Exhibit A1 – New Fire Station 2 Program Criteria

INTRODUCTION

Fire Station 2 is to be designed and constructed on the vacant property leased from the Wake County Board of Education, effective May 1, 2023. The land is comprised of approximately 4.0 acres and is located on Paramount Parkway as shown on the Recombination Plat for The Wake County Board of Education (H14 Site), prepared by Dewberry Project No 50154382, dated 3/28/23. Recorded at Wake County Register of Deeds Book: BM2023 Pages: 684-685.

This Program Criteria was summarized from Work performed for Morrisville Fire Station 3, located on Harris Mill Road, programmed in 2020 and constructed in 2022/2023.

The Fire Station shall be designed to accommodate 27 staff members, working over three shifts (9 per shift). Within the next 15 years, it is envisioned that the staff will increase to 39 members (13 per shift) and be comprised of 50% male and 50% or more female.

Deliver a facility with the 'look, feel, and operational characteristics' similar to Fire Station 3 for compatibility and interchangeability of staff between the facilities.

PROGRAMMING

These Program Criteria are to be further discussed, confirmed, and possibly refined during the Phase 1 / Due Diligence and Preliminary Design Phase Services.

The site and building plans shall be in conformance with the following:

Exhibit B - Interlocal Agreement for Programming and Planning school and Town Facilities in Morrisville, NC, dated March 17, 2023. *Note: this ILA will undergo some updating to account for a slight change in use from a High School to a Middle School.*

Exhibit C – Lease between Wake County Board of Education and Town of Morrisville, dated May 1, 2023.

Exhibit D - Perimeter Park II Protective Covenants.

Exhibit E – Lease between The Trustees of Wake Technical Community College and the Town of Morrisville, dated August 1, 2025

Material Quality Standards or Performance Criteria

> All materials used and equipment installed as part of this project are to be new and considered commercial grade. No seconds or refurbished equipment will be accepted.

Special Material Requirements

> Design process shall include consideration of materials and construction methods that will increase the level of sustainability and environmental stewardship.
>
> The Design-Builder shall assist the Town in documenting and "scoring" the design toward the goal of "Adjacent" LEED Silver. The Town does not intend to have the project certified, rather it is interested in comparing the project to USGBC LEED Silver status.

The Design-Builder shall provide waste disposal metrics to account for the recycling of Construction and Demolition debris. The Town has a minimum 70% recycling objective.

Provisions for Utilities

The Design-Builder is required to collaborate with all necessary utility providers to design and deliver all needed utility connections and services to provide a turnkey project upon completion.

The Design-Builder will need to provide two independent pathways from the right-of way or utility easement for the Town's data service provider (ATT, GF, Comcast, etc.) to pull in its service(s) and terminate them in the IT room.

The Design-Builder may be able to coordinate with the design and construction of the adjacent Middle School and Wake Early College of Information and Biotechnologies (WECIB) to be relocated to Paramount Parkway.

Government's Rules, Ordinances, or Goals

All design and construction must comply with the Town of Morrisville Unified Development Ordinances UDO Adopted Version July 2024, Town of Morrisville Engineering Design and Construction Manual (EDCM) located here: Engineering Department | Town of Morrisville, NC and any other local, state or federal guidelines applicable to the project.

Provide a 3D BIM Model option

Enhanced facility commissioning, inclusive of the building envelope, and a Preventative Maintenance Plan shall be provided prior to substantial completion.

The facility shall include a Building Automation System (BAS) in conformance with the Town's requirements.

The Design-Builder shall address the Town's Strategic Plan Objectives and applicable Town Policies and Standards during the design, construction, commissioning, and handover of the facilities:

Strategic Planning & Performance Management

Strategic Plan

Sustainable Practices and Initiatives – Public Works

Exhibit F: Public Works Recommended Standards for Town Facilities REV January 7, 2026

Program Space Name, quantity, approximate size, functional requirements

Entry Vestibule, 1, 16 x6, 105 SF

Provide a secure entry point to introduce visitors into the building. A manually lockable outer door (typically open 24/7) with access-controlled inner door. Air lock feature to help reduce effect on or loss of conditioned air from the building. Provide notification devices (phone and buzzer) to alert staff that a visitor has arrived. This phone will only dial the station or 911.

Fire Station Entry Lobby, 1, 10 x12, 100 SF

Provide a secure waiting area for visitors entering through the vestibule. Seating for 3 or 4 persons, access-controlled door into the Fire Station proper.

Include provisions for a future Information display monitor.

Evaluate options for incorporating a display cabinet for awards and memorabilia.

Interior Vestibule, 2, 5 x 10, 100 SF

Air lock feature to help reduce effect on or loss of conditioned air from the building into the apparatus bay and introduction of contaminants from the apparatus bay into the building.

Unisex Bathroom, 2, 7 x8, 56 SF

Include Touchless fixtures, in accordance with the Town's Public Works standards.

One accessible directly from the Entry Lobby for use by visitors and other non-staff. The second accessible directly from the Apparatus Bays for use by staff.

Fire Workroom / Meeting, 1, 18 x27, 470 SF

Provide movable tables/seating for 12 persons, plus 4 individual workstations with cabled and wireless internet. Include approx. 24 SF of storage cabinet/work surface with 45 mail slots above. Provide 2 wall mounted large format touch screen information display monitors, network enabled, camera/microphone, wall mounted PC and HDMI connection. CAD monitor workstation and display. Meeting room shall have individual HVAC temperature control, adjustable and hands-free automatic lighting controls.

The purpose of this room is to facilitate staff meetings, conference room, conduct group training, individual desk work, distribute information to staff via mail slots, and support other office functions.

Provide in-floor electrical and IT outlets to support movable tables in center of room.

Fire Workroom Storage: 1, 7 x11, 76 SF

The purpose of this room is to store Workroom tables, chairs, training and promotional materials. It can also house the station radio alert system.

Office: 3, 11 x 14 460 SF

The three offices are for staff positions.

One desk shall be accommodated in each office. File cabinets for official records, Whiteboards, CAD monitor and small closet. Provide windows to lobby.

Provide wired IT connections, in addition to wireless.

Decon Room: 1, 10 x 21 220 SF

(2 compartment SS sink, eye wash/shower) This room will also contain a turnout gear extractor and dryer.

The purpose of this room (a.k.a. dirty area) is for staff to remove, clean, and decontaminate turnout gear after returning from a call. It is not for intended for the decontamination of hazardous or infectious materials. Provide a floor drain for washdown cleaning.

The Decon Room should be directly accessible from the apparatus bays and from the exterior for returning staff.

An eyewash/safety shower should be provided for emergency use during removal of contaminated equipment, and to support emergency use for maintenance activities in the apparatus room. Provide seamless transition with flooring and floor drain to hose out.

Decon bath / shower: 1, 9 x 10, 90 SF

This Wash Area room shall be adjacent to the Decon Room, to enable staff to remove contaminated equipment in the Dirty Area / Decon Room, then move into the Bath/Shower room for further disrobing and showering. The Bath/Shower room needs to be set up for easy washdown / cleaning (provide floor drain) and access to a clean area following showering for dressing. Include a small area to store towels and tyvec suits.

It is preferable (not mandatory) for the exit from the Decon bath / shower to enter a clean area of the station and avoid the Decon Room.

Turnout Gear Storage: 1, 10 x 40, 432 SF

This room is for the storage of clean, ready to go, staff turnout gear, and to protect it from UV deterioration and carcinogens from truck exhaust. The room shall be set up to accommodate 39 - 24”W x24”D x full height gear grid lockers. The intent is for staff to put on (Don) their turnout gear outside of the room, in the apparatus bays. Each locker position should be capable of holding an active set of gear and a second set for each firefighter.

Include direct access to the apparatus bays. Provide at least one set of double doors for ease of access in and out of room. Provide ventilation to aid in drying gear and reduce airborne carcinogens.

Tool Room / Work Area: 1, 22 x 14, 300 SF

(double doors to bays and exterior)

This room is for the storage of firefighting and emergency equipment. It shall be set up to accommodate a large rolling tool box to be located in this room (i.e. HD model# HOTC5623BB2S 64”H 22”D 56”W 23 drawer). Plus two smaller toolboxes for the other two shifts. Provide double doors, no threshold.

Provide work bench and air compressor with piping with quick connect outlets.

Include one direct access door to the apparatus bays and one to the outside.

Include provisions to either purchase new or relocate the existing Eagle Air, Raven CFS, SCBA tank filling equipment (cascade system) to this station if existing station needs to be vacated. The existing cascade system is 240 single phase 60 hertz 12’ long, 4’4” deep, and 6’ tall. The Tool Room shall be conditioned / ventilated to support the requirements of the SCBA tank filling system.

Provide space for one 65”H 43”W 181/2”D hazardous materials storage cabinet directly outside the Tool Room within the Apparatus Bay.

Provide 2 compartment SS shop sink for general cleanup, floor basin, and shop towels. Space for a Safety Kleen parts cleaner.

Emergency Supplies Storage Room: 1, 10 x 12, 120 SF

Conditioned space to have easy access to the Apparatus Room.

The purpose of this room is for the storage of emergency Fire supplies and possibly supplies for EMS. Include provisions for oxygen storage and Haz-Mat response supplies.

Rehab Room: 1 10 x 12 120 SF

Provide an ice machine i.e. Scotsman model NO922 Prodigy Plus, filtered water point near the ice machine to fill coolers, freezer, vending, hose bib, and access door to apparatus bay.

The purpose of this room is to support staff hydration, reduce heat stress and promote recovery.

Bedrooms: 9, 14 x 16, 2,016 SF

(room for 3 closets / 3 beds)

Each bedroom shall accommodate three closets and three floor level beds (no bunks), so that each staff member has his/her own individual bed and closet. The bedrooms are intended to be occupied by only one staff member at a given time. Bedrooms shall be capable of holding two if necessary, for storm response staffing.

Include provisions for a wall mounted television and illuminated ceiling fan in each bedroom.

Bathrooms: 4, 9 x 10, 500 SF

The bathrooms are intended for staff personal hygiene and shall be accessible from the bedrooms, day room, kitchen and dining areas. They shall also serve as toilet facilities for fire station staff during work hours. It is preferred that visitors utilize the unisex bathroom off the Entry Lobby.

(with showers)

Exercise Room: 1, 28 x 38, 1,000 SF

The exercise room shall accommodate the following equipment: 4 treadmills, 2 ellipticals, a free weight rack, Squat Rack, Dumb Bell Weight Rack, Stair Mill, Exercise Bike. Mirrors. Provide electrical outlets to accommodate the exercise equipment.

The room shall have a roll up door to the bay to allow HIT workouts to spill out into the bay.

Laundry Room: 1, 8 x 12, 96 SF

(residential equipment)

The laundry room is for the staff to wash and dry their personal / street clothes. One set of washer and dryer shall be accommodated.

Day Room: 1, 20 x 23, 460 SF

(seating for 9/11)

Accommodate use of recliners, same as current station. Provide wall mounted large format monitor for Television and Computer use, plus a wall mounted, CAD monitor.Wall mounted Verkada Camera Display Ceiling fan.

Kitchen / Dining: 1, 22 x 26, 640 SF

(seating for 13/15 (2/residential stoves, hoods, 2 sinks, 3 pantry's, 3 refrigerators, 1 dishwasher)

Provide garbage disposal for each sink. Two microwaves. Pre plumbed water supply for coffee machine.

Provide wall mounted large format monitor for Television and Computer use, plus a wall mounted, CAD monitor

Additional wall mounted display for First Arriving Dashboard.

Provide exterior door to outside gazebo and BBQ area.

Janitor: 2, 8 x 6, 96 SF

Floor sink, mop and broom storage, room for a chemical proportioner.

One for the office area and a separate one for the shop areas.

Sprinkler Riser: 1, 5x5, 25 SF

To house the fire riser and Fire Alarm Control Panel.

Electrical: 1, 11x14, 146 SF

IT: 1, 8 x 10, 78 SF

Mechanical: 1, 14x15, 205 SF

HVAC shall take into consideration the ASHRAE Position Document on Infectious Aerosols, regarding the design, installation, and operation of heating, ventilating, and air-conditioning (HVAC) systems, including air-cleaning, and local exhaust ventilation (LEV) systems, to decrease the risk of infection transmission.

Compliance with Town of Morrisville's filter replacement program (MERV 11) or greater. Use MERV13 or highest standard for clean air.

Provide access stair / ships ladder to roof.

2 Double Deep Pull-Thru Apparatus Bays:1, 45 x 80, 3,600 SF

14 x 14 Bi-parting doors are preferred on all Fire Department Apparatus Bays

Alternatively, sectional OHD's may be acceptable on the rear of the Bays, with 14 x 14 Bi-parting doors only on the front of the Bays.

The following equipment shall be accommodated to be stored inside the Apparatus Bays

Ladder 22- 48ft

Reserve Ladder - 42ft

Rescue 22- 28ft

Engine 22- length 31ft

Rescue Boat – 20ft

The building design should minimize the creation of horizontal surfaces in the ceiling area of the Apparatus Bays, which has the potential to accumulate dust. The design should also attempt to eliminate any floor mounted accessories or ancillary equipment – apparatus only on the floor.

Plymovent vehicle rail exhaust systems shall be provided to accommodate both pull through and back in apparatus.

High Bay LED lighting and radiant gas heating shall be provided in the Apparatus Bays. Some LED lights shall be on all the time and the others on a switch. Will need some of the lights connected to the station alert. Prefer all heaters incorporated on one thermostat.

Shore power shall be provided via drop cord to each vehicle. 20 Amp circuit. Provide reels on ceiling to accommodate drop shore lines.

Compressed air drops shall be provided at every shore power electrical dropline to support every vehicle in the Apparatus Bay or be able to run tools. Additional drops shall be provided on the Apparatus Bay walls and inside the tool room. A separate storage room to house the compressor is preferred – or exterior unit.

Include four (4) rigging eyes in the apparatus room for personnel training. Each rigging eye shall support a minimum of 10,000 pounds. Evaluate opportunities for other training props to be incorporated into the design of the facility (i.e. Manhole opening in mezzanine floor for confined space training)

Two standard hose bibs shall be provided, one hose bib connection on the interior at the front and another on the rear of the bay. Two 1-1/2” hose bibs shall also be provided at the front and rear of the bays.

Provide clear floor sealer/hardener on the Apparatus Bays slab

Wall mounted display for First Arriving Dashboard

Wall mounted display for CAD Monitor

Storage mezzanine (insulated conditioned space) 1 16 x 43 680

The mezzanine storage shall be accessible from within the Apparatus Bays.

EMS/County **(This is an option to be considered)**

The Fire Station is to be designed to accommodate 3 EMS personnel per 12-hour shift, now and into the future.

Apparatus Bay 1, 23x49, 1,130

The bay shall be provided with two shore power sources (1@20 amps and 1@30 amps) facing the rear of the EMS vehicle.

14 x 14 Bi-parting doors shall be provided to match the Fire Department Apparatus Bays

Plymovent vehicle rail exhaust system shall be provided

Other requirements are the same as for the Fire Apparatus Bays

EMS Storage: 1, 13 x 20, 270 SF

Card Access controlled, Air-conditioned storage of EMS supplies and equipment

EMS Dayroom: 1, 20 x 29, 590 SF

(3 recliners, with one desk space for paperwork)

Provide access to Raleigh Fire Dispatch and include a separate CAD connection

EMS Unisex Bathroom / locker room: 2, 14 x 17, 480 SF

(with showers)

Other Program Requirements

Access Control:

The access control system shall be Verkada Access Control. The access control equipment shall be installed in a secure room. All card readers shall be the latest model Verkada readers that will work with the Verkada Secure Cards that is used by the Town currently.

Verkada Number Pad card readers shall be installed at all common areas to allow for access by Wake EMS.

Include card access readers to any external door or secured room, to keep any intentional or unintentional visitors contained.

All access control wiring should be provided at time of installation, to limit future construction to facilitate new requirements.

The system shall be connected to the Town's existing Verkada access control system.

Intrusion Detection System: (Not required)

Video Surveillance:

Security cameras shall be installed to cover the exterior areas adjacent to building entrances, parking areas, plus the main vestibule and lobby areas of the premises. The video surveillance system should be IP-based and compatible with the Town's existing Verkada system.

Install a viewing station for staff to be aware of the building's exterior while in the kitchen and dayroom.

The Town uses Verkada video surveillance system cameras that require an IP-based network for operation.

Include a camera in the bay for staff awareness. And at all external entrances where a card reader is present, or at least a view to correspond to.

IT:

A network infrastructure shall be installed and made operationally sufficient to support all wired data ports, wireless LAN, smart display and network-enabled security equipment.

Network cabling shall be CAT6 grade and the structured cabling installation shall meet best practices and applicable industry standards such as TIA/EIA and BICSI. A lockable network cabinet shall be provided to secure network, security, and wi-fi equipment. The wall mounted cabinet can be something similar to https://www.amazon.com/Tripp-Lite-Enclosure-Switch-Depth-SRW12US/dp/B003WAT7WC?th=1

The following rooms / areas will require Design-Builder wired IT connections and the CAT6 cables shall be terminated in a patch panel, contained in the wall mounted rack in the IT closet. The Town will handle the network infrastructure installation.

Fire Workroom / Meeting

3 Offices

9 Bedrooms

Day Room

Kitchen / Dining

CAD Display Locations

First Arriving Dashboard locations

Wi-Fi AP Locations

Security Camera Locations

- Network wiring should require at least 2 drops per office and bedrooms.
- Direct 'Shielded' wiring for CAD dispatch displays ran to the conference room or ready room directly to provide Video over Network connections. 2 drops per location, designated by Fire Staff.
- Wi-Fi access points, to be installed by the project contractor once wired terminations are completed, and an additional cable included to connect those devices.
- IT closets should be wood lined and power outlets should be available for access control panels, IT Rack, AV Rack, ISP providers, and future expansion.
- Dual 3” conduits (with pull string) from opposite sides of the building should egress into the IT closet to allow easy ISP installations and future expansions, with pull strings.
- Single 2” Roof conduit to a pole with extension coupler and pull string should be installed for any future radio, satellite, WiFi, or gps services that may arise.
- Video cabling also for video displays in the bay should also be shielded and routed back to the AV Rack.
- 5g / GPS relay wiring will be needed in the bay, if Solar Panels are installed.

The Town has a Master Services Contract with an integrator who will participate in the design to incorporate access control, video surveillance, and Wi-Fi requirements. The integrator will also provide installation services.

Emergency Generator:

Natural Gas supply, capable to run the “entire” Fire Station, not as Life Safety.

Solar:

Provide roof mounted photovoltaic solar system capable of offsetting the maximum electricity usage forecasted for the facility.

Radio Alerting System:

Provide dedicated lighting circuit in each bunk/bedroom, day room, kitchen, bathrooms, and in direct path to the apparatus bay from these areas to provide red lighting separate from clear lighting circuit when activated by an alert.

Provide speakers (Bogen or similar) in all areas/rooms of the building, including bullhorn style located in apparatus bay and directly outside/overhead of bay doors for external call alert notification.

The following equipment shall be provided by the Design-Builder for rack mounting in a lockable 12U+ network cabinet. The location is to be chosen after plans drafted, preferably a Telco/Electrical room separated from Town IT infrastructure. Wall power outlet should be installed behind the rack.

a. 12U Network Cabinet (Tripp Lite SRW12US33G)
b. Viking PA-IP SIPSIP / Multicast Paging Adapter
c. Denon 333XAB Mixer Amplifier (With Bogen MBS1000A Microphone)
d. ART PB4X4 Power Base
e. Three Viking MTG-10 Tone Generators
f. One Shelf

The following circuits shall be routed in proximity/near/inside of cabinet:

a. Doorbell circuit
b. Red alert light circuit (to be closed with relay per activation)
c. Speaker circuit
d. Microphone feed from radio room (see above)
e. Network termination for VOIP device (include a VOIP paging interface)

Site Parking/Requirements:

Evaluate options for placing the building and other improvements on the site. Consider optimum use of the site, to enable alternative uses for the unused portion, including but not limited to a sale / disposition of the unused portion. Other considerations shall include reducing cost of site work, reducing cost of foundations and building construction, management of stormwater, reducing impact on natural resources, and supporting the overall program criteria and functional use of the facility.

Initially 20 standard, plus 2 HC, future 33 total staff and visitor parking spaces (10x20)

Future 12'x12' Storage shed

12'x24' Trash / Recycle dumpster enclosure

Covered outdoor eating / barbeque area – include natural gas supply, overhead lighting and fan, and privacy fence.

Two fire hydrants at the rear of the facility – one on each side of the apron (accessible to both sides of the truck), and one at the front of the facility.

Include space to store one boat on a trailer 20ft L x 8ft

Provisions for testing pumper trucks –This will need to be a service test pit. No less than 10,000 gallon capacity, buried no deeper than 2 feet. And immediately accessible by the drafting side of the fire truck with the ability to flow no less than 2000 Gallons per minute back into the tank, threaded to accept a western test kit. And designed to defuse the energy of 2000 GPM flow within the tank refill system.

Space for servicing ladder truck shall be accommodated within the site, so the ladder can be extended without unnecessarily blocking traffic.

New Fire Station 2 Bubble Diagram