

ROOF CONDITION SURVEY

For
Town of Sudbury

**Town Hall
322 Concord Road
Sudbury, Massachusetts**

February 3, 2012

RBA Project No. 201056.00

Prepared by:



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EXECUTIVE SUMMARY

Town Hall Roof
322 Concord Road
Sudbury, Massachusetts

General Roof Description

The roof area of the entire building is approximately 7,555 square feet (SF).

- One steep-sloped roof area contains approximately 6,000 SF of slate roofing, labeled Roof Area No. 1 on the roof plan.
- One low-sloped roof area contains approximately 1,375 SF of EPDM roofing, labeled Roof No. 2 on the roof plan.
- Two steep-sloped roof area contains approximately 110 SF of roll roofing, labeled Roof Area Nos. 3 & 5 on the roof plan.
- One steep-sloped roof area contains approximately 50 SF of copper roofing, labeled Roof Area No. 4 on the roof plan.
- One steep-sloped roof area contains approximately 20 SF of shingle roofing, labeled Roof Area No. 6 on the roof plan.

Roof Observations/Issues

The slate roofing system that exists on Roof No. 1 is estimated to be approximately 80-years old. Leakage is reported to occur at the skylight/hatch assembly (tarp collection system is in place). The slate shingles are in good to fair condition. Over the years random slates have been replaced. Many cracked/broken slates were observed. Water staining on the underside of the wood decking was observed. The copper sheetmetal has been resecured with fasteners that are now rusted. Deteriorated masonry was observed at the chimney. Gutter repairs with roofing cement were observed in the copper gutters.

The EPDM roofing system that exists on Roof No. 2 reportedly was installed in 2008 and appears in good condition. No warranties are currently in place.

The roofing systems on the remaining roof areas (Roof Nos. 3-6 at approx. 180 SF) are in good condition.

Corrective Recommendations

The recommended work Estimated Construction Costs are broken down as follows. Reference is made to the "Recommended Roof Repair and Replacement Spreadsheet" located in the in the Master Executive Summary Report, for the recommended work year Estimated Construction Costs.

1. In an effort to extend the useful service life of the 80-year old slate roofing system (Roof No. 1) the recommendation is to implement preventive maintenance repairs in years **2011, 2015, and 2019**. Recommended repairs include removing skylight/hatch assembly and roofing over, replacing cracked/broken slate, flashing repairs, masonry repairs to the chimney, gutter repairs/replacement as necessary.
2. No corrective repairs are recommended at this time for the EPDM roofing, roll roofing, copper roofing, and shingle roofing.

I. IDENTIFICATION

Subject: Town Hall Roof

Location: 322 Concord Road
Sudbury, Massachusetts

Observation Date: Inspected during the month of August 2010

Site Contact: James F. Kelly, Building Inspector
978-443-2209 ext 1361

Client: Town of Sudbury, Massachusetts

Reliance: This report is for exclusive use and may be relied upon by the Town of Sudbury, MA. No parties or persons other than those identified as authorized users may use or rely on the information or opinions in this report without the express written consent of Russo Barr Associates, Inc.

II. OBJECTIVE

Objective

This report has been prepared according to the accepted proposal between the Town of Sudbury, MA (Client) and Russo Barr Associates, Inc. (RBA).

The purpose of this report is to provide a description of roof conditions, consisting of the roof surfacing with associated flashing and roof drainage systems, and an evaluation of their general physical condition for the Town of Sudbury, MA. This report includes a schematic roof plan and photo documentation of existing conditions and observed deficiencies.

This report is based on observations made during a walk-through visual survey of the roof areas and accessible interior areas, readily available documents pertaining to roof conditions, information provided by interested parties, and interviews. Roof test cuts and an infrared moisture survey were not performed.

The report identifies physical deficiencies and for each, provides a corrective recommendation action and a corresponding estimate of probable construction cost. Any estimates of construction cost prepared by RBA are intended as an aid in budgeting. They are not quotations, or proposals to do the work for that price, and their accuracy is not guaranteed.

Interviews

James F. Kelley, Building Inspector
Art Richards, Electrical Inspector

Readily Available Documents

Roof plans were available for review.

III. DESCRIPTION

The subject of this report is the roof condition the Town Hall located in Sudbury, Massachusetts. The Town Hall contains slate, EPDM, shingle, copper and roll roofing systems. The roof area of the entire building is approximately 7,557 square feet (SF). There exist various typical penetrations throughout the roof area such as vent pipes, skylight, rooftop unit, skylight/roof hatch assembly, and chimneys.

Roofing System Details

Identification	Area (SF)	Roofing System Type	Estimated Age	Condition
Roof Area No. 1 (Elev. 38' ±)	6,000	Slate with wood roof decking. Roof is sloped (approx. 9:12 pitch). Roof drains via gutters and downspouts.	80+ years	Good to Fair
Roof Area No. 2 (Elev. 15' ±)	1,375	Adhered EPDM. Roof is low-sloped.	2 years	Good
Roof Area Nos. 3 (Elev. 13' ±)	80	Roll roofing. Roof drains via gutters and downspouts	unknown	Good
Roof Area No. 4 (Elev. 7' ±)	50	Copper. Roof drains via free flow onto the ground.	unknown	Good
Roof Area No. 6 (Elev. 10' ±)	20	3-tab Shingles with wood roof decking. Roof is sloped. Roof drains via free flow onto the ground.	unknown	Good

IV. MAINTENANCE & WARRANTY INFORMATION

Roof Warranty:

No warranties are currently in place.

History of Repairs:

Not Known.

History of Roof Studies/Inspections:

There have been no previous roof studies performed.



Photo No. 01

Location: Sudbury
Town Hall

Description: Aerial
View of Roof.



Photo No. 02

Location: Sudbury
Town Hall

Description:
Overview of slate
roof.



Photo No. 03

Location: Sudbury Town Hall

Description: Overview of low slope roof. EPDM roof is in good condition.



Photo No. 04

Location: Sudbury Town Hall

Description: Slate roofing is aged but apparently intact.



Photo No. 05

Location: Sudbury Town Hall

Description: Copper ridge cap has been fastened with steel roofing nails rusting in corrosion of the steel fasteners.

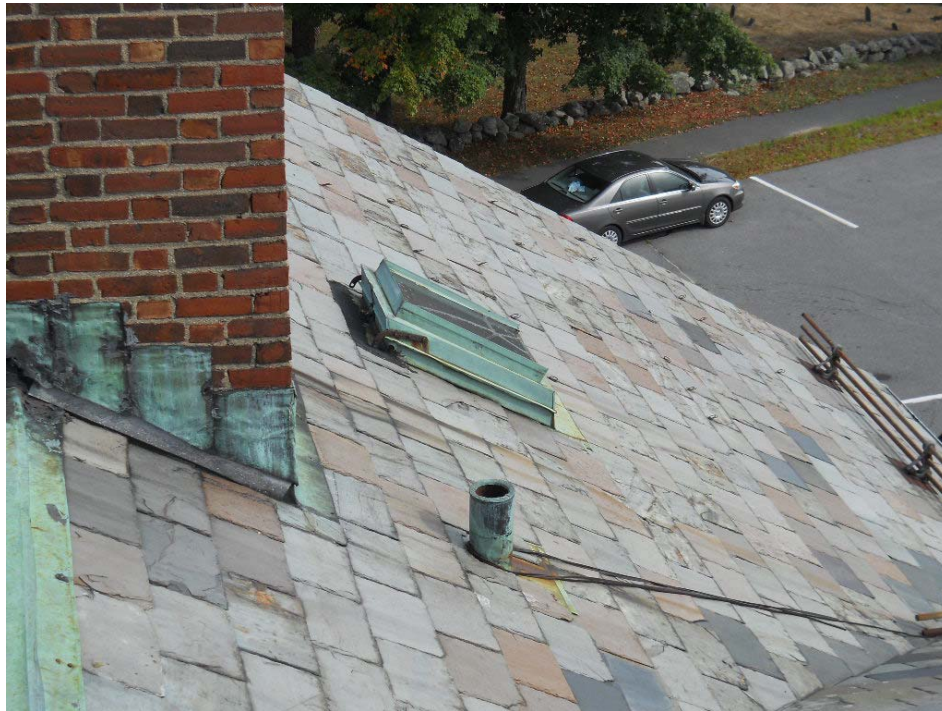


Photo No. 06

Location: Sudbury Town Hall

Description: Aged skylight/access hatch is the apparent source of leaks.



Photo No. 07

Location: Sudbury Town Hall

Description: Blue tarps installed below the skylight shown above direct water to trash barrels.



Photo No. 08

Location: Sudbury Town Hall

Description: Masonry chimney requires repairs.



Photo No. 09

Location: Sudbury
Town Hall

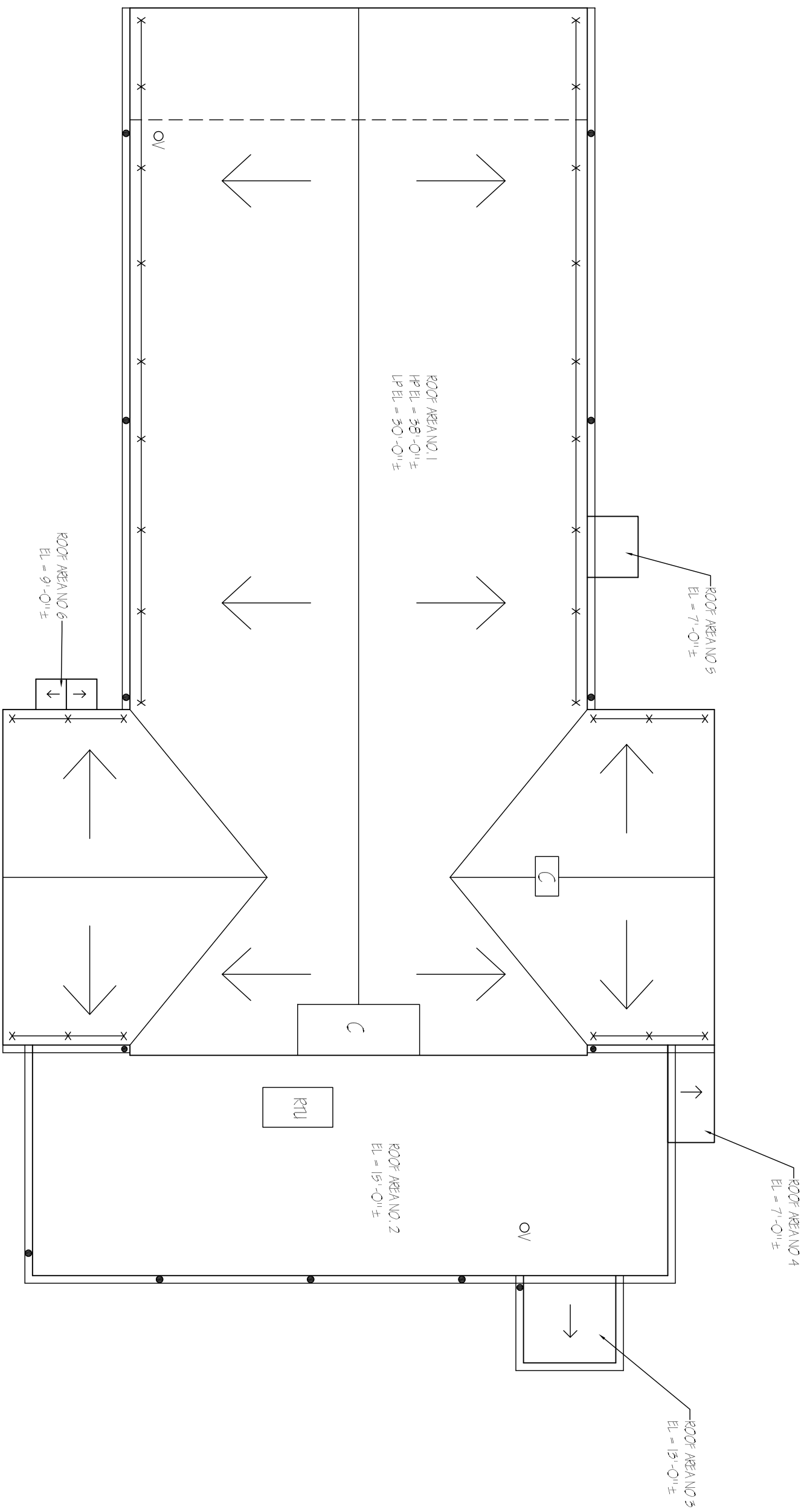
Description: Roll
roofing is worn.



Photo No. 10

Location: DPW
Highway Office &
Garage

Description:
Soldered flat seam
copper roofing is in
fair condition.



LEGEND	
OV	VENT PIPE
C	CHIMNEY
---	LINE OF OVERHANG
●	GUTTER & DOWNSPOUT
→	SLOPE DIRECTION: DOWN
RTU	ROOF TOP UNIT
X-X	SNOW GUARDS

NO	DATE	BY	DESCRIPTION

TOWN OF SUDBURY
 TOWN HALL
 322 CONCORD ROAD
 ROOF CONDITION SURVEY
 ROOF AREA PLAN



DATE: 02.03.12
 SCALE: AS NOTED

DRAWN BY / CHECKED BY: JFW/RJG
 PROJECT NO: 2011056.00
 DRAWING NO: R-1

TOWN HALL - ROOF AREA PLAN
 SCALE: NOT TO SCALE