

EMERGENCY SERVICES FACILITIES TOWN OF RICHMOND, VERMONT

FINAL REPORT
SEPTEMBER 19, 2016



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Committee Introduction..... 1

Introduction / Process 2

Project Guiding Principles 3

Part 1: Analysis

Existing Facilities Conditions

 Police Department Existing Facilities Conditions 6

 Fire Department Existing Facilities Conditions..... 7

 Richmond Rescue Inc. Existing Facilities Conditions 8

Existing Program Deficiencies and Proposed New Program

 Police Department Program and Space Deficiencies 9

 Police Department Proposed Program 10

 Fire Department Program and Space Deficiencies..... 11

 Fire Department Proposed Program 12

 Rescue Inc. Program and Space Deficiencies 13

 Rescue Inc. Proposed Program..... 14

Part 2: Site Concepts

Site Selection Criteria 16

Site Schematic Design 17

Facility Schematic Design 24

Relative Cost and Phasing Options 28

Recommendations..... 36



TOWN OF RICHMOND

RICHMOND TOWN CENTER
203 Bridge Street, P.O. Box 285
Richmond, Vermont 05477



On behalf of the steering committee, I am pleased to present the results of the Richmond Public Safety Building feasibility study. The information included here will be used to assist the voters, taxpayers and Selectboard in determining how to move forward with future facilities planning for our emergency services.

At the March 3, 2014 Town Meeting, our then-Fire Chief Thomas Levesque proposed the question, “Be it resolved that we discuss a plan for a Public Safety Building.” This issue was overwhelmingly supported by the voters, and after some informal discussions, Selectboard member Taylor Yeates convinced the Selectboard in 2015 to engage an architect to begin a significant discussion on the future of the facilities for Police, Fire and Rescue. Managing the project for the town was a steering committee of initially nine members. The results of the steering committee and architect’s work is found in this report.

The steering committee met from January through September to develop these recommendations. There were many thoughtful discussions on the deficiencies of our existing facilities, the needs of the various agencies and the logistics of how best to meet those needs. Several visits were made to neighboring communities to observe newer building designs and functions.

I’d like to thank the members of the steering committee for their time and effort. Taylor Yeates, President, Richmond Rescue and former Selectboard member; David Sander, Selectboard member; Alan Buck, Chief of Police; Dennis Gile, Fire Chief; Jerry Levesque, Assistant Fire Chief; and residents Rick Barrett, Brian Carpenter, Jim Hering, Michael Meiman, and Robert Stafford. Without the commitment from this group of dedicated citizens, Chief Levesque’s motion would fade from memory.

I hope you find this information useful and provocative during discussions of our facilities needs.

Sincerely,

Geoffrey Urbanik
Town Manager

Town Clerk & Treasurer
434-2221

Selectboard & Town Manager
(802) 434-5170 / FAX 329-2011

Police
434-2153

Highway
434-2631

Library
434-3036

Water & Sewer
434-2178

Planning & Zoning
434-2430

Introduction / Process:

In March of 2014, the voters of the Town of Richmond approved a feasibility study to examine the potential relocation, expansion or consolidation of the Richmond Police Department, Richmond Fire Department and Richmond Rescue, Inc. Black River Design Architects was retained in the winter of 2016 by the Selectboard to work with a Committee on evaluating the needs of each organization and potential efficiencies and benefits that might be achieved by combining their programs into one building.

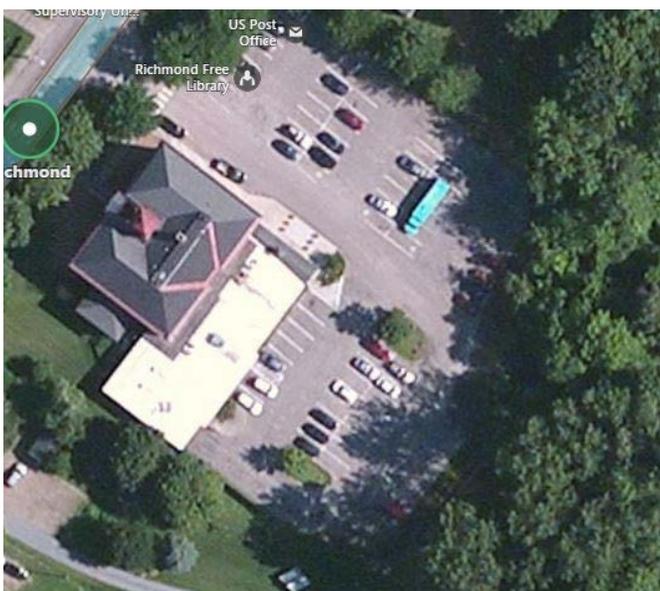
Black River Design and the Committee established “Project Guiding Principles” to ensure that the process remained focused on an agreed upon set of criteria. Working within the principles, monthly meetings included tasks such as:

- Development of site selection criteria
- A tour of each existing facility
- Meetings with stake holders
- Evaluation of programmatic needs
- Tours of several other facilities to get an understanding what works well and what does not work well in contemporary public safety facilities
- Review and revision of schematic site / plan options
- Evaluation of relative project costs

The following is a general summary of the process and the recommendations presented. If there are specific questions regarding the these finding questions can be addressed to the Committee through the Town Manager.



RICHMOND RESCUE INC. SITE



RICHMOND POLICE DEPARTMENT



RICHMOND FIRE DEPARTMENT

Project Guiding Principles:

In an effort to ensure that all decisions were made based on a consistent and established set of criteria, the Committee established the below guiding principles.

Seek the community's input for the development of a plan to build the Richmond Public Safety Complex. To update stakeholders on the progress and findings, the committee held several public forums, made their regular committee meetings open to the public, and finally, reported back to the Select Board.

Acquire an accessible and safe building site to meet current and future community needs. The committee established well thought out site selection criteria (see "site selection criteria") to identify what characteristics were important and so each proposed site could be evaluated equally.

Design a public safety building that enhances the level of service provided by police, fire, and rescue through a common facility. The Committee felt strongly that a combined program in one building would be a benefit, but was not without its challenges.

Build a facility that represents Richmond's business and residential character and fosters community pride. With careful consideration, a new building of this prominence should enhance its neighborhood and become a visible symbol of community pride.

Build a facility in which it is healthy, secure and safe for employees to work and where community members feel comfortable when seeking services and attending community meetings, allowing for much better public engagement with public safety professionals. The Committee desired to create a high quality facility that would enhance the bond between public safety and the community by providing a pleasant place to work, improving recruitment and retention efforts, providing easy access to services for the community and a public gathering space that would last for many years to come.

Build a cost effective and energy efficient facility by incorporating green building principals into the construction and having net-zero ready capability. Recognizing the community's desire for a sustainable building, the Committee made energy efficiency a priority. It is yet to be determined that a net-zero building is the right solution.

Part 1: Analysis

POLICE DEPARTMENT EXISTING FACILITIES CONDITIONS

Police Department existing facilities conditions:

Location: 203 Bridge St.

Site description: The 1.75-acre site is located within the flood plain. There are several reserved parking spots within the larger paved parking area.

Building description: The Police Department is located within the historic Town Hall / School House. The station has storage in the basement (flooded in 2011), a processing room on the entry level, and main offices located on the first main building level. Having to bring prisoners up and down stairs is dangerous to both the prisoner, the officers, and the public.

Age: The Town Hall is a converted school building constructed over 100 years ago.

Construction type: The structure is wood / masonry with brick veneer (insulation is unknown).

Roofing: The asphalt shingles are in poor condition.

Exterior walls: The exterior brick walls of the building appear to be in good condition.

Doors and windows: The doors are generally from an earlier renovation and in fair condition. The windows are original to the building; some have additional storm windows. Some windows are in poor condition.

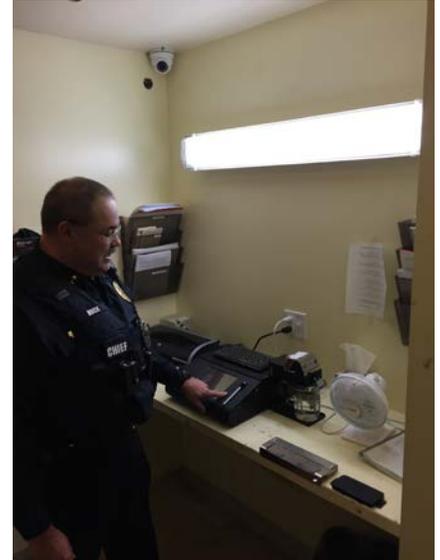
Foundation: The building sits on the original stone foundation which is in good condition.

Interior finishes: The walls are a combination of original plaster and gypsum board. All surfaces are painted. Floors are primarily carpeted except in the bathroom and processing room. Flooring is in good condition.

ADA compliance: Accessibility to the main offices space is via a public elevator within the common space of the building. The bathroom is not accessible.

Mechanical / Electrical: Mechanical and electrical services are part of the overall building systems. Lighting appears to be adequate. Additional wall outlets are needed. Ventilation within the processing room is not adequate for the functioning of the processing equipment. There is no backup electrical generator on site.

Other: The building lacks sufficient security protocols. ■



VITAL EQUIPMENT IS LOCATED IN HOLDING CELL



INADEQUATE STORAGE SPACE



NO QUIET WORK SPACE

Fire Department existing facilities conditions:

Location: 356 East Main St.

Site description: The 0.65-acre site is owned by the Town. The drive exits directly onto Route 2. Fire truck access is restricted by the site size and topography. This is vulnerable to inclement weather. There is parking for approximately 12 vehicles; three spaces are paved. It is possible that the building was constructed over waste from the construction of the Interstate 89. There is a small sink hole at the northwest corner of the building that has been repeatedly filled without success. The east wall is near the property line.

Building description: The fire station consists of a 5 bay garage with support spaces located at one end. At the other end of the building, a small wood structure was constructed to house the town's historic fire truck. There is storage located above the support spaces. This area is accessed via stairs located within the first garage bay. The ceiling in the space is only about 6' high.

Age: The original building was constructed as a police station consisting of an office and garage bay. Four garage bays were added in the 1970 / 80s.

Construction type: The building is brick veneer over block (presumed rigid cavity insulation).

Roofing: The asphalt shingles are in good condition. The roof is constructed with trusses.

Exterior walls: The exterior brick walls of the building appear to be in fair condition. There is significant damage to the mortar joints due to salt damage.

Doors and windows: The original doors and windows are in poor condition.

Foundation: The building is constructed on a concrete slab with no basement.

Interior finishes: The training room and office space have wood paneling in poor condition. The garage bays have exposed block walls. The carpet in the training area is well past its serviceable life as is the vinyl flooring in the offices and bathroom.

ADA compliance: Although the building is on single level, access around the building is limited. The bathroom is not accessible.

Mechanical / Electrical: Having been recently upgraded, lighting within the bays is adequate. Lighting in the other spaces is poor. New garage door operators have been recently added. The building's boiler has recently been replaced and is in good condition.

Other: There is a new backup electrical generator on site. There is no exhaust ventilation system. There is no sprinkler system and the building will likely not meet current OSHA or Fire Safety standards.



LIMITED APPARATUS BAY CIRCULATION



LIMITED TRAINING SPACE



LIMITED STORAGE

RESCUE INC. EXISTING FACILITIES CONDITIONS

Richmond Rescue Inc. existing facilities conditions:

Location: 216 Railroad St.

Site description: The 0.5-acre site is located at the end of a dead end street. The site is flat with a portion located within the 100-year flood plain (the building is not located within the flood plain). There is parking for approximately 12 vehicles; three spaces are paved.

Building description: The building is a two story structure with a two bay garage at one end and support spaces at the other. Several support rooms are located off of the garage bay. The main training room is located on the first floor with three bedrooms and private areas accessible from an enclosed stair located at the furthest end of the building. There is also a small 12'x12' storage shed.

Age: The building was constructed in the mid-1980s. The storage shed was constructed in 1996.

Construction type: The building is wood with (presumed) fiberglass insulation.

Roofing: The asphalt shingles are original to the building and appear to be in good conditions. The roof is constructed with trusses.

Exterior walls: The building is clad in vinyl siding which appears to be in fair condition.

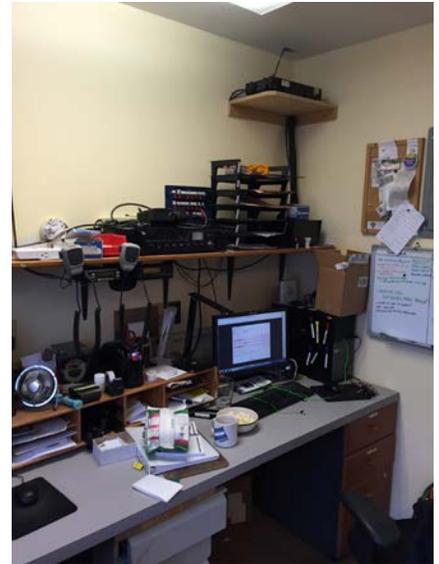
Doors and windows: The doors and windows are original to the building and are in fair condition.

Foundation: The building is constructed on a concrete slab with no basement.

Interior finishes: Interior walls are painted gypsum board and are in fair condition. Floors are primarily carpeted except in kitchen and bath areas which have vinyl flooring. Flooring is in good condition.

ADA compliance: There is no accessibility to the second floor bedrooms. The bathroom is not accessible.

Mechanical / Electrical: Lighting appears to be adequate. Additional wall outlets may be needed to accommodate personal electronic devices. The building's boiler has recently been replaced and is in good condition. There is a backup electrical generator on site.



OFFICE



TRAINING ROOM / DAY ROOM



NEWEST BUILDING IN STUDY

Existing program deficiencies and proposed new program:

Black River Design met with the Committee as well as representatives from the individual departments to review their current program and to discuss their anticipated future (30 year) needs.

Police Department program and space deficiencies:

The Police department space has many security and safety deficiencies. There is no on-grade interior space to unload prisoners from a vehicle. The secure access for prisoners is through a public corridor. The processing and holding areas are combined in a small room. This room does not function well as either a holding or a processing space because of its small size. The holding and processing areas should have their own designated areas. There is no juvenile holding facility. There is no secure, soft or child interview facilities. Interview areas are needed.

The public reception area is an open transaction desk that is not secure from the waiting area. There are motion activated cameras, but evening and overnight security is insufficient. Typical night staffing is one officer, who spends most of his time on patrol. This leaves the station unoccupied for significant periods of time. There are no separate officer work areas. Processing and holding are combined. This is not an acceptable combination. Additionally, security, space, and ventilation are inadequate.

Processing and holding share a space. This is not an acceptable combination.

Evidence space is very limited and shared with some general storage. Additional storage space for files and evidence is needed in a safe and secure location. The security of the evidence room should be improved but will require additional contiguous space to make such improvements.

As mentioned above, there is no sally port. Additionally, there is no vehicle evidence storage or cruiser storage. These large spaces would be very difficult to accommodate within the current site and building configuration.

Existing program space:

Name	Existing SF	Location	Function	Deficiencies
Chief’s office	140	Level 1	Office	
Reception	120	Level 1	Reception	Open to lobby
Lobby	100	Level 1	Lobby	Open to reception
Bathroom	60	Level 1	Bathroom	Not accessible or within a secure area
Evidence room	90	Level 1 1/2	Evidence holding	Not large enough, not accessible (up a flight of steps)
Officers room	360	Level 1	Officers work area	Doubles a lunchroom and circulation
Interview	100	Level 1	Interview	Used for storage as well as for interviews
Processing room	80	Level 0	Process detainees	Not within view of the rest of the department (down a flight of steps), too small, and not appropriately fitted out for prisoner holding
Evidence room	200	Level-1	Evidence holding	Not large enough, remote, and no proper mechanical system

POLICE DEPARTMENT PROPOSED PROGRAM

Police Department proposed program:

In an effort to alleviate the above deficiencies, the program below is proposed.

Police Department						
Space / Activity	Existing Sq. Ft.	Notes on existing	Proposed Net Alloc. Sq.Ft.	Possible Shared Space	Notes	Adjacencies
Lobby	100	Need to go through public space to enter	140	Yes	Securable space	Direct into multipurpose / training room
Dismissal vestibule	0	Does not exist	40	No	Should be visible, secure and discreet	Not into front lobby
Reception desk	120	Not secure	120	No	Secure with pass through window and file storage	
Public restroom	60	Not ADA compliant	80	Yes	ADA compliant	Off lobby
Soft interview room (a space for victim interviews)	0		100	Yes	Comfortable space, outside of the "secure" area (maybe used as EMS room)	With second door to secure area
Patrol room	360	Current open space makes work difficult	500	No	Cubical, not a public space, space for printers, copies, fax, teletype, and server	
Interview room	100	Currently doubles as storage	120	No	Secure	
Observation room	0	Does not exist	80	No	Small room adjacent to interview room with two way mirror for recording and lineups	Adjacent to Interview room
Holding cell	0	Does not exist	160	No	Should be directly off sally port and next to processing room	Next to Processing room
Processing room	80	Remote from officers, non ADA, at the bottom of a set of stairs	120	No	Should be visible and adequately sized for breathalyzer, finger printing, etc.	Next to holding cell
Juvenile processing room	0	Does not exist	80	No	Space needs to be visible and does not get locked. Two doors, one from processing room one into officers area.	Not in same space as adult holding cells
Chief's office	140	Adequate in size and location	140	No	Centrally located	Off of Patrol Rm.
Office(s) (future detective / shift supervisor office)	0	Does not exist	200	No	Could be used for other purposes until needed	Off of Patrol Rm.
Locker room (men's)	0	Does not exist	480	Yes	8 Lockers, 2 showers 2 toilets	
Locker room (women's)	0	Does not exist	360	Yes	6 Lockers, 2 showers 2 toilets	
Sally port	0	Does not exist	1,600	No	2 bays wide, two vehicles deep, vehicle wash, decontamination area, flammable storage, and eyewash station	Should have secure vestibule before entering processing
Decontamination area in sally port	0	Does not exist	48	Maybe		How do we deal with prisoner decontamination?
Equipment storage	0	Does not exist	120	No	Space for uniform storage, gun cleaning and other officer equipment storage (off sally port), work bench, and gun discharge	
Evidence room	90	Undersized	200	No	Conditioned with secure pass through large doors and a variety of storage options	
Records storage	200	Located in basement	400	No	Conditioned space (long term)	
Conference room	0	Does not exist	300	Yes	Conference rooms and space for small media event	
Break room	0	Does not exist	200	Maybe (location dependent)	Kitchenette would be adequate	
Cardio fitness room	0	Does not exist	240	Yes	Fitness area	Near locker rooms
General building storage	0	Need more	382	Some	Provide a variety of types	
Circulation / MEP	0		1,863	Some		
Total	1,250		8,072			

Fire Department program and space deficiencies:

The site is tight which significantly limits fire truck circulation. The apron and drive slope steeply away from the bay doors down to Route 2. This leaves no level area to park a truck outside on the apron and creates a dangerous intersection with Route 2. It is unsafe for a single firefighter to maneuver a truck on and off the site.

The apparatus bay is not long enough, so trucks must be parked tight to the overhead doors at the front. With this arrangement there is limited work and movement space behind the trucks. The space between trucks is not adequate for all uses. Hose wash and dry is done in the apparatus bay area between trucks. Minor service is done in back of the trucks. The apparatus bay will not be big enough to accommodate the anticipated size of future fire trucks (38'+).

Turn out gear is stored at a back corner of one of the apparatus bays. There is limited area to dress for a call. There is no turn out gear washing facility.

There is a small training and meeting room and limited office and storage areas. All support areas are too small and out of date, which may affect the department's ability to attract new volunteers.

Existing program space:

Name	Existing SF	Location	Function	Deficiencies
Training room	300	Level 1	Meeting and training	Not large enough and poor quality space
Workroom	120	Level 1	Small work shop and desk	Not large enough, poor quality space, and no exterior windows
Office / Storage	60	Level 1	Storage	Not large enough
Bathroom	60	Level 1	Bathroom	Not ADA accessible and in poor condition
Apparatus bays	3,200	Level 1	Truck bays	Depth is inadequate
Wood bay addition	400	Level 1	Antique truck storage	Not conditioned and poor quality space
Storage	540	Level 2	Storage	Space is on a second level and ceiling height is only about 6' high

FIRE DEPARTMENT PROPOSED PROGRAM

Fire Department proposed program:

In an effort to alleviate the above deficiencies, the program below is proposed.

Space / Activity	Existing Sq. Ft.	Notes on existing	Proposed Net Alloc. Sq.Ft.	Possible Shared Space	Notes	Adjacencies
Fire Department						
Space / Activity	Existing Sq. Ft.	Notes on existing	Proposed Net Alloc. Sq.Ft.	Possible Shared Space	Notes	Adjacencies
Lobby	0	Does not exist	100	Yes	Vestibule	
Multipurpose / training room	300	Undersized and in poor condition	600	Yes	Should be adequately sized and appointed for training and meeting purposes	Lockout so it can be used by public after hours
Air tank room	0	Does not exist	100	No	Separate room with workbench, compressor, air packs, etc.	Off apparatus bay
Public restroom	60	Not ADA compliant	100	Yes	ADA compliant	W/ Shower
Workroom	180	Poorly located	300	Yes	Centrally located. Some parts storage and general storage, space for long and short term projects.	Off the apparatus bay near EMS
Gear storage	0	located at the back of an apparatus bay, undersized	300	No	Adequate space for large group to get into their gear at the same time.	Off the apparatus bay
Decontamination Rm.	0	Does not exist	120	Maybe	Shower for decontamination, with toilet	Off apparatus bay near gear wash.
Gear wash area	0	Does not exist	200	No	Should be a dedicated space with HD washer and room to dry turn out gear	Off the apparatus bay (near decontamination area?)
Chief's office	0	Does not exist	100	No	Small administrative space	Near Shift Officer's office
Shift Officer's office	0	Does not exist	100	No	Small administrative space	Near Chief's office
Hose drying	0	Located in one of the apparatus bays	40	No	25'-30' high space (possible ladder training space)	Off the apparatus bay
Apparatus bay	3,600	Little circulation space around equipment	4,500	Maybe	20x75 to fit future trucks (under truck wash), Drive-thru 4" water supply to fill tanker (10' min. between trucks, and ideally one truck per bay)	Under carriage cleaning. One or all bays to be wash bays. 4" water line.
Watch room / Shift Office	0	Does not exist	100	Maybe	A room with views into apparatus bay and apron and access to same and Multipurpose / Training Rm. (EOC Rm)	A coordinating space for the individual who remains at the station during an event. Could be future dispatch space.
Locker room (men's)	0	Does not exist	300	Yes	10 Lockers, 2 showers 2 toilets	
Locker room (women's)	0	Does not exist	300	Yes	10 Lockers, 2 showers 2 toilets	
Breakroom	0	Does not exist	200	Maybe	Kitchenette	
Storage	540	Majority of storage is located on the second floor	298	Some	Adequately sized and located	
Circulation / MEP	0		2,328	Some		
Total	4,680		10,086			

Richmond Rescue Inc. program and space deficiencies:

Richmond Rescue is an independent, non- profit, and volunteer organization that serves Richmond, Bolton, Huntington and Jericho. The current building generally serves the Richmond Rescue Inc.'s needs well. The quality of the facility is believed to be part of the reason why Richmond Rescue attracts a large number of volunteers.

The training room is used for multiple functions and general use by on-duty volunteers. This limits the ability of the room to be used for public education events.

The fitness room is combined with a bedroom and is too small.

The two double bunk rooms are not ideal, single bunk rooms would be preferred.

Existing program space:

Name	Existing SF	Location	Function	Deficiencies
Apparatus bay	1,100	Level 1	Truck storage	No ventilation
Med. Rm.	48	Level 1, adjacent to apparatus bay	Medicine storage	Room cannot maintain the required 68F.
Clean-up Rm.	56	Level 1, adjacent to apparatus bay	Personal clean up	None
Bathroom	56	Level 1, adjacent to apparatus bay	Bathroom	None
Mechanical Rm.	48	Level 1, adjacent to apparatus bay	Boiler and washer / dryer	Could use a second washing machine
Training Rm. / Day Rm.	780	Level 1	Training and social	Could be larger
Office	100	Level 1	Paper work	None
Kitchen	100	Level 1	Cooking	None
Bedroom 1	140	Level 2	Sleeping	None
Bedroom 2	140	Level 2	Sleeping	None
Bedroom 3	180	Level 2	Sleeping	Need to go through office to gain access
Office	180	Level 2	Quit space	None
Bathroom	100	Level 2	Bathroom with shower	May not be accessible, only one shower
Day Rm.	580	Level 2	Quit space	No window
Stairs	200	Level 1&2	Circulation	No window

Richmond Rescue Inc. proposed program:

In an effort to alleviate the above deficiencies, the program below is proposed.

Space / Activity	Existing Sq. Ft.	Notes on existing	Proposed Net Alloc. Sq.Ft.	Possible Shared Space	Notes	Adjacencies
Richmond Rescue Inc.						
Space / Activity	Existing Sq. Ft.	Notes on existing	Proposed Net Alloc. Sq.Ft.	Possible Shared Space	Notes	Adjacencies
Lobby	0	Does not exist	100	Yes	Public entrance	
Side treatment area (EMS room)	0	Does not exist	100	Yes	Same as "soft interview room)	
Apparatus bay	1,100	Little storage	1,800	Maybe	Accommodate a possible third vehicle	Stacked or side by side in same space as Fire
Multipurpose / training room	780	Is open to kitchen	1,600	Yes	Available to the public (movable wall partition)	Includes storage
Medication room	48	Not conditioned (too cold)	60	No	Secure and conditioned	Off apparatus bays
Public restroom	56	Only one on ground level	80	Yes	ADA	
Decontamination room	56	Washer / dryer located in MEP room	100	Maybe	shower for decontamination (washer/dryer), toilet	Off apparatus bays
Locker room (men's)	0	Does not exist	800	Yes	20 Lockers, 2 showers, 2 toilets	
Locker room (women's)	0	Does not exist	800	Yes	20 Lockers, 2 showers, 2 toilets	
Office	100		200	No	One main office and one shift office	
Staff work space	0		256	Maybe	Work cubicles	
Bunk room	640	Currently only 3 with a need for 4	960	Maybe	Mix of doubles and singles to accommodate 8	
Cardio fitness room	0	Currently a make shift space	180	Maybe	Should be properly located	Near locker rooms
Day room	580	No windows	600	No	Should be isolated from public spaces, provisions for "cooking" small items (microwave, coffee pot, sink)	Near bunk rooms
Laundry room	0	Part of mechanical space	80	Maybe	Near decontamination space, but not part of it	Near bunk rooms
Bathroom	100	Shared by both men and women	200	No	One male and one female residential type bathroom	Near bunk rooms
Kitchen	100	Open to multipurpose / training room	440	Maybe (public access?)	Possible private areas for use during larger gatherings	Near training room
Storage	0	Need more	418			
Circulation / MEP	248		2,632	Some		
Total	3,808		11,406			

Part 2: Site Concepts

Site selection criteria:

Due to the vital role these services play in responding to emergencies in the community, the Committee developed the following criteria to evaluate the potential sites.

The site should be out of the flood zone.

The site should have multiple routes to reach all areas of town.

The site should provide for safe, rapid and unobstructed deployment of emergency vehicles. Most vehicular traffic to and from the facility(ies) would be urgent in nature. Locating the services on a site that minimizes potential conflict with the public is a priority.

The site should be located a safe distance away from the railroad tracks. The railroad carries potentially hazardous materials and a derailment /chemical spill could impede the ability to respond to emergencies.

The site should have adequate access to water and sewer service. The fire station's high demand for water should be considered when selecting a site. Being on the public water and sewer line is not mandatory, but would be significantly better than having to make other accommodations, such as underground water storage facilities.

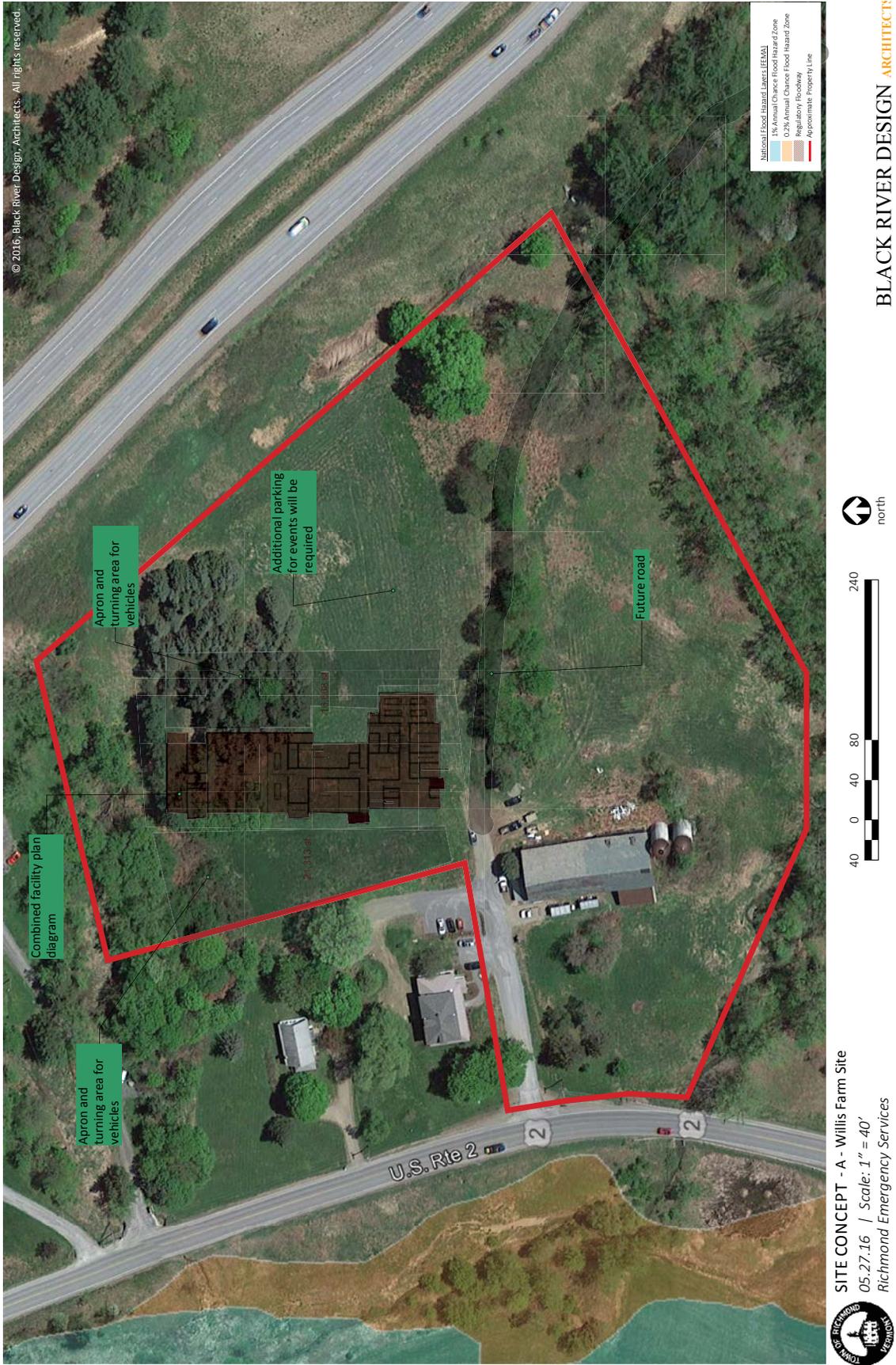
The development of the site should be economically viable. Large site development in Richmond is difficult given that most flat areas are located within the flood plain or adjacent to the railroad tracks. The east side of Route 2 is extremely steep. The site development costs of any potential site should not be taken lightly.

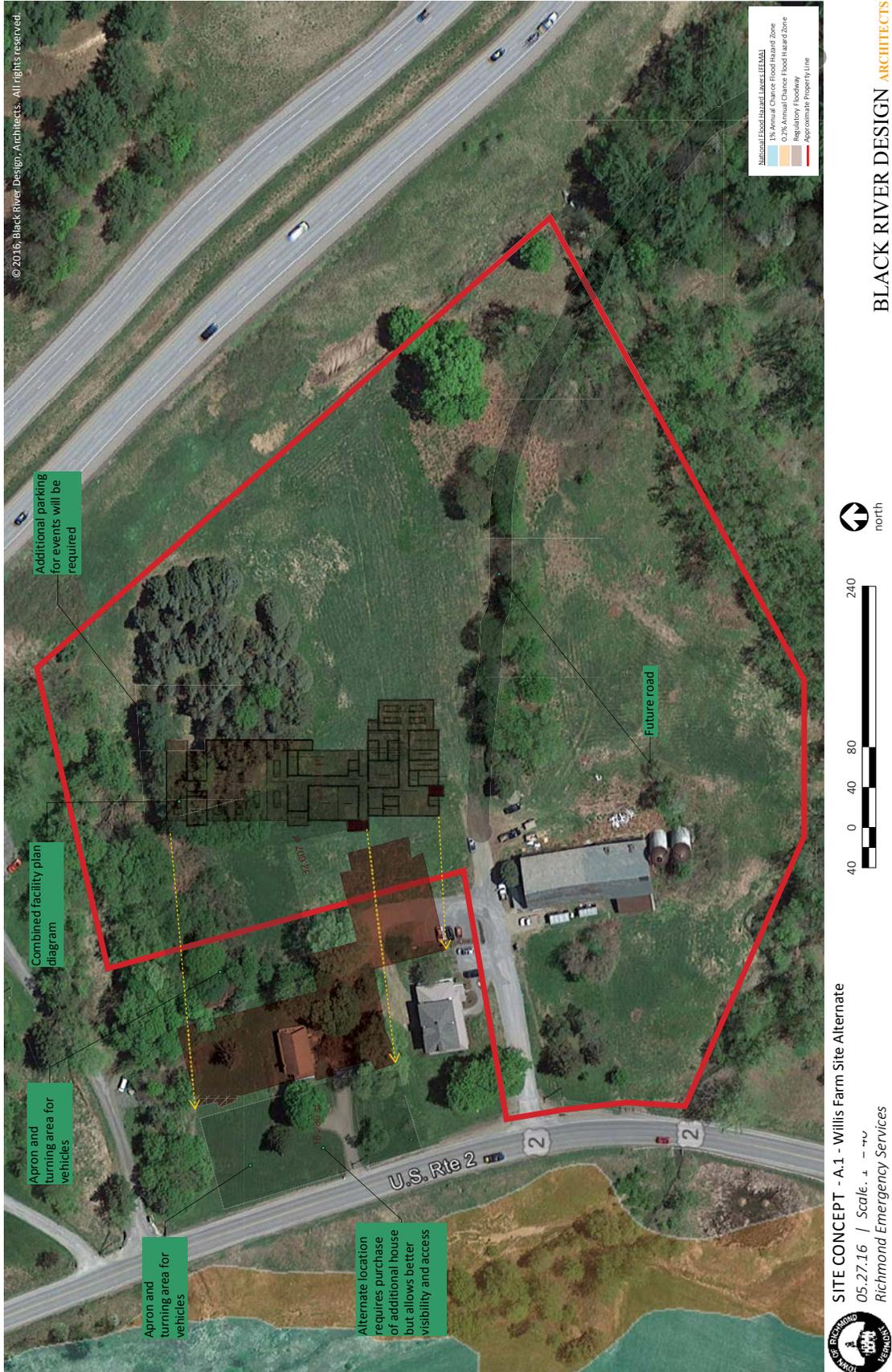
The site should be big enough to accommodate future growth. Public buildings are expected to serve their communities for a long time, but the needs of the town will be very different 25, 50, or 100 years from today. Although these needs may be difficult to predict, the ability of a site to support future expansion needs to be considered. This criterion is also critical for any project which may be phased.

Current and future call volume and location should be considered. There is little doubt that Richmond is well positioned to continue to grow, and all of the services should be located to best serve this growth.

The site should foster community pride. Public safety facilities are a significant expenditure and are expected to serve the community for generations to come. Public buildings are also expected to reflect the community and its priorities.

SITE SCHEMATIC DESIGN



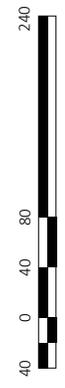


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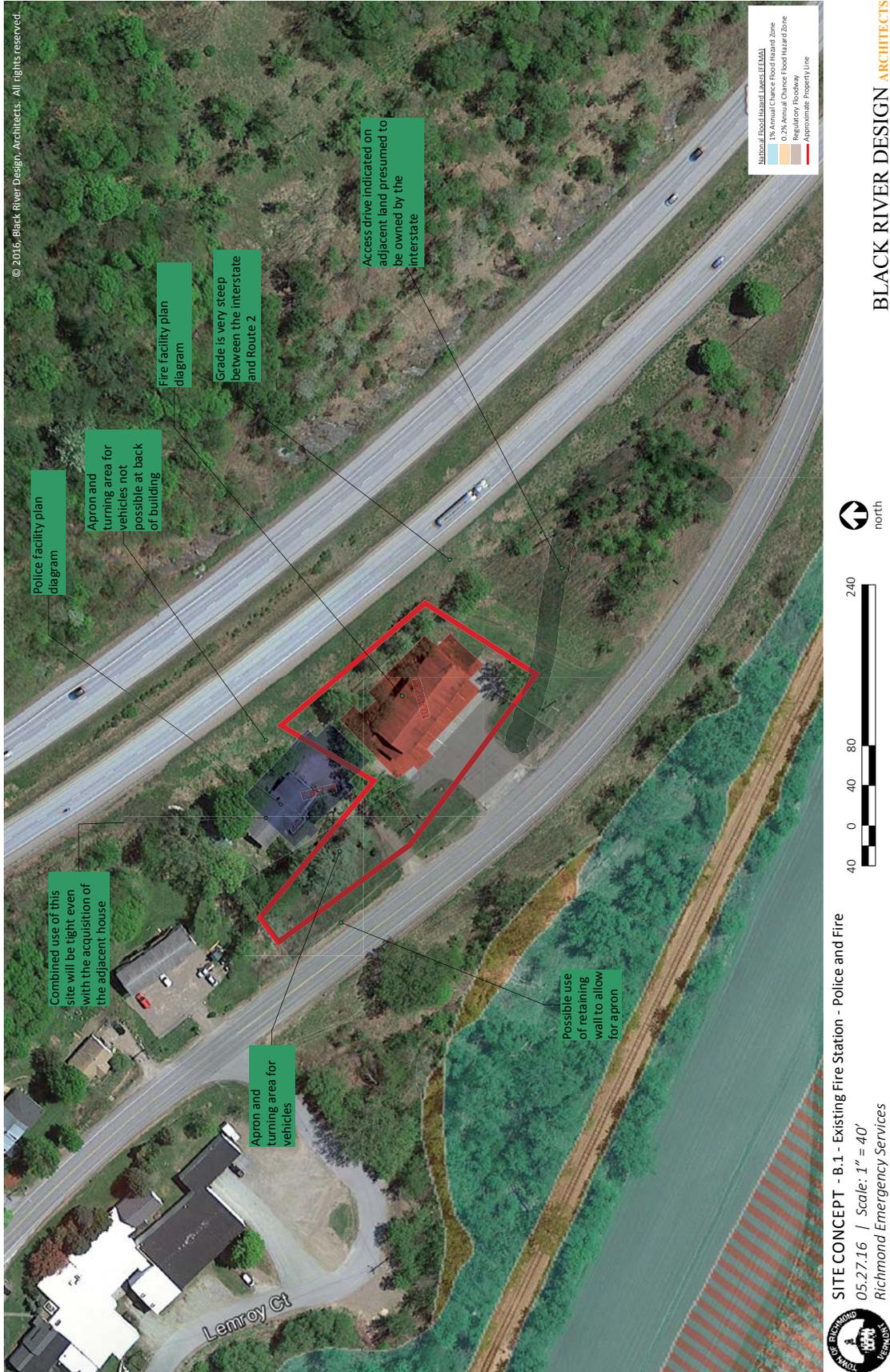
BLACK RIVER DESIGN ARCHITECTS



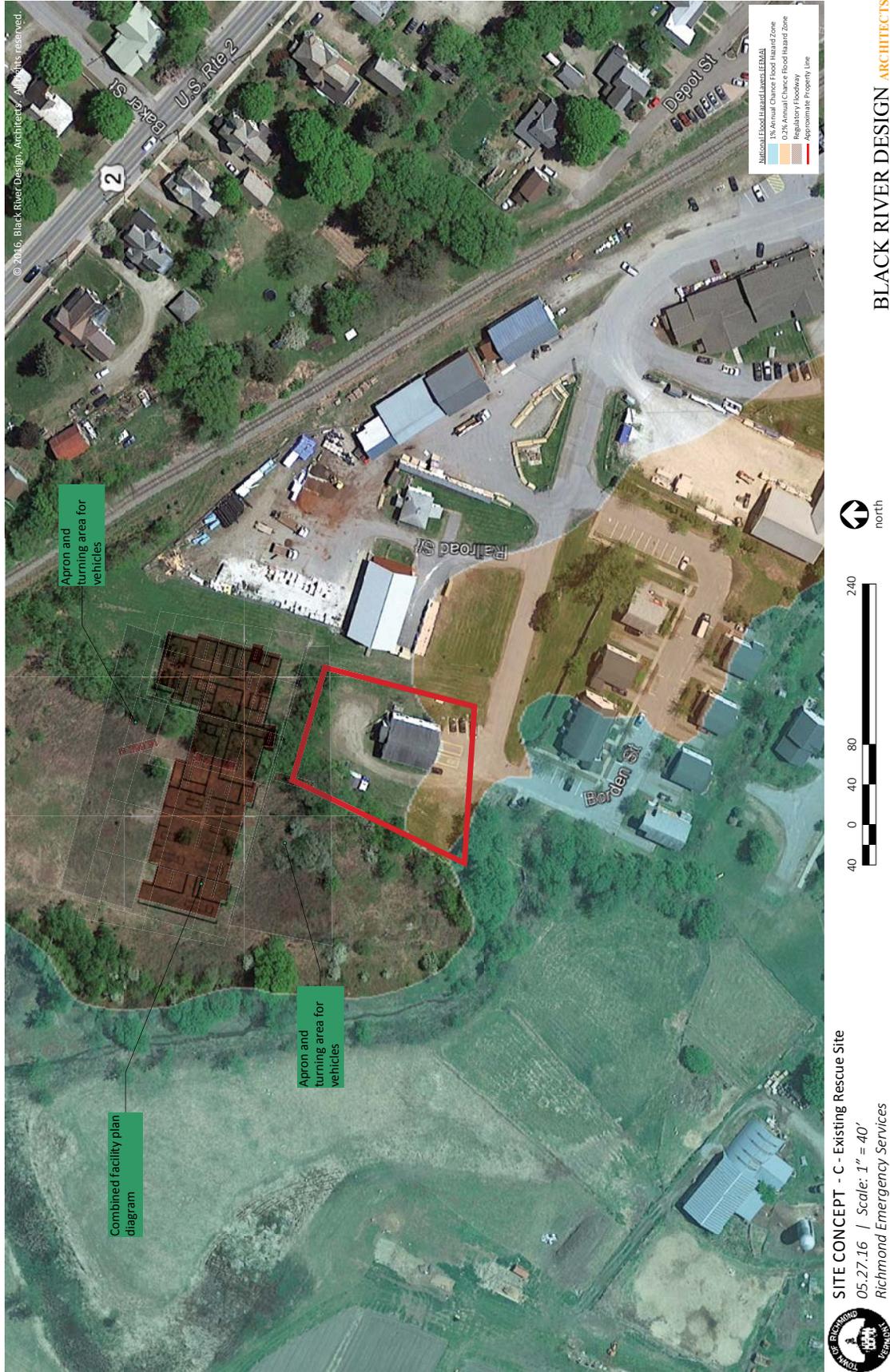
SITE CONCEPT - B - Existing Fire Station
 05.27.16 | Scale: 1" = 40'
 Richmond Emergency Services



BLACK RIVER DESIGN ARCHITECTS



BLACK RIVER DESIGN ARCHITECTS



BLACK RIVER DESIGN ARCHITECTS



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Site is very narrow and does not accommodate the entire program well. Possible site for police alone.

Combined facility plan diagram

Apron and turning area for vehicles

Apron and turning area for vehicles

National Flood Hazard Layers (NFHL)

- 1% Annual Chance Flood Hazard Zone
- 0.2% Annual Chance Flood Hazard Zone
- Regulatory Floodway



BLACK RIVER DESIGN ARCHITECT

SITE CONCEPT - D - West Main Site
 05.27.16 | Scale: 1" = 40'
 Richmond Emergency Services



Facility schematic design:

The Committee reviewed and analyzed several design options and concepts ranging from minimal (no work at the Richmond Rescue, renovations at the Richmond Fire Department, and new Richmond Police Department) to a single combine three service facility.

Each of these facilities has very specific and specialized building needs, but they also have overlapping generic needs. Spaces which could be shared include: Interior circulation, wash rooms, locker rooms, cardio room, break rooms, mechanical systems. There is a potential for Richmond Rescue and Richmond Fire Department to share training and apparatus bays. Schematic designs exploring these overlapping and combine spaces are depicted below.



RELATIVE COST AND PHASING OPTIONS

Relative cost and phasing options:

Black River Design generated schematic relative cost estimates for a variety of construction and phasing scenarios. All costs presented below are in current dollars and any future construction costs would need to be adjusted for inflation. Any proposed construction project would need to be more fully defined and cost estimated before moving forward.

Concept A would be to build a new police station and do minor renovations to the existing fire stations. At a later date, a new fire station would be constructed. A new rescue facility would be constructed when the existing facility was no longer viable.

Concept B would be to build a new combined facility to house all three departments.

Concept C would be to build a new combined facility or individual facilities (higher cost) to house police and fire services. A new rescue facility would be constructed when the existing facility was no longer viable.

Recommended Option: Year 1

Recommended Concept - New police and fire station		Work scheduled for year 1	New police and fire station.				Recommended Concept Total
			Scope	Unit	\$/Unit.	Sub-total	
Police	Renovations	No work	0	0	\$0	\$0	
New stand alone police station of a new site.	New	New station	8072	\$270	\$2,179,440	\$2,833,272	
	Site Development	Develop part of site	2	\$250,000	\$500,000	\$650,000	
	Site Acquisition	Acquire new site	5	\$200,000	\$1,000,000	\$1,000,000	
	FFE	New FFE	8072	\$20	\$161,440	\$209,872	
	Cost				\$3,679,440	\$4,693,144	
Fire	Renovations	Renovate existing	0	\$170	\$0	\$0	
Renovate The existing station to take care of short term needs, but not address any space concerns.	New	No work	9058	\$225	\$2,038,050	\$2,649,465	
	Site Development	No work	2	\$250,000	\$500,000	\$650,000	
	Site Acquisition	No work	1	\$200,000	\$200,000	\$200,000	
	FFE	No work	9058	\$10	\$90,580	\$117,754	
	Cost				\$2,738,050	\$3,617,219	
Project Cost					\$6,417,490	\$8,310,363	
Time value of money							
Town tax burden							

Concept A: Year 1

Concept A - New police station with fire and ems to follow in the future		Work scheduled for year 1	New police station on a site selected to be large enough to support a combined facility in the future. Renovations to the existing fire station sufficient to allow for 10 years or continued service. No improvements in the space needs for the fire station.			
			Scope	Unit	\$/Unit.	Sub-total
Police	Renovations	No work	0	0	\$0	\$0
New stand alone police station of a new site.	New	New station	8072	\$270	\$2,179,440	\$2,833,272
	Site Development	Develop part of site	2	\$250,000	\$500,000	\$650,000
	Site Acquisition	Acquire new site	5	\$200,000	\$1,000,000	\$1,000,000
	FFE	New FFE	8072	\$20	\$161,440	\$209,872
	Cost				\$3,679,440	\$4,693,144
Fire	Renovations	Renovate existing	4680	\$170	\$795,600	\$1,034,280
Renovate The existing station to take care of short term needs, but not address any space concerns.	New	No work		\$225	\$0	\$0
	Site Development	No work		\$250,000	\$0	\$0
	Site Acquisition	No work	0	\$200,000	\$0	\$0
	FFE	No work		\$10	\$0	\$0
	Cost				\$795,600	\$1,034,280
Rescue	Renovations	No work	0	\$170	\$0	\$0
No work planned.	New	No work	0	\$225	\$0	\$0
	Site Development	No work	0	\$250,000	\$0	\$0
	Site Acquisition	No work	0	\$200,000	\$0	\$0
	FFE	No work		\$10	\$0	\$0
	Cost				0	\$0
Project Cost					\$4,475,040	\$5,727,424
Time value of money						
Town tax burden						

RELATIVE COST AND PHASING OPTIONS

Concept A: Year 10

Concept A - New police station with fire and ems to follow in the future		Fire Station would be constructed on the site with the Police station. Existing Fire Station site to be sold.			
Work Schedule for year 10					
	Scope	Unit	\$/Unit.	Sub-total	Total (Sub-total +30%)
Police No work required.	No work	0	0	\$0	
	No work	0	\$270	\$0	
	No work	0	\$0	\$0	
	No work	0	\$200,000	\$0	
	No work	0	\$20	\$0	
				\$0	
Fire Addition and renovation at end of building life cycle.	No work		\$170	\$0	\$0
	New Building	9058	\$225	\$2,038,050	\$2,649,465
	Develop site	2	\$250,000	\$500,000	\$650,000
	No work	0	\$200,000	\$0	\$0
	New FFE	9058	\$10	\$90,580	\$117,754
				\$2,538,050	\$3,417,219
Rescue No work planned.	No work	0	\$170	\$0	\$0
	No work	0	\$225	\$0	\$0
	No work	0	\$250,000	\$0	\$0
	No work	0	\$200,000	\$0	\$0
	No work		\$10	\$0	\$0
				0	\$0
				\$2,538,050	\$3,417,219

Concept A: Year 20

Concept A - New police station with fire and ems to follow in the future		Rescue building is at the end of its useful life. The existing site is sold and a new rescue is constructed on the site with Police and Fire.					
Work Schedule for year 20		Scope	Unit	\$/Unit.	Sub-total	Total (Sub-total +30%)	Concept A Total
Police No work required.	No work		0	0	\$0	\$0	
	No work		0	\$270	\$0	\$0	
	No work		0	\$250,000	\$0	\$0	
	No work		0	\$0	\$0	\$0	
	No work			\$20	\$0	\$0	
					\$0	\$0	
Fire No work required.	No work			\$170	\$0	\$0	
	No work			\$225	\$0	\$0	
	No work	0		\$250,000	\$0	\$0	
	No work	0		\$200,000	\$0	\$0	
	No work			\$10	\$0	\$0	
					\$0	\$0	
Rescue Addition and renovation at	No work			\$170	\$0	\$0	
	No work	11406		\$225	\$2,566,350	\$3,336,255	
	Develop part of site	1		\$250,000	\$250,000	\$325,000	
	No work	0		\$200,000	\$0	\$0	
	New FFE	11406		\$10	\$114,060	\$148,278	
					\$2,816,350	\$3,809,533	
					\$2,816,350	\$3,809,533	\$12,954,176

RELATIVE COST AND PHASING OPTIONS

Concept B: Year 1

Concept B - New combined police, fire and rescue station.		Work scheduled for year 1	One combined facility in year 1. Existing Fire and Rescue sites are sold. Areas reduced by 10% in this option to reflect spatial efficiency.				Concept B Total	
			Unit	\$/Unit.	Sub-total	Total (Sub-total +30%)		
	Police	Renovations	No work	0	0	\$0	\$0	
	Combined facility	New	New building	8072	\$270	\$2,179,440	\$2,833,272	
		Site Development	New site	2	\$250,000	\$500,000	\$650,000	
		Site Acquisition	Acquire new site	2	\$200,000	\$400,000	\$400,000	
		FFE	New FFE	8072	\$20	\$161,440	\$209,872	
		Cost				\$3,240,880	\$4,093,144	
	Fire	Renovations	Renovate existing	0	\$170	\$0	\$0	
	Combined facility	New	New building	9058	\$225	\$2,038,050	\$2,649,465	
		Site Development	New site	2	\$250,000	\$500,000	\$650,000	
		Site Acquisition	Acquire new site	2	\$200,000	\$400,000	\$400,000	
		FFE	New FFE	9058	\$10	\$90,580	\$117,754	
		Cost				\$2,938,050	\$3,817,219	
	Rescue	Renovations	No work	0	\$170	\$0	\$0	
	Combined facility	New	New building	11406	\$225	\$2,566,350	\$3,336,255	
		Site Development	New site	1	\$250,000	\$250,000	\$325,000	
		Site Acquisition	Acquire new site	1	\$200,000	\$200,000	\$200,000	
		FFE	New FFE	11406	\$10	\$114,060	\$148,278	
		Cost				\$3,016,350	\$4,009,533	
						\$9,195,280	\$11,919,896	

Concept C: Year 1

Concept C - New Fire police on separate sites rescue would be renovated later.		Work scheduled for year 1	New police station on a site selected to be large enough to support a stand alone police station. Existing fire station demolished and a new Fire station built on existing site.			
	Scope		Unit	\$/sq.ft.	Sub-total	Total (Sub-total +30%)
Police	Renovations	No work	0	0	\$0	\$0
New stand alone police station of a new site.	New	New building	8072	\$270	\$2,179,440	\$2,833,272
	Site Development	New site	2	\$250,000	\$500,000	\$650,000
	Site Acquisition	Acquire new site	2	\$200,000	\$400,000	\$400,000
	FFE	New FFE	8072	\$20	\$161,440	\$209,872
	Cost				\$3,240,880	\$4,093,144
Fire	Renovations	No work		\$170	\$0	\$0
Demolish existing station, reconfigure the existing site and build a new station.	New	New building	9058	\$250	\$2,264,500	\$2,943,850
	Site Development	New site	2	\$250,000	\$500,000	\$650,000
	Site Acquisition	No work	0	\$200,000	\$0	\$0
	FFE	New FFE	9058	\$10	\$90,580	\$117,754
	Cost				\$2,764,500	\$3,711,604
Rescue	Renovations	No work	0	\$170	\$0	\$0
No work planned.	New	No work	0	\$225	\$0	\$0
	Site Development	No work	0	\$250,000	\$0	\$0
	Site Acquisition	No work	0	\$200,000	\$0	\$0
	FFE	No work		\$10	\$0	\$0
	Cost				0	\$0
					\$6,005,380	\$7,804,748

Concept C: Year 10

Concept C - New Fire police on separate sites rescue would be renovated later.		No Work.			
Work Schedule for year 10					
	Scope	Unit	\$/Unit.	Sub-total	Total (Sub-total +30%)
Police	No work	0	0	\$0	\$0
No work required.	No work	0	\$270	\$0	\$0
	No work	0	\$0	\$0	\$0
	No work	0	\$0	\$0	\$0
	No work		\$20	\$0	\$0
					\$0
Fire	No work		\$170	\$0	\$0
No work required.	No work	0	\$225	\$0	\$0
	No work	0	\$250,000	\$0	\$0
	No work	0	\$200,000	\$0	\$0
	No work		\$10	\$0	\$0
					\$0
Rescue	No work	0	\$170	\$0	\$0
No work planned.	No work	0	\$225	\$0	\$0
	No work	0	\$250,000	\$0	\$0
	No work	0	\$200,000	\$0	\$0
			\$10	\$0	\$0
					0
				\$0	\$0

Concept C: Year 20

Concept C - New Fire police on separate sites rescue would be renovated later.	Work Schedule for year 20	Renovate and add on to Rescue to meet current needs at the end of useful life of building.				
		Scope	Unit	\$/Unit.	Sub-total	Total (Sub-total +30%)
Police	No work	0	0	\$0	\$0	
No work required.	No work	0	\$270	\$0	\$0	
	No work	0	\$250,000	\$0	\$0	
	No work	0	\$0	\$0	\$0	
	No work		\$20	\$0	\$0	
				\$0	\$0	
Fire	No work		\$170	\$0	\$0	
No work required.	No work		\$225	\$0	\$0	
	No work	0	\$250,000	\$0	\$0	
	No work	0	\$200,000	\$0	\$0	
	No work		\$10	\$0	\$0	
				\$0	\$0	
Rescue	No work	3808	\$170	\$647,360	\$841,568	
Addition and renovation at end of building life cycle.	No work	7598	\$225	\$1,709,550	\$2,222,415	
	No work	0	\$250,000	\$0	\$0	
	No work	1	\$200,000	\$200,000	\$200,000	
	New FFE	11406	\$10	\$114,060	\$148,278	
				\$2,556,910	\$3,412,261	
				\$2,556,910	\$3,412,261	
					\$11,217,009	

RECOMMENDATIONS

Recommendations:

At the conclusion of the study, it was determined that there are two recommended directions. Neither of these recommendations include the co-location of the Richmond Rescue within a combined or individual Police or Fire Department building. The Richmond Rescue's desire to continue to be a 24-hour facility with housing accommodations is not as good a fit with the Fire Department as once expected. The Committee established that a new Police Station is the highest priority with a new Fire Station being of high, but secondary importance. Given this conclusion, the Committee presents the following recommendations.

Priority 1: Purchase a site along the Rt. 2 western gateway that is large enough to accommodate the Police Department and Fire Department. A benefit of this site over the existing site is its proximity to I-89, which accounts of much of the Police and Fire Departments calls. If Richmond Rescue wished to join in the future, this site would accommodate their program.

Priority 2: Purchase the 0.75-acre residential property adjacent to the existing Richmond Fire Department, raze both buildings and build a new Police Station and Fire Station. The benefit of this approach is that the two facilities could share site circulation as well as having access to town water and sewer. This scenario would allow for flexibility in the timing of the construction of a new fire station. The major challenge of this site is will be extensive site leveling which will need to take place.

