

Miller Ranch Townhome Association Reserve Study



Reserve Study
Project No. 16016

Prepared for
Miller Ranch Townhome Association
Edwards, Colorado

Prepared by
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Miller Ranch Townhome Association

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Introduction

Borne Consulting has been commissioned by the Miller Ranch Townhome Association to prepare a Reserve Study Update. The purpose of this Reserve Study update is to evaluate the common-area components for major repair, maintenance and replacement that are the responsibility of the Association. This Study provides a limited-scope evaluation of the existing condition and remaining life of the common-area components. The Study also includes estimated costs for the major repair, maintenance and/or replacement of the items to enable the Association to establish an adequate level of reserve funds for the upkeep of the property. Major repair, maintenance and/or replacement items are defined as anything that costs over \$1,000.

Community Description

Miller Ranch Townhome Association consists of 7 buildings that house 49 townhome-style residences that were built between 2003 and 2004. The Association maintenance responsibilities consist of asphalt driveways, wood fencing, painting associated with garage doors and exterior façade, and roofs.

Approach

To prepare this Reserve Study Projection, Borne Consulting has completed the necessary research, the component report, the cost estimates, the financial projections, and the projection interpretation.

The projections were assembled using the cash flow method. This method develops a reserve funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until a desired funding program is achieved.

Reference Material

The following references were provided to Borne Consulting for this Reserve Study update by the client:

- 2016 financial information
- Interest rate earned on invested capital funds
- Historical expense and past capital project information

Exclusions

Items not included in this Projection Update are:

- Non- common area components.
- Association components that have estimated costs below the reserve component threshold amount of \$1,000.
- Long lasting items with estimated economic lives exceeding 30 years, such as sanitary sewers or building structural components. However, these items are included if they are known to have a fairly predictable anticipated useful life that falls within the term of the Study.
- Normal operating items, i.e., taxes, insurance, snow plowing, utilities, cleaning and landscape maintenance, etc.

Disclaimer

This Reserve Study was prepared specifically for Miller Ranch Townhome Association. The information contained within this document has been assembled in conjunction with the client and is intended to assist the client with its reserve planning and funding. Borne Consulting does not guarantee, either explicitly or implied, that all repair and replacement items have been identified, the accuracy of the probable costs or the component lives.

In providing the opinions of probable replacement costs, the client understands that Borne Consulting has no control over costs or the price of labor, equipment or materials, or over the contractor's method of pricing, and that the opinions of probable replacement costs provided herein are made on the basis of Borne Consulting's qualifications and experience. Borne Consulting makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to actual bid or construction costs.

All comments made are based on conditions seen at the time of the site visit. We do not accept any responsibility for unknown or unknowable conditions within the existing site or structures.

Reserve Study Component Report

A. Paving

A1. Asphalt Drives

Location: Driveways associated with detached garages for the townhome units.

Description: Estimated 10,340 square feet of 10 feet wide, presumed recycled bituminous asphalt pavement.

Condition: Good condition with low grade raveling/weathering noted.

Preventative Maintenance

Seal Coating protects asphalt from ultraviolet rays and water, which helps to slow the process of oxidation and raveling. The goal of seal coat is create a waterproof, protective coating that can increase the life of an Associations pavement and improve appearance. *Source: Rocky Mountain Pavement*

Crack seal is a long term, cost effective way to maintain the life of an Associations pavement. It seals the cracks from water intrusion and other damaging factors. Material is applied hot to create a bond with the existing pavement as a defense against pavement deterioration. *Source: Rocky Mountain Pavement*

Corrective Maintenance

Asphalt overlays are an application of a layer of bituminous material to an existing surface. The benefits of asphalt overlays is that it adds structural strength to the existing surface, can improve drainage, re-establishes proper grade and smooth ride, and can be less expensive than complete removal and replacement. Asphalt milling may be needed in areas where curb and gutters are present. *Source: Rocky Mountain Pavement*

Conventional Patching repairs sub-grade failures by removing existing asphalt, possible excavation of subgrade material, possible addition of compacted fill material, and replacement of asphalt. The benefits to patchwork is that it stabilizes sub-grade material, re-establish proper drainage, and permanent and long lasting. *Source: Rocky Mountain Pavement*

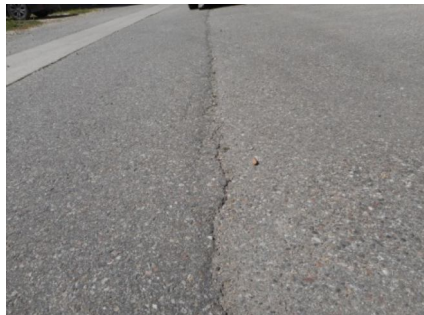
Age: Estimated 12-13 years old.

Expected Useful Life: 15 to 20 years with maintenance.

Effective Useful Life: 5 to 6 years.

Action(s):

- Cyclically seal coat and crack fill the asphalt surface every 3 years, starting in 2018.
- Mill and overlay and/or full depth patch replace the asphalt associated with the parking areas every 18 years, starting in 2023. Prior to this work, we recommend contacting an engineer to recommend the most cost-effective way to perform the work.



B. Landscaping and Appurtenances

B1. Wood Fencing

Location: End townhome units adjacent to streets and common areas.

Description: 885 linear feet of 6-foot high, wood privacy fencing.

Condition: Good to fair condition with damaged and/or missing wood pickets noted.

Age: Estimated 12-13 years old.

Expected Useful Life: 14 to 16 years with maintenance.

Effective Useful Life: 4 to 6 years.

Action(s):

- Cyclically stain or seal the wood fencing every 5 years, starting in 2016.
- Cyclically remove and replace approximately 1/3 of the wood fencing every 5 years, starting in 2020.



C. Façade

C1. Siding and Trim

Location: Exterior of townhome units and detached garages associated with the townhomes.

Description: Cementitious lap siding and hard board products installed as fascia, soffit, paneling, and window and door trim.

Condition: Good to fair condition.

Age:

- Paint - Estimated 5 to 6 years old.
- Siding and Trim - Estimated 12-13 years old.

Expected Useful Life:

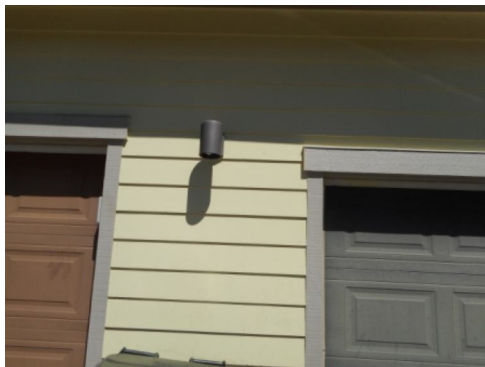
- Paint - 0 to 1 years.
- Siding and Trim - 30 to 40 years.

Effective Useful Life:

- Paint - 0 to 1 years.
- Siding and Trim - 18 to 28 years.

Action(s):

- Cyclically prep and paint the siding and trim and replace any damaged or deteriorated sections every 7 years, starting in 2022.
- Remove and replace the siding and trim in 2040.



C2. Metal Building Features

Location: Exterior of several townhome units.

Description: 2,580 square feet of 2-foot wide corrugated metal panels fastened to townhome framing components.

Condition: Good condition.

Age: Estimated 12-13 years old.

Expected Useful Life: 30 to 40 years.

Effective Useful Life: 24 to 34 years.

Action(s):

- Remove and replace metal paneling in 2040.
- Annually inspect the surface and fasteners along with repair any damaged paneling sections. This cost is not included in the Study because normally associations perform this as a maintenance item and the cost is considered an operating expense.



C3. Garage Buildings and Doors

Location: At the vehicular entrances to the detached townhome garages.

Description: Garage buildings with 7-foot tall panelized metal garage doors.

Condition: The paint associated with the garage doors is in good condition. We were informed that the Association is only responsible for the painting of the garage doors.

Age:

- Paint – Expected to be painted in 2016.

Expected Useful Life:

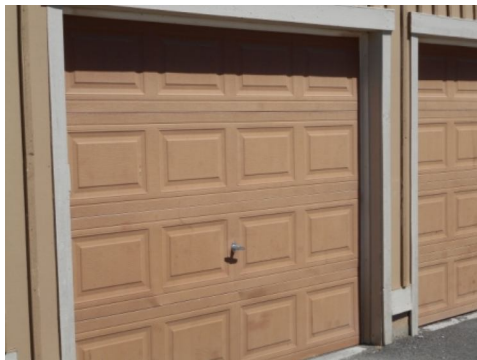
- Paint - 5 to 7 years.

Effective Useful Life:

- Paint - 7 years.

Action(s):

- Cyclically prep and paint the garages every 7 years, starting in 2023.



D. Roofing

D1. Asphalt Shingled Roofs

Location: On the roofs of all the townhome buildings and detached garages associated with the townhomes.

Description: Estimated 853 squares of laminated asphalt shingles over a membrane.

Condition: The roofs appeared to be in good condition, based only on the visual characteristics of the shingle material.

Age: Estimated 12 years old.

Expected Useful Life: 15 to 20 years due to mountainous climate.

Effective Useful Life: 9 years.

Action(s):

- Cyclically remove and replace the asphalt shingled roofs every 20 years, starting in 2025.



D2. Gutters, Downspouts and Extensions

Location: At the roof edges of all the townhome buildings and detached garages associated with the townhomes.

Description: Estimated 2,303 linear feet of aluminum gutters, downspouts, and extensions.

Condition: Good to fair condition overall. We noted some areas where the arrangement of the downspout extensions is displacing landscaping materials and other locations where the current geometry is unsatisfactory for effectively conveying the stormwater discharge from the downspouts.

Age: Estimated 12 years old.

Expected Useful Life: 15 years due to mountainous climate.

Effective Useful Life: 9 years due to mountainous climate.

Action(s):

- Cyclically prep and paint the gutters, downspouts, and extensions associated with driveway side of the detached garages. Also replace any damaged or deteriorated sections for all the gutters, downspouts, and extension regarding the detached garages and the townhome units every 5 years, starting in 2020.
- Cyclically remove and replace gutters, downspouts, and extensions every 15 years, starting in 2020.



D3. Heat Tape

Location: Within the gutters and downspouts of several townhome units.

Description: Unknown brand, phasing, and quantity.

Condition: Good to fair condition. A budget will be set for \$4000 per year, plus inflation, for the life of this Study. Budget could be used for repairing and/or additional installation of heat tape applications for various townhome units.

Age: Varies.

Expected Useful Life: 20 to 25 years.

Effective Useful Life: Varies.

Action(s):

- Cyclically inspect, repair and/or install additional heat tape cables for selected townhome units and detached garages every year, starting in 2016.



**Miller Ranch Townhome Association
RA Reserve Component Detail**

| Description | Date in Service | Replacement Year | Useful | Adjustment | Remaining | Units | Unit Cost | Current Cost |
|--|-----------------|------------------|--------|------------|-----------|---------------------|-----------|--------------------|
| Asphalt Drives | | | | | | | | |
| Cyclically seal coat and crack fill | 2012 | 2018 | 3 | 3 | 2 | 10,340 square feet | 0.25 | 2,585 |
| Engineering fees for asphalt evaluation | 2027 | 2027 | 18 | 0 | 11 | 1 Unit | 5,000.00 | 5,000 |
| Mill and overlay and/or full depth patc.. | 2004 | 2022 | 18 | 0 | 6 | 5,170 square feet | 3.50 | 18,095 |
| Asphalt Drives - Total | | | | | | | | <u>\$25,680</u> |
| Wood Fencing | | | | | | | | |
| Cyclically remove and replace wood fe.. | 2016 | 2016 | 15 | 0 | 0 | 294 linear feet | 33.11 | 9,766 |
| Cyclically stain or seal | 2011 | 2021 | 5 | 0 | 5 | 885 linear feet | 6.00 | 5,310 |
| Wood Fencing - Total | | | | | | | | <u>\$15,076</u> |
| Siding and Trim | | | | | | | | |
| Cyclically prep and paint the siding and.. | 2015 | 2022 | 7 | 0 | 6 | 103,061 square feet | 1.50 | 154,591 |
| Remove and replace | 2004 | 2040 | 35 | 1 | 24 | 97,314 square feet | 4.08 | 397,041 |
| Siding and Trim - Total | | | | | | | | <u>\$551,633</u> |
| Metal Building Features | | | | | | | | |
| Remove and replace the metal paneling | 2004 | 2040 | 35 | 1 | 24 | 2,580 square feet | 12.00 | 30,960 |
| Metal Building Features - Total | | | | | | | | <u>\$30,960</u> |
| Garage and Garage Doors | | | | | | | | |
| Cyclically paint the garage doors | 2016 | 2023 | 7 | 7 | 7 | 1 UT | 26,400.00 | 26,400 |
| Garage and Garage Doors - Total | | | | | | | | <u>\$26,400</u> |
| Asphalt Shingled Roofs | | | | | | | | |
| Remove and replace the asphalt shingl.. | 2004 | 2025 | 20 | 1 | 9 | 853 squares | 500.00 | 426,500 |
| Asphalt Shingled Roofs - Total | | | | | | | | <u>\$426,500</u> |
| Gutters, Downspouts and Extensions | | | | | | | | |
| Remove and replace gutters, downspo.. | 2004 | 2020 | 15 | 1 | 4 | 2,303 linear feet | 10.50 | 24,181 |
| Gutters, Downspouts and Extensions - Total | | | | | | | | <u>\$24,181</u> |
| Heat Tape | | | | | | | | |
| Repair and/or install additional heat ta.. | 2010 | 2016 | 1 | 0 | 0 | 1 Unit | 4,000.00 | 4,000 |
| Heat Tape - Total | | | | | | | | <u>\$4,000</u> |
| Total Asset Summary | | | | | | | | <u>\$1,104,431</u> |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Spread Sheet**

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|--|--------------|--------------|--------------|--------------|---------------|---------------|----------------|---------------|--------------|----------------|
| Description | | | | | | | | | | |
| Asphalt Drives | | | | | | | | | | |
| Cyclically seal coat and crack fill | | | 2,742 | | | 2,997 | | | 3,275 | |
| Engineering fees for asphalt evaluation | | | | | | | | | | |
| Mill and overlay and/or full depth patch re.. | | | | | | | 21,606 | | | |
| Asphalt Drives Total: | | | 2,742 | | | 2,997 | 21,606 | | 3,275 | |
| Wood Fencing | | | | | | | | | | |
| Cyclically remove and replace wood fencing | 9,766 | | | | | 11,322 | | | | |
| Cyclically stain or seal | | | | | | 6,156 | | | | |
| Wood Fencing Total: | 9,766 | | | | | 17,478 | | | | |
| Siding and Trim | | | | | | | | | | |
| Cyclically prep and paint the siding and tri.. | | | | | | | 184,590 | | | |
| Remove and replace | | | | | | | | | | |
| Siding and Trim Total: | | | | | | | 184,590 | | | |
| Metal Building Features | | | | | | | | | | |
| Remove and replace the metal paneling | | | | | | | | | | |
| Metal Building Features Total: | | | | | | | | | | |
| Garage and Garage Doors | | | | | | | | | | |
| Cyclically paint the garage doors | | | | | | | | 32,469 | | |
| Garage and Garage Doors Total: | | | | | | | | 32,469 | | |
| Asphalt Shingled Roofs | | | | | | | | | | |
| Remove and replace the asphalt shingled .. | | | | | | | | | | 556,486 |
| Asphalt Shingled Roofs Total: | | | | | | | | | | 556,486 |
| Gutters, Downspouts and Extensions | | | | | | | | | | |
| Remove and replace gutters, downspouts .. | | | | | 27,216 | | | | | |
| Gutters, Downspouts and Extensions Total: | | | | | 27,216 | | | | | |
| Heat Tape | | | | | | | | | | |
| Repair and/or install additional heat tape | 4,000 | 4,120 | 4,244 | 4,371 | 4,502 | 4,637 | 4,776 | 4,919 | 5,067 | 5,219 |
| Heat Tape Total: | 4,000 | 4,120 | 4,244 | 4,371 | 4,502 | 4,637 | 4,776 | 4,919 | 5,067 | 5,219 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Spread Sheet**

| Description | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|--------------------|---------------|--------------|--------------|--------------|---------------|---------------|----------------|---------------|--------------|----------------|
| Year Total: | 13,766 | 4,120 | 6,986 | 4,371 | 31,719 | 25,112 | 210,973 | 37,388 | 8,342 | 561,705 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Spread Sheet**

| | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|--|---------------|---------------|--------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|
| Description | | | | | | | | | | |
| Asphalt Drives | | | | | | | | | | |
| Cyclically seal coat and crack fill | | 3,578 | | | 3,910 | | | 4,273 | | |
| Engineering fees for asphalt evaluation | | 6,921 | | | | | | | | |
| Mill and overlay and/or full depth patch re.. | | | | | | | | | | |
| Asphalt Drives Total: | | 10,499 | | | 3,910 | | | 4,273 | | |
| Wood Fencing | | | | | | | | | | |
| Cyclically remove and replace wood fencing | 13,125 | | | | | 15,216 | | | | |
| Cyclically stain or seal | 7,136 | | | | | | | | | |
| Wood Fencing Total: | 20,262 | | | | | 15,216 | | | | |
| Siding and Trim | | | | | | | | | | |
| Cyclically prep and paint the siding and tri.. | | | | 227,023 | | | | | | |
| Remove and replace | | | | | | | | | | |
| Siding and Trim Total: | | | | 227,023 | | | | | | |
| Metal Building Features | | | | | | | | | | |
| Remove and replace the metal paneling | | | | | | | | | | |
| Metal Building Features Total: | | | | | | | | | | |
| Garage and Garage Doors | | | | | | | | | | |
| Cyclically paint the garage doors | | | | | 39,932 | | | | | |
| Garage and Garage Doors Total: | | | | | 39,932 | | | | | |
| Asphalt Shingled Roofs | | | | | | | | | | |
| Remove and replace the asphalt shingled .. | | | | | | | | | | |
| Asphalt Shingled Roofs Total: | | | | | | | | | | |
| Gutters, Downspouts and Extensions | | | | | | | | | | |
| Remove and replace gutters, downspouts .. | | | | | | | | | | 42,402 |
| Gutters, Downspouts and Extensions Total: | | | | | | | | | | 42,402 |
| Heat Tape | | | | | | | | | | |
| Repair and/or install additional heat tape | 5,376 | 5,537 | 5,703 | 5,874 | 6,050 | 6,232 | 6,419 | 6,611 | 6,810 | 7,014 |
| Heat Tape Total: | 5,376 | 5,537 | 5,703 | 5,874 | 6,050 | 6,232 | 6,419 | 6,611 | 6,810 | 7,014 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Spread Sheet**

| Description | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|--------------------|---------------|---------------|--------------|----------------|---------------|---------------|--------------|---------------|--------------|---------------|
| Year Total: | 25,637 | 16,036 | 5,703 | 232,897 | 49,893 | 21,448 | 6,419 | 10,884 | 6,810 | 49,416 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Spread Sheet**

| | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 |
|--|----------------|---------------|--------------|--------------|----------------|---------------|--------------|----------------|---------------|------------------|
| Description | | | | | | | | | | |
| Asphalt Drives | | | | | | | | | | |
| Cyclically seal coat and crack fill | 4,669 | | | 5,102 | | | 5,575 | | | 6,092 |
| Engineering fees for asphalt evaluation | | | | | | | | | | 11,783 |
| Mill and overlay and/or full depth patch re.. | | | | | 36,783 | | | | | |
| Asphalt Drives Total: | 4,669 | | | 5,102 | 36,783 | | 5,575 | | | 17,875 |
| Wood Fencing | | | | | | | | | | |
| Cyclically remove and replace wood fencing | 17,639 | | | | | 20,449 | | | | |
| Cyclically stain or seal | 9,590 | | | | | 11,118 | | | | |
| Wood Fencing Total: | 27,230 | | | | | 31,567 | | | | |
| Siding and Trim | | | | | | | | | | |
| Cyclically prep and paint the siding and tri.. | 279,209 | | | | | | | 343,392 | | |
| Remove and replace | | | | | 807,103 | | | | | |
| Siding and Trim Total: | 279,209 | | | | 807,103 | | | 343,392 | | |
| Metal Building Features | | | | | | | | | | |
| Remove and replace the metal paneling | | | | | 62,935 | | | | | |
| Metal Building Features Total: | | | | | 62,935 | | | | | |
| Garage and Garage Doors | | | | | | | | | | |
| Cyclically paint the garage doors | | 49,112 | | | | | | | 60,401 | |
| Garage and Garage Doors Total: | | 49,112 | | | | | | | 60,401 | |
| Asphalt Shingled Roofs | | | | | | | | | | |
| Remove and replace the asphalt shingled .. | | | | | | | | | | 1,005,075 |
| Asphalt Shingled Roofs Total: | | | | | | | | | | 1,005,075 |
| Gutters, Downspouts and Extensions | | | | | | | | | | |
| Remove and replace gutters, downspouts .. | | | | | | | | | | |
| Gutters, Downspouts and Extensions Total: | | | | | | | | | | |
| Heat Tape | | | | | | | | | | |
| Repair and/or install additional heat tape | 7,224 | 7,441 | 7,664 | 7,894 | 8,131 | 8,375 | 8,626 | 8,885 | 9,152 | 9,426 |
| Heat Tape Total: | 7,224 | 7,441 | 7,664 | 7,894 | 8,131 | 8,375 | 8,626 | 8,885 | 9,152 | 9,426 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Spread Sheet**

| Description | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 |
|--------------------|----------------|---------------|--------------|---------------|----------------|---------------|---------------|----------------|---------------|------------------|
| Year Total: | 318,332 | 56,553 | 7,664 | 12,996 | 914,953 | 39,942 | 14,201 | 352,278 | 69,553 | 1,032,376 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Detail**

| Description | Expenditures |
|---|-----------------|
| Replacement Year 2016 | |
| Wood Fencing | |
| Cyclically remove and replace wood fencing | 9,766 |
| Heat Tape | |
| Repair and/or install additional heat tape | 4,000 |
| Total for 2016 | \$13,766 |
| Replacement Year 2017 | |
| Heat Tape | |
| Repair and/or install additional heat tape | 4,120 |
| Total for 2017 | \$4,120 |
| Replacement Year 2018 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 2,742 |
| Heat Tape | |
| Repair and/or install additional heat tape | 4,244 |
| Total for 2018 | \$6,986 |
| Replacement Year 2019 | |
| Heat Tape | |
| Repair and/or install additional heat tape | 4,371 |
| Total for 2019 | \$4,371 |
| Replacement Year 2020 | |
| Gutters, Downspouts and Extensions | |
| Remove and replace gutters, downspouts and extensions | 27,216 |
| Heat Tape | |
| Repair and/or install additional heat tape | 4,502 |
| Total for 2020 | \$31,719 |
| Replacement Year 2021 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 2,997 |
| Wood Fencing | |
| Cyclically remove and replace wood fencing | 11,322 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Detail**

| Description | Expenditures |
|---|------------------|
| <i>Replacement Year 2021 continued...</i> | |
| Cyclically stain or seal | 6,156 |
| Heat Tape | |
| Repair and/or install additional heat tape | 4,637 |
| Total for 2021 | \$25,112 |
| Replacement Year 2022 | |
| Asphalt Drives | |
| Mill and overlay and/or full depth patch replacement | 21,606 |
| Siding and Trim | |
| Cyclically prep and paint the siding and trim and replace any damaged or deteriorated | 184,590 |
| Heat Tape | |
| Repair and/or install additional heat tape | 4,776 |
| Total for 2022 | \$210,973 |
| Replacement Year 2023 | |
| Garage and Garage Doors | |
| Cyclically paint the garage doors | 32,469 |
| Heat Tape | |
| Repair and/or install additional heat tape | 4,919 |
| Total for 2023 | \$37,388 |
| Replacement Year 2024 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 3,275 |
| Heat Tape | |
| Repair and/or install additional heat tape | 5,067 |
| Total for 2024 | \$8,342 |
| Replacement Year 2025 | |
| Asphalt Shingled Roofs | |
| Remove and replace the asphalt shingled roofs | 556,486 |
| Heat Tape | |
| Repair and/or install additional heat tape | 5,219 |
| Total for 2025 | \$561,705 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Detail**

| Description | Expenditures |
|---|------------------|
| Replacement Year 2026 | |
| Wood Fencing | |
| Cyclically remove and replace wood fencing | 13,125 |
| Cyclically stain or seal | 7,136 |
| Heat Tape | |
| Repair and/or install additional heat tape | 5,376 |
| Total for 2026 | \$25,637 |
| Replacement Year 2027 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 3,578 |
| Engineering fees for asphalt evaluation | 6,921 |
| Heat Tape | |
| Repair and/or install additional heat tape | 5,537 |
| Total for 2027 | \$16,036 |
| Replacement Year 2028 | |
| Heat Tape | |
| Repair and/or install additional heat tape | 5,703 |
| Total for 2028 | \$5,703 |
| Replacement Year 2029 | |
| Siding and Trim | |
| Cyclically prep and paint the siding and trim and replace any damaged or detached | 227,023 |
| Heat Tape | |
| Repair and/or install additional heat tape | 5,874 |
| Total for 2029 | \$232,897 |
| Replacement Year 2030 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 3,910 |
| Garage and Garage Doors | |
| Cyclically paint the garage doors | 39,932 |
| Heat Tape | |
| Repair and/or install additional heat tape | 6,050 |
| Total for 2030 | \$49,893 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Detail**

| Description | Expenditures |
|---|-----------------|
| Replacement Year 2031 | |
| Wood Fencing | |
| Cyclically remove and replace wood fencing | 15,216 |
| Heat Tape | |
| Repair and/or install additional heat tape | 6,232 |
| Total for 2031 | \$21,448 |
| Replacement Year 2032 | |
| Heat Tape | |
| Repair and/or install additional heat tape | 6,419 |
| Total for 2032 | \$6,419 |
| Replacement Year 2033 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 4,273 |
| Heat Tape | |
| Repair and/or install additional heat tape | 6,611 |
| Total for 2033 | \$10,884 |
| Replacement Year 2034 | |
| Heat Tape | |
| Repair and/or install additional heat tape | 6,810 |
| Total for 2034 | \$6,810 |
| Replacement Year 2035 | |
| Gutters, Downspouts and Extensions | |
| Remove and replace gutters, downspouts and extensions | 42,402 |
| Heat Tape | |
| Repair and/or install additional heat tape | 7,014 |
| Total for 2035 | \$49,416 |
| Replacement Year 2036 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 4,669 |
| Wood Fencing | |
| Cyclically remove and replace wood fencing | 17,639 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Detail**

| Description | Expenditures |
|---|------------------|
| <i>Replacement Year 2036 continued...</i> | |
| Cyclically stain or seal | 9,590 |
| Siding and Trim | |
| Cyclically prep and paint the siding and trim and replace any damaged or deteriorated | 270,209 |
| Heat Tape | |
| Repair and/or install additional heat tape | 7,224 |
| Total for 2036 | \$318,332 |
| Replacement Year 2037 | |
| Garage and Garage Doors | |
| Cyclically paint the garage doors | 49,112 |
| Heat Tape | |
| Repair and/or install additional heat tape | 7,441 |
| Total for 2037 | \$56,553 |
| Replacement Year 2038 | |
| Heat Tape | |
| Repair and/or install additional heat tape | 7,664 |
| Total for 2038 | \$7,664 |
| Replacement Year 2039 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 5,102 |
| Heat Tape | |
| Repair and/or install additional heat tape | 7,894 |
| Total for 2039 | \$12,996 |
| Replacement Year 2040 | |
| Asphalt Drives | |
| Mill and overlay and/or full depth patch replacement | 36,783 |
| Siding and Trim | |
| Remove and replace | 807,103 |
| Metal Building Features | |
| Remove and replace the metal paneling | 62,935 |
| Heat Tape | |
| Repair and/or install additional heat tape | 8,131 |
| Total for 2040 | \$914,953 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Detail**

| Description | Expenditures |
|---|------------------|
| Replacement Year 2041 | |
| Wood Fencing | |
| Cyclically remove and replace wood fencing | 20,449 |
| Cyclically stain or seal | 11,118 |
| Heat Tape | |
| Repair and/or install additional heat tape | 8,375 |
| Total for 2041 | \$39,942 |
| Replacement Year 2042 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 5,575 |
| Heat Tape | |
| Repair and/or install additional heat tape | 8,626 |
| Total for 2042 | \$14,201 |
| Replacement Year 2043 | |
| Siding and Trim | |
| Cyclically prep and paint the siding and trim and replace any damaged or deteriorated | 243,392 |
| Heat Tape | |
| Repair and/or install additional heat tape | 8,885 |
| Total for 2043 | \$352,278 |
| Replacement Year 2044 | |
| Garage and Garage Doors | |
| Cyclically paint the garage doors | 60,401 |
| Heat Tape | |
| Repair and/or install additional heat tape | 9,152 |
| Total for 2044 | \$69,553 |
| Replacement Year 2045 | |
| Asphalt Drives | |
| Cyclically seal coat and crack fill | 6,092 |
| Engineering fees for asphalt evaluation | 11,783 |
| Asphalt Shingled Roofs | |
| Remove and replace the asphalt shingled roofs | 1,005,075 |

**Miller Ranch Townhome Association
RA Reserve Study Annual Expenditure Detail**

| Description | Expenditures |
|--|---------------------------|
| <i>Replacement Year 2045 continued...</i> | |
| Heat Tape | |
| Repair and/or install additional heat tape | 9,426 |
| Total for 2045 | <u>\$1,032,376</u> |

Miller Ranch Townhome Association RA Preliminary Reserve Study Summary

| | |
|-----------------------|--------------------|
| Report Date | September 26, 2016 |
| Account Number | 10014.1 |
| Budget Year Beginning | June 01, 2016 |
| Budget Year Ending | May 31, 2017 |
| Total Units | 49 |
| Phase Development | 1 of 1 |

| <i>Report Parameters</i> | |
|----------------------------------|-------------|
| Inflation | 3.00% |
| Interest Rate on Reserve Deposit | 0.57% |
| Contingency | 1.00% |
| 2016 Beginning Balance | \$81,142.00 |

Preliminary Funding Model Summary of Calculations

| | |
|--------------------------------------|----------------|
| Required Monthly Contribution | \$3,333.33 |
| <i>\$68.03 per unit monthly</i> | |
| Average Net Monthly Interest Earned | <u>\$42.40</u> |
| Total Monthly Allocation to Reserves | \$3,375.73 |
| <i>\$68.89 per unit monthly</i> | |

**Miller Ranch Townhome Association
RA Preliminary Reserve Study Projection**

Beginning Balance: \$81,142

| Year | Annual Contribution | Annual Interest | Annual Expenditures | Projected Ending Reserves |
|------|------------------------|--------------------|------------------------|---------------------------------|
| 2016 | 40,000 | 509 | 13,766 | 107,884 |
| 2017 | 46,000 | 735 | 4,120 | 150,500 |
| 2018 | 52,900 | 984 | 6,986 | 197,397 |
| 2019 | 60,835 | 1,291 | 4,371 | 255,153 |
| 2020 | 69,960 | 1,493 | 31,719 | 294,888 |
| 2021 | 80,454 | 1,791 | 25,112 | 352,021 |
| 2022 | 92,522 | 1,092 | 210,973 | 234,663 |
| 2023 | 106,401 | 1,456 | 37,388 | 305,132 |
| 2024 | 122,361 | 2,075 | 8,342 | 421,226 |
| 2025 | 140,715 | | 561,705 | 236 |
| 2026 | 161,822 | 355 | 25,637 | 136,776 |
| 2027 | 186,096 | 1,266 | 16,036 | 308,101 |
| 2028 | 186,096 | 2,304 | 5,703 | 490,798 |
| 2029 | 186,096 | 2,049 | 232,897 | 446,046 |
| 2030 | 186,096 | 2,840 | 49,893 | 585,088 |
| 2031 | 186,096 | 3,797 | 21,448 | 753,533 |
| 2032 | 186,096 | 4,845 | 6,419 | 938,055 |
| 2033 | 186,096 | 5,874 | 10,884 | 1,119,141 |
| 2034 | 186,096 | 6,932 | 6,810 | 1,305,359 |
| 2035 | 186,096 | 7,753 | 49,416 | 1,449,792 |
| 2036 | 186,096 | 7,042 | 318,332 | 1,324,597 |
| 2037 | 186,096 | 7,822 | 56,553 | 1,461,962 |
| 2038 | 186,096 | 8,887 | 7,664 | 1,649,280 |
| 2039 | 186,096 | 9,927 | 12,996 | 1,832,306 |
| 2040 | 186,096 | 5,818 | 914,953 | 1,109,267 |
| 2041 | 186,096 | 6,687 | 39,942 | 1,262,108 |
| 2042 | 186,096 | 7,707 | 14,201 | 1,441,709 |
| 2043 | 186,096 | 6,802 | 352,278 | 1,282,329 |
| 2044 | 186,096 | 7,506 | 69,553 | 1,406,378 |
| 2045 | 186,096 | 2,713 | 1,032,376 | 562,811 |