PART 1 – GENERAL

1.1 PROJECT LOCATION

122 Knowles Ave, Middletown, CT 06457
Apartments A and B

**Note: Adjacent properties are occupied by private residents/businesses, Wesleyan University staff, students and administrative offices.

1.2 RELATED DOCUMENTS

1. The project location noted above is currently an occupied two family (“A” and “B”) wood frame house. The project scope shall include but not be limited to installing a new fire alarm system in apartment “A”, apartment “B”, basement, attic and the removal of existing local fire alarm system and all associated devices. Fire alarm devices that will be removed must be returned to owner.

2. The Owner shall obtain the building permit for all of the project. Building permit number shall be provided to the awarded contractor.

3. Awarded contractor shall provide to the Owner certified copies of all contractor and sub-contractor licenses. Licenses shall be current and correspond to the type of work being performed by the specific individuals. Contractor shall not be allowed to start work without these copies.

4. Awarded contractor shall schedule and notify Owner of all inspections with the City of Middletown. Owner must be present during testing.

5. Drawings, photos and general provisions of the Contract, including General and Supplementary Conditions and all other Specification Sections apply to this project.

1.3 HAZARDOUS MATERIAL COORDINATION

1. All painted surfaces are to be treated as positive for lead containing paint due to the construction of the building prior to 1978. Federal, State, Local and OSHA requirements are to be strictly adhered to for all lead removal.

2. Contractor shall wrap lead waste in 6-mil plastic and dispose of in Owner supplied lead dumpster. Owner shall dispose of lead waste.

3. All contractor personnel working on the project shall be certified by the U.S. Environmental Protection Agency (EPA) for lead based paint activities.

4. Children under the age of six (6) occupy this building. RRP shall be strictly enforced. See Section 01015.

1.4 SCHEDULE

Project Schedule
1. Attic and Basement 7/1/2018 – 7/27/2018
2. Apartment “A” 7/15/2018 – 7/30/2018
1.5 GENERAL PROJECT REQUIREMENTS

1. Contractor shall adhere to the project manual posted on the [Major Maintenance FY19 website](#).
2. Reference the Hazardous Assessment materials report available for viewing at the Owner’s office located at 170 Long Lane and posted on the [Major Maintenance FY19 website](#).
3. Coordinate all work with Owner’s Representative and the work of other trades.
4. The property is an occupied multi-family residential building.
5. Contractor shall not access the property under any circumstance unless scheduled by owner. Buildings in the surrounding area shall be occupied throughout the summer. Care shall be taken to protect all furniture during the execution of the work.
6. The contractor will be responsible to ensure each subcontractor is responsible for daily clean up of individual’s work. Project site must be kept clean and free from tripping hazards.
7. Hepa vacuum shall be required during all drilling, wall penetrations, and cleaning.
8. Conduct construction waste management activities in accordance with the State of Connecticut EPA, Middletown Municipal Code and all other applicable laws and ordinances. Removal of non-lead based debris is to be disposed of in contractor supplied dumpsters at a location agreed to by the Owner and Contractor.
9. Coordinate all work with work of other trades.
10. Contractor to comply with all State and Federal Codes, City of Middletown Ordinances, OSHA requirements and Wesleyan University General Project Requirements and Closeout Procedures.
11. Provide as-built drawings for all work performed in this building that creates a physical change to the building.
12. Apartments inside the property are occupied and fully furnished. Contractor shall provide for the proper protection of existing furnishings. Any furniture moved shall be reinstalled to respective rooms and thoroughly cleaned by this contractor.
13. Contractor shall provide dust barriers to all surrounding spaces within building for partial renovations.
14. After review of site, contractors are responsible for any required temporary protection during the work.
15. **Doors to facilities must be kept locked at all times:** any propped doors will be closed by Wesleyan University facility operations staff or public safety, no complaints or exceptions. If doors are to be propped the door shall be watched by a representative of this contractor.
16. Upon completion of all specified work, the contractor shall thoroughly clean for move-in condition. Coordinate work with other trades.

PART 2 - SCOPE OF WORK BY DIVISION

DIVISION 2 – SITWORK / DEMOLITION

SITWORK GENERAL

1. Contractor shall protect existing turf, concrete walks and pavement as required. Damaged turf, concrete walks and pavement shall be repaired by the contractor at no cost to the Owner.
2. Contractor shall protect the existing landscaping around the perimeter of each house. Contractor shall re-grade, repair and re-seed all disturbed landscaped areas upon completion of the work.

DEMOLITION

**Note:** Contractor shall perform all demolition activities in accordance with Wesleyan University’s Construction Waste Management guidelines outlined in section 01505.
DEMOlITION
General
1. For existing fire alarm systems or devices noted to be removed, contractor shall remove all existing smoke detectors, panels, wiring, related devices and wire mold throughout the house. Return devices/detectors to Owner for proper disposal.

DIVISION 9 – FINISHES – BY GENERAL CONTRACTOR’S PAINTING SUBCONTRACTOR

1. General Contractor shall prep all existing surfaces scheduled to be painted in accordance with the requirements outlined in specification section 09901. Contractor shall clean building surfaces upon completion of all prep work to remove all residues.
2. General Contractor shall patch, prep, paint and re-finish all surfaces disturbed, damaged or patched due to the fire alarm system installation.
3. Contractor is responsible for painting installed conduit and wire mold.

INTERIOR FINISH SCHEDULE:

SHERWIN WILLIAMS PROMAR 200: Match existing color/finish in each room

DIVISION 16 - ELECTRICAL

1. The cost for the fire alarm system shall be identified in the appropriate space on the bid proposal form
2. Contractor shall install a new fire alarm system for the following location:
   • 122 Knowles Ave Middletown, CT 06457
3. Contractor is to conceal wiring to greatest extent possible. When unable to conceal wiring, contractor shall utilize wire mold in apartments. Conduit is acceptable in attic, basement, and east stair tower. *Conduit and wire mold shall be painted
4. Owner is providing a basis of design for the fire alarm system, but it is the contractors responsibility to provide their own shop drawing and device requirement locations per code
5. The new fire alarm system shall be Siemens or Simplex Grinnell. Provide cost for both systems. Reference specification section 16722 and the project manual dated 1/1/18 for all other project requirements.
6. Activation notification shall be through an automatic dialer to monitoring company.
7. Contractor shall connect phone lines to fire alarm panel and dialer.
8. New fire alarm system shall have battery back up.
9. The system shall fully comply with the latest issue of these standards. National Fire Protection Association (NFPA) - USA: No. 72 National Fire Alarm Code, No. 101 Life Safety Code except as modified and supplemented by this specification.
10. The system shall be an active/interrogative type system where each transponder and/or addressable device is repetitively scanned, causing a signal to be transmitted to the main fire alarm control panel (FACP) indicating that the device and its associated circuit wiring is functional. Loss of this signal at the main FACP shall result in a trouble indication as specified hereinafter for the particular input.
11. Contractor shall hardwire C.O detectors, one on each sleeping floor and one in the basement.
12. Contractor shall provide keyed pull stations, heat detectors, synched horn strobes, battery backup, programming and all related materials and testing. All devices shall be labeled.
13. New Fire Alarm Installation shall be capable to provide interaction with Bed Shakers

- Future Bed Shaker Connections
  i. Provide additional 14/2 from FACP to a j-box in hallway outside bedrooms on 1st and 2nd floors for future wiring into bedrooms that would require the use of bed shakers and need for the installation of additional strobes.
  ii. Provide outlet for connection and activation of bed shakers.
  iii. Contractor to verify and confirm that bed shakers can be powered from the battery in the fire alarm panel and activated upon fire alarm activation

14. The FACP and peripheral devices shall be manufactured 100% by a single U.S. manufacturer (or division thereof).
15. The system as specified shall be approved by the Owner, Owner’s Insurance Co. and the Office of the State Fire Marshall (Authority Having Jurisdiction), and turned over to the owner in an operational condition.
16. Activation of any system fire, security, supervisory, trouble, or status initiating device shall cause the following actions and indications at all network Person Machine Interfaces using basic graphics and multiple detail screens. See sequence of operations. The specifications and standards listed below form a part of this specification.
17. PMI displays on main fire alarm control and all secondary panels with LCD displays shall display alarm condition, device initiating the alarm and location of device.
18. Transmit alarm condition to fire alarm monitoring company.
19. Activation of a common area smoke detector, or manual pull station alarm shall cause all the above to occur, plus it shall cause its integral alarm lamp to be energized until the alarm condition of the detector has been reset.
20. Activation of one-unit bedroom or common room smoke detector shall cause the local audible base to activate in the room. It shall cause a supervisory signal to be triggered at the fire alarm control panel. Any second unit room smoke detector will cause a general alarm condition as described above.
21. Any alarms shall be displayed on a minimum 80-character LCD display. The top line of 40 characters shall be the point label and the second line shall be the device type identifier. The system alarm LED shall flash on the control panel until the alarm has been acknowledged. Once acknowledged, this same LED shall latch on. A subsequent alarm received from another zone shall flash the system alarm LED on the control panel.
22. The LCD display shall show the alarm information. The remote status panel shall mimic the control panel operation. All alarms shall be displayed on an SSD style annunciator. Annunciator shall list all alarm zones and be located as shown on the drawings.
23. Visual Signals: All visual signals shall be synchronized to flash in unison. Visual signals shall be wired on a separate signal circuit from audible devices.
24. Each unit will be programmed for selective building activation.
25. Contractor shall provide shop drawings in accordance with current International Fire Code Section 907.1.2.
26. Electrical contractor is responsible for all programming and coordination of final testing and acceptance with Fire Department and Owner.
## SEQUENCE OF OPERATION FOR WOODFRAME HOUSES

<table>
<thead>
<tr>
<th>Action</th>
<th>Manual Pull Station</th>
<th>System Smoke Detector</th>
<th>System Smoke Detector &amp; Any Other Initiating Device</th>
<th>Carbon Monoxide Detector</th>
<th>Apartment Carbon Monoxide Detector &amp; Any Other Initiating Device</th>
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<tr>
<td>Indicate Trouble on FACP</td>
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<tr>
<td>Indicate Trouble on remote annunciators</td>
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<tr>
<td>Indicate Supervisory on FACP</td>
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<tr>
<td>Indicate Supervisory on remote annunciators</td>
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<tr>
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<tr>
<td>Indicate Alarm on remote annunciators</td>
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<td>Sound general evacuation alarm</td>
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<tr>
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<td>X</td>
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<td>Activate dialer and send signal to monitoring company</td>
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End of Section