

- Purpose: Affordable Housing
 Historic Preservation
 Conservation/Open Space
 Recreation

**Town of Lincoln, Massachusetts
Community Preservation Committee
Project Submission Sheet**

Requests received by November 15, 2004 will be considered for recommendation at the April 2005 Town Meeting.

Project Name: Replace roof on the Gund building of the Lincoln Public Library

Submitted by: Barbara Myles, Director **Submission Date:** November 15, 2004

Address, Phone, E-mail:

Lincoln Public Library (781) 259-8465 bmyles@minlib.net
3 Bedford Road

Town Committee or Organization (if applicable): Lincoln, MA 01773 Lincoln Public Library

Brief description of the project: The artificial slate now on the Gund roof is deteriorating. Numerous shingles are cracked and broken. The "skin" of many of the shingles is worn, and the cement-fiber core is exposed. Once the cement-fiber core is exposed, the shingles absorb water like sponges and allow water to enter the building. Already the library has leaks at a couple of locations that could easily be roof related. Gorman Richardson Architects recommends replacing the Gund roof within a 1 - 3 year time frame, with a real slate roof before the roof fails.

Time frame for completion of the project:
Summer 2005

How does this project help preserve Lincoln's character or further its mission?

Replacing the Gund roof will prevent major leaks from destroying library materials and damaging the library building. The artificial slate shingles now on the Gund roof were a new product in 1989, when the Gund addition was built, so there was no long term product history for these artificial slate shingles. Real slate does have a long term product history with an expected useful life of 80 to 100 years. Real slate will preserve the historic character of the Lincoln Public Library, which is located in the center of Lincoln's History District.

What are your funding requirements?

Fiscal Year	Implementation Costs	Maintenance Costs	Total Costs	Other Funding Sources (and \$ amount)	CPC Funds Requested
2006	\$579,985		\$579,985		
2007					
2008					
Total					

PLEASE ATTACH SUPPORTING DOCUMENTS OR OTHER INFORMATION

2006-03

For CPC Use:
Received on: ___/___/___

Received by: _____

Determination: _____
Reviewed on: ___/___/___

November 9, 2004

ROOF REPLACEMENT BUDGET

Gund Roof North, Gund Roof South
Lincoln Public Library

Item	Unit	Unit Cost	Quantity	Extension	Comments
Demolition of the existing roof and copper	Square foot (SF)	\$15	5,000	\$75,000	
Gund South, labor & material: Rebuild dormers	Each	\$2,500	2	\$5,000	
Labor & materials: New slate roof (includes scaffolding)	Square	\$5,000	50	\$250,000	
Labor & materials: New copper gutters	Linear foot (LF)	\$45	275	\$12,375	
Labor & materials: New copper downspouts	LF	\$35	336	\$11,760	
Labor & materials: Copper flashing work @ valleys, roof-to-turret, base of chimney, etc.	Allowance			\$30,000	
Sub-total of trades				\$384,135	
Dumpster & hauling	Month	\$2,000	1	\$2,000	
Port-A-Toilet	Month	4	\$500	\$2,000	
Sub-total, trades, scaffold, dumpster, toilet				\$388,135	
Contingency @ 5%				\$19,407	
General conditions @ 10%				\$40,754	
Overhead and profit @ 10%				\$44,830	
Permits and fees @ 6%				\$29,588	
Sub-total				\$522,714	
Architectural & engineering fees @ 10%				\$52,271	
Structural engineering study				\$5,000	
GRAND TOTAL, ALL EXPENSES				\$579,985	

Timeline of the Public Bid Process for the Library's Building Repairs

January 2004 – Conception Phase

- Simpson, Gumpertz, and Heger performed a Condition Site Survey in January 2004 and found \$1.2 million of building repairs.

February 2004 – Town Government Authorization

- Capital Planning Committee and Finance Committee approves \$104,100 in building repairs for the library
- Community Preservation Committee approves \$75,000 for window restoration/repairs in the Preston Building.

March 2004 – Approval by Town Residents

- Residents at Town Meeting approve Article 8 (proposed by the Community Preservation Committee), which includes \$75,000 for window restoration/repairs to the Preston Building, and Article 11 \$104,100 for building repairs and improvements to the Lincoln Library.
- Articles 8 and 11 pass when residents vote at townwide election.

April 2004 through August 2004 – Design Phase

· April

Building Committee writes a Request for Qualifications (RFQ), with the help of Town Counsel, for architectural/engineering consulting services for repairs at the library.

· May

Advertisements are placed in the Central Register and Waltham Tribune for the RFQ for designer services during the week of May 12.

A pre-bid conference is held on May 18 to show potential bidders the repairs included in the RFQ.

· June

Bids are received on June 1 from David L. King Architects, Gorman Richardson Architects, LIEBSTUDIOS – architecture, Peterson Associates Consulting Engineers, and TBA Architects.

The Building Committee recommends Gorman Richardson Architects (GRA) to the Board of Trustees at the June 15 Trustees meeting.

On June 21 the Building Committee agreed to the language for a letter of intent, which states that the library awards the designer services contract to GRA and requests that work begin immediately while the contract is finalized.

The letter of intent is sent to GRA on June 22.

· July

The designer services contract is signed by the library (on July 8), Town Counsel, Town Accountant, and GRA (on July 27).

The Building Committee meets with GRA on July 14 and 21 to develop bid documents for construction phase.

GRA completes construction bid documents on July 28 and Building Committee approves them on August 4.

Beginning August 2004 – Construction Phases

· August

Advertisements are placed in the Central Register and Waltham Tribune for remedial construction work during the week of August 4.

A pre-bid conference is held on August 6 but no companies come to the conference.

Another advertisement is placed in the Central Register for the week of August 18.

A second pre-bid conference is held on August 25 and representatives from eight companies are present.

· September

Sub-bids are received on September 8 for the Preston Building windows and roof work with related metal work on the flat roof. Only one bid is received for each project so these bids are rejected per MGL c. 149 §44S.

GRA instructs the general contractors to carry allowances in their bids for the rejected sub-bids.

Bids from general contractors are due on September 14.

Only two bids for the main bid were received on September 14 and the bids were for amounts over our budget. Both bids were rejected as per MGL c. 149 §44S.

Invitational bids were sent to qualified companies for the sub-bid on September 20 and are due on October 6.

Invitational bids were sent to qualified general contractors for the main bid on September 27 and are due on October 13.

· October

Only one sub-bid was received on October 6 for the roof work with related metal work on the flat roof but the amount of this bid is over our budget. This bid was rejected as per MGL c. 149 §44S.

One bid was received for the window restoration sub-bid and this bid was within our budget.

On October 13 one main bid was received but it was over budget. This bid was rejected as per MGL c. 149 §44S.

*\$228k bid \$150 budgeted
Gum & roof - fake slate tiles*



GORMAN
RICHARDSON
ARCHITECTS

September 23, 2004

Ms. Barbara Myles
Director
Lincoln Public Library
3 Bedford Road
Lincoln, MA 01773

RE: Gund Roof Recommendations

Dear Ms. Myles,

Herein Gorman Richardson Architects, Inc. (GRA) is providing recommendations for action associated with the Gund roofs.

Background

The majority of the Gund roof areas are clad with simulated slate shingles, with copper flashings, gutters and downspouts. The intent of the simulated slate shingle product was to provide the look of real slate but at a lower cost. Another feature was the simulated slate weighs less than real slate.

In review of the Construction Documents for the original Gund construction (done on September 16, 2004) GRA learned the following product was specified for installation to the roofs:

- Simulated slate: The style is "Slate"; the size is "Continental", meaning each shingle is 10 – 5/8" x 15 – 3/4" x 3/16" thick, and were manufactured by Eternit, Inc. At this juncture we believe this is the installed product.

This past July and August, GRA performed field survey work associated with producing construction documents for Phase 1 Repairs. The work included surveying the Gund roofs to confirm observations as communicated in the *Condition Survey Report* dated 26 January 2004, prepared by Simpson Gumpertz & Heger, Inc. (SG&H, Boston, MA). SG&H's recommendations include:

- Within the next 0 – 18 months: "replace all broken simulated slate shingles". The budget amount for this year for this is \$500. Note that this work was bid recently as part of the Phase 1 repairs.
- In the long term, 7 – 12 years: "remove and replace all synthetic slate shingles." The budget amount for this is \$396,000.

77 Main Street

Ropkinton

Massachusetts

01749

TEL 508 437.2590

FAX 508.435 0072

Product History

While finding supporting documentation is difficult, GRA's own recollection is that around the time the shingles were installed, Eternit simulated slates and similar

www.gormanrichardson.com

products by other manufacturers were experiencing problems on a wide-scale basis. Specifically, shingles were experiencing deterioration due to water penetrating into the cement-fiber core.

As stated, documentation of this is difficult to find, given this occurred better than 10 years ago. However, discussions with roofers during the bidding period for the Phase 1 repairs confirmed GRA's recollection of such problems. Meaning, during the bid phase, roofers did call and volunteered that they do not believe replacing broken shingles is wise, because 1) the product is not available, 2) walking on the roof will likely cause more damage, and 3) because of the product history, consideration should be given to replacement anyway.

The problem was that the shingles themselves had a smooth polished surface that formed what is commonly called "the skin." The purpose of the skin was to provide a barrier against water penetration. In many cases, the skin would wear exposing the cement-fiber core, and this core is what would take on water.

Observations

During GRA's field survey work, our observations included the following:

- Numerous shingles are cracked and broken
- The "skin" of many shingles is worn, and the cement-fiber core is exposed
- At a couple locations, there are leaks that could easily be roof related

Recommendations

GRA recommends consideration be given to replacing the Gund shingles with a new roof within a 1 – 3 year time frame. This is based on the following:

- The history of the product
- Discussions with roofers
- GRA's own observations
- Walking on the roof to replace broken shingles may cause more damage
- The product is no longer available for replacement work
- There are a couple of locations of potential roof leaks

One other consideration is that during the recent bidding, GRA learned that the budgeted amount of \$500 for the repair of broken and cracked shingles is not enough money anyway.

Even beyond this, there is support for doing the work on an even more expeditious schedule than 1 – 3 years. Another SG&H recommendation is to install new snow fences above pedestrian walkways, because currently there are none. The budgeted amount for this is \$3,000.

THIS REPRESENTS A LIFE SAFETY CONCERN THAT SHOULD BE ADDRESSED IMMEDIATELY.

Doing the roof work would better facilitate installing new snow fences at required locations as opposed to doing new snow fences and roof work independently.

One final consideration is this: The phase 1 repairs require some flashing work and installation of new downspouts. This too could be better performed as part of new roofing work, and may provide some savings, as doing only gutters means higher individual unit costs --- there is an economy of scale with doing more work.

Budget Recommendation

GRA recommends consideration be given to a budget amount of \$425,000 - \$475,000 that includes the work, new snow fences, and architectural and engineering fees, assuming the project is executed in the short term.

real state

By way of commentary, it is possible to leave the roof in place for another 3 – 5 years or maybe even longer. However, if doing so the following should be kept in mind:

- The product will continue to deteriorate
- Predicting when and where pieces of shingles will fall is difficult:
 - This too represents a life-safety concern
- Arguably the rate of deterioration will increase over upcoming years
- The product itself is no longer available for use in a replacement program
- Access to the roof to do the work is problematic anyway
- Ongoing leaks will cause additional deterioration

As you review and discuss this matter please do not hesitate to contact me directly with questions, comments or concerns. My direct dial is 508-544-2721.

Sincerely,

Gorman Richardson Architects, Inc.



Neil W. Rouleau, CCCA

Vice President, Building Envelope Services

Lincoln Public Library
Gund Roof
October 26, 2004



First floor turret facing Trapelo Road - broken tile



First floor turret facing LL and terrace – worn tiles



Corner at LL and Bedford – broken tile



Story room turret – worn tiles

Greenwood Industries, Inc.
PO Box 2800
Worcester, MA 01613
Phone: 508 865 4040
Estimating Fax: 508 865 8016
John D'Elia - Ext. 211

To: Neil Rouleau, Gorman Richardson **From:** John D'Elia

Fax: 508-435-0072 **Pages:** 1

Phone: 508-544-2600 **Date:** 9-28-04

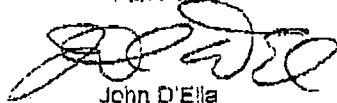
Re: Lincoln Public Library **CC:** File

Urgent **x For Review** **Please Comment** **Please Reply** **Please Recycle.**

Neil,

I did some budget pricing for just the roofs that have the faux slate on them. I came up with around 50 sq of roof area. If we use an unfading black or gray slate (roughly \$400.00 per sq. cost for material on that type of slate) it will cost around \$250,000.00 to do the roofing. If you use Ecostar by Carlisle in lieu of the slate it would cost somewhere around \$235,000.00. In both cases I figured new copper work as it relates to those roofs (gutters, downspouts, crickets, valleys, ridge & hip cap, snow guards, drip, conductor heads, step & base flashing). I didn't go to crazy with the copper work or snowguards so you may need to adjust the pricing if you feel there may be some tricky or difficult metal conditions. There are other faux slates out there Bradco Supply made me aware of another one by Tamko I think it was called Lamorite that they said was pretty good as well. Ray Pike is the rep. for the Ecostar product he has a new number that I do not have. If you call Bradco at 1-800-442-3039 ask for Pat he can probably direct you to who or where to call for samples and literature. You could also go online and see whats out there and find out who to contact for literature or samples.

Thank You



John D'Elia

FAX TRANSMISSION**GORMAN RICHARDSON ARCHITECTS**77 Main St Hopkinton, Massachusetts 01748
508-544-2600 Fax: 508-435-0072 Email: gra@gra.net**Connecticut Office:**1080 Main Street South Woodbury, Connecticut 06798
203-573-1752 Fax: 203-263-8823

To:	Barbara Myles	Fax Number:	781-259-1056	Telephone Number:	781-259-8465
From:	Neil W. Rouleau	Project:	Lincoln Public Library Roof		
Date:	12-Oct-2004	Project Number:	0015		
Message:					Total Pages: 1

Barbara,

Attached is the budget prepared by Greenwood Industries for simulated slate roof replacement. In review of this, please keep the following in mind:

- When doing budgets, contractors often work to get the lowest possible number --- as they always approach this as if they were bidding the project. Accordingly, costs are likely to be higher.
- Additional dollars should be added for gutter work. By way of recommendation, waiting on the downspouts (as discussed) makes sense as gutters are going to be required anyway, if redoing the roof.
- Additional dollars should be added for architectural fees. 10% is a good number for budget purposes.

Any questions please call me direct: 508-544-2721

Regards

Neil W. Rouleau

Cc:

18 January 2005

Lincoln Library

Roofing budget:

Budget price from James M. McKenna & Son (See attached)	\$374,750
Bond	\$ 6,000
Contingency (10%)	<u>\$ 38,000</u>
Sub-total	\$418,750
Consultant fees (arch & struct eng.)	<u>\$ 43,000</u>
Total	\$461,750

07 31 20

JAMES M. MCKENNA AND SON
SPECIALTY ROOFING AND SHEET METAL
SLATE - COPPER - TILE - E.P.D.M.

3 CASTLE HILL ROAD - HOPKINTON, MA 01748
TELEPHONE (508) 435-6402 - FAX (508) 497-5148

JANUARY 3, 2005

LINCOLN PUBLIC LIBRARY
BEDFORD ROAD
LINCOLN, MA 01773

RE: BUDGET PRICING FOR THE LINCOLN PUBLIC LIBRARY ROOF.

JOB DESCRIPTION:

- ERECT SCAFFOLDING
- REMOVE AND DISPOSE OF SIMULATED SLATE ROOF TILES
- REMOVE AND STORE COPPER HIPS AND RIDGES
- RE-NAIL ROOF BOARDS OR PLYWOOD
- INSTALL 45LB. TAMKO ORGANIC BASE SHEET TO ROOF SURFACE
- INSTALL W.R. GRACE ICE AND WATER SHIELD TO EAVES, SIDEWALLS AND VALLEY AREAS
- FABRICATE AND INSTALL 20 OUNCE COPPER VALLEYS
- LOCATE, PURCHASE AND INSTALL A NEW OR SALVAGED ROOFING SLATE TO MATCH BLACK SLATE ON ORIGINAL LIBRARY BUILDING
- FABRICATE AND INSTALL NEW COPPER FLASHINGS WHERE NEEDED
- INSTALL 5 NEW DOWNSPOUTS AS PER ARCHITECTS SPECIFICATIONS
- RE-INSTALL COPPER HIPS AND RIDGES

ESTIMATED STOCK AND LABOR: \$ 374,750.00

PLEASE NOTE: THERE MAY BE ADDITIONAL COST FOR REMOVAL AND DISPOSAL IF SIMULATED SLATE ROOF TILES CONTAIN ASBESTOS.

BUILDING PERMITS ARE INCLUDED IN PRICING, HOWEVER, ANY REQUIRED BONDS ARE NOT.