

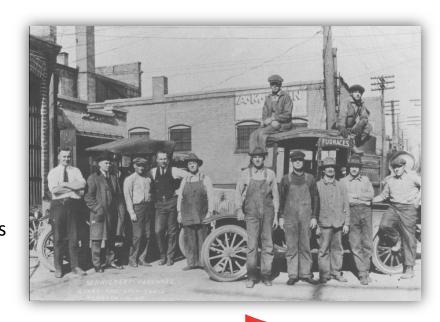
Protecting Your Assets:

Benefits of Proactively Planning Your Roof Expenses

Julie Leiferman, Business Development Manager

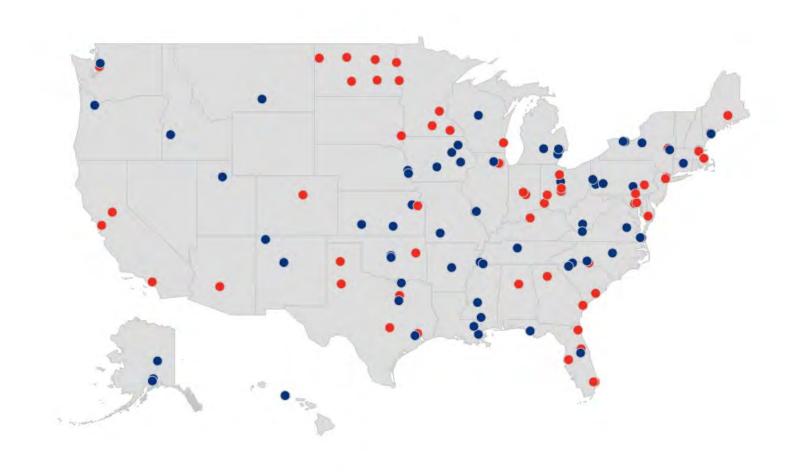
About Us

- Established in 1906 by George Schwickert
- Founding member of Tecta America Corporation (2000) nation's leading roofing contractor
 - Corporate Tecta America has over 70 locations which are wholly owned subsidiaries; with more than 3,500 Employees
- Schwickert's operating unit has four locations in Mankato, Rochester, Savage, MN & Lawrence, KS
- One of the **best safety ratings in the industry-** EMR of .59
- Deep financial strength unlimited bonding capacity
- Experience in all roof systems and certified by every major manufacturer
- Design/Build/Assist on mechanical piping and HVAC systems
- Comprehensive preventative maintenance programs for roof and HVAC systems





Tecta America Operating Unit Locations





Maintenance: Roofing Systems

Preventative Maintenance

- Structured maintenance programs that repair roofs before leaks occur
- Allows for educated maintenance decisions
- Maximizes roof life expectancy
- Minimizes upkeep
- Assesses roof condition

Inspections

- Asset Management
- Customized Roof
 Maintenance Inspection
 Service
- Survey and 1-5 years short term planning & 1-10 years long term planning



Maintenance: Roofing Systems- Tecta Tracker

Tecta Tracker breaks down the assessment into the following categories for each section of your roof:

- Budget
- Reports- R.A.P., Portfolio, Topline Summary
- Roof Sections Listing and Details
- Benchmarks- 10 Point Rating System
- Forecasts- Maintenance and Capital
- Executive Summary
- Photos and Drawings
- Service History
- Documents- Warranties, Forecasts



Detailed real-time information on your facility's roofing sections by performing a roof audit to combine all critical information in one place.



Reactive Vs. Proactive



VS.





Reactive Approach

Reactive:

- x Acting in a response to a situation rather than creating or controlling it
- Doing things only in response to something that has happened

Outcomes of a Reactive Approach

- Not able to budget
- Putting out fires
- General maintenance turns into emergencies
- Not able to plan daily, weekly, monthly, quarterly, annually





Proactive Approach

Proactive:

- ✓ Creating or controlling a situation by causing something to happen rather than responding to it after it has happened
- ✓ action and result oriented behavior

Benefits of a Proactive Approach

- Budgets
- Planned Maintenance
- Plan spending
- Real time
- History

- Inventory
- Analysis
- Accuracy
- Accessible





REACTIVE APPROACH AT WHAT COST?



AT WHAT COST?

- Increased Maintenance Costs:
 - Waiting for a roof leak to occur, fixing just that leak and then waiting for the next leak to happen costs an average of 30 cents per square foot annually, versus an average of 15 cents per square foot annually.
- Life Cycle:
 - Proactively maintained roofs last an average of 21+ years compared to an average lifespan of 13 years for reactive maintenance



AT WHAT COST?

- Replacement Cost:
 - Roofs that have been proactively maintained can sometimes cost less than ½ the cost of a roof that has not been maintained.
 - Difference between a complete tear off and a membrane swap with added insulation is approximately \$8.00 per square foot. (Do the math 100,000 SF roof is \$800,000.00)
- Other Hidden Factors:
 - Mold
 - OR Room Shutdown due to leaks
 - Patient Room Shutdown due to leaks
 - Others?

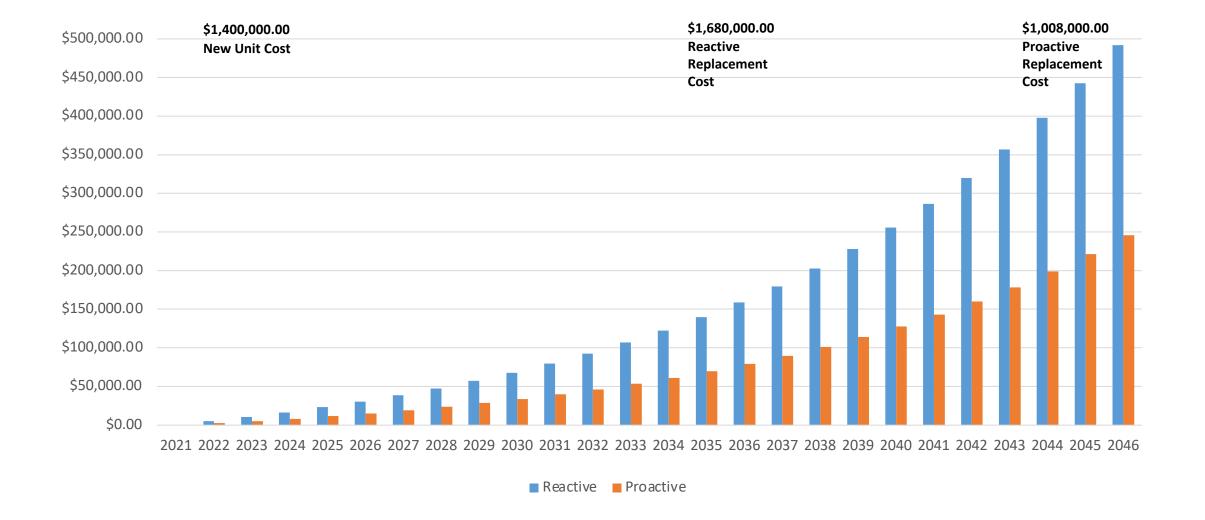


25 Year Life Cycle Comparison

The longer a roof's life can be extended, the more the overall savings increase and life cycle costs decrease.

- Ballast EPDM Example 100,000 SF roof new \$1,400,000.00
- Reactive maintenance Maintenance cost is \$5K per year and goes up incrementally by 10% per year until failure at year 13. New roof is 20% higher at cost of \$1,680,000.
- Reactive maintenance and then switched to proactive maintenance after 5 years. At the 5 year mark maintenance cost is \$10K, but then goes down to \$2500 per year until failure at year 21. New roof is potentially 40% lower due to being able to reuse substrate. Cost for the new roof would be approximately \$1,008,000.
- Proactive maintenance Maintenance cost is \$2500K per year and then goes up incrementally by 10% per year until failure at year 21. New roof is potentially 40% lower due to being able to reuse substrate. Cost for the new roof would be approximately \$1,008,000.





BREAKING THE REACTIVE ROOF CYCLE

- Proactive roof asset management goal is to maximize the life of an entire roofing portfolio and to accurately predict the expense or capital dollars needed to maintain the portfolio over time.
- Determining roof life expectancy is the basis for all recommendations of an asset management program.
- Approximately 85% of roofs are replaced unnecessarily due to bad information. A roof undergoes serious wear and tear throughout it's lifetime, with factors of weathering and degeneration taking their toll.
- The current condition of a roof can be determined by testing and analysis that will determine if roof repair or restoration is an option or whether roof replacement is necessary. Repairing a roof should be considered if it will survive its original service life expectancy without exceeding the cost of a new roof.



Where to Start

- 1. Comprehensive Roof Inspection with core cuts to get baseline
- 2. Condition Assessment Analysis
- 3. Recommended Solutions and Costs
- 4. Online Software
- 5. History and Data Tracking



Conduct Routine Inspections and Maintenance

- There is no such thing as a maintenance free roof system
- Maximize performance, extend the life of the roofing system
- Keep warranty valid
- Reduces or eliminates leak repair calls
- Reduces overall cost of the life of the roof
- Just because the water isn't seen in the building doesn't mean the roof isn't leaking
- The sooner the deficiency or damage is repaired the smaller the cost of the repair, exterior and interior



Preparing Your Roof for Seasonal Wear

Maintenance & repair

=

the key to making sure your roof is ready at all times.

Being proactive can mean the difference between having a small repair vs. a full tear off and replacement



1. Material

Look at the roof surface for cracks, bubbles, cuts, worn or missing material and loose materials.

With your permission, your roofers should immediately make repairs to any damage found

Associated Risks:

 These issues can allow water into the roofing system. This may not show up inside the building but is degrading the roof system from within. This can also cause issues with mold and deck deterioration.



2. Flashings

All flashings should be inspected and verified as secure and sealed

Associated Risks:

 Water could accumulate under the flashings and then freeze in the cold temperatures, causing the flashing to pull loose further until the water makes it into the building.



3. HVAC and other Projections

Ensure there haven't been alterations made to any penetrations.

If there have been, make sure all are flashed and properly sealed.

Associated Risks:

 When alterations are made this adds added stress to the roofing system and can separate pourable sealer in pitch pans or caulked joints on units. If not properly sealed this can cause damage not only to the building but also to your roof top units.



4. Metal Details

Inspect and make sure all details are secure and properly installed.

Associated Risks:

 Improper metal installation can allow water and ice into the system causing premature degradation to the metal. This can cause metal to come loose and get blown across a roof and cause more damage.



5. Pitch Pans

Inspect and ensure all pitch pans are properly sealed.

Associated Risks:

 Pitch pans are usually located at electrical connections, AC condensers and gas lines. If not properly sealed this will allow water into electrical panels which can cause equipment to ice up putting stress on gas line joints causing leaks.



6. Drainage

Inspect all drains, scuppers, gutters and downspouts to make sure water is properly draining from the roof.

All strainer baskets will also need to be cleaned and inspected for proper attachment.

Associated Risks:

 A plugged drain, scupper, gutter or downspout can cause water and ice to build up on a roof system and it can also cause ice dams. This adds unneeded weight and stress to the roof and can cause major damage not to mention, pushing water into the building that would have run off if not for the ice dam.



It's also important to examine surrounding areas adjacent to your facility for things that could affect your roof during the winter months



7. Trees

Don't forget..snow = weight!

Surrounding trees and branches hanging over and around your building are a potential hazard.

Associated Risks:

- Branches can dump a significant amount of snow on your roof
- Entire branches could break and land on your roof



What Can Void a Warranty?

- Unauthorized alterations, adding or deleting equipment on you roof. You need to contact your roofing manufacturer before installing anything on your roof
- Incorrect repairs, not using the manufacturers product or not preforming them to manufacturers specifications.
- Failure by the owner to use reasonable care in maintaining the roof
- Read the Terms and Conditions of the warranty.



OUT OF SIGHT OUT OF MIND UNTIL YOU HAVE A LEAK

PICTURES OF EXAMPLES OF WHAT TO LOOK FOR





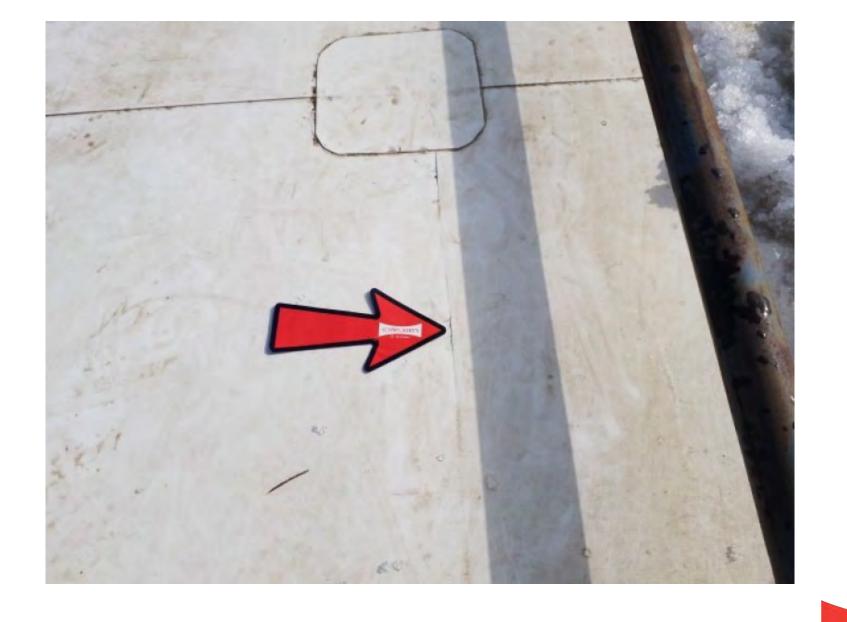




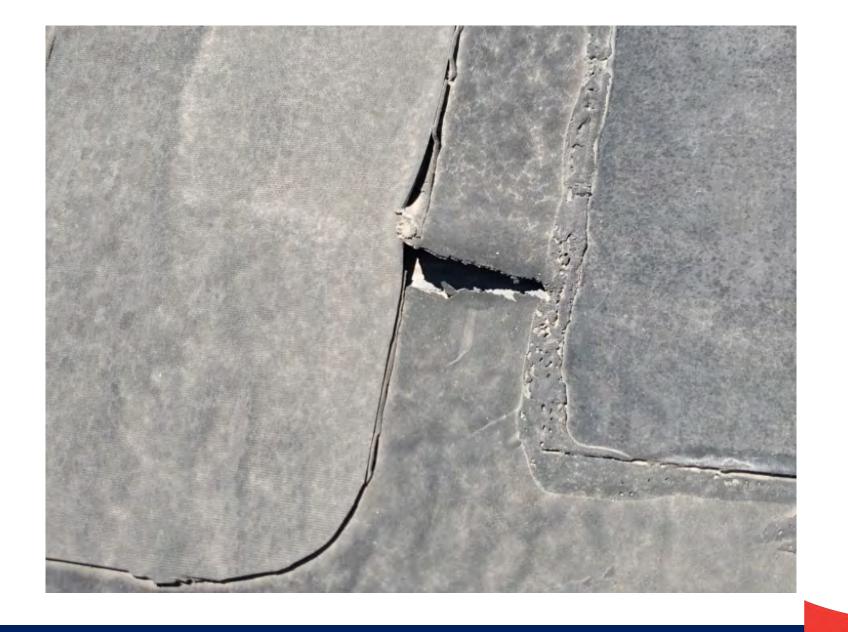














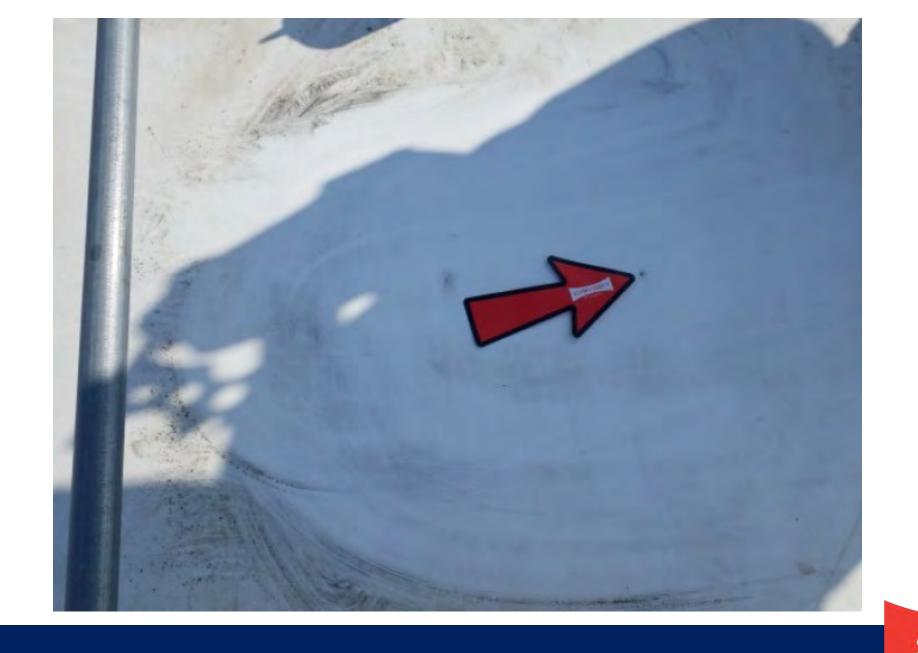






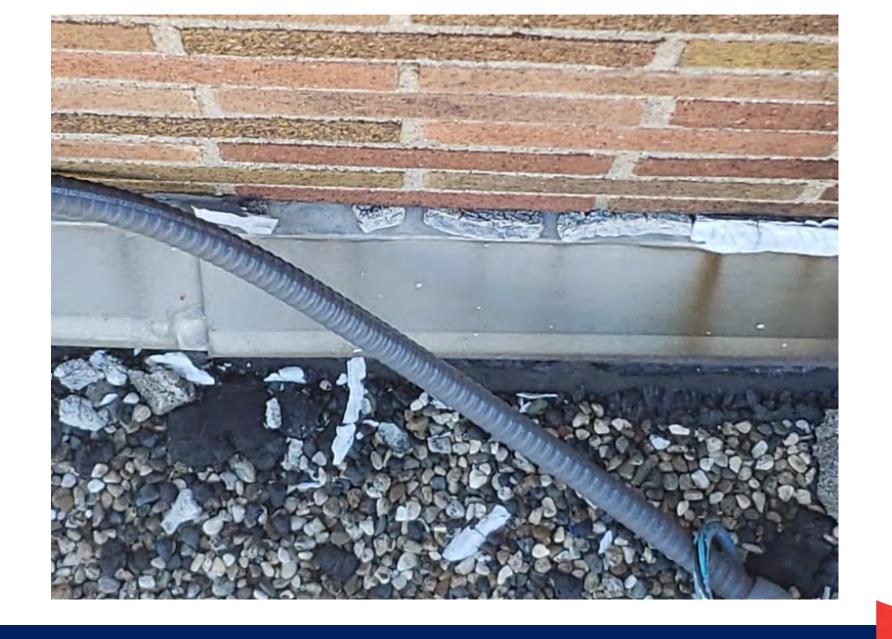
























PROACTIVE APPROACH





ACILITIES INFRASTRUCTURE **PHYSICAL** EQUIPMENT

ENTERPRISE



What is Asset Management?

Asset Management is a systematic process of developing, operating, maintaining, upgrading and disposing of assets cost effectively to ensure a company's tangible and intangible assets are maintained and accounted for.



Benefits of Asset Management

Asset Management allows you to go from a reactive approach to a proactive approach.





Why Have an Asset Management Plan

- Critical for **efficient location monitoring, inventory, oversight** of maintenance, asset condition and depreciation
- Manual documentation and asset tracking can be overwhelming and therefore is often not done
- In some industries such as health care and government, regulations mandate that certain assets be carefully monitored and managed.
 - · Some insurance policies require you to have an asset management plan
- Missed opportunities for uncovering ways to optimize performance, enhance productivity and boost the company's bottom line
- Predicts asset failure in order to avoid costly downtime and reduces maintenance costs
- Saves time and money
- Allows you to make effective budgeting operations and financial decisions based on accurate data







Successful Asset Management Program Inclusions

- Integrated data systems (Roofing, HVAC, etc.)
- Centralized database
- Visibility
- Ability to add, subtract and capture history
- Conducts a critical equipment analysis
- Aids in optimizing life cycle
- Short/long range planning (budgets)
- Benchmark system to critically analyze your assets to determine remaining service life
- Tailored to fit your needs



Schwickert's Tecta Tracker





"One Company - Endless Solutions."

Roofing | Architectural Sheet Metal | Specialty Metal Fabrication | Electrical **Heating, Cooling & Refrigeration | Plumbing | Pipe Fitting | Crane Service** 24/7 Emergency Service Response | Waterproof Systems | Preventative Maintenance Facilities Asset Management | Roof Top Safety Solutions **Metal Wall Panel Systems | Gutters & Down Spouts Air Duct Cleaning | Chimney Sweeping | Dryer Vent Cleaning** Cooperative Purchasing Contracts through TIPS & NCPA | Design Build & Design Assist Specialty Mechanical Systems for Healthcare, Industrial & Manufacturing **Backflow Prevention & Fire & Smoke Damper Testing and Certification**

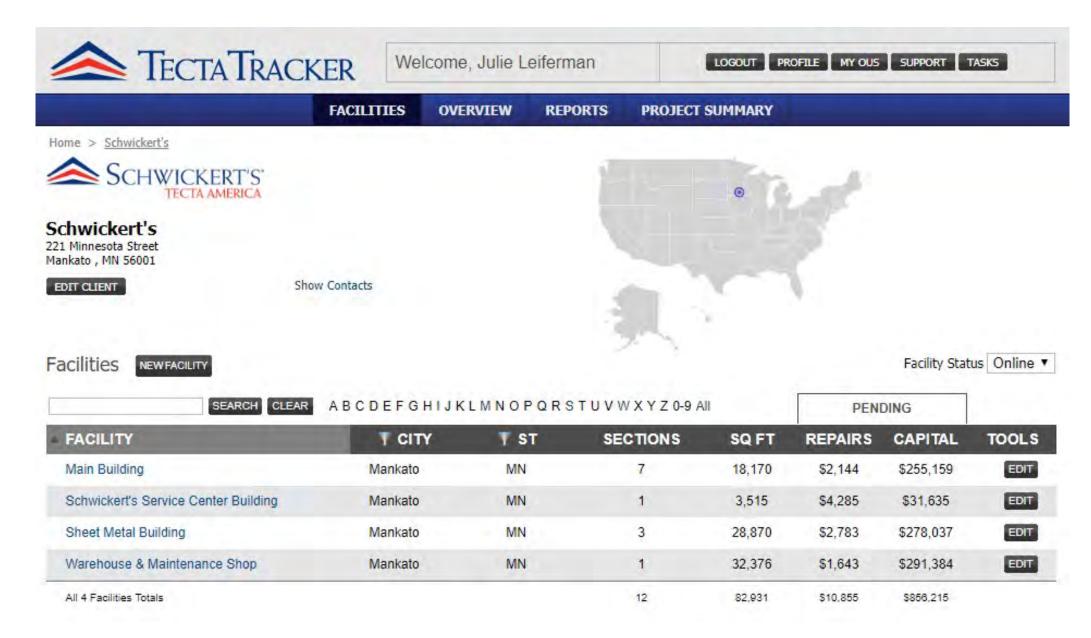


Questions?

Julie Leiferman
Business Development Manager
jleiferman@tectaamerica.com
507-381-5524



EXAMPLES FROM AN ASSET MANAGEMENT SYSTEM





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MECH UNITS

MECH BUDGET

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Sections

NEW SECTION

LIST VIEW

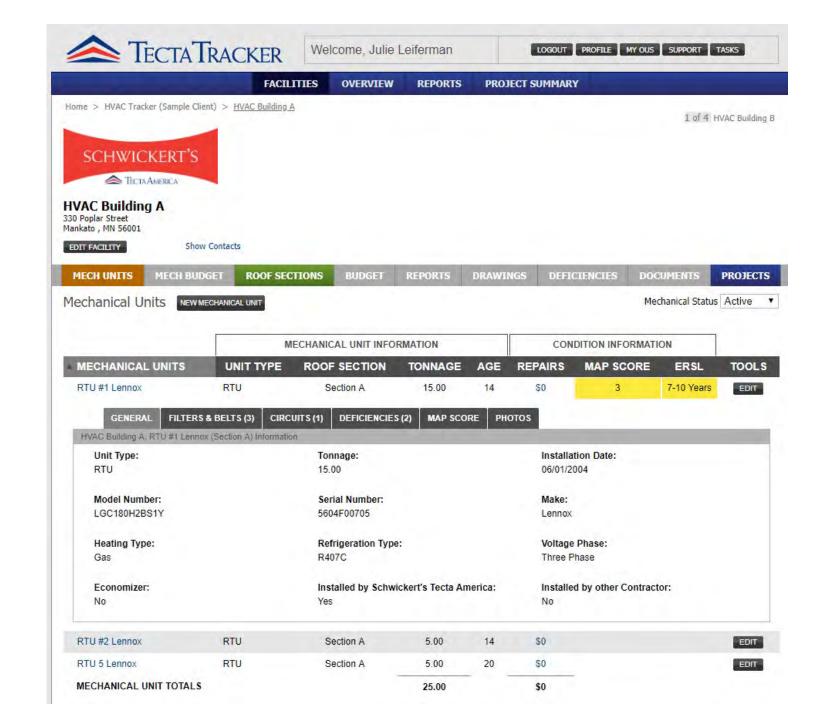
MAP VIEW

*The most recent Facility Roof Audit was performed on 06/22/2017.

BUDGET

		R	OOF SYSTEM INFOR	MATION		CONDITIO	ON INFORM	ATION	
SECTIONS	TYPE	ATT	SQ FT	AGE	PHOTOS	REPAIRS	RAP	ERSL	TOOLS
Section A	BUR-A	Hot	1,626 (approx)	27	3	\$1,000	27	4-6 Years	EDIT
Section B	EPDM	В	2,838 (approx)	12	3	\$406	32	7-9 Years	EDIT
Section C	BUR-A	Hot	8,048 (approx)	16	3	\$0	34	7-9 Years	EDIT
Section D	TPO	U	2,595 (approx)	5	3	\$0	40	7-9 Years	EDIT
Section E	EPDM	FA	639 (approx)	5	3	\$369	41	10+ Years	EDIT
Section F	EPDM	В	2,407 (approx)	16	3	\$369	31	7-9 Years	EDIT
Section G&H	EPDM	FA	17 (approx)	12	3	\$0	37	7-9 Years	EDIT
SECTION TOTALS			18,170			\$2,144			

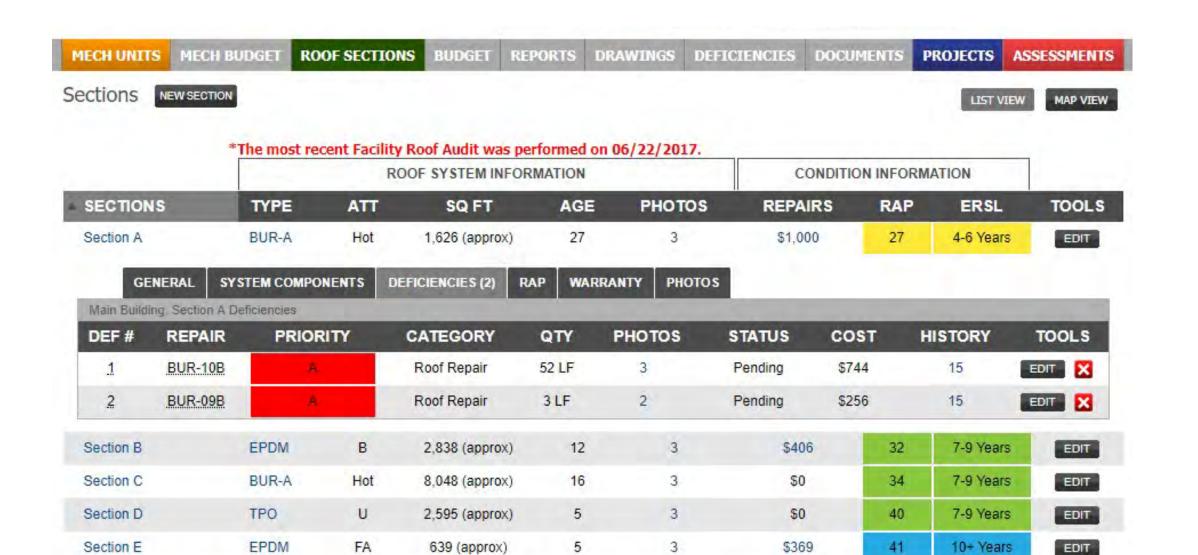
*The most recent Facility Roof Audit was performed on 06/22/2017. CONDITION INFORMATION ROOF SYSTEM INFORMATION TOOLS SECTIONS TYPE ATT SQ FT AGE **PHOTOS** REPAIRS RAP ERSL Section A BUR-A Hot 1,626 (approx) 27 3 \$1,000 27 4-6 Years EDIT SYSTEM COMPONENTS **DEFICIENCIES (2)** RAP WARRANTY **PHOTOS GENERAL** Main Building, Section A Information Section Overview: Section A is a Asphalt Built-Up Roof roof system that is believed to be approximately twenty-six years old, and is in good condition. As of the Facility Roof Audit, there are approximately \$1,000.00 in pending repairs that should be completed on this roof section. With timely completion of recommended repairs and continued regular maintenance, this section has an estimated remaining service life of 3-5 Years. System Type: Square Feet: Roof Pitch: Asphalt Built-Up Roof (BUR-A) 1,626 (approximate) Unknown Attachment Type: Installation Date: Core Cut Taken: Hot Asphalt 01/01/1991 No No. of Roof Layers: Membrane Color: Manufacturer: Unknown Color Johns Manville International Unknown Installed By: REVIEW SECTION Schwickerts Section B **EPDM** В 12 3 \$406 32 7-9 Years 2,838 (approx) EDIT Section C BUR-A Hot 16 3 \$0 34 7-9 Years 8,048 (approx) EDIT Section D TPO U 5 3 \$0 7-9 Years 2,595 (approx) EDIT 40 Section E **EPDM** FA 5 3 \$369 10+ Years 639 (approx) 41 EDIT Section F **EPDM** 2,407 (approx) 16 3 7-9 Years B 31 EDIT \$369 Section G&H **EPDM** FA 12 3 \$0 7-9 Years 17 (approx) 37 EDIT SECTION TOTALS 18,170 \$2,144



				ROO	FSYS	TEMI	NEC	ORMA	TION		COND	ITION INFORMA	ATION	
SECTIONS	TYPE		ATT		5	Q FT			AGE	PHOTOS	REPAIRS	RAP	ERSL	TOOL
Section A	BUR-A		Hot		1,526	(appr	ax)		27	3	51,000	27	4-6 Years	EOIT
GENERAL	SYSTEM COM	PONEN	ITS	DEF	CILNC	ILS (2)		RAP	WARRANT	Y PHOTOS				
with Uniding, Section	A Root Assess	ment P	rolle'				œ.							NAP HISTOR
ASSESSMENT	CATEGORIE	s		ROOF	ASS	ESS	OR	POIN	ITS	RAP	ERSL	ASSESSM	ENT DATE	: 06/22/201
Membrane, Seams	& Surfacing	5	4	3	2	1	- 6	4	5					
Membrane Base Fl	ashings	5	4	3	2	1	0			Done	Estimated			
Insulation & Deckir	ig.	5	4	3	2	1	0	-3	5	Roof Assessor	Remaining			
Drainage Condition		5	4	3	2	1	8			Points	Service Life	R	AP: 27	*
Roof Top Traffic		5	4	3	2	1	10					_		
Leak Status		5	4	3	2	1	.0			0-15	0-1 Year			
Roof Age		5	4	3	2	1	.0			16-20	2-3 Years	ERSL	: 4-6 Y	ears
Interior Sensitivity		5	4	3	2	1	0			21-30	4.6 Years			
Current Repair Sta	bus	5	4	3	2	1	0	- 4	5	31-40	7-9 Years			
Overall Assessmen	nt	5	14	3	2	1	0		5	41-50	10+ Years			

^{*} This table suggests the Estimated Remaining Service Life of this roof section based on ten key categories of assessment. Remaining service life depends on regular maintenance, timely completion of additional recommended repairs, environmental conditions & risk factors, roof system type and overall design specifications and certain non-roofing components of the building envelope.

Section 0 BUR-A Hot Section 0 TPO U Section F EPDM FA Section 6 EPDM B Section G&H EPDM FA	18,170			\$2,144			
Section 0 TPO U Section F EPOM FA	17 (approx)	12	3	80	37	7-9 Years	EDIT
Section () TPO U	2,407 (approx)	16	3.	5369	31	7-9 Years	FDIT
	639 (approx)	5	3.	\$369	41	10+ Years	EDIT
Section C BUR-A Hot	2,595 (approx)	5	3	\$0	40.	7-9 Years	ECIT
	8,048 (approx)	16	3	\$0	34	7-9 Years	EDIT
Section 8 EPDM B	2,838 (approx)	12	3	\$406	32	7-9 Years	EDIT



16

12

3

3

\$369

\$0

\$2,144

31

37

7-9 Years

7-9 Years

EDIT

EDIT

Section F

Section G&H

SECTION TOTALS

EPDM

EPDM

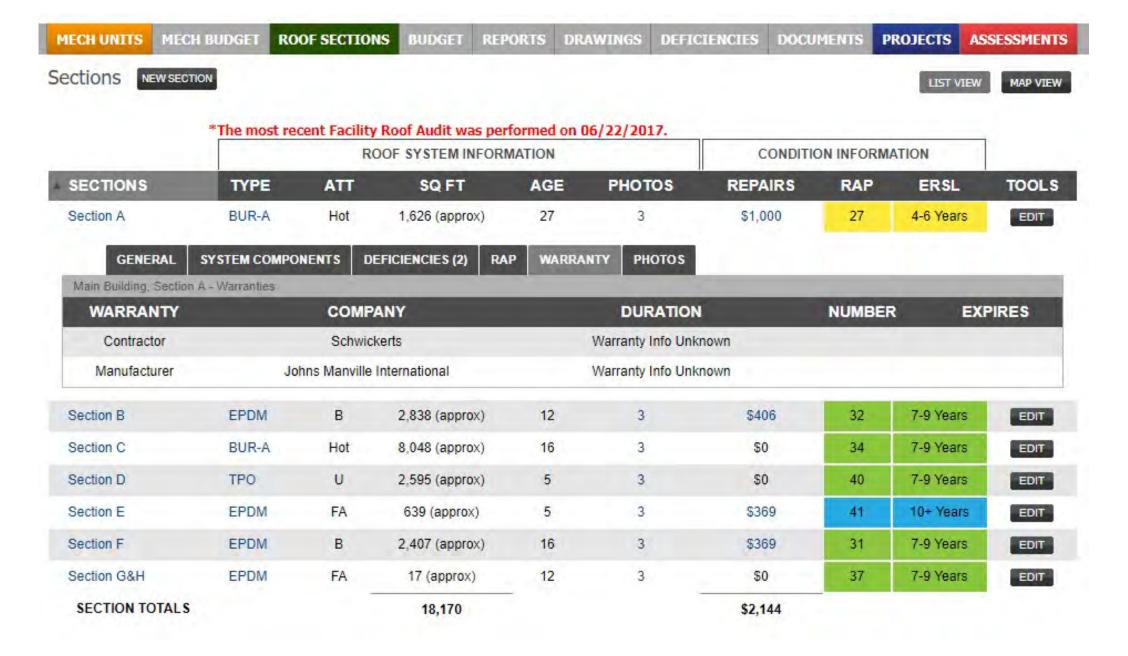
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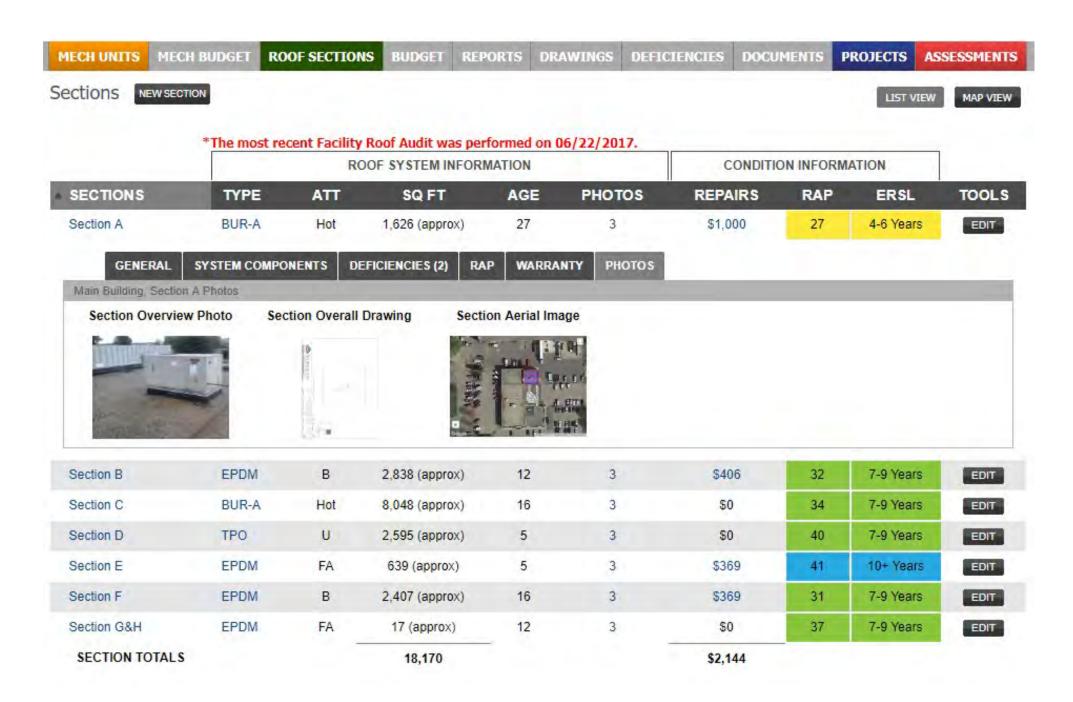
FA

2,407 (approx)

17 (approx)

18,170







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MECH UNITS

MECH BUDGET

ROOF SECTIONS

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ASSESSMENTS

Drawings

NEW DRAWING

CAPTION	FILE	DATE	TOOLS
2014 Main Building Drawings	copied_5360_2014 Main Building Drawings_533db648a2dea.pdf	07/10/2014 12:19	EDIT X
2014 Overall Roof Drawing	copied_5360_2014 Main Bldg-Overall_533db6143f9e6.png	07/10/2014 11:27	EDIT X

LOGOUT

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ASSESSMENTS

•

NAME

Roof Section Information

RUN REPORT

Mechanical Inventory Report

RUN CSV

RUN XLSX

Roof Repair History

RUN REPORT

RUN CSV

RUN XLSX

Customize

Project

All Projects

Mechanical Repair History

There are no completed mechanical projects for this facility.

Photographic Essay

RUN REPORT

Project

06/22/2017 Facility Roof Audit

.

Facility Summary report has been moved to the project reports page.

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Main Building

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MECH UNITS

MECH BUDGET

ROOF SECTIONS

BUDGET

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DEFICIENCIES

DOCUMENTS

PROJECTS

ASSESSMENTS

Deficiencies

PROJECT 06/22/2017 - Facility Roof Audit ▼

T SECTION	DEF#	TREPAIR	T PRIORITY	CATEGORY	QTY	PHOTOS	TSTATUS	COST	HISTORY	TOOLS
Section A	.1	BUR-10B	A ₁	Roof Repair	52 LF	3	Pending	\$744	15	EDIT X
Section B	1	SP-09A	A	Roof Repair	4 LF	1	Pending	\$406	15	EDIT X
Section E	1	SP-03A	A	Roof Repair	1 LF	1	Pending	\$369	15	EDIT X
Section F	1	SP-09A	A	Roof Repair	1 LF	2	Pending	\$369	15	EDIT X
Section A	2	BUR-09B	A	Roof Repair	3 LF	2	Pending	\$256	15	EDIT X



FACILITY SUMMARY REPORT



Schwickert's

Old Company Building 221 Minnesota Street, Mankato, MN 56001

Facility Roof Audit Performed On:

Jun 23, 2017







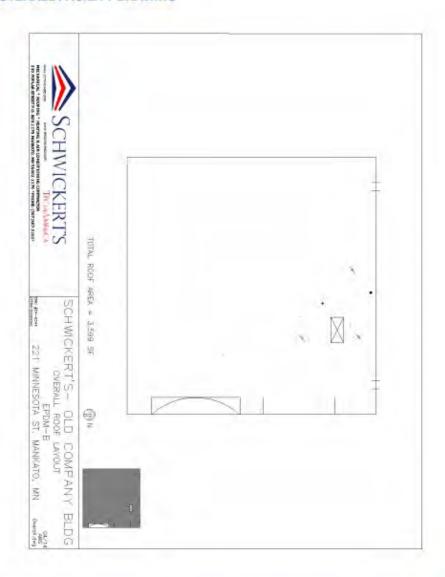
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Overall Facility Drawing	2
Project Overview	3
Project Summary	
Facility Overview	
Financial Forecast	
Action Items	
Section Information	
Section A	5
Program Overview	9

Please note that the financial figures provided in this report reflect opinions of probable costs based on current pricing. However, conditions may change with time, and market fluctuations in raw material pricing are common. As such, financial figures should be considered initial budget estimates derived from current roof information. In addition, the identification of roof system components is based on test cut sampling and/or information from the owner's records. However, in some cases actual roof system components may vary from those reported here.



OVERALL FACILITY DRAWING





PROJECT OVERVIEW

Project Summary

On June 23, 2017, Tecta roofing specialists performed a comprehensive roof audit of your facility.

The goal of the TectaPlan inspection and maintenance program as a management tool is to identify and address your roofing issues and needs.

Facility Overview

Currently, this facility has 1 roof section that is approximately 26 years old and in satisfactory condition.

ROOF SECTION	SQFT	SYSTEM TYPE	AGE	ERSL	PRIORITY A	PRIORITY B	PRIORITY C
Section A	3,515	EPDM	26	3-5 Years	\$4,285	\$0	\$0
Totals					\$4,285	\$0	\$0

^{*}Repair pricing is for budget purposes, and may not reflect travel charges or additional project costs. Actual project repair costs depend on the scope of work selected. Please request a proposal for final pricing.



Financial Forecast

There is 1 capital project currently being proposed for this facility over the next five years. The complete Financial Forecast includes Annual Program Fees (Inspection Costs), as well as any current Pending Repair Costs, and an Additional Service Budget for unplanned repairs throughout the year.

COST CATEGORY	2017	2018	2019	2020	2021
Capital Projects*	\$0	\$0	\$31,635	\$0	\$0
Section A	\$0	so	\$31,635	so	\$0
Pending Repairs**	\$4,285				
Program Fees	\$500	\$500	\$500	\$500	\$500
Additional Service	\$1,800	\$1,900	\$2,000	\$2,100	\$2,200
Totals	\$6,585	\$2,400	\$34,135	\$2,600	\$2,700

^{*} Typically roof replacements or full-scale restorations.

Action Items

Regularly inspecting and properly maintaining your roofs are instrumental to prolonging service life and deferring costly replacements as long as possible. Therefore, we recommend that you continue with the planned maintenance program on an annual or semi-annual basis.

Two (2) deficiencies were noted on the day of the 2017 roof audit, which are pending at an approximate total repair cost of \$4,285.00.

By completing the above repairs, it will help extend the life of the roof and will help prevent water from entering the roof system.

[&]quot;Includes all Priority A, B and C Repairs.



SECTION A

OVERVIEW

Section A is a Ethylene Propylene Diene Monomer roof system that is believed to be approximately twenty-six years old, and is in satisfactory condition. As of the Facility Roof Audit, there are approximately \$4,300.00 in pending repairs that should be completed on this roof section. With timely completion of recommended repairs and continued regular maintenance, this section has an estimated remaining service life of 3-5 Years.

SYSTEM INFORMATION

 System Type
 EPDM

 Sq Ft
 3,515

 Attachment
 Ballasted

 Install Date
 01/01/1991

 Manufacturer
 Carlisle Syntec, Inc.

 Installed By
 Unknown Contractor

NOTES

Recommend re-roofing this section in the next 3 years due to age and weathering - flashing details and glued seams starting to curl. No roof deficiencies noted at the time of the 2016 roof audit.



WARRANTY TYPE	COMPANY	NUMBER	EXP DATE	
Contractor	Warranty Info Unknown			

Contractor Warranty Info Unknown

Manufacturer Carlisle Syntec, Inc.

PENDING REPAIRS*

Priority A \$4,285

Priority B \$0

Priority C \$0

Total Pending \$4,285

PROPOSED CAPITAL PROJECT

 Project Year:
 2019

 Project Cost:
 \$31,635

 Project Type:
 Tear Off / Replace

Proposed System: EPDM

Assessment Categories	F	toof	Ass	essn	nent	Poi	nts	Roof A	Assessor Points	Estimated R	emaining Service Life
Membrane, Seams & Surfacing	5	4	3	2	1	0	-5	0-15		9-1700	
Membrane Base Flashings	5	4	3	2	1	0		-07/13		W-1-1-	
insulation & Decking	5	4	3	2	1	0	-5	16-20		2-3 Years	
Drainage Condition	5	4	3	2	1	0		10-20		2-5 rears	
Roof Top Traffic	5	4	3	2	1	0		21-30	212.42	3-5 Years	2223 2 2224
eak Status	5	4	3	2	1	0		21.00	RAP: 25	5-5 rears	ERSL: 3-5 Years
Roof Age	5	4	3	2	1	0		31-40		5-10 Years	
nterior Sensitivity	5	4	3	2	1	0		31-40		0-10 Teats	
Current Repair Status	5	4	3	2	1	0	-5	41-50		10+ Years	
Overall Assessment	5	4	3	2	1	0	-5	41-30		tov rears	
otal Points		1	25								

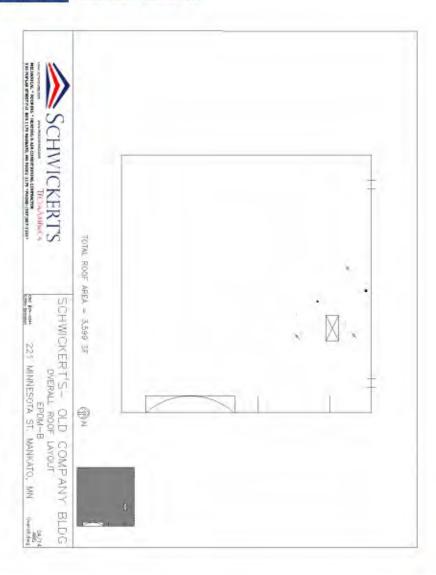
[&]quot;Repair pricing is for budget purposes, and may not reflect travel charges or additional project costs. Actual project repair costs depend on the scope of work selected. Please request a proposal for final pricing.

[&]quot;This table suggests the Estimated Remaining Service Life of this roof section based on ten key categories of assessment. Remaining service life depends on regular maintenance, timely completion of additional recommended repairs, environmental conditions & risk factors, roof system type and overall design specifications and certain non-roofing components of the building envelope.



SECTION A

OVERALL DRAWING





SECTION A

PENDING REPAIRS



https://www.lectabacies.com/https://

Repair #1:

Deteriorated membrane flashing will be removed and replaced using compatible Single-Ply materials and repair procedures in compliance with membrane manufacturer's recommendations and/or current industry standards.

Problem: SP-08 - Deteriorated Membrane Base Flashing

Section: Section A
Status: Pending
Priority: A - Urgent
Category: Roof Repair

Quantity: 180 LF Life Safety: No

Monitor Only:

Estimated Cost: \$3,347





Repair #2:

Unbonded membrane laps will be repaired using compatible Single-Pty materials and repair procedures in compliance with membrane manufacturer's recommendations and/or current industry standards.

Problem: SP-03 - Membrane Lap Unbonded

Section: Section A

Status: Pending

Priority: A - Urgent

Category: Roof Repair

Quantity: 40 LF Life Safety: No

Monitor Only:

Estimated Cost: \$938







FACILITY SUMMARY REPORT



COMPLETED REPAIRS



Mitors Fewer Installander com/(2044)

No repairs were completed during this inspection.



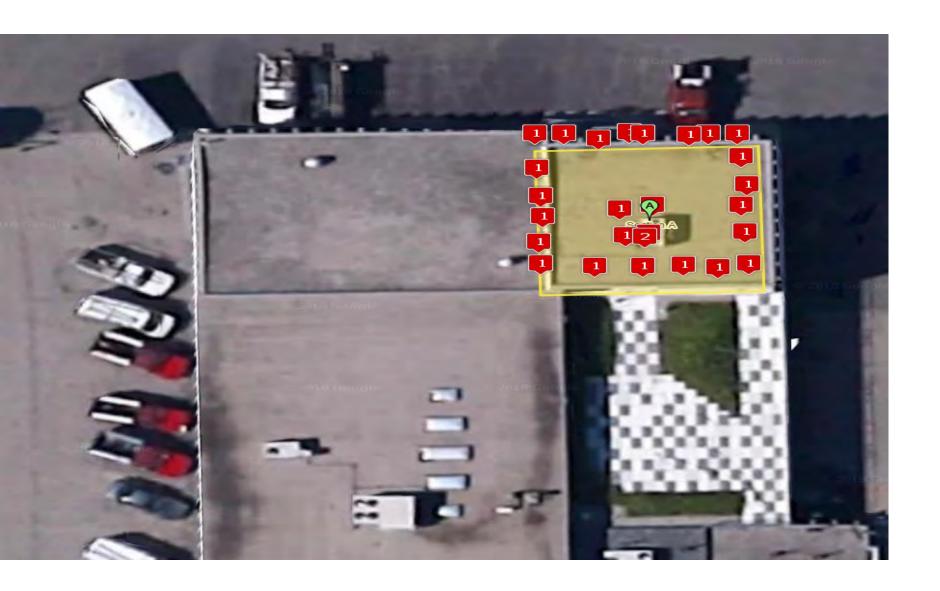
PROGRAM OVERVIEW

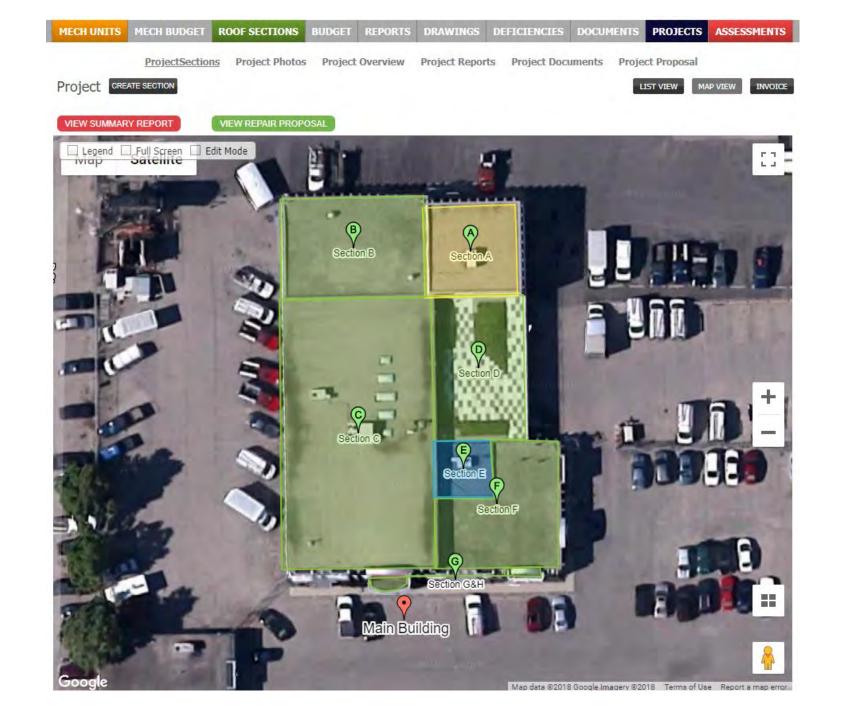
The initial phase of the TectaPlan program consists of an assessment of the roof(s) on your facility, including: meeting with site personnel, gathering available roof maintenance and warranty documentation, performing a walk-through of the facility to identify possible leak areas, determining field measurements and (where possible) system component information, visually inspecting the roof to determine overall condition and documenting defects.

The second phase consolidates information gathered during the initial site visit. In this phase, we utilize TectaTracker, our online roof asset management tool, to collate photographs, computer drawings, physical attributes and historical data to provide a complete assessment of your roof(s).

The final phase comprises a professional analysis of installed roofing on your facility with an emphasis on actions needed to return each roof to a maintainable condition, maximize performance and extend service life. To this end, a 5 year financial forecast of maintenance budgets and capital expenditures is provided.

The success of the TectaPtan inspection and maintenance program depends upon regular follow-up inspections, preventive maintenance and timely completion of recommended repairs, which allow the short term recommendations to be continually fine-tuned, and your roofing portfolio to remain in top condition. This approach maximizes roof service life and reduces overall cost over the life of the asset.





Budget Information 5 YEAR 10 YEAR

		P	ENDING REPA	MRS			MAIN	TENAN	CE AND	REPA	R FORE	CAST			
	PRIOR	ITY A	PRIORITY I	B PRIORITY C	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	тос
Pending Repairs	2,14	14	0	0	2,144										
Annual Program Fees					560	560	560	560	560	560	560	560	560	560	E
Additional Service Estimate					1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	ED
					4,104	2,060	2,160	2,260	2,360	2,460	2,560	2,660	2,760	2,860	
_															- 1
	EW FORECAS		_				_								
ctive Forecast 2017 Inspection	VIEW	EDIT	×								CA	PITAL	FOREC	ASI	
	_	_	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	THE RESERVE TO SHARE THE PARTY OF THE PARTY	-	_							_		
SECTIONS	SQ FT	AGE	ERSL	SYSTEM TYPE	PRO	JECT	TYPE	2017	2018	2019	2020	2021	2022	2023	202
SECTIONS Section A	SQ FT 1,626	AGE 26	ERSL 4-6 Years	SYSTEM TYPE BUR-A	PRO	JECT R1	TYPE	2017 0	2018 0	2019 0	2020 29,268	2021 0	2022 0	2023 0	202
10.000			- Contract of the Contract of		PRO		TYPE	256.45	Section 1	4.5	Contract of the last		A. R. Santa	0	-
Section A	1,626	26	4-6 Years	BUR-A	PRO	R1	TYPE	0	0	0	29,268	0	0	0	0
Section A Section B	1,626 2,838	26 11	4-6 Years 7-9 Years	BUR-A EPDM	PRO	R1 R1	TYPE	0	0	0	29,268 0	0	0 25,542	0	0
Section A Section B Section C	1,626 2,838 8,048	26 11 15	4-6 Years 7-9 Years 7-9 Years	BUR-A EPDM BUR-A	PRO	R1 R1 R1	TYPE	0 0 0	0 0 0	0 0 0	29,268 0 0	0 0 0	0 25,542 0	0 0 144,864	0 0 0
Section A Section B Section C Section D	1,626 2,838 8,048 2,595	26 11 15 4	4-6 Years 7-9 Years 7-9 Years 7-9 Years	BUR-A EPDM BUR-A TPO	PRO	R1 R1 R1 R1	TYPE	0 0 0	0 0 0	0 0 0	29,268 0 0 0	0 0 0	0 25,542 0 0	0 0 144,864 0	0 0 0
Section A Section B Section C Section D Section E	1,626 2,838 8,048 2,595 639	26 11 15 4 4	4-6 Years 7-9 Years 7-9 Years 7-9 Years 10+ Years	BUR-A EPDM BUR-A TPO EPDM	PRO	R1 R1 R1 R1 R1	TYPE	0 0 0 0	0 0 0 0	0 0 0 0	29,268 0 0 0 0	0 0 0 0	0 25,542 0 0	0 0 144,864 0	0 0 0 7,66

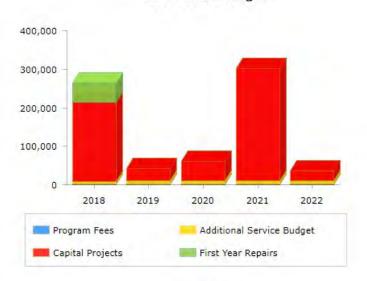
Budget Information 5 YEAR 10 YEAR

			PENDING REP	AIRS	MAIN	MAINTENANCE AND REPAIR FORECAST						
	PRIO	RITY A	PRIORITY	B PRIORITY C	2017	2018	2019	2020	202	21 TO	OLS	
Pending Repairs	2,	144	0	0	2,144							
Annual Program Fees					560	560	560	560	56	0	EDIT	
Additional Service Estimate					1,400	1,500	1,600	1,700	1,8	00	EDIT	
					4,104	2,060	2,160	2,260	2,3	60		
Main Building, Capital Forecast NEW F	ORECAST											
ctive Forecast 2017 Inspection ▼	VIEW EDIT	×						CAPIT	AL FOR	ECAST		
SECTIONS	SQ FT	AGE	ERSL	SYSTEM TYPE	PROJEC	T TYPE	2017	2018	2019	2020	202	
Section A	1,626	26	4-6 Years	BUR-A	R	1	0	0	0	29,268	0	
Section B	2,838	11	7-9 Years	EPDM	R	1	0	0	0	0	0	
Section C	8,048	15	7-9 Years	BUR-A	R	1	0	0	0	0	0	
Section D	2,595	4	7-9 Years	TPO	R	1	0	0	0	0	0	
	639	4	10+ Years	EPDM	R	R1		0	0	0	0	
Section E					n	R1		0	0	21,663	0	
Section E Section F	2,407	15	7-9 Years	EPDM	K	1	0	v		21,003	U	
		15 11	7-9 Years 7-9 Years	EPDM EPDM	R		0	0	0	0	0	

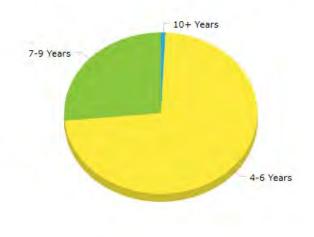
CURRENT SUMMARY

HISTORY TRENDING

Five Year Budget



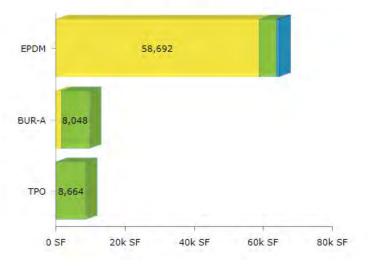
Estimated Remaining Service Life



Repairs by Priority



ERSL by Roof Type



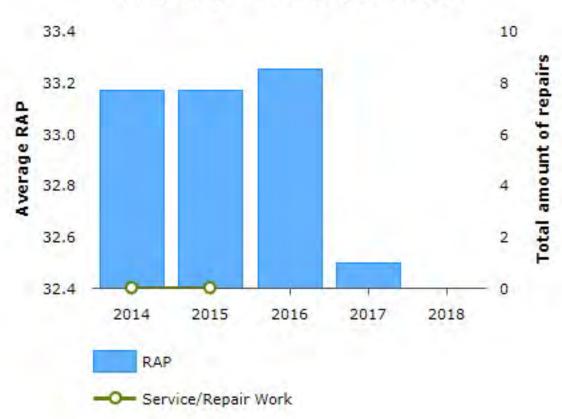
Overview

CURRENT SUMMARY

HISTORY

TRENDING

Trending Data - RAP/Service





LOGOUT PROFILE MY OUS SUPPORT TASKS

FACILITIES

OVERVIEW

REPORTS

PROJECT SUMMARY

Home > Schwickert's > Reports



Schwickert's

221 Minnesota Street Mankato , MN 56001

EDIT CLIENT

Show Contacts



NAME		
Portfolio Overview (Portrait)	RUN PDF	RUN DOC
Portfolio Overview (Landscape)	RUN PDF	RUN DOC
Capital Expenditures (Portrait)	RUN PDF	RUN DOC
Capital Expenditures (Landscape)	RUN PDF	RUN DOC
Topline Summary	RUN XLS	
Topline Detailed	RUN XLS	
Client Project History Report	RUN CSV	
Roof Repair History	RUN CSV	RUN XLSX
HVAC Repair History	RUN CSV	RUN XLSX
Mechanical Topline Summary	RUN XLS	

Main Buildi	ng					*****		Pending Repair:				_		Financia	Forecast		-		
Roof Section	Installed	Expiry	Roof Type	SqFt	RAP	ERSL	Priority A	Priority B	Priority C.	.2018	2019	2020	2021	2022	5053	2024	2025	2026	2027
Section A	01/01/1981		BUR-A	1,626	27	4-6 Years	\$1,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29,268.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Section B	01/01/2006		EPDM	2,838	32	7-9 Years	\$406.00	\$0,00	\$0.00	\$0,00	\$0,00	\$0.00	\$0,00	\$25,542.00	\$0,00	\$0.00	\$9,00	\$0.00	\$0,00
Section C	01/01/2002		BUR-A	8,048	34	7-9 Years	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$144,864.00	\$0.00	\$0.00	\$0.00	\$0.00
Section D	01/01/2013		TRO	2,535	40	7-9 Years	\$0.00	\$0.00	\$0.00	\$0.00	\$0:00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25,950.00	\$0.00	\$0:00
Section E	01/01/2013	01/01/2023	EPDM	633	41	10+ Years	\$369,00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,668.00	\$0.00	\$0.00	\$0.00
Section F	01/01/2002		EPDM	2,407	31	7-9 Years	\$369.00	\$0.00	\$0.00	\$0.00	\$0,00	\$21,663,00	\$0.00	\$0.00	\$0,00	\$0.00	\$0.00	\$0.00	\$0,00
Section 3&H	01/01/2006	01/01/2012	EPDM	- 17	37	7-9 Years	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$204.00	\$0.00	\$0.00	\$0.00	\$0.00
-				1 2	Capital Tota	ts				\$0,00	\$0,00	\$50,931.00	\$0.00	\$25,542.00	\$145,068.00	\$7,668,00	\$25,950.00	\$0.00	\$0.00
				Ann	iual Program	Fèes	,			\$560.00	\$560.00	\$560.00	\$560.00	\$560.00	\$560.00	\$560.00	\$560.00	\$560.00	\$0.00
				Additional Service Estimate		-			\$1,500,00	\$1,600,00	\$1,700.00	\$1,800.00	\$1,300.00	\$2,000,00	\$2,100,00	\$2,200.00	\$2,300.00	\$0,00	
				Facility Totals			\$2,144.00	\$0.00	\$0.00	\$2,060.00	\$2,160.00	\$ 53,191.00	\$2,360.00	\$28,002.00	\$147,628.00	\$10,328.00	\$28,710.00	\$2,860.00	\$0.00
Schwickert'	s Service Cent	er Boilding				******		Pending Repair:						Financial	Forecast				
Roof Section	Installed	Expiry	Roof Type:	SqFt	BAR	ÉRSL	Priority A	Priority B	Priority C	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Séction A	01/01/1991		EPDM	3,515	25	4-6 Years	\$4,285.00	\$0.00	\$0.00	\$0.00	\$31,635.00	\$0.00	\$0.00	\$0.00	\$0,00	\$0.00	\$0.00	\$0.00	\$0,00
				-	Capital Tota	ls				\$0.00	\$31,635.00	\$0.00	\$0.00	\$0,00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
				Ann	ual Program	Fèss				\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500,00	\$500.00	\$500,00	\$500.00	\$0:00
				Addition	onal Service I	Estimate				\$1,900.00	\$2,000.00	\$2,100.00	\$2,200.00	\$2,300.00	\$2,400.00	\$2,500.00	\$2,600.00	\$2,700.00	\$0.00
				Fa	cility To	tals	\$4,285.00	\$0.00	\$0.00	\$2,400.00	\$34,135.00	\$2,600.00	\$2,700.00	\$2,800.00	\$2,900.00	\$3,000.00	\$3,100.00	\$3,200.00	\$0.00
Sheet Meta	Building			06/07/2017			Pending Repairs				Financial Forecast								
Roof Section	Installed	Expiry	Roof Type	SqFt	BAP	ERSL	Priority A	Priority B	Priority C	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Section A	01/01/1981		EPDM	14,028	27	4-6 Years	\$454.00	\$2,328.00	\$0.00	\$126,252.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Section B	01/01/1991		EPDM	8,773	26	4-6 Years	\$0.00	10.00	\$0.00	\$78,957.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0,00
Section C	01/01/2009	01/01/2024	TPO	5,069	40	7-9 Years	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$72,828
					Capital Tota	ts			2.7	\$205,203.00	\$0,00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$72,828
				Ann	iual Program	Fees				\$500.00	\$500.00	\$500.00	\$500,00	\$500.00	\$500,00	\$500.00	\$500,00	\$500.00	\$0.00
			Additio	onal Service l	Estimate				\$1,900.00	\$2,000.00	\$2,100.00	\$2,200,00	\$2,300,00	\$2,400.00	\$2,500.00	\$2,600.00	\$2,700.00	\$0.00	
				Fa	cility Tot	tals	\$454.00	\$2,329.00	\$0.00	\$207,609.00	\$2,500.00	\$2,600.00	\$2,700.00	\$2,800.00	\$2,900.00	\$3,000.00	\$3,100.00	\$3,200.00	\$72,828
Warehouse	& Maintenance	Shop				05/23/2017		Pending Repair:						Financial	Forecast				
Roof Section	Installed	Expiry	Roof Type:	SqFt	BÁP	ERSL	Priority A	Priority B	Priority C	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Section A	01/01/1991		EPDIM	32,376	3.0	4-6 Years	\$0.00	\$1,643,00	\$0.00	\$0.00	\$0,00	\$0.00	\$291,384.00	\$0.00	\$0,00	\$0.00	\$0.00	\$0.00	\$0.00
				- 1	Capital Tota	ls.	-			\$0.00	\$0.00	\$0.00	\$291,384.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Annual Program Fees						\$362,00	\$962.00	\$962.00	\$362,00	\$962.00	\$962.00	\$362.00	\$962,00	\$362.00	\$0.00			
				Additional Service Estimate Facility Totals Capital Grand Totals Grand Totals						\$1,500.00	\$1,600.00	\$1,700.00	\$1,800.00	\$1,900.00	\$2,000.00	\$2,100.00	\$2,200.00	\$2,300.00	\$0.00
							\$0.00	\$1,643.00	\$0.00	\$2,462.00	\$2,562.00	\$2,662.00	\$294,146.00	\$2,862.00	\$2,962.00	\$3,062,00	\$3,162.00	\$3,262.00	\$0.0
										\$205,209.00	\$31,635.00	\$50,931.00	\$291,384.00	\$25,542.00	\$145,068.00	\$7,668.00	\$25,950.00	\$0.00	\$72,82
							\$6,883.00	\$3,972.00	\$0.00	\$214,531.00	\$41,357.00	\$61,053.00	San all al	200 202 00	\$156,390.00	\$19,390.00	\$38,072.00	\$12,522.00	\$72,828

