$	11,193,943	\$ 13,184,654					\$401			
Grafton DPW Facility	33,710	2018	\$	11,713,205	\$ 12,399,201					\$368			
Middleboro DPW Facilty	34,000	2019	\$	13,673,300	\$ 14,355,199						\$422		
Yarmouth DPW Facility	37,990	2019	\$	14,633,435	\$ 16,367,227						\$431		
Burlington DPW Facility	66,200	2019	\$	23,925,000	\$ 26,074,333						\$394		
Holden DPW Facility	42,000	2020	\$	14,519,200	\$ 15,780,624							\$376	
Rockport DPW Facility	22,658	2021	\$	12,550,000	\$ 13,799,954								\$609
Marshfield DPW Facility	25,156	2021	\$	11,071,000	\$ 11,509,058								\$458
Average Cost per SF:						\$277	\$283	\$286	\$322	\$366	\$416	\$376	\$533



#### **Department of Public Works Facilities** TOTAL PROJECT COST COMPARISON - Recent Cost Data

**TOTAL PROJECT COSTS (Construction and Soft Costs)** 

Description	Size (SF)	Bid Date	Average Const. Cost	Soft Cost	Total Cost	_	_	_	_	2023 Avg Cost per SF
Middleborough DPW TOTAL Project Cost	34,000	2019	\$14,355,199	\$2,039,700	\$ 16,394,899	\$482	\$559	\$587	\$617	\$648
Wrentham DPW TOTAL Project Cost	31,025	est. 2023	\$16,945,392	\$3,744,625	\$ 20,690,017		1	1		\$667

#### Notes

- Middleborough cost adjusted for 2021 pandemic driven spike (16%) plus an average of 5% per year for normal escalation
   Middleborough costs includes \$300K in contingency (low based on industry standards)
   Wrentham costs includes \$2.1M in contingency due to the early nature of the project

11/19/21