# **Supplemental Information**

# **Newton City Hall Historic Preservation Proposal**



3 February 2003

Newton Public Buildings Preservation Task Force Newton Public Buildings Department



# City of Newton, Massachusetts Office of the Mayor

Telephone
(617) 796-1100
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(617) 796-1113
E-mail
Dcohen@ci.newton.ma.us

Mayor February 3, 2003

Mr Jeffrey Sacks Chairman City of Newton, Community Preservation Committee 1000 Commonwealth Avenue Newton Massachusetts 02459

Re:

**Funding Proposal** 

Newton Public Building Preservation Task Force & Public Buildings Department

# Dear Mr Sacks:

In acknowledgement of the "Evaluation of Application for CPA Funding Memorandum" prepared by Jennifer Goldson for the proposal referenced above and dated 12 January 2003, the Newton Public Building Preservation Task Force & Newton Public Buildings Department submit the following additional information in support of their joint grant proposal request.

- A Budget Summary, including all three portions of the proposal with sufficient contingency to cover any unanticipated project conditions.
- Information on the specific type and number of corridor lighting fixtures required and a more refined cost estimate from St Louis Antique Lighting Company, one of the three custom fixture manufacturers working with the NPBPTF on the replication of the original fixtures. The Committee has chosen to go forward with the fixture that was originally installed in the corridors, even though it is more expensive, once it found that substantially more light can be obtained from the fixture than the remaining fixtures in the War Memorial corridor are producing.
- A preliminary specification, and a cost estimate prepared by M L McDonald Sales Company Painting Division for painting the lead-coated-copper balustrade and gutter assembly at the perimeter of the roof on the City Hall and War Memorial including attendant flashings and downspouts; and the exposed raw copper base of the cupola over the War Memorial.
- A preliminary specification, and a cost estimate prepared by the Newton Public Buildings Division for restoring and painting the remaining unrestored wood windows in the Newton City Hall and War Memorial. (This last information was included in the last package submitted by the Task Force.)
- A letter from Newton Public Buildings Commission Nicholas Parnell regarding maintenance of the building components for which restoration funding is sought in the grant proposal.

Mr Jeffrey Sack February 3, 2003 Page 2

We are happy to provide this additional information to the committee, and hope that the Committee will consider with enthusiasm, our application to undertake these highly visible and much needed restoration projects.

Very truly yours,

sem M Basham

Susan M Basham **x LoB**Co-Chair, Public Buildings Preservation Task Force

Michael Rourke

Co-Chair, Public Buildings Preservation Task Force



# City of Newton, Massachusetts Office of the Mayor

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\$390,260.00

David B. Cohen Mayor

# Budget Summary Funding Proposal - City of Newton Public Buildings Preservation Task Force and Public Buildings Department

The budget information presented below includes the most recent information for each of the three tasks being proposed for funding. Since its original submittal, the Public Buildings Preservation Task Force has worked on more detailed scopes of work for each project and involved manufacturers and contractors in the process of preparing more detailed specifications and budgets. The budgeted costs below are considered to be reasonably accurate and contain modest contingencies. The budget costs for each item were prepared by the following sources.

# Lighting Fixtures

St Louis Antiques Lighting Company – Fixtures
Installation and Touch-up Painting of Ceilings – Newton Public Buildings Department

# Balustrade and Cupola Preparation and Painting M L McDonald Sales Company – Painting Division

# Wood Window Restoration

Total for all three projects

Newton Public Buildings Department - Based on cost of restoration already undertaken.

<ul> <li>Historic Lighting Fixture Replacement</li> <li>Cost of Replicated Lighting Fixtures 16 Fixtures @ \$5300.00/fixt</li> <li>Extra glass replacement shades (Allowance)</li> <li>Removal of existing fixtures and installation of new fixtures \$250.00/fixture</li> <li>Repainting of ceiling after removal of fixtures @ \$150/bay</li> </ul>	\$84,800.00 5,000.00 4,000.00 2,400.00 \$96,200.00	\$ 96,200.00
Painting of Balustrade and Cupola Base		
Balustrade, Flashings & Gutters	\$134,702.00	
Cupola Base	40,958.00	
Cupota Base	\$175,660.00	\$175,660.00
<ul> <li>Restoration and Painting of Balance of Wooden Windows</li> <li>Aldemanic Chamber/War Memorial Auditorium Arch Topped Units 21 Units @ \$5000.00/unit</li> <li>Ground Floor War Memorial – 8 Units @ \$1200.00/unit</li> <li>City Hall North and South Stairways 2 Units @ \$1600.00/unit</li> <li>Ground Floor War Memorial Toilets 2 Units @ 800.00/unit</li> </ul>	ŕ	\$119,400.00

1000 Commonwealth Avenue Newton, Massachusetts 02459



801 North Skinker Blvd. St. Louis, MO 63130 St. Louis Antique Lighting Company Phone: (314) 863-1414 Fax: (314) 863-6702 Email: slalco@mindspring.com



• Comments:					
□ Urgent		□ For Review	□ Please Reply		
Re:	NEWTON CITY HALL LTG.	CCı			
Phone	*	Date:	1-3-03		
Fax	1-617-924-6685	Pages:	1		
-	LARRY BAUER	mer Assertion	an a		
Tor	SOLOMON-BAUER ARCH.	From:	GARY BEHM		

MR. BAUER: PER YOUR REQUEST TO ESTIMATE THE COST TO REPLICATE THE HISTORIC LIGHTING FIXTURES FOR NEWTON, MASS. CITY HALL, WE ARE PLEASED TO QUOTE THE FOLLOWING:

"URN" FIXTURE: QTY.-16 EXACT REPLICATION, GLASS AND BRONZE; FINISH TO MATCH ORIGINAL AND LACQUERED WITH INCRALAC; LAMPING TO BE COMPACT FLORESCENT WITH VERTICALLY MOUNTED ELECTRONIC BALLAST, TWO-32 WATT LAMPS @2700K; OVER-ALL-LENGTH-AS SPECIFIED. PRICE: \$5300 EACH. (TWO 32 WATT CF LAMPS ARE EQUIVALENT TO APPROX. 250 WATTS OF INCANDESCENT)

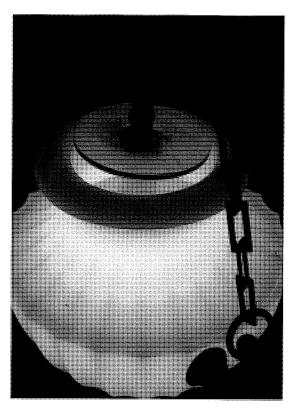
"FLUTED BOWL" STYLE FIXTURE: QTY.-16 EXACT REPLICATION; GLASS AND BRONZE; FINISH TO MATCH ORIGINAL, LACQUERED WITH INCRALAC. FOUR 32 WATT OF LAMPS @ 2700K WITH TWO -TWO LAMP ELECTRONIC BALLASTS; OVER-ALL-LENGTH AS SPECIFIED. PRICE \$4200 EACH. (4-32 WATT OF LAMPS ARE THE EQIVALENT OF APPROX. 500 WATTS OF INCANDESCENT.) TO USE A COLD CAST POLYESTER SHADE RATHER THAN GLASS, THE PRICE WOULD BE \$3100.

FIXTURES SHALL BEAR THE APPROPRIATE UNDERWRITERS'S LABORATORY LABEL.

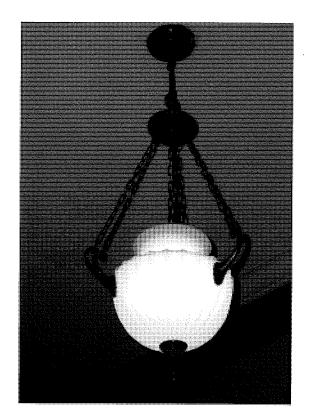
PRICE INCLUDES ALL ENGINEERING AND COMPLETE FULL SCALE DRAWINGS (AUTOCAD 2000), ALSO LAMPS, CRATING, SHIPPING AND INSURANCE.



Two Piece Cast Glass Urn Bowl



Simple Hanging Lamp w/Glass Shield



**Bronze and Cast Glass Lantern** 

1922



M.L. McDONALD Sales Company, Inc.

Mr. Larry Bauer Solomon & Bauer 44 Hunt Street Watertown, MA 02472

January 30, 2003

50 OAKLAND STREET P.O. BOX 315 'VATERTOWN, MA 02471-0315 617-923-0900 FAX;

617-926-8418 (Estimating & Field Operations) 617-923-0597 (Billing & Administration) Reference: Newton City Hall

Exterior Balustrade Painting MLM Estimate #65-1100

Dear Mr. Bauer,

We are pleased to submit our budget price of \$175,660.00 for the painting of the balustrade and downspouts per our walk through with you today.

COMMERCIAL PAINTING

The following is a breakdown per area.

	High balustrade at center cupola	\$40,958
INDUSTRIAL PAINTING	Front façade at main entrance	\$49,235
	Left of building facing Library	\$38,465
	Rear of building	\$5,475
MAINTENAMOR BUILTING	Right of building face Commonwealth Avenue	\$41.527

MAINTENANCE PAINTING

This budget includes preparation and finish per our letter dated January 10, 2003, all necessary protection and scaffolding to complete the project.

DECORATIVE PAINTING GILDING MARBLEIZING

Thank you for the opportunity for us to bid this project.

WALL COVERING

It was a pleasure meeting you, if you have any questions, or need further assistance, please do not hesitate to call.

Sincerely,

BRASIVE BLAST CLEANING

Charles F. Mossali Painting Division Extension 1241

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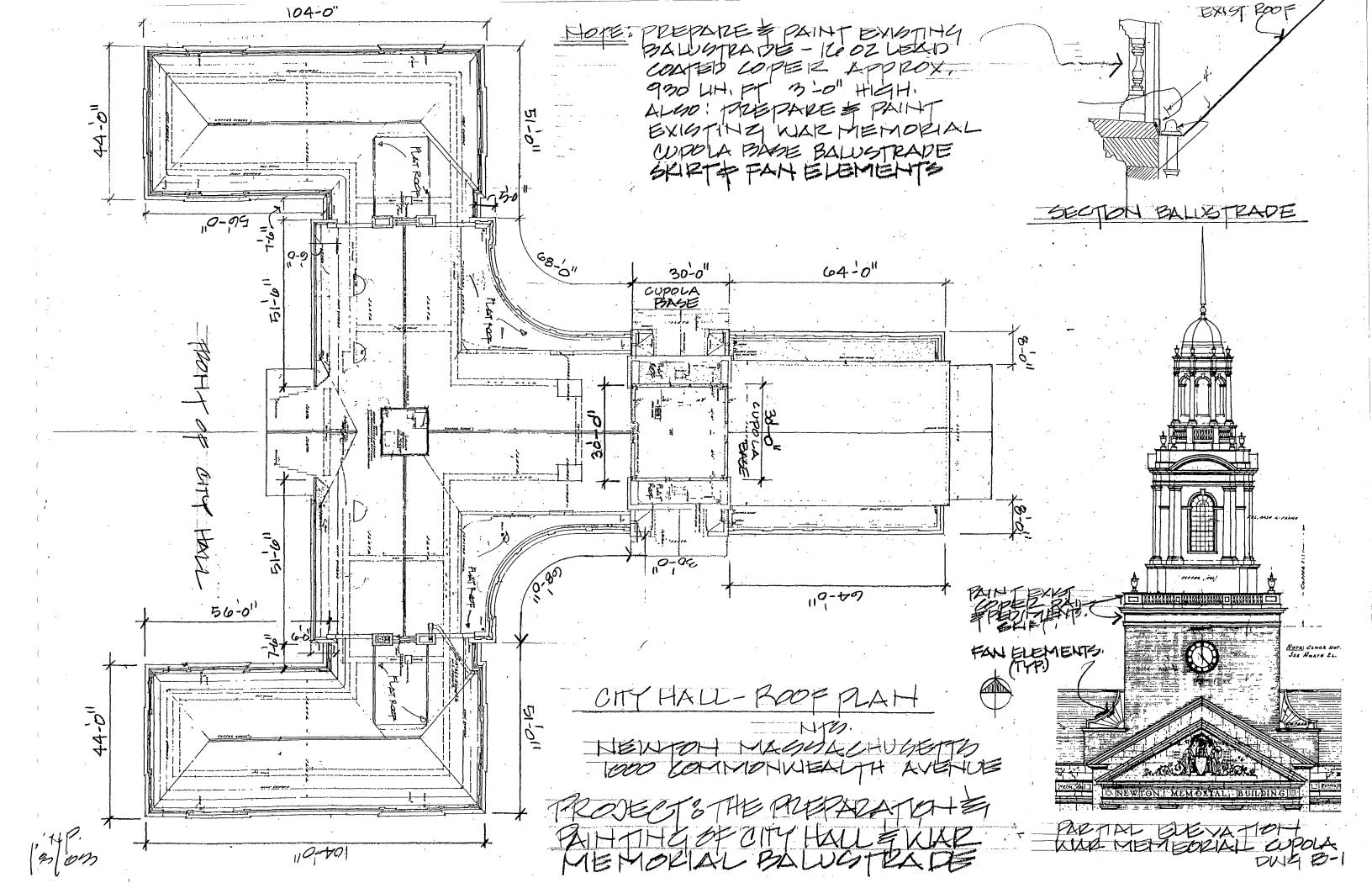
JRYWALL CONSTRUCTION

CFM/sbs

STRETCHWALL™ COUSTICAL/TACK PANELS

cc: R. L. Ayers

**FIREPROOFING** 



#### SECTION 09912

# PAINTING (BALUSTRADE & CUPOLA BASE)

#### PART 1 - GENERAL

# 1.1 SUMMARY

- A. This Section includes surface preparation and field painting of exposed exterior items and surfaces as follows:
  - 1. All sections of lead-coated-copper balustrade and gutter assembly at City Hall roof perimeter as shown on accompanying drawings.
  - 2. Lead coated copper flashings on top of limestone band at floor level of War Memorial Audiorium.
  - 3. Lead coated copper gutter and fascia at bottom of recessed wall at perimeter of Aldermanic Chamber.
  - 4. Lead coated copper downspouts and leader heads.
  - 5. Bare copper balustrade and base at War Memorial cupola.
- B. Also included in the scope of work is:
  - 1. The furnishing of all lifts, scaffolding, staging and other means of accessing the areas to be painted.
  - 2. The furnishing of all protection equipment and devices, and conforming to all legally required procedures for dealing with the preparation of lead coated surfaces.
  - 3. The protection of building surfaces and plant materials below the areas of work.
  - 4. The protection of all building occupants and visitors during work operations.

# 1.2 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Samples: For each type of finish-coat material indicated.

# 1.3 QUALITY ASSURANCE

- A. Benchmark Samples (Mockups): Provide a full-coat benchmark finish sample for each type of coating and substrate required. Comply with procedures specified in PDCA P5.
  - 1. Balustrade: Provide samples on at least 10 linear feet of typical balustrade at roof perimeter and at cupola base.
  - 2. Flashing at limestone band: Provide sample on at least 10 linear feet.
  - 3. Small Areas and Items: Architect will designate items or areas required.
  - 4. Final approval of colors will be from benchmark samples.

# 1.4 PROJECT CONDITIONS

- A. The areas to be painted include the balustrade at the perimeter of the roof of the building at a height of 30 to 40 feet above grade, and the base of a roof mounted cupola above a sloping slate roof. The painting contractor must provide all equipment for accessing the areas to be painted in a legal manner that will provide safety to all workmen, occupants of the building, and visitors to the building.
  - 1. All work shall be scheduled and coordinated with the City of Newton Public Buildings Department so as not to interrupt the normal use of the building.
- B. Preparation of the lead-coated-copper balustrade will involve sanding and washing the lead coated copper. All procedures must be undertaken in a manner that will conform to all regulations governing work with this hazardous materials and all byproducts of this operation must be disposed of in a legal manner off site.
- C. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F. Maintain storage containers in a clean condition, free of foreign materials and residue.
- D. Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50 and 90 deg F.
- E. Apply solvent-thinned paints only when temperatures of surfaces to be painted and surrounding air are between 45 and 95 deg F.
- F. Do not apply paint in snow, rain, fog, or mist; or when relative humidity exceeds 85 percent; or at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

# 1.5 EXTRA MATERIALS

- A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
  - 1. Quantity: 5 percent, but not less than 1 gal. or 1 case, as appropriate, of each material and color applied.

# PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

- B. Manufacturers' Names: Shortened versions (shown in parentheses) of the following manufacturers' names are used in other Part 2 articles:
  - 1. Benjamin Moore & Co. (Benjamin Moore).
  - 2. ICI Dulux Paint Centers (ICI Dulux Paints).
  - 3. PPG Industries, Inc. (Pittsburgh Paints).
  - 4. Sherwin-Williams Co. (Sherwin-Williams).

# 2.2 PAINT MATERIALS, GENERAL

- A. Material Compatibility: Provide block fillers, primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.
- C. Colors: Match samples.

# 2.3 PREPARATORY COATS

- A. Exterior Primer: Exterior alkyd primer of finish coat manufacturer and recommended in writing by manufacturer for use with finish coat and on substrate indicated.
- B. Exterior Metal Primer: Factory-formulated rust-inhibitive metal primer for exterior application.
  - 1. Sherwin-Williams; Kromik Metal Primer E41N1 or Architect approved equal: Applied at a dry film thickness of not less than 3.0 mils (0.076 mm).

# 2.4 EXTERIOR FINISH COATS

- A. Exterior Full-Gloss Alkyd Enamel: Factory-formulated full-gloss alkyd enamel for exterior application.
  - Sherwin-Williams; SWP Exterior Gloss Oil Base Paint A2Series or Architect approved equal: Applied at a dry film thickness of not less than 2.0 mils (0.051 mm).

#### PART 3 - EXECUTION

# 3.1 APPLICATION

A. Examine substrates, areas, and conditions, with Applicator present, for compliance with requirements for paint application.

- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
- C. Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- D. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified.
  - 1. Metals: Sand and solvent wash all metal surfaces; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with SSPC's recommendations.
    - a. Sand and solvent wash all copper and lead coated copper surfaces as recommended by paint system manufacturer and according to SSPC-SP2 and SSPC-SP1.

# E. Material Preparation:

- 1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
- 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
- F. Sand lightly between each succeeding enamel coat.
- G. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
  - 1. If undercoats, stains, or other conditions show through final coats of paint, apply additional coats until paint film is of uniform finish, color, and appearance.
- H. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
- I. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide total dry film thickness of the entire system as recommended by manufacturer.
- J. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

K. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

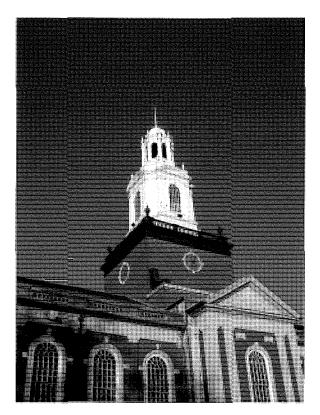
# 3.2 CLEANING AND PROTECTING

- A. At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from Project site.
- B. Protect work of other trades, whether being painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.
- C. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work.
  - 1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces. Comply with procedures specified in PDCA P1.

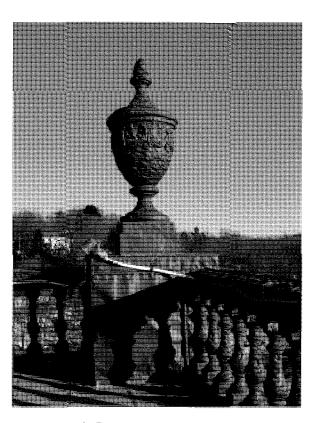
# 3.3 EXTERIOR PAINT SCHEDULE

- A. Copper and Lead-coated-copper:
  - 1. Alkyd-Enamel Finish: Two finish coats over a industrial metal primer.
    - a. Primer: Exterior metal primer.
    - b. Finish Coats: Exterior full-gloss alkyd enamel.

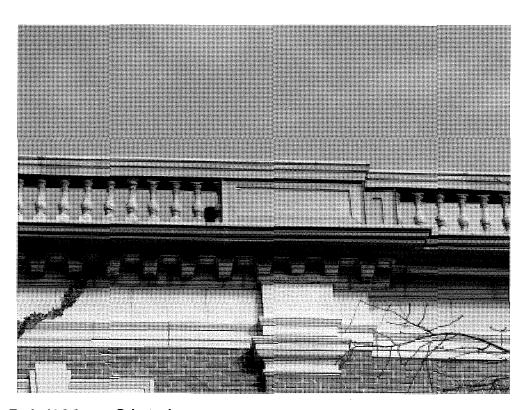
END OF SECTION 09912



Typical LC Copper Balustrade & Copper Cupola Base

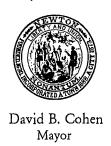


Copper Cupola Base w/Decorative Urn



**Typical LC Copper Balustrade** 

# City of Newton



# PUBLIC BUILDINGS DEPARTMENT

A. NICHOLAS PARNELL, AIA, COMMISSIONER
Telephone (617) 552-7007
FAX (617) 969-5795
52 ELLIOT STREET
NEWTON HIGHLANDS, MA 02461-1605

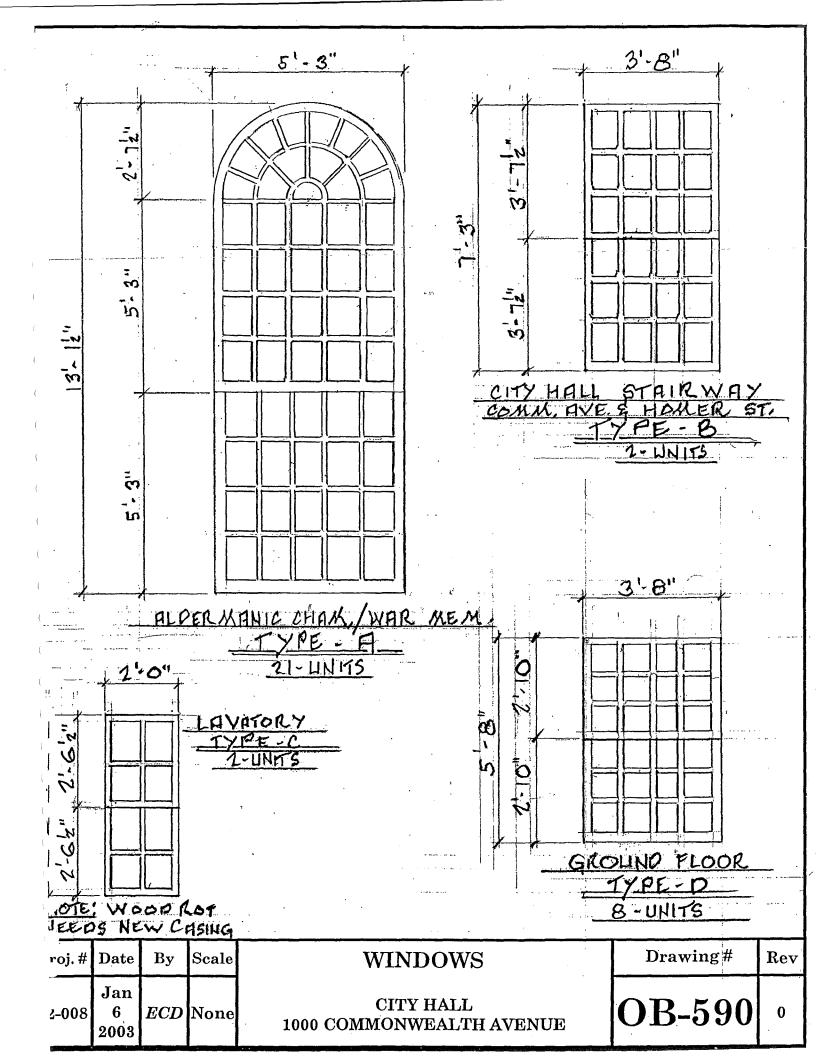
Maintenance Division 552-7188 Design Division 552-7009/7010 Energy Division 552-7008

7 January 2003

Newton Public Buildings Preservation Task Force Window Restoration Cost Estimate

See Window Elevations for Unit Types

Total	\$119,400.00
2 Units @ \$800.00/Unit	1,600.00
Ground Floor War Memorial Toilet Units	
2 Units @ \$1600.00/unit	3,200.00
City Hall North & South Stairway Units	
8 Units @ \$1200.00/unit	9,600.00
Ground Floor War Memorial Units	
21 Units @ \$5000.00/unit	\$105,000.00
Aldermanic Chamber/War Memorial Arch Topped Units	



#### **SECTION 08600**

#### WOOD WINDOW RESTORATION

# 1. GENERAL

# 1.01 GENERAL REQUIREMENTS

A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

# 1.02 DESCRIPTION OF WORK

- A. General: Provide all labor, materials, equipment, and services required for wood window restoration, single to double-paned window conversion, and finish painting for the indicated existing windows in the Newton City Hall and War Memorial.
  - 1. Work shall be conducted as specified herein, as shown on drawings, and as may be required by field conditions and regulatory authorities.

# 1.03 QUALITY ASSURANCE

A. Installer shall be an experienced installer of double paned glass conversions in historic structures.

# 1.04 HAZARDOUS MATERIALS

- A. It is highly likely that paint on window sashes and frames contains lead, and it is possible that glazing compound and sealants may contain asbestos. Subcontractor shall have these and any other suspect materials tested for the presence of hazardous materials before beginning work.
- B. If hazardous materials are found by testing, subcontractor shall prosecute all work involving removal and work with the materials in accordance with all laws, regulations, and guidelines for working with the specific hazardous materials found.

# 1,05 SUBMITTALS

A. Submit evidence and references attesting to compliance with Paragraph 1.03 Quality Assurance, Article A that demonstrates capabilities and experience. Include a list of at least three (3) completed projects on buildings listed on the State Register of Historic Places in the New England region or on the National Register of Historic Places. List project names, addresses, names of Architect and Owner, plus a list of general wood window projects. Company must have a minimum of 5 years experience in conversion of windows in historic buildings to double-paned glass. This information shall be submitted in conjunction with the shop drawings.

# B. Shop Drawings:

- 1. Where repairs to the wood portions of the sash are required, Subcontractor shall submit complete shop drawings to the Architect for approval. The drawings shall include dimensioned elevations and sections as well as full size details of all typical members and joinery, types of materials, and shall show hardware and methods of securing and fastening members to adjacent work.
- 2. Window shop drawings shall clearly indicate any deviation from the design or detailing of the existing conditions.
- C. Product Data: Subcontractor shall submit the following and obtain approval prior to the start of work:
  - 1. Materials list of items proposed to be provided and materials to be used in the work of this Section;
  - 2. Manufacturers' specifications and other data needed to prove compliance with the specified requirements.
  - 3. Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the work.
- D. Reference Sample Window
  - 1. The subcontractor shall complete full restoration and conversion of one of the monumental arch topped windows in the War Memorial Hall to be used as a reference example of quality before undertaking restoration of the balance of the windows.
  - 2. The subcontractor shall make adjustments to this reference sample until the quality of the workmanship is satisfactory to the Owner and meets the requirements of the specifications and drawings.
- E. Upon completion of work required by this section, the subcontractor shall submit to the Owner a list of components used by type and size. Include instructions for periodic inspections, care and maintenance.

# 1.06 PRODUCT DELIVERY AND STORAGE

A. All materials to be delivered to job site by licensee or suppliers in good condition.

# 1.07 WINDOW REMOVAL

A. All window sash, retaining beads, parting beads, and counterweights and chains shall be removed from window frames for conversion and restoration in subcontractors shop. Openings shall be covered with plywood of 3/4" minimum thickness, or other covering approved by the Owner.

B. All removed pieces shall be labeled in a manner that will allow identification after restoration that will assure their reinstallation in the same locations on the same window opening from which they were removed. Subcontractor shall be responsible for the safe removal and storage of all window components. All lost or damaged material shall be replaced by the Subcontractor at no cost to the Owner.

# 1.08 JOB CONDITIONS

- A. Provide all staging, lifts, ladders and other equipment required to remove window sashes from their frames and completely restore frames.
- B. All work shall be scheduled with Owner so well in advance so that rooms in which work must take place are available for the work of the contract. Work in each room shall be scheduled to assure the shortest possible shut-down time for the room. The contractor shall thoroughly clean each room as soon as contract work is finished and return it to active use.
- C Restore in-place window frames in strict accordance with manufacturer's literature including Safety Data Sheets pertaining to safety and weather conditions required for work with the material specified.

# 2. PRODUCTS

# 2.01 MATERIALS

# A. EXISTING SASH

- 1. After removal and tagging for identification, all glazing and glazing compounds shall be removed from sash using methods that will not damage wood sash components.
- 2. Existing wood sash shall be examined for condition of all wooden sash members. It is the intent of this specification to preserve and reuse as much original fabric as possible. Any members which are too far deteriorated for repair shall be marked for re-inspection with Owner present. After joint concurrence, the deteriorated members shall be removed from sash and replaced with new components of identical profile and wood species.
- 3. All deteriorated existing wood sash members that are not replaced shall be restored utilizing fillers and consolidants as specified below, and when finished shall meet the agreed upon standard set with the reference sample window joints strong and complete, surfaces smooth and even matching original member profile, and glazing rebate routed out as required for conversion to insulating glazing material.

# B. GLASS

- 1. Insulated units factory fabricated of double-strength glass. Nominally ½" thick.
  - a. Dual sealed edges using aluminum, Swiggle (manufactured by Tremco), or Warm Edge Technology (manufactured by Edge Tech), spacer predetermined at time of sample. Dual seal to use butyl and Polysulfide sealant.
  - b. Glass units to have factory replacement warranty covering unit "free from moisture between the two glass surfaces for a period of ten (10) years".
  - c. Units shall be gas filled, with a low E coating on surface #2.

# C. GLAZING

- 1. Existing sash shall be modified to receive thicker insulating glass un its by cutting a deeper glazing rebate into the existing wood muntin bars and sash frame members. The additional depth may be less than the difference in thickness of the existing and new glazing if it is determined in consultation with the Owner that a steeper wash on the exterior glazing putty is acceptable. All rebate surfaces shall be cleaned back to a raw wood surface.
- 2. Use Norseal (manufactured by Norton) PVC Foam gasket to back bed glass to sash.
- 3. Maintain an air space of 1/8"± 1/16" around glass.
- 4. Exterior glazing stop to be of milled wood or equivalent, sealed and mechanically fastened to the existing sash. Wood to be primed white ready for finish painting.
- 5. Compatible glazing sealant shall be used to seal exterior stop against moisture infiltration. Sealant shall meet ANSI/ASTM C-834-76.

# D. WINDOW BALANCES

- 1. Reuse existing window balance, chain, and pulley system:
- 2. Existing weights to be balanced to new, heavier glass. Weight pockets sealed to control air infiltration. Replace chains as required. Install weather-stripping on sides of sash using either, or both, vinyl corner seal and ribbed felt spline.

# E. BALANCE COMPONENT SPECIFICATIONS

1. Existing broken sash chains shall be replaced with plated steel, 250 lb. test chains. Weights shall be added with 2 lb. stackable cast iron 4" sections or presized lead weights. Sash pulleys shall be replaced where needed with red bronze housing and wheel, with a steel axle, and matched to existing size and design.

# F. WEATHER-STRIPPING

- 1. All weather-stripping to be installed into a saw kerf.
- 2. Horizontal weather-stripping shall be 1/4" tubular silicone rubber with a saw kerf bar.
- 3. Vertical weather-stripping shall be a brush with vinyl center fin, 1/4" pile, held in a polypropylene saw kerf bar.
- 4. Check rail shall be bulb covered with low friction plastic coating.
- 5. End of check rail shall come in contact with brush plug in jambliner or parting stop.
- 6. All weather-stripping shall be applied in accordance with Manufacturer's specifications.

# G. HARDWARE

1. Reuse existing historic sash locks and other historic window hardware. Replace missing hardware with hardware that matches the original.

# H. WOOD REPAIR

- 1. All shallow, non structural filler shall be exterior rated. Latex flexible (can be painted) filler shall be used. Filler will be used on surface, not structural parts, of window.
- 2. Make appropriate deep repairs to window components using epoxy consolidants and fillers, and wood dutchmen where appropriate. Epoxy consolidant should not be diluted with any solvent, such as alcohol, to increase degree of penetration (doing this will create an inherently weak resin once cured).
- 3. For wood deterioration less than 1/2" deep (defined as "punkiness" of wood, tested with an ice pick using moderate hand pressure), brush-apply epoxy resin on to clean wood surfaces.
  - a. Follow manufacturer's instructions for mixing of components, application temperatures, and material handling.
  - b. Apply heavy coat of epoxy resin and allow to soak into wood. Apply additional coat while previous coat is uncured to completely saturate the deteriorated areas of wood.
- 4. For wood deterioration greater than 1/2" deep (defined as punkiness and not loss of wood):
  - a. Drill three-eighths inch (3/8") diameter holes through approximately 90% of thickness of wood. Stagger holes on approximately two inch (2") centers.
  - b. Apply heavy coat of epoxy resin and allow to soak into wood. Apply additional coat while previous coat is uncured to completely saturate the deteriorated areas of wood.

- c. Pour low modulus, low viscosity epoxy resin into each hole until hole has been filled. As epoxy is absorbed into the wood, top off holes with epoxy as required until all holes will accept no more but without allowing epoxy to pool on surface.
- d. Brush the remaining weathered portions with epoxy. Repeat brush application until all surfaces being treated are saturated with epoxy but there is no pooling of epoxy on the surface. Excess epoxy may be removed with an alcohol-soaked rag.
- e. Thoroughly sand epoxy-treated wood to provide proper surface for bond of paint. Curing time varies with ambient temperature and product used.
- f. Protect epoxy from prolonged exposure to ultraviolet light. Prime paint shall be applied within 48 hours after cure.
- 6. For losses, holes, cracks and gouges:
  - a. Fill with epoxy filler, mix and apply epoxy wood filler in accordance with manufacturer's recommendations. Fill flush with surface of wood, matching profile of historic wood.
  - b. Sand to smooth finish and tool to match existing wood after filler is completely cured.
- 7. Where practicable and necessary, repair deteriorated, split, or missing wood with dutchmen repairs. Dutchmen repairs shall be performed in the following manner:
  - a. Neatly cut out defective materials and enough sound wood to bond dutchmen to sound substrate. Form a prismatic void in existing wood with square corners and edges. Cut dutchmen to exactly fit void, with exposed portion matching historic profile of woodwork, and grain of dutchmen insert parallel to historic wood grain direction.
  - b. Secure dutchmen with waterproof adhesive and clamp (or for frames, nail) in place until glue is set.
  - c. Where necessary to cut off an end of a component and install dutchmen, use a diagonal scarf joint for end-to-end joints.
  - d. Dutchmen should match the existing joinery in both the type of joint and the number of separate elements being joined (two separate elements connected by a joint should not be replaced with a single piece).
  - e. For dutchmen repairs of stiles and rails, join dutchmen to existing wood using interlocking diagonal scarf joints or interlocking joints (such as open mortise and tenon joints) or both to increase the bonding surface of the joint and the structural strength of completed assembly.

# I. WOOD PRESERVATIVE

1. Treat all bare wood surfaces with wood preservative, according to manufacturer's instructions. Liberally apply two coats to all surfaces. Allow 24 hours between coats and three (3) days prior to painting.

# J. FINISH PAINTING

- 1. After repair as specified above, all window frames, sash and interior and exterior window casings shall be sanded smooth and cleaned ready to receive primer and finish paint as follows:
  - a. All previously painted surfaces shall be spot primed to cover all portions of bare wood.
  - b. All interior wood surfaces shall receive two coats of satin finish alkyd enamel paint, Benjamin Moore Satin Impervo Enamel or Owner approved equal in color to match existing interior window trim color.
  - c. All exterior wood surfaces shall receive two coats of high gloss exterior alkyd enamel paint, Benjamin Moore Impervo Enamel or Owner approved equal, in color to match existing exterior window and trim.

# 1. EXECUTION

# 3.01 INSPECTION

A. Before reinstallation of window sash and hardware begins, openings shall be inspected and surfaces shall be dry.

# 3.02 INSTALLATION

A. Installer shall conform to safety regulations as required by federal, state, and local laws.

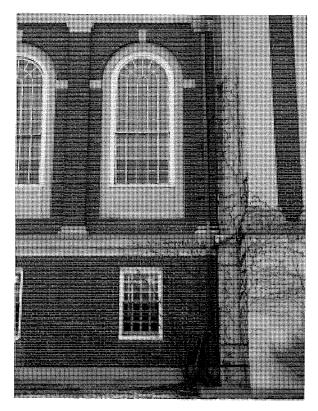
# B. Re-Installation

- 1. Cut saw kerfs and install weather-stripping in frames and sash to match approved reference sample.
- 2. Re-install sash in openings from which they were originally removed attaching chains and sash weights.
- 3. Reinstall salvaged parting beads or new parting beads as required.
- 4. Salvaged inside stop shall be screwed back into place using new screws to match those removed, in existing screw hole locations.

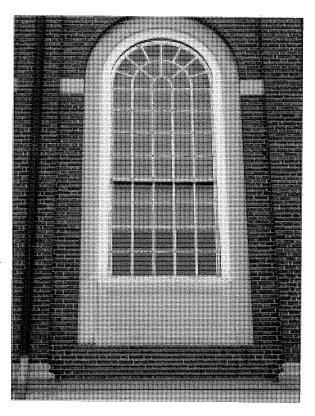
# 3.03 ADJUST AND CLEAN

- A. Adjust and check each operating item of hardware, and each window to ensure proper operation and function of every unit and a tight but workable fit between operating components.
- B. Clean all glass.

++ END OF SECTION 08600 ++



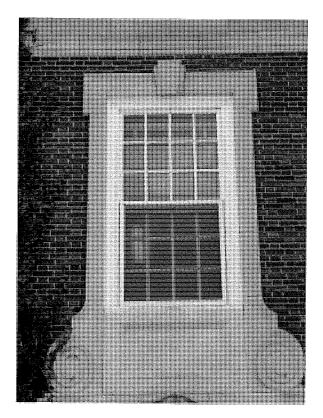
Typical War Memorial Windows Type A & D



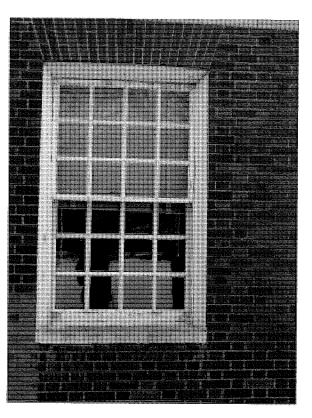
**Deteriorated War Memorial Window Type A** 



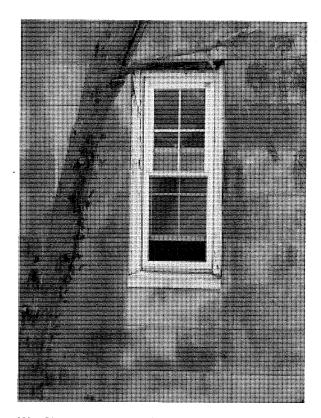
North Elevation of City Hall & War Memorial with Subject Windows



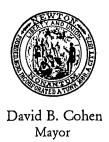
Stair Window Type B



Lower War Memorial Window Type D



War Memorial Toilet Windows Type C



# PUBLIC BUILDINGS DEPARTMENT

A. NICHOLAS PARNELL, AIA, COMMISSIONER
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52 ELLIOT STREET
NEWTON HIGHLANDS, MA 02461-1605

Maintenance Division 552-7188 Design Division 552-7009/7010 Energy Division 552-7008

January 31, 2003

Mr. Jeffrey Sacks, Chairman Community Preservation Committee 45 Old Colony Road Newton, MA 02467

Re: City Hall and Newton Corner Library

Dear Mr. Sacks:

The City's Public Buildings Department recognizes that Newton's public buildings are great assets that require care and maintenance.

Funding for such maintenance is available either through the City's Capital Improvement Plan (CIP) or the Public Buildings Department's annual maintenance budget using the services of in house personnel or contract craftsmen. The identification and scheduling of any necessary maintenance and repair is accomplished through an annual needs assessment program administered by Building Department staff.

Please let me know if I can provide you with any additional information concerning maintenance of our public buildings.

Sincerely,

A. Nicholas Parnell, AIA

**Public Buildings Commissioner** 

cc. Kathy Glick-Weil Art Cabral