

**Feasibility Study**  
*for the*  
**Monroe Volunteer Emergency  
Medical Service**  
**Monroe, CT**



*April 2017*

**JHI**

**JACUNSKI HUMES**

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Feasibility Study  
for the  
**Monroe Volunteer Emergency Medical Service**  
**Monroe, CT**

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# **INTRODUCTION**

Jacunski Humes Architects, LLC is pleased to present this Final Report of findings related to the Town of Monroe's Request for Qualifications for a Feasibility Study for Emergency Medical Services for the Town of Monroe, CT.

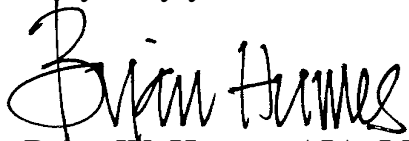
This Final Report is a compilation of items that have been produced and distributed by this office as they have been completed since our Notice to Proceed.

In addition to work performed through the office of Jacunski Humes Architects, the Construction Management firm of KVAssociates, Inc., Boston, MA provided professional cost estimating services.

Jacunski Humes Architects, LLC is proud of our reputation and experience in the field of **Public Safety Facility Design**. Jacunski Humes Architects, LLC currently has more active Public Safety Projects than any other architectural firm within New England. For the past twenty five (25) years, I have dedicated my architectural knowledge and expertise to the area of **Public Safety Facility Design**. Through this involvement with the Public Safety community, I have been involved with the planning and design of over *eighty (80)* municipal police / fire / EMS facilities throughout six states and have established a *national reputation* in the field of Public Safety Facility Planning and Design.

I trust that a thorough review of this Final Report will indicate to you our experience in this very technical building type.

Very truly yours,



Brian W. Humes, AIA, LEED AP  
Jacunski Humes Architects, LLC

**Space Needs Assessment**  
*for the*  
**Monroe Volunteer Emergency  
Medical Service**  
**Monroe, CT**



*February 2016*

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## **GENERAL INFORMATION**

**Date:** February 2016

**Agency:** Monroe Volunteer Emergency Medical  
Service

**Address:** 54 Jockey Hollow Road  
Monroe, CT 06468

**Telephone No.:** (203) 452-2826

**Primary Contact:** Mr. Donald Smith

# **GROWTH ESTIMATES**

## **Population Statistics:**

Year	1990	2000	2010	2020	2025
	<i>census</i>	<i>census</i>	<i>census</i>	<i>projected</i>	<i>projected</i>
Monroe, CT	16,896	19,247	19,479	18,960	18,599

source: UCONN State Data Center  
Connecticut Population Projections 2015-2025

## **Year 2015: Monroe Demographics (projected)**

Name	Year	Age	Male	Female	Total
Monroe	2015	0 to 4 years	340	308	648
Monroe	2015	5 to 9 years	548	513	1061
Monroe	2015	10 to 14 years	799	765	1564
Monroe	2015	15 to 19 years	939	899	1838
Monroe	2015	20 to 24 years	647	552	1199
Monroe	2015	25 to 29 years	283	202	485
Monroe	2015	30 to 34 years	274	282	556
Monroe	2015	35 to 39 years	402	487	889
Monroe	2015	40 to 44 years	635	698	1333
Monroe	2015	45 to 49 years	882	937	1819
Monroe	2015	50 to 54 years	979	1009	1988
Monroe	2015	55 to 59 years	803	878	1681
Monroe	2015	60 to 64 years	673	550	1223
Monroe	2015	65 to 69 years	477	509	986
Monroe	2015	70 to 74 years	293	365	658
Monroe	2015	75 to 79 years	219	319	538
Monroe	2015	80 to 84 years	164	241	405
Monroe	2015	85 to 89 years	109	169	278
Monroe	2015	90 years and over	48	103	151
Monroe	2015	Total	9512	9786	19298

## **Year 2020: Monroe Demographics (projected)**

<b>Name</b>	<b>Year</b>	<b>Age</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Monroe	2020	0 to 4 years	314	283	597
Monroe	2020	5 to 9 years	408	366	774
Monroe	2020	10 to 14 years	635	597	1232
Monroe	2020	15 to 19 years	851	817	1668
Monroe	2020	20 to 24 years	794	751	1545
Monroe	2020	25 to 29 years	479	361	840
Monroe	2020	30 to 34 years	223	166	389
Monroe	2020	35 to 39 years	323	371	694
Monroe	2020	40 to 44 years	517	600	1117
Monroe	2020	45 to 49 years	709	766	1475
Monroe	2020	50 to 54 years	880	932	1812
Monroe	2020	55 to 59 years	930	954	1884
Monroe	2020	60 to 64 years	728	798	1526
Monroe	2020	65 to 69 years	590	472	1062
Monroe	2020	70 to 74 years	395	452	847
Monroe	2020	75 to 79 years	241	331	572
Monroe	2020	80 to 84 years	170	274	444
Monroe	2020	85 to 89 years	109	177	286
Monroe	2020	90 years and over	66	130	196
Monroe	2020	Total	9362	9598	18960



## **Year 2025: Monroe Demographics (projected)**

<b>Name</b>	<b>Year</b>	<b>Age</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Monroe	2025	0 to 4 years	351	319	670
Monroe	2025	5 to 9 years	381	341	722
Monroe	2025	10 to 14 years	495	449	944
Monroe	2025	15 to 19 years	687	649	1336
Monroe	2025	20 to 24 years	707	670	1377
Monroe	2025	25 to 29 years	625	555	1180
Monroe	2025	30 to 34 years	418	324	742
Monroe	2025	35 to 39 years	272	256	528
Monroe	2025	40 to 44 years	438	485	923
Monroe	2025	45 to 49 years	592	669	1261
Monroe	2025	50 to 54 years	711	763	1474
Monroe	2025	55 to 59 years	834	878	1712
Monroe	2025	60 to 64 years	850	874	1724
Monroe	2025	65 to 69 years	641	711	1352
Monroe	2025	70 to 74 years	498	417	915
Monroe	2025	75 to 79 years	329	408	737
Monroe	2025	80 to 84 years	188	285	473
Monroe	2025	85 to 89 years	114	200	314
Monroe	2025	90 years and over	71	144	215
Monroe	2025	Total	9204	9395	18599

## **STAFF PROJECTIONS**

### **EMS Personnel:**

	Year		
	2015	2020	2025
		<i>est.</i>	<i>est.</i>
Administrative Assistant (part-time)	1	1	1
Administrative Coordinator (part-time)	0	1	1
EMS Paramedics (contracted service, 24/7/365)	1	1	1
EMS E.M.T.'s (contracted service, 6am-6pm)	2	2	2
Volunteers	40	50	60
<b>Total E.M.S. Positions / Volunteers</b>	<b>44</b>	<b>55</b>	<b>65</b>

Daily Staffing Levels = 3-person day crew + paramedic

## **VEHICLE PROJECTIONS**

### **E.M.S. Vehicles:**

	Year		
	2015	2020	2025
		<i>est.</i>	<i>est.</i>
<b>Vehicles:</b>			
Modular Ambulances	3	3	3
Paramedic Fly Car	1	1	1
Additional Fly Car	0	1	1
<b>Total Ambulances</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>Total Vehicles</b>	<b>1</b>	<b>2</b>	<b>2</b>

# **SPACE NEEDS ASSESSMENT**

## **Proposed Square Footage** **(Net)**

### **1. Vestibule / Restrooms**

a.	<u>Vestibule</u>		<u>80</u>
	1.	Air-lock vestibule	
	2.	Walk off mat	
	3.	Vision panel to Administrative Assistant to oversee Vestibule	
	4.	Electronic door control to remainder of facility	
	5.	Doorbell to facility	
	6.	Intercom to Central Dispatch (Monroe Police)	
	7.	Display Case	
	8.	Pamphlet Rack	
	9.	Adjacent to Administrative Assistant	
b.	<u>Restrooms</u>	<u>Two (2) @ 75</u>	<u>150</u>
	1.	Handicap accessible	
	2.	Male and Female facilities	
	3.	Location to support Training Classroom occupancy and staff use	

### **2. Training Classroom**

a.	<u>Location</u>		
	1.	Convenient access from Vestibule for volunteer / community access	
b.	<u>Training Classroom</u>		<u>1,200</u>
	1.	Seating for sixty (60) at training tables and chairs	
	2.	Computer workstation for one (1)	
	3.	Audio / Visual capabilities	
	4.	Independent sound system	
	5.	Lighting on dimmers, varied lighting levels	
	6.	WIFI enabled	
	7.	Video input and output locations	
	8.	Movable tables and chairs	
	9.	Presentation wall surface(s) / wall monitors	
	10.	Dual use as cot space during natural disasters / emergencies	
	11.	Adjacent to restroom facilities	

- c. Furniture Storage 80
1. Storage of tables and chairs
  2. Audio visual equipment
  3. Sound system amplifier location
  4. Directly adjacent to Training Classroom
  5. Lockable
- d. Training Aids Storage 60
1. Medical training aids
  2. CPR training aids
  3. Mannequins, training equipment, supplies
  4. File storage
  5. Directly adjacent to Training Classroom
  6. Lockable

### **3. *Administrative Assistant***

- a. Administrative Assistant 200
1. Workstation for one (1)
  2. Waiting area in Conference Room / Training Classroom
  3. Coat closet
  4. File storage, lockable (16 drawer capacity, min.)
  5. Bookshelving
  6. Vision panel to Vestibule
  7. Photo ID station with white background, printer
  8. Visitor's chairs for two (2)
  9. Markerboard / Tackboard
  10. Paper shredder
  11. Overhead speaker with volume control (radio frequency)
  12. Natural light
  13. Adjacent to Administrative Director, Conference Room

#### **4. EMS Administrator**

- |    |   |            |
|----|---|------------|
| a. | <u>EMS Administrator</u>                                  | <u>175</u> |
|    | 1. Workstation for one (1)                                |            |
|    | 2. Coat closet  |            |
|    | 3. File storage, lockable (12 drawer capacity, min.)      |            |
|    | 4. Bookshelving   |            |
|    | 5. Visitor's chairs for two (2)                           |            |
|    | 6. Markerboard / Tackboard                                |            |
|    | 7. Paper shredder   |            |
|    | 8. Overhead speaker with volume control (radio frequency) |            |
|    | 9. Natural light  |            |
|    | 10. Adjacent to Administrative Assistant, Conference Room |            |

#### **5. Chief / Deputy Chief's Office**

- |    |   |            |
|----|---|------------|
| a. | <u>Chief / Deputy Chief's Office</u>                      | <u>175</u> |
|    | 1. Workstations for two (2)                               |            |
|    | 2. Visitor's chairs, one (1) per workstation              |            |
|    | 3. File storage, lockable (4 drawers per workstation)     |            |
|    | 4. Bookshelving   |            |
|    | 5. Natural light  |            |
|    | 6. Overhead speaker with volume control (radio frequency) |            |
|    | 7. Natural light  |            |
|    | 8. Adjacent to Administrative Assistant, Conference Room  |            |

#### **6. Conference Room / Quiet Study**

- |    |   |            |
|----|---|------------|
| a. | <u>Conference Room</u>  | <u>320</u> |
|    | 1. Conference table seating for twelve (12), Exec. Bd. meetings |            |
|    | 2. Bookshelving for library materials / training material       |            |
|    | 3. Quiet study cubicle with computer workstation                |            |
|    | 4. Remote radio transmitter w/ copper phone line access points  |            |
|    | 5. Adjacent to Administrative Offices, Vestibule                |            |

## 7. *Copy / Mail Room*

- a. Copy / Mail Room 125
1. High speed copier / scanner
  2. Paper storage
  3. Office supplies storage
  4. Mail distribution area for volunteers, sixty (60), minimum
  5. Marketing materials storage

## 8. *MVEMS Equipment Storage*

- a. MVEMS Equipment Storage 100
1. Storage of MVEMS supplies and equipment
  2. Storage of uniforms, jackets, department issued equipment
  3. Radio spare parts inventory
  4. Adjustable shelving
  5. Adjacent to Administrative Offices

## 9. *Duty Crew Office*

- a. Duty Crew Office 150
1. Computer workstations for three (3)
  2. Gear storage area
  3. Locker storage, six (6) minimum, for equipment / clothing storage
  4. Adjacent to Day Room

## 10. *Day Room*

- a. Day Room 1,000
1. Flexible space for waiting, dining, food preparation
  2. Comfortable furniture seating
  3. Computer workstation for one (1)
  4. Television
  5. Natural light
  6. Dining table seating for 8-12
  7. Residential style kitchen
    - a. Range / Hood
    - b. Sinks / Disposal
    - c. Dishwasher
    - d. Microwave
    - e. Refrigerator / Freezer
  8. Convenient to Apparatus Bays

## 11. *Bunk Rooms*

a.	<u>Bunk Rooms</u>	<u>Six (6) @ 80</u>	<u>480</u>
	1.	Individual rooms for Male / Female use	
	2.	One (1) twin, extra-long mattress / box spring, side table, lamp; potential for “bunked” beds.	
	3.	One (1) storage locker	
	4.	Overhead speaker for tone alerting	
	5.	Telephone	
	6.	Individual temperature controls	
	7.	Adjacent to Restrooms / Showers, away from Day Room	

## 12. *Restrooms / Showers*

a.	<u>Restrooms / Showers</u>	<u>Two (2) @ 80</u>	<u>160</u>
	1.	Toilet / Sink / Shower unit	
	2.	Handicap accessible design	
	3.	Robe hooks	
	4.	Toilet accessories	
	5.	Mirror	
	6.	Adjacent to Bunk Rooms	

## 13. *Apparatus Bays*

a.	<u>Apparatus Bays</u>	<u>4,320</u>
	1.	Three (3) double-deep bay required, (18’ wide x 80’ long) to provide for current and future EMS vehicles.
	2.	14’ wide x 14’ high apparatus bay doors at each bay
	3.	120 V. cord reels @ each bay (30 amps, minimum)
	4.	Exhaust capture system for diesel apparatus (overhead capture and exhaust)
	5.	Trench style floor drains centrally located at each bay with oil and grease entrapment system
	6.	Radio speakers/intercom system/paging/alert tone
	7.	Multiple hose bibb connections (inside and outside bays) for wash down
	8.	Auto door openers with remotes on all front line pieces
	9.	Markerboard / apparatus status and daily check clipboard area
	10.	Radio charging station
	11.	Networked printer location
	12.	Coat rack / locker storage
	13.	Vending machines, two (2) minimum

#### **14. EMS Supplies Storage**

- a. EMS / Medical Supplies Storage 60
1. Shelving for medical supplies
  2. Limited access to restock vehicles
  3. Locate adjacent to Apparatus Bays

#### **15. EMS Inventory Storage**

- a. EMS Inventory Storage 100
1. Shelving for medical supplies
  2. Secured access to control inventory
  3. Locate adjacent to Apparatus Bays

#### **16. Decontamination / Clean Room**

- a. Decontamination / Clean Room 200
1. Emergency eye wash / deluge shower with floor drain
  2. Washer / Dryer
  3. Wash sink with drain boards for large equipment use
  4. Cleaning supplies storage
  5. Direct access from building exterior, adjacent to Apparatus Bays

#### **17. Oxygen Generation Room**

- a. Oxygen Generation Room 150
1. Medical Oxygen Generation equipment (air compressors, pressure equalization reservoir, piping and tubing)
  2. Capacity of system to be determined by the Owner
  3. Oxygen tank storage containers
  4. Fire-rated containment area
  5. Adjacent to Apparatus Bays, exterior parking for drop-off's

#### **18. Custodial Services and Toilet Facilities**

- a. Custodial Closet 80
1. Service sink / floor sink
  2. Janitorial supply storage
  3. Cart storage
  4. Equipment storage
  5. Floor cleaning equipment / cleaning supplies / paper supplies storage



b.	<u>Restrooms</u>	<u>Two (2) @ 75</u>	<u>150</u>
	1.	Handicap accessible	
	2.	Male and Female facilities for staff use	
	3.	Adjacent to Day Room	

## **19. Data Equipment**

a.	<u>Computer Network Server / Computer Equipment</u>	<u>50</u>	
	1.	Network server location, rack mounted	
	2.	Patch panels for telephone / data network	
	3.	Networked system monitor and keyboard	
	4.	Tape storage for backups (fire rated)	
	5.	Telephone system / Data system demarcation point, conduit access to public utility location(s)	
	6.	Head end location for access control / video surveillance systems, rack mounted	
	7.	Acoustical control to adjacent spaces	
	8.	Independent HVAC for cooling demands	

## **20. Mechanical**

a.	<u>Boiler Room</u>	<u>150</u>	
	1.	Two boilers (min), preferred, high efficiency condensing type	
	2.	Gas fired burners preferred	
	3.	Hot water heater	
	4.	Floor drains	
	5.	Side-wall venting	
b.	<u>HVAC Equipment</u>	<u>200</u>	
	1.	Air handling unit(s)	
	2.	Ducted supply and returns	
	3.	High efficiency filters	
	4.	VAV boxes with DDC controls	
	5.	Zoned systems	
	6.	Host computer w/in Computer Data Room	
	7.	Varied locations throughout facility / roof top	
c.	<u>Standby Generator Power</u>	<u>exterior enclosure</u>	
	1.	Transfer switch	
	2.	On-site, uninterruptable fuel supply (72 hour supply, min.)	
	3.	Muffler system	
	4.	Day tank	
	5.	Acoustic enclosure	

- d. Electrical Switchgear Room 80
  - 1. Main Distribution Panel (MDP)
  - 2. Electrical subpanels
  
- e. Fire Suppression 50
  - 1. Fully sprinkled facility
  - 2. Code designed minimum

## **21. Circulation**

- a. Corridors w/in Net to Gross
  - 1. 48" clear width (min.)

# **SPACE NEEDS SUMMARY**

## **Summary Sheet**

## **Square Ft. proposed**

### **EMS Space**

Vestibule / Restrooms	230
Training Classroom	1,340
Administrative Assistant	200
EMS Administrator	175
Chief / Deputy Chief's Office	175
Conference Room / Quiet Study	320
Copy / Mail Room	125
MVEMS Equipment Storage	100
Duty Crew Office	150
Day Room	1,000
Bunk Rooms	480
Restrooms / Showers	160
Apparatus Bays	4,320
EMS Supply Storage	60
EMS Inventory Storage	100
Decontamination / Clean Room	200
Oxygen Generation Room	150
Custodial Services and Toilet Facilities	220
Data Equipment Room	50
Mechanical	480
Circulation	w/in net to gross
<b>Total Net Square Footage</b>	<b>10,035</b>
Net to Gross Factor (1.10 x apparatus bays)	430
Net to Gross Factor (1.35 x all other spaces)	2,000
<b>Total Gross Square Footage Required</b>	<b>12,465</b>

# **SITE NEEDS ASSESSMENT**

- a. Public / Volunteers / Staff Parking 18,000
1. Total number of spaces required = Fifty (50) minimum preferred
  2. Handicap accessible parking, code minimum required
  3. Motorcycle parking on concrete pad, staff use
  4. Convenient to building points of entry
- b. Apparatus Bay Aprons 4,000
1. Restrict personal vehicle access, access by apparatus only
  2. Convenient parking for first responders / volunteers
  3. Radiant heating to prevent icing / snow removal operations
- c. Flagpoles w/in Landscape Setback
1. One (1) minimum preferred
  3. Internal halyard
  4. Located at public entry
- d. Signs w/in Landscape Setback
1. Department identification
  2. Located at roadside
  3. Located on building
  4. Illuminated and Electronic Message Board, preferred
  5. Conforms to Local Zoning
- e. Lighting
1. Lighting in public areas
  2. Lighting in all parking areas
  3. Illuminated walkways
  4. Illuminated entry locations
  5. Lighting coordinated with CCTV locations
- f. CCTV Camera Surveillance
1. Monitoring of all points of entry, staff vehicles
  2. Color, fixed focus cameras at critical areas of surveillance
  3. Weatherproof housings
  4. Pole mounted away from structure
- g. Handicap accessibility
1. Entire facility to be designed for handicap accessibility

- h. Plant Material w/in Landscape Setback
1. Minimize maintenance
  2. Eliminate large ground cover
- i. Trash Storage 150
1. Number of dumpsters required = one (1) minimum
  2. Dumpster enclosure with concrete pad
  3. Approach zone for waste retrieval
- j. Snow Storage w/in Landscape Setback
1. Provide snow storage capacity at parking areas / site design
  2. Coordinate fencing locations with snow removal requirements
- k. Exterior Hose Bibb Locations
1. Provide varied locations around building for maintenance requirements
  2. Lockable access
  3. Vehicle rinse location at Apparatus Bay aprons
- l. Communications Antenna
1. No ground mounted antenna tower anticipated, building mounted only
  2. Radio signals transferred to repeater network throughout town from Central Dispatch (Monroe Police)
- m. Outdoor Dining 250
1. Patio area convenient to Kitchen / Day Room
  2. Picnic table seating
  3. Portable outdoor cooking option

## **SITE NEEDS SUMMARY**

<b>Site Requirements</b>	<b>Area Estimate (square feet)</b>
Public / Volunteers / Staff Parking	18,000
Apparatus Apron	4,000
Apparatus Approach	4,000
Dumpster Enclosure	150
Communications Antenna	On-building
Outdoor Dining	250
<b>SUBTOTAL</b>	26,400
Building Footprint (one story assumed)	12,465
Landscaped Setbacks / Zoning Setbacks	20,000
Future Expansion Potential	5,000
<b>TOTAL SITE AREA</b>	63,865

**DIVIDED BY 43,560 = 1.5 ACRES (MINIMUM BUILDABLE AREA, RECOMMENDED)**

**Site Assessment**  
*for the*  
**Monroe Volunteer Emergency  
Medical Service**  
**Monroe, CT**



*August 2016*

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**SITE ASSESSMENT  
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MONROE VOLUNTEER EMERGENCY  
MEDICAL SERVICE  
MONROE, CT**

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**SITE ASSESSMENT  
FOR THE  
MONROE VOLUNTEER EMERGENCY  
MEDICAL SERVICE  
MONROE, CT**

**August, 2016**

**The Town of Monroe has requested that Jacunski Humes Architects, LLC, Berlin, CT, review several sites that the town has identified as having the potential to accommodate the current and future space and site needs of the Monroe Volunteer Emergency Medical Service.**

**The space and site needs criteria that will be utilized to determine the adequacy of these sites was previously outlined within a Space Needs Assessment, dated February, 2016, and prepared by Jacunski Humes Architects, LLC. A summary of that document determined the following:**

- Recommended Space Needs: 12,465 gross square feet of construction**
- Recommended Site Needs: 1.5 acres of land**

**The sites to be evaluated are comprised of the following parcels:**

- 1. 54 Jockey Hollow Rd, Map 85-Lot 17**
- 2. 7 Fan Hill Rd, Map 75-Lot 3**

**This site assessment is based upon visual inspections of each site and cursory review of available documentation to determine if available land meets the initial criteria to support a new, modern, efficient emergency medical facility for the Town of Monroe. This initial site assessment and review considers the following key components:**

- 1. ACQUISITION COSTS**
- 2. LOT SIZE RELATIVE TO SITE NEEDS ASSESSMENT**
- 3. PARKING AVAILABILITY**
- 4. SITE CONSTRUCTION AND DEVELOPMENT COSTS**
- 5. LOCATION / ACCESS / TRAFFIC**
- 6. VEHICULAR ACCESS AND EGRESS**
- 7. UTILITIES**
- 8. VISIBILITY**
- 9. NEIGHBORHOOD IMPACT**
- 10. ZONING RESTRICTIONS**
- 11. WETLANDS**
- 12. FLOOD PLAIN**
- 13. CONVENIENCE**

**Based upon these findings, the Town of Monroe may elect to continue their review of these sites to gain additional insight into the viability of these sites to accommodate the current and future needs of the Monroe EMS. This initial site assessment should not be construed as an all-inclusive and exhaustive investigation of deeds, restrictions, easements, zoning, subsurface conditions, hazardous materials, required mitigations, utilities, or other conditions that may be impacted by existing construction.**

# 1. 54 Jockey Hollow Road, Map 85-Lot 17

## Property Statistics:

Current Owner:	Town of Monroe
Net Total Assessed Value:	\$794,100
Location:	Jockey Hollow Road near Chalk Hill Road
Parcel Size:	2.38 acres
Existing Structures:	Fire/EMS Facility
Zone:	RF-1, Residential & Farming District 1

## Remarks:

54 Jockey Hollow Road, Map 85-Lot 17 is a 2.38 acre parcel in the north –central area of town and currently serves as one of the town’s Fire Stations as well as the Operational Station for the Monroe Volunteer Emergency Medical Service. The property is bordered by Jockey Hollow Road to the south, adjacent residential properties to the east and west, and the town’s educational campus consisting of the Fawn Hollow Elementary School, Jockey Hollow Middle School and the retired Chalk Hill School to the north. The site has access only onto Jockey Hollow Road. The topography of the site can be characterized as flat for the built portion of the site. Much of the unimproved area has some significant topography.

A portion of the east branch of the Pequonnock River flows along the western property line of the site and a portion of the western edge of the site is contained in FEMA Zone A. The majority of the site is in FEMA Flood Zone X showing little concern for flooding.

The site’s only structure consists of a predominantly single-story brick building built in 1983 and expanded in 2001 of approximately 12,700 sf with 3 vehicle bays facing the street and 3 vehicle bays facing the rear. The bay space, storage and utility space comprises approximately 6,200 sf with the remainder as office and bunkroom spaces,

Sight lines along Jockey Hollow Road are unrestricted to the West for approximately 300’ and to the East for substantially farther than that. Jockey Hollow Road serves as an east-west vehicular feeder for the Town of Monroe. There are no electrified traffic control devices. Intersections are controlled with stop signs.

The property and the surrounding area is currently zoned “RF-1” Residential & Farming District 1, and is residential in character.

Site is currently served by septic system. The street is currently supplied with a 3-phase electric service supplied through overhead lines and pole mounted transformers located on the subject side of Jockey Hollow Road.

Public Transportation is not available to this site.

**1. 54 Jockey Hollow Road, Map 85-Lot 17**



**Aerial View showing Extents of Property**

**2. 54 Jockey Hollow Road, Map 85-Lot 17**



**View of 54 Jockey Hollow Road from street looking north**

**3. 54 Jockey Hollow Road, Map 85-Lot 17**



**View of Jockey Hollow Road at exit drive looking west towards Chalk Hill Road**

**4. 54 Jockey Hollow Road, Map 85-Lot 17**



**View of Jockey Hollow Road at exit drive looking east towards Fan Hill Road**

## 2. 7 Fan Hill Road, Map 85-Lot 17

### Property Statistics:

Owner:	Town of Monroe
Net Total Assessed Value:	\$3,394,900
Location:	7 Fan Hill Road
Parcel Size:	7.17 acres
Existing Structures:	Town Hall, Police Department
Existing Use:	Town Hall, Police Department
Zone:	RF-1H, Residential & Farming District 1

### Remarks:

7 Fan Hill Road is a 7.17 acre parcel in the center of Monroe. The property is bordered by Church Street to the north and northwest, Fan Hill Road to the east, the Edith Wheeler Memorial Public Library to the south and St Jude's Catholic School to the southwest. The site has direct access onto Church Street. The portion of the existing property that is desired to accommodate an EMS facility is an area to the west of the Town Hall and is currently used as parking, storage and impound lot for the Police Department. The site topography in this area consists of a small flat area that is currently paved. The remainder of the western portion of the property slopes substantially down to Church Street and is unsuitable for development.

The existing structures include a two story town hall and police structure built in 1972 and added onto in 2013 of approximately 47,000 sf with the Police Department occupying most of the lower level and the Town Hall utilizing the main level.

The entirety of the site is in FEMA flood zone X, showing no potential for flooding.

Sight lines along Church Street to the west are somewhat restricted by the curve of the road, sight lines to the east are clear for at least 300'.

The property and the surrounding area is currently zoned "RF-1H", Residential & Farming District 1. The property is within the Monroe Historic District and subject to review by the Historic District Commission.

The flat area of the existing lot up to the existing parking area is approximately 130 feet at its deepest dimension and is approximately 150 feet in length yielding about 25,000 square feet or 0.6 acres for development. Based upon the Space Needs Assessment requirement for 1.5 acres of property, the subject property falls well short of the required area, even with a multi-story solution.

The site is currently served by septic system. The precise location of the existing building's septic system is unknown, but is believed to be under a portion of the parking lot and the parcel that is being studied. Developing this site would require the relocation of the Town Hall/Police septic system as well as providing a separate or expanded system for the new facility. The building is currently utilizing oil and electricity as their primary fuel sources. The site is currently supplied with a 3-phase electric services supplied through overhead feeds and pole mounted transformers located on the subject side of Church Street.

Public Transportation consists of a Greater Bridgeport Transit bus stop located about a mile south of the site on Route 111.

## **1. 7 Fan Hill Road, Map 75-Lot 3**



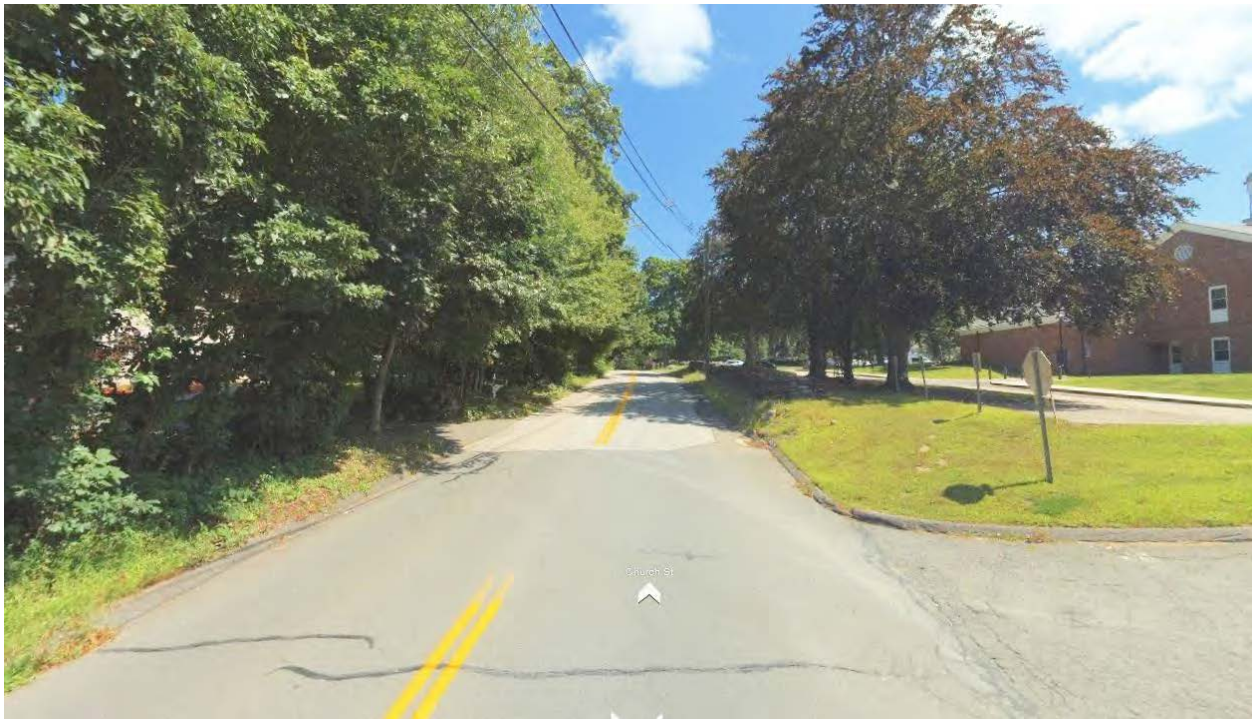
**Aerial View entire parcel in yellow, study parcel in red**

**2. 7 Fan Hill Road, Map 75-Lot 3**



**Aerial View of study parcel**

**3. 7 Fan Hill Road, Map 75-Lot 3**



**View of Church Street at exit drive looking east towards Fan Hill Road**



**4. 7 Fan Hill Road, Map 75-Lot 3**



**View of Church Street at exit drive looking West towards Abbey Lane**

## **Executive Summary**

This Site Assessment Study has examined two (2) individual parcels of property to provide for the needs of a modern, efficient, attractive, and cost effective Volunteer Emergency Medical Service Facility for the Town of Monroe.

Each site, or combination of sites, that was evaluated has the potential to accommodate a new, or renovated EMS facility based upon current and future needs of the Monroe Volunteer Emergency Medical Service. It is the goal of this report to identify, in descending order, the site(s) that provides the "greatest potential" for the Town of Monroe.

This "greatest potential" evaluation is contingent upon the following factors:

1. **COST TO THE TOWN OF MONROE - ACQUISITION COSTS**
2. **LOT SIZE RELATIVE TO SITE NEEDS ASSESSMENT**
3. **PARKING AVAILABILITY**
4. **SITE CONSTRUCTION AND DEVELOPMENT COSTS**
5. **LOCATION / ACCESS / TRAFFIC**
6. **VEHICULAR ACCESS AND EGRESS**
7. **UTILITIES**
8. **VISIBILITY**
9. **NEIGHBORHOOD IMPACT**
10. **ZONING RESTRICTIONS**
11. **WETLANDS**
12. **FLOOD PLAIN**
13. **CONVENIENCE**

Based on the information contained in this Site Assessment Study, the following sites are ranked, in descending order, for consideration by the Town of Monroe:

### **1. 54 Jockey Hollow Road, Map 85-Lot 17**

**The town-owned land along Jockey Hollow Road is very desirable for the expansion of the EMS facility due to location, lot size and present use. The entire existing facility is approximately the same size required by the Space Needs Assessment. The proposed solution would require the relocation of current Fire Department apparatus, equipment and personnel.**

**Executive Summary (continued)**

**The existing parcel generates little concern for development and site access. The construction project would likely consist of primarily renovation and replacement, as opposed to new construction. Sight lines for egress are excellent onto Jockey Hollow Road. The location of the parcel within the Town of Monroe is very good providing access to main roads. The project impact on the neighborhood is similar to the current impact.**

**This Site Evaluation was not asked to address the ramifications, or potential solutions, pertaining to the relocation of the Fire Department to an alternate location.**

**2. 7 Fan Hill Road, Map 75-Lot 3**

**The town-owned land along Church Street is viable for the development of a EMS facility but must overcome some substantial obstacles. Of concern is the lack of area required for a septic field as well as parking. The small lot availability indicates a multistory solution would be required, regardless of desirability and a parking solution that would rely on the use of existing Town Hall parking. It is not known whether the Town Hall/ Police facility has sufficient on-site parking to accommodate this need.**

**Sight lines for egress are good on to Church Street. The location of the parcel in the center of the Town of Monroe is convenient and it's adjacency to the Police Department is favorable. The additional impact on the neighborhood would be negligible, as no houses are in view.**

**The cost to construct a new facility in this location could be substantial compared to alternate site options as soil stabilization could be required depending on the configuration of the building and parking.**

## *Site Evaluation Criteria*

SITE: **54 Jockey Hollow Road, Map 85-Lot 17**

GROSS AREA: 2.38 acres

CRITERIA:	IDEAL SITE	THIS SITE
LOT SIZE RELATIVE TO SITE NEEDS ASSESSMENT	12	<u>12</u>
ACQUISITION COSTS	10	<u>10</u>
PARKING AVAILABILITY	10	<u>10</u>
SITE CONSTRUCTION COSTS	10	<u>10</u>
LOCATION / ACCESS / TRAFFIC	8	<u>6</u>
VEHICULAR ACCESS AND EGRESS	8	<u>7</u>
UTILITIES	8	<u>8</u>
VISIBILITY	6	<u>3</u>
NEIGHBORHOOD IMPACT	6	<u>6</u>
PUBLIC TRANSPORTATION ROUTE	6	<u>0</u>
ZONING RESTRICTIONS	4	<u>4</u>
WETLANDS	4	<u>4</u>
FLOOD PLAIN	4	<u>4</u>
CONVENIENCE	4	<u>4</u>
<b>TOTAL RANKING</b>	<b>100</b>	<b><u>88</u></b>

## *Site Evaluation Criteria*

SITE: **7 Fan Hill Road, Map 75-Lot 3**

GROSS AREA: 0.6 acres

CRITERIA:	IDEAL SITE	THIS SITE
LOT SIZE RELATIVE TO SITE NEEDS ASSESSMENT	12	<u>2</u>
ACQUISITION COSTS	10	<u>10</u>
PARKING AVAILABILITY	10	<u>2</u>
SITE CONSTRUCTION COSTS	10	<u>4</u>
LOCATION / ACCESS / TRAFFIC	8	<u>7</u>
VEHICULAR ACCESS AND EGRESS	8	<u>6</u>
UTILITIES	8	<u>4</u>
VISIBILITY	6	<u>4</u>
NEIGHBORHOOD IMPACT	6	<u>6</u>
PUBLIC TRANSPORTATION ROUTE	6	<u>2</u>
ZONING RESTRICTIONS	4	<u>4</u>
WETLANDS	4	<u>4</u>
FLOOD PLAIN	4	<u>4</u>
CONVENIENCE	4	<u>4</u>
<b>TOTAL RANKING</b>	<b>100</b>	<b><u>63</u></b>



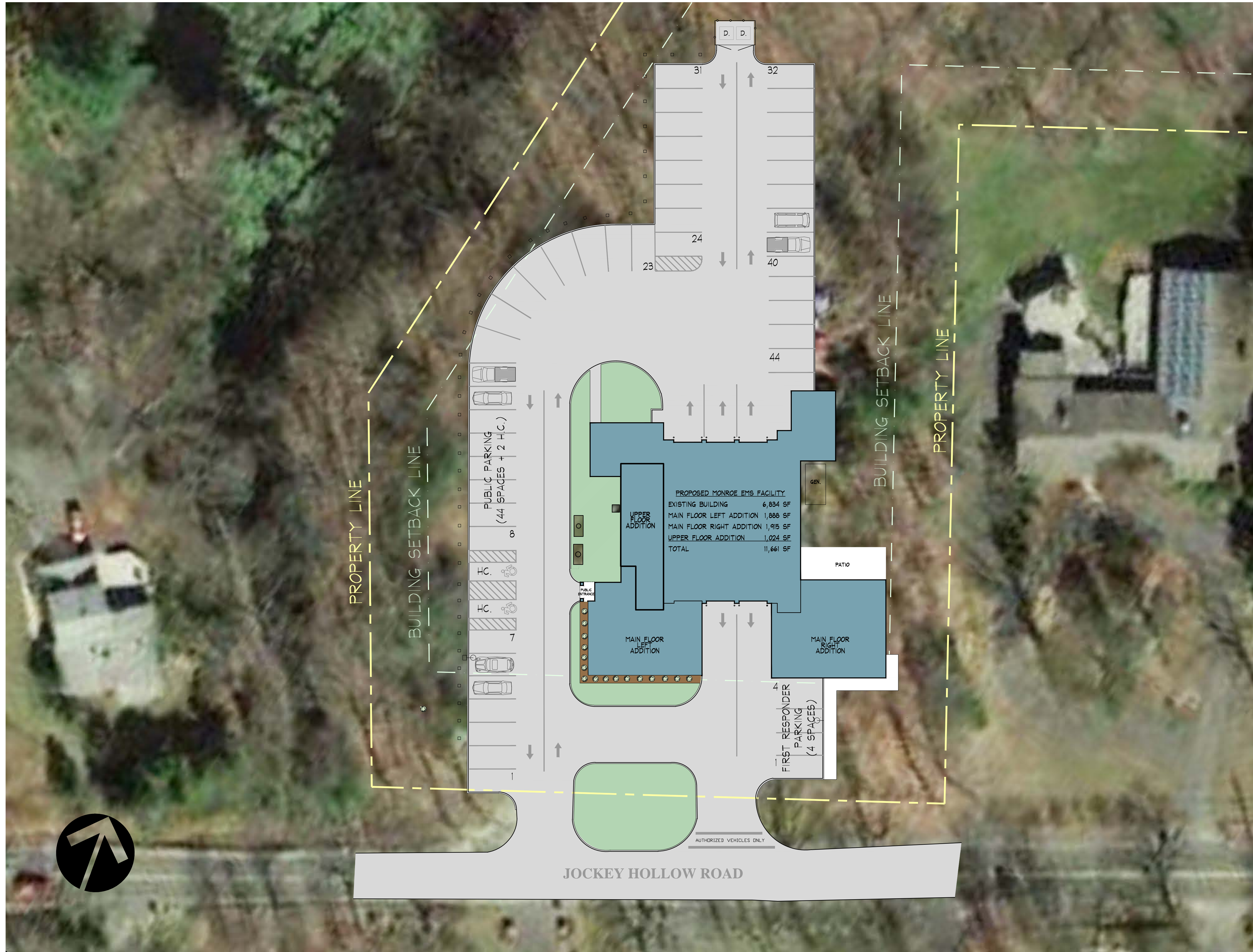
A PROPOSED FACILITY EXPANSION FOR THE  
**MONROE VOLUNTEER  
 EMERGENCY MEDICAL SERVICE**  
 54 JOCKEY HOLLOW ROAD  
 MONROE, CONNECTICUT

**JH|H**  
**JACUNSKI HUMES**  
 ARCHITECTS, LLC

15 MASSIRIO DRIVE  
 SUITE 101  
 BERLIN, CT 06037  
 TEL 860-828-9221  
 FAX 860-828-9223

**EXISTING  
 SITE  
 PLAN**

PROJ. NO. JH1531	DRAWING NO. <b>EXC-1</b>
SCALE: 1:20'	
DATE: NOV. 21, 2016	

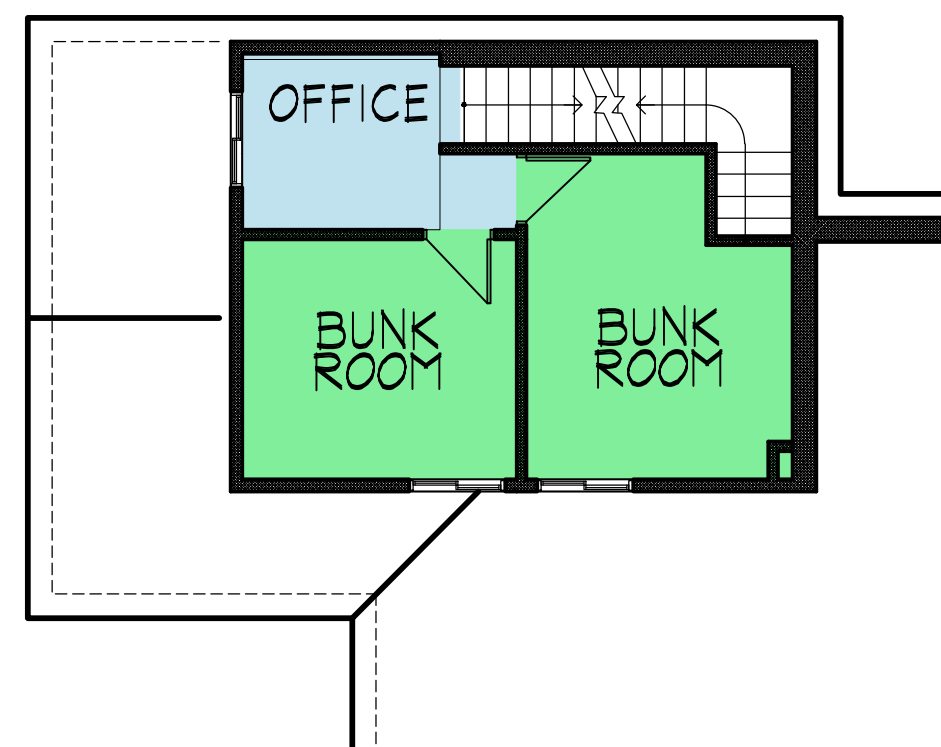


A PROPOSED FACILITY EXPANSION FOR THE  
**MONROE VOLUNTEER  
 EMERGENCY MEDICAL SERVICE**  
 MONROE, CONNECTICUT  
 54 JOCKEY HOLLOW ROAD

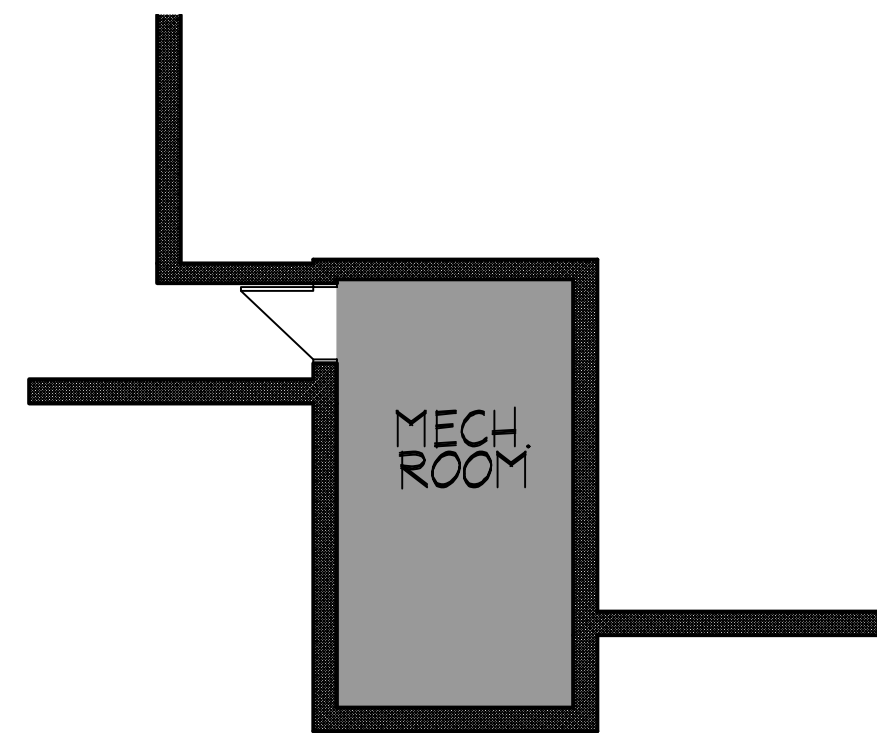
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**PROPOSED  
 SITE  
 PLAN**

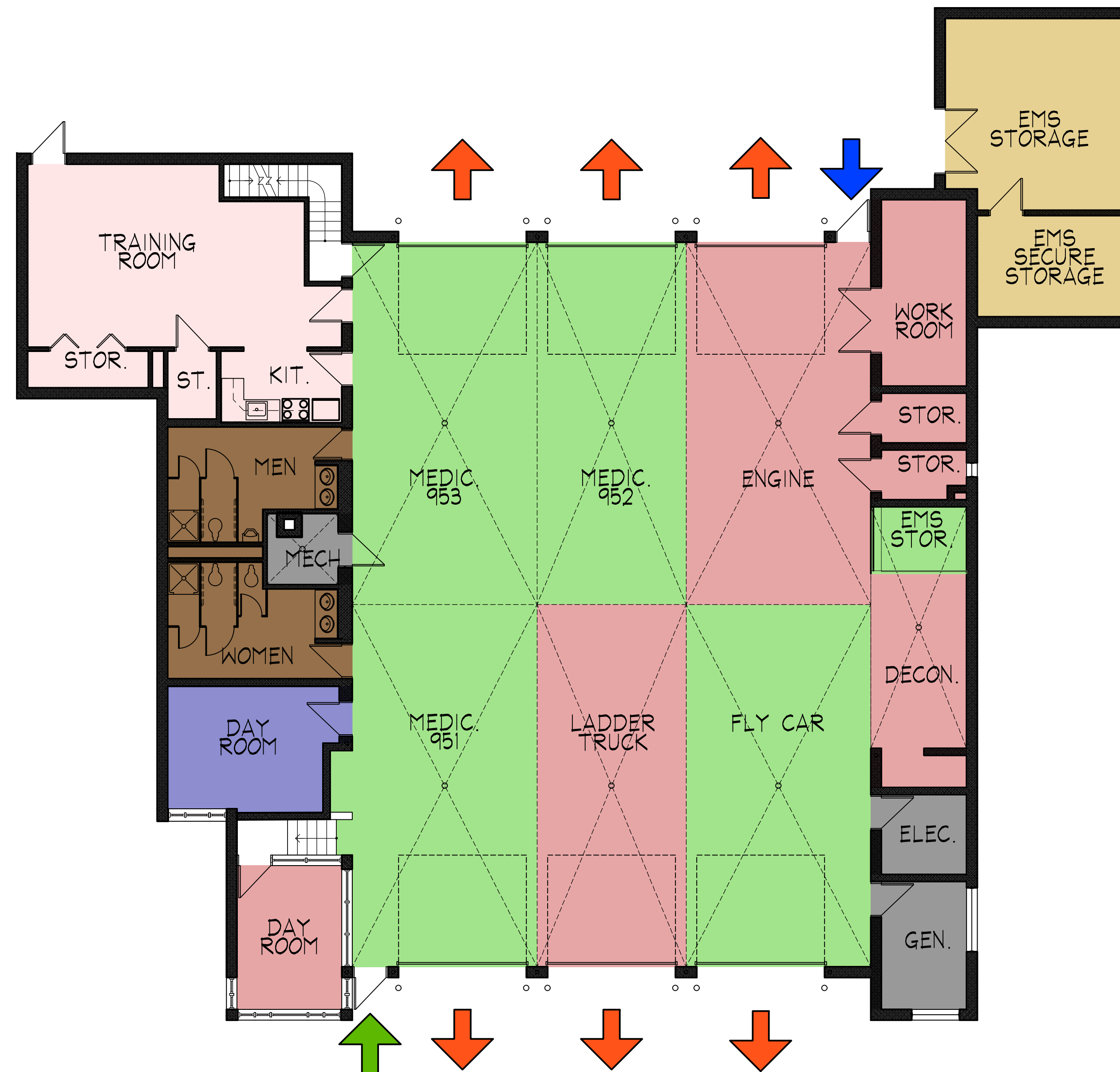
PROJ. NO. JH1531	DRAWING NO. <b>C-1</b>
SCALE: 1:20'	
DATE: NOV. 21, 2016	



**3 UPPER FLOOR PLAN**  
SCALE: 1/8" = 1'-0"



**2 LOWER FLOOR PLAN**  
SCALE: 1/8" = 1'-0"



**1 MAIN FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

LEGEND			
	ADMINISTRATION		FIRE DEPARTMENT SPACES
	EMS VEHICLE BAY		TOILETS/ JANITORIAL/ STORAGE
	EMS STORAGE		MECHANICAL/ BUILDING SERVICES
	DECONTAMINATION		DAY ROOM
	TRAINING		SLEEPING QUARTERS
	OXYGEN GENERATION		
			VEHICULAR EXIT
			PUBLIC ENTRANCE
			STAFF ENTRANCE

SPACE	EXISTING EMS AREA (SF)
TRAINING ROOM	513
ADMIN. / OFFICE	83
DAY ROOM / KITCHEN	259
BUNK ROOMS	250
RESTROOM / SHOWERS	315
BAY AREA	2,293
EMS STORAGE	489
DECONTAMINATION	183
OXYGEN GENERATION	0

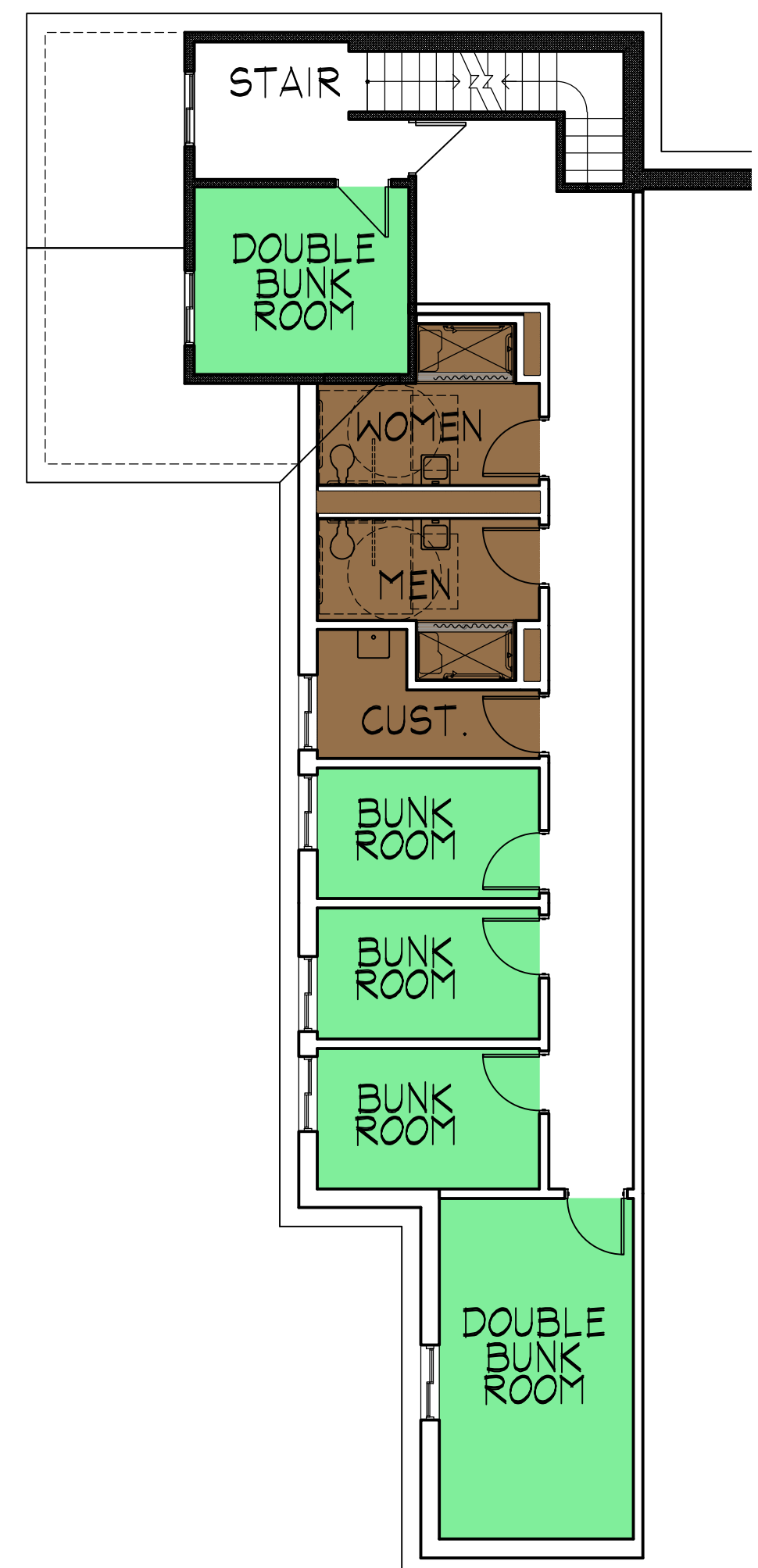
A PROPOSED FACILITY EXPANSION FOR THE  
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**EXISTING  
 FLOOR  
 PLANS**

PROJ. NO.	JH1531	DRAWING NO.	<b>EX-1</b>
SCALE:	1/8" = 1'-0"	DATE:	
DATE:	NOV. 21, 2016		





**2 UPPER FLOOR PLAN**  
SCALE: 1/8" = 1'-0"



**1 MAIN FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

**LEGEND**

- ADMINISTRATION
- EMS VEHICLE BAY
- EMS STORAGE
- DECONTAMINATION
- FIRE DEPARTMENT SPACES
- OXYGEN GENERATION
- TRAINING
- SLEEPING QUARTERS
- TOILETS/ JANITORIAL/ STORAGE
- MECHANICAL/ BUILDING SERVICES
- DAY ROOM
- VEHICULAR EXIT
- PUBLIC ENTRANCE
- STAFF ENTRANCE

**A PROPOSED FACILITY EXPANSION FOR THE**  
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**PROPOSED**  
**FLOOR**  
**PLANS**

PROJ. NO. JH1531	DRAWING NO. A-1
SCALE: 1/8" = 1'-0"	
DATE: NOV. 21, 2016	

**MONROE EMS**  
**SPACE NEEDS SUMMARY**

**Summary Sheet**

**Space Needs  
Proposed**

**Plan  
Proposed**

Vestibule / Restrooms/Lobby	230	322
Training Classroom	1,340	1,302
Administrative Assistant	200	200
EMS Administrator	175	165
Chief / Deputy Chief's Office	175	179
Conference Room / Quiet Study	320	518
Copy / Mail Room	125	124
MVEMS Equipment Storage	100	140
Duty Crew Office	150	200
Day Room	1,000	929
Bunk Rooms	480	554
Restrooms / Showers	160	162
Apparatus Bays	4,320	3,534
EMS Supply Storage	60	97
EMS Inventory Storage	100	98
Decontamination / Clean Room	200	237
Oxygen Generation Room	150	143
Custodial Services and Toilet Facilities	220	366
Data Equipment Room	50	52
Mechanical	480	124
Circulation	w/in net to gross	
<b>Total Net Square Footage</b>	<b>10,035</b>	<b>9,446</b>
Net to Gross Factor (1.10 x apparatus bays)	430	353
Net to Gross Factor (1.35 x all other spaces)	2,000	2,069
<b>Total Gross Square Footage</b>	<b>12,465</b>	<b>11,868</b>



MONROE EMERGENCY  
MEDICAL SERVICES





MONROE EMERGENCY  
MEDICAL SERVICES

# **ANTICIPATED PROJECT COSTS**

To the best of our ability, all anticipated project costs associated with the proposed renovations to 54 Jockey Hollow Road, Map 85, Lot 17 have been identified.

In order to ascertain the costs of interior renovations and new construction, several assumptions have been made as to quality of materials and type of construction. The building materials assumed are consistent with new EMS facilities constructed in the State of Connecticut to insure durability, safety, security, and ease of maintenance over the life of the structure. Within areas of new construction, exterior walls are constructed of load bearing wood framing, exterior fenestration is aluminum, interior wall construction in high abuse areas is concrete masonry units, interior wall construction in office areas and public spaces is gypsum drywall on wood and light gauge metal framing, flooring in public lobby is durable and easy to maintain, flooring in wet areas is ceramic tile, flooring in office areas is carpet tiles, flooring in decontamination areas is seamless epoxy coating, ceiling areas in all areas is suspended acoustic tile. The renovated construction is assumed to be modifications to existing walls, ceilings, flooring, plumbing, mechanical, and electrical systems.

Based upon the attached professional cost estimate, as prepared by KVAssociates, Inc., Boston, MA, the following anticipated costs have been established:

## **Estimated Hard Costs:**

Site Improvements:	\$540,440.00
<u>Additions / Renovations:</u>	<u>\$1,763,659.00</u>
Total Costs:	\$2,304,099.00

The “average” cost per square foot anticipated for the interior renovation / new construction is equal to \$151.24 / square foot. This represents to the Town of Monroe a considerable savings over a “new build” facility. For comparison purposes, KVAssociates, Inc. compared the proposed schematic design solution versus a facility of complete new construction. The comparison for anticipated hard costs was as follows:

## **Estimated “New Build” Hard Costs:**

Site Improvements:	\$657,588.00
<u>New Build:</u>	<u>\$3,750,000.00</u>
Total Costs:	\$4,407,588.00

A Project Budget Worksheet has been produced and included for the Town of Monroe to anticipate “soft costs” and “contingencies” within an EMS Facility Building Project.

The cost to provide furniture, furnishings, and equipment (FF&E) is included within the project soft costs. Historically, the cost to furnish and equip a new EMS Facility is established as an allowance equal to \$7-10/s.f. An allowance amount of \$125,000 has been included for the purpose of purchasing furniture, fixtures, and equipment needs of the department. No re-use of existing furniture is being proposed due to its condition.

Costs outlined for Telephone and Data Systems are for telephone/intercom and computer network equipment throughout the structure and the cost for a new telephone system. Costs for telephone and data wiring are included within the project hard costs.

Costs outlined for Integrated Technology Systems includes the furnishing and installing of CCTV, Audio recording, Intercom, and Access Control systems that are necessary within an EMS facility to satisfy the needs of the department and public.

Finally, a Project Contingency has been included which represents a percentage of the cost of construction and site development. At this stage of planning and cost estimating, it is prudent to anticipate future issues which will impact costs. Once a scheme is identified and developed into a Design Development or Construction Document Phase the Project Contingency can be reassessed and further defined. At this stage of project development, a contingency equal to 10% of the anticipated hard costs is included.

All costs are currently projected for a Fall 2017 construction start. Costs should be increased 3-4% / year to accommodate for cost escalation due to inflation.

It is also anticipated that the construction duration for the completion of the new construction, sitework, and relocation would be approximately ten (10) months from the award of a construction contract by the Town of Monroe.

Due to the uncertainty of when a start date can be established, these project duration estimates have been developed to identify the duration of each activity and has not taken into account seasonal variances which might impact construction scheduling.

The Town of Monroe is also anticipating a Construction Manager (CM) at Risk form of project delivery. Total project budgets have been derived with the CM @ Risk project delivery method incorporated. All fees for professional services are based upon a percentage of projected hard costs and are within industry standards for their profession. General conditions costs are included and were estimated by our professional cost estimating professional, KVAssociates, Inc.

Based upon the information contained above, and outlined on Schematic Design Documents, the attached Professional Cost Estimate and Project Cost Worksheets have been established:

**Proposed Additions / Renovations to  
54 Jockey Hollow Road for  
NEW EMS FACILITY  
Monroe, CT**

April 6, 2017

**Project Budget Worksheet**

<b>Hard Costs:</b>		
Site Improvements	\$ 540,440	
Additions / Renovations to Existing Building	\$1,763,659	
<b>Subtotal</b>		<b>\$2,304,099</b>
<b>Soft Costs:</b>		
Furniture/Fixtures/Equipment (FF&E)	\$ 125,000	
Architectural / Engineering Fees	185,000	
Construction Management	100,000	
General Conditions / Bond Costs / OH&P	450,000	
Building Equipment / AV Systems	30,000	
Communications / Radio Equipment	8,000	
Integrated Technology Systems	40,000	
Telephone / Data Systems	25,000	
Special Inspections / Testing	10,000	
Relocation Costs / Moving Expenses	5,000	
Printing, Advertising, Bid Expenses	2,000	
Legal Fees / Bonding Costs / Admin. Costs	40,000	
Utility Company Back charges	10,000	
Land Surveying	10,000	
Geotechnical Engineering / Borings	8,000	
Builder's Risk Insurance	10,000	
Local Permitting Fees	assumed waived	
<b>Subtotal</b>		<b>\$1,058,000</b>
<b>Project Contingency (10%)</b>	\$ 250,000	<b>\$ 250,000</b>
<b>Project Total</b>		<b>\$3,612,099</b>



**NEW CONSTRUCTION OPTION**  
**for**  
**NEW EMS FACILITY**  
**Monroe, CT**

April 6, 2017

**Project Budget Worksheet**

<b>Hard Costs:</b>		
Site Improvements	\$ 657,588	
New Construction	\$3,750,000	
<b>Subtotal</b>		<b>\$ 4,407,588</b>
<b>Soft Costs:</b>		
Furniture/Fixtures/Equipment (FF&E)	125,000	
Architectural / Engineering Fees	350,000	
Construction Management (CM) Fees	200,000	
Building Equipment / AV Systems	30,000	
Communications / Radio Equipment	8,000	
Integrated Technology Systems	75,000	
Telephone / Data Systems	75,000	
Special Inspections / Testing	25,000	
Relocation Costs / Moving Expenses	5,000	
Printing, Advertising, Bid Expenses	4,000	
Legal Fees / Bonding Costs / Admin. Costs	50,000	
Utility Company Back charges	20,000	
Land Surveying	10,000	
Geotechnical Engineering / Borings	8,000	
Builder's Risk Insurance	15,000	
Local Permitting Fees	assumed waived	
<b>Subtotal</b>		<b>\$ 1,000,000</b>
<b>Project Contingency (10%)</b>	\$ 440,000	<b>\$ 440,000</b>
<b>Project Total</b>		<b>\$5,847,588</b>

**Estimate for: Renovation and Additions to Monroe, CT EMS Facility**

Ref Dwgs: Jacunski Humes Architects, Schematic Drawings dated November 21, 2016  
Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
1	<b>Sitework Preparation and Demolition</b>					
2	Silt Fence	1,000	lf	\$ 2.00	\$ 2,000.00	
3	Haybale Erosion Control	600	lf	\$ 6.00	\$ 3,600.00	
4	Protection Around Existing Catch Basins	1	allow	\$ 500.00	\$ 500.00	
5	Perimeter Construction Fencing 8' with Scrim	1,100	lf	\$ 22.00	\$ 24,200.00	
6	Fence Gate	1	ea	\$ 1,000.00	\$ 1,000.00	
7	Demolish Areaway and Stair to Basement			in Building \$		
8	Remove/Dispose Concrete Curbs	410	lf	\$ 5.00	\$ 2,050.00	
9	Sawcut Pavement	150	lf	\$ 5.00	\$ 750.00	
10	Strip Asphalt and Dispose	1,640	sy	\$ 4.50	\$ 7,380.00	
11	Remove Existing Septic and Leaching Field	1	allow	\$ 10,000.00	\$ 10,000.00	
12	Truck Washdown Area	1	allow	\$ 1,500.00	\$ 1,500.00	
13	<b>Subtotal</b>				<b>\$ 52,980.00</b>	
14						
15	<b>Site Earthwork</b>					
16	Clear and Grub Unimproved Areas	1.60	acres	\$ 5,000.00	\$ 8,000.00	
17	Strip Topsoil	185	cy	\$ 8.00	\$ 1,480.00	
18	Cuts and Fills (assume 2' avg on 1/4 the Site Area)	1,000	cy	\$ 6.00	\$ 6,000.00	
19	Additional Import structural fill (allow)	1,200	cy	\$ 30.00	\$ 36,000.00	
20	Soil Disposal as Clean Fill			Assume all Remains on Site		
21	Rough Grade for Sitework	4,750	sy	\$ 1.00	\$ 4,750.00	
22	Fine Grade and Compact at Paved Areas	3,255	sy	\$ 1.50	\$ 4,882.50	
23	6" Gravel under Patio and Sidewalk	19	cy	\$ 35.00		
24	12" Dense Grade under Drives and Parking	1,070	cy	\$ 28.00	\$ 29,960.00	
25	Excavate for Retention Basin			in Site Utilities		
26	Excavate for Septic			in Utilities		
27	Excavate/Backfill for Underground Piping			in Utilities		
28	Trench for Site Lighting Conduit			in Utilities		
29	<b>Subtotal</b>				<b>\$ 91,072.50</b>	
30						
31	<b>Site Utilities</b>					
32	<u>Water Service:</u>					
33	-Domestic Water Service			Existing to Remain		
34	<u>Sanitary System:</u>					
35	-Remove Existing Septic System and Leaching Field	1	allow	\$ 5,000.00	\$ 5,000.00	
36	-New Septic System	1	allow	\$ 25,000.00	\$ 25,000.00	
37	<u>Storm Drainage Allowance:</u>					
38	-Catch Basins	5	ea	\$ 4,000.00	\$ 20,000.00	
39	-Manhole	3	ea	\$ 3,500.00	\$ 10,500.00	
40	-Water Quality Structure	1	ea	\$ 7,500.00	\$ 7,500.00	
41	-Storm Piping/Trenching	600	lf	\$ 60.00	\$ 36,000.00	
42	-Stormwater Infiltration Basin -Excavate, Gravel, Stone, Filter Fabric	1	allow	\$ 15,000.00	\$ 15,000.00	
43	Electrical Service			Existing to Remain		
44	Tel/Data Service			Existing to Remain		
45	<u>Site Lighting:</u>					
46	-Light Poles and Bases	2	ea	\$ 4,000.00	\$ 8,000.00	
47	-Light Bollards	1	allow	\$ 2,500.00	\$ 2,500.00	
48	-Conduit and Wire for Site Lights	300	lf	\$ 20.00	\$ 6,000.00	
49	-Timer/Control for Site Lights	1	allow	\$ 1,000.00	\$ 1,000.00	
50	Excavate/Backfill for Underground Piping			in Units		
51	Trench for Site Lighting Conduit	225	lf	\$ 10.00	\$ 2,250.00	
52	<b>Subtotal</b>				<b>\$ 138,750.00</b>	
53						

Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

Ref Dwgs: Jacunski Humes Architects, Schematic Drawings dated November 21, 2016  
Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
54	<b>Site Paving, Concrete and Curbing</b>					
55	Precast Concrete Curb	820	lf	\$ 30.00	\$ 24,600.00	
56	Repairs/Rework to Existing Curb to Remain (220 lf)	1	allow	\$ 2,000.00	\$ 2,000.00	
57	Asphalt Paving (3-1/2" Total Thickness)	3,200	sy	\$ 27.00	\$ 86,400.00	
58	Repairs to Existing Asphalt Paving (rear of building)	1	allow	\$ 2,000.00	\$ 2,000.00	
59	Concrete Sidewalk	475	sf	\$ 10.00	\$ 4,750.00	
60	Patio Masonry Curb	50	lf	\$ 65.00	\$ 3,250.00	
61	Patio Precast Pavers on Setting Bed	500	sf	\$ 20.00	\$ 10,000.00	
62	Parking Lot Striping	48	sps	\$ 25.00	\$ 1,200.00	
63	Handicap Space Symbols and Striping	2	loc	\$ 125.00	\$ 250.00	
64	Misc Directional and Crosshatch Pavement Striping	1	allow	\$ 1,000.00	\$ 1,000.00	
65	Concrete Pad for Emergency Generator	1	allow	\$ 3,000.00	\$ 3,000.00	
66	<b>Subtotal</b>				<b>\$ 138,450.00</b>	
67						
68	<b>Site Amenities</b>					
69	Stockade Fence for Dumpster Enclosure	38	lf	\$ 80.00	\$ 3,040.00	
70	Stockade Fence Gates	2	lvs	\$ 800.00	\$ 1,600.00	
71	Gaurdrail	400	lf	\$ 45.00	\$ 18,000.00	
72	Bollards at Overhead Doors			in Building \$		
73	Flagpoles			None		
74	HC Parking Signage	2	ea	\$ 125.00	\$ 250.00	
75	Misc. Exterior Signs	1	allow	\$ 500.00	\$ 500.00	
76	Building Identification Sign			None		
77	<b>Subtotal</b>				<b>\$ 23,390.00</b>	
78						
79	<b>Landscaping</b>					
80	Loam	250	cy	\$ 55.00	\$ 13,750.00	
81	Plantings	1	allow	\$ 10,000.00	\$ 10,000.00	
82	Hydroseed	13,400	sf	\$ 0.30	\$ 4,020.00	
83	Irrigation			Not Included		
84	<b>Subtotal</b>				<b>\$ 27,770.00</b>	
85						
86	<b>Demolition</b>					
87	Demolition of pavement and Curbs			in Site Prep		
88	Move Furniture, Equipment and Supplies			by Owner		
89	Misc. Sawcutting	1	allow	\$ 1,000.00	\$ 1,000.00	
90	Demolish Areaway Ramp/Railings to Mechanical Basement	1	loc	\$ 1,000.00	\$ 1,000.00	
91	Demolish Mechanical Basement	240	sf	\$ 10.00	\$ 2,400.00	
92	Demolish Wood Framed Above Ground Structure	240	sf	\$ 6.00	\$ 1,440.00	
93	Demolish Slab at Generator Room	100	sf	\$ 4.00	\$ 400.00	
94	Partial Demolition of Roof and Framing for New 2nd Floor Structure	1,100	sf	\$ 3.00	\$ 3,300.00	
95	Strip off Siding Where New Additions Join to Existing	4	loc	\$ 500.00	\$ 2,000.00	
96	Remove Windows/Louvers	3	ea	\$ 200.00	\$ 600.00	
97	Remove Overhead Door	1	ea	\$ 200.00	\$ 200.00	
98	Remove Doors and Frames	13	ea	\$ 50.00	\$ 650.00	
99	Remove Toilet Partitions	5	ea	\$ 150.00	\$ 750.00	
100	Remove Plumbing Fixtures	11	ea	\$ 50.00	\$ 550.00	
101	Demolish CMU Partitions	1,000	sf	\$ 4.00	\$ 4,000.00	
102	Demolish Finishes in Renovated Areas	1,645	sf	\$ 1.00	\$ 1,645.00	
103	Plumbing Disconnects			in Plumbing		
104	Electrical Disconnects			in Electrical		
105	Temporary Partitions	1	allow	\$ 1,000.00	\$ 1,000.00	
106	Temporary Roof Protection for 2nd Floor Addition	1	allow	\$ 2,500.00	\$ 2,500.00	
107	Dumpsters	4	ea	\$ 700.00	\$ 2,800.00	

Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

Ref Dwgs: Jacunski Humes Architects, Schematic Drawings dated November 21, 2016  
Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
108	<b>Subtotal</b>				<b>\$ 26,235.00</b>	
109						
110	<b>Building Excavation</b>					
111	Protect Existing Building	1	allow	\$ 2,000.00	\$ 2,000.00	
112	General Excavation for New Additions (assume 2' Average Cut)	280	cy	\$ 8.00	\$ 2,240.00	
113	Excavate for Foundation Footings	230	cy	\$ 12.00	\$ 2,760.00	
114	Backfill Foundations and Compact	290	cy	\$ 12.00	\$ 3,480.00	
115	Trenching and Backfill for Interior Plumbing	80	lf	\$ 12.00	\$ 960.00	
116	Trenching and Backfill for Generator Ductbank	80	lf	\$ 30.00	\$ 2,400.00	
117	Prep/Compact Subgrade for Slabs	3,800	sf	\$ 0.50	\$ 1,900.00	
118	Gravel Fill for Slabs on Grade	70	cy	\$ 30.00	\$ 2,100.00	
119	Excavate and Backfill for Septic			In Site Earthwork		
120	Excavate for New Retention Basin			In Site Earthwork		
121	Ledge Removal			Not Included		
122	Truck Out Overburden as Clean Fill	220	cy	\$ 12.00	\$ 2,640.00	
123	Contaminated Soil Removal			Not Included		
124	<b>Subtotal</b>				<b>\$ 20,480.00</b>	
125						
126	<b>Concrete</b>					
127	Spread Footings and Piers	4	ea	\$ 750.00	\$ 3,000.00	
128	Strip Footings	31	cy	\$ 475.00	\$ 14,725.00	
129	Frost Walls	43	cy	\$ 550.00	\$ 23,650.00	
130	High Walls		None			
131	Drill and Dowel New Foundation to Existing	4	loc	\$ 300.00	\$ 1,200.00	
132	Set Imbeds for Sill Plates	1	allow	\$ 1,000.00	\$ 1,000.00	
133	Slab on Grade	3,800	sf	\$ 9.00	\$ 34,200.00	
134	Infill Slab at Demolished Stair	1	allow	\$ 1,000.00	\$ 1,000.00	
135	Entry Slab	2	cy	\$ 600.00	\$ 1,200.00	
136	Mechanical Equipment Pads	1	allow	\$ 1,000.00	\$ 1,000.00	
137	Floor Repairs to Existing Slab	1	allow	\$ 2,500.00	\$ 2,500.00	
138	<b>Subtotal</b>				<b>\$ 83,475.00</b>	
139						
140	<b>Masonry</b>					
141	8" CMU Infill of Door Openings	2	loc	\$ 600.00	\$ 1,200.00	
142	8" CMU Infill to Close Off OH Door Opening and Adjacent Door	130	sf	\$ 24.00	\$ 3,120.00	
143	Cut in New CMU Opening to MVEMS Storage	1	loc	\$ 2,000.00	\$ 2,000.00	
144	Exterior Brick Veneer	870	sf	\$ 60.00	\$ 52,200.00	
145	Exterior Stone Cap on Brick	217	sf	\$ 80.00	\$ 17,360.00	
146	Repairs to Existing Brick			Not Included		
147	<b>Subtotal</b>				<b>\$ 75,880.00</b>	
148						
149	<b>Structural Steel</b>		None			
150	<b>Subtotal</b>				<b>\$ -</b>	
151						
152	<b>Miscellaneous Metal</b>					
153	Railings at Interior Stair			Existing to Remain		
154	Supports for Lav Countertops	14	lf	\$ 60.00	\$ 840.00	
155	Toilet Partition Supports	3	ea	\$ 400.00	\$ 1,200.00	
156	Overhead Projector Mount	1	ea	\$ 500.00	\$ 500.00	
157	OH Door Frames 8' x 8'			Not Required		
158	Bollards at OH Doors Front Elevation	4	ea	\$ 700.00	\$ 2,800.00	
159	Misc. Steel for Mech. Equipment Support	1	allow	\$ 2,500.00	\$ 2,500.00	
160	Misc. Metal	11,661	sf	\$ 1.00	\$ 11,661.00	
161	<b>Subtotal</b>				<b>\$ 19,501.00</b>	

Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

Ref Dwgs: Jacunski Humes Architects, Schematic Drawings dated November 21, 2016  
Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
162						
163	<b>Rough Carpentry</b>					
164	<u>Structural Framing and Sheathing:</u>					
165	Frame Exterior Walls for New Ground Floor Additions	3,324	sf	\$ 6.00	\$ 19,944.00	
166	Frame Exterior Walls for 2nd Floor Additions	672	sf	\$ 7.00	\$ 4,704.00	
167	Frame Interior Bearing Wall for 2nd Floor Addition	576	sf	\$ 7.00	\$ 4,032.00	
168	Reinforce Roof Deck for 2nd Floor	1,024	sf	\$ 8.00	\$ 8,192.00	
169	Roof Framing for New Additions	4,827	sf	\$ 8.00	\$ 38,616.00	
170	Sheathing New Roofs	5,300	sf	\$ 3.00	\$ 15,900.00	
171	Plywood Wall Sheathing on New Additions	2,500	sf	\$ 3.00	\$ 7,500.00	
172	Plywood T&G Decking on New Addition	1,024	sf	\$ 3.50	\$ 3,584.00	
173	Infill Existing Exterior Door Opening	1	loc	\$ 300.00	\$ 300.00	
174	Reframe for Window and Door Openings	1	loc	\$ 350.00	\$ 350.00	
175	Misc Repairs to Existing Framing to Join New Work to Old	1	allow	\$ 5,000.00	\$ 5,000.00	
176	Fasteners, Hangers and Adhesives for Framing and Sheathing	1	allow	\$ 5,000.00	\$ 5,000.00	
177	<u>Exterior Siding and Trim:</u>					
178	Fiber Board Siding and Battens	2,200	sf	\$ 6.50	\$ 14,300.00	
179	PVC Cornerboard Trim	116	lf	\$ 8.00	\$ 928.00	
180	Eave Trim, Vent and Backup Framing	220	lf	\$ 30.00	\$ 6,600.00	
181	Gable Trim and Back-up Framing	180	lf	\$ 26.00	\$ 4,680.00	
182	Install Windows			in Windows		
183	Window and Door PVC Trim Boards	315	lf	\$ 10.00	\$ 3,150.00	
184	T&G Soffits at Entry Canopy	50	sf	\$ 6.00	\$ 300.00	
185	Decorative Trim at Entry Canopy	1	allow	\$ 500.00	\$ 500.00	
186	Round Columns/Trim at Entries	2	ea	\$ 1,500.00	\$ 3,000.00	
187	Louvers in Gable Ends	3	ea	\$ 500.00	\$ 1,500.00	
188	Plywood Decking in Attic			Not Required		
189	<u>Interior Rough Carpentry:</u>					
190	Interior 2x4 Stud Framing	3,400	sf	\$ 5.50	\$ 18,700.00	
191	Framing for Gyp Board Ceilings	1,985	sf	\$ 6.00	\$ 11,910.00	
192	Strapping for Gyp Board Ceilings at 2nd Floor	1,100	sf	\$ 1.00	\$ 1,100.00	
193	Toilet Accessory Blocking	6	baths	\$ 250.00	\$ 1,500.00	
194	Electric Backboards with 2x4 Blocking	1	allow	\$ 500.00	\$ 500.00	
195	Blocking for Millwork/Lockers/Counters	1	allow	\$ 500.00	\$ 500.00	
196	Blocking for Cable Trays	1	allow	\$ 500.00	\$ 500.00	
197	Blocking at Misc. MEP Penetrations	1	allow	\$ 1,000.00	\$ 1,000.00	
198	Block for interior doors and borrowed lites	24	opngs	\$ 50.00	\$ 1,200.00	
199	Misc. interior rough carpentry	1	allow	\$ 2,000.00	\$ 2,000.00	
200	<b>Subtotal</b>				<b>\$ 186,990.00</b>	
201						
202	<b>Finish Carpentry/Millwork</b>					
203	Credenzas in Training Classroom	20	lf	\$ 350.00	\$ 7,000.00	
204	Credenza in Conference Room	12	lf	\$ 400.00	\$ 4,800.00	
205	Upper Cabinets in Study	11	lf	\$ 175.00	\$ 1,925.00	
206	PLAM Countertops in Study	21	lf	\$ 80.00	\$ 1,680.00	
207	Solid Surface Countertops at Lavs	14	lf	\$ 200.00	\$ 2,800.00	
208	Closet Rods and Shelf at Classroom	5	lf	\$ 40.00	\$ 200.00	
209	PLAM Countertop in Day Room	21	lf	\$ 80.00	\$ 1,680.00	
210	Base Cabinets and Countertop at Day Room Kitchen	17	lf	\$ 260.00	\$ 4,420.00	
211	Upper Cabinets at Day Room Kitchen	20	lf	\$ 175.00	\$ 3,500.00	
212	Lav Skirt/Pipe Guards	4	loc	\$ 600.00	\$ 2,400.00	
213	Install Doors, Frames, Hardware	30	lvs	\$ 200.00	\$ 6,000.00	
214	Windowsills and apron	116	lf	\$ 30.00	\$ 3,480.00	
215	Misc. Wood Trim and Shelving	1	allow	\$ 1,000.00	\$ 1,000.00	

Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

Ref Dwgs: Jacunski Humes Architects, Schematic Drawings dated November 21, 2016  
 Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
216	<b>Subtotal</b>				<b>\$ 40,885.00</b>	
217						
218	<b>Moisture Protection/Roofing</b>					
219	Foundation Wall Dampproofing	1,200	sf	\$ 2.00	\$ 2,400.00	
220	Concrete Floor Sealer	in Flooring				
221	Weather Barrier at Exterior Siding and masonry	3,100	sf	\$ 2.00	\$ 6,200.00	
222	Wrap Air Barrier into Window and Door Openings	16	loc	\$ 100.00	\$ 1,600.00	
223	Flashing at Brick Shelf	217	lf	\$ 16.00	\$ 3,472.00	
224	Flashing at Watertable Stone Cap	217	lf	\$ 10.00	\$ 2,170.00	
225	Flashing at Window and Door Headers	145	lf	\$ 20.00	\$ 2,900.00	
226	Rework to Existing Shingle Roof to Join to New	1	allow	\$ 2,500.00	\$ 2,500.00	
227	30 Yr Asphalt Shingle Roof and Felt Underlayment	5,300	sf	\$ 3.50	\$ 18,550.00	
228	Ice and Watershield - 6' From Edge	1,320	sf	\$ 3.50	\$ 4,620.00	
229	Counterflashings	1	allow	\$ 2,500.00	\$ 2,500.00	
230	Metal Drip Edge	400	lf	\$ 4.00	\$ 1,600.00	
231	Ridge Vents	Not Required				
232	Aluminum Gutters	220	lf	\$ 12.00	\$ 2,640.00	
233	Aluminum Downspouts	70	lf	\$ 10.00	\$ 700.00	
234	Splash Blocks	6	loc	\$ 150.00	\$ 900.00	
235	Interior Caulking	1	allow	\$ 2,500.00	\$ 2,500.00	
236	Exterior Caulking - Windows and Doors	550	lf	\$ 7.00	\$ 3,850.00	
237	<b>Subtotal</b>				<b>\$ 59,102.00</b>	
238						
239	<b>Insulation</b>					
240	Rigid Insulation 2" at New Foundation Perimeter	1,200	sf	\$ 2.50	\$ 3,000.00	
241	Rigid Insulation Under Slab on Grades at New Addition 4' Inboard	1,200	sf	\$ 2.50	\$ 3,000.00	
242	6" Spray Foam Insulation at Exterior Walls	2,800	sf	\$ 3.50	\$ 9,800.00	
243	Exterior Soffit Insulation	in Spray Foam				
244	12 Cellulose Blown In Insulation in Attic	4,827	sf	\$ 3.00	\$ 14,481.00	
245	Fire Stopping	in MEP Trades				
246	Interior Vapor Barrier - Exterior Walls and Attics	8,151	sf	\$ 0.50	\$ 4,075.50	
247	Misc. insulation at Windows and Exterior Doors	16	opngs.	\$ 50.00	\$ 800.00	
248	<b>Subtotal</b>				<b>\$ 35,156.50</b>	
249						
250	<b>Windows and Glass</b>					
251	Aluminum Operable Windows 4x5 at Bunk Rooms	5	ea	\$ 1,300.00	\$ 6,500.00	
252	Exterior Storefront 7'-6" High	720	sf	\$ 70.00	\$ 50,400.00	
253	Exterior Glass Doors	2	pair	\$ 7,000.00	\$ 14,000.00	
254	Aluminum Sidelight Frame and Glass	1	ea	\$ 1,200.00	\$ 1,200.00	
255	Aluminum Doors including Hardware	3	lvs	\$ 3,200.00	\$ 9,600.00	
256	Mirrors at Lav Countertop	50	sf	\$ 25.00	\$ 1,250.00	
257	<b>Subtotal</b>				<b>\$ 82,950.00</b>	
258						
259	<b>Doors, Frames, Hardware</b>					
260	Overhead Doors	Existing to Remain				
261	Welded Metal Frames - Single	20	ea	\$ 300.00	\$ 6,000.00	
262	Welded Exterior Metal Frames - Single	1	ea	\$ 375.00	\$ 375.00	
263	Welded Metal Frames - Rated	1	ea	\$ 350.00	\$ 350.00	
264	Welded Metal Frames - Pair	4	ea	\$ 375.00	\$ 1,500.00	
265	Exterior Hollow Metal Doors	1	lvs	\$ 400.00	\$ 400.00	
266	Interior Hollow Metal Doors	5	lvs	\$ 350.00	\$ 1,750.00	
267	Interior Rated Hollow Metal Doors	1	lvs	\$ 400.00	\$ 400.00	
268	Wood Doors	23	lvs	\$ 375.00	\$ 8,625.00	
269	Door Hardware - New and Existing Doors	38	lvs	\$ 800.00	\$ 30,400.00	

Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

Ref Dwgs: Jacunski Humes Architects, Schematic Drawings dated November 21, 2016  
Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
270	Hardware for Aluminum Doors	in Windows and Glass				
271	Electrified Hardware	in Integrated Technology				
272	Door Installation	In Finish Carpentry				
273	Keying	1	allow	\$ 1,000.00	\$ 1,000.00	
274	<b>Subtotal</b>				<b>\$ 50,800.00</b>	
275						
276	<b>Drywall</b>					
277	Framing for Walls and Ceilings	in Rough Carpentry				
278	Regular 3-5/8" Stud Partitions	4,960	sf	\$ 3.00	\$ 14,880.00	
279	2 HR Rated Partitions	280	sf	\$ 5.00	\$ 1,400.00	
280	Chase/One-Sided Partitions	780	sf	\$ 3.00	\$ 2,340.00	
281	Perimeter Drywall	4,375	sf	\$ 3.00	\$ 13,125.00	
282	Drywall Ceilings -at Additions	2,363	sf	\$ 3.50	\$ 8,270.50	
283	Drywall Ceilings - Existing Renovated Areas	622	sf	\$ 3.50	\$ 2,177.00	
284	Drywall Interior Soffits	1	allow	\$ 1,000.00	\$ 1,000.00	
285	Insulation-Interior Partitions	5,740	sf	\$ 1.00	\$ 5,740.00	
286	Durock Premium at Tile Walls	660	sf	\$ 2.00	\$ 1,320.00	
287	Misc patching to Existing due to MEPs	1	allow	\$ 1,000.00	\$ 1,000.00	
288	<b>Subtotal</b>				<b>\$ 51,252.50</b>	
289						
290	<b>Acoustic Ceilings</b>					
291	2x2 Grid and Tile	3,574	sf	\$ 4.75	\$ 16,976.50	
292	<b>Subtotal</b>				<b>\$ 16,976.50</b>	
293						
294	<b>Flooring and Tile</b>					
295	<u>Ceramic Tile:</u>					
296	Bathroom/Locker Ceramic Tile Floor	279	sf	\$ 16.00	\$ 4,464.00	
297	Clean/Repair Grout to Existing Tile floor	304	sf	\$ 4.00	\$ 1,216.00	
298	Bathroom Ceramic Tile Base	151	lf	\$ 12.00	\$ 1,812.00	
299	Ceramic Tile Walls	660	sf	\$ 16.00	\$ 10,560.00	
300	Lobby Porcelain Tile	196	sf	\$ 26.00	\$ 5,096.00	
301	Porcelain Base	52	lf	\$ 20.00	\$ 1,040.00	
302	Rubber Base	1,543	lf	\$ 3.00	\$ 4,629.00	
303	VET	4,458	sf	\$ 4.50	\$ 20,061.00	
304	Carpet	1,098	sf	\$ 5.00	\$ 5,490.00	
305	Walk-Off Mats/Frames	in Specialties				
306	Clean and Seal Existing Concrete Floors	5,080	sf	\$ 1.25	\$ 6,350.00	
307	Misc. Floor Leveling	5,835	sf	\$ 0.50	\$ 2,917.50	
308	Moisture Mitigation Allowance	1	allow	\$ 5,000.00	\$ 5,000.00	
309	Epoxy flooring and base	In painting				
310	<b>Subtotal</b>				<b>\$ 68,635.50</b>	
311						
312	<b>Painting</b>					
313	<u>Exterior:</u>					
314	Seal T&G Soffits at Entry Canopy	50	sfsa	\$ 3.00	\$ 150.00	
315	Paint Exterior Columns	2	ea	\$ 200.00	\$ 400.00	
316	Paint Bollards at OH Doors	4	ea	\$ 50.00	\$ 200.00	
317	Exterior Siding and Trim	Assume Pre-finished				
318	<u>Interior:</u>					
319	Walls GWB	9,700	sf	\$ 0.90	\$ 8,730.00	
320	Existing CMU Walls-Epoxy Paint	5,800	sf	\$ 2.00	\$ 11,600.00	
321	HM Doors	6	lvs	\$ 100.00	\$ 600.00	
322	Wood Doors	Pre-finished				
323	Paint Existing Doors and Frames	10	ea	\$ 125.00	\$ 1,250.00	

Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

Ref Dwgs: Jacunski Humes Architects, Schematic Drawings dated November 21, 2016  
Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
324	Door Frames	26	ea	\$ 50.00	\$ 1,300.00	
325	Paint Plywood Backboards with Fire Retardent Paint	1	allow	\$ 500.00	\$ 500.00	
326	Paint Interior of Windows	Prefinished Aluminum				
327	Windowsills and Trim	116	lf	\$ 8.00	\$ 928.00	
328	Wall Covering	Not Included				
329	Protective Wallcovering	Not Included				
330	Drywall Ceilings - New and Existing	7,965	sf	\$ 0.80	\$ 6,372.00	
331	Painting Repairs to Existing Surfaces	1	allow	\$ 2,000.00	\$ 2,000.00	
332	<b>Subtotal</b>				<b>\$ 34,030.00</b>	
333						
334	<b>Specialties/Accessories</b>					
335	TP Holder	7	ea	\$ 50.00	\$ 350.00	
336	Soap Dispenser	8	ea	\$ 50.00	\$ 400.00	
337	Shower Soap Dispenser	2	ea	\$ 50.00	\$ 100.00	
338	Hand Dryer	6	ea	\$ 400.00	\$ 2,400.00	
339	Sanitary Napkin Disposal	3	ea	\$ 726.00	\$ 2,178.00	
340	42" Grab Bars	3	ea	\$ 75.00	\$ 225.00	
341	36" Grab Bars	3	ea	\$ 70.00	\$ 210.00	
342	Swing Grab Bars	3	ea	\$ 125.00	\$ 375.00	
343	Shower Grab Bars	2	ea	\$ 200.00	\$ 400.00	
344	Robe Hooks	4	ea	\$ 25.00	\$ 100.00	
345	Framed Mirrors	4	ea	\$ 200.00	\$ 800.00	
346	HC Toilet Partitions	1	ea	\$ 1,500.00	\$ 1,500.00	
347	Standard Toilet Partitions	2	ea	\$ 1,800.00	\$ 3,600.00	
348	Urinal Screen		None			
349	Mop and Broom Holder	1	ea	\$ 100.00	\$ 100.00	
350	Shower Curtain/Rod	2	ea	\$ 100.00	\$ 200.00	
351	Shower seats	2	ea	\$ 400.00	\$ 800.00	
352	Fire Extinguishers/cabinets	3	ea	\$ 350.00	\$ 1,050.00	
353	Interior Signage - Code and Wayfinding	4,827	sf	\$ 0.50	\$ 2,413.50	
354	ID Signage on Building	1	allow	\$ 3,000.00	\$ 3,000.00	
355	16' Marker Boards	1	ea	\$ 1,500.00	\$ 1,500.00	
356	Window Shades	820	sf	\$ 7.00	\$ 5,740.00	
357	Coat Hooks	1	allow	\$ 500.00	\$ 500.00	
358	Corner Guards in Corridors	3	ea	\$ 250.00	\$ 750.00	
359	Walk-Off Mats/Frames at Vestibule	64	sf	\$40.00	\$ 2,560.00	
360	<b>Subtotal</b>				<b>\$ 31,251.50</b>	
361						
362	<b>Appliances/Equipment</b>					
363	Refrigerator	1	ea	\$ 1,200.00	\$ 1,200.00	
364	Under Cabinet Frig		None			
365	Microwave	1	ea	\$ 250.00	\$ 250.00	
366	Dishwasher	1	ea	\$ 500.00	\$ 500.00	
367	Range	1	ea	\$ 800.00	\$ 800.00	
368	Motorized Projection Screen	1	ea	\$ 1,500.00	\$ 1,500.00	
369	<b>Subtotal</b>				<b>\$ 4,250.00</b>	
370						
371	<b>Plumbing</b>					
372	Plumbing Cut and Caps	1	allow	\$ 2,500.00	\$ 2,500.00	
373	New HWH Plant	1	allow	\$ 7,500.00	\$ 7,500.00	
374	Underslab Waste Piping to Kitchen Sink (allow)	75	lf	\$ 50.00	\$ 3,750.00	
375	Misc. Rework to Existing Piping	1	allow	\$ 5,000.00	\$ 5,000.00	
376	Gas/Sand Separator	Existing to Remain				
377	Above Grade Water, Waste and Pent Piping	in Fixture Units				



Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

Ref Dwgs: Jacunski Humes Architects, Schematic Drawings dated November 21, 2016  
Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
378	Water Closets	7	ea	\$ 3,500.00	\$ 24,500.00	
379	Urinals	1	ea	\$ 3,500.00	\$ 3,500.00	
380	Lavs Drop in and Wall Hung	8	ea	\$ 3,750.00	\$ 30,000.00	
381	Drinking Fountain (not shown)	1	ea	\$ 4,500.00	\$ 4,500.00	
382	Mop Receptor	1	ea	\$ 3,750.00	\$ 3,750.00	
383	Kitchen Sinks	1	ea	\$ 3,750.00	\$ 3,750.00	
384	Eyewash (not shown)	1	ea	\$ 4,000.00	\$ 4,000.00	
385	Appliance Hookups	1	allow	\$ 500.00	\$ 500.00	
386	HC Shower	2	ea	\$ 4,500.00	\$ 9,000.00	
387	Floor Drains at Sally Port	Existing to Remain				
388	Floor Drains	3	ea	\$ 800.00	\$ 2,400.00	
389	Exterior Sillcocks	2	ea	\$ 700.00	\$ 1,400.00	
390	Hose Bibbs	2	ea	\$ 500.00	\$ 1,000.00	
391	Pipe Insulation	4,827	sf	\$ 2.00	\$ 9,654.00	
392	Firesafing	1	allow	\$ 1,000.00	\$ 1,000.00	
393	<b>Subtotal</b>				<b>\$ 117,704.00</b>	
394						
395	<b>Fire Protection</b>	Not Required				
396	Rework to Existing in Renovated Areas	1,645	sf	\$ 3.00	\$ 4,935.00	
397	New Distribution and Heads for New Additions	4,827	sf	\$ 6.00	\$ 28,962.00	
398	Tie New Piping to Existing	1	allow	\$ 2,500.00	\$ 2,500.00	
399	Engineering	1	allow	\$ 5,000.00	\$ 5,000.00	
400	<b>Subtotal</b>				<b>\$ 41,397.00</b>	
401						
402	<b>HVAC</b>					
403	Misc Demo and Disconnect of Existing	1	allow	\$ 2,500.00	\$ 2,500.00	
404	Rework to Existing System	1	allow	\$ 5,000.00	\$ 5,000.00	
405	Split System Heat Pumps for New Additions	3	ea	\$ 15,000.00	\$ 45,000.00	
406	CUH at Vestibule	1	ea	\$ 1,000.00	\$ 1,000.00	
407	Exhaust Fans for Toilet Rooms	6	ea	\$ 500.00	\$ 3,000.00	
408	Ductwork and RGDs for New Additions	4,827	sf	\$ 10.00	\$ 48,270.00	
409	Supplemental Electric Baseboard Heat at New Additions	4,827	sf	\$ 2.00	\$ 9,654.00	
410	Heating and Ventilation in Sally Port	Existing to Remain				
411	Dedicated Split System for Comm. Equip	1	ea	\$ 10,000.00	\$ 10,000.00	
412	Localized Temperature Controls	4,827	sf	\$ 1.00	\$ 4,827.00	
413	Duct Liner	1	allow	\$ 2,500.00	\$ 2,500.00	
414	Vibration Isolation and Sound Attenuation	1	allow	\$ 2,500.00	\$ 2,500.00	
415	Fire Stopping	1	allow	\$ 1,000.00	\$ 1,000.00	
416	Coordination Drawings	1	allow	\$ 2,500.00	\$ 2,500.00	
417	Testing and Balancing	4,827	sf	\$ 0.60	\$ 2,896.20	
418	<b>Subtotal</b>				<b>\$ 140,647.20</b>	
419						
420	<b>Electrical</b>					
421	Electrical Disconnects/Make Safe	1	allow	\$ 2,500.00	\$ 2,500.00	
422	Primary and Secondary Service to Building	Existing to Remain				
423	Expand Main Electric Service for New Additions	4,827	sf	\$ 5.00	\$ 24,135.00	
424	Diesel Emergency Generator	200	KW	\$ 300.00	\$ 60,000.00	
425	Weatherproof Generator Enclosure	1	allow	\$ 10,000.00	\$ 10,000.00	
426	Automatic Transfer Switch	1	ea	\$ 5,000.00	\$ 5,000.00	
427	UPS	1	allow	\$ 10,000.00	\$ 10,000.00	
428	Ductbank to Generator (2-4" conduit)	40	lf	\$ 160.00	\$ 6,400.00	
429	Feeders to Gen Set	80	lf	\$ 30.00	\$ 2,400.00	
430	Convenience Power Rework at Renovated Areas	1,645	sf	\$ 3.00	\$ 4,935.00	
431	Convenience Power Distribution at New Additions	4,827	sf	\$ 6.50	\$ 31,375.50	

Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

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	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
432	<u>Lighting and Switching:</u>					
433	-Classroom Addition	1,888	sf	\$ 14.00	\$ 26,432.00	
434	-Day Room Addition	1,915	sf	\$ 12.00	\$ 22,980.00	
435	-2nd Floor Addition	1,024	sf	\$ 8.00	\$ 8,192.00	
436	-Renovated Conference Room Area	613	sf	\$ 14.00	\$ 8,582.00	
437	-Renovated Deputy Office	180	sf	\$ 12.00	\$ 2,160.00	
438	-Renovated 1st Floor Toilet Rooms	310	sf	\$ 10.00	\$ 3,100.00	
439	-Renovated Storage Areas	542	sf	\$ 6.00	\$ 3,252.00	
440	-Exterior Sconces	5	ea	\$ 800.00	\$ 4,000.00	
441	-Exit Lights	6	ea	\$ 350.00	\$ 2,100.00	
442	-Emergency Lighting Circuitry	6,472	sf	\$ 1.00	\$ 6,472.00	
443	Power for HVAC	4,827	sf	\$ 1.75	\$ 8,447.25	
444	Fire Alarm System (assume all new)	11,661	sf	\$ 3.50	\$ 40,813.50	
445	<u>Power for Misc. Equipment:</u>					
446	-Power to FACP	1	ea	\$ 500.00	\$ 500.00	
447	-HWH	1	ea	\$ 750.00	\$ 750.00	
448	-Power/Control Wiring to Projector and Projector Screen	1	ea	\$ 750.00	\$ 750.00	
449	-Power to Trap Primers	2	ea	\$ 200.00	\$ 400.00	
450	-Drinking Fountain	1	ea	\$ 250.00	\$ 250.00	
451	Tel/Data conduit, ring and string	In Integrated Technology				
452	Exterior site lighting	in Site Utilities				
453	Fire Safing	1	allow	\$ 1,000.00	\$ 1,000.00	
454	Temp Power and Light	in General Conditions				
455	<b>Subtotal</b>				<b>\$ 296,926.25</b>	
456						
457	<b>Integrated Technology</b>					
458	Access Control, Surveillance and Paging	1	allow	\$ 25,000.00	\$ 25,000.00	
459	Communications Wiring - New and Renovated Areas	6,427	sf	\$ 5.00	\$ 32,135.00	
460	<b>Subtotal</b>				<b>\$ 57,135.00</b>	
461						
462	<b>General Conditions</b>					
463	Project Manager (1/4 time for 10 months)	10	mos	\$ 5,500.00	\$ 55,000.00	
464	Superintendent (working with tools 1/3 time)	10	mos	\$ 13,500.00	\$ 135,000.00	
465	Assistant Superintendent	Not Needed				
466	Accounting	10	mos	\$ 1,000.00	\$ 10,000.00	
467	Miscellaneous Survey Work	1	allow	\$ 5,000.00	\$ 5,000.00	
468	Job Site Trailers	Use Existing Building				
469	Job Office Equipment	1	allow	\$ 5,000.00	\$ 5,000.00	
470	Job Office Supplies	10	mos	\$ 200.00	\$ 2,000.00	
471	Temp Utilities-Power and Light	4,827	sf	\$ 0.60	\$ 2,896.20	
472	Temp Utilities-Water	Use Existing				
473	Temp Utilities-Telephone	Use Existing				
474	Utility Consumption-Electric	10	mos	\$ 300.00	\$ 3,000.00	
475	Utility Consumption-Water	10	mos	\$ 100.00	\$ 1,000.00	
476	Utility Consumption-Telephone	10	mos	\$ 300.00	\$ 3,000.00	
477	Temporary Toilets	10	mos	\$ 300.00	\$ 3,000.00	
478	Temporary Heat	4	mos	\$ 2,000.00	\$ 8,000.00	
479	Winter Weather Protection	in Trades				
480	Temporary Protection-Interiors	1	allow	\$ 1,000.00	\$ 1,000.00	
481	General Cleaning	6	mos	\$ 2,500.00	\$ 15,000.00	
482	Final Cleaning	11,661	sf	\$ 0.60	\$ 6,996.60	
483	Street Cleaning	1	allow	\$ 2,500.00	\$ 2,500.00	
484	Dumpsters	8	ea	\$ 700.00	\$ 5,600.00	
485	Job Safety	1	allow	\$ 2,500.00	\$ 2,500.00	

Estimate for: **Renovation and Additions to Monroe, CT EMS Facility**

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 Gross Sq Ft: 6,834 sf existing plus 4,827 sf new

	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL	NOTES (See Below)
486	Building Permit	By Owner				
487	Blueprinting	1	allow	\$ 5,000.00	\$ 5,000.00	
488	Postage/FedEx	10	mos	\$ 300.00	\$ 3,000.00	
489	Courier Service	10	mos	\$ 100.00	\$ 1,000.00	
490	Small Tools and Supplies	1	allow	\$ 5,000.00	\$ 5,000.00	
491	Construction fence	in Site Prep				
492	Temporary signage	1	allow	\$ 1,000.00	\$ 1,000.00	
493	Project Sign	1	allow	\$ 1,500.00	\$ 1,500.00	
494	General Liability Insurance	2,400	\$	\$ 15.00	\$ 36,000.00	
495	Builders Risk Insurance	by Owner				
496	Expenses for Ceremonies	by Owner				
497	<b>Subtotal</b>				<b>\$ 318,992.80</b>	
498						

*Serving the Public Safety Community*

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