

Appendix A- Vender Quotes

For the window section of this study, quotes were solicited from Window Woman of New England for wood window restoration, and a storm window quote was provided by Allied Window, a company specializing in large scale and special storm window installations.



January 13, 2015

44R Elm Street • Amesbury, MA 01913
Phone: (978) 532-2070 • Fax: (978) 532-0040

www.window-woman-ne.com

Window Repair and Restoration Proposal
Topsfield Town Hall
8 West Common Street
Topsfield, MA 01983

Based on the survey notes prepared by Adams & Smith, the following proposal details our procedures to make the windows safe, functional and more weather tight.

There are three levels of service I am proposing: Tune Up, Renovation, and Restoration.

Tune Up Services include:

- Remove window sash and front stops from openings (from the interior)
- Remove windows to our Peabody workshop – board up openings if necessary
- Chip all loose, flaking glazing putty
- Replace any broken panes of glass with antique glass
- Repair damaged exterior areas with epoxy and/or replacement of wood as needed.
- Reinforce all loose joints in the sashes, re-gluing and epoxy repair of sashes as necessary
- Replace sash ropes with copper dipped steel sash chain
- Install spring bronze weather stripping
- Replace all parting bead
- Planing and shimming as needed of window sashes to fit openings and align meeting rails while still allowing clearance for operating windows
- Lubricate pulleys
- Clean, wax and reinstall sash

Window Opening ID	Cost per Window	Total
1-5	750	3750
11-12	750	1500
16-17	750	1500
	TOTAL TUNE UP	\$6750

Renovation Services include:

- Remove window sash and front stops from openings (from the interior)
- Remove windows to our Peabody workshop – board up openings if necessary
- Chip all loose, flaking glazing putty
- Replace any broken panes of glass with antique glass
- Repair damaged exterior areas with epoxy and/or replacement of wood as needed.
- Reinforce all loose joints in the sashes, re-gluing and epoxy repair of sashes as necessary
- Replace sash ropes with copper dipped steel sash chain
- Install spring bronze weather stripping
- Replace all parting bead
- Planing and shimming as needed of window sashes to fit openings and align meeting rails while still allowing clearance for operating windows
- Scuff, prime and paint exterior of windows
- Lubricate pulleys
- Clean, wax and reinstall sash

Window Opening ID	Cost per Window	Total
6-7-8	1500	4500
10	1500	1500
14-15	1500	3000
22, 24	500	1000
28	2700	2700
	TOTAL	\$12,700
	RENOVATIONS	

Full Restoration Services include:

- Remove window sash and front stops from openings (from the interior)
- Remove windows to our Peabody workshop – board up openings if necessary
- Remove all glazing putty and glass
- Remove all paint from interior and exterior surfaces
- Repair damaged exterior areas with epoxy and/or replacement of wood as needed.
- Replace any damaged or missing rails, muntins
- Reinforce all loose joints in the sashes, re-gluing and epoxy repair of sashes as necessary
- Replace any broken panes of glass with antique glass
- Replace sash ropes with copper dipped steel sash chain
- Install spring bronze weather stripping
- Replace all parting bead
- Planing and shimming as needed of window sashes to fit openings and align meeting rails while still allowing clearance for operating windows
- Prime and paint interior
- Prime and paint exterior
- Lubricate pulleys
- Clean, wax and reinstall sash

Window Opening ID	Cost per Window	Total
9	2150	2150
13	2150	2150
20,21	2150	4300
23	1200	1200
25,26	2150	4300
27	3500	3500
29,30,31, 32,33	3850	19250
34	2300	2300
35, 36,37,38	3850	15400
40,41	850	1700
42, 43	1400	2800
44,45,46,47,48	1200	6000
	TOTAL RESTORATIONS	\$65,050

Grand Total all windows \$84,500

Warranty

We are committed to your satisfaction, and we stand behind the quality of our work. We will use our best efforts to perform our obligations under this agreement. Often the fit of windows changes from season to season, we are always happy to tweak the fit in the first year after work is completed at no additional charge.

We do not use chemical paint strippers, only heat, steam, and manual removal. We practice safe lead paint handling and removal processes. Our team has completed the EPA RPP certification training and we have received our Certification to Conduct Lead Based Paint Activities and Renovations.

About our company

Window Woman of New England was established in 2003. A list of references is available on request. Home Improvement Contractor registration #166056. We are fully insured.

If any further information or clarification is needed please don't hesitate to contact me at 978-532-2070 or via email at ahardy@window-woman-ne.com.

Sincerely,

Alison J Hardy



Terms of Agreement

- I. AGREEMENT: Window Woman of New England shall oversee, and be responsible for all work and provide all the materials to support the work described above. This document represents the agreed work to be performed.
- II. Work shall take approximately 1-2 weeks for tune up or renovation, four to six weeks for full restoration and may commence on/or after March 1, 2015
- III. CONTRACT PRICE: A deposit equal to one third of the estimated total is due prior to or upon removal of first set of windows. All payments should be made to: *Window Woman of New England, 44R Elm Street, Amesbury, MA 01913*
- IV. WORKING CONDITIONS: Window Woman of New England shall remove all debris from site as a normal course to completing its work .Access to Water and electricity shall be part of the work requirement.

Acceptance signature for work proposed

Date

Acceptance signature for work proposed
Window Woman of New England – Alison Hardy

Date

Proposal

ALLIED WINDOW, INC. THE WINDOW PROFESSIONALS 11111 Canal Road Cincinnati, OH 45241 (513) 559-1212 · 800-445-5411 · FAX: (513) 559-1883 email: info@alliedwindow.com			
PROPOSAL SUBMITTED TO:		PHONE	DATE
Adams & Smith LLC		(617) 512-5697 x	1/29/15
STREET		FAX	Cell
55 Thomas Road		(781) 599-2070	() -
CITY, STATE & ZIP CODE		JOB NAME	
Swampscott MA 01907		Topsfield Town Hall - 1	
CONTACT		JOB LOCATION	
Richard Smith		Topsfield MA 01983	

We hereby submit specifications and estimates for:

Fabricate and deliver (42) custom interior / exterior storm windows.

- QUOTE INCLUDES:**
- * **32 Operating Historic One Lite - Type (HOL-OP)**
 - * **- Top fixed, Bottom Operable with Charcoal aluminum screen**
 - * **5 Allied One Lite - Type (AOL-A-IVS)**
 - * **- Single panel, Outside removable with Invisible clips**
 - * **- No Screen**
 - * **5 Magnetic One Lite - (MOL)**
 - * **- Interior Magnetic Storm Panel, No Screen**
 - * **- Deep guide mounting stops with factory applied steel tape**
 - * **Special Shapes**
 - Standard Color (White, Colonial White, Beige, Bronze, or Black)**
- ADD FOR CUSTOM COLOR = \$2,597.00**
- Shipping Costs Included
- DELIVERED COST = \$18,883**
- Lead time: Not less than 12 weeks from receipt of final dimensions**

We Propose hereby to furnish material – complete in accordance with above specifications, for the sum of:

(See Above) Dollars **(\$18883.00)**

Payment to be made as follows:

20% Deposit with Order, Net 30

Pricing does not include any state sales tax. All material is guaranteed to be as specified.

Authorized Signature
Gregg V. Martin, VP
Gregg Martin

All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate period. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

Note: This proposal may be withdrawn by us if not accepted within 30 days.

<p>Acceptance of proposal – The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.</p>	SIGNATURE
DATE OF ACCEPTANCE	SIGNATURE

Appendix B- Draft Window Restoration Specification

This is a draft of a window restoration specification for bidding of this work. Further development and input from MHC will be required prior to bidding the work.

SECTION 08600

WOOD WINDOW CONSERVATION

PART I-GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications Sections, apply to the work of this section.
- B. The extent of work is shown on the Drawings and Window Schedule and described herein.
- C. Allowances: Refer to Section 01020 - Allowances, which apply to the work of this section.
- D. Unit Prices: Refer to Section 01025 - Unit Prices which applies to the work of this Section.

1.02 DESCRIPTION OF THE WORK

- A. Provide all plant, materials, labor and equipment necessary and/or required for the complete execution of the work of this Section including, but not limited to:
 - 1. Complete repair and restoration of all wood window frames and sash as listed on the Window Schedule:
 - a. Removal of all indicated double hung and fixed sash from their respective openings with their respective interior stops, transporting sash to off-site work area, and the provision of temporary protective closure of all sash openings.
 - b. Removal of all exterior paint finishes down to bare wood substrate from designated sash in off site work area, except for specific areas of paint designated by the Preservation Consultant to be retained as an in place record of past paint treatments.
 - c. Removal of all glazing compound and glass from all sash removed from building that are designated for 100% reglazing followed by reinstallation of all existing glass lites in their original position with complete new glazing.
 - d. Removal of all defective glazing compound from all sash designated for partial reglazing followed by new glazing to replace the defective glazing.
 - e. At all frames and sills scheduled for on-site work conservation work, in place preparation of all exterior painted surfaces for repainting by conventional cleaning, scraping and hand sanding of loose or defective paint. At specific areas to be treated with epoxy removal

all paint down to bare wood.

- f. Removal of all hardware and window furnishings as required to remove the sash from their frames. **Window shades, blinds and interior shutters together with their hardware are to be stored and reinstalled when the completed sash are reinstalled.**
 - g. Woodwork conservation repairs including epoxy consolidation and epoxy filling, wood dutchmen, and replacement rails to restore severely weathered, deteriorated, or otherwise damaged wood components of window sash frames and sills. Refer to Section 06250 -Woodwork Conservation.
 - h. At sash designated to be replaced, fabricate new sash matching all dimensions and profiles of indicated original sash and glaze with restoration glass.
 - i. Prime and finish painting on site of all exterior window frames, sash **and any interior stops and trim not removed from openings**, and other indicated items shall be carried out under the work of this section in accordance with the requirements of Section 09900 - Painting.
 - j. Prime and finish painting off-site of all sash **and interior** stops removed from the openings shall be carried out under the work of this section in accordance with the requirements of Section 09900 - Painting.
 - k. Reinstallation of all window sash removed from their frames complete with all hardware, weights and ropes, and wood stops as required to be weathertight and secure sash in place. Upper sash are to be fixed in place by wood blocks in their jambs.
2. Clean up at the completion of the work to include cleaning all window glass.
 3. All woodwork repairs to sash and frames shall conform to all the requirements of Section 06250 -WOODWORK CONSERVATION.
 4. All work affecting existing painted surfaces shall conform to the requirements of Section 09900 -PAINTING.
 5. Allowances: Refer to Section 01020 -ALLOWANCES, which apply to the work of this section.

ALLOWANCE #1. All labor and materials required to conserve the sills at windows #1, 19, and 20 including related repairs to the jambs: ~ for labor on a unit cost basis, and \$800 for materials on a lump sum basis (wood and epoxy).

ALLOWANCE #2. All labor and materials required to install wood dutchman repairs to sash at windows #1 and 24 as indicated on the

Window Schedule: \$1,500 for labor on a unit cost basis, and \$50 for materials on a lump sum basis (wood and epoxy).

6. Unit Prices: Refer to Section 01025 -UNIT PRICES, which applies to the work of this Section.

UNIT PRICE #1. Labor performed to accomplish the work within Allowances 1, 2, and 3, per hour.

1.03 RELATED WORK SPECIFIED ELSEWHERE

- A. Carefully examine all of the Contract Documents for requirements which effect the Work of this Section.
- B. Related Work Specified Elsewhere:
- 1 Section 06100 -Rough Carpentry
 - 2 Section 06200 -Finish Carpentry
 - 3 Section 06250 -Woodwork Conservation
 - 4 Section 09900 -Painting

1.04 INTENT

- A. It is the intent of this work to restore the window sash and frames to sound, stable and weather tight condition while preserving the maximum amount of historic fabric possible.

1.05 QUALITY ASSURANCE

- A. The work of this Section shall be accomplished by a “specialist” firm of established reputation for performance of work of the highest quality having not less than five years of successful experience in the repair and restoration of wood windows and woodwork conservation with epoxies on buildings of similar age; and type to the Topsfield Town Hall or, if newly organized, whose personnel have previously established a similar reputation in the same field, and which is regularly engaged in and maintains a regular force of workman skilled in the work of this section.
- B. Provide sufficient workmen and supervisors who shall be present at all times during execution of this portion of the Work, and who shall be thoroughly familiar with the type of construction involved and the materials and techniques specified.
- C. The Contractor shall take all necessary field measurements prior to fabrication and installation of work and shall assume complete responsibility for accuracy of same.

1.06 SUBMITTALS

- A. Work Plan: Submit work plan detailing schedule proposed to accomplish the work including the order in which specific rooms and windows will be worked on, protection of the openings while the sash are removed for both security and inclement weather, measures to protect the sash and

historic glass during the execution of the work and identification systems to be used to insure that all sash, interior stops, individual glass panes, and related elements are reinstalled in their existing locations, and coordination with the work of other sections of this Contract.

- B. Field Survey & Window Schedule: The Window Schedule included with the Drawings is provided to indicate the general intent and scope of work required under this Contract, but is not guaranteed to be definitive as to the exact locations and full extent of all work required for the complete restoration of all wood windows, materials, components, elements and finishes under this Contract. Prior to commencing with the work, the Contractor shall carry out and complete his own "Field Survey & Window Schedule" of all wood windows and related materials, components, elements and finishes scheduled for work throughout the building in accordance with the requirements of this section, and submit the Field Survey & Window Schedule to the Preservation Consultant for review and approval. Refer to Submittals requirements specified in Section 01000 - General Requirements.

1. The Field Survey & Window Schedule shall be updated and resubmitted to the Architect to include new conditions information discovered after removal of window sash from the openings and after preparation work is completed (paint and glazing removal).

C. Samples

1. Provide 2 samples of each type of replacement glass proposed for use.
2. Provide samples of each type of wood, hardware, fasteners, putty, paints, epoxies, adhesives, and other materials proposed for use. Provide unopened container of each material with manufacturer's original labeling.

- D. Product Data: Submit manufacturers' technical data and Materials Safety Data Sheets for each product specified or proposed for use including recommendations for their application and use.

1.07. FIELD CONSTRUCTED MOCK-UPS

- A. Prior to the start of production work for the respective items, provide full size mock-ups for each of the items listed in locations designated by the Architect. Mock-ups will be used to measure standards of workmanship, finish, texture, material, and detail, and qualifications of workman with regard to requirements set forth in the Contract Documents. Obtain written acceptance of Mock-up from Preservation Consultant before proceeding with production work. Repeat mock-up procedure as required until accepted by Architect. Protect and mark accepted mock-ups, retain in undisturbed condition during construction to be used as a standard for acceptance of completed work. Unless otherwise indicated accepted mock-ups may be incorporated into production work. Note that individual mock-ups may be phased to the normal order of performing the work rather than at the beginning of the entire Contract. However, the individual mock-ups

must be presented for review prior to starting production work for the particular stage of work to be demonstrated. Refer to Section 06250 - Woodwork Conservation for additional mock-up requirements that apply to the work of this section.

1. Complete off-site conservation of a single sash unit demonstrating in successive stages:
 - a. Removal of painted/ finishes, all glazing putty and glass, and preparation of rabbets to receive new putty.
 - b. Installation of glass and glazing putty.
 - c. Execution of typical woodwork conservation repairs.
 - i. Epoxy consolidation and filling of weather checked surface.
 - ii Dutchman repair of corner joint.
 - d. Execution of finish painting.
 - e. Reinstallation of restored sash and stops in window opening including typical associated hardware.

1.08. DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to site in manufacturer's original and unopened containers and packaging, bearing labels as to type and names of products and manufacturers. Store materials only in designated areas.
- B. Protect materials during storage and construction. Keep containers tightly closed and away from open flames. Protect liquid components from freezing. Keep all products dry and protected from rain.
- C. Comply with manufacturer's recommendations for minimum and maximum temperatures.

1.09 PROJECT CONDITIONS

- A. Environmental requirements. Do not remove or install sash during rainy or windy weather conditions.
- B. Do not apply paint, glazing compound or epoxy materials to damp substrates, or when ambient temperature of substrate materials are below 40 degrees F or as otherwise specified or recommended by the manufactures printed instructions.
- C. Protect openings while the sash are removed for both security and weather.
- D. Protect occupants of building and building interior finishes that are N.I.C. during all work operations for the duration of the project.

1.10 GUARANTEE

- A. Provide written warranty ensuring that all sash and window frame repairs shall remain sound, and free and defects for a period of two (2) years from the date of substantial completion, and that any such defects

occurring within the warranty period will be repaired or replaced in a manner conforming with the requirements of these Contract Documents.

PART 2- PRODUCTS

2.01 GENERAL

- A. All wood conservation repair materials including epoxies, wood, adhesives, and fasteners shall be as specified in Section 06250 - Woodwork Conservation.
- B. Putty filler for nail holes and small cracks and fissures less than 1/16" wide: Commercial grade linseed oil based putty.
- C. Clear wood treatment at jamb linings: Clear alkyd oil resin preservative; "REZ" by Pittsburgh paint Co., or equal.

2.02 GLAZING MATERIALS

- A. Glazing Putty: **Linseed Oil Putty, F.5. IT-G-410E(1). Sarko Putty by XXX**
- B. Glazing Points: Standard manufacture, copper or zinc coated metal in size suitable for the installation. Points shall not protrude through the putty.
- C. Primer for Putty: Alkyd oil based primer by same manufacturer as finish paint, SUPRIME #8 by Pratt & Lambert or equal; or Boiled Linseed Oil.
- D. Glass: Salvage glass of cylinder type similar in visual character to existing cylinder glass in sash; Restoration Glass, "Light" by Blenko Glass, Milton, NY, or Bendheim Glass Company, Passaic, NJ.

2.03 HARDWARE

- A. **Locks: XXXX**
- B. Shade, Venetian blind hardware, and other misc. hardware: Remove as required to carry out the scope of repairs, and reinstall on completion of the work. At offices temporarily reinstall immediately after removing sash.
- D. Fasteners:
 - 1 Match original fasteners in type, size and material unless indicated otherwise on drawings or schedule. In general fasteners are to be brass or bronze. **Ives stop bead adjusters??**
 - 2 The use of drywall screws, galvanized deck screws, and similar modern fasteners is prohibited.
- E. Sash Cord: Chain of size and weight to match typical existing chains at units where chains are found to need replacement. At upper sash to be fixed in place, chains and weights are to be left connected to the sash.
- F. Sash Weights: Use existing weights where schedule indicates sash is

to be operable. All other weights are to be left in place in the pocket as is.

- G. Weather Stripping: Jambs – Bronze “V: type weather stripping by XXXX. Meeting rails YYY; Sills ZZZ.

2.04 WOOD

- A. Replacement Sash and replacement turned bases: Clear straight grained Spanish Cedar or Honduras mahogany.
- B. Wood Dutchman and replacement rails: Match species and grain of wood in sash being repaired (probably Eastern White Pine), using only heartwood.

PART 3 -EXECUTION

3.01 INSPECTION AND ACCEPTANCE

- A. Examine all surfaces and contiguous elements to receive the work of this section and correct, as part of the Work of this Contract, any defects affecting installation. Commencement of work will be construed as complete acceptance of surfaces and contiguous elements.

3.02 REFERENCE STANDARDS

- A. For window conservation and glazing: Preservation Briefs #9, “The Repair of Historic Wooden Windows”, by John H. Myers, The National Park Service, 1981

3.03 WINDOW REPAIR SCHEDULE

- A. The Window Repair Schedule and Drawings AX-AXX are to be used in conjunction with 3.05 and 3.06 below, which describe the work designated by the terms used in the Schedule.
- B. The terms “Conservation 1”, and “Conservation 2” designate the level of epoxy conservation work required at the indicated components of the window frames and sills on an additive basis to repair the typical existing defects. Components designated with the term “no visible defects” appear to be in generally good condition other than paint and are to be left as is. Components designated for “Conservation 1” have limited moderate deterioration to wood elements, and are to receive a moderate level of woodwork conservation repairs (primarily epoxy consolidation and filling) followed by spot painting of the repaired area to match adjacent paint color. Components designated for “Conservation 2” have relatively severe deterioration to wood elements, and are to receive more extensive woodwork conservation repairs including replacement of indicated defective elements and repairs to related flashing followed by spot painting of the repaired area.
- C. The terms “no visible defects”, “Conservation 1”, “Conservation 2”, Dutchman, and “replace” designate the levels of work required at the

window sash to repair the typical existing defects. The terms are generally parallel to the terms in “B” above, but with the basic work under “no visible defects”, including complete reglazing along with off-site paint removal and repainting, and hardware refurbishing.

3.04 WOOD CONSERVATION

- A. All work indicated by the terms “conserve”, “conservation repairs”, “epoxy consolidation”, “epoxy filling”, “epoxy” or “woodwork conservation”, or “Dutchman” is to conform to all the requirements of Section 06250 -Wood Conservation & Repairs.

3.05 WINDOW FRAME REPAIRS

- A. Repair wood frames including sills, exterior casings and exterior trim according to the following categories.

Category 1: Good Condition Window Schedule Note: “no visible defects”,

Typical Existing Condition: Paint surfaces are worn but wood generally remains firm and sound. Sills may have minor fine weather checking but remain firm.

- a. Paint: All surfaces are to be left as is.

Category 2: Fair Condition Window Schedule Note: **“Epoxy 1”**

Typical Existing Condition: Sills where there are widespread areas of fissures and weather checks; exterior casings that have splits and weather checking in the lower few inches; and short loose or dislodged sections of moldings.

- a. Preparation of painted surfaces for epoxy and/or Dutchman repairs where paint remains: Remove paint to bare wood within 2 inches of all sides of defects and prepare surface for epoxy repair. Paint in areas that will not be affected by the conservation work (i.e., most of the window frames and sills) will not require paint preparation and repainting. Following application of epoxy conservation, sand the repair area to level the epoxy filling and provide smooth surface, and feather edges of remaining paint adjacent to repair area to facilitate spot repainting. Utilize scrapers and sanding blocks custom fabricated as required to conform to existing molding profiles to avoid damaging curved moldings and crisp edges.

- b. Repair of moderate defects to wood sills and exterior casings: Repair moderate defects with epoxy. Woodwork having areas of fissures and splits shall be repaired in place using epoxy consolidants and epoxy fillers to restore unit to sound and smooth profile (Epoxy filler is to be used only to fill voids and cracks, and is not to be built up over surface to restore missing original profiles -refer to Section 06250 for requirements of epoxy conservation work).

c. Painting: Apply paint to repaired area to match existing adjacent colors and surface textures as per Section 09900 -Painting.

Category 3 -Poor Condition Window Schedule Note: “Epoxy 2”

Typical Existing Condition: Lower portions of window frames having turned bases and molded pilasters above the front entry porch have substantial areas of rot and splits along with defects in the copper sill flashings.

- a. All operations under category 2.
- b. Bases of colonettes at windows 23, 42, & 43: Replace turned bases with matching new bases. At window 23 remove internal blocking as required repair copper sill flashing, and install wood Dutchmen to replace rotted sections of the base of the jamb for window 23. Refer to Drawing Details XX and YY for specific repair details. Refer to Section 06250 for requirements regarding wood Dutchman and epoxy conservation work.
- c. Bottoms of molded pilasters at windows 22 and 24: Provide extensive epoxy conservation and/or wood Dutchman at all elements that are, extensively fissured and weathered, rotted or otherwise deteriorated. Refer to Section 06250 for requirements regarding wood Dutchman and epoxy conservation work.

3.06 WINDOW SASH, WEATHER STRIPPING, AND INTERIOR STOP REPAIRS

A. Repair sash, including rails, stiles and muntins according to the following categories

Category 1 - Good Condition - Window Schedule Note; “No Visible Defects”

Typical Existing Condition: Double hung or fixed sash that exhibit a range of paint and glazing conditions from sound to moderate weathering of paint and limited areas of cracked, missing, or otherwise defective glazing compound, but with all wood surfaces remaining sound with only minimal fine weather checking except for typical end grain defects at the exposed bases of the lower sash stiles. All first floor sash are included in this category.

- a. Sash removal: Remove upper and lower sash from opening and transport to shop to execute work. Provide temporary weatherproof closure for opening where storm windows are not present.
- b. Interior stops - Removal: Remove jamb stops as required to remove sash, install temporary closure at opening where needed, and to reinstall conserved sash. Use care in removal to not break, crack or otherwise damage the stops. Temporarily reinstall stops as required to secure temporary closure of opening or to store them in place and provide functional window blinds.

- c. Interior stops - Reinstallation: All stops are to be reused in the opening they were removed from. Replacement stops matching the existing in detail and finish are to be provided in any instances where the stops are damaged in removal, or where indicated on the schedule. Reuse existing fasteners and holes wherever feasible. Where not feasible review fastener options with Preservation Consultant. Position stops to firmly hold sash in place. Fill any obsolete fastener holes in stops as per paragraphs d.ii and iii below.
- d. Shades and blind along with their hardware: Remove as required to remove sash from openings; in office spaces, reinstall after sash removal. In other spaces store for reinstallation. Fill all obsolete holes from fasteners, etc. (including existing holes from hardware that is no longer present) with putty filler colored to match adjacent wood surface.
- e. Sash locks: remove from sash; discard modern clamshell locks; remove all early locks and store for possible reuse.
- f. Weather Stripping: remove all bronze and vinyl weather stripping from jambs and sash. Replace with XXX “V” shaped bronze weather stripping in jambs, YY at meeting rails, and ZZ at bottom rails of lower sash.
- g. Paint preparation:
 - i. Sand and hand scrape to remove all loose or otherwise deteriorated paint on all exterior portions of sash. Utilize scrapers and sanding blocks custom fabricated as required to conform to existing molding profiles to avoid damaging curved moldings and crisp edges.
 - ii. Repainting of existing interior stops is to be limited to touch up of defects at fasteners to match existing paint color and surface. New stops are to be painted to match adjacent existing woodwork.
 - iii. Preservation of historic paint: At locations to be designated by Preservation Consultant leave area of existing interior paint in place undisturbed. Such areas will usually be 12” long by the width of a rail or stile.
- h. Repair of minor defects:
 - i. General: Woodwork having only shallow surface roughness with all fissures less than 1/16 inches wide. Hand sand to smooth and remove loose or friable wood and roughness, prime, and fill shallow fissures with putty filler after priming. Coordinate window repair with paint priming operations.
 - ii. Protruding Pins: Slightly protruding pins may be sanded or cut flush to the sash surface as required to facilitate sanding. Pins protruding over 1/8” should be driven home or if very loose replaced with new pins prior to being cut flush to the sash

surface.

- i. Repair end grain defects in base of stiles at sash: Carry out conservation repairs to consolidate and fill all checking in the exposed end grain at the bottom of the lower sash stiles with epoxy, including voids where the end grain of the stiles is missing over rail tenons as indicated on drawing details. End grain conservation repairs are not indicated on the Window Schedule.
- j. Glass and Glazing:
 - i. Glazing: Spot remove all defective glazing using extreme care not to break glass.
 - ii. Broken Glass: Replace all broken or cracked panes of cylinder or modern glass with either salvage or reproduction cylinder glass similar in character to the remaining cylinder glass in the specific sash.
 - iv. Preparation for putty: All joints, spaces, and surfaces to receive glazing compound shall be thoroughly dry and free from dust, oil and other foreign materials before priming and glazing. Apply priming paint or linseed oil sealer to all bare wood surfaces prior to application of glazing materials. Allow 24 hours drying time prior to installing new glazing compound. Do not use a shellac based primer sealer. Do no glazing when ambient temperatures are less than 40 F. All glazing work shall be performed in accordance with the standards of the "FGMA Glazing Manual," and the specific printed specifications, instructions and recommendations of each of the various manufacturers.
 - v. Installation where glass has been removed: Bed glass panes in thin layer of glazing compound, matching specific position and orientation of each pane prior to removal. Secure with glazier's points, making sure that points will not protrude through finished glazing compound. Install face glazing compound and tool to form smooth, neat and consistent surface.
 - vi. Installation where glass remains in place: Install face glazing compound wherever existing is missing or has been removed, and tool to form smooth, neat and consistent surface with comers neatly struck.
- k. Weights and Chains at all sash designated to be operable: Repair all weights and chains as required to restore smooth, functional operation of lower sash at windows indicated to be operational on the Window Schedule. Adjust or change weights as required to properly balance weight of sash. Provide new chains only where existing is broken or missing.
- l. Parting Beads: Parting beads at "Category 1 windows are to be left as is.

- m. Painting: Prepare wood and glazing surfaces for painting. Lightly sand all wood, removing weathered surface material. Clean off all dust and dirt. Allow glazing putty to fully cure prior to applying paint. Apply paint as per Section 09900. At all exterior glazing lap paint approximately 1/16" onto surface of glass to provide tight, continuous seal between glass and glazing compound.
- n. Cleaning: Clean glass surfaces promptly after installation, exercising care to avoid damage to glass. Remove excess glazing compound, paint, dirt, and other contaminants.
- o. Storm windows: all storm windows are to remain as is.

Category 2 -Fair Condition - Window Schedule Note: "Conservation 1"

Typical Existing Condition: Sash that exhibit substantial weathering and/or checking of some exterior wood surfaces, and/or corner joints and/or muntin/rail joints out of alignment less than 1/8".

- a. Perform all work included under Category 1 above. as applicable.
- b. Glass and Glazing putty: Remove all glazing and bedding putty to bare wood substrate using extreme care not to break glass. Remove glass from sash, label as to positions and orientation in sash, and store for reinstallation.
- c. Exterior Paint: Remove all exterior paint down to wood substrate from all exterior surfaces of sash that have been removed from the building. Hand sand exposed wood to remove any roughness resulting from paint removal process, and to provide smooth surface on severely weathered exterior surfaces. Utilize scrapers and sanding blocks custom fabricated as required to conform to existing molding profiles to avoid damaging curved moldings and crisp edges.
- d. Interior paint: Sand and hand scrape to remove all loose or otherwise deteriorated paint on all interior portions of sash. Fully sound paint is to be left as is other than cleaning light sanding to remove surface dirt. Utilize scrapers and sanding blocks custom fabricated as required to conform to existing molding profiles to avoid damaging curved moldings and crisp edges. Apply interior paint approximately 1/16" onto surface of glass to provide tight, continuous seal between glass and glazing compound. New paint is to match the existing color of each sash.
- e. Repair of moderate defects: Exterior wood having areas of small fissures and weather checking and/or small areas of rot shall be conserved using epoxy consolidants and epoxy fillers to restore unit to sound and smooth surface.
- f. Joints having gaps: Re-align joint to be as tight as possible and repin as required.

Category 3 -Poor Condition Window - Schedule Note: "Conservation 2"

Typical Existing Condition: Sash with extensive deep weather checking, substantial separation and/or rot at corner joints, and/or broken muntins.

- a. Perform all work included under Categories 1 & 2.
- b. Provide additional repairs to replace areas of separated corner joints, and/or rot with new wood dutchmen repairs and/or new replacement rails and/or muntins.
 - i. Separated Corner joints: Corner joint(s) and/or muntin/rail joints more than 1/8 inch out of alignment, or having limited broken, voids or moderately rotted elements, shall be repaired by disassembly of joint and regluing and pinning and epoxy/small dutchman repairs including rebuilding deteriorated tenons with wood Dutchman as required. Where damage is extensive the defective element may be replaced with a matching element (i.e., usually a rail or muntin).

Category 4 -Replacement Window Schedule Note: "Replace Sash"

Typical Existing Condition: Sash with extensive widespread defects or modern replacement sash.

- a. Perform all work included under Categories 1 & 2 as required to remove existing sash and install new replacement.
- b. Provide replacement sash sized to fit specific openings indicated on the Schedule. Joinery details and profiles of sash shall exactly match all details of historic sash designated by the Preservation Consultant rather than the units they are scheduled to replace.
- c. Carpentry and painting requirements for new sash shall conform to all the requirements of Section 06200 -Finish Carpentry, and Section 09900 -Painting, respectively.

3.07 ACCEPTANCE AND PATCHING

- A. On completion of work, all equipment and debris resulting from the work of this section shall be removed from the premises.
- B. Leave work clean, whole, and sound ready for additional finish or sealing as specified and/or as indicated.
- C. Clean all glass, window sash, casings, trim and accessories free of dirt and other foreign materials after completion of installation.

END OF SECTION

Appendix C- Window Schedule

This spreadsheet compiles field observations of existing conditions for the Town Hall windows, along with recommendations for repair and restoration. This was developed from field surveys by Bill Finch and Richard Smith in Fall 2014 and documents the conditions as of that time.

Topsfield Town Hall - Window Schedule

#	Configuration	Size	Type	Ropes	Sash Rails & Stiles		Sash Muntins		Lock		Ext. Glazing		Bedding Putty		Paint	Glass Type	Parting Bead		Weatherstripping		Sill		Storm Sash	Other	Summary	#	
					Condition	Action	Condition	Action	Cond.	Action	Condition	Action	Condition	Action			Condition	Action	Condition	Action	Condition	Action					
1	2 over 2	6' 7" x 2' 10 1/2"	DH	Ch-OK	Good		Good		Yes		Good	spot glaze	Good		Good	3 new, 1 old	Good		Type 1	Replace	peeling paint		Yes		Replace lock & WS, spot reglaze & repaint ext	1	
2	2 over 2	6' 7" x 2' 10 1/2"	DH	Ch-OK	Good		Good		yes, but does not engage	Replace	Good	spot glaze	Good			2 new, 2 old	Good		Type 1	Replace	peeling paint		Yes		Replace lock & WS, spot reglaze & repaint ext	2	
3	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New pulley	Good		Good		Yes	Replace	Good	spot glaze	Good		Good	1 new, 3 old	Fair		Type 1	replace	peeling paint	repaint	Yes		Replace lock & WS, spot reglaze & repaint ext	3	
4	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New pulley	Good		Good		Yes	Replace	Good	Spot glaze	Fair		Fair	4 new	Poor	Replace	Type 1	Replace	peeling paint	repaint	Yes	AC unit in summer, Sash do not meet at meeting rail, lock not functional	Replace lock & WS, spot reglaze & repaint ext; replace PB	4	
5	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New pulley	Good		Good		Yes	Replace	Good	Spot glaze	Good		Fair	4 old	Good		Type 1	Replace	peeling paint	repaint	yes	Window is painted shut- free up Cutouts in head of frame at ext; chip on hood bracket	Free up sash, dutchmen at cutouts in ext frame. Replace lock & WS, repaint ext	5	
6	2 over 2	6' 7" x 2' 10 1/2"	DH	Ch-OK	Good, exc endgrain LR LS		Good		Yes	Replace	Good, exc bot rail LS	Spot glaze			Good	1 new, 3 old	Poor	Replace	Type 1	Replace	Good	Repaint	Yes	Window very tight, need to free up operation	Free up sash, repair lower sash. Replace lock & WS, repaint ext	6	
7	2 over 2	6' 7" x 2' 10 1/2"	DH	Ch-OK	Good		Good		Yes	Replace	Good, exc bottom rail	spot glaze	US- good LS-poor		Good	3 new, 1 old	Good		Type 1	Replace	Good	repaint	Yes	Sash don't meet properly; US not seating properly, painted shut	Free up sash, repair lower sash. Replace lock & WS, repaint ext	7	
8	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New pulley	Good, crack at lower RH corner LS		Good		Yes	Replace	US good LS poor	Reglaze LS Spot glaze upper	Fair		Good		Fair		Type 1	Replace	Good	repaint	Yes	Sash not meeting, US not fully up, painted in place, slightly racked	Free up US, repair LS. Replace lock & WS, reglaze, repaint ext	8	
9	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New Pully	Good		Good		No	Replace	Poor	Reglaze all	Poor	Reglaze	Poor	US- old LS- obscure	Poor	Replace	None	Replace	Fair	repaint	None	Sash painted shut, poor exterior condition	Remove sash, restore function. New PB, WS, glazing, lock. New storm window	9	
10	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New Pully	Good		Good		Yes	Replace	Good	spot glaze			Fair	2 new, 2 old 1 old cracked	Good		None	Replace	Good	repaint	Yes	Exterior paint weathered. Heavy profile casings at interior; cut for ceiling	Replace lock & WS, spot reglaze & repaint ext, replace broken lite	10	
11	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New Pully	Good		Good		Yes	Replace	Fair	spot glaze	Fair-poor	Reglaze	Poor	1 new, 3 old	Poor	Replace	Type 1	Replace	Fair	repaint	Yes	Exterior paint weathered. Heavy profile casings at interior; cut for ceiling	Replace lock & WS, spot reglaze & repaint ext	11	
12	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New Pully	Good		Good		Yes	Replace	Good	spot glaze	Poor		Fair	2 new, 2 old	Fair	Replace	Type 1	Replace	Fair	repaint	Yes	Exterior paint weathered. Heavy profile casings at interior; cut for ceiling	Free up sash. Replace lock, PB & WS, spot reglaze, repaint ext	12	
13	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New Pully	Good		Good		Yes	Replace	Poor	Reglaze	Poor	Reglaze	Poor	4 new	Poor	Replace	Type 1	Replace	Poor	Epoxy, repaint	Yes	Heavy weather checking. Applied film on US glass	Expoy weathered ext wood, replace PB, lock, WS, reglaze and repaint ext. remove film	13	
14	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New Pully	Good; exc hole in bot RH corner LS		Good		Yes	Replace	Fair-poor	Reglaze	Poor	Reglaze	Fair	4 new	Poor	Replace	Type 1	Replace	Fair	repaint	Yes	Weather checking and peeling on ext casings and sill	Repair LS. Replace lock & WS, reglaze, repaint ext	14	
15	2 over 2	6' 7" x 2' 10 1/2"	DH	Rope. New Pully	Good, exc decay at tenons in bot LS		Good		Yes	Replace	Fair	Spot reglaze			Good	2 new, 2 old	Poor	Replace	Type 1	Replace	Good	repaint	Yes	US dropped 1/2". ptd in. LS very loose in frame. Interior stool bowed.	Free up US. Repair LS. Replace PB, lock & WS, reglaze, repaint ext	15	
16	2 over 2	6' 7" x 2' 10 1/2"	DH	Ch-OK	Good		Good		Yes	Replace	Fair	Spot reglaze			Good-fair	3 new, 1 old	Good		Type 1	Replace	Good	repaint	Yes	Upper sash caulked in	Free up US. Replace lock & WS, reglaze, repaint ext	16	
17	Infilled	6' 7" x 2' 10 1/2"	N/A																		Good	repaint			Clapboard infill with frame, sill and hood	Repaint clapboards at infill, secure loose hood flashing	17
18	2 over 2	6' 7" x 2' 10 1/2"	DH	Ch-OK	Good		Good		Yes	Replace	Fair	Reglaze	Good		Goog-fair	3 new, 1 old	Good		Type 1	Replace	Good	repaint	Yes		Reglaze LS, spot reglaze US, replace lock & WS, repaint ext	18	

Topsfield Town Hall - Window Schedule

#	Configuration	Size	Type	Ropes	Sash Rails & Stiles		Sash Muntins		Lock		Ext. Glazing		Bedding Putty		Paint	Glass Type	Parting Bead		Weatherstripping		Sill		Storm Sash	Other	Summary	#	
					Condition	Action	Condition	Action	Cond.	Action	Condition	Action	Condition	Action			Condition	Action	Condition	Action	Condition	Action					
20	2 over 2	79"x34.5"	DH	Ch-ok	US & LS L rail rail joints open 1/16"	Tighten joints	Ch-OK		OK		Poor	100% Reglaze	Fair	??	Repaint ext	3 old, 1 new	OK		Type 1		Moderate Fissures	Epoxy	none	Has AC unit	100% reglaze & paint ext, tighten all joints, epoxy conserve sill	20	
21	2 over 2	79"x34.5"	DH	Ch-ok	US m. rail joints & LS L rail joints 1/8" Rt ILS L corner dropped 1/8" & long fissures both rails	Epoxy rails & tighten joints; Possibly replace L rails	Ch-OK		OK		Poor	100% Reglaze			Repaint ext	2 old, 2 new	OK				OK		none	Repair cracks in US & LS g rail	100% reglaze & paint ext, tighten all joints, epoxy checks in US & LS bottom rails, possibly replace rails	21	
22	1 lite	17.75x37	fixed	NA	ok						ok		ok	ok	?	NA		Ext caulking			Cu Clad		none	Base of left frame & jamb rotted, turn up flashing under frame	Paint sash, recaulk perimeter. Epoxy conserve left ext jamb, rework sill flashing under jamb.	22	
23	4 lites	44.75x24.75	Removable	NA	bottom corner very Rotted	Replace sash															Cu Clad	Rework flashing at base of frame	none	Base moldings and jambs rotted; replace and turn up flashing under frame	Replace sash & molded jamb bases and rework sill flashing (source of leaks)	23	
24	1 lite	17.75x37	fixed	NA	ok						ok?		ok?			NA					Cu Clad		none	Base of right frame & jamb rotted, turn up flashing under frame	Paint sash, recaulk perimeter. Epoxy conserve left ext jamb, rework sill flashing under jamb.	24	
25	2 over 2	79"x34.5"	DH	rope	L sash bottom rail severely checked; replace rail, U rail meeting rail sep @ corners	L sash- Epoxy L rail; U sash replace or epoxy loose sliver @ meeting rail	OK		?		Poor	100% Reglaze	poor; reglaze		Repaint ext.	4 new	poor	Replace			metal patch & weathered		none	Meeting rails do not align	Epoxy L rail of L sash, Tighten & epoxy U sash L rail or replace rail; 100% reglaze & paint ext	25	
26	2 over 2	79"x34.5"	DH	?	l. sh base of rt stile rotted, u. sash meeting rail dropper 1/4" rt.	Dutchman base of LS Rt stile; reset L rail of U sash rt	OK		?		Poor	100% Reglaze	ok		Repaint ext	u sash 2 old - 1 cr, L sash wire glass	Poor	Replace			weathered	Epoxy conserve	none	Painted shut; Possibly replace both sash if Dutchman not feasible	Dutchman base of LS rt stile, reset US L rail corner joints; Replace both sash if repair not feasible	26	
27	6 over 6	11'6.5 x 38.75	DH	Ch-ok	u. sash m.r. dropped 1/4" lt side & center, left stile checked @ base; l. sash bot. rail deep crack	Replace both sash	Knife blade muntins U sash. l. sash broken horiz. muntin;	U sash muntins weak & do not match orig. sash; replace both sash	none	new lock	Poor	100% Reglaze	some silicone added		Repaint ext	New							none	non matching replacmentupper sash with weak knifeblade muntins; L sash correct profile but split L rail Replace both sash	non matching replacment upper sash with weak knifeblade muntins; L Sash rail split. Replace both sash	27	
28	6 over 6	11'6.5 x 38.75	DH	Fixed?	1/16" sep u.sash rt m.r.	Tighten joint	OK		none	new lock	Poor	100% Reglaze	poor; reglaze		Repaint ext	All new	OK				ok		none	new replacment sash - ok: minor checking at base of ext casing	100% reglaze & paint ext, tighten U sash joints. New sash matches orig.	28	
29	6 over 6	11'6.5 x 38.75	DH	Ch-ok	LS L rotted corner	Rebuild rail tenon & Dutchman stile @ corner	OK		at side	add lock	Poor	100% Reglaze	?	Recheck	Repaint ext	all old	poor	Replace	type 1		ok		none	minor checking & punky @ base of left ext casing; epoxy conserve - Has int shutters	Dutchman repair rot at Base of L sash stile,100% reglaze & paint ext; epoxy checks at frame base	29	
30	6 over 6	11'6.5 x 38.75	DH	Ch-OK	US L rail dropped 1"; LS L rail checked at corners	Resecure US L rail + epoxy as needed; epoxy LS Lrail checks	US one poor; LS on mis aligned	Replace US bad muntin; refit LS muntin	at side	add lock	Poor	100% Reglaze	Fair	Recheck	Repaint ext	all old	fair-poor	Replace	type 1; bronze @ sill			ok		none	has int. shutters; one CR glass LS	100% reglaze & paint ext; Resecure dropped US L rail + epoxy as needed; epoxy LS Lrail checks. Replace 1 defective muntin in US	30
31	6 over 6	11'6.5 x 38.75	DH	Ch-ok	US L rail dropped slightly left side	Resecure US L rail	OK		at side	Type 2 add lock	Poor US, Fair LS	100% Reglaze	Fir US, good LS		Repaint ext	all old	OK				ok		none	LS 5 year ois old replacement: has shutters	100% reglaze & paint ext; Resecure dropped US L rail	31	
32	6 over 6	11'6.5 x 38.75	DH	Ch-ok	US lower rail dropped 1" - LS L rail severely checked	Replace both sash	Fair		none	new lock	Poor	New shash	Poor			all old; salvage glass for ne sash	poor	Replace	?		OK - slight sep from casing on left side	Caulk separation	none		Replace both sash	32	
33	6 over 6	11'6.5 x 38.75	DH	Ch-ok	LS L rail & base of stiles heavy checking/splits	Epoxy	Some Weathering	Sand/opoxy?	none	new lock	Poor	100% Reglaze	fair-poor	??	Repaint ext & Varnish Int.	Old	Poor	Replace	type 1		fair		None	Bullnose molding on frame has multiple spits: Epoxy	100% reglaze & paint ext; Epoxy conserve checks in L sash L rail and stiles. Possibly replace sash due to interior erosion	33	
34	6 lites upper	upper sash only	Fixed	None	US L rail poor, prob. Loose, sep rt corner	Replace rail ??	Some Weathering	??	none		Poor	100% Reglaze	Fair	??	Repaint ext.	Old	None		None		None		None	Door in place of LS - need determination of treatment	US only, door below: 100% reglaze & paint ex, replace lower rail?	34	
35	6 over 6	11'6.5 x 38.75	DH	Ch-ok	US L rail dropped 1" left; can't see LS L rail	Resecure rail or replace	Mild weathering	Sand	Type , left	Add lock	Poor	100% Reglaze	fair-poor	??	Repaint ext & Int	Old, one small Cr	?		Type 1		OK ?		None	Has Int Shutters	Resecure dropped US rail or replace; 100% reglaze & paint ext	35	

Topsfield Town Hall - Window Schedule

#	Configuration	Size	Type	Ropes	Sash Rails & Stiles		Sash Muntins		Lock		Ext. Glazing		Bedding Putty		Paint	Glass Type	Parting Bead		Weatherstripping		Sill		Storm Sash	Other	Summary	#	
					Condition	Action	Condition	Action	Cond.	Action	Condition	Action	Condition	Action			Condition	Action	Condition	Action	Condition	Action					
36	6 over 6	11'6.5 x 38.75	DH	Ch-ok	LS L rail & base of stiles heavy checking/splits	Epoxy rail & stiles, possibly replace rail	Mild Weathering	Sand	Type 2, rt.	add lock	Poor	100% reglaze	Fair-poor; silicone sealant acded	??	Repaint ext & Int	Old - 3 cracked	poor	Replace	type 1			1/2" dia. Rot pocket rt.	Epoxy pocket	none	Has Int Shutters - Bullnose molding on frame has multiple splits; epoxy or caulk Splits & checks base of ext casings - Epoxy. Loose molding below left console; renail.	100% reglaze & paint ext; Epoxy/replace splits@ L sash L rail & Stile bases: R & R splits and defects in casing and sill w/epoxy.	36
37	6 over 6	11'6.5 x 38.75	DH	None - fixed	LS L rail has added piece across bottom including stiles; joints fair	Replace LS or possibly new bottom rail and piece out stiles	OK		None		Fair - poor	100% Reglaze	OK		Upper OK. Lower fair-poor	Float	OK		Can't see		Some checks next to sash	Epoxy checks	none	Upper sash fixed with blocks @ jamb and appears to be new with correct profile. Window intersected by floor. Top of frame was cut out to install sash and pieced back in.	Replace LS or possibly new bottom rail and piece out stiles; 100% reglaze & paint ext.	37	
38	6 over 6	11'6.5 x 38.75	DH	Ch-ok	LS Fair, US checks in lower sites	Replace upper sash for other reasons	US knife blade LS matches old	None	New Lock		Fair-poor	US 100% reglaze - Replace LS	Poor		Repaint ext	Float	Poor?	Replace	None	New WS	Very lite checks	leave as is	none	US is 30 year old replacement with wrong muntin and very weak at muntins: replace US. LS frozen in place. Window intersected by floor. Splits @ bases of ext casing; epoxy. Loose molding at consol; renail	Replace US (wrong profile & weak), 100% reglaze & paint LS	38	
40	2 lite	??	Fixed	NA	L left corner joint open 1/16	Tighten joint	OK	NA			Fair-poor	100% reglaze	Poor	100% reglaze	Repaint int & ext	old	NA		None	Caulk in place	OK		None		Tighten joints - 100% reglaze & paint ext	40	
41	2 lite	??	Fixed	NA	L corner joints open 1/8. some checks	Tighten joint + epoxy checks	OK	NA			Poor	100% reglaze	??		Repaint int & ext	old	NA		None	Caulk in place	OK		None	Surveyed only from photo	Tighten joints & epoxy checks - 100% reglaze & paint ext	41	
42	3 lite compass head	??	Fixed	NA	L Rail rt corner joint open 1/16"	Tighten joint	OK	NA			Fair-poor	Spot reglaze ??	OK		Repaint ext	2 old, 1 new	NA		Ext. Silicone caulk	Re-caulk	Copper clad sloped	none	None	Left molded base delaminating - epoxy and reset or replace, Recaulk bases to sill, check joints in frame.	Spot reglaze & repaint ext. Replace left molded base or epoxy laminations, recaulk base to cu sill, R&R joints in frame. Caulk sash in place.	42	
43	3 lite compass head	??	Fixed	NA	L Rail rt corner joint open 1/16"	Tighten joint	OK	NA			Fair-poor	100% reglaze ??	OK		Repaint ext	2 old, 1 new	NA		Ext. Silicone caulk	Re-caulk	Copper clad sloped	None	None	Right molded base cracks Delaminating) - epoxy and reset, Recaulk bases to sill, check joints in frame. Water leaks to left side of stool.	Spot reglaze & repaint ext. Replace right molded base or epoxy laminations, recaulk base to cu sill, R&R joints in frame. Caulk sash in place.	43	
44	2 lite	??	Fixed	NA	L rail heavy checks & base of stiles rotted	Epoxy rail & stiles	OK	NA			poor	100% reglaze	Poor			Old ??	NA			Caulk new sash in place	Can't see		None	Bases of ext casing split -epoxy Interior has hardcloth screen	100% reglaze & ext paint. Epoxy rail & stiles	44	
45	2 lite	??	Fixed	NA	L rail heavy checks, rt side 1/4" sep.- stile may be rotted at base	Epoxy rail, possibly replace sash	OK	NA			poor	100% reglaze or replace sash	Poor		Poor	Old	NA			Caulk new sash in place	Can't see		None	Replace sash. Sash enclosed with plexy in computer room	Possibly Replace sash. Sash enclosed with plexy in computer room	45	
46	1 over 1	80" x 24"	??	None	Severely weathered and rotted corners	Replace U & L sash																		Allows water entry - Assume replacementsnt -	Replace U & L sash & provide new int. stops.	46	
47	1 over 1	80" x 24"		None	Severely weathered and rotted corners	Replace U & L sash																		Allows water entry - Assume replacementsnt -	Replace U & L sash & provide new int. stops.	47	
48	1 over 1	80" x 24"		None	Severely weathered and rotted corners	Replace U & L sash																		Allows water entry - Assume replacementsnt -	Replace U & L sash & provide new int. stops.	48	
49	2 lite		Fixed																								49
50	2 lite		Fixed																								50
51	3 over 6		DH																								51