NOBLIN & ASSOCIATES, L. L. C.

Consulting Engineers

RESERVE BUDGET ANALYSIS

SHAKER LANDING CONDOMINIUM ENFIELD, NEW HAMPSHIRE

SUBMITTED TO:

Shaker Landing Condominium Association

c/o Moseley Associates, Ltd.

P. O. Box 706

White River Junction, VT 05001

SUBMITTED FROM:

Noblin & Associates, L. L. C.

One Washington Street

Suite 3050

Dover, New Hampshire, 03820

DATE:

October, 2014

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1.0 INTRODUCTION

Between May and July of 2014, a Reserve Budget Analysis was performed by Noblin & Associates, L. L. C. for the Shaker Landing Condominium in Enfield, New Hampshire.

The purpose of this study was to determine the funding requirements for anticipated replacement and refurbishment of the Condominium facilities. Reserve items to be included as part of this analysis are major building and site components with an expected useful life of thirty years or less. Items with an expected useful life of over thirty years, such as foundations, structural framing, etc., are not considered part of this Reserve Budget Analysis. Maintenance items, such as painting, snow removal, etc., are not considered Reserve Items and are not included in this Reserve Budget Analysis.

The first phase of our study included review of the available Condominium documents, which provide a general description of the Condominium facilities and Unit boundaries. These boundaries are used to differentiate between common areas, which the Condominium Association is responsible for maintaining, and individual Units, which Unit owners are responsible for maintaining.

The second phase of our study included inspection of the development to determine the types, grades and quantities of common area elements. It should be noted that, these inspections are limited to visual inspections to determine the general conditions of these items. These inspections are not intended to provide a detailed analysis of the various items and may not identify latent or other subsurface conditions.

It should be noted that this study includes various estimated values, including replacement costs, service lives, etc. These estimated values are used to provide a realistic model of the anticipated maintenance requirements for this development. Actual replacement schedules for the various elements included in this study must be determined as part of the on-going maintenance program of the development. Actual costs must be determined from actual bid prices for the work. As this information becomes available, it should be incorporated into updated versions of this study. We recommend updating this study on a regular basis, typically every three to five years.

We recommend that this study be reviewed by the Association's legal and financial professionals, particularly with regard to any tax implications.

2.0 GENERAL

The Shaker Landing Condominium consists of 32 separate townhouse Units in six triplex buildings, and seven duplex buildings. The triplex buildings were reportedly constructed in 1969 as student housing, and converted to a Condominium in 1985, at which time the interiors of the buildings were renovated. The duplex buildings were added as a subsequent phase in 1987.

The buildings consist of wood framed structures set on concrete foundations, with the triplex buildings being two stories and the duplex buildings being three stories. The construction would be classified as Residential Group R-3, Type V (attached single family, light wood framed). Roofs consist of fiberglass shingles with sections of single ply membrane on the duplex buildings. Exterior siding consists of vertical board and batten on the triplex buildings and beveled clapboard siding on the duplex buildings. Windows are wood framed units. All Units are provided with exterior wood framed decks of various sizes and configurations.

The development includes wooded and landscaped areas on a 32 acre site, and has lake frontage on Mascoma Lake on the east boundary. The development is accessed from Landing Road off Route 4A, and is provided with unpaved roadways (Lower Landing Road and Mastro Lane) to individual buildings. Common Condominium structures include a mail shed, beach/dock facilities on the lake, and dumpster/recycling area. The development is provided with town sewer facilities and water from a community well located off site.

In addition to our physical inspections of the Condominium facilities, the following additional sources of information have been incorporated into our study:

- Review of the available maintenance history with representatives of the Board of Trustees and the management company, Moseley Associates of White River Junction, Vermont;
- Condominium Documents including the By-Laws which state the Unit boundaries;
- Plans for the development including building plans, site plans and plans for the sewage disposal system;
- Various reports and documentation related to the maintenance history of the development, including roof repairs to Building #45 and siding repairs to the Duplex buildings.

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Review of the available Condominium documents indicates the Unit boundaries are as follow. As noted in the previous section, these boundaries are used to differentiate between Common Areas, which the Condominium Association is responsible for maintaining, and individual Units, which Unit Owners are responsible for maintaining.

Lower Boundaries:

Exterior Surface of Concrete Slab or Unfinished Upper Surface of

Floor on Upper Levels.

Ceilings:

Unfinished Interior Surface of Ceilings.

Vertical Boundaries: Unfinished Interior Surface of Perimeter Walls and Door Frames.

Doors:

Finished Exterior Surface of Entrance Doors.

Windows:

Unfinished Interior Surface of Window Frames and Exterior Surface of Glass. It should be noted that Article V, Section 6, b (Maintenance and Repair) of the By-Laws states that Unit Owners are responsible for replacement of exterior windows and doors in

their Unit.

Fireplaces/Chimneys: Interior Surface of Flues, Fireboxes and Chimneys.

Our interpretation of the boundaries regarding

Fireplaces/Chimneys is that these are part of the Units, and Unit

Owners are responsible for them.

It should be noted that Article V, Section 6, b (Maintenance and Repair) of the By-Laws states that Unit Owners are responsible for heating/electrical/plumbing components contained within the Unit and serve no other. Therefore, any components not contained within the Unit (exterior light fixtures, propane tanks, etc.) would be Common Area.

The Condominium Association is responsible for all building and site elements outside the Unit boundaries. These include:

- Roadways
- Landscaped and Recreational Areas
- Roofs
- Exterior Walls
- Limited Common Facilities (Decks, etc.)
- Common Facilities and Structures (Mail Shed, Beach Facilities, etc.)
- Utilities Servicing More Than One Unit
- Exterior Site Lighting

3.0 SUMMARY

There are a number of funding methods generally accepted within the industry for a Reserve Budget Analysis such as this. The most common methods can be described as follows:

- Full Funding: The Full Funding method is designed to set aside Reserves for each Common Item so that funds are in place equivalent to the depreciated value of the Item. For a new Item, funds should be set aside annually equivalent to the Cost of the Item divided by its Service Life. For example, a \$20,000 (current cost) roof replacement project with a Service Life of 20 years has depreciated 3/20ths of \$20,000 after three years. To be Fully Funded the Association should have \$3,000 set aside for the roof. For an Item that has been in service for a number of years without being fully funded, the resulting Shortfall will need to be made up for in the remaining Service Life to meet the objectives of the Full Funding method. For example, a roof replacement project with a current Shortfall of \$5,000 and a remaining Service Life of 5 years requires an additional Catch-Up of \$1,000 per year to be Fully Funded by the time the roof needs replacement.
- <u>Baseline Funding</u>: The Baseline Funding method is designed to have sufficient Reserves on hand so that the Reserve Fund balance never drops below zero. This method requires frequent review of the funding program to ensure adequate funds are in place for upcoming expenditures. Associations using the Baseline Funding method typically have higher instances of special assessments and/or deferred maintenance.
- Threshold Funding: The Threshold Funding method is designed to have sufficient Reserves on hand so that the Reserve Fund balance never drops below a predetermined level between Fully Funded and zero. For example, an Association may choose to set funding levels such that the project Reserve Balances never drop below \$50,000 over a specified number of years. The Threshold Funding method should produce lower Annual Contributions than Full Funding, but less chance of needing special assessments and/or deferred maintenance than Baseline Funding.
- <u>Statutory Funding:</u> The Statutory Funding method maintains Reserve Funds as described or required by local laws or codes.

Our funding calculations for this development are shown in Appendix A. The Annual Contribution is be broken down into two components, 1) the Basic Contribution (\$48,470) which represents the Replacement Cost divided by the Service Life for each Item, and 2) the Basic Catch-Up (\$391,033) which represents the existing Shortfall divided by the remaining Service Life for each Item. Using the Fully Funded method, the total Annual Contribution is \$439,503.

Appendix B shows the projected expenditures for replacement and refurbishment of the various Common Items over the next 30 years. It should be noted that some items which have been shown as single expenditures in a given year may actually be scheduled over a number of years. As more accurate schedules for the work are developed as part of the on-going management program for the development, these schedules should be incorporated into updated versions of this study.

Appendix C shows the Reserve Fund balance over this same 30 year period given the recommended levels of funding and projected expenditures. It should be noted that, the Basic Catch-Up contribution, as listed in Appendix A, has been reduced to 70% of the calculated value to allow a reduced total contribution in accordance with the Threshold Funding method. This

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produces an Adjusted Catch-Up of \$273,723 (70% of \$439,503) for the first year, which when combined with the Basic Contribution of \$48,470 produces an Annual Contribution of \$322,193 for the first year.

The reduction in the Basic Catch-Up contribution is possible due to the fact that actual expenditures on individual items are made on a staggered basis, while funding for all items is continuous. This staggering of expenditures provides some unused funds at all times. These unused funds provide adequate reserve to adjust the Basic Catch-Up contribution as noted, without depleting the Reserve Fund.

It should be noted that, the 30 Year Cash Flow Chart in Appendix C shows decreasing Catch-Up contributions in later years. This is due to the fact that as an item is replaced for the first time, the need for a Catch-Up contribution for this particular item is eliminated. Therefore, the total Catch-Up contribution is reduced.

It should also be noted that assumed interest and inflation rates have been factored into these calculations as noted in Appendix C. The assumed interest rate is slightly higher than the assumed inflation rate, as should be the case at any given time. While the interest and inflation rates will fluctuate over the course of this study, they should tend to rise and fall concurrently. As long as they do so, and the interest rate stays somewhat ahead of the inflation rate, they tend to cancel out each other. For this reason, interest and inflation will have a negligible effect on these funding calculations.

4.0 COMMON AREA ELEMENTS

Replacement costs include estimated material and labor costs and are based on the conditions noted during our survey, our experience with similar construction and assumed levels of maintenance. Replacement of the original elements with matching materials has been assumed with the exception of items where obvious deficiencies have been noted. Replacement costs for any such deficient items include the costs for upgrading the original elements as noted. For items where specific conditions, replacement costs and remaining service lives cannot be determined (i.e. underground utilities, etc.), a reasonable allowance has been assumed.

The following items have been included in our Reserve Budget Analysis:

SECTION 02 - SITEWORK

Site Utilities -

An allowance has been included for miscellaneous repairs to the existing site and underground utilities. Items assumed to be included under this allowance would include repair or replacement of exterior wooden utility sheds, replacement of the wooden railing on the north side of Building 33 (see Photograph #1), etc. It should noted that the fence on the north side of Building 33 has been installed to prevent people using the walkway in this area from going over the steep drop-off to the stream below. There are other lawn areas along this stream which abut similar drop-offs. When the fencing is replaced, it should be extended to address these areas also.

Note: This allowance should be periodically reviewed and adjusted according to the actual site utility costs established for this development.

Bridge -

There is a deteriorated concrete bridge structure over the stream on the north end of the property (see Photograph #2). The fill materials around the structure have eroded leaving a number of potentially unstable areas which could create safety issues for people walking over or around the bridge. We would recommend that the bridge be removed or these areas be otherwise stabilized. It is our understanding that the bridge is not the property of the Condominium Association.

Pavement -

The upper section of Landing Road consists of bituminous pavement. At the time of our site inspections, the existing pavement appeared to be in generally satisfactory condition. Several minor deficiencies were noted including minor cracking of the pavement surface in various areas.

Removal and replacement of the existing pavement, with some subgrade preparation has been assumed. It is our understanding that 20% of the cost of maintaining this road will be paid for by the Lower Shaker Village Partnership, the commercial entity which owns the land the road passes through, and approximately 18% of the cost will be paid for by the six Phase III Unit Owners. Repaving allowances in Appendix A have been reduced accordingly.

Unpaved Roads - The lower section of Landing Road, Mastro Lane and parking facilities consist of unpaved roadways. At the time of our site inspections, the existing roadways appeared to be in generally fair condition, with minor washing out of fill materials.

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Rehabilitation of the roadways with some additional fill materials has been assumed. Typical costs for this type of work as noted in Appendix A are based on historical costs for other similar developments.

Wooden Stairs - The site includes five sets of stairs from the main parking area down to the lower lawn areas and Triplex buildings (see Photographs #3 & #4). These stairs range in size from approximately 4' x 6' steps made with in-filled landscaping timbers, to framed stairways over 40' in length. Several flights of stairs have intermediate landings framed with 2 x 8 joists and 4 x 4 posts. Decking and stair treads are made with 5/4 x 6 pressure treated lumber. Elevated stairs have 40" railings. Framed stairways are set on poured concrete footings. These stairways appear to be in generally sound condition, with minor to moderate deterioration in areas.

> It is our understanding that periodic repairs are made to these stairs, some of which were on-going at the time of our inspections. With adequate repairs, this program could be adequate to maintain the stairs for some time. An allowance has been included for continued annual repairs to the stairs as noted in Appendix A.

Signage -

Replacement of the existing directional signs on the site has been assumed as noted in Appendix A. Remaining service lives are based on the current conditions of the signs, which appear relatively new.

SECTION 06 - WOOD

Wood Decks -Triplex Decks

Exterior decks on the Triplex buildings consist of wood framed structures of various sizes (see Photograph #5), typically 18' x 24' in size at grade (Unit 2 decks), or 12' x 16' in size 16" off the ground (Unit 1 & 3 decks). Decks are accessed from the Unit interiors through sliding doors and from the ground with wood framed stairs when above grade. Some decks have been modified from these typical configurations, with some being partially enclosed.

All decks appear to be constructed of pressure treated lumber. Deck frames consist of 2 x 8 or 2 x 6 joists and rims with 5/4 x 6 deck boards. Railings consist of 36" wooden rails with 60" privacy walls in some locations.

Replacement of the existing exterior decks has been assumed as noted in Appendix A. All framed decks should be supported with 4 x 4 posts set on concrete footings set below the frost line.

Decks presently set on grade could be replaced with new concrete paver patios in lieu of framed decks, which would be somewhat less expense. For the purposes of this study, it has been assumed the Unit 2 decks would be replaced with 2' x 2' concrete pavers on a proper setting bed.

Consideration should be given to new composite decking instead of pressure treated decking. The initial cost of the composite materials will be more (approximately \$4.00/sf additional), but it will provide a more uniform finished appearance and

should require less maintenance. For the purposes of this study, composite decking has been assumed for the framed decks.

Duplex Decks

Exterior decks on the Duplex buildings consist of wood framed structures of various sizes, typically 7' x 7' on the front, 7' x 14' on the side (see Photograph #6), and stacked 7' x 12' decks on the rear. Decks are accessed from the Unit interiors through double swing doors. The decks are partially enclosed.

All decks appear to be constructed of pressure treated lumber. Deck frames consist of 2 x 8 joists and rims on the larger decks, and 2 x 4 or 2 x 6 joists on the front of the buildings. The 2 x 6 and particularly the 2 x 4 joists are undersized, and should be increased to 2 x 8's. Metal joist hangers have been used to frame the decks. Decking consists of 5/4 x 6 pressure treated boards. Railings consist of 36" wooden rails with balusters set on centers of approximately 6".

The exterior sides of the decks are supported by 6 x 6 vertical posts set on 10" poured concrete footings. Washing out of the fill around these footings was reportedly recently addressed.

Replacement of the existing exterior decks has been assumed as noted in Appendix A. Due to the fact that these decks are partially enclosed, it has been assumed they will have a somewhat longer service life than the decks on the Triplex buildings. For the purposes of this study, composite decking has been assumed for these decks.

SECTION 07 - BUILDING ENVELOPE

Siding - <u>Triplex Siding</u>

The existing siding on the Triplex buildings consists of vertical board and batten siding (see Photograph #7) with battens spaced at approximately 9" o.c. This siding is reportedly original to the buildings. This siding is in generally fair to poor condition, with significant deterioration at lower wall areas which are exposed to more moisture (see Photograph #8).

A significant concern with this type of siding is the fact that it does not shed water as effectively as other types of siding which are installed in overlapping fashion, such as clapboards or shingles. Water infiltration can occur through the joints between boards and battens and horizontal joints in taller wall sections.

Replacement of the existing siding has been assumed in phases of two buildings per year, starting in ten years. It should be noted that there will significant costs associated with maintaining the existing siding, which will likely increase as these materials continue to age.

We would recommend that alternate siding materials which will be more weatherproof be considered, such as clapboards or shingles. Vinyl or other alternate

siding could be considered to reduce the maintenance requirements for the building. All new siding should be installed with a weatherproof building wrap and waterproof flashings at corners, penetrations and other critical areas. Given the age of these buildings, we would also anticipate significant sheathing and framing repairs will be necessary.

Duplex Siding

The existing siding on the Duplex buildings consists of beveled cedar clapboard siding with the rough side exposed and an exposure of approximately four inches. The clapboard siding appears to be medium grade material. Minor cracking of the clapboards was noted in several areas. Minor to moderate failure of the paint finish was noted, particularly on lower wall areas exposed to splash back from the roofs (see Photograph #11).

Exterior trim on these buildings consists of finish pine corners, fascias, rakes, and window/door trim. The existing trim materials appear to be in generally fair condition. Deterioration in the trim ranges from minor cracking and checking on most buildings to significant decay in some areas, including the bottoms of corner boards and above-roof trim.

There is a noticeable deflection in the siding at the second floor level on the rear of Building #7 (see Photograph #9). This deflection appears to be due to typical movement in the framed wall/floor structure, and is related to typical shrinkage of the framing lumber. New framing lumber is usually relatively wet, and dries and shrinks for some time after construction. In this instance, it appears that the second floor joists and rim joists have dried and shrunk sufficiently to deflect the attached plywood sheathing outward, thus creating the bulge in the wall's exterior surface. This condition is fairly common in buildings of similar age and construction. It should be noted that at the time of our inspection, the building appeared to be structurally sound.

Water infiltration and subsequent deterioration of sheathing and framing materials has reportedly been a significant problem on several of these buildings, including Buildings 11 and 13, and particularly on the fronts of the buildings where roof run-off is concentrated. Severe deterioration of structural framing and sheathing has been found in areas where siding has been removed.

Due to the water infiltration issues found on these buildings to date, eventual complete replacement of the existing siding has been assumed in phases of two buildings per year, starting in ten years. It should be noted that there will significant costs associated with maintaining the existing siding, which will likely increase as these materials continue to age.

Vinyl or other alternate siding could be considered to reduce the maintenance requirements for the building. All new siding should be installed with a weatherproof building wrap and waterproof flashings at corners, penetrations and other critical areas. Given the age of these buildings, we would also anticipate significant sheathing and framing repairs will be necessary.

Grading -

A number of areas were noted where the grade and landscaping materials are close to, or in contact with, the exterior wood siding and framing materials on these buildings (see Photograph #10). Contact between the wooden building structures and surrounding grade will promote deterioration of the wood due to the increased exposure to moisture from the surrounding grade materials. Prolonged periods of elevated moisture levels in wood promote the growth of wood destroying fungus and/or insects.

Contact between grade materials and wooden building components was noted on Units 7-1, 7-2, 11-2, 13-2, 15-1, 27-1 and 29-1. Contact or inadequate clearance was also noted on a number of the Triplex buildings, particularly along the sides of the building where the grade slopes.

At the time of any siding replacement, areas with inadequate clearance to grade materials should be addressed by lowering the grade or building up the wall areas with decay resistant materials at the base of the walls.

Roofs - <u>Triplex Shingle Roofs</u>

The existing roof systems on the Triplex buildings consist of standard three tab asphalt roof shingles on pitched sections with a slope of approximately 5:12, and single ply EPDM membranes on low sloped sections of some buildings with a slope of approximately 3:12. Many roof areas include either full or partial cathedral roof sections, where the interior gypsum sheathing is located on the underside of the pitched roof structures.

Asphalt shingles consist of a fiberglass felt reinforcing mat embedded in an asphalt binder. The reinforcing mat provides tensile strength for the shingle while the asphalt binder provides its waterproofing capability. The top surface of the shingle is coated with stone granules which protect the shingle from mechanical wear and degradation from ultraviolet light. A self-sealing adhesive strip is applied to the top of the shingle to provide adhesion between the shingles. After being exposed to the sun after installation, the shingle tabs should bond to the self-sealing adhesive strip on the underlying shingles.

Inspection of these buildings showed the shingles to be in fair to poor condition in most areas. Shingle tabs are generally worn and torn in many areas. Also of note was blistering of the shingle tabs in many areas (see Photograph #13). This condition is caused when voids, or blisters, form in the asphalt shingles. These blisters can be caused by a number of factors, including moisture trapped between layers of shingles which is subsequently heated and expanded by the sun. This condition may be partially due to the relatively heavy tree cover around these buildings, which causes them to retain moisture when in the shade and then experience relatively quick temperature increases as the buildings come into direct sunlight as the day progresses.

The front roof sections on Building 37 appeared to be in relatively good condition and to be newer than other areas. There appear to be two layers of shingles on Buildings 33, 35, 43 and 47.

Rooftop units and details on these buildings include aluminum ice belts on lower eave areas (see Photograph #12), aluminum gutters over entrances, skylights with aluminum flashing kits and PVC vent pipes with neoprene boot flashings. The roofs include hip details covered with cap shingles and peaks which are flashed with various metal and shingle cap configurations.

The plywood roof deck is noticeably deflected in many areas (see Photograph #14). In addition, the edges of the plywood roof deck appear to be loose and partially lifted in many areas.

These buildings have reported experienced water infiltration during periods of heavy snow and ice accumulation and during periods of "ice damming". Ice damming refers to the build-up of ice along pitched roof eaves. This condition is typically caused when snow or ice over heated portions of the building is melted by heat rising through the roof surface. The melt water then runs down the roof toward the eave, which typically extends beyond the heated portion of the building and is relatively cold. Once this melt water reaches the cold eave, it refreezes. If enough melt water freezes along the eave, it can form a dam which will trap additional melt water running down the roof. As this trapped water builds up behind the ice dam, it can eventually back under shingles and enter the building.

It appears that the metal ice belts and electric heating cables on these buildings have been installed to address this ice damming. Several other roof design considerations are critical for preventing ice damming and associated water infiltration on pitched roofs. These include proper insulation and ventilation in the roof structure. A second critical item is waterproof underlayment below shingles at roof eaves and other critical locations. This is intended to prevent any water which accumulates behind ice dams and backs under the shingles from entering the building.

Proper roof ventilation requires a flow of air throughout all areas of a roof structure. The best means of providing this air flow is continuous vents at the roof ridges or peaks, and eaves. The vents should be distributed throughout all ridge and eave areas and should be balanced between the upper and lower roof areas to maximize the actual flow of air. It is critical that a clear passage be left between the eaves and ridges.

These buildings are provided with vent openings at the lower eaves and at the upper roof peaks. However, the framing of these roofs apparently has the main roof rafters running parallel with the eaves and peaks, instead of perpendicular as with most conventionally framed roofs. This framing configuration leaves no vent passages between the eaves and peaks, making these roofs completely unvented.

In addition to reducing ice damming, ventilation of roof spaces is critical to allow the dissipation of moisture and excessive heat in these structures. In a relatively cold area, such as New England, moisture tends to travel from heated interior areas to unheated spaces during the winter heating season. A number of Unit Owners have reported frequent moisture infiltration during winter months, typically when

temperatures rise after prolonged cold spells. This is likely due to condensation and freezing of moisture, which then melts and drips into the building when the temperatures rise.

Replacement of the existing roofs has been assumed in phases of two buildings per year, starting in one year.

To address previous problems with ice damming and moisture infiltration, we would recommend the following scope of work be considered:

- Removal of the existing roof structure, including shingles, underlayment and plywood roof sheathing down to the framed rafters.
- Insulation of the rafter cavities with spray foam insulation. This type of insulation should provide a higher R value than comparable thicknesses of fiberglass insulation, and if properly installed will act as a vapor barrier on the interior face of the roof assembly.
- Installation of new plywood sheathing.
- Reroofing with a relatively heavy weight shingle with complete asphaltic waterproofing membrane to address potential ice damming issues.

As noted above, this scope of work should address the previous problems with ice damming and moisture infiltration, but will not be a vented roof. Instead, the spray foam insulation will act as both insulation and a vapor barrier on the interior face of the roof assembly. This type of unvented roof assembly is becoming more common in the industry, and addresses issues with air movement through an existing structure which was not originally provided with a proper vapor barrier on the interior face.

Triplex Single Ply Membrane Roofs

The low slope roof sections on Buildings 33, 35, 37 and 47 have fully adhered Ethylene, Propylene, Diene Monomer (EPDM) single ply membrane systems. EPDM roof systems consist of individual sheets of single ply membrane bonded together with adhered seams to form a continuous roof system. The membrane in a fully adhered system is adhered to rigid insulation or underlayment which is fastened with screws and stress plates to the structural roof deck.

Rooftop units and details include skylights, PVC vent pipes with elastomeric boot flashings, and square aluminum exhaust vents.

The existing roof membrane seams and flashings on these roofs are in relatively poor condition, with adhered seams failing in adhesion in many areas and previous repairs with what appears to be silicone sealant in some locations. Silicone is not the proper material for an EPDM membrane roof system.

The roof membrane has been turned up and fastened over the siding on wall areas

above the roof on Building 47. This detail will allow water getting behind the siding to run under the membrane roof system. The wall flashing detail on other buildings appears to be run behind the siding, but the exact details are not clear.

Replacement of the existing roofs has been assumed in phases of two buildings per year, starting in one year, with all low slope roof sections on the Triplex buildings replaced with fully adhered single ply membrane systems (EPDM, PVC or TPO). Replacement of these roofs should be coordinated, or include replacement of the siding on the wall areas above the roofs. This will allow a waterproofing underlayment behind the siding to be integrated into the roof perimeter flashings.

Duplex Shingle Roofs

The existing roof systems on the Duplex buildings consist of standard three tab asphalt roof shingles on pitched sections with moderate to steep slopes.

Inspection of these buildings showed the shingles to be in fair to poor condition in most areas. Similar to the Triplex buildings, these buildings have reportedly experienced water infiltration during periods of ice damming. Shingle tabs are generally worn and torn in many areas. Significant damage was noted on many front roof eaves, which appears to be due to removal of ice accumulations (see Photograph #17). Also of note was blistering of the shingle tabs in many areas, similar to that noted on the Triplex buildings.

Significant lichen and moss growth was noted on shingle surfaces in many areas on these buildings (see Photographs #15 & #16). The growth of these plants will cause severe pitting of the shingle surface.

Rooftop units and details on these buildings include gutters over entrances, skylights with aluminum flashing kits, and PVC vent pipes with neoprene boot flashings.

Various repairs were noted around the skylights, including shingle replacement, installation of exposed asphaltic membrane, and mastic repairs. It should be noted that asphaltic membrane is not intended for long term exposure to ultraviolet sunlight, and is an improper material for this application (see Photograph #18). The skylight on Unit 23 appeared to be new, and several other flashing repairs were noted on this building.

Replacement of the existing roofs has been assumed in phases of two buildings per year, starting in one year. Reroofing with a moderate to heavy weight shingle has been assumed. Asphaltic waterproofing membrane underlayment should be installed in critical areas, including the areas above roof eaves, valley areas, dormers and gable walls. Reroofing is assumed to include removal of original shingles to allow for inspection of the plywood deck for possible deterioration or inadequate fastening.

Chimneys -

These buildings include fireplaces with various types of chimneys or exhausts. The Duplex buildings are provided with wood framed chimney boxes with metal flues and caps. The Triplex buildings appear to have been originally provided with concrete

chimney structures covered with wood siding. Many of these chimneys have been capped with various metal caps or flashings, many of which do not appear to be watertight (see Photographs #19 & #20). In addition, some chimneys have been replaced with through-wall vents.

As noted in Section 2.0, it is our interpretation of the Condominium By-Laws that chimneys are the Unit Owners' responsibility, and therefore are not included in our Reserve Funding calculations. However, we would strongly recommend that the Association establish guidelines for the regular inspection and maintenance of all fireplaces and chimneys, with inspections performed by a qualified professional. In addition, requirements for a complete, watertight cap flashing on chimney enclosures should be established to maintain the integrity of these structures.

SECTION 08 - WINDOWS

Windows in the Triplex buildings consist of clad wood framed double-hung units in most areas, fixed or casement windows in upper clearstory walls, and bay windows off some kitchen areas. The double-hung windows have been provided with exterior aluminum storm windows. Exterior decks are accessed through clad wood sliding doors. Exterior entrance doors are metal framed units. The windows appear to be original to the buildings.

Windows in the Duplex buildings consist of clad wood framed double-hung units with some fixed windows. Exterior decks are accessed through clad wood double swing doors. Exterior entrance doors are metal framed units. The windows appear to be original to the buildings.

As noted in Section 2.0, it is our interpretation of the Condominium By-Laws that window and door replacement is the Unit Owners' responsibility, and therefore is not included in our Reserve Funding calculations. However, it is our understanding that window replacement is currently under consideration, particularly in the Triplex buildings. We would strongly recommend that window replacement and siding replacement be coordinated to ensure that window openings are properly flashed at the time of siding replacement. If flashing of the window openings is not properly integrated into siding replacement, significant water infiltration into the wall structures can continue to occur, despite an otherwise weathertight replacement siding system.

SECTION 11 - EQUIPMENT

Beach Equipment - Replacement of the existing boat docks, swim dock and canoe racks has been assumed as noted in Appendix A (see Photographs #21 & #22). Replacement costs have been based on estimated time and materials to replace these items with comparable structures. Remaining service lives are based on the current conditions of these items.

SECTION 13 - SPECIAL CONSTRUCTION

Mail Shed -

The existing mail shed consists of an open air, wood framed structure housing individual standard sized mailboxes, and four oversized boxes for large items (see Photograph #23). The existing shed is in poor condition, at least partially due to apparent heaving of the corner posts. It has been noted that these posts will be fairly susceptible to heaving due to the fact that they are regularly cleared of snow which will maximize the penetration of frost into the ground.

Replacement of the existing mail shed in the immediate future has been assumed as noted in Appendix A. Replacement costs have been based on estimated time and materials to replace the shed with a comparable structure. To help stabilize the new structure, it is assumed corner posts will be set on bell shaped footings set below the frost line.

Mailboxes -

Replacement of mailboxes has been assumed at the time the mail shed is reconstructed.

Note: It should be determined if the Post Office will assume the cost for mailbox replacement, which is the case in some instances.

SECTION 15 - MECHANICAL

Building Utilities - An allowance has been included for miscellaneous replacement of non-standard mechanical and electrical components on the exteriors of the buildings, including spotlights, propane tanks, etc.

Note: It should be noted that our interpretation of the Condominium By-Laws is that although in some cases these service only a single Unit, because they are outside the boundaries of the Unit they are considered Common Area elements. If the Association deems these to be individual Owner responsibilities, they should be eliminated as Reserve Items.

SECTION 16 - ELECTRICAL

Building Lights - Replacement of exterior light fixtures at Unit entrances and exterior decks has been assumed. This includes new fixtures and labor to install them. Reuse of existing wiring has been assumed.

Note: As noted above, these could be considered to service only a single Unit, and if the Association deems these to be individual Owner responsibilities, they should be eliminated as Reserve Items.

Walk Lights -

Replacement of exterior walk/driveway lights has been assumed (see Photograph #24). This includes new fixtures and posts. Reuse of site wiring has been assumed. These lights are being replaced this year, so the funding shown in Appendix A would be for the next phase of replacement.

APPENDIX A COMMON ELEMENT COSTS & SERVICE LIVES

SHAKER LANDING CONDOMINIUM COMMON ELEMENT COSTS & SEDVICE IN

	BASIC	CAICH-UP	(\$27)	\$3,404	\$5,465	\$1,316	(\$64)	\$2	40C 7EE	920,733	\$12,252	920,733	\$12,252	//g'/L#	45,892	107,114	\$5,192	\$4,417	\$3,783	\$5,138	\$4,371	\$3.743	\$1,610	\$69 475	\$69.475	\$33 138	\$1 824	\$1 824	\$870	\$10.074	\$10.074	\$4,805	\$12,195	160	47,024	9400	1010	(\$14)	\$2,866	\$695	(\$27)	\$578	(\$16)
	SHORTFALL		\$273	\$17,021	\$38,256	\$9,210	\$636	\$32	\$38 155	600, 100	412,710	640,733	912,232	950,500	\$11,785 \$135,430	001	\$46,728	\$44,168	\$41,608	\$46,242	\$43,708	\$41,175	\$19,321	\$72,675	\$69.475	\$66.275	\$1,908	\$1.824	\$1.740	\$10,538	\$10,074	\$9,610	\$36,584	011 010	616,114	\$1 804	1005	(\$330)	\$2,998	\$727	\$273	\$6.941	(\$236)
Citata	RESERVES	HESENAES	\$27	\$2,367	\$4,944	\$1,190	\$64	\$18	\$3.845	\$1.080	\$3 845	£1.040	42 64	040,040	\$20,202	000	47,032	\$7,032	\$7,032	\$6,958	\$6,958	\$6,958	\$3,479	\$7,325	\$7,325	\$7,325	\$192	\$192	\$192	\$1,062	\$1,062	\$1,062	\$4,248	\$2.381	\$458	\$220	9096	0000	\$302	\$73	\$27	\$1,483	\$653
010	FUNDS		\$300	\$19,388	\$43,200	\$10,400	\$700	\$50	\$42,000	\$14,000	\$40,600	\$13,533	830,000	419 087	\$155.820	900 100	000,000	002,100	\$48,640	\$53,200	\$50,667	\$48,133	\$22,800	\$80,000	\$76,800	\$73,600	\$2,100	\$2,016	\$1,932	\$11,600	\$11,136	\$10,672	\$40,832	\$14.300	\$2,750	\$1.833	\$25B	0000	99,300	\$800	\$300	\$8,424	\$357
ES	CONTR.			\$1,293		\$371	\$700	\$10	\$1,400	\$467	\$1.400	\$467	\$1.400	\$467	\$5,565	40 550	42,000 000,000	42,300	92,250	\$2,533	\$2,533	\$2,533	\$1,267	\$3,200	\$3,200	\$3,200	\$84	\$84	\$84	\$464	\$464	\$464	\$1,856	\$1,300	\$250	\$167	\$256	0010	20.00	200	\$300	\$648	\$357
/ICE LIV	LIFE (1)			1 0		,	!	15			-	1	2	0	12	o	2 5	7		מ פ	10	11	12	8	1	2		1	2		-	2	က	თ	6	4	24	i				12	19
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COMMON ELEMENT COSTS & SERVICE LIVES SERVICE REPLACED AGE REMAIN AD.IIIST			0000	2000			0,000	0102								h																		2004	2004	2004	2014					2002	2014
SERVICE	_	-	- 00	2 2	3 6	00 7	- 6	SO	30	30	30	30	30	30	40	30	30	30	30	9 6	9 6	OS .	8	25	25	52	52	52	25	52	เม	52	52	20	20	15	25	25	25		-	22	20
COST (\$300	\$25 BEO	\$54,000	\$13,000	000,000	0000	9200	\$42,000	\$14,000	\$42,000	\$14,000	\$42,000	\$14,000	\$222,600	\$76,800	\$76,800	\$76.800	\$76,000	476,000	476,000	000,074	\$38,000	\$80,000	\$80,000	\$80,000	\$2,100	\$2,100	\$2,100	\$11,600	\$11,600	009,114	\$46,400	\$26,000	\$5,000	\$2,500	\$6,400	\$3.300	\$800	0000	\$300	\$16,200	\$7,130
QUANTITY		-	11000 (sf)	27000 (sf)	6500 (sf)			-	2 (bldg)	7 (bldg)	2 (bldg)	2 (bldg)	2 (blda)	2 (bldg)	(P) (A)	Chida o	(B) 7	(bpid) L	Z (DIdg)	2 (bldg)	2 (bldg)	2 (bldg)	2 (bldg)	2 (bldg)	(gpid)	(Bold)	(Bold) I	4 (bidg)	വ	-	2	1	44	4	7		108	2					
PRICE		\$300.00 (lump sum)	ł					ш	- 1					- 1	\$31,800.00 (per bldg)	\$38,400.00 (per bldg)	\$38,400.00 (per bldg)			1			- 1	- 1	- 1	- 1	\$1,050.00 (per bldg)	\$1,050.00 (per bidg)		\$11,800.00 (per bidg)	#11,000,000 (per blug)		der bidg) no.coo	\$5,200 (ea)		\$500 (ea)	\$6,400.00 (lump sum)	\$75.00 (ea)	\$200.00 (ea)	\$300 00 (lump cum)	(illins dillin) oo.ooo	\$150.00 (per unit)	acocion (per unit)
ITEM		Site Utilities	Landing Road (Upper)	Landing Road (Lower)	Mastro Lane	Wooden Stairs	Signage	מיים/ ביובים הי	7	7	+	4		(PH III)	Duplex Ext Decks	Triplex Siding (Phase I)		(1)		E		+	-	1	1		1	1	Ľ	1	1	1	(1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Boat Dock	SWITH DOCK	X		Small Mailboxes	Large Mailboxes	Building Utilities	Semipling to the semipline to the semipl	Molt Lights	
		2-SITEWORK						8-WOOD	000							7-BUILDING ENVELOPE																	HINDMONIO FF				13-SPECIAL CONST			15-MECHANICAL	16-FI FOTBIOAL (Exterior Division)	L'S EFECTIONE (Exigno	

10/27/14

Totals:

(1) The Remaining Service Lives for various items have been adjusted to reflect any noted deficiencies and assumed premature replacement.

(2) The date of construction for this development is:

(3) Funding and maintenance based on this study will be assumed to begin in:

(4) The Reserve Fund Balance is:

(5) For the purposes of this study, inflation will be assumed to be:

(6) For the purposes of this study, interest will be assumed to be:

(7) The Reserve Fund Balance is:

(8) For the purposes of this study, interest will be assumed to be:

(9) For the purpose of this study, interest will be assumed to be:

\$126,000

\$48,470 \$1,063,665

SHAKER LANDING CONDOMINIUM 30 YEAR REPLACEMENT/REFURBISHMENT SCHEDULE

2024

2023

2022

2021

2019

2018

2017

2016

2015

ITEM

\$300 \$300 \$700 \$90,827 \$31,072 \$5,975 \$91,783 \$300 \$700 \$300 \$300 \$62,029 \$300 \$14,933 \$700 \$300 \$300 \$700 \$300 \$700 \$300 \$28,540 \$300 \$2,706 \$300 \$700 \$300 \$300 \$700 \$49,240 \$43,697 \$2,185 \$300 \$12,069 \$700 \$83,232 \$300 \$2,142 \$300 \$700 \$11,832 \$300 \$81,600 \$42,840 \$14,280 \$300 \$3,300 \$14,000 \$2,100 \$11,600 \$700 \$800 \$300 \$42,000 \$80,000 Triplex Siding (Phase II)
Triplex Siding (Phase III)
Duplex Siding (Phase I) riplex EPDM Rfs (PH III) Triplex Wd Decks (PH III) Triplex Grd Decks (PH III) Friplex Grd Decks (PH II) Duplex Siding (Phase II) Duplex Siding (Phase III) Duplex Siding (Phase IV) riplex EPDM Rfs (PH I) Duplex Roofs (Phase III) (Phase IV) riplex Wd Decks (PH II) riplex EPDM Rfs (PH II) riplex Wd Decks (PH I) **[riplex Grd Decks (PH I)** riplex Roofs (Phase III) Duplex Roofs (Phase II) riplex Roofs (Phase II) Duplex Roofs (Phase I) Triplex Siding (Phase I) riplex Roofs (Phase I) Landing Road (Upper) Landing Road (Lower) Duplex Ext Decks Large Mailboxes Small Mailboxes **Building Utilities** Wooden Stairs **Building Lights** Duplex Roofs (Mastro Lane anoe Rack Walk Lights Site Utilities Swim Dock Boat Dock Mail Shed Signage 16-ELECTRICAL (Exterior 7-BUILDING ENVELOPE 13-SPECIAL CONST 15-MECHANICAL 11-EQUIPMENT 2-SITEWORK **6-WOOD**

Note: The assumed annual inflation rate is:

10/27/14

Updated:

2%

\$220,958

\$1,300

\$78,262

\$1,300

\$29,840

\$4,006

\$50,540

2024

2023

2022

2021

2020

2019

2018

\$157,048 2017

\$153,994

2016

\$155,100 **2015**

Totals:

30 YEAR REPLACEMENT/REFURBISHMENT SCHEDULE SHAKER LANDING CONDOMINIUM

2027

2025

ITEM

\$300 \$700 \$3,642 \$10,387 2034 \$300 \$700 \$300 2033 \$700 \$300 \$300 2032 \$300 \$700 \$300 2031 \$269 \$300 \$700 \$300 \$300 \$700 \$300 \$300 \$700 \$300 2028 \$20,546 \$300 \$700 \$48,193 \$300 \$282,311 \$300 \$700 \$95,491 \$94,496 \$300 \$700 \$300 \$92,644 \$300 \$93,619 \$187,562 riplex Grd Decks (PH III) riplex EPDM Rfs (PH I) riplex Wd Decks (PH III) riplex Wd Decks (PH II) riplex Wd Decks (PH I) Triplex Siding (Phase II)
Triplex Siding (Phase III) Juplex Siding (Phase IV) riplex EPDM Rfs (PH III) Duplex Siding (Phase III) Duplex Roofs (Phase II)
Duplex Roofs (Phase III) Duplex Roofs (Phase IV) riplex Grd Decks (PH I) Duplex Siding (Phase II) Duplex Siding (Phase I) riplex Roofs (Phase III) Triplex Siding (Phase I) riplex Roofs (Phase II) uplex Roofs (Phase I) riplex Grd Decks (PH riplex Roofs (Phase I) Landing Road (Upper) -anding Road (Lower) Duplex Ext Decks Mail Shed Small Mailboxes Large Mailboxes **Building Utilities** Building Lights Walk Lights Vooden Stairs **Jastro Lane** Sanoe Rack Swim Dock Boat Dock Signage 16-ELECTRICAL (Exterior 7-BUILDING ENVELOPE 13-SPECIAL CONST 15-MECHANICAL 11-EQUIPMENT 2-SITEWORK **6-WOOD** Totals:

2%

Note: The assumed annual inflation rate is:

10/27/14

Updated:

\$15,329

\$1,300

\$1,300

\$1,300

\$1,569

\$1,300 2029

\$1,300

\$352,349

\$191,288 2026

2028

2034

2033

2032

2031

2030

SHAKER LANDING CONDOMINIUM 30 YEAR REPLACEMENT/REFURBISHMENT SCHEDULE

ITEM

\$700 \$700 \$700 \$700 \$700 \$700 \$700 \$700	2-SITEWORK	Site Utilities	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300
Master Lewer Mast		Landing Road (Upper)		1941		×		\$42.410				
Winder Latine STOO		Landing Road (Lower)										
Notice Stroke S		Mastro Lane		1						l		
Stroke Vot Decks (PH.1)		Wooden Stairs	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700	\$700
Tiplex Vid Decks (PH I)		Signage										
Triplex Gold Deske (PH II)	6-WOOD	Triplex Wd Decks (PH I)										
Triplex WD Decks (PH III) Triplex WD Decks (PH III) Triplex Script (Phase III) Depks Script (Phase III) Triplex Script (Phase III) Depks Script (Phase III) Triplex Script (Phase III)		Triplex Grd Decks (PH I)									li li	
Tippex Grd Decise (PH II)		Triplex Wd Decks (PH II)	-									
Triplex Values (PH III) Duplex Soling (Phase II) Triplex Soling (Phase III) Triplex Soling (Phase III) Duplex Soling (Phase III) Duplex Soling (Phase III) Duplex Soling (Phase III) Triplex Soling (Phase III) Duplex Soling (Phase III) Triplex Sol		Triplex Grd Decks (PH II)										
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Triplex Solding (Phase II)		Duplex Ext Decks						190				
Triplex Soling (Phase III)	7-BUILDING ENVELOPE											
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Duplex Siding (Phase II)		Triplex Siding (Phase III)		+								
Duplex Siding (Phase II)		Duplex Siding (Phase I)									+	
Duplex Soling (Phase III)		Duplex Siding (Phase II)										
Triplex Roofs (Phase II)		Dupley Siding (Phase III)		14								
Triplex Roots (Phase II)		Duplex Siding (Phase IV)										
Triplex Roots (Phase III)		Tripley Boofs (Phase I)		+				Q101 010				
Triplex Rouse (Plase II)		Triplex Boofs (Bhase I)						9101,740	0000			
Triplex FODM Ris (PH II)		Tiples hoors (Fliase II)		1					\$133,873			
Triplex EPDM Ris (PH II) S3,544 S3,514 S3,544 S3,544 S4,445 S4,544 S4,644 S		Iriplex Roots (Phase III)								\$136,551	20	
Triplex EPDM Ris (PH II)		Triplex EPDM Rfs (PH I)						\$3,445				
Triplex EPDM Ris (PH III) Triplex EPDM Ris (PH III) S3,584 S1,091		Triplex EPDM Rfs (PH II)							\$3,514			
Duplex Roofs (Phase II)		Triplex EPDM Rfs (PH III)								\$3,584		1
Duplex Roots (Phase II)		Duplex Roofs (Phase I)						\$19,031				
Duplex Root's (Phase III)		Duplex Roofs (Phase II)							\$19,412			
Duplex Roofs (Phase IV) Duplex Roofs (Phase IV) Seat Dock Swim Dock		Duplex Roofs (Phase III)	1							\$19,800		
Boat Dock Swim Dock Swim Dock Swim Dock Cance Rack Cancer		Duplex Roofs (Phase IV)		1							\$80,784	
Swim Dock Cance Rack Swim Dock Cance Rack Cancer Rac	11-EQUIPMENT	Boat Dock										\$46,172
Canoe Rack Can		Swim Dock										\$8.879
Mail Shed Small Mailboxes		Canoe Rack										
Small Mailboxes \$5,414 \$5,414 \$6 \$6,414 \$6 <t< td=""><td>13-SPECIAL CONST</td><td>Mail Shed</td><td></td><td></td><td></td><td></td><td>\$10,294</td><td></td><td></td><td></td><td></td><td></td></t<>	13-SPECIAL CONST	Mail Shed					\$10,294					
Large Mailboxes		Small Mailboxes						\$5.414				
CTRICAL (Exterior Building Utilities \$300		Large Mailboxes						\$1,312				
CTRICAL (Exterior Building Lights St.,300 \$1,300 \$11,594 \$204,161 \$158,099 \$161,235 \$82,084 \$55	15-MECHANICAL	Building Utilities	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300
Walk Lights	16-FI ECTBIGAL (Exterior	'Building Lights)))	
\$1,300 \$1,300 \$1,300 \$11,594 \$204,161 \$158,099 \$161,235 \$82,084 2035 2036 2037 2038 2039 2040 2041 2042 2043 3040 MASS The second control in the street second c		Walk Lights				1	1			1		
\$1,300 \$1,300 \$1,300 \$1,300 \$11,594 \$204,161 \$158,099 \$161,235 \$82,084 2035 2036 2037 2038 2039 2040 2041 2042 2043 Updated:		יימוא בופוונט										
2035 2036 2037 2038 2039 2040 2041 2042 2043	Totals:		\$1,300	\$1,300	\$1,300	\$1,300	\$11,594	\$204.161	\$158.099	\$161.235	\$82.084	\$56.351
The engineer annual inflation mater is:		I	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
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		F. (4)	מל קלישווטטל כין	ry acitaltai lana		/00						

SHAKER LANDING CONDOMINIUM 30 YEAR CASH FLOW CHART

YEAR	OPENING	BASIC	ADJUSTED	TOTAL	EXPENSES**	CLOSING
	BALANCE	CONTRIBUTION	CATCH-UP*	CONTRIBUTION		BALANCE***
2015	\$126,000	\$48,470	\$273,723	\$322,193	\$155,100	\$301,475
2016	\$301,475	\$48,470	\$88,783	\$137,253	\$153,994	\$296,458
2017	\$296,458	\$48,470	\$45,116	\$93,585	\$157,048	\$243,584
2018	\$243,584	\$50,408	\$36,579	\$86,988	\$50,540	\$290,504
2019	\$290,504	\$50,408	\$36,299	\$86,707	\$4,006	\$386,479
2020	\$386,479	\$50,408	\$33,916	\$84,324	\$29,840	\$457,512
2021	\$457,512	\$50,408	\$33,916	\$84,324	\$1,300	\$560,497
2022	\$560,497	\$52,425	\$29,169	\$81,594	\$78,262	\$586,316
2023	\$586,316	\$52,425	\$29,169	\$81,594	\$1,300	\$691,668
2024	\$691,668	\$52,425	\$20,833	\$73,258	\$220,958	\$568,681
2025	\$568,681	\$52,425	\$14,682	\$67,106	\$187,562	\$468,563
2026	\$468,563	\$54,522	\$9,413	\$63,935	\$191,288	\$357,406
2027	\$357,406	\$54,522		\$54,522	\$352,349	\$67,918
2028	\$67,918	\$54,522		\$54,522	\$1,300	\$124,921
2029	\$124,921	\$54,522		\$54,522	\$1,300	\$184,204
2030	\$184,204	\$56,703		\$56,703	\$1,569	\$247,808
2031	\$247,808	\$56,703		\$56,703	\$1,300	\$314,231
2032	\$314,231	\$56,703		\$56,703	\$1,300	\$383,311
2033	\$383,311	\$56,703		\$56,703	\$1,300	\$455,154
2034	\$455,154	\$58,971		\$58,971	\$15,329	\$517,874
2035	\$517,874	\$58,971	0	\$58,971	\$1,300	\$597,413
2036	\$597,413	\$58,971		\$58,971	\$1,300	\$680,134
2037	\$680,134	\$58,971		\$58,971	\$1,300	\$766,163
2038	\$766,163	\$61,330		\$61,330	\$1,300	\$858,040
2039	\$858,040	\$61,330		\$61,330	\$11,594	\$943,092
2040	\$943,092	\$61,330		\$61,330	\$204,161	\$835,128
2041	\$835,128	\$61,330		\$61,330	\$158,099	\$769,828
2042	\$769,828	\$63,783		\$63,783	\$161,235	\$701,219
2043	\$701,219	\$63,783		\$63,783	\$82,084	\$710,601
2044	\$710,601	\$63,783		\$63,783	\$56,351	\$746,605

Updated: 10/27/14

* The Basic Catch-Up contribution, as calculated in Appendix A, has been adjusted to to allow for a minimal contribution while maintaining a positive Closing Balance over the span of this study, given the recommended contributions and projected expenses.

** For the purposes of this study, annual inflation rates will be assumed to be:

Inflation has been factored into the calculations for Expenses in future years.

To account for increased Expenses in future years, an increase of in the Annual Contribution has been assumed every four years.

This adjustment should be reviewed with regular updates of the study.

*** For the purposes of this study, annual interest rates will be assumed to be:

Interest has been factored into the calculations for the Closing Balances for the Reserve Fund.

(Due to Contributions & Expenses being made throughout the year, Interest applied to only 50% of Annual and Catch-Up Contributions, and 50% of Expenses for a given year.)

NOTE: The above Cash Flow Chart is intended as a model to show the relative level of Reserve Funding which will be necessary for the anticipated expenditures at this development. The expenditures, contributions and fund balances shown are projections based on the available information at this time. The actual values will vary, particularly in later years.

APPENDIX B PHOTOGRAPHS



Photograph #1 - Fence At North End Of Development



Photograph #2 - Bridge At North End Of Development



Photograph #3 - In-Fill Stairway



Photograph #4 - Framed Stairway



Photograph #5 - Triplex Exterior Deck



Photograph #6 - Duplex Exterior Deck



Photograph #7 - Siding On Triplex Building



Photograph #8 - Deteriorated Siding On Triplex Building



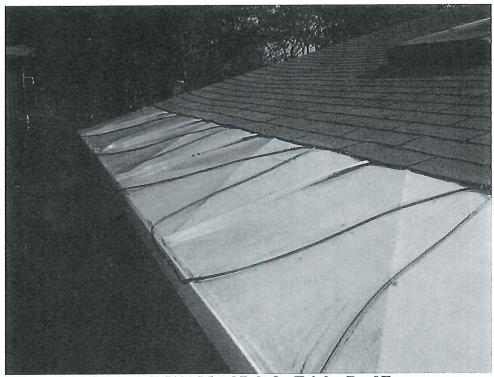
Photograph #9 - Bulging Siding On Rear Of Building #7



Photograph #10 - Siding In Contact With Grade Materials



Photograph #11 - Failing Siding Finish



Photograph #12 - Metal Belt On Triplex Roof Eave



Photograph #13 - Blistered Roof Shingles



Photograph #14 - Plywood Decking Lifting



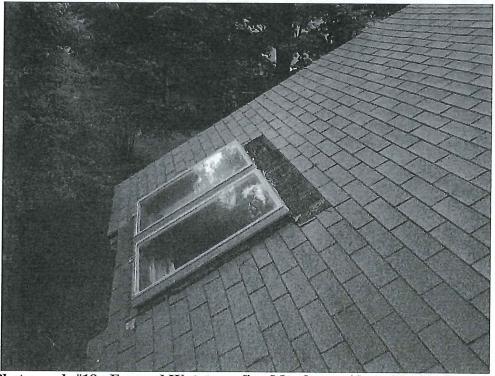
Photograph #15 - Lichen Growth On Duplex Building



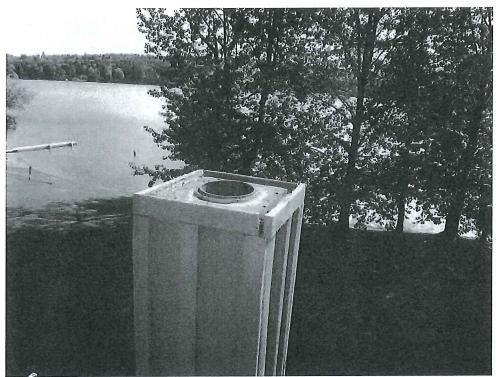
Photograph #16 - Moss Growth On Duplex Building



Photograph #17 - Damaged Roof Shingles On Duplex Building



Photograph #18 - Exposed Waterproofing Membrane Above Duplex Skylight



Photograph #19 - Triplex Chimney With No Cap Flashing



Photograph #20 - Triplex Chimney With Open Cap Flashing



Photograph #21 - Boat Dock



Photograph #22 - Canoe Rack



Photograph #23 - Mail Shed



Photograph #24 - Walkway Light