



## **Request for Qualifications**

### **Fleet Services Facility**

**July 9, 2021**

## **I. OVERVIEW AND PURPOSE**

The City of Concord is soliciting proposals from well-qualified consultants to provide architectural and engineering design for a new Fleet Services Facility to be located at 605 Alfred Brown Jr Ct SW. Attached is a map showing the proposed location. A space needs study was completed in 2010 for this project. Attached is the section of the report pertaining to fleet needs.

The consultant selected may be asked to provide any or all of the following services for this project: preliminary design, site plan, building plans, cost estimate, bidding documents, bidding administration, construction administration, and inspection. It is anticipated that this project will employ a construction manager at risk.

A description of the project is as follows:

The project is generally described as a new Fleet Services Facility with approximately 44,000 square feet. The new facility will contain the following functions: fleet administration, training space, break room, locker rooms, parts department, maintenance offices, maintenance bays, repair bays, tire shop and storage, machine shop, weld shop, and utility spaces along with vehicle/equipment parking and staging and vehicle fueling. It is the City's desire to incorporate high performance, energy efficient HVAC, plumbing, electrical, mechanical, security, and fire alarm systems and controls. City of Concord general preferences are attached.

## **II. SCOPE OF WORK**

The following is a general description of the work required. This is not intended to be all-inclusive.

1. Schematic Design
  - a. Ascertain requirements of the project from the owner.
  - b. Study existing conditions of site.
  - c. Prepare schematic drawings.
  - d. Prepare probable construction cost based on area, volume or other current unit costs.
2. Design Development
  - a. From approved schematic drawings, complete design drawings including site and floor plans, elevations and other drawings.
  - b. Prepare probable construction cost based upon design drawings..
3. Construction Documents
  - a. From approved design drawings, complete working drawings and specifications.
  - b. Obtain all permits and approvals for construction.
  - c. Prepare probable construction cost based upon construction documents.

4. Contract Administration and Construction Inspection, as required.
  - a. Attend pre-construction conferences.
  - b. Shop drawing review.
  - c. Provide construction inspection.
  - d. Attend monthly progress meetings.
  - e. Review change orders.
  - f. Review pay requests from contractors.

Questions concerning the scope of this project should be directed via email to Sue Hyde, Engineering Director at the email below with the subject line shown. Any amendments to the RFQ shall be made in writing and distributed as an addendum.

Sue Hyde, Engineering Director  
Email: [hydes@concordnc.gov](mailto:hydes@concordnc.gov)  
Subject: Fleet RFQ

**Firms should have no contact related to this project with elected officials or City of Concord Employees other than as directed herein, during the RFQ process.** Any such contact will subject the firm to immediate disqualification for consideration for this project. At the option of the selection committee interviews may or may not be held with three or more of the applicants if it is determined to enhance the selection process.

### **III. SUBMITTAL REQUIREMENTS**

The selection of the firm will be based on the totality of the qualifications of the firm as presented in the detailed qualifications statement. The presence or absence of one or more of the items listed below, except for those items required by law, shall not be totally disqualifying but shall be taken into consideration as a portion of the totality reflecting positively or negatively on the qualifications of the firm. Qualification statements should clearly and concisely address the following:

- Firm name and location of office where work will be performed, including project manager and any known sub-consultants.
- Specialized or appropriate expertise in design of fleet service centers.
- Experience in designing publicly funded and/or governmental projects in North Carolina.
- The project manager, key personnel, and any sub-consultants who will be involved with this project; their qualifications and experience as related to the scope of work detailed above as well as their anticipated assignments related to this project, including specific information on their experience with similar projects.
- Other work commitments of the specified key personnel during this project time frame and work capacity of the firm as a whole.
- Client references for related work done in the past five years, including name, address, telephone number and contact person most involved with the project.

- Historical data on comparable projects completed over the past five years showing schedule performance and change order history, including original budget, pre-bid estimate, guaranteed maximum price, if applicable, and final cost.
- Documentation of any history of litigation associated with project performance and/or professional liability.
- Documentation of the firm's safety history.
- Documentation of the firm's financial standing and insurance coverage.

#### IV. QUALIFICATION STATEMENT DEADLINE

The statement of qualifications shall be limited to 15 pages inclusive of the cover sheet. ONLY ELECTRONIC SUBMISSIONS WILL BE ACCEPTED. Submissions exceeding the 15-page limitation will not be considered. Submissions should be in .pdf format. **Electronic submission of the statement of qualifications are due no later than 2:00 p.m. on August 3, 2021 at the email address below.** No statement of qualifications will be accepted after this time.

The City reserves the right to reject any and all statements of interest. It is anticipated that a firm will be selected and notified by end of August 2021.

The statement of qualifications should be sent to the following e-mail address as a .pdf file: [chestnut@concordnc.gov](mailto:chestnut@concordnc.gov). An electronic receipt will be sent when your submission is downloaded to our server. Paper copies will not be accepted. The subject line should contain the firm's name and "SOQ for Fleet Services Facility".

#### V. SELECTION CRITERIA

The considerations below will be utilized for selection of the firm. Selection will be made after thorough review conducted by a City panel. Actual interviews may be conducted after review of the responses by interested firms.

1. The firm's recent experience, knowledge, and familiarity in the construction of similar projects and the firm's demonstrated ability in construction incorporating the client's design preferences.
2. The successful experience of the staff to be assigned to this project to perform the type of work required within the budget established by the Concord elected officials and with minimal to no change orders.
3. Adequate staff and/or consultant team in order to meet a time schedule established for the work including current workload.
4. Proposed design approach for the project.
5. Construction administration capabilities.

6. The firm's satisfactory performance on previous contracts including a positive client relationship, commitment to the project budget, no major legal or technical problems and sufficient supervision of the construction project.
7. The firm's financial ability to undertake the work and assure the liability as well as adequacy of an accounting system to identify costs chargeable to the project.
8. Any other factors that may be applicable for this project.

It is an absolute requirement of the City that the project work site and work force be drug free and that associated individuals, including subcontractors, working on the project be free of prior or pending felony convictions, the qualifications statement should include a commitment to this requirement and an indication of the plan of the firm to ensure compliance with this requirement.

The City of Concord panel will negotiate a contract with the top rated firm following selection. If a contract cannot be successfully negotiated with the top rated firm, the panel will proceed to the second rated firm. Firms that are not selected will be notified.

In order to offer architectural, engineering, or landscape architectural services in response to this solicitation, the proposing firm must be properly licensed to practice Architecture, Engineering, or Landscape Architecture in the State of North Carolina.

## **VI. PROJECT SCHEDULE**

This project is an approved capital improvement project and funding is available therefore the project will proceed as quickly as possible.

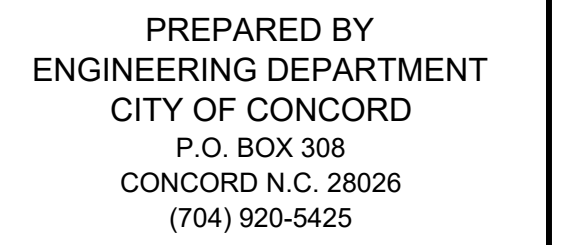
## **VII. CONTRACTING**

Any contract developed for this work shall be construed and enforced in accordance with the laws of the State of North Carolina. Any controversy or claim arising as a result of contracting shall be settled by an action initiated in the appropriate division of the General Court of Justice in Cabarrus County, North Carolina.

## **VIII. EQUAL EMPLOYMENT OPPORTUNITY**

The local government of the City of Concord does not discriminate administering any of its programs and activities. The Consultant(s) awarded the contract for work will be required to assure that no person shall be denied employment or fair treatment, or in any way discriminated against on the basis of race, sex, religion, age, national origin, or disability.



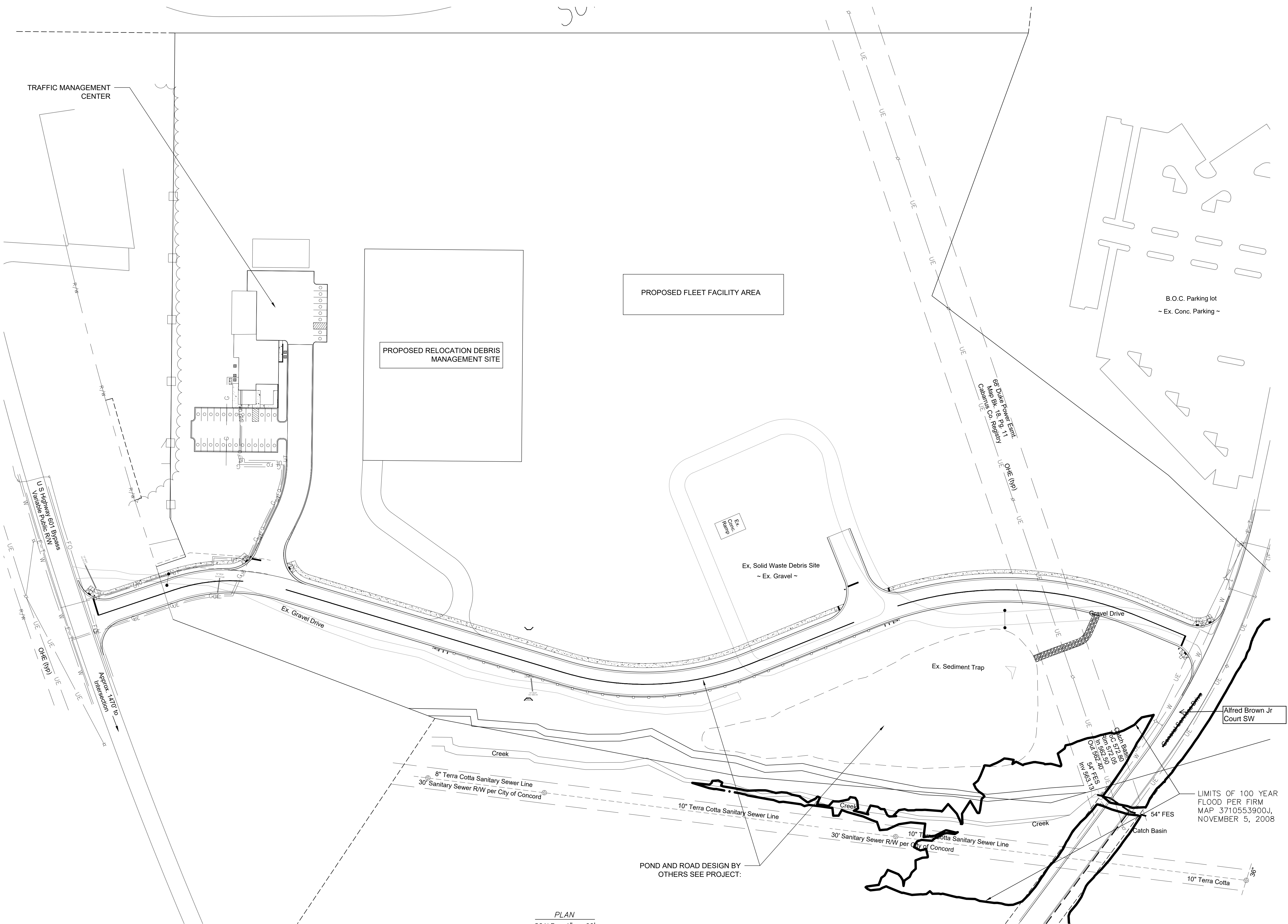


Surveyor's Seal

## PROJECT #:

DESIGNED BY: EAB	REV. #	DATE	DESCRIPTION	BY
DRAWN BY: BCC				
CHECKED BY: EAB				
SCALE: AS SHOWN				
DATE: 06/29/21				
PROJECT NUMBER:				
SHEET: 1				
OF: 1				

C:\3\Eng\Engineering Projects\2014\020 Traffic\ManCenterDesign\2014-020 Traffic Site Grading.dwg Jun 29, 2021 - 3:29pm



# CITY OF CONCORD - ALFRED M. BROWN OPERATIONS CENTER

## FLEET SERVICES DEPARTMENT Space Needs Assessment



### General Description of Services

Fleet Services operates a full-service vehicle and equipment shop that currently maintains over 1,000 pieces of equipment and employs 2 shifts spanning the hours of 6 a.m. to 12:30 a.m. Equipment maintenance ranges from small engine repair (lawn mowers, chain saws, etc.) to heavy-duty trucks and equipment (dump trucks, backhoes, excavators). Maintenance includes inspections, preventative maintenance and major repairs. Fleet also performs minor fabrication and machining, light and heavy duty tire work, and makes hydraulic hoses.

While Fleet is not responsible for the washing or cleaning of City vehicles and equipment, a pull-through wash bay is attached to the current building. However, this bay is currently not utilized due to inadequate equipment and water reclamation system.

Fleet operates and maintains two fueling facilities, which are located at the Brown Center and Fire Station #9. The BOC has two 12,000 gallon above ground fuel storage tanks, and Fire Station #9 has two 10,000 gallon underground fuel storage tanks. Most fueling is performed with fuel keys, therefore access of Fleet managers to the fueling stations is importation, since keys must be constantly maintained and updated.

Fleet also manages the surplus sale of vehicles and equipment to the public. The Department must be accessible to external customers such as sales / vendors and also the public for viewing and purchase of vehicles.

### Department Interaction

Fleet Services provides maintenance and services of equipment for all Departments located at the Brown Center on a regular basis in addition to City of Concord Police and Fire Vehicles, which are located off site.

### FUTURE GROWTH

As Fleet Services is responsible for the maintenance and service of almost all City equipment, the growth of this Department is directly related to the services offered and growth of all other Departments located at the Brown Center. In addition, heavy equipment continues to become more complex and sophisticated, especially those with hydraulics, which require more regular maintenance.

**Y A T E S ■ C H R E I T Z B E R G ■ H U G H E S   A R C H I T E C T S**

704.788.2000

■ 145 Union Street South

■ Concord, NC

■ [www.ycharch.com](http://www.ycharch.com)

The Solid Waste Department is currently performing a study to determine the feasibility of the City providing automated residential garbage and recycling collection, which is currently outsourced to a waste management contractor. If this service is provided by the City in the future, Solid Waste will add a significant amount of new waste collection equipment, most of which contain complex hydraulic systems that would be serviced by Fleet. Therefore, possibility of automated garbage collection is of particular importance to the future growth of the Fleet Services Department.

## **FUTURE RECOMMENDATIONS**

### **General**

Fleet Services does not currently occupy any space within the Administration Building, Ready Room Building, Warehouse or Equipment / Laydown Yard and is not expected to utilize any of these spaces in the future. Fleet functions as a relatively autonomous operation and does not require specific proximity to Departments or areas on the site, other than for the convenient dropping-off and picking-up of equipment by the various Departments.

Fleet currently occupies a building which contains a main level of 13,900 square feet and a storage mezzanine of approximately 3,200 square feet for a total building of 17,100 square feet. The building was originally constructed to service a City equipment fleet of far less stock than is currently maintained. The existing building is located on a part of the site which makes it particularly difficult to expand, due to physical site constraints and vehicle / equipment circulation.

The current Fleet building contains space deficiencies for all program components such as office space, service bays, shops, storage and toilets / lockers. The support spaces, such as parts, tool / tire storage, and toilets / lockers are located in the center of the building and are therefore, difficult to expand. In addition, due to it's location on the site, the Fleet facility does not have sufficient staging area for equipment to be serviced, new equipment to be set-up or surplus equipment to be sold.

Circulation around the existing fueling station has been an issue in the past. The fueling station is located adjacent to the primary drive for all vehicles and equipment, including visitors to the Brown Center and includes two-way fueling islands. The location of the fueling station has caused congestion of this primary circulation route. The Fleet Department does however, prefer for the fueling station to be located near the Fleet facility for management purposes. In addition, the City should encourage more use of the remote fueling center located at Fire Station #9 by crews before returning to the Brown Center to help alleviate traffic at the fueling station.

Due to the significant existing space inadequacy, difficulty of the current building expansion and site constraints, it is the recommendation of this study that Fleet Services be relocated into a new building on the new portion of the site. A new, more flexible and expandable building should be designed to accommodate future growth. In addition, the site needs to



allow for adequate staging of vehicles / equipment and also be designed to expand in the future.

### **Future Use of Existing Fleet Services Building**

The existing Fleet building, with fairly minor modifications, could be utilized by a number of Departments if a new Fleet facility is constructed in the future. The existing office area consists of a large, open configuration which could be utilized for an additional meeting and training space for many Departments.

The City of Concord Communications Department radio shop would be particularly well suited for use of this facility, since the existing building contains several roll-up doors, maintenance bays and storage areas that the radio shop requires. In addition, the radio shop typically installs and upgrades systems in much of the equipment housed at the Brown Center, as well as police and fire vehicles housed at various off-site locations (but which are also maintained by the Fleet Department at the Brown Center). Currently, the radio shop is located off-site, several miles away from the BOC, requiring significant additional time and staff to transport equipment back and forth. Therefore, the radio shop would be better located on the Brown Center site. The Communications Department prefers, if possible, that the radio shop be located within a separate facility than Fleet Services, due to the specialized and sophisticated communications equipment stored and installed in vehicles and equipment.

The existing Fleet building could also be utilized by the City of Concord Fire Department for repair of fire breathing apparatus. A clean working room and area for storage is needed by this Department and no such space is currently available within any of the City fire stations. The Fire Department estimates an area of approximately 500 square feet would be adequate for this function, which could be accomplished in a number of spaces within the existing Fleet building such as in one of the service bays, on the storage mezzanine or potentially in the existing front office area.

The Buildings and Grounds wood shop would be better located out of the Warehouse (where it is currently located) to allow for efficient use of that space for more high bay storage. The wood shop could be located within a portion of the service bays of the existing Fleet building. In addition, Buildings and Grounds could utilize part or all of the existing storage mezzanine for storage of various items which are not inventory controlled by the Purchasing Department.

GANNETT FLEMMING      TABLE FS-1  
ESTIMATED FUNCTIONAL AREA REQUIREMENTS FOR FLEET SERVICES DEPARTMENT AT BROWN OPERATIONS CENTER

**FLEET SERVICES DEPARTMENT**

Description	Current Quantity	10-Year Projection Quantity	20-Year Projection Quantity	Current Square Footage	10-Year Square Footage	20-Year Square Footage	Space Type	Comments
<b>Fleet Administration</b>								
Director	1	1	1	225	175	175	Office	Existing office very large.
Administrative Assistant	1	1	1	640	120	120	Office	Existing area "underutilized", as it was originally sized to include a dispatch area.
Operations Manager	1	1	1	180	120	120	Office	Position Currently Vacant. Existing office noisy due to proximity to shop.
Lobby/Waiting	0	1	1	In Admin. Asst. area	150	150	Waiting	Near Administrative Assistant.
Work Room	0	1	1	In Admin. Asst. area	120	120	Work Room	Near Administrative Assistant.
Files	0	1	1	In Admin. Asst. area	120	120	Storage	Near Administrative Assistant.
Conference	0	1	1	None	200	200	Conference	
Men's Toilet	1	1	1	35	60	60	Toilets	
Women's Toilet	1	1	1	35	60	60	Toilets	
Storage	0	1	1	None	120	120	Storage	
Net Total				1,115	1,245	1,245		
Grossing factor		30%		385	370	370		Grossing factor for circulation, wall thicknesses and mech. / elec. closets.
Gross Total				1,500	1,615	1,615		

**Common Spaces**

Training	0	1	1	None	750	750	Training	Training Room to accommodate 25-30 people.
Break Room / Kitchen / Vending	1	1	1	325	400	400	Kitchen / Lunch Room	
Men's Shop / Toilet / Lockers	1	1	1	150	600	600	Toilet / Lockers	
Women's Shop / Toilet / Lockers	0	1	1	None	200	200	Toilet / Lockers	Not currently provided.
Mechanic Lockers	12	24	31	See above	See above	See above	Lockers	Total number of lockers for Mechanics, Parts, On-Site Fire & Radio.
Additional AGC Mech. Lockers	0	2	4	See above	See above	See above	Lockers	Additional required for mechanics dedicated to Automated Garbage Collection vehicles.
Janitor	1	1	1	50	80	80		
Net Total				525	2,030	2,030		
Grossing factor		30%		75	610	610		Grossing factor for circulation, wall thicknesses and mech. / elec. closets.
Gross Total				600	2,640	2,640		

# FLEET SERVICES DEPARTMENT

Description	Current Quantity	10-Year Projection Quantity	20-Year Projection Quantity	Current Square Footage	10-Year Square Footage	20-Year Square Footage	Space Type	Comments
-------------	------------------	-----------------------------	-----------------------------	------------------------	------------------------	------------------------	------------	----------

## Parts Department

Parts Manager	1	1	1	120	120	120	Office	Needs enclosed office near clerks.
Parts Clerk	1	2 (1st Shift) 1 (2nd Shift)	2 (1st Shift) 1 (2nd Shift)	50	100	100	Work Station	Provide 6' x 8' workstations
Issue Area	0	1	1	None	75	75	Counter	
Secure Tool Storage	1	1	1	160	300	300	Cage / Walk In Closet	Existing is cage area is within shop. Dedicated storage space (15' x 20') preferred.
Parts Storage - Main Floor Only (Mezz. listed elsewhere)	1	1	1	625	2,500	2,900	Manual Shelving Storage	Assumes Just In Time by Vendors. Projection basis: ~ 2 SF / Rolling stock. High density storage will reduce floor area. Detailed design should include study to identify needs, options, etc. for efficient storage space.
Shipping/Receiving	0	1	1	None	250	250	Shipping/Receiving	Dedicated interior area for shipping / receiving products.
Loading Dock	0	Only if req'd by elevations	Only if req'd by elevations	None	Included above	Included above	Shipping/Receiving	Dedicated exterior loading/unloading area on site. Loading dock necessary only if grade elevations require.
Net Total				955	3,345	3,745		
Grossing factor		25%		Included	840	940		Grossing factor for circulation, wall thicknesses and mech. / elec. closets.
Gross Total				955	4,185	4,685		

## Maintenance Offices

Fleet Coordinator	1	1	1	140	120	120	Office	Office opens to shop area.
Shop Foreman	1 per shift	1 per shift	1 per shift	140	140	140	Office	Office shared across two shifts adjacent to Fleet Coordinator and opens to shop area.
Copy/Records Supplies	0	1	1	In Janitor's Closer	120	120	Locate Near Coordinator	
Manuals/ Library	0	1	1	In Janitor's Closer	100	100	Locate Near Coordinator & Foreman	Space requirements expected to decrease as industry moves to computer manual format.
Storage	1	1	1	55	150	150	Storage	Secure storage room.
Net Total				335	630	630		
Grossing factor		25%		-	160	160		Grossing factor for circulation, wall thicknesses and mech. / elec. closets.
Gross Total				335	790	790		

# FLEET SERVICES DEPARTMENT

Description	Current Quantity	10-Year Projection Quantity	20-Year Projection Quantity	Current Square Footage	10-Year Square Footage	20-Year Square Footage	Space Type	Comments
<b>Maintenance Bays - Lift Bays</b>								
Cars & Light Vehicles	3	3.7	4.5	2,030	2,240	2,800	Repair Bays with Lifts	10 Year: 4 Bays @ 35' x 16' 20 Year: 5 Bays @ 35' x 16'
Medium Vehicles	1	1.2	1.4	560	560	1,120		10 Year: 1 Bay @ 35' x 16' 20 Year: 2 Bays @ 35' x 16'
Buses, ORC, Heavy Veh. 40' or Less	1	1.3	1.5	640	990	1,980		10 Year: 1 Bay @ 55' x 18' 20 Year: 2 Bays @ 55' x 18'
Heavy/Fire App. > 40'	0	1	1	None	1,300	1,300		10 Year: 1 Bay @ 65' x 20' 20 Year: 1 Bay @ 65' x 20' Rotary Model 100/42 surface mounted parallelogram lift with entry and exit ramps is 704" long = 58'-8"
Total Lift Bays	6	8	11	3,230	5,090	7,200		10 Year: 1 Small Engine; 4 Light Cap., 1 Med. Cap., 1 Heavy Cap.; 1 Fire App 20 Year: 1 Small Engine; 5 Light Cap., 2 Med. Cap., 2 Heavy Cap.; 1 Fire App

## Maintenance Bays - Flat Bays

Small Engine Repair Bay	1	1	1	480	480	480	Flat Repair Bays without Lifts	10 Year: 1 Bay @ 30' x 16' 20 Year: 1 Bay @ 30' x 16'
Cars, Light & Med. Vehicles	3	3.69	4.43	1,680	2,240	2,800		10 Year: 3 Bays @ 35' x 16' + 1 Bay @ 35' x 20' end to end w/ Flat Fire Apparatus Bay to yield 100' long pull-through bay for tractor w/ Low Boy trailer 20 Year: 4 Bays @ 35' x 16' + 1 Bay @ 35' x 20'
Buses, ORC, Heavy Veh. 40' or Less	1	1.28	1.49	680	990	990		10 Year: 1 Bay @ 55' x 18' 20 Year: 1 Bay @ 55' x 18'
Radio / Comm.	Currently Off -site	1.24	1.48	Currently Off -site	1,440	1,440		10 Year: 1 Bay @ 35' x 16', 1 Bay @ 55' x 18' 20 Year: 1 Bay @ 35' x 16', 1 Bay @ 55' x 18'
Heavy/Fire App. >40'	Currently Off -site	1.33	1.67	Currently Off -site	1,300	2,600		10 Year: 1 Bay @ 65' x 20' 20 Year: 2 Bays @ 65' x 20' (can also accommodate other Heavy Vehicles, Buses and ORCs)
Sub-Total Flat Bays	4	8	10	2,360	5,970	7,830		10 Year: 2 Bays @ 35' x 16', 2 Bays @ 55' x 18', 1 Bay @ 65' x 20' 20 Year: 3 Bays @ 35' x 16', 2 Bays @ 55' x 18', 2 Bays @ 65' x 20'
Net Total SF Repair Bays	10	16	21	5,590	11,060	15,030		Does not include dedicated bays that may be required for Automated Garbage Collection Vehicles.
Grossing factor		25%		1,400	2,770	3,760		Grossing factor for circulation, wall thicknesses, tool boxes, etc.
Gross Total SF Repair Bays				6,990	13,830	18,790		

## Repair Bays for Automated Garbage Collection

Dedicated AGC Repair Bay	0	1	2	None	990	1,980	Flat Repair Bays without Lifts	Space may be required if AGC vehicles are added per Allen Scott input 10 Year: 1 Bay @ 55' x 18' 20 Year: 2 Bay @ 55' x 18' Assume Flat Bays for most work on hydraulics; Lift-related tasks to be done in "Common" Bays.
Grossing factor		25%		None	250	500		Grossing factor for circulation, wall thicknesses, tool boxes, etc.
Gross Total SF Dedicated AGC Repair Bays				None	1,240	2,480		

# FLEET SERVICES DEPARTMENT

Description	Current Quantity	10-Year Projection Quantity	20-Year Projection Quantity	Current Square Footage	10-Year Square Footage	20-Year Square Footage	Space Type	Comments
-------------	------------------	-----------------------------	-----------------------------	------------------------	------------------------	------------------------	------------	----------

## Vehicle Maintenance & Repair Support Shops

Brake Shop	0	Included in "Common" Shop	Included in "Common" Shop	In Work Bays	400	400	Shop	Currently adjacent to flat repair bay.
Tire Shop and Storage	1	Included in "Common" Shop	Included in "Common" Shop	750	750	1,000	Shop	Existing space includes corridor to/from tire shop, but does not include approximately 800 additional square feet of large tire storage on Mezzanine.
Machine Shop	0	Included in "Common" Shop	Included in "Common" Shop	In Work Bays	400	500	Shop	Currently small machinery within footprint of various repair bays.
Weld Shop	1	Included in "Common" Shop	Included in "Common" Shop	In Work Bays	600	600	Shop	Current welding area is adjacent to existing Small Engine Repair Bay.
Common Shop	0	1	1	None	2,150	2,500		
Radio Shop Manager	Currently Off-site	1	1	Included Below	140	140	Office	Dedicated Office.
Radio Shop	Currently Off-site	1	1	2,535 SF total reported off-site	700	800	Work Stations, Parts, WIP	100 sf / Technician plus 400 sf for shop area. See "Flat Bays" for Installation / Repair Bay sizes.
Net Total Shops				750	2,990	3,440		Note: The radio shop is currently located off-site and inefficient. Propose to relocate this function to the Brown Center, either as programmed within the Fleet Services building or in a separate facility - see Architect's assessment.
Grossing factor		25%		-	750	860		
Gross Total Shops				750	3,740	4,300		

## Utility Spaces

Floor Equipment Storage	0	In Secure Tool Room	In Secure Tool Room	-	Area as req'd for Floor Equip	Area as req'd for Floor Equip	Shop Floor	Currently no designated space. Fleet Services to determine what to store in Secure Tool Room as new items are procured.
Mechanic Tool Box Storage	0	0	0	In Repair Bay Area	In Repair Bay Area	In Repair Bay Area	Shop Floor	Currently no designated space. Area allowed for within repair bays footprint in circulation factor.
Lube Room	0	1	1	Repair Area & Mezz	400	400	Specialty Mech. Room	Currently no designated lube room, located in work bays and on mezzanine. Provide dedicated Lube Room on Main Level in future.
Air Compressor	1	1	1	50	100	100	Requires Air Makeup	Include Air Dryer. Could be in Mechanical Room, Lube Room or on Mezzanine
Electrical	0	1	1	150		150		
Mechanical	0	1	1	On mezz	200	200		
Data	0	1	1	None	75	75		
Net Total				200	775	925		
Grossing factor		25%		-	190	230		Grossing factor for circulation, wall thicknesses and mech. / elec. closets.
Gross Total				200	965	1,155		

# FLEET SERVICES DEPARTMENT

Description	Current Quantity	10-Year Projection Quantity	20-Year Projection Quantity	Current Square Footage	10-Year Square Footage	20-Year Square Footage	Space Type	Comments
-------------	------------------	-----------------------------	-----------------------------	------------------------	------------------------	------------------------	------------	----------

## TOTAL SQUARE FOOTAGE NEEDS

<b>Main Level Building Total</b>				13,900	31,155	38,955		
<b>Mezzanine - Materials Storage</b>				3,200	5,000	5,000	Crane Accessible Storage and / or Vertical Lift	Current Mezzanine also used for hose shop, bulk lube tanks, fire storage and records. Requested that future Mezzanine be used for bulk materials storage only.
<b>Gross Total - Fleet Services Building</b>				17,100	36,155	43,955		Includes Total of Main Level and Mezzanine spaces.

## Vehicle / Equipment Parking & Staging

Light Duty Rolling Stock	37	60	75	By Architect	By Architect	By Architect	Vehicle Parking	Number of Spaces per Dan Nuckolls, includes Radio & Fire Requirements. Provide 10' x 20' spaces.
Heavy Duty Rolling Stock	6	15	20					Number of Spaces per Dan Nuckolls, includes Radio & Fire Requirements. Provide 12' x 40' spaces.
Surplus Rolling Stock & New Rolling Stock	5	25	35					Number of Spaces per Dan Nuckolls, includes Radio & Fire Requirements. Provide 10'x30' spaces. Surplus and New Rolling Stock does not occur at same time, able to share spaces.
<b>Net Total Spaces</b>	<b>48</b>	<b>100</b>	<b>130</b>					

## Vehicle Fueling

Fueling Islands	3 double sided islands	4 double sided islands	4 double sided islands	2,800	3,850	3,800	Fuel Islands	Existing Fueling Area Includes 3 double sided islands (6 lanes). 4 double sided fuel islands proposed for future fleet (8 lanes). Requested that Fueling Islands be near Fleet Building, if it is relocated.
Fuel Tank Farm	2 above ground tanks	3 below ground tanks	3 below ground tanks	620	900	900	Fuel Storage	Existing Fueling Area includes 2 above ground storage tanks. Requested that future storage tanks be underground. There are pros & cons to both storage types. New tanks should be sufficient to receive full tanker truck delivery. New tanks and piping should be designed accept range of fuel types.



GANNETT FLEMMING      TABLE FS-2  
TOTAL ROLLING STOCK MAINTAINED AT BROWN OPERATION CENTER

Rolling Stock Maintained by Type for FY 2006-07	Current	10-year	20-year	Includes all rolling stock maintained by the division. Below are examples and descriptions for the types of rolling stock.
a) Cars - Normal Usage	17	22	30	Administrative cars
b) Cars - Severe Usage	146	195	240	Pursuit and patrol cars
c) Light Vehicles	222	260	300	Vehicles of less than 15,000 GVW, excluding cars
d) Medium Vehicles	52	60	75	Vehicles between 15,000 and 32,000 GVW
e) Heavy/Sanitation Vehicles	12	20	25	Sanitation vehicles over 32,000 GVW
f) Heavy/Sewer Vehicles	3	4	5	Sewer vehicles over 32,000 GVW
g) Heavy/Fire Apparatus	24	32	40	Fire vehicles over 32,000 GVW
h) Other Heavy Vehicles	45	60	70	Other vehicles over 32,000 GVW, such as street sweepers
i) Trailed Equipment	160	190	220	Trailers
j) Off-Road/Construction/Tractors	80	90	100	Bulldozers, back hoes and related vehicles
k) Buses	12	20	26	Buses
l) Small Engine/Stationary Equip.	250	300	350	
<b>TOTAL NUMBER OF ROLLING STOCK</b>	<b>1023</b>	<b>1253</b>	<b>1481</b>	

Fleet Vehicle Staging LD	37	60	75	Light duty staging and employee parking
Fleet Vehicle Staging HD	6	15	20	Heavy duty staging
Fleet Vehicle Staging Surplus	5	25	35	* Light and heavy duty surplus vehicle staging
Fleet Vehicle Staging New	0	25	35	* Light and heavy duty new vehicle staging

\* Staging for new and surplus vehicles are short term and may be combined

Fleet Personnel	14	17	20	Fleet employees only
*Fire Personnel	1	3	5	Fire Mechanics
*Radio Shop	4	6	8	Comms employees

\* Contingent on combining services in one location

Source: Fleet project spreadsheet as provided by client

<sup>1</sup>Growth Rate calculated by  $((10 \text{ Year Qty} - \text{Current Qty}) / \text{Current Qty}) / 100$  by GLMc

<sup>2</sup>Growth Rate calculated by  $((20 \text{ Year} - \text{Current Qty}) / \text{Current Qty}) / 100$  by GLMc

<sup>3</sup>Growth Rate over Current cannot be calculated, entered total projected quantity

## **CITY OF CONCORD PROJECT PREFERENCES**

1. Whenever a project scope involves planning and design work; consider and include the following items for each project:
  - a- Conduit design for City fiber, communication, and cable.
  - b- Include at least one data and phone outlet on each office wall.
  - c- Planned location with power and data needed for time clock.
  - d- Adequate cooling for equipment in IT Rooms.
  - e- All IT Rooms shall have a 4' X 8' X ¾" sheet of plywood installed landscape on the wall for the purpose of mounting IT, phone, and cable equipment.
  - f- No flat roofs are allowed as part of the design for a project.
  - g- Design for security needs as required. The City uses Lefler Electronics, Inc. to monitor fire, security, and elevator.
2. Whenever a project scope involves new plumbing fixtures; only install high efficiency toilets (1.28 gallons per flush) and water efficient urinals as required per Interbasin Transfer Agreement for all new City-owned facilities and retro-fits, where practicable. Sloan Flush Valves are to valves of choice for the City. No waterless urinals allowed.
3. All HVAC units requires controls. Only install Reliable Controls to interface with the Cities control monitoring software system unless the City authorizes a different vendor in writing.
4. Whenever a project scope involves a new HVAC System; only install Carrier Units unless the City authorizes a different vendor in writing. This also includes mini splits. All mini-split installations should use conventional condensate pumps in lieu of mini-pumps. 4" filter boxes are the preferred duct filtration method. All units shall contain a UV Air Treatment System. Honeywell UV2400U1000 is the City recommended system. No duct work can have interior insulation. All ductwork must be insulated/wrapped on the exterior. All units shall be located in one central mechanical room for centralized maintenance and not above the ceiling.
5. Whenever a project scope involves the City running fiber or cable to the structure; the contractor will be responsible to install a minimum 24" X 24" X 12" metal box at location designated to bring the fiber and/or cable into the building. Box installation will also include running two 2" conduits from exterior box to designated IT Room location for the project. All conduit turns shall be sweeps with not less than a 12" radius bend. Contractor will also need to include as part of their bid the cost to run up to 50' of two buried 2" conduits from either the pole or transformer pad where the City cable provider drops the fiber/cable run on site. See example pictures below:



6. The City of Concord will only accept the following restroom accessories for all projects:
  - a- Bobrick B-3947 Recessed Convertible Paper Towel Dispenser and Waste

Receptacle

- b- Bobrick B-35903 Recessed Paper Towel Dispenser
- c- Bobrick B-27460 Double-Roll Toilet Tissue Dispenser
- d- GoJo LTX-12 Touch Free Foam Soap Dispenser

7. All work shall meet the following standards, rules, and procedures applicable to each project:

**NC State Building Code – 2018**

**NC Administrative Code and Policies – 2018**

**NC Fire Prevention Code – 2018**

**NC Mechanical Code – 2018**

**NC Plumbing Code – 2018**

**NEC – National Electrical Code**

**NC Electrical Code – 2014**

**NC Energy Conversation Code – 2018**

**NC Fuel Gas Code – 2018**

**NC Existing Building Code – 2018**

**NC Rehabilitation Code - 2012**

<b>AA</b>	– Aluminium Association
<b>AAMA</b>	– American Architectural Manufacturers Association
<b>ACI</b>	– American Concrete Institute
<b>AF&amp;PA</b>	– American Forest & Paper Association
<b>AISC</b>	– American Institute of Steel Construction
<b>AISI</b>	– American Iron and Steel Institute
<b>AITC</b>	– American Institute of Timber Construction
<b>ANSI</b>	– American National Standards Institute
<b>APA</b>	– Engineered Wood Association
<b>ASCE/SEI</b>	– American Society of Civil Engineers Structural Engineering Institute
<b>ASME</b>	– American Society of Mechanical Engineers
<b>ASTM</b>	– ASTM International
<b>AWCI</b>	– Association of the Wall and Ceiling Industry
<b>AWPA</b>	– American Wood Protection Association
<b>AWS</b>	– American Welding Society
<b>BHMA</b>	– Builders Hardware Manufacturer's Association
<b>CPA</b>	– Composite Panel Association
<b>CPSC</b>	– Consumer Product Safety Commission
<b>CSA</b>	– Canadian Standards Associations
<b>CSSB</b>	– Cedar Shake and Shingle Bureau
<b>DASMA</b>	– Door and Access Systems Manufactures Association International
<b>DOC</b>	– US Dept. of Commerce – National Institute of Standards and Technology
<b>DOJ</b>	– US Department of Justice
<b>DOL</b>	– US Department of Labor
<b>GA</b>	– Gypsum Association
<b>HPVA</b>	– Hardwood Plywood Veneer Association
<b>HUD</b>	– US Department of Housing and Urban Development

<b>ICC</b>	– International Code Council
<b>NAAMM</b>	– National Association of Architectural Metal Manufacturers
<b>NCDOT</b>	– North Carolina Department of Transportation
<b>NCMA</b>	– National Concrete Masonry Association
<b>NFPA</b>	– National Fire Protection Association
<b>PCI</b>	– Precast Pre-Stressed Concrete Institute
<b>PTI</b>	– Post-Tensioning Institute
<b>RMI</b>	– Rack Manufacturers Institute
<b>SDI</b>	– Steel Deck Institute
<b>SJI</b>	– Steel Joist Institute
<b>SPRI</b>	– Single-Ply Roofing Institute
<b>TIA</b>	– Telecommunications Industry Association
<b>TMS</b>	– The Masonry Society
<b>TPI</b>	– Truss Plate Institute
<b>UL</b>	– Underwriters Laboratories, Inc.
<b>WDMA</b>	– Window and Door Manufacturers Association
<b>WRI</b>	– Wire Reinforcement Institute

8. All sub-contractors are required to have at least one English speaking employee in a lead position when working on site.