PART 1 – GENERAL

1.1 RELATED DOCUMENTS

1. This is a single family undergraduate woodframe house. The project scope shall include but not be limited to the window replacement and exterior work as identified.

2. The Owner shall obtain the building permit for all of the MM FY12 projects. Building permit number shall be provided to the awarded contractor. 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. Contractor shall schedule and notify Owner of all inspections with the City of Middletown. Owner must be present at inspections.

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

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

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

3. Contractor shall provide current blood test results for ALL employees working on Wesleyan properties before the start of any work. Monthly reports shall be provided thereafter and also upon completion of the project. See Section 01015.

1.3 SCHEDULE

1. General Project Schedule
   1. Start Work: 5/24/11
   2. Project Complete: 7/23/11

1.4 GENERAL PROJECT REQUIREMENTS

1. Contractor shall adhere to the project manual.

2. Contractor to assume all paint is lead containing. Reference the Hazardous Assessment materials report available for viewing at the Owner’s office located at 170 Long Lane.

3. Coordinate all work with Owner’s Representative.

4. This is an unoccupied single family residential building. Buildings in the surrounding area shall be occupied throughout the summer.

5. 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.

6. 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.

7. Coordinate all work with work of other trades.
8. Contractor to comply with all State and Federal Codes, City of Middletown Ordinances, OSHA requirements and Wesleyan University General Project Requirements and Closeout Procedures.
9. Provide as-built condition drawings for all work performed in this building that creates a physical change to the building.
10. All woodframe houses are 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.
11. Contractor shall provide dust barriers to all surrounding spaces within building for partial renovations.
12. After review of site, contractors are responsible for any required temporary protection during the work.
13. Prior to the start of exterior work, contractor shall contact CL&P to ensure that protective safety boots are installed at all overhead service wiring locations.
14. Any overtime required to complete the project MUST be brought to Owner’s attention prior to submission of bid.
15. Contractor shall provide traffic barricades, signage, flagpersons and all other traffic control methods required to complete the work.
16. **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.

**PART 2 - SCOPE OF WORK BY DIVISION**

**DIVISION 2 – SITEWORK / DEMOLITION**

**SITEWORK:**
1. Contractor shall protect the existing landscaping around the perimeter of the house. Contractor shall re-grade, repair and re-seed all disturbed landscaped areas upon completion of the work.
2. Contractor shall excavate as required to install a new concrete sidewalk in the location shown on the photo sheets.
3. Contractor shall set finish grade of new sidewalk based on stepping down 7” from the deck landing at the rear of the house and the doorway at the north elevation.
4. Contractor shall ensure the new sidewalk slopes ¼” per foot away from the house.
5. Contractor shall install new solid PVC drain piping from the existing gutter leader at the rear of the house, beneath the sidewalk, to daylight. Length shall be as required to maintain a positive slope to daylight, working with the existing yard topography. Provide all required gutter-to-piping transition pieces.
6. Contractor shall compact the sub-grade prior to placing the processed sub-base material.
7. Contractor shall install processed sub-base to a depth of 6”.
8. Sub-base shall conform to CT DOT Form 816, Article M.02.01. Submit sub-base material specifications to Owner for approval prior to the start of work.
9. Sub-base material shall be compacted to 95% of maximum dry density as determined by AASHTO T-180, Method D.
10. Contractor shall place topsoil to a depth of 4-6” on either side of the new concrete walkway.
11. Contractor shall provide landscaping services to include but not be limited to grading, topsoil, seeding, protecting and maintaining all areas impacted from the work.
12. Contractor shall protect and water all seeded areas for a minimum of 4-weeks.
13. Contractor shall coordinate the use of motorized lifts with the Owner. 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.

**DEMOLITION:**
West Side Concrete Entry Steps / Walls
1. Contractor shall provide dust control for the duration of the project. All surfaces scheduled to be demolished shall be wet down to minimize dust. All sawcutting activities shall employ wet method.
2. Contractor shall demolish the existing concrete stair posts and concrete railing walls along the west entry front stairs. Contractor shall sawcut the posts flush with the concrete landing surfaces.
3. Contractor shall sound out all surfaces and chip out any damaged, spalled, cracked or deteriorated sections or areas of concrete down to a solid substrate.

Window Replacement
1. Contractor shall maintain the attic storm windows and windows.
2. Contractor shall maintain all basement windows.
3. Contractor shall remove and recycle storm windows and windows noted to be removed in accordance with Wesleyan University Construction Waste Management guidelines outlined in section 01505. All aluminum materials shall be recycled. Contractor shall identify in their bid, credit for this material.
4. Contractor shall remove sash weights.
5. Contractor shall remove and salvage window treatments. Contractor shall reinstall window treatments and provide new hardware as necessary.

DIVISION 3 – CONCRETE

West Side Concrete Entry Steps / Walls
1. Contractor shall powerwash all vertical and horizontal surfaces of the west side front entry stairs. Contractor shall use straight water with no chemical additives. Utilize a 15 degree spray nozzle.
2. Contractor shall sound out all concrete surfaces to locate and remove all loose and/or deteriorated concrete sections.
3. Contractor shall treat any exposed, rusted rebar with a bonding and anti-corrosion agent prior to installing concrete repair material. All rust must be removed from existing rebar prior to applying bonding agent per manufacturer’s requirements.
4. Contractor shall patch, fill and repair all spalls, cracked areas, gouges, etc. in accordance with repair material manufacturer’s requirements.
5. Contractor shall provide any formwork required to infill and repair the larger damaged concrete areas or sections.
6. Contractor shall apply a cementitious concrete surface dressing over the vertical walls, treads and risers on the west side front entry stairs to provide a “new concrete” finish.
7. Contractor shall cure new concrete finish in accordance with manufacturer’s requirements.
8. Contractor shall apply a sealer that is compatible with the concrete repair and surfacing material applied.
9. Contractor shall core as required to install new metal handrail posts.
10. Contractor shall install non-shrink grout to set new metal handrail posts in place. Slope grout to drain.

Concrete Repair Materials:
Ardex Bonding & Anti-Corrosion Agent
Ardex CP Concrete Patch
Ardex CD Concrete

Or

Silpro C-21 All Acrylic Bonding Agent / Primer
Silpro Easy Patch  
Silpro Fastcrete

Or

Approved equal system. System components shall include a bonding agent, concrete patch material and concrete resurfacing material.

New Concrete Sidewalk
1. Contractor shall install a new concrete sidewalk as shown on the photo sheets. Concrete sidewalk thickness shall be 5”.
2. Contractor shall install one expansion joint located at the approximate midpoint of the new sidewalk installed. Coordinate exact placement with the control joint spacing. #5 epoxy painted rebar dowels shall be cast-in place 10” O.C. with an 18” leg sheath. Expansion joint filler and joint sealant shall be as specified. Concrete control joints between the expansion joint shall be tooled and spaced at 4’-0” O.C.
3. Expansion joint filler shall be Sealtight® Fibre Expansion Joint by W.R. Meadows, Inc., www.wrmeadows.com – 1-800-342-5976 or approved equal. Thickness shall be ½”. Expansion joints shall be set ½” below the concrete surface and filled with the appropriate specified joint sealant.
4. Concrete mix design shall be 4000 PSI. Contractor shall submit proposed concrete mix design to Owner for review and approval.
5. Concrete pavement reinforcement shall be WWF 6x6 – W8xW8 in top 1/3 of slab depth. Welded wire mesh shall be supported by chairs. Welded wire mesh shall not be placed on compacted gravel and pulled up during concrete placement.
6. Contractor shall protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Begin final curing procedures immediately following initial curing and before concrete has dried. Continue final wet curing for at least 7 days in accordance with ACI 301 procedures. Avoid rapid drying at end of final curing period.
7. Contractor shall perform curing of concrete by wet curing, either by keeping the concrete surface continuously wet by covering with water or providing a continuous water-Fog Spray.
8. Surfaces shall be kept continuously moist for not less than 72 hours after finishing.
9. Contractor shall wet cure with Ultra Care wet curing blankets or approved equal.
10. Contractor shall cover concrete surface with non-staining absorptive wet curing cover, thoroughly saturating cover with water and keeping continuously wet. Place absorptive cover to provide coverage of concrete surfaces and edges, with 4” lap over adjacent absorptive covers.
11. Contractor shall provide a broom finish in a direction perpendicular to the curb line.
12. Contractor shall apply a compatible sealer over the concrete 28-days after concrete placement.

DIVISION 4 – MASONRY

1. N/A

DIVISION 5 – METALS

1. Contractor shall install new galvanized metal railings at all locations where concrete wall panels and posts previously existed. Contractor shall also install three additional rail sections as shown on the photo sheets (Identified as 1, 2, 3). Rail style shall be 1 ½” diameter with intermediate pickets as specified.

DIVISION 6 – WOOD AND PLASTICS
1. Contractor shall maintain the interior window trim wherever possible; however, contractor shall install new trim pieces or replace existing if required to complete the window installation.
2. Contractor shall remove and reinstall the existing interior stops as required to complete the installation. Install new stops to match existing if required.

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

1. Contractor shall install joint sealant over all expansion joint filler installed as part of the sidewalk installation. Joint sealant shall be DynaTred® non-sag, traffic-grade polyurethane sealant by Pecora Corporation [www.pecora.com](http://www.pecora.com) – 1-800-523-6688 or approved equal. Submit manufacturer’s standard color options to Owner for review and selection.
2. Prior to installing new windows, Contractor shall remove existing sash, sash weights and sash cords. Contractor shall fill sash weight pockets with cotton batt insulation, apply sealant to head and jambs of existing sash stops and then install new window(s). Contractor shall fill voids between old and new with expanding foam, trim interior with new trim pieces as required and seal perimeter interior with clear caulk to eliminate the potential for any air infiltration.
3. Contractor shall wrap wood trim at all locations where new windows are installed with pre-finished break metal. Contractor shall also wrap wood trim at attic windows. Provide color deck with color options to Owner for selection.
4. Contractor shall caulk around the interior and exterior perimeter of all new windows installed.
5. Contractor shall caulk around the perimeter exterior break metal installed.

DIVISION 8 – DOORS AND WINDOWS

1. Contractor shall replace all windows in the house excluding
   a. attic windows
   b. basement windows
2. Divided lite configuration for new windows shall be 2 over 2.
3. Contractor shall install obscure glass for all bathroom windows – upper and lower sashes.
4. Contractor shall install fiberglass windows as specified.
5. Contractor shall submit window shop drawings to Owner for approval prior to ordering windows.

DIVISION 9 – FINISHES

1. Contractor shall prep all existing surfaces scheduled to be painted in accordance with the requirements outlined in specification section 09910. Contractor shall clean surfaces upon completion of all prep work to remove all residues. Allow 24-48 hours of dry time before applying paint products and use a moisture test meter to ensure that the surface is dry prior to applying paint products – maximum moisture content shall be 14%. Provide Owner with results.
2. Contractor shall wait 24-48 hours after rain and shall use a moisture test meter to ensure that the surface is dry prior to applying paint products – maximum moisture content shall be 14%. Contractor shall also monitor the weather forecast and not apply paint products if rain is predicted. Provide Owner with results.
3. Contractor shall prep, prime and paint the following:
   a. attic window sashes and muntins
   b. basement window sashes, muntins and frames
   c. basement security straps (DTM paint)
   d. new railings installed (DTM paint)
   e. damaged trim and new interior trim pieces installed (to match adjacent trim pieces)
4. Contractor shall apply one coat of Zinsser peel stop to all surfaces noted to be painted, one coat of tinted primer and one topcoat of latex paint in accordance with specification requirements.
5. Contractor shall powerwash the entire exterior of the house. Contractor shall use straight water with no chemical additives and utilize a 15° nozzle. Powerwashing activities shall not begin until all concrete demolition work is complete.

**FINISH SCHEDULE:**

**BENJAMIN MOORE:**
- Navajo White – exterior windows not replaced
- Tudor Brown – basement windows / basement security straps / window infill / railings
- White – exterior railings

**PRATT & LAMBERT:**
- Wesleyan White #2532 semi gloss or stain and poly to match existing color and sheen – interior trim

**DIVISION 10 - SPECIALTIES**
1. Contractor shall remove and reinstall window treatments as required to install the new windows. Provide new mounting hardware as required.

**DIVISION 11 - EQUIPMENT**
1. N/A

**DIVISION 12 - FURNISHINGS**
1. N/A

**DIVISION 13 – SPECIAL CONSTRUCTION**
1. N/A

**DIVISION 14 – CONVEYING SYSTEMS**
1. N/A

**DIVISION 15 - MECHANICAL**
1. N/A

**DIVISION 16 - ELECTRICAL**
1. N/A