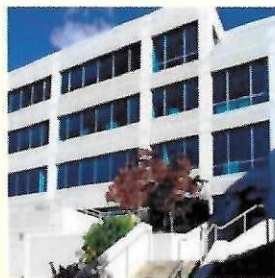


Roof Analysis Report

for

City of San Bruno
567 El Camino Real
San Bruno, CA 94066

Library
San Bruno, CA



Submitted by:
Sal Salem

Tremco, Inc.
743 Shell Blvd
Foster City, CA 94404

October 27, 2021

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TREMCO

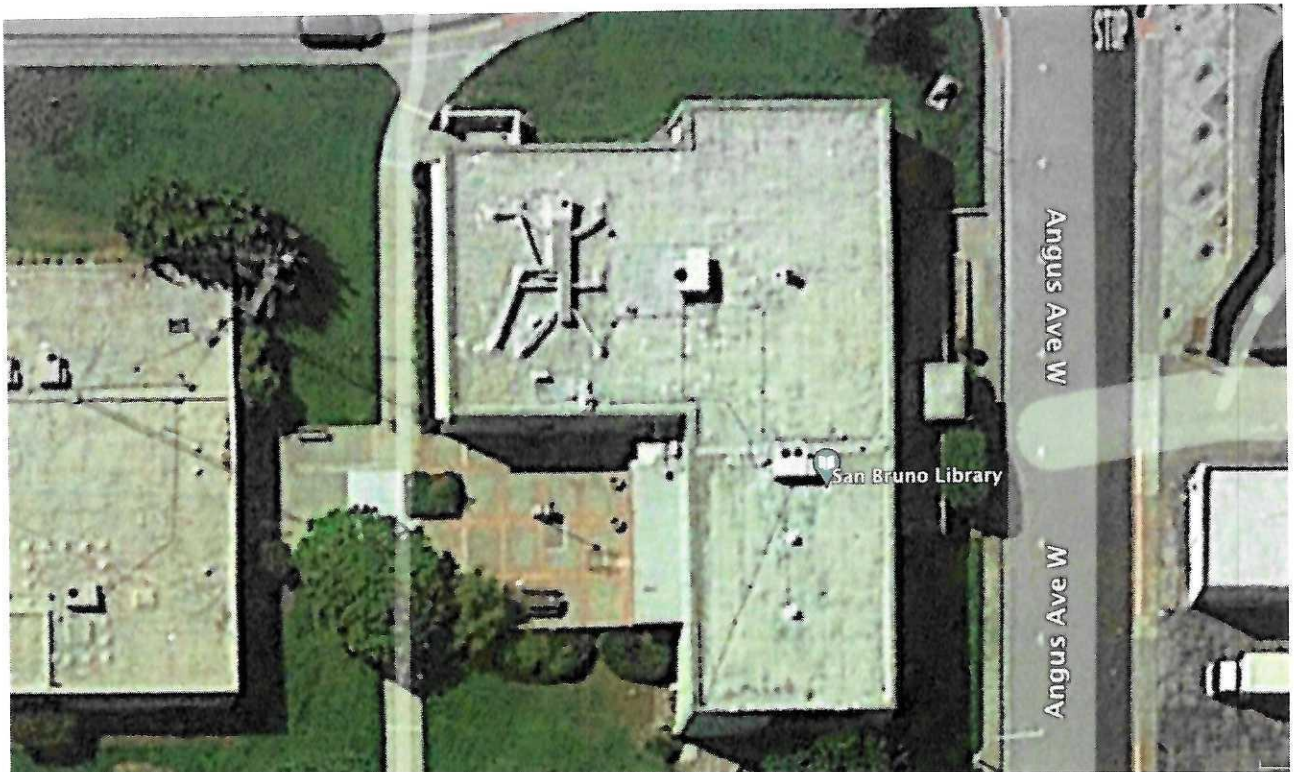
October 27, 2021

Ross Shkuratov
City of San Bruno
567 El Camino Real
San Bruno, CA

Dear Mr. Shkuratov,

A site visit and roof inspection were conducted on October 5, 2021 for the subject property. The following is a summary of my findings along with recommendations to address both the short term and long-term roofing needs for this campus.

Building Overview



Construction:

Roof Level:	Main Building
Roof Type:	SPUF
Membrane:	SPUF
Insulation:	½" Gypsum
Surfacing:	Granules
Deck:	Wood
Slope:	¼"
Drainage:	Internal Gutters
Year installed:	2004 (estimate)
Roof Area:	8,800 Sq. Ft.

Observations / Deficiencies:

- Signs of previous repairs
- Damage to the parapet walls
- Several holes in the field of the roof
- Granules collecting in the low points and corners of the roof
- Leaves collecting in the low points and corners of the roof
- Several blisters
- Mild occurrences of ponding
- Outstanding maintenance needs
- Several leaks reported

1. Overview of the roof.



2. Close-up photo of isolated areas of failure.



3. Close-up photo of SPUF failure.



4. Close-up photo of granules collecting on the roof. As granules become loose, the membrane is no longer protected.



5. Close-up photo of blisters/previous repairs.



6. Close-up photo of several blisters and repairs.



7. Openings in the ductwork.



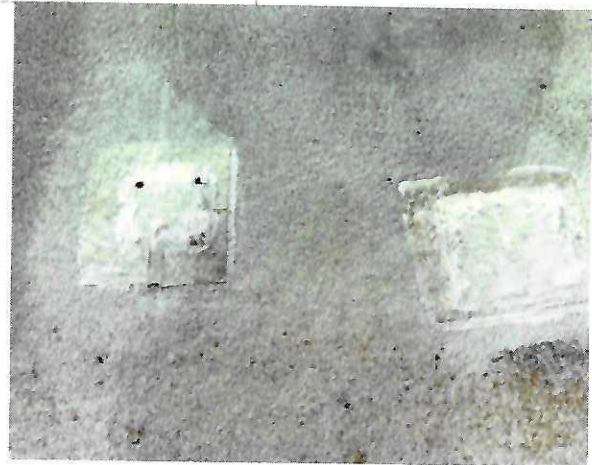
8. Close-up photo of openings along the perimeter.



9. Close-up photo of damage to the perimeter of the roof.



10. Close-up photo of previous repairs made to the roof.



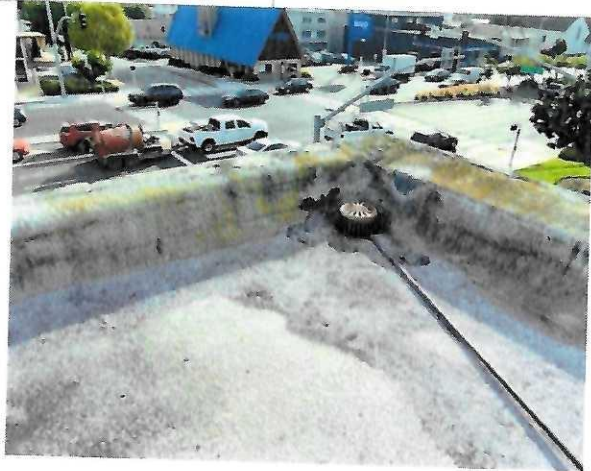
11. Close-up photo of failure at the perimeter of the roof.



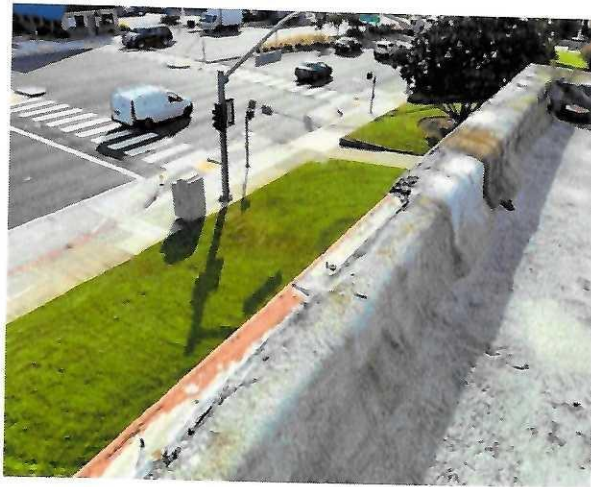
12. Close-up photo of granules collecting in the corners of the roof.



13. Photo of granule collection.



14. Damaged perimeter.



15. Close-up photo of a core sample.





Short Term:

Repairs to the roof consisting of the following. These repairs should only be made as a temporary band-aid while funding for roof replacement.

1. 3-course the damaged areas of the roof using AlphaGuard MT + Permafab.
2. 3-course damaged perimeters using Alphaguard MT + Permafab.

Cost Estimate: \$7,500

Short Term (Annual Basis) – Tremcare Gold:

- A comprehensive roof maintenance program that helps prevent premature deterioration and keeps your roofing assets in top working order.
- Housekeeping: removal of incidental debris (leaves, branches, etc.) from the roof, drains and gutters during scheduled, periodic housekeeping operations
- Preventive Maintenance: maintenance of your roofs in their present condition by making minor repairs to the membrane and flashing systems
- 24-Hour Emergency Leak Response - priority treatment

Long Term:

Single Ply: Tremco's Tremply TPA System

After decades of performance, the roof has reached the end of its service life and should be budgeted for replacement. Tremco's Tremply TPA Single Ply system would be an excellent system for this roof. The reflective surface offers resistance to harmful UV rays and combines with maximum seam strength for durability and long-term performance. The roofs can also have walk pads installed on them for slip resistance. The speed of installation will provide for significant labor cost savings at prevailing wage rates.

Preliminary Cost Estimate: \$175,000-\$185,000

Thank you for the opportunity to assist you with this assessment. As you prepare to evaluate potential modernization projects at this site, I would welcome the opportunity to consult with the District on the impact any such work would have on the existing roofing infrastructure. Please do not hesitate to contact me if there are any questions or concerns.

Sal Salem
Field Advisor
Tremco, Inc.
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