

# Roof Inspection Report

Prepared for:

Mr. Greg Boettger  
Bellevue Schools  
&  
Mr. Ralph Gladbach  
GP Architecture, LLC.

Prepared by:

Roofing Solutions, Inc.  
6728 W. 153<sup>rd</sup> Street  
Overland Park, KS 66223



## Project Location

Bellevue Public Schools Support Center  
2820 Arboretum Drive  
Bellevue, NE 68005

**Facility:** Bellevue Public Schools Support Center  
2820 Arboretum Drive  
Bellevue  
Nebraska  
68005  
U.S.A.



**Contact Name:** Greg Boettger

**Contact Telephone:** (402) 293-5066 Ext:



**Contact Fax:** ( ) -

**Date of Last Inspection:** Mar 21, 2017

**Type of building:** Office

**Type of Neighborhood:** Residential

## Roof Section List

Photo	Section / Name / Year Installed	Size / Height	Roof Type	Condition Index / *RCI / ASLR(Yrs)	Estimated Replacement Value
	Roof A A 2005	20,150 sq. ft. 28 ft.	Asphalt Shingles	Good 71 8(Yrs)	\$110,825.00
	Roof B B 2005	2,874 sq. ft. 28 ft.	Built-Up Asphalt Roofing	Good 71 8(Yrs)	\$34,488.00
<b>23,024</b>					<b>\$145,313.00</b>
*RCI Rating 0 -100 where 100 is excellent					

## Recommendation Summary

Section ID	Budget Year	Activity Type	Action Item ?	Allocation	Urgency	Budget Amount
Roof A	2017	No Action	No	N/A	N/A	\$0
Roof B	2017	Repair	Yes	Expense	Moderate	\$500
<b>\$500</b>						

**Expense Budgets - 5 Years**

Section ID	2017	2018	2019	2020	2021
Roof B	\$500	\$0	\$0	\$0	\$0
	<b>\$500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Total Budgets - 5 Years**

Section ID	2017	2018	2019	2020	2021
Roof A	\$0	\$0	\$0	\$0	\$0
Roof B	\$500	\$0	\$0	\$0	\$0
	<b>\$500</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**Roof Name:** A**Roof Size:** 20,150 sq. ft.**Est. replacement Cost:** \$ 110,825.00**Existing System Type:** Asphalt Shingles**Year Installed:** 2005**Assessed Service Life  
Remaining (Years) :** 8**Height:** 28 Ft.**Slope:** 05:12**Interior Sensitivity:** Normal**Drainage:** Adequate**Currently Leaking?** No**History of Leaking?** No**Drainage and Leak  
Details:** Roof Section A slopes to the eave edges and drains to an external gutter with downspouts.

No recent leaks were reported on this roof section at the time of inspection.



## Existing Roof System Construction

Layer Type	Description	Method Of Attachment
Deck	Plywood	Nailed
Underlayment	Ice & water shield	Cold Adhesive
Membrane	Shingles	Nailed

## Overall Core Condition

Roofing layers were determined at an eave edge view. The deck is plywood and there is a layer of ice and water shield installed. The membrane is a laminated, asphalt shingle.

## Core Photos

Photos	Date	Description
	Mar 21, 2017	Membrane

## Overall Roof Inspection Assessments

Date	Inspection Type	Inspecting Company	Inspector
Mar 21, 2017	Phase 1 Roof Inspection	Roofing Solutions, Inc.	Garry Hendrickson
<p>Roof Section A refers to the steep sloped, shingle roof system at the Bellevue Public Schools Support Center building. The roof section includes the main roof area, a lower roof area at the front and rear of the building and a small canopy at the south side of the building. The roof is an approximately twelve (12) year old, laminated, asphalt shingle. The roof is a hip design with a vented ridge detail and attic vents on the front and rear roof areas. There are wall vents in the sunken roof area walls for ventilation of the main roof area attic space. The wall details are flashed with a metal flashing.</p> <p>Overall, the roof system is in good working condition with no defects observed at the time of the roof inspection. With routine maintenance and regular inspection, the roof system should remain effective for the duration of its assessed service life. There was no warranty information available for this roof section at the time of inspection.</p>			

## Recommendations Details

Budget Year	Activity Type	Action Item ?	Allocation	Urgency	Quotation \$
2017	No Action	No	N/A	N/A	\$0
No action is recommended at this time.					\$0

**Roof Name:** B**Roof Size:** 2,874 sq. ft.**Est. replacement Cost:** \$ 34,488.00**Existing System Type:** Built-Up Asphalt Roofing**Year Installed:** 2005**Assessed Service Life  
Remaining (Years) :** 8**Height:** 28 Ft.**Slope:** 1/4" per ft.**Interior Sensitivity:** Normal**Drainage:** Adequate**Currently Leaking?** No**History of Leaking?** No**Drainage and Leak  
Details:** Roof Section B slopes to the interior and drains to two (2) primary roof drains with overflow drains adjacent.

No recent leaks were reported on this roof section at the time of inspection.



## Existing Roof System Construction

Layer Type	Description	Method Of Attachment
Deck	Metal	Spot Attached
Insulation	Polyisocyanurate	Laid - In -Place
Insulation	Polyisocyanurate	Mechanically Fastened
Cover board	Dens-Deck - .25" (1/4")	Hot Asphalt
Membrane	BUR - Multiply	Hot Asphalt
Surfacing	Gravel	Hot Asphalt

## Overall Core Condition

One (1) core cut was performed, revealing a factory primed steel decking. The insulation consists of one (1) layer of 1.75" and one (1) layer of 1.5" polyisocyanurate insulation board (3.25" total) and one (1) layer of 1/4" Dens-Deck cover board. The membrane is a multiply BUR with a gravel surface.

## Core Photos

Photos	Date	Description
	Mar 21, 2017	Deck Underside
	Mar 21, 2017	Roof System Core



## Overall Roof Inspection Assessments

Date	Inspection Type	Inspecting Company	Inspector
Mar 21, 2017	Phase 1 Roof Inspection	Roofing Solutions, Inc.	Garry Hendrickson

Roof Section B refers to the low slope roof system on the sunken roof area at the Bellevue Public Schools Support Center building. The roof is an approximately twelve (12) year old BUR with a gravel surface. The perimeter sides of the roof area are a wall detail and are flashed up 12" with a modified bitumen membrane flashing which extends under a metal counter flashing. The counter flashing is set under a metal wall panel which covers the remainder of the wall height.

Defects and conditions found during the inspection include the following:

- One (1) split corner observed on a wall flashing
- One (1) split flashing seal observed around a pitch pocket detail

Overall, the roof system is in good working condition. With the aforementioned defects addressed, in addition to routine maintenance and regular inspection, the roof system should remain effective for the duration of its assessed service life. There was no warranty information available for this roof section at the time of inspection.

## Recommendations Details

Budget Year	Activity Type	Action Item ?	Allocation	Urgency	Quotation \$
2017	Repair	Yes	Expense	Moderate	\$500

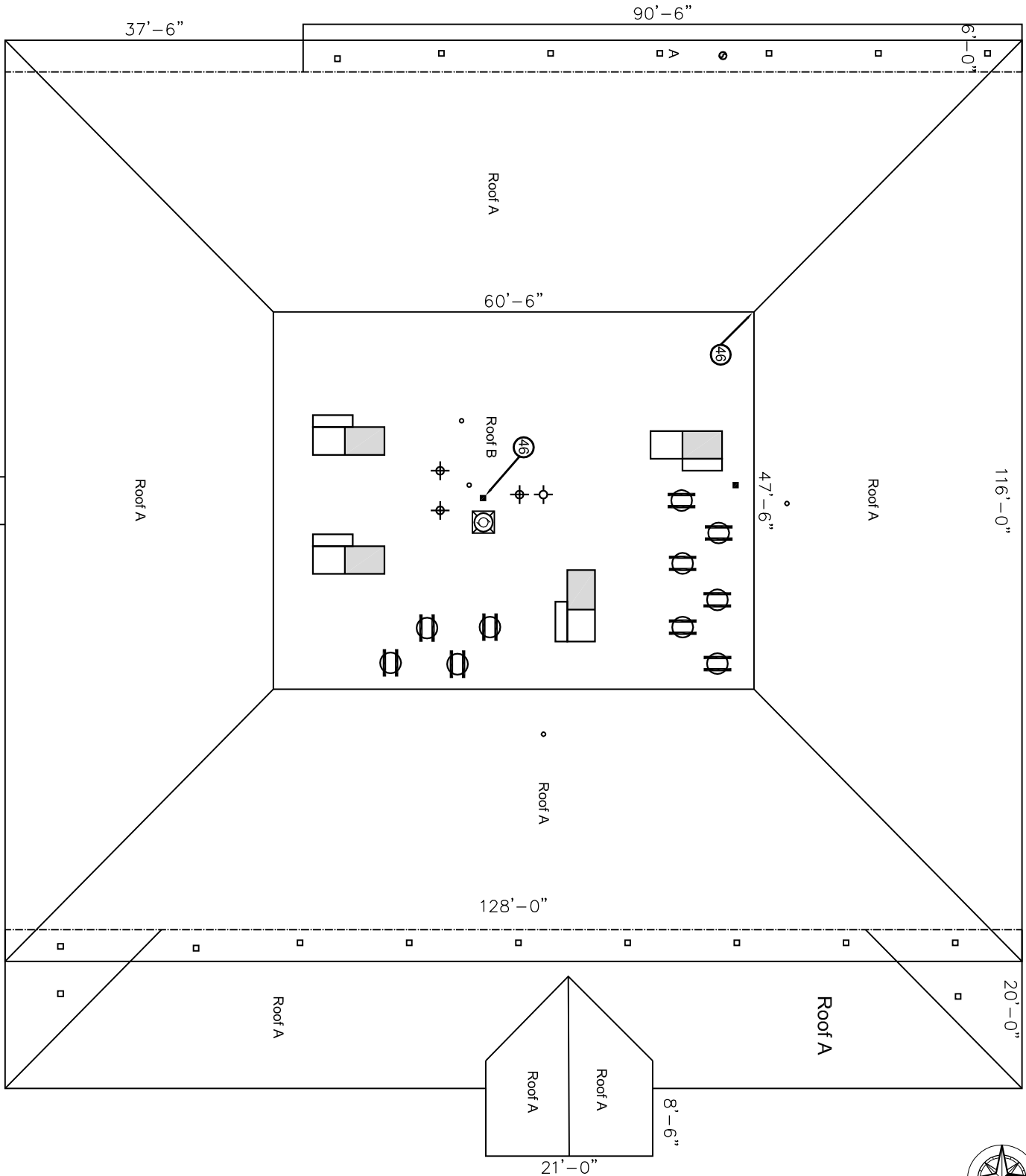
RSI recommends repairs be completed in accordance with the attached deficiency list.

**\$500**

Photos and Deficiencies



<b>Defect Code:</b>	<b>46</b>	<b>Quantity:</b>	<b>Under 10 LF</b>	<b>Priority:</b>	<b>First Year</b>
Description: Split in flashing					
Repair: Cut away loose flashing and clean and prime repair area. Apply strip in of like material centered over split extending a minimum of 4" in all directions past prepared area.					



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 RSI@roofingsolutionsinc.com

Project Name:

**Bellevue Schools Support Center**

Project Address:

**2820 Arboretum Drive  
 Bellevue, NE 68005**

Sheet Number:  
**01 of 01**

Date:  
**03/21/2017**

Drawn By:  
 GH

Project Number:  
**00-000000**

Sheet Title:  
**A&B-Roof Plan**

- DRAWING LEGEND**
- ⊕ DRAIN
  - ⊖ OVERFLOW
  - ⊕ SCUPPER
  - ⊖ HVAC UNIT
  - ⊕ CURB
  - ⊖ SATELLITE
  - ⊕ PITCH PAN
  - PIPE
  - SLEEPER
  - ⊖ EXHAUST FAN
  - ⊕ CONDENSER ON SLEEPERS
  - ⊖ DEFECT NOTE
  - ⊕ CONSTRUCTION NOTE
- N.L.C. NOT IN CONTRACT  
 U.N.O. UNLESS NOTED OTHERWISE

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 Deficiency Legend
 

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Defect #	<b>FIELD MEMBRANE AND ROOF SURFACE</b>
1	Description: Deteriorated or missing sealant at counterflashing, termination bar, sealant lip, metal flashing, expansion joint, etc.
2	Description: Fishmouth in field or flashing seam.
3	Description: Open lap in field membrane.
4	Description: Dry lap edge.
5	Description: Buckling or ridging of membrane.
6	Description: Split in membrane.
7	Description: Wrinkle in membrane.
8	Description: Surface erosion.
9	Description: Membrane deterioration.
10	Description: Tented membrane at fastener.
11	Description: Blister in field membrane or flashing.
12	Description: Alligatoring of asphalt surfacing.
13	Description: Tar boils/blueberries.
14	Description: Displaced ballast.
15	Description: Ponding of water.
16	Description: Blocked drain, scupper, or downspout.
17	Description: Missing or damaged drain/scupper strainer
18	Description: Unadhered membrane or inadequate membrane attachment.
19	Description: Unadhered insulation or inadequate insulation attachment.
20	Description: Displaced insulation
21	Description: Loose walkway pad or deteriorated paver.
22	Description: Debris, trash, construction materials, HVAC equipment, filters, motors, etc. on roof surface.
23	Description: Physical damage to membrane including cuts, holes, tears, scrapes, scuffs, or abrasions.
24	Description: Evidence of past problem and previous repair.
25	Description: Membrane slippage
26	Description: Membrane shrinkage
27	Description: Missing or damaged membrane protection layer at sleeper, antenna, satellite sled, blocking, pipe stand, paver, etc.
28	Description: Reported leak location
29	Description: Missing, loose, or broken shingles
30	Description: Open or missing tile eave stop.
31	Description: Missing or open mortar joints at the ridge or hip.
32	Description: Broken or missing tile.
33	Description: Loose, displace, or unsecured tiles.

## Deficiency Legend

Defect #	FLASHINGS AND PENETRATIONS
40	Description: Low flashing height.
41	Description: Missing or inadequate flashing attachment.
42	Description: Loose or unadhered flashings.
43	Description: Weathered and deteriorated flashing
44	Description: Bridged flashing
45	Description: Open flashing lap
46	Description: Split in flashing
47	Description: Racked flashings
48	Description: Missing termination
49	Description: Missing counterflashing
50	Description: Missing pipe flashing.
51	Description: Leaking or damaged gutters/downspouts.
52	Description: Missing rain cap, rain collar, or hood.
53	Description: Open lead flashing.
54	Description: Fallen or loose backer rod.
55	Description: Deteriorated or shrunken pitch pan filler.
56	Description: Abandoned and obsolete equipment.
57	Description: Expansion joint deficiencies.
58	Description: Inadequate or nonconforming membrane flashing detail.
	<b>METALWORK AND MISCELLANEOUS</b>
70	Description: Open joint in metal flashing.
71	Description: Open or missing joint cover.
72	Description: Signage penetration not sealed properly.
73	Description: Improper sheet metal detail.
74	Description: Inadequate coverage of metal flange.
75	Description: Inadequate attachment of metal flashings.
76	Description: Inadequate transition flashings.
77	Description: Grease or other contaminants exhausted or vented onto roof surface.
78	Description: Leaking or damaged gutters/downspouts.
79	Description: Cracks in walls.
80	Description: Broken, plugged, or disconnected condensate line.
81	Description: Displaced antenna, sign, bracing, support, strap, etc.
82	Description: Open or deteriorated wall joint.
83	Description: Efflorescence.
84	Description: Deck deflection
85	Description: Vegetation growth.
86	Description: Corrosion or rust
87	Description: Mechanical defect
88	Description: Skylight defect/cracked/deteriorated
89	Description: Missing wall covering or cladding materials.

Bellevue Public Schools Support Center\_Bellevue, NE  
Ph 1 Roof Inspection\_Roof A\_2017-03-21



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Ph 1 Roof Inspection\_Roof A\_2017-03-21

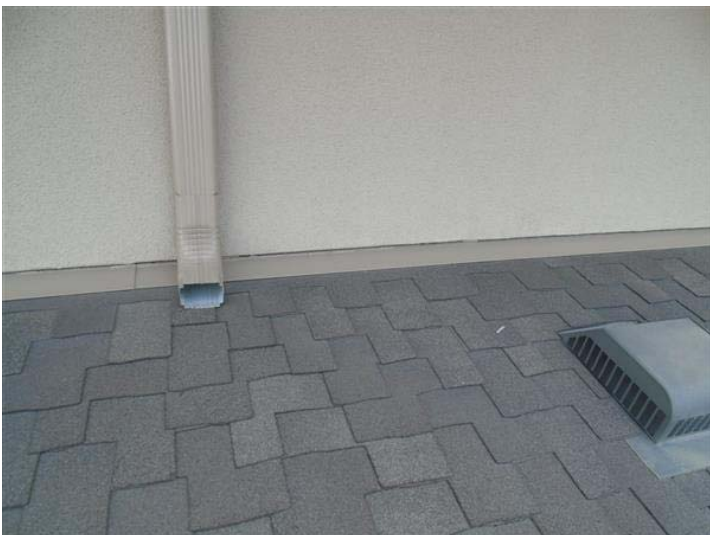


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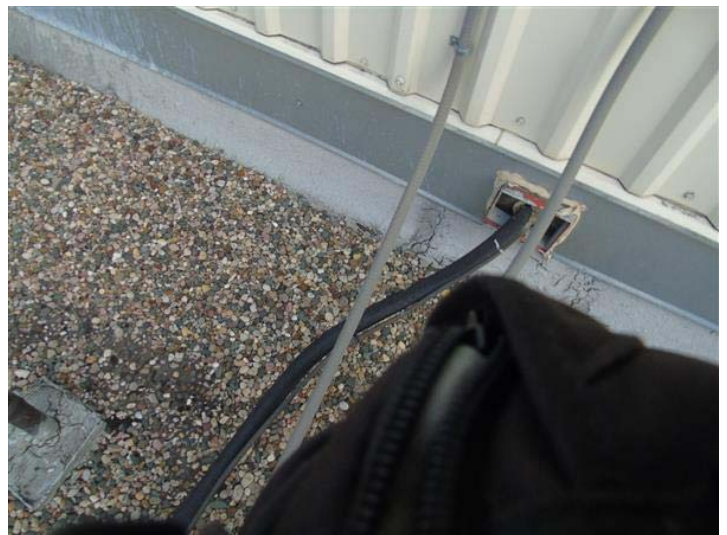
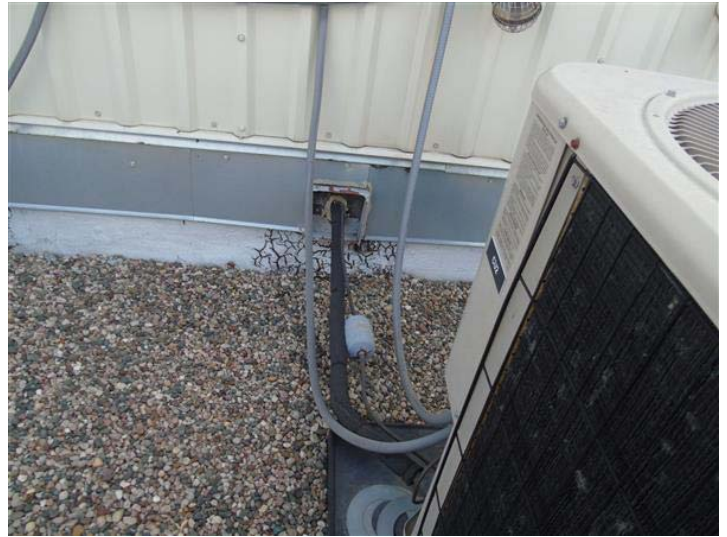
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