RESTORATION
ENGINEERING, INC.
10503 West Drive, Ste A
Fairfax, VA 22030
(703) 272-7787
www.REI1.com

2018 REPLACEMENT RESERVE STUDY

FAIRLINGTON GLEN CONDOMINIUM

Arlington, Virginia

FINAL REVISION

September 10, 2019

TABLE OF CONTENTS

INTRODUCTION

Purpose: The purpose of this Capital Reserve Study is to provide the Board of Directors for the Fairlington Glen Condominium Association, with a document that establishes the replacement reserve funding required to repair or replace physical assets when they reach the end of their useful service lives. The replacement schedules are based on estimated useful life as determined by normal aging schedules and a visual inspection of the existing conditions. This study, however, does not include a detailed condition assessment of each item.

It is critical to the success of a condominium association to have an adequately funded replacement reserve fund to provide for the replacement of the community's common elements as they reach the end of their useful lives. This Capital Reserve Study will help Fairlington Glen to determine the extent and timing of the future gross reserve contributions that will be required to finance major replacements and repairs as they become due. It will then be up to the Glen to provide for (1) the necessary funding of its required reserve contributions and (2) a preventive maintenance program that will minimize any reduction in the useful lives estimated in this study.

In developing this Capital Reserve Study, Restoration Engineering, Incorporated (REI) observed and documented the condition of the property at random locations and noted its associated elements or systems, and determined if the systems are functioning adequately and approximated when replacement is required. By having a general idea of the useful life of commonly owned items within the community, the Association can ensure that the quarterly assessments are adequate to cover the repair/replacement costs expected during any particular year. The property value of these condominiums will be protected through the use of this study by providing ample funding for the upkeep of these buildings.

Authority: This Type I Capital Reserve Study has been prepared in accordance with our proposal dated May 7, 2018. Field work and gathering of information was performed at various times during 2018 and in January of 2019.

Background and Historical Information: Fairlington Glen Condominium is located near the intersection of North Quaker Lane and King Street in Arlington. Fairlington Glen is comprised of 56 separate buildings each consisting of as little as 3 and as many as 11 individual town home or condominium style units.

Management: Presently, the Condominium is managed by Cardinal Management in Woodbridge, Virginia. The Condominium Association is responsible for common elements used by all owners (*walkways, signage, sidewalks, etc.)* as well as elements necessary to the function of the buildings (*i.e., sewer systems, roofing systems, lighting, etc.)*.

Scope of Services: REI performed the following services in preparation of this study:

1. Reviewed the 2013 Fairlington Glen Capital Reserve Study and associated documents, prepared by Restoration Engineering, Inc.
2. Reviewed documentation regarding the condominium conversion that was not available or reviewed as part of the previous study including:
    a. "The Fairlington Story, Rebirth of a Village" (*hereinafter referred to as "Fairlington Story"*): This was a short, marketing book, prepared by CBI-Fairmac, detailing the renovation work that was performed in conjunction with the condominium conversion.
    b. House and Home Magazine, August 1975, pgs 50-53 (*hereinafter referred to as "H&H*"): This was an article titled, "Is this the hottest condo conversion in the country?", and again detailed numerous elements of the renovation work that was performed as part of the condominium conversion.
3. Met with Board Representatives, Mr. Maynard Dixon and Mr. William Worsley, in February of 2018, to discuss potential changes to the assets catalogued in the previous CRS.
4. Reviewed construction drawings and details concerning previous projects, specified by Restoration Engineering, Inc., that were performed subsequent to the previous CRS.
5. Reviewed available contracts and receipts (*provided by representatives of the Fairlington Glen Board Representatives)* for repair and replacement work on the common elements in the last several years.
6. Reviewed and modified the Reserve Spreadsheet/Asset Schedule of the Association's physical assets that was previously prepared, in house, for the Glen's 2008 Reserve Study by Mr. William Worsley; and, was subsequently, in 2013, updated by REI as part of the previous CRS. This spreadsheet/schedule was modified based on site observations, information collected and submitted by various Glen Board representatives and owners at large, and from conversations with contractors who have worked on the buildings or are familiar with construction conditions in the broader Fairlington area of Arlington County. The primary modifications, other than updating costs and life expectancy for various elements, included:
    a. <u>Elimination of "Sidewalk Replacement" from the Summary Table.</u> The Board has reportedly elected to treat sidewalks as a maintenance budget item moving forward. It is very difficult to track the condition and life expectancy of the concrete sidewalks on a comprehensive basis. Therefore, the Board will allot funds from the existing maintenance budget, on an annual basis, to repair and/or replace deteriorated sections of concrete sidewalk. Please note that the "Sidewalks" tab in the spreadsheet has not been deleted as this tab does provide relevant information regarding the previously allocated funding as well as the approximate square footage of sidewalk in each particular court.
    b. <u>Updated "Parking Lots" Tab:</u> The table was updated to reflect maintenance, repair and replacement work that has been performed within the last five years. The "Remaining Useful Life" of the parking lots was also updated to reflect more current conditions. This resulted in deferring some of the previously anticipated (*per 2013 CRS*) comprehensive parking lot repairs in 2023.

The plat was also updated to highlight the parking areas and to indicate the relevant square footage of the parking lot.

c. Updated "Curb_Gutter" Tab: The table was updated to correlate with the parking lot repair recommendations and to provide for individual depreciation of the curb/gutter within each court.

d. Updated "Storm" Tab: The table was updated to reflect recent stormwater improvements that were not reflected in the 2013 CRS, including any additions of drains and catch basins. The plat was also updated to show these improvements.

e. Created "Water" Tab: The study was updated to include the water supply lines which were not included on previous studies. Based on research, REI determined that the existing water lines were installed in conjunction with the condominium conversion. The plat was also updated to show the numbering convention for the water lines as well as the lineal footage of each line. Please note that the study includes only the common element portion of the water lines where they extend up to the building wall. Per the bylaws, owners are jointly responsible for the water supply lines within the building footprint; therefore, the interior lines are not included in the study.

f. Eliminated "Swimming Pool" Tab and Created "Pools Revised" Tab: Information regarding the swimming pool structure, equipment, furniture, etc. was broken down into further detail. Most notably, the wading pool was separated from the main pool as the various elements of both of these pools have different service lives and have not typically been repaired/replaced concurrently.

g. Modified "Roofs" Tab: Both the plat and the table were modified to reflect all roof replacement work that has been performed since the previous CRS. Also, all previous roof replacement contracts, dating from 2004, were input into the table and adjusted for inflation in an attempt to derive an accurate unit cost for the slate roofing replacement.

h. Modified "Masonry" Tab: Deleted references to the masonry stoops that were included in the previous CRS (*see next item*) as the BOD elected to make the stoops a separate depreciable asset. This tab will now only refer to general maintenance/repointing work that is related to the brick and stone building facade (*excluding chimneys and stoops*).

i. Created "Stoops" Tab: This table was created based upon a table created by Mr. Bill Worsley in 2016, subsequent to the previous study and subsequent to completion of the first stoop repair project. All stoops are now identified individually and labeled on the plat. Life expectancies of each stoop have been modified based on recent maintenance, repair and replacement work; and, condition assessments performed in 2016.

j. Created "Chimneys" Tab: All chimneys are now identified individually in the table and labeled on the plat. Each chimney cap is listed as a separate entity with corresponding life expectancy.

k. Created "Dormers" Tab: All gable dormers (***not*** *hip dormers or shed dormers*) are now identified individually in the table and labeled on the plat.

7. Visually inspected, photographed and estimated the remaining service life of the following common elements (*please note that some elements were not able to be viewed/photographed - i.e. sewers, water lines, etc.)*:

   a. Hardscape including asphalt pavement, concrete curb, and gutter.

   b. Utilities including:

      i. Sanitary Sewer System including existing cast iron and terra cotta sewers including relining maintenance, clean out installation, etc.

      ii. Storm Sewer System including existing terra cotta, PVC, Orangeburg, concrete and polyethylene piping systems and associated concrete and polyethylene catch basins.

      iii. Water Supply System

   c. Miscellaneous Site Features including signage, fencing (*multiple types*), handrails and exterior lighting.

   d. Recreational Features including:

      i. Swimming Pool and associated equipment and accessories

      ii. Pool Deck and Coping

      iii. Tennis Courts

      iv. Pickleball Court - formerly “Paddleball Court”

      v. Basketball Court

      vi. Bath House

      vii. Tot Lot Equipment

   e. Exterior Building Elements including:

      i. Roofing Systems and Associated Flashings - including gutters and downspouts.

      ii. Attic Dormers - excludes windows and window frames at dormers.

      iii. Chimneys and chimney caps.

      iv. Brick Masonry Stoops at entryways.

      v. Building Facade including brick and stone masonry veneers and associated architectural elements such as exterior wood trim and shutters. ~~While the architectural wood trim found throughout the property is a common element, it is considered an ongoing maintenance item; therefore, a certain percentage of the yearly budget is devoted to maintenance of these elements and, thus, reserves are not generally used for repair or replacement of these items.~~

      vi. Front Canopies and Rear Porticos including the wood framing and architectural wood detailing at the front porch canopies and the small portico roofs at the rear of lower floor units.

      vii. Doors and Windows at Common Areas of Apartment Style Units.

f. Building Interiors and Services including:

i. General Common Elements at Common Interiors of Apartment Style units including Interior Finishes (*carpeting, trim, paint, etc.*), Mailboxes and Interior Lighting.

ii. General Elements at Management and Maintenance Offices including Interior Finishes (*flooring, trim, paint, etc.*), Interior Lighting, Furniture, and Office Equipment.

iii. Tools and Equipment utilized by on site maintenance personnel.

Please note that a comprehensive inspection of all elements was not performed. Only a small percentage of an item are actually inspected/reviewed to approximate the existing conditions and estimated quantities. We did not inspect every sealant joint, roof, gutter, metal flashing, etc.

8. Estimated the repair or replacement costs using the following sources:

a. Contractors' bids/costs for similar repair/replacement work on other projects.

b. Previous amounts paid for renovation work done on this property.

c. Published cost data such as Means Construction Cost Data.

d. Industry publications such as trade journals and news bulletins that discuss construction costs.

e. Discussions with contractors who have previously performed work at the Glen or other Fairlington properties.

Note that the cost projections assume that regular maintenance and repairs will be performed in accordance with accepted industry standards. The service lives of building components are reduced if proper maintenance and repair schedules are not followed.

9. **REI** excluded the following services or items from the survey:

a. Items that are the responsibility of the Unit Owners including:

i. Windows (*with the exception of windows at common areas and pool house*)

ii. Doors (*with the exception of building entry door at apartment style units and doors at Pool House/Restroom Facility*).

b. Items maintained by funds in the maintenance and operations budget, including but not limited to sidewalks~~exterior wood trim and fascia~~.

c. A code analysis to determine if items are in compliance with current local and State building codes, including accessibility issues.

d. Projects to upgrade the existing facilities as required to comply with current or new building codes or to upgrade to improve a specific system.

e. Identification or testing for any type of hazardous material.

f. Demolition or destructive testing to determine actual conditions.

g. Evaluation of mechanical and electrical items by specialized consultants to better assess the mechanical and electrical systems.

10. REI also included a line item for the reserve study itself, with a useful life of 5 years (*the statutory interval between reserve studies)* because the Glen has chosen to save for such studies and to fund them from reserves.

Forward-Looking and Updatable: We were asked to make this study, as much as possible, a forward-looking analysis of the actual condition of the property. To further this goal, no asset that was fully functioning was listed as fully depreciated (*with annual depreciation = 0*), even though it might have exceeded the average useful life span reported in trade studies for such assets, unless the Glen was in the process of contracting for its replacement. In other words, when an aging Glen asset was still fully functioning, we did our best to estimate how much longer it was likely to last, given its age and the fact that it had already lasted so long. In making this determination, we relied on a wide variety of information, including trade studies of depreciation, conversations with contractors, and experience with similar assets in the much broader Fairlington area that includes the Glen.

As with the Glen's 2008 reserve study, this study was designed to provide an easily updatable model as well as a report on the condition of the Glen's assets. Asset replacement costs can be easily updated by using spreadsheet formulas to update inflation factors and replacement costs/unit (*for example, by updating older roof replacement costs/square foot with those reflected in recent contracts*).

General Reserve Fund Information: We did **not** perform a cash flow analysis, as might typically be done in a capital reserve study, because our understanding is that the Condominium will do this in house based upon the required reserve expenditure projections provided by this study. Thus, projections of revenues, operating expenses, gross reserve contributions, and the extent to which reserves will be fully funded (*reserves = accrued depreciation*) were beyond the scope of this study. REI will continue to work with the Glen's in-house accounting to revise the reserve funding figures once a funding plan is approved and established by the Board

Appendix A of this Study is the Asset Schedule for all Common Elements. Sub-Appendices A1, A2, etc. include specific data for some general items listed in the Asset Schedule. Appendix B, Multi-Year Reserve Expenditures Table, shows the expected Reserve expenditures over the next 20 years. All appendices are incorporated into a single spreadsheet which is derived from the Glen's 2008 Reserve spreadsheet, prepared by Mr. Bill Worsley and the same spreadsheet that was submitted in 2013. It is important to understand that these tables/appendices show a best estimate of repair/replacement requirements. The true cost can only be determined by obtaining bids based on a specific scope of work from several Contractors. Also, the tables do not dictate that replacement must occur in a given year.

This study reflects current building conditions and possible expenses for the Association, but the study is not a substitute for proper management of and maintenance of the community's common property. Usually, items are not replaced in the specific year that they are scheduled for replacement in the study. Since some aesthetic items do not jeopardize the integrity of the building systems, their replacement timing and value will vary depending on the desires of the Association. Additionally, some items will not survive their expected life spans and will require early replacement. Likewise, other items will exceed their expected life span and allow replacement to be delayed. Costs will vary as well and all estimates are based on conditions prevailing and observed at the time this report was prepared.

Capital Reserve Studies are required under the Virginia Condominium Act every five years. In addition, the Board is to review the results of the study at least annually to determine if reserves are sufficient and make any adjustments to maintain reserves. The Glen has been following, and should continue to follow, these practices.

OBSERVATIONS AND FINDINGS

General: The information provided in the following sections is grouped in accordance with the Reserve Schedule so that similar or related building systems and components are together. Each section is further broken down into numbered component parts which describe specific elements. The condition of each component is then determined and either the repair or replacement work recommended is identified. We also provide more detailed explanations of items where we found unusual conditions or where we made basic assumptions based on our knowledge of building systems. Each component number corresponds to a line item on the expenditure charts.

The information in the following sections discusses each building component, its condition, and recommendations for either repair or replacement. Each number has a corresponding line item in the Table at Appendix B that provides the estimated remaining useful life of each item and the estimated cost for replacement.

1. HARDSCAPE

1.1 ASPHALT PAVEMENT

1.1.1 General: All Courts are paved with asphalt. Based on test cut data from our 2006 Pavement Study, the original profile of the pavement probably consisted of a 2 to 2½ inch base course and a 1 to 1½ inch surface course. Over the years, multiple asphalt overlays have been installed, raising the profile of the pavement throughout the community and covering the original concrete curb at almost all locations. Based on the most recent pavement replacement work performed in Court 14 in 2018, there is very little stone subbase beneath the existing pavement.

1.1.2 Condition: The existing asphalt pavement is generally in varying, but generally fair, condition. As previously noted, the "Parking Lots" tab in the Asset Schedule has been updated to reflect repairs that have been performed recently including:

1.1.2.1 Pavement overlay in Courts 11 and 14 and sealcoating of all remaining courts in 2011.

1.1.2.2 Pavement overlay in Court 6 and sealcoating of Courts 1, 5, 7, 9, 10, 12, 15 & 16 in 2014.

1.1.2.3 Replacement of pavement and associated curb, gutter and sidewalk in Court 14 in 2018.

1.1.3 Life Expectancy/Maintenance: Despite the rigorous maintenance, we anticipate that full replacement of the pavement will be necessary around 2023 with the exception of Courts 9 and 14. The pavement should be reevaluated, at that time, prior to proceeding with full scale replacement work. For the purposes of this Study, the life expectancy of all Courts (*except 9* & 14) has been set at 10 years.

1.1.4 Replacement Considerations: Compliance with Arlington County regulations governing water runoff to the Chesapeake Bay (*as delineated in the Chesapeake Bay Preservation Ordinance or* ***CBPO***) limits the Glen's ability to replace its parking lots completely down to the sub-grade (*exposed earth*) without either losing allowable surface area, using alternate surface materials (*such as a more expensive permeable surface)* or constructing additional drainage structures elements (*filtration berms, sediment traps, etc.*). Consequently, in the previous CRS, replacement of all Courts was lumped together (*in 2023*) to mitigate some of these additional costs in an attempt to achieve an economy of scale. However, based on the most recent replacement work in Court 14 and conversations with various paving contractors, it is more prudent to break up pavement replacement into smaller projects, perhaps even on a court-by-court basis. In order to avoid potential conflicts with Arlington County and the requirements of the CBPO, when this work is performed, the work must be staged in increments to avoid excess exposure of the subgrade and all equipment must be staged within the property limits of the Glen. Corresponding to this revised

recommendation, we have repositioned court replacement for each court, with only one or two courts performed per year, based on current conditions and recent maintenance work.

1.1.5 Coordination: As noted in the previous CRS, when the pavement is replaced the associated concrete curb and gutter should also be replaced and reconfigured as necessary. Consequently, all projected parking lot replacement work has been coordinated with proposed curb and gutter replacement work.

1.1.6 Cost Information: Unit Cost information for both replacement and ongoing asphalt maintenance were derived from previously performed work and conversations with asphalt paving contractors.

1.2 CONCRETE

1.2.1 Concrete Sidewalk

1.2.1.1 General: There are approximately 3 miles of sidewalks at Fairlington Glen (47,500 square feet). As referenced earlier in this survey, the Board has elected to treat sidewalks as a maintenance budget item moving forward. Heretofore, sidewalks have been included as a reserve study item; however, It is very difficult to track the condition and life expectancy of the concrete sidewalks on a comprehensive basis. Therefore, the Board will allot funds from the existing maintenance budget, on an annual basis, to repair and/or replace deteriorated sections of concrete sidewalk. Please note that the "Sidewalks" tab in the spreadsheet has not been deleted as this tab does provide relevant information regarding the previously allocated funding as well as the approximate square footage of sidewalk in each particular court.

1.2.2 Concrete Curb and Gutter

1.2.2.1 General: Poured in place concrete curb and gutter is installed along the perimeter of all Courts; however, in most locations, the gutter pan has been overlaid with asphalt and is not visible. As discussed in the pavement section above, multiple overlays have been installed at most Courts and, as a result, only the curb is visible with the exception of courts that have been recently reconstructed including Courts 9, 14 & 16.

1.2.2.2 Condition: Where visible the curbs are in fair condition but cannot be maintained without damaging the asphalt pavement.

1.2.2.3 Life Expectancy/Maintenance: The existing concrete curb and gutter is at the end of its useful life and should be replaced.

1.2.2.4 Replacement Considerations: Given that replacement of the concrete curb and gutter will have a significant impact on the adjoining asphalt pavement; and, as noted in the

previous commentary regarding the parking lots, we recommend that this work be performed in conjunction with the asphalt pavement reconstruction on a court-by-court basis. We previously calculated the length of concrete curb and gutter to be approximately 6,700 lineal feet. The estimated unit cost (*in $2018*) to replace the concrete pavement is $31.00 per lineal foot. Based on this unit cost, we estimate the 2018 replacement cost for the concrete curb and gutter to be **$214,000.00**.

1.2.3 Concrete Alleys/pavement

1.2.3.1 General: There are two concrete paved alleyways on the property. The first is approximately 250 feet long and extends from a curb cut along South Stafford Street (between Courts 12 and 13) back towards the swimming pool. This is the emergency access lane for the swimming pool and must be open at all times during swimming pool operation periods. The second alleyway is approximately 150 feet long and extends from a curb cut along South 36th Street (between Courts 6 and 7) back towards the pickle-ball court. This alleyway was the original access drive for the boiler plant that sat where the existing pickle-ball court is located. As such, this alleyway does not require special access.

1.2.3.2 Condition: Both of the concrete alleyways are in marginal condition. There are numerous cracks at both alleyways and the pavement has been dislocated in some areas.

1.2.3.3 Life Expectancy/Maintenance: The existing concrete pavement should be repaired to extend life expectancy. Cracks can be routed and sealed to control water intrusion. Dislocated sections of pavement should be patched. The pavement should provide 10 years of additional service if repairs are performed.

1.2.3.4 Replacement Considerations: As noted above, we calculated the length of alleyway to be approximately 400 lineal feet. The alley is approximately 11 feet wide which yields an approximate square footage of 4,400 sf. The estimated unit cost to replace the concrete pavement is $15.00 per square foot. Based on this unit cost, we estimate the 2018 replacement cost for the concrete alleyway pavement to be **$66,000.00**.

2. UTILITIES

2.1 SANITARY SEWER

2.1.1 General: During the condominium conversion in the 1970's, bathrooms were installed in all basement levels. At that time, the original cast iron plumbing below the floor slab was removed and replaced with plastic (*typically polyvinyl chloride or "PVC"*) piping. All sanitary sewer piping converges below the basement slab in the "Low Unit" where the newer PVC piping is connected to an original cast iron, 4 inch diameter lateral that runs to a point a few feet outside the building wall. The lateral then typically transitions to a 6 inch diameter, terra cotta pipe which extends either to a manhole that is serviced by an Arlington County lateral or connects directly to the Arlington County Main in the street.

2.1.2 Terra Cotta Piping

2.1.2.1 General: As referenced in the paragraph above, almost all exterior laterals consist of 6 inch diameter, terra cotta pipes with bell and spigot joints. Based on information provided in the "Fairlington Story" we do not believe that these laterals were replaced during the condominium conversion. The detailing of the joints at the time of original construction was crude based upon available materials and methods at that time (early 1940's). Consequently, these types of systems are extremely susceptible to deterioration via dislocation and root penetration.

2.1.2.2 Condition: As documented in REI's 2006 Sanitary Sewer Survey and subsequent repair work, the original terra cotta piping was in marginal condition at the time of the survey; however, was still in functional condition and could be repaired. Subsequently, over the three-year period 2007-2009, 35 of the 56 terra cotta sewer laterals were relined using epoxy injected liner. The remaining 21 had either been previously relined or fully replaced, or in a few cases, were replaced by Dwyer during the 2007-2009 period. The relining work was performed, predominantly, by US Sewer and Drain. To our knowledge there have been relatively few issues subsequent to completion of the relining work and the Glen no longer incurs cost for maintenance of the exterior sanitary sewer laterals.

2.1.2.3 Life Expectancy/Maintenance: The life expectancy of relined terra cotta piping is generally estimated at 50 years; however, the technology has not been tested over a long enough period of time to determine if this estimate is conservative, realistic or overly optimistic. For the purposes of this Study the life expectancy has remained as 50 years. In approximately 15 to 20 years, the Glen should again perform a comprehensive inspection to assess the condition of the relined piping at its supposed half-life.

2.1.2.4 Replacement Cost: The replacement/relining costs assumed in the 2013 CRS have been maintained for the 2018 CRS.

2.1.3 Exterior Cleanouts

2.1.3.1 General: Over the years, several exterior cleanouts were installed to provide access to the terra cotta laterals at a point just outside the building walls. Installation of the cleanouts was necessitated by the need to perform frequent maintenance to prevent clogging of the laterals. When the comprehensive relining project was performed, numerous additional cleanouts were installed (*except in 14 lines where access was from existing manholes)* to provide permanent access to specific lines for the purpose of facilitating future inspection and maintenance. The cleanouts typically consist of a vertical, 6-inch diameter PVC pipe that extends just above grade where it terminates at a removable plug. The vertical pipe is typically connected to the lateral with a "Y" fitting.

2.1.3.2 Condition: The condition of the cleanouts is unknown due to the fact that the cleanouts are not readily viewable without the use of pipe inspection equipment. It is assumed that the cleanouts are in good condition due to the anticipated life expectancy of PVC pipe and fittings.

2.1.3.3 Life Expectancy/Maintenance: It is reasonable to assume that the exterior cleanouts will last as long as the sewer laterals. Given that the cleanouts would probably need to be replaced in conjunction with any major work on the sewer laterals, we estimate the life expectancy to be 50 years.

2.1.3.4 Replacement Cost: The replacement/relining costs assumed in the 2013 CRS have been maintained for the 2018 CRS.

2.1.4 PVC Piping

2.1.4.1 General: As previously noted, when the Glen was converted to condominiums most of the below grade piping beneath the units was replaced with Poly Vinyl Chloride (*PVC*) pipe. In addition, where original terra cotta sewer laterals were replaced over the years, they were generally replaced with new PVC pipe.

2.1.4.2 Condition: Only a small portion of the PVC pipe from the conversion era has been surveyed and is in good condition. Most of the replaced sewer laterals are relatively new and are also presumed to be in good to excellent condition.

2.1.4.3 Life Expectancy/Maintenance: Typically, the life expectancy of below grade PVC piping has been estimated at 50 years. However, recent research/testing on PVC pipe suggests that the life expectancy may be significantly higher than this figure; even up to and beyond 100 years. For the purposes of this study the life expectancy is estimated at 65 years.

2.1.4.4 Replacement Cost: The replacement/relining costs assumed in the 2013 CRS have been maintained for the 2018 CRS.

2.1.5 Cast Iron Piping

2.1.5.1 General: As previously noted, the sewer laterals that extend from the "Low Unit" to the exterior laterals are fabricated from cast iron pipe that is typically 4 inches in diameter. During the relining project a few of the interior cast iron laterals were relined but the vast majority have not been addressed.

2.1.5.2 Repairs performed since 2013 CRS: The Glen has engaged both Dwyer Plumbing and McDaniel Plumbing to perform a variety of repairs to the cast iron laterals since the previous CRS study was completed. Typically, partial repairs to the cast iron lines were performed in proximity to the tie-in with the terra cotta laterals or the interior PVC piping. Most recently, the lateral at 3523B S. Stafford Street (*Court 1*) experienced a sewer back-up that was, subsequently, determined to be caused by dislocation of the cast iron lateral at or near the point where it runs beneath the foundation wall.

2.1.5.3 Condition: In the course of the 2006 Sanitary Sewer Survey we were able to inspect a small portion of the cast iron laterals in instances where access to the exterior lateral could only be gained via the basement bathroom or interior cleanout. From this limited observance we noted numerous locations with standing water and widespread buildup of scale on the interior surface of the pipe. In many instances the camera head could not be pushed through the interior of the pipe due to the buildup of scale/corrosion. The scale can be cleaned via high pressure washing equipment (*as was performed by US Sewer and Drain in locations where they installed an outside cleanout*); however, the scale will continue to buildup over time and continue to reduce the cross sectional area of the pipe.

2.1.5.4 Life Expectancy/Maintenance: Cast iron piping, when properly installed with adequate slope and compacted bedding can provide service for 100 years or more. However, when not properly installed or in cases where the sub-grade has deteriorated (*possibly due to high ground water/flooding)* the piping can begin to sag or "belly" and hold water. Standing water in the piping accelerates corrosion of the cast iron and, eventually, will lead to failure of the pipe. Although conditions probably vary significantly (*as highlighted above)*, we estimate the average service life to be 75 years at the Glen. Given this figure, the cast iron piping is nearing the end of its useful life and replacement/relining costs should be budgeted. Based on conversations with plumbers who routinely perform work in the Fairlington communities, this projection is validated by the fact that this type of failure is becoming considerably more common. Consequently, REI projects that the Glen will need to perform comprehensive repairs to all of the cast iron laterals within the next 20 years.

2.1.5.5 Replacement/Repair Options: As stipulated in the previous CRS, there are typically three options for addressing repair/replacement of the cast iron sewer laterals:

2.1.5.5.1 First Option: The first option is to simply replace the pipe with new pipe. Replacement of the piping is an extremely invasive and disruptive process which requires partial demolition of the basement floor slab. Although the Association is not responsible for replacement of damaged personal items (*non common elements*) this is still the most expensive option and should be avoided if at all possible. Although not desired, the Board should still allocate enough funding to account for complete replacement in at least twenty percent (*20*%) of the cases.

2.1.5.5.2 Second Option: The second option is to reline the interior of the cast iron piping in a manner similar to the relining of the exterior laterals. This is probably the most economical option provided that the pipe is sound and straight enough to allow for cleaning of the pipe scale and insertion of the relining equipment and the liner itself. For the purposes of the CRS, it is estimated that this option will be employed in fifty (*50*%) percent of the cases.

2.1.5.5.3 Third Option: The third and final option is pipe bursting. This method involves pulling a new plastic pipe through the old pipe. The method is called "Bursting" because the leading edge of the new pipe is mounted to a bursting head that splits open the old pipe to make room for the new pipe. For the purposes of the CRS, it is estimated that this method will be employed in thirty (*30*%) percent of cases. Please note that pipe bursting in this capacity has not actually been performed at the Glen (as opposed to the other two methods) so the viability and cost of this option is not as well defined. Once a few pipes have been replaced in this manner, the estimated cost for this work may need to be updated.

2.1.5.6 Replacement/Repair Considerations: REI Recommends the cast iron lateral repairs be performed every 5 years, with repairs being performed, in conjunction, at several units. Preferably, on a court-by-court basis. When soliciting pricing for this work, unit pricing for all three options listed above should be provided by the bidders. The scope of work should include preliminary, hydrojetting and camera inspection of all lines designated for repair in each particular phase. Following inspection, a decision should be made regarding the preferred repair approach for each particular lateral. Then, the cost can be determined based on the pricing submitted by the Contractor. If the repair amount exceeds the dollars that have been budgeted for that particular phase, some repairs can be postponed to meet budget requirements or additional funds can be allocated.

2.2 STORM DRAINAGE

2.2.1 General: For this Study we provided a detailed breakdown of all Stormwater Management elements as shown on the "Storm" tab of the Asset Spreadsheet. These elements have been broken down into piping and structure components. As noted earlier, new storm drain elements (*installed subsequent to 2013)* have been added to the "Storm" tab and are typically indicated on the plat.

2.2.2 Concrete Manholes/Catch Basins and Manhole Covers

2.2.2.1 General: There are numerous catchbasins throughout the property that collect stormwater runoff and divert runoff, via underground piping, into the Arlington County stormwater mains running along the various streets surrounding the Glen. The catchbasin covers are typically made from concrete while the basins themselves are made of either concrete or concrete masonry. At grade inlet locations (*in parking lots*), cast iron grates are installed while at other locations, the basin is accessed via manholes that are typically covered with cast iron manhole covers.

2.2.2.2 Condition: In general, the various catch basins are in good condition and should provide numerous additional years of service. For the purposes of this study the useful life of the basins is listed as 100 years but this figure may be exceeded. When the parking lots are reconstructed, it may be advisable/necessary to reconstruct some of the existing grade inlet catch basins that are within the parking areas.

2.2.2.3 Life Expectancy/Maintenance: Ongoing maintenance of all catch basins must be periodically performed to maintain proper operation of all catch basins. For example, some of the yard inlet basins have been choked with vegetative overgrowth or overzealous application of mulch which has impeded the drain inlet. Maintenance costs for these situations are not considered as part of the Reserve Study.

2.2.3 Terra Cotta Pipe

2.2.3.1 General: Many of the larger diameter pipes interconnecting catch basins or leading to the Arlington County Main are fabricated from terra cotta segments. This is the same type of piping that is used for the sanitary sewer laterals (*see above*) and which required relining in that instance. In the case of the storm laterals, the piping is a much larger diameter and, as such, is not as susceptible to blockages from root intrusion.

2.2.3.2 Condition: When the storm sewer survey was conducted in 2007, many of the terra cotta storm laterals were surveyed and were generally found to be in good condition.

2.2.3.3 Life Expectancy/Maintenance: For the purposes of this study, the life expectancy of the terra cotta piping has been set at 100 years; however, the service life may extend well beyond this amount of time.

2.2.3.4 Replacement Cost: Eventually, when the piping requires repair, the terra cotta lines should be relined with an epoxy liner in a manner similar to the sanitary laterals. The unit cost for relining of 12 inch diameter terra cotta piping is approximately $150 per lineal foot (*based on previous conversations with US Sewer and Drain and presumed inflation*).

2.2.4 Poly Vinyl Chloride (PVC) Pipe

2.2.4.1 General: As previously noted, some of the original Orangeburg stormwater piping throughout the Glen was subsequently replaced with PVC piping.

2.2.4.2 Condition: The condition of the piping was not verified but was assumed to be in excellent condition given the age of the material.

2.2.4.3 Life Expectancy/Maintenance: The generally anticipated life expectancy of PVC storm drainage pipe is around 65 years but may be considerably higher.

2.2.5 Polyethylene Pipe

2.2.5.1 General: Throughout the Glen, in some areas, perforated and corrugated polyethylene piping (*and catch basins – see below*) was installed to facilitate surface drainage. The piping is typically installed just below grade and typically interconnects plastic catch basins or discharges into a natural drainage feature or a concrete catch basin.

2.2.5.2 Condition: The condition of the piping varies depending upon age and installation. In locations where the piping was not properly wrapped with filter fabric and not properly sloped it is choked with sediment and is in poor condition. The polyethylene material itself is robust (*especially when not exposed to UV light*); however, the performance of this material over an extended period of time is not anticipated.

2.2.5.3 Life Expectancy/Maintenance: For the purpose of this Study the life expectancy is assumed to be 20 years.

2.2.5.4 Replacement Cost: When sections of corrugated polyethylene piping are replaced, we recommend that new perforated PVC sewer and drain pipe be installed in a manner similar to the recent work performed in the common area between Court 9 and Court 15 by Environmental Enhancements. The approximate unit cost to install new PVC S&D piping just below grade is $25 per lineal foot.

2.2.6 Polyethylene Catch Basins and Grates

2.2.6.1 General: As noted in the previous Section, numerous polyethylene catch basins have been installed throughout the Glen.

2.2.6.2 Condition: The catch basins are generally in good condition.

2.2.6.3 Life Expectancy/Maintenance: For the purpose of this Study the life expectancy is assumed to be 20+ years of service.

2.3 WATER SUPPLY

2.3.1 Water Supply Piping

2.3.1.1 General: The water supply lines were not included on the previous CRS or any previous Glen CRS to the best of our knowledge. According to the "Fairlington Story" the conversion era work included "...*Abandon all existing water service and install new water service from street mains with new meters*..." Consequently, the existing water supply piping is approximately 46 years old. Based on previous, minor maintenance and repair work that has been performed at the Glen and other communities, the water supply lines are copper. The diameter of the supply lines varies based on the size of the building/number of units being serviced. It is assumed that the existing supply lines vary in diameter between 1 ½ inches up to 3 inches.

2.3.1.2 Plat/Asset Schedule Changes: Although the plat from the 2013 CRS Study did show the water lines, these lines were not previously labeled or catalogued. All water lines have been individually designated with a number consisting of the Court number plus a sequential number following a hyphen. In instances where a main line enters a particular court and branches off into several different lines, the main line is typically labeled as "1" (*i.e. - in Court 15 the line extending from the Arlington County Main into the center of the court is labeled as "15-1*"). The linear footage of each line is also indicated on the plat in parentheses.

2.3.1.3 Water Supply for Pool/Office: Please note that the water line(s) servicing the existing pool and on-site maintenance office are not shown on the plat because the location could not be verified and is not shown on the original plat. It is presumed that this line is located in the area immediately behind Court 11 because the water meter servicing Court 11 also services the pool area.

2.3.1.4 Recent Repairs: In September of 2014, Dwyer Plumbing performed repairs to the 2 inch diameter, copper main at 4110 36th Street South in Court 5. In this particular instance, the main was leaking at the penetration through the foundation wall; therefore, comprehensive replacement was not required. Instead, Dwyer excavated on the exterior of the unit and replaced a small section of the original copper line. The cost for this work was $4,625.00.

2.3.1.5 Condition: The condition of the copper supply lines is unknown. Very little repair/maintenance has been performed to these lines over the years (*see previous paragraph*); therefore, it is assumed that the lines are in fair condition, despite their age.

2.3.1.6 Life Expectancy Factors: The life expectancy of copper supply piping is generally assumed to be between 50 and 70 years but could be even greater if conditions are optimal. The life expectancy will vary depending upon a variety of factors including:

2.3.1.6.1 Acidity or alkalinity of the supply water. Neutral ph (*7.0*) is ideal.

2.3.1.6.2 Acidity/alkalinity of the soil in which it is placed.

2.3.1.6.3 Installation / proper bedding of pipe.

2.3.1.6.4 Possible galvanic corrosion at interface with and/or penetration through the cementitious materials in the foundation wall.

2.3.1.6.5 Thickness of the pipe wall. Presumably, a thicker wall pipe, designated by the applicable building code at the time, would have been installed.

2.3.1.7 Life Expectancy Projection: For the purposes of this study, given the limited number of repairs, the limited amount of information that is available regarding the original installation; and, the relative unknown condition of the pipe or water chemistry, the life expectancy of the existing copper supply lines has been estimated at 70 years. Therefore, comprehensive replacement is NOT anticipated within the next 20 years. When additional problems surface with the water supply piping, presumably within the next 5 to 10 years, a more accurate assessment of the condition of the piping can be performed and the type and installation of the piping can be more thoroughly documented.

2.3.1.8 Replacement Cost: To calculate the estimated replacement cost we first estimated the percentage of each line that extends under pavement, sidewalk or lawn/landscape. The cost to excavate and restore the overburden will vary significantly depending upon the type of landscape/hardscape above. These percentages were multiplied by the linear footage of each line and by the assumed unit costs for replacement. Please note that the size of the supply lines may also affect the replacement cost; however, given that the size of the existing lines is unknown, it was generally assumed that all lines are 2 inch for simplicity. Based on these calculations, the total estimated replacement cost for all water supply lines is **$910,000.00**

3. MISCELLANEOUS SITE FEATURES

3.1 SIGNAGE

3.1.1 General: Site signage is limited. At various entry points throughout the property, there are two, painted, High Density Urethane (HDU) signs (*21 sets total*). The upper sign shows the address/Court information while the lower sign indicates that parking is reserved and unauthorized parking will be towed. Each of these signs is mounted to two, four-by-four, pressure treated, painted wood posts. There are also approximately sixteen painted, custom aluminum signs positioned around the property and indicating various information including: "Private Property", "Do Not Climb Fence", etc. All of the signs were fabricated by Banana Banner in late 2017/early 2018.

3.1.2 Condition: The signs are all relatively new and are in excellent condition.

3.1.3 Life Expectancy/Maintenance: The HDU material is considerably more durable than wood (*previous sign material*) and should provide long term protection against deterioration, warping and/or other deterioration that might be expected with wood signage. It is very likely that the HDU material itself will outlast the painted finish on the sign. For aesthetic reasons, the BOD may wish to refurbish or replace the signs earlier than necessary but, for the purposes of this study, the life expectancy has been set at 20 years.

3.1.4 Replacement Cost: As previously noted, the signage was recently fabricated by Banana Banner and cost information is readily available. The cost to fabricate the HDU signs and associated posts was approximately **$18,900.00** or approximately $85 per square foot. The cost to fabricate the aluminum signs was around **$500.00** or $16 per square foot.

3.2 FENCING

General: A "Fencing" tab was added to the Asset Schedule/Spreadsheet during the 2013 CRS to provide detailed information regarding the quantity, life expectancy and anticipated replacement cost of the various types of fencing utilized at the Glen. To our knowledge, no fencing replacement work has been performed subsequent to the previous CRS; therefore, many of the recommendations remain in place (*see below for additional discussion)*.

3.2.1 Patio Fencing

3.2.1.1 General: Privacy fencing (*approximately 6 feet high*) is installed around all private patio areas in the rear of the units. The pressure treated wood fencing is fabricated with pressure treated 4 by 4 posts and 6 by 6 posts (at gates) set in concrete. All posts are

covered with plastic, pyramid style post caps. Fence rails consist of three, parallel, pressure treated 2 x 4's secured to the posts with galvanized steel fence brackets. The fence is clad on both sides with staggered, pressure treated 1 x 4's that are secured to the rails with 2 nails at each rail. The cap rail consists of a pressure treated 1 x 4. The gate frames are fabricated from pressure treated lumber and are clad with tightly spaced 1 x 4 lumber on one side. The top edge of the gate is scalloped to provide some architectural detail. The gate hardware is heavy duty, coated, galvanized steel hardware that is available at many home improvement centers. This fencing was installed in 1997 by Long Fence.

3.2.1.2 Condition: Although the patio fencing is now 21+ years old, it is still, generally, in fair condition. This condition is partly attributable to continued maintenance that has been performed by on-site maintenance staff. On August 9, 2018, Bill Worsley met with Nate Eback, a sales representative for Long Fence, to discuss their bid for replacement of the pickle-ball court fence (*see below*). Bill reported that Mr. Eback indicated that the patio fences could have a useful life of up to 30 years if properly maintained. We attempted to confirm this information with Mr. Eback but he no longer works for Long Fence. Other Long Fence representatives did indicate that a 30 year life expectancy is possible if the fence is well maintained and is not subject to high wind conditions.

3.2.1.3 Life Expectancy/Maintenance: The life expectancy of the patio fencing was revised to 25 years (*previously listed as 20 years*) in the 2013 CRS based on the condition. however, given the condition, we believe the life expectancy can be extended another 3 to 5 years provided maintenance is performed. We would recommend that the BOD encourage the on-site maintenance personnel (or fencing contractor) replace deteriorated/curled/warped fence cap rails to extend the life of the wood fencing. This will prevent moisture from readily entering the end grain of the wood slats. At gates, the exposed end grain at the cut edge along the top of the gates exhibits preliminary deterioration. A sealer should be applied to the end grain in an effort to inhibit moisture from entering the end grain.

3.2.1.4 Replacement Cost: We had previously calculated the length of patio fencing to be approximately 13,250 lineal feet based on the site plan that we previously prepared in AutoCad. Based on this quantity we estimate the 2018 replacement cost to be approximately **$425,000.00** based upon assumed inflation since 2013. The patio fencing was last replaced in 1997 at a cost of approximately $250,000.

3.2.2 Split Rail Fencing

3.2.2.1 General: The vinyl split rail fence installed along the sidewalk that abuts the parking lot in Court 4.

3.2.2.2 Condition: Fencing was installed in 2010 and is still in good condition.

3.2.2.3 Life Expectancy/Maintenance: We anticipate an additional 15+ years of service and maintenance costs should be minimal.

3.2.2.4 Replacement Cost: The current estimated replacement cost, in 2018 dollars, is **$8,250.00**.

3.2.3 Perimeter Fencing

3.2.3.1 General: The border of the property that adjoins King Street and Quaker Lane is protected by a 6 foot high chain link fence. The fence along Quaker Lane was installed in 1977 and the short section of fencing between 36th Street and King Street (*along Quaker Lane*) was reportedly installed some time later. The installation date for the fencing along King Street is not known and may date to the condominium conversion.

3.2.3.2 Condition: Despite the age of the perimeter fence, the fence continues to function well and is in serviceable condition. The aluminum "H" posts are plumb and exhibit minimal corrosion. Our assumption is that the posts were set in concrete. The posts were painted with a green coating/paint which is failing at numerous locations. The galvanized steep pipe top rail of the fence exhibits corrosion in numerous areas; however, the corrosion appears to be, predominantly, surface corrosion. Like the posts, the top rail was painted/coated some time ago but the paint has failed at numerous locations. The chain link itself is a PVC coated (green color) galvanized steel material that is in good condition. Our assumption is that the fence posts and top rail are original while the chain link was installed at a later date. Presumably, the original chain link was removed and the posts and top rail were painted prior to installation of the new wire mesh.

3.2.3.3 Life Expectancy/Maintenance: Given the varying condition of the fence components and finishes, we believe the perimeter fencing can provide 10+ years of additional service provided some maintenance is performed to address the ongoing corrosion of the top rail. It would be advantageous to review the existing condition with several fencing contractors to determine the optimal maintenance approach.

3.2.3.4 Replacement Cost: We estimated the length of perimeter fencing from field observations and a takeoff from available CAD drawings resulting in a total estimated length of 2200 feet. The estimated unit cost for replacement, in $2018, is approximately $31.75 per lineal foot yielding an anticipated replacement cost of **$70,000.00.** Replacement costs assume in-kind replacement and costs could be significantly higher if the Board elects to install a wooden fence in lieu of chain link when replacement is performed.

3.2.4 Pool Perimeter Fencing

3.2.4.1 General: A six-foot-high decorative aluminum fence is installed along the perimeter of the pool deck and a shorter section of aluminum fencing is installed between the baby pool and the main pool.

3.2.4.2 Condition: The fencing is still in excellent condition and should provide 15+ years of additional service as planned.

3.2.4.3 Life Expectancy/Maintenance: The aluminum fencing has a lifespan of approximately 30 years as estimated on the previous study and should provide 15+ years of additional service as planned.

3.2.4.4 Replacement Cost: The aluminum fencing was replaced in 2003 at a cost of $32,200 or roughly $80 a lineal foot. We estimate the 2018 replacement cost to be equivalent with the 2003 cost + inflation. Consequently, the estimated unit cost to replace the fence is $109 per lineal foot yielding a total estimated replacement cost of **$43,500.00**.

3.2.5 Court Perimeter Fencing

3.2.5.1 General: Ten-foot-high chain link fencing is installed around all of the tennis courts and the pickle-ball court. There is a short (*three-foot-high*) section of chain link fencing along the north side of the basketball court.

3.2.5.2 Condition: The pickle-ball court fence is new and in excellent condition. The triple tennis court and basketball court fences were installed in 2011 and are in still in good condition. The single tennis court fence was installed in 2003 and is in marginal condition.

3.2.5.3 Life Expectancy/Maintenance: For the purpose of this study, the pickle ball court fence should provide another 30 years of service, the triple tennis court fence and basketball court fence should provide another 23+ years of service as planned, and the single tennis court should be replaced in the next 6 to 8 years.

3.2.5.4 Replacement Cost: We calculated the length of ten-foot-high fencing to be approximately 1,070 lineal feet and the length of the three-foot high fencing to be approximately 80 lineal feet. Based on these quantities, we estimate the 2018 replacement cost to be approximately **$47,000.00**.

3.3 HANDRAILS

3.3.1 Wrought Iron Handrails

3.3.1.1 General: Throughout the property, in areas where there are more than 2 or 3 concrete steps in succession, wrought iron handrails have been installed to prevent falls and to assist pedestrians when climbing or descending the stairs. This item was not included on previous studies but has been included with this study because it is a common element.

3.3.1.2 Condition: In general, the handrails are in fair condition although there are a number of areas where the handrail posts are slightly loose and are not anchored properly. Loose handrails could be a liability issue so on site maintenance personnel should be vigilant with maintenance and repair.

3.3.1.3 Life Expectancy/Maintenance: We anticipate that the handrails will provide 10 years of additional service.

3.3.1.4 Replacement Cost: We counted a total of 40 handrail sections during our 2013 survey of the property. To our knowledge, none of these sections has been removed and no new sections of handrail have been added subsequent to the 2013 study. The length of each section varies considerably but the actual lineal footage was not calculated. We anticipate the replacement cost, in $2018, to be approximately $238.00 per section or **$9,500.00**.

3.4 EXTERIOR LIGHTING

3.4.1 Carriage Lights

3.4.1.1 General: Throughout the community, there are a number of "Carriage" lights that are mounted to poles approximately 20 to 30 feet from the main entrances to individual units. In a comprehensive survey, conducted by Bill Worsley in August of 2017, 192 total poles and lights were identified. To our knowledge, no additional lights have been added subsequent to the 2013 study. The carriage lights are connected via circuitry that runs to a common electrical panel. In general, one circuit is provided per Court. Replacement of the circuitry that feeds the carriage lights is likely more expensive than the carriage lights themselves and the life expectancies, following replacement, are different as well; therefore, for the purposes of this study, the Carriage Lights and the circuitry that supports the carriage lights (*see below)* were separated into separate line items in the 2013 study.

3.4.1.2 Recent Repairs:

3.4.1.3 Condition: The condition of the carriage lights varies somewhat due to varying exposure conditions; however, in general, the lights and light poles are in average condition with many poles in poor condition. As previously noted, Bill Worsley conducted a comprehensive survey of the carriage lights in 2017 and identified at least 74 poles with current deficiencies (38 percent).

3.4.1.4 2018 Modifications in Court 14: The recently completed parking lot reconstruction in Court 14 also included installation of new electrical conduit for the carriage lights in Court 14 as it was advantageous to install the new conduit before placing new concrete sidewalk and asphalt pavement. When this work was performed the existing lights and poles were reinstalled and reconnected. To comply with code requirements, the electrical subcontractor who performed this work had to install new in-ground electrical junction boxes/enclosures at each light. These boxes are unsightly and present potential issues with ongoing lawn/landscape maintenance.

3.4.1.5 Life Expectancy/Maintenance: We estimate that the lights and light poles will provide an additional 2 to 4 years of service. When the lights are replaced, the circuitry should also be replaced (*see Carriage Light Circuits below*).

3.4.1.6 Replacement Recommendations/Costs for Light Mountings: The existing light poles are buried in the ground and are susceptible to damage/dislocation due to a variety of conditions including: mowing equipment, vandalism, wet ground, etc. When the lights/poles are replaced, we would strongly recommend that the new light poles be mounted to concrete piers, in lieu of a buried installation. An 8 or 10 inch diameter concrete pier would be formed at each pole location using a round form (*Sonotube or similar)*. Prior to placement of the concrete, new conduit would be run, below grade and up through the center of the form, penetrating through the center of the pier. The top of the form would be set at grade level. Once the concrete is poured, stainless steel anchor bolts would be set in the freshly placed concrete using a template provided by the post manufacturer (*see below for post information*). This type of installation would provide a more attractive, lower maintenance system moving forward. The estimated cost to install a new concrete mounting base with anchor bolts is $105 per pole/light which yields a total estimated cost of **$19,500.00**.

3.4.1.7 Pole Replacement Recommendations / Costs: When the poles are replaced, we would recommend replacement with a standard, 3 inch diameter pole to match the existing installation as much as possible. We would strongly recommend installation of an extruded or cast aluminum (*not steel*) pole to provide long term protection against corrosion. It is also recommended that the pole have a high quality finish to limit maintenance costs. The pole should include (*as either part of the pole or as an accessory)* a mounting base that is designed to be secured with anchor bolts. The pole should also include an integral, removable cover/junction box to accommodate wiring installation and to comply with current electrical code requirements. This will eliminate the need to install ground access boxes as was done recently at Court 14. The estimated cost to install new anchor mounted, prefinished aluminum poles is $205 per pole/light which yields a total estimated cost of **$38,000.00**. Please note that there is a wide variety of pole options available in various styles and materials. This cost could vary significantly based on the type of pole that is selected. Again, REI does not recommend installation of a less expensive, lighter gauge steel pole as these types of poles would be subject to premature degradation.

3.4.1.8 Light Fixture Replacement Recommendations / Cost: When the carriage lights are replaced, the new lights should match the existing lights (*or at least be of a traditional style)* to preserve the character of the existing installation. REI strongly recommends conversion to LED fixtures to reduce operating costs and to provide a low maintenance installation. Once again, the cost for new fixtures could vary given that the cost of lighting fixtures varies tremendously depending upon style and materials. In May of 2018, Bill

Worsley researched available products from Lowes and distributed a document to all Board members showing eight different options, varying in price from $45 to $135 per fixture, that are similar to the existing fixtures. For the purposes of this study, the estimated cost to replace the carriage lights with new, LED fixtures is $225 per light/fixture which yields a total estimated replacement cost of **$43,000.00**.

3.4.1.9 Photocells: When the new carriage lights and carriage light circuits are installed, new photocells should be installed at all circuits. The estimated unit cost to install new photocells is $200 per cell which yields a total estimated cost of **$3,200.00**.

3.4.1.10 Optional Exterior Outlets: When the new circuitry is installed, REI strongly recommends installation of new exterior power circuits. In all likelihood a new power circuit would need to be independent of the new lighting circuit but the new circuit wiring could be run in the same conduit. In our experience, there have been numerous occasions where the on site maintenance personnel have "hot-wired" one of the existing carriage light circuits to provide power for various maintenance equipment that is utilized throughout the property. Obviously, this is not a safe or preferred operation. Installation of new, common electrical circuits within the Courts would provide readily accessible power for future maintenance operations. Power outlets/receptacles would typically be limited to one per Court (*perhaps 2 at larger courts*) and all outlets would need to be mounted in tamper proof, exterior rated housings with integral locking features.

The estimated cost to integrate electrical power and associated circuitry/hardware, in conjunction with lighting upgrade, is **$8,000.00**

3.4.2 Carriage Light Circuits

3.4.2.1 General: As noted above, the carriage lights are connected to a common lighting circuit at each Court. This circuit for the exterior lights is typically a buried electrical cable that is, presumably, exterior rated.

3.4.2.2 Recent Circuitry Repairs: Over the past several years, Power Systems Electric, Corp. (PSE) has performed an extensive amount of repairs to the carriage light circuitry including:

3.4.2.2.1 May 2, 2012 (Pool Area): Replaced 190 feet with conduit/new conductor for a total cost of $2,794.18.

3.4.2.2.2 April 8, 2014 (Pool and Court 10): Replaced 80 feet with conductor for a total cost of $2,032.45.

3.4.2.2.3 April 23, 2014 (Court 3): Replaced 180 feet with conduit/new conductor for a total cost of $2,805.83.

3.4.2.2.4 May 13, 2015 (Court 2): Replaced 40 feet with conduit/new conductorand installed new interior conduit for a total cost of $2,392.66.

3.4.2.2.5 October 14, 2015 (Court 6): Replaced 180 feet with conduit/new conductor for a total cost of $2,365.36.

3.4.2.2.6 November 5, 2015 (Pool + Tennis + Basketball Court): Replaced 150 feet with conduit/new conductor for a total cost of $2,023.13.

3.4.2.2.7 April 7, 2016 (Court 3): Replaced 40 feet with conduit/new conductor for a total cost of $2,030.81.

3.4.2.2.8 December 20, 2017 (Court 1): Replaced 40 feet with conduit/new conductor for a total cost of $2,105.20.

3.4.2.2.9 February 22, 2018 (Court 1): Miscellaneous electrical repairs for a total cost of $1,372.47.

3.4.2.3 Condition: As noted in the previous study and as highlighted by the spate of recent repairs chronicled in the previous paragraph, this circuitry is not reliable and is not installed in accordance with current Electrical Code Requirements. In brief, buried wiring must be a minimum of 24 inches below grade.

3.4.2.4 Circuitry Replacement Recommendations: We strongly recommend that the existing circuitry be replaced in conjunction with replacement of the lights themselves. When the circuitry is replaced there are two options:

3.4.2.4.1 Option 1: New, exterior rated, insulated conductor (*not in conduit*) can be installed; however, this conductor must be buried a minimum of 24 inches below grade level which will require substantial excavation throughout the property; or

3.4.2.4.2 Option 2: New, exterior rated, intermediate metal conduit (*IMC*) can be installed at a minimum depth of 6 inches below grade. Clearly, Option 2 is more economically viable and less invasive to the property.

3.4.2.5 Life Expectancy: We anticipate that the new, IMC conduit/circuits will provide approximately 50 years of service if properly installed.

3.4.2.6 Replacement Cost: In the previous reserve study we estimated the total length of circuitry for the carriage lights to be around 9,200 lineal feet. The approximate unit cost to install new conductor in IMC is $12.50 a lineal foot yielding a total estimated replacement cost of around **$115,000.00**. Please note that this cost may be slightly less if some of the recently installed conduit can be reused as part of the replacement work.

3.4.3 Swimming Pool Pole Lights

3.4.3.1 General: There are 13 pole lights surrounding the swimming pool that were presumably installed around the time of the conversion.

3.4.3.2 Condition: These lights are generally in fair condition but many of the poles are leaning and some of the connections between the lights and the poles appear suspect.

3.4.3.3 Life Expectancy/Maintenance: For the purpose of this study, these lights should provide an additional 5 years of service.

3.4.3.4 Replacement Cost: The estimated unit replacement cost, in 2018 dollars, is $800 per light (*revised up from $500 in previous study*) yielding a total estimated replacement cost of **$10,400.00.** Once again, this cost could vary significantly depending upon the material and style selected.

4. RECREATIONAL FEATURES

4.1 SWIMMING POOL

Please note that the "Swimming Pool" tab from the 2013 Asset Schedule/Spreadsheet has been eliminated and replaced with the "Pools Revised" tab. The information in this revised tab is significantly more detailed than the previous study.

4.1.1 MAIN SWIMMING POOL:

The existing swimming pool was constructed, in 1974 as part of the condominium conversion, and is a standard, in ground, concrete swimming pool with a plaster "whitecoat", tile borders and precast concrete coping stones.

4.1.1.1 **Whitecoating**

4.1.1.1.1 General: Replastering or "Whitecoating" of the pools was performed in the Spring of 2016 by Atlantic Pool Service, Inc. To our knowledge, Atlantic also manages pool operations and performs periodic maintenance.

4.1.1.1.2 Condition: The whitecoat is less than 3 years old and is in good condition.

4.1.1.1.3 Life Expectancy/Maintenance: The anticipated life expectancy of the whitecoat was previously estimated at 10 years (*2013 Study*); however, based on correspondence between the Board of Directors and Steve Bogdanoff (*President of Atlantic Pool Service, Inc.*) In November of 2015, a more reasonable life expectancy for the whitecoat is approximately "...6 to 8 years..." For the purposes of this study, the life expectancy has been assigned as 7 years.

4.1.1.1.4 Replacement Cost: Based on conversations with commercial swimming pool contractors, current pricing for whitecoating is around $3.50 per square foot which calculates to a total 2018 cost of approximately **$13,800.00**.

4.1.1.2 **Coping Stones**

4.1.1.2.1 General: There are existing precast concrete coping stones and decorative ceramic tile (*at the water line*) along the perimeter of the main pool.

4.1.1.2.2 Condition: Fair

4.1.1.2.3 Life Expectancy/Maintenance: The existing stones and tiles are estimated to have a remaining useful life of approximately 9 years.

4.1.1.2.4 Replacement Cost: The estimated unit replacement cost of the coping stones at the Main Pool, in 2018 dollars, is $75.00 per lineal foot yielding a total anticipated replacement cost of around **$19,500.00.**

4.1.1.3 Perimeter Tile

4.1.1.3.1 General: There are existing decorative tile (*at the water line*) along the perimeter of the main pool.

4.1.1.3.2 Condition: Excellent. The perimeter tile was replaced in conjunction with application of the new whitecoat in 2015.

4.1.1.3.3 Life Expectancy/Maintenance: The perimeter tile has a remaining useful life of approximately 11 years.

4.1.1.3.4 Replacement Cost: The estimated unit replacement cost of the perimeter tile, in 2018 dollars, is $45.00 per lineal foot yielding a total anticipated replacement cost of around **$11,300.00.**

4.1.1.4 Transition Tile

4.1.1.4.1 General: There are existing decorative tile at the transition from the shallow end to the deep end as well as other miscellaneous tile at steps.

4.1.1.4.2 Condition: Excellent. The transition tile was replaced in conjunction with application of the new whitecoat in 2015.

4.1.1.4.3 Life Expectancy/Maintenance: The transition tile has a remaining useful life of approximately 11 years.

4.1.1.4.4 Replacement Cost: The estimated unit replacement cost of the perimeter tile, in 2018 dollars, is $45.00 per lineal foot yielding a total anticipated replacement cost of around **$2,700.00.**

4.1.1.5 Pool Covers

4.1.1.5.1 General: The previous study (*2013*) allocated funding for purchase of a pool cover despite the fact that the Glen had not previously utilized a cover. This was done in order to provide better protection for the whitecoat. New pool covers were installed by Atlantic Pool Service, Inc., over both the Main Pool and the Wading Pool, in 2017 (*exact date unknown)*. The pool covers are manufactured by Meyco and are fully warrantied for materials and workmanship for a period of two years (*presumably up to the Summer of 2019*). Meyco also provided a 12 year, prorated, material warranty for the cover which will extend up to 2029.

4.1.1.5.2 Condition: The covers are still relatively new and are in excellent condition.

4.1.1.5.3 Life Expectancy/Maintenance: To preserve the life of the pool cover it is important that the warranty conditions are followed. Most notably, the water level must remain within 18 inches of the cover to avoid excessive deflections under heavy snowloads. For the purposes of this study, the life expectancy of the cover is estimated to be 18 years.

4.1.1.5.4 Replacement Cost: For the purposes of this Study and based on allocation in the previous Study, funding is allocated for a pool cover in approximately

17 years at an estimated cost of $2.95 per square foot or around **$9,100.00** (*in $2018*).

4.1.1.6 Main Pool Beam/structure Repair

4.1.1.6.1 General: Based on conversations with swimming pool contractors and previous expenditures, it is assumed that periodic repairs will be necessary to the perimeter of the pool structure (*typically referred to as the pool "beam")*.

4.1.1.6.2 Condition: The condition of the structural concrete along the perimeter of the pool shell is unknown.

4.1.1.6.3 Life Expectancy/Maintenance: Although the existing conditions are not known, it is prudent to budget funding for periodic structural repairs to the pool beam. For the purposes of this study, the interval of these repairs is set at 20 years.

4.1.1.6.4 Replacement Cost: For the purposes of this study, the estimated cost to perform periodic structrual repairs to the pool beam is **$25,000.00**.

4.1.1.7 Main Pool Structure Repair/replacement

4.1.1.7.1 General: The 2008 Reserve Study included an allocation for "Pool Reconstruction" based on information garnered from a Reserve Study for an adjacent Fairlington property and confirmed by the association's pool contractor. Presumably, "reconstruction" would entail complete removal and replacement of the existing pool shell and associated piping.

4.1.1.7.2 Condition: As noted in the previous survey, based on conversations with various pool contractors, it is uncertain if complete reconstruction of the pool will be required in the next 20 to 30 years as previously allocated. Apparently, swimming pools constructed in the 1970's (*such as FG*) are often superior in construction to those that were fabricated in the 1980's and even into the early 1990's due to changes in gunite/shotcrete materials and application methods.

4.1.1.7.3 Life Expectancy/Maintenance: For the above reason, the swimming pool may not need complete reconstruction and periodic structural repair and piping maintenance/replacement can be performed instead. For the purposes of this Study the life expectancy is listed as 60 years.

4.1.1.7.4 Replacement Cost: The 2008 study included an allocation of $500,000 but the funding was reduced to $250,000 in the previous study and, for the purposes of this study, is again estimated at **$250,000.00**.

4.1.2 MAIN POOL EQUIPMENT

4.1.2.1 **Main Pool Skimmers:** The existing skimmers at the perimeter of the pool are presently in fair condition and have an estimated remaining useful life of 9 years. For the purposes of this study, the estimated cost to replace the skimmers at the Main Pool is **$13,500.00**.

4.1.2.2 **Main Pool Filters:** The main pool filter system consists of three separate, cartridge style filters with 4 separate filters in each filter. Steve Bogdanoff indicated that the existing filters are in fair condition; however, he noted that the filters/cartridges are very difficult to service and the service can typically not be performed by lifeguards. Steve also indicated that it cost around $1,000.00 to replace the cartridges every other year. If the filters are not services properly, it will be difficult to maintain the proper cycling of the pool water and could put additional stress on the pool pump. Mr. Bogdanoff strongly recommended converting the existing cartridge filter system to a sand filter system when the existing filters have reached the end of their useful life. The estimated remaining useful life of the existing filters is 3 years. For the purposes of this study, the estimated cost to install new sand filters at the Main Pool is **$12,800.00**.

4.1.2.3 **Main Pool Pump:** The existing main pool pump is a commercial grade, brass pump and is in good condition according to Mr. Bogdanoff. The estimated remaining useful life of the pump is 16 years. For the purposes of this study, the estimated cost to replace the pump at the Main Pool is **$10,000.00**.

4.1.3 WADING "BABY POOL"

4.1.3.1 **Wading Pool Whitecoat:** See 4.1.1.1 for detailed information regarding the whitecoat. The existing whitecoat at the Wading Pool was installed in 2014 by Neptune Aquatics. The whitecoat is in fair condition and has an estimated remaining useful life of 3 years. For the purposes of this study, the estimated cost to replace the whitecoat at the Wading Pool is **$3,700.00**.

4.1.3.2 **Wading Pool Coping Stones:** See 4.1.1.2 for detailed information regarding the Coping Stones. The existing Coping Stones at the Wading Pool were installed in 2014 by Neptune Aquatics. The Coping Stones are in good condition and have an estimated remaining useful life of 26 years. For the purposes of this study, the estimated cost to replace the Coping Stones at the Wading Pool is **$5,000.00**.

4.1.3.3 **Wading Pool Perimeter Tile:** See 4.1.1.3 for detailed information regarding the Perimeter Tile. The existing Perimeter Tile at the Wading Pool was installed in 2014 by Neptune Aquatics. The Perimeter Tile is in good condition and has an estimated remaining useful life of 11 years. For the purposes of this study, the estimated cost to replace the Perimeter Tile at the Wading Pool is **$3,100.00**.

4.1.3.4 **Wading Pool Cover:** See 4.1.1.1 for detailed information regarding the Pool Covers at both the Wading Pool and the Main Pool. The existing Pool Cover at the Wading Pool was installed in 2017 by Atlantic. The Pool Cover is in excellent condition and has an

estimated remaining useful life of 17 years. For the purposes of this study, the estimated cost to replace the Pool Cover at the Wading Pool is **$1,300.00**.

4.1.4 WADING POOL EQUIPMENT

4.1.4.1 **Main Pool Skimmers:** The existing skimmer at the Wading Pool is in fair condition and has an estimated remaining useful life of 9 years. For the purposes of this study, the estimated cost to replace the skimmer at the Wading Pool is **$1,500.00**.

4.1.4.2 **Wading Pool Filters:** The Wading pool filter system consists of one, smaller (than main pool filters), cartridge style filter. Steve Bogdanoff indicated that this filter is smaller and much easier to maintain than the main pool filters. The estimated remaining useful life of the existing wading pool filter is 6 years. For the purposes of this study, the estimated cost to replace the filter at the Wading Pool is **$2,500.00**.

4.1.4.3 **Wading Pool Pump:** The existing Wading pool pump is a residential grade, plastic pump and is in fair condition according to Mr. Bogdanoff. The estimated remaining useful life of the pump is 3 years. For the purposes of this study, the estimated cost to replace the pump at the Wading Pool is **$1,500.00**.

4.1.5 POOL DECK

4.1.5.1 **Pool Deck Repair:** There are approximately 6,500 square feet of concrete pool decking surrounding the Main Pool and Wading Pool. The existing concrete pool deck is in fair condition but continued maintenance will be necessary until the deck is replaced due to isolated spalling and cracking that typically occur. The Association has, to date, allocated funding for isolated concrete repairs on the pool deck every five years with the next round of repairs anticipated to occur next year (*2019*). It is estimated that 7.5 percent of the pool deck will require repair at a unit cost of $32.00 per square foot when repairs are performed. Assuming 7.5 percent repair yields a total anticipated construction cost of around **$15,500.00.**

4.1.5.2 **Pool Deck Replacement:** The existing concrete pool deck is in fair condition and periodic maintenance is anticipated as detailed in 4.1.5.1. At some point it will be more advantageous to simply replace the entire pool deck, in lieu of continuing maintenance. The life expectancy of the pool deck is approximately 50 years; therefore, total replacement is anticipated in 2024. The anticipated unit cost for replacement (*in $2018*) is $14.50 per square foot yielding a total anticipated construction cost of around **$94,000.00.** The figures referenced are based on conversations with various paving contractors.

4.1.6 POOL ACCESSORIES / FURNITURE

4.1.6.1 **Lifeguard Chairs:** The existing, portable lifeguard chairs (2 total) were purchased in 2006 and are in fair condition. The life expectancy of the chairs is approximately 20 years; therefore, replacement is anticipated in 2026. The replacement cost will vary depending upon the type of chair that is purchased. Commercial models incorporating rugged, stainless steel frames and matching the existing chair configuration and currently selling for around $2,500.00. For the purposes of the study, the anticipated unit cost for replacement (*in $2018*) is **$2,500.00.**

4.1.6.2 **Large Canvas Awning:** The existing large canvas awning was purchased in 2005 and is in fair to marginal condition. The life expectancy of the awning is approximately 15 years; therefore, replacement is anticipated in 2020. The replacement cost will vary depending upon the type of awning/material that is purchased. For the purposes of the study, the anticipated unit cost for replacement (*in $2018*) is **$4,500.00.**

4.1.6.3 **Small Canvas Awning:** The existing small canvas awning was purchased in 2010 and is in good condition. The life expectancy of the awning is approximately 15 years; therefore, replacement is anticipated in 2025. The replacement cost will vary depending upon the type of awning/material that is purchased. For the purposes of the study, the anticipated unit cost for replacement (*in $2018*) is **$3,500.00.**

4.1.6.4 **Pool Furniture:** The existing pool furniture consists of a variety of chairs, tables, umbrella stands, umbrellas, chaise lounges, planters, basketball goal, etc. Based on records provided by the Glen, this furniture was not bought simultaneously; rather, periodic replacements of specific items have been performed over the years. Most recently (2017), a significant amount of furniture was replaced at a cost of approximately $7,200.00. This furniture is relatively new and is in good condition. For the purposes of the study, the life expectancy of the pool furniture is listed as 8 years with an anticipated replacement cost of approximately **$10,000.00**.

4.1.6.5 **"Dri-Dek" Matting:** New "Dri-Dek" interlocking, plastic matting was installed by Atlantic Pool Service, at both pool changing rooms, in 2015 and is in fair condition. We spoke with a representative of the manufacturer who indicated that the life expectancy of the matting is approximately 3 to 5 years depending upon a number of factors including: usage, maintenance, exposure, etc. Therefore, replacement is anticipated in 2023. For the purposes of the study, the anticipated unit cost for replacement (*in $2018*) is **$1900.00.**

4.2 COURTS

4.2.1 Triple Tennis Court

4.2.1.1 Triple Tennis Court - General: The triple tennis court is located just to the North of Court 1. These courts were reconstructed and resurfaced in 2011 at a cost of $97,366.00 by Bishop's Tennis, Inc. (BTI) At that time, the triple tennis courts were overlaid with a new, specialized, waterproof fiber turf (*"Nova Pro-Bounce" by General Acrylics - see previous study for detailed description of surfacing*). Subsequently, in the Spring of 2016, BTI resurfaced the triple tennis court with an acyrlic/mesh/sand blend (*Laykold "Nusurf"*) and two finish coats (*Laykold ColorCoat*). In conjunction with the 2016 work, BTI also installed the "Riteway Crack System" to address three structural cracks in the asphalt base.

4.2.1.2 Warranty: BTI provided a 5 year warranty for the work performed in 2016; therefore, the existing surface is under warranty until 2021. BTI also provided a 3 year warranty for the structural crack repair; therefore, the structural crack repairs are under warranty until the Summer of 2019.

4.2.1.3 Condition: The triple tennis court surface is in excellent condition.

4.2.1.4 Life Expectancy/Maintenance: The life expectancy of the coatings on the triple tennis court is approximately five years; therefore, recoating is anticipated in 2021. The life expectancy of the new fabric overlay at the triple tennis court should provide 20 years of service; therefore, replacement is anticipated in 2031.

4.2.1.5 Replacement/Recoating Costs: Recoating cost information was obtained directly from BTI. The estimated recoating cost (in $2018) for the triple tennis court is **$20,000.00**. Reconstruction costs are based on the original construction costs adjusted for inflation.

4.2.2 Single Tennis Court

4.2.2.1 Single Tennis Court - General: The single tennis court, adjacent to the Swimming Pool, was overlaid with asphalt in 2011 (*also by Bishop Tennis*) and coated (*conventional coating - not turf)* at a cost of $41,655.00. Subsequently, in 2016, several structural cracks were repaired and recoated. Complete recoating was not performed at that time.

4.2.2.2 Warranty: BTI warrantied the crack repairs for a period of 6 months; therefore, these repairs are no longer under warranty.

4.2.2.3 Condition: The single tennis court is in fair condition but the coating is in marginal condition.

4.2.2.4 Life Expectancy/Maintenance: The life expectancy of the coating on the single tennis court is approximately five years; therefore, the existing coating is past its useful life.

Resurfacing/recoating should be performed in 2019. The asphalt overlay should provide 15 years of service; therefore, replacement is anticipated in 2026.

4.2.2.5 Replacement/Recoating Costs: Recoating cost information was obtained directly from BTI. The estimated recoating cost for the single tennis court is **$10,000.00**. This cost also includes an allocation for miscellaneous leveling and crack repair.

4.2.3 Basketball Court

4.2.3.1 General: The basketball court was reconstructed and recoated in 2012, by Pro-Pave Inc., at a cost of approximately $17,000 and $4,000 respectively. This work involved installation and compaction of a new, graded stone subbase in an effort to eliminate depressions in the playing surface. The work also involved additional excavation and stone fill/compaction in areas with poor subgrade conditions; most notably, a substantial depression near the West end of the court.

4.2.3.2 Condition: The basketball court has a history of foundation problems which have resulted in numerous repairs over the years. The repairs that were performed in 2012 were performed with the expressed purpose of eliminating future repairs and providing a safer playing surface. Unfortunately, the persistent depression at the West end of the court has reappeared. It is important to note that the basketball court is located directly over the old boiler plant (*note that outline of the old boiler plant has been added to the plat for reference purposes*) and the depression is located in close proximity to the point where the old steam pipes connected to the boiler plant. According to the "Fairlington Story", at the time of conversion, CBI Fairmac was to "...demolish and remove all existing boiler plants...remove all distribution (*steam*) lines to five feet outside of all living units...(and)...abandon remaining lines..." It is our suspicion that, when this demolition work was performed, some piping was left in place and the soil may not have been properly backfilled. Consequently, the subgrade is continuing to degrade beneath this depression.

4.2.3.3 Proposed Repairs: In an effort to eliminate the persistent depression at the West end of the basketball court, REI recommends performing a more comprehensive foundation repair. In general, the recommended repair would involve additional excavation and installation of multiple layers of a plastic reinforcing matrix (*"Stratabase" by Geogrid or equivalent)* in the area surrounding the depression.

4.2.3.4 Life Expectancy/Maintenance: The life expectancy of the basketball court was previously estimated at 20 years; however, the need to repair the depression in the court warrants repairs at an earlier date. For the purposes of the study, the life expectancy is estimated at 5 years. When structural repairs are performed, a new color coating should be applied with reapplication of the coating anticipated every 5 years.

4.2.3.5 Replacement Cost: The estimated cost to perform additional structural repairs to the basketball court is **$25,000.00**. Please note that this number could vary significantly

depending upon the final scope of repairs. Also note that better pricing may be achieved by combining this work with future parking lot repairs. The cost to resurface the basketball court, in $2018, is **$5,000.00**.

4.2.4 Pickleball Court

4.2.4.1 Pickleball Court - General: The Pickleball court (formerly Paddleball Court) is a single, smaller court located between/behind Courts 6 and 7 along King Street.

4.2.4.2 Condition: The pickleball court surface is in poor condition, exhibiting major structural cracks, and the coating is in marginal condition.

4.2.4.3 Life Expectancy/Maintenance: The court surface and its coatings have both surpassed their useful service lives. The life expectancy of surface reconstruction is estimated to be twenty years while coatings are estimated to have five years of useful service life. Replacement and recoating should be performed immediately and at the same time. For the purpose of this study, replacement and recoating should be performed in 2020.

4.2.4.4 Replacement/Recoating Costs: The estimated cost (in $2018) for reconstruction/ structural repairs to the pickleball court is **$12,000.00** based on historical construction costs adjusted for inflation. The estimated recoating cost (in $2018) for the pickleball court is **$10,000.00** based on pricing obtained from similar jobs..

4.3 TOT LOT / SWINGS

4.3.1 General: New playground equipment was installed by All Recreation of Virginia, Inc. In the Summer of 2014. This work included installation of new equipment manufactured by Playworld Systems ("*Challenger Series*"). Our assumption is that the system is under warranty but we have not received any documentation to that effect. When the new playground system was installed, All Recreation also removed the existing playground equipment and installed new, 2-tier, pressure treated 6 by 6 borders around both the Tot Lot and the Swing areas. In addition, approximately 4 inches of pea gravel was installed to meet relevant safety requirements. In June of 2018, the Association contracted with PSG General Contractors to install 2 additional inches of pea gravel to refill the bounded areas as required to comply with safety regulations.

4.3.2 Condition: All components are relatively new and are in excellent condition.

4.3.3 Life Expectancy/Maintenance: We spoke with a representative of Playworld Systems to discuss the life expectancy of the recently installed playground equipment. Playworld anticipates that their equipment can provide 30 to 40 years of service provided periodic maintenance is performed. They also indicated that they are still servicing equipment that was originally manufactured in the 1970's. For the purposes of the study, the life expectancy has been set at 35 years. Given that the pea gravel has already

been replenished and the certainty that periodic replenishment will be necessary, REI has separated the pea gravel as a separate depreciable asset and corresponding life expectancy at 4 years. Also, the life expectancy of the 6 x 6 pressure treated border will be significantly less than the equipment itself. For the purposes of this study, the life expectancy has been set at 15 years and the border will be treated as a separate depreciable asset.

4.3.4 Replacement Cost: The total cost for the playground installation in 2014 was $56,650.00. The portion of this work that was related to installation of the new 6 x 6 borders was approximately $7,000.00; therefore, the estimated cost to replace the 6 x 6 border, in $2018, is **$7,250.00**. The portion of 2014 playground cost that was related to installation of new pea gravel was approximately $4,000 factoring in installation costs. The cost to replenish the pea gravel in 2018 was $3,600.00. Consequently, for the purposes of this study, the estimated cost to replenish the pea gravel, in $2018, is **$3,800.00**. Subtracting the costs for the border and associated pea gravel from the original construction cost yields an estimated original installation cost of $46,000. Factoring in inflation and for the purposes of this study, the estimated cost to replace the playground equipment, in $2018 is **$47,700.00**

5. BUILDING EXTERIORS

5.1 SLATE ROOFING SYSTEMS

5.1.1 Slate Roofing and Flashings:

5.1.1.1 Almost all buildings at the Glen are covered with Slate Roofing (*Buckingham, Vermont or Bangor slate*). Throughout the last several years numerous original Bangor slate roofs have been replaced with Vermont slate in accordance with our recommendations. A survey of all roofing systems was originally conducted in approximately 1995 (*by Seal Engineering, Inc.*) at which time the type and condition of all roofing systems was catalogued. Since that time, REI has overseen replacement of dozens of roofs and periodically updated the originally prepared roof schedule.

5.1.1.2 At the time of the previous reserve study (*2013*), there were still 13 buildings with the original Bangor slate on a portion of the roof. The last section of original Bangor slate roofs is currently being replaced by James R. Walls Contracting, Inc. (*"Walls"*).

5.1.1.3 Condition: All of the roofs that have been replaced in the last 25 years are in good to excellent condition. The condition of the original Vermont slate roofs (*75 years old*) varies but is, generally, fair given their age. The Association should anticipate ongoing maintenance costs for these roofs (*see next paragraph*) up until the time they are replaced.

5.1.1.4 Life Expectancy/Maintenance: Now that all the original Bangor roofs have been replaced with Vermont slate, a roof replacement project will likely not be necessary for approximately 25 years (*2043*); however, periodic maintenance and repair will need to be performed. The original Vermont slate roofs are in good condition and should provide 100 years of service as anticipated; however, ongoing maintenance will be required. For the past three years, REI has specified and overseen maintenance and repair that has been performed on a number of roofs by Walls. These repairs consist, primarily, of refastening slate, replacing cracked slate, sealing exposed nailheads, installing new copper bibs, etc. The average cost of these repairs, per year, is $30,000.00. REI anticipates that similar annual expenditures will be necessary up until the time that the replacement cycle begins for the original Vermont roofs. At this point, the Association has chosen to pay these maintenance costs out of the annual maintenance budget. Our understanding is that the Board would prefer to maintain this arrangement moving forward. The annual maintenance costs should be revisited when the next study is performed (*2023*) to determine if transitioning these costs to a reserve asset is warranted.

5.1.1.5 Replacement Cost: We reviewed the cost of all roof replacement projects at the Glen since 2004 (*see "Roofs" tab at Asset Schedule*). Unit replacement costs were adjusted

for inflation in an effort to determine the average replacement unit cost. Based on these calculations, the average historical replacement cost, in $2018, is **$26.82 a square foot** (*approximately 12% higher than previous reserve estimate - $23.64 a square foot)*. Using this unit cost, the total estimate replacement cost of all roofs is approximately **7 million dollars.**

5.1.2 Gutters and Downspouts

5.1.2.1 General: All roofs are drained via aluminum gutters and downspouts. In general, the gutters and downspouts have been replaced in conjunction with roof replacement work throughout the last several years.

5.1.2.2 Previous Repairs: A comprehensive gutter repair and replacement project was undertaken in 2010 following the massive snowstorms that occurred in February of that year. The resulting snow and ice buildup tore off or damaged the existing hanging gutters at dozens of locations throughout the Glen. At that time, we conducted a comprehensive survey of all gutters and prepared construction documents for repair, reinforcement/refastening and/or replacement of gutters. In general, these repairs were designed to reinforce the outside edge of the gutters and to provide heavy duty strapping (*above and beyond industry standards*) to ensure that the gutters did not fail if a similar event occurs in the future.

5.1.2.3 Condition: Given the recent repair work, the gutters are generally in good condition.

5.1.2.4 Life Expectancy/Maintenance: The gutters should provide an additional 45+ years of service provided routine maintenance and repair are performed. We will continue to specify replacement of the gutters and downspouts in conjunction with replacement of roofing unless the gutters at these locations were recently replaced. Also note that we will continue to specify the installation of larger gutters to facilitate drainage as has been our practice throughout the last several years.

5.1.2.5 Reserve Funding: We do not recommend allocating any reserve funding for replacement of gutters and downspouts because this work is generally incorporated into the roof replacement funding or is addressed via annual maintenance. The Board should continue to allocate yearly maintenance funding for repairs to the gutters and downspouts.

5.2 DORMERS

5.2.1 Gable Dormers

5.2.1.1 General: There are 172 gable dormers throughout the complex. All gable dormers are catalogued in the "Dormers" tab on the Asset Schedule. All dormers have been individually designated with a number consisting of the Court number plus a sequential number following a hyphen. In all previous studies, the gable dormers have not been

considered a separate common element. From this point forward, the gable dormers shall be considered separate, depreciable elements with the exception of each dormer's slate roof and associated flashings (*part of "Roofs"*) and the dormer window (*non-common element – Owner's responsibility)*. Please note that similar provisions have NOT been provided to separate the numerous Hip Dormers as these dormers are more integrated into the facade. Similarly, there is NOT a similar provision for the various, large Shed Dormers. The Shed Dormers are covered almost entirely in slate; therefore, they are considered as part of the roofing system. Finally, there is NOT a similar provision for the gable dormers at the gambrel-roofs as these structures are also covered in slate.

5.2.1.2 Construction: The gable dormers are conventional, wood-framed dormers with the face of the dormer located typically, approximately 2 to 3 feet upslope of the eave. The dormers are all fabricated with the same height. The length/depth of the dormer is contingent on the slope of the roof through which it penetrates. The dormers are clad, on the sides, with tongue-in-groove, 1 x 6 (nominal), wood siding that is secured to the sheathing. The face of the dormers is detailed with decorative wood trim elements including complicated cornice moldings that replicate the detailing along the eaves of the buildings.

5.2.1.3 Condition: The gable dormers, presumably, date to the original construction. As such, they are in varied condition depending upon frequency of maintenance, exposure to elements (i.e. exposed to wind driven rain, south vs. north facing, etc.). The conditions also vary depending upon the condition of the window. In many instances the windows have been covered with storm windows; or, in other cases, the original windows have been replaced with new vinyl window with integral screens. Throughout the years of overseeing numerous roof replacement projects at the Glen, REI has observed significant deterioration of the trim beneath the windows and at the sides of the windows. In many of these cases, repairs were difficult given that the windows could not be removed and reinstalled/replaced as part of this work.

5.2.1.4 Life Expectancy/Maintenance: The life expectancy of the existing gable dormers and associated trim is difficult to estimate. Presuming that aggressive maintenance/painting is maintained, the porticos should provide 25 years of additional service. At some point, when ongoing maintenance costs are prohibitive, it would be wise to implement a phased replacement plan wherein, individual groups of dormers (perhaps on a court-by-court basis) are renovated entirely. This renovation would entail removal of the existing trim elements in their entirety and installation of new cellular PVC trim/siding (AZEK or equivalent). These materials would not require constant repainting/maintenance and would be rot resistant. In conjunction with this work, the windows should be removed and reinstalled so that the trim on the face of the dormers can be properly installed and flashed.

5.2.1.5 Replacement Cost: We contacted Kolas Contracting, Inc. and requested estimated pricing to renovate/refurbish the dormers as detailed above. Kolas is very familiar with the work involved given that they have been performing this work at Fairlington Arbor for the last few years. The estimated unit cost to renovate/refurbish the gable dormers is **$1,450.00**

5.3 CHIMNEYS

5.3.1 Masonry Chimneys

5.3.1.1 General: There are 154 ornamental brick masonry chimneys throughout the complex. All chimneys are catalogued in the "Chimneys" tab on the Asset Schedule. All chimneys have been individually designated with a number consisting of the Court number plus a sequential number following a hyphen.

5.3.1.2 Construction: The chimneys are "ornamental" in the sense that there are no fireplaces. However, each chimney incorporates a series of terra cotta flues that exit through the sides of the chimney, approximately 2 feet above the roof line. The purpose of these flues is not totally clear but, presumably, they were used to vent some mechanical equipment/systems that are no longer in use (see "Chimney Covers" below).

5.3.1.3 Condition: According to the "Fairlington Story", all chimneys were repointed or "tuckpointed" at the time of conversion; consequently, the tuckpointing repairs are approximately 45 years old. In general, industry standards prescribe repointing every 50 years. However, in many instances, repointing will not be necessary for a longer period of time, depending upon the type of mortar and the quality of the original installation. Based on the conditions observed, we do not recommend comprehensive repointing of the chimneys within the next 10 years. However, there are some chimneys that will require repairs within the next 10 years. Please note that the scope of this study did not include detailed analysis/inspection of the chimneys. Although chimneys were viewed from the ground, it is difficult to assess the condition of the mortar from ground level.

5.3.1.4 Life Expectancy/Maintenance: For the purposes of this study, the life expectancy of the conversion era repointing is assumed to be 60 years.

5.3.1.5 Replacement/Repair Cost: To calculate the estimated repair costs for repointing, the approximate square footage of brick at each chimney was calculated based upon the size of the chimney, the pitch of the roof, the height above the roof, etc. Then, we assumed a unit cost of $40.00 per square foot for repointing. Please note that this figure is contingent on a number of factors. Most importantly, accessing the chimneys to perform the necessary repairs is the most difficult and expensive portion of the cost. The assumed unit cost is likely to be significantly greater if only one chimney is being repairs at a time. Conversely, if numerous chimneys were repaired simultaneously, the unit costs would likely be lower. Using the $40.00/sf estimated unit cost, the estimated replacement/repair cost to repoint all chimneys is around **$155,000.00**

5.3.2 Copper Chimney Caps

5.3.2.1 General: Copper chimney caps were installed by Walls Contracting, at all 154 chimneys, in the late 1990's to early 2000's (exact years for individual caps not known). The chimney caps were fabricated from 20 ounce copper sheet and all joints were soldered. The copper chimney caps were not accounted for on the most recent reserve study or any previous reserve study. From this point forward, the chimney caps will be treated as an independent, depreciable element. As noted above, a new, "Chimneys" tab has been added to the Asset Schedule Spreadsheet. All chimneys are now identified individually in the table and labeled on the plat. Each chimney cap is listed as a separate entity with corresponding life expectancy.

5.3.2.2 Condition: The copper chimney caps were well fabricated and are still in good condition.

5.3.2.3 Life Expectancy/Maintenance: The copper chimney caps should provide an additional 30 years of service.

5.3.2.4 Replacement Cost: The estimated replacement cost, per chimney cap, in 2018 dollars is based on the size of the chimney as shown on the "Chimneys" tab in the Asset Schedule. Using the estimated unit cost(s), the estimated replacement/repair cost to replace all chimney caps is around **$238,000.00**

5.3.3 Chimney Screens

5.3.3.1 General: As noted earlier, all of the chimneys include a series of terra cotta flues that penetrate through the sides of the chimneys, typically 2 feet above the roof ridge. It is not clear exactly what was originally vented via these flues, but our understanding is that the flues are abandoned. Since the previous study (2013), Fairlington Glen has contracted with NV Roofing to install new, prefinished aluminum screens, over these abandoned flue locations, at numerous locations. The first screen installation occurred in 2015 and included approximately 25 chimneys. The second screen installation occurred in late 2016 / early 2017 and included approximately 60 chimneys. As noted above, a new, "Chimneys" tab has been added to the Asset Schedule Spreadsheet. All chimney screens are now identified individually in the table and all recent screen installation are shown in the table.

5.3.3.2 Condition: The condition varies depending upon the type of screening/cover and the date of installation; however, so many of the screens are recently installed and in good condition.

5.3.3.3 Life Expectancy/Maintenance: The approximate life expectancy of the new, prefinished metal covers is 25 years. The covers could last longer than this period but it is very likely

that the finish will deteriorate and the screens may become unsightly as they approach the end of their useful life.

5.3.3.4 Replacement Cost: NV Roofing's cost to install the 25 new chimney screens in 2015 was approximately $4,100.00 or $164.00 per chimney. NV Roofing's cost to install the 60 new chimney screens in 2016/17 was $8,560.00 or around $143.00 per chimney. For the purposes of this study, the estimated unit replacement cost is around $165.00 per chimney for a total estimated replacement cost (all 154 chimneys) of **$25,000.00**.

5.4 FACADES

5.4.1 Brick/Stone Veneer

5.4.1.1 General: The facades of all buildings at the Glen are comprised primarily of brick masonry veneer or brick bearing walls. There are also a number of buildings with stone veneer.

5.4.1.2 Condition: It is important to note that the frequency and quantity of necessary masonry repairs varies significantly depending upon the quality of the brick, the mortar and the craftsmanship. As a general rule, masonry veneer will require comprehensive repointing within 50 years of installation. As noted earlier (see "Chimneys"), the Fairlington Story indicates that a significant amount of repointing work was performed at the time of conversion (approximately 45 years ago). During the previous study (2013), REI recommended that a comprehensive masonry survey be performed, prior to the first round of extensive repairs, to identify and prioritize the masonry repairs that will be required in the next 25 years. Subsequently, Bill Worsley spearheaded an effort to perform, in-house, a comprehensive survey of the stoops and facades. This effort provided good diagnostic information regarding the status of the brick masonry and this information was used to prioritize repairs to the masonry stoops. In conjunction with these repairs, numerous repairs to the brick facade have been performed based on the recommendations from the comprehensive survey.

5.4.1.3 Life Expectancy/Maintenance: For the purposes of the study, the recommended interval between masonry repair projects is 5 years. Given that several repairs have been performed in conjunction with previous and ongoing masonry stoop repairs, we recommend incorporating the next round of masonry repairs in approximately 4 years. For the purposes of this Study, these repairs are included in Calendar Year 2022.

5.4.1.4 Repair Cost: Based on the most recent repairs performed at the Glen and the overall condition of the brick, we have estimated the cost to perform repointing and miscellaneous facade repairs at the Glen to be around $150,000.00 per cycle.

5.4.2 Shutters

5.4.2.1 General: Inoperable vinyl shutters are installed throughout the property, generally on the front elevation.

5.4.2.2 Condition: The shutters were installed in 2005 and are in fair condition.

5.4.2.3 Life Expectancy/Maintenance: Life expectancy is estimated at 25 years although, periodically, some shutters will need to be replaced.

5.4.2.4 Replacement Cost: The anticipated replacement cost for the shutters (*in $2018*) is approximately $75,000.

5.4.3 B-Unit Doors

5.4.3.1 General: The installation date of the existing front entry doors at the Apartment Style Units (*"B-Units"*) is not known; however, based on appearance, the doors have been in place for some time.

5.4.3.2 Condition: Despite their age, the doors are in fair condition.

5.4.3.3 Life Expectancy/Maintenance: The doors should provide five additional years of service.

5.4.3.4 Replacement Cost: The anticipated unit replacement cost for the front doors is $1,500 per door assuming standard sized doors with standard hardware are installed.

5.4.3.4.1 When the doors are replaced the Board may wish to incorporate new electronic lock technology which would improve security and enable each resident to have an independent access code for the common access door.

5.4.4 B-Unit Windows

5.4.4.1 General: According to the "Fairlington Story", all of the original windows were replaced at conversion. Presumably, wood, double hung windows were installed at that time given that there are still many wood windows remaining, including the common area, B-unit windows. Based on the information provided by the Glen, only one of these windows has been replaced since the previous study (*in 2015 by Sunshing Contracting*). As is the case with the numerous non-common element window replacements, when windows are replaced, the original wood sashes area removed and new vinyl framed, replacement windows within the frame of the original wood windows. Then, new trim is installed to cover the transition between the new frames and the masonry openings.

5.4.4.2 Condition: As noted in the previous study (2013) most of the existing windows are original (conversion-era), in poor condition and should be replaced.

5.4.4.3 Life Expectancy/Maintenance: The windows have little remaining life expectancy and should be replaced as soon as funds are available. For the purposes of this Study, the life expectancy is set at 2 years.

5.4.4.4 Replacement Cost: The previously anticipated (per 2013 study) unit replacement cost for the windows was $500 per window but that cost assumed that all windows were replaced concurrently with a standard, vinyl framed replacement window. The window that was replaced in 2015 was replaced at a cost of $695.00. For the purposes of this study; and, based on more recent cost information; and, assuming comprehensive replacement, the estimated unit replacement cost is $625.00 per window. There are 23 B-Unit Buildings with two windows in each common space. Consequently, the total estimated replacement cost is **$29,000.00**.

5.5 ENTRANCES

5.5.1 Brick Masonry Stoops

5.5.1.1 General/History: All building front entrances at the Glen are accessed via brick masonry stoops (*181 total*) that are covered with small roofs. The stoops are typically fabricated with brick placed over a concrete, concrete block and/or clay tile structural foundation. The "Fairlington Story" does not provide a detailed description of any remediation that was performed at the stoops; however, it is assumed that some reconstruction/repointing was performed given the extent of the renovations. In 2005, REI conducted a comprehensive survey of all brick masonry stoops and, subsequently, recommended reconstruction of 56 separate stoops (*over 5 phases*) throughout the property. In 2006, the Glen embarked on the first phase of stoop reconstruction (*13 total*) which was performed by C.A. Lindman. Subsequent to the 2006 project, the Glen elected not to proceed with the remaining four phases due to changing reserve priorities. In the Spring of 2016, Glen representatives performed a comprehensive inspection of the masonry stoops and developed a revised prioritization schedule of stoop repairs. This revised schedule was used to develop drawings and specifications for a new phase of stoop repairs in 2016. Subsequently, the work specified in this phase was completed over a period of almost two years (Jan 2017 - December 2018) by C.A. Lindman. This project was delayed for several months due to permitting issues with Arlington County and poor management by the Contractor. The second phase of stoop repairs was bid to several contractors in the Fall of 2018 and is slated to be completed in 2019 by KGS Contracting, Inc. In the midst of the most recent stoop project, Fairlington again revised the stoop condition survey to reflect work performed and the next phase of construction. This revised survey was provided to REI for our review and use (see next paragraph).

5.5.1.2 Changes to Asset Schedule: The revised masonry stoop survey was provided to REI in spreadsheet format. This revised schedule was implemented into the Asset Schedule under the new tab "Stoops". Previously, the masonry stoops were included under the "Masonry" tab. The stoop information previously referenced in the "Masonry" tab has not been deleted but is shown in grayscale to note that it is no longer relevant. The

information regarding the general brick facade is still referenced at the "Masonry" tab. The new "Stoops" tab shows each individual stoop with corresponding condition, life expectancy and replacement/repair projections.

5.5.1.3 Condition: The brick masonry stoops are in varied condition as delineated on the referenced table. While most of the stoops that were in severe need of repair have been replaced or will be replaced/reconstructed in the pending phase of work, there will still be a need to reconstruct some additional stoops; and, perform periodic repairs/repointing to meet life expectancy projections.

5.5.1.4 Life Expectancy/Maintenance: As noted on the new "Stoops" tab, the "Anticipated Life Expectancy of a New Stoop". This number is modified in the table based on maintenance that has been previously performed or that is pending.

5.5.1.5 Replacement Cost: During the 2006 project, certain hidden structural conditions were identified during the course of the reconstruction work that resulted in additional work for the contractor. C.A. Lindman indicated, at the time, that the pricing should have been higher. Consequently, for the purposes of the previous Reserve Study, we have increased unit pricing for stoop replacement and included a base mobilization figure per stoop. Subsequently, based on pricing information from the more recent Lindman project, we have calculated the historical unit cost to replace the stoops as $185.00 per square foot. Based on this unit cost, the total estimated replacement cost of all stoops is approximately **1.46 million dollars**.

5.5.2 Front Porticos

5.5.2.1 General: All entry stoops are covered with decorative porticos that extend approximately 4 to 5 feet away from the building depending upon the number of units per entrance. Based on old photographs and information in the "Fairlington Story", the porticos are original (1943). The porticos are wood framed structures that are anchored to the facade and, in most cases, supported by two decorative columns that are supported at the corners of the stoops. The decorative columns may have been added at the time of conversion. The columns at B-Unit entrances are typically brick masonry. The roofs of the porticos are configured in gable, hip and shed roof configurations and are all covered with slate roofing (*note that the roofing of the porticos is considered part of the adjacent main roof section and is not considered a separate roofing element*). The framing of the porticos is covered in decorative and semi-ornate wood trim (*fascia, soffit, frieze, cornice molding, etc.*), in a manner similar to the trim at the eave of the main roof.

5.5.2.2 Recent Repairs: Isolated repairs to the decorative trim have been performed at the porticos, by Kolas Contracting, Inc. (Kolas) over the last few years including:

5.5.2.2.1 October 13, 2015 (Court 6): Repaired deteriorated fascia and dentil molding for a total cost of $550.00.

5.5.2.2.2 December 9, 2015 (Court 10): Repaired deteriorated fascia and soffit for a total cost of $500.00.

5.5.2.3 Condition: The condition of the exterior trim varies considerably. The trim at the porticos is repaired and painted every four years. This constant maintenance has extended the life of the porticos. As a rule, the porticos are in fair condition. The original trim does exhibit isolated deterioration throughout the complex.

5.5.2.4 Life Expectancy/Maintenance: The life expectancy of the existing porticos and associated trim is difficult to estimate. Presuming that aggressive maintenance/painting is maintained, the porticos should provide 25 years of additional service. At some point, when ongoing maintenance costs are prohibitive, it would be wise to implement a phased replacement plan wherein, individual groups of porticos (perhaps on a court-by-court basis) are renovated entirely. This renovation would entail removal of the existing trim and decorative columns in their entirety and installation of new cellular PVC trim (AZEK or equivalent) and new synthetic, decorative columns. These materials would not require constant repainting/maintenance and would be rot resistant.

5.5.2.5 Replacement Cost: To determine the estimated replacement cost of the porticos, we contacted Steven Kolas (president of Kolas) to discuss potential costs. Kolas provided estimated pricing to refurbish the porticos including: removal of existing wood trim, gutters and downspouts; installation of new PVC trim and decorative columns, installation of new gutters and downspouts; and, removal and reinstallation of existing light fixtures. Kolas provided pricing for four different styles of porticos:

5.5.2.5.1 Style **A**: This is the cantilevered style portico located at single entrances, typically on the side of end units. The estimated unit cost to renovate a Style A portico is **$4,500.00**.

5.5.2.5.2 Style **B**: This is the standard, shed roof, double entrance portico with turned, 4 x 4 wood columns at the corners. The estimated unit cost to renovate a Style B portico is **$5,225.00**.

5.5.2.5.3 Style **C**: This is the standard, single entrance canopy at apartment style buildings with brick masonry piers instead of columns. The estimated unit cost to renovate a Style C Portico is **$5,400.00.**

5.5.2.5.4 Style **D**: This is the standard, gable/hip entrance canopy at double entrances with larger, tapered columns at the corners. The estimated unit cost to renovate a Style D Portico is **$6,200.00**.

There are a total of 108 entrance porticos at the property and the total estimated refurbishment/replacement cost is **$975,100.00**.

5.5.3 Rear Canopies

5.5.3.1 All rear entrances are covered with small canopies that extend approximately 3 feet away from the building. Based on old photographs and information in the "Fairlington Story", the rear canopies are original (1943). The canopies are wood framed structures that are anchored to the facade. The roofs of the canopies are configured in a shed roof configuration and are all covered with slate roofing (*note that the roofing of the canopies is considered part of the adjacent main roof section and is not considered a separate roofing element*). The framing of the porticos is considerably less ornate than the front porticos and is typically covered in simple wood trim (*fascia, soffit, rake molding, etc.*).

5.5.3.2 Recent Repairs: Isolated repairs to the decorative trim have been performed at the porticos, by Kolas Contracting, Inc. (Kolas) over the last few years including:

5.5.3.2.1 February 11, 2016 (4132 S 36th St - Court 6): Removed and rebuilt canopy in its entirety for a total cost of $1,650.00.

5.5.3.2.2 May 5, 2016 (4130 S 36th St - Court 6): Removed and rebuilt canopy in its entirety for a total cost of $1,650.00.

5.5.3.2.3 September 12, 2016 (3547B S Stafford - Court 2): Removed and rebuilt canopy in its entirety for a total cost of $1,200.00.

5.5.3.3 Condition: The condition of the exterior trim varies considerably. The trim at the canopies is repaired and painted every four years. This constant maintenance has extended the life of the canopies. As a rule, the canopies are in fair condition. The original trim does exhibit isolated deterioration throughout the complex and at least 3 canopies have recently been rebuilt as detailed above.

5.5.3.4 Life Expectancy/Maintenance: Based on conversations with contractors who have performed work on the canopies at the Glen and similar properties, the anticipated life expectancy of the canopy structure is 85 years. Consequently, based on this number, community wide replacement would be anticipated in 2028. For the purposes of this study, the life expectancy is grouped by Court and varied between 80 and 90 years to provide for a annual replacement work, by Court, starting in 2023.

5.5.3.5 Replacement Cost: To determine the estimated replacement cost of the canopies, we reviewed previous replacement costs and contacted Steven Kolas (president of Kolas) to discuss potential costs. Based on these conversations, the estimated unit cost to reframe and reconstruct a rear entrance canopy is **$1,200.00**. Please note that this unit cost is based on performing several canopies under the same project. If canopies were replaced on an individual basis, unit pricing would be around $1,700.00. There are 306 rear entrance canopies at the property. Consequently, the total estimated replacement cost is **$367,200.00**.

5.6 BATH HOUSE / MAINTENANCE BUILDING EXTERIOR

5.6.1 General: In 2009, extensive renovations were performed at the Bath House + Maintenance Building/Office. Originally, the Bath House (restrooms for pool use) and the maintenance office were two separate structures that were separated by a decorative pergola. The design for the renovations (prepared by Q-Design, PLC, included demolition of the pergola and installation of a new structure connecting the two separate structures. The new space incorporates a large, maintenance storage and workroom, maintenance office, pool equipment rooms, storage closets, restrooms, lifeguard staging area, equipment storage, etc. The new structure was designed with similar architectural features as the existing structure; most notably, slate roofing and split-faced, Concrete Masonry Unit (CMU) walls.

5.6.2 Condition: The structure/facade/roof of the building are still in good condition.

5.6.3 Life Expectancy/Maintenance: It is anticipated that periodic maintenance will need to be performed to the exteriors of the Bath House / Maintenance Building including but not limited to: door/window replacement, power washing, slate repairs, trim replacement, etc. For the purposes of this study, we have not attempted to capture these costs as part of reserve funding; rather, these costs should be paid out, on an as needed basis, from allocated maintenance funding. The life expectancy of the structure itself is difficult to estimate, but for the purposes of this study, is set at 50 years, at which time significant renovations are forecast.

5.6.4 Replacement Cost: The Glen spent approximately $540,000 for the renovation project (*both interior and exterior work)* in 2009 which included significant expenditures for design and engineering costs. Future renovations are not expected to be as extensive as the 2009 work ;therefore, the estimated replacement/renovation cost is **$250,000.00.**

6. BUILDING INTERIORS & SERVICES

6.1 INTERIORS

6.1.1 B-Unit Finishes

6.1.1.1 General: The existing finishes (*carpeting, paint, etc.*) in the common lobbies of the B-Units were installed in 2006 at a cost of $50,220.00 or approximately $2,200 per building.

6.1.1.2 Condition: The condition of the carpeting and paint is fair considering the age of the materials.

6.1.1.3 Life Expectancy/Maintenance: The life expectancy for the interior finishes was previous estimated at 10 to 12 years (2013); therefore, replacement was originally anticipated in 2018. Replacement has not yet been performed; therefore, replacement is now anticipated in 2 to 3 years.

6.1.1.4 Replacement Cost: The anticipated replacement cost (in $2018) is based on the original replacement cost adjusted for inflation since 2006 or **$57,500.00**.

6.1.2 B-Unit Mailboxes

6.1.2.1 General: The B-Unit mailboxes were replaced in 2011, at a cost of around $10,000.00, and are in excellent condition.

6.1.2.2 Condition: Excellent.

6.1.2.3 Life Expectancy/Maintenance: The life expectancy of the mailboxes is approximately 35 years.

6.1.2.4 Replacement Cost: The anticipated replacement cost (in $2018) is based on the original replacement cost adjusted for inflation since 2011 or **$11,500.00**.

6.1.3 Management & Maintenance Offices (Interiors)

6.1.3.1 General: See Paragraph 5.6.1 for additional information regarding the exterior of the Maintenance Building. As previously noted, the Maintenance Office, including the maintenance building, pump/equipment room, storage areas, restrooms, etc., immediately adjacent to the pool, underwent an extensive renovation in 2009 at a total cost of around $450,000.00.

6.1.3.2 Condition: The interior of the building is still in good condition. In addition, when the renovation of the building was performed in 2009, numerous updates were performed including installation of new fixtures, new showers, new toilets, benches, etc; and, the facilities were updated to comply with ADA requirements. The interior of the changing

rooms is industrial with exposed, painted concrete masonry walls and wood framed roof and stainless steel bathroom stall dividers.

6.1.3.3 Life Expectancy/Maintenance: This facility will require significant maintenance through the years due to its function; however, complete refurbishment (*in a manner similar to the 2009 project)* is not anticipated for many years. For the purposes of this study, the life expectancy is listed at 50 years.

6.1.3.4 Replacement Cost: The anticipated replacement/renovation cost (in $2018) is estimated at **$80,000.00**.

6.2 TOOLS/EQUIPMENT

6.2.1 B-unit Carpet Cleaner

6.2.1.1 General: The Association purchased a self contained, commercial style carpet cleaning unit, manufactured by Tennant® in 2011 at a cost of $2,333.00.

6.2.1.2 Condition: According to Nelson and Maria (on site maintenance staff), the carpet cleaner is still operating well

6.2.1.3 Life Expectancy/Maintenance: Previously (2013 Study) we had projected the life expectancy of this unit at 8 years; therefore, replacement was previously projected to occur in 2019. Based on the current operating condition of the carpet cleaner, the life expectancy has been revised to 12 years.

6.2.1.4 Replacement Cost: Tennant makes a wide variety of carpet cleaning machines with significant variation in pricing. For the purposes of this study, the replacement cost is estimated at **$2,500.00**.

6.2.2 Tractor & Accessories

6.2.2.1 General: The Association purchased a small lawn tractor in 2003 at a cost of $2,600.00. Since that time, several tractor accessories have been purchased to supplement the capabilities of the tractor. Our understanding is that the tractor is used frequently by the on site maintenance personnel to perform a variety of tasks.

6.2.2.2 Condition: Despite the fact that the tractor is now fifteen years old, Nelson and Maria indicated that it is still operating well. Nelson indicated that he services the tractor every 50 operating hours.

6.2.2.3 Life Expectancy/Maintenance: The tractor had previously been projected to be replaced in 2015. For the purposes of the study, the useful life is listed as three years with replacement anticipated in 2021.

6.2.2.4 Replacement Cost: When the tractor is replaced, the new tractor will likely need some new accessories for compatibility; consequently, the estimated replacement cost is **$5,000.00**.

6.2.3 Snow Blower

6.2.3.1 General: The Association purchased a snow blower (Toro Powermax 1028) in 2010 at a cost of $1,840.00.

6.2.3.2 Condition: Nelson and Maria indicated that the snow blower is still operating well and is in good condition.

6.2.3.3 Life Expectancy/Maintenance: The life expectancy of the snow blower is estimated at 13 years with replacement occurring in 2023.

6.2.3.4 Replacement Cost: The estimated replacement cost is **$1,700.00** based on current pricing for this same model at Home Depot.

6.2.4 Pipe Inspection Camera and Locator

6.2.4.1 General: The Association purchased a new recording, pipe inspection camera (Fiberscope Viper ADV) in 2015 at an approximate cost of $2,500.00. This camera is used periodically to perform inspections of sewer lines to determine if deficiencies are present. The association purchased an above ground locator (Tracker II by UEMSI) in or around 2006 when the sanitary sewer survey was performed. Nelson indicated that he has not used this equipment in some time but it appears to be operating correctly.

6.2.4.2 Condition: The camera is still in operating condition; however, Nelson indicated that the camera needs maintenance and some of the wiring connections are loose.

6.2.4.3 Life Expectancy/Maintenance: 20 years (2035)

6.2.4.4 Replacement Cost: The estimated replacement cost of the camera and locator is **$4,000.00**.

6.2.5 Pool/Maintenance Building HVAC

6.2.5.1 General: The Heating, Ventilating and Air Conditioning System (*HVAC*) at the Swimming Pool / Maintenance Building was not included in the previous reserve study. A new system was installed by Dwyer Plumbing in the Fall of 2016. This system is a depreciable asset and reserves should be allocated for replacement. The installed system was manufactured by Lennox and marketed under the trade name "Magic-Pak". The system is still under the manufacturer's five year warranty.

6.2.5.2 Condition: We do not have the expertise to assess the condition of the HVAC system but, presumably, the system is still in good operating condition given its age.

6.2.5.3 Life Expectancy/Maintenance: Periodic, annual maintenance should be performed as would be performed on any HVAC system. Costs for maintenance should be allocated from existing annual maintenance funding. The life expectancy of a properly maintained, residential-style HVAC system is approximately 12 to 15 years. In many instances, the furnace portion of the unit will outlast the air conditioning components and may provide

20+years of service. For the purposes of this study the life expectancy of the HVAC system is set at 15 years; therefore, replacement is anticipated in 2031.

6.2.5.4 Replacement Cost: The cost to install the system in 2016 was $5,190.00. Consequently, the estimated cost to replace the existing system (*in $2018*) is **$5,500.00**.

6.2.6 Additional/Miscellaneous Equipment

6.2.6.1 General: In addition to the equipment listed individually in this section, there is a variety of equipment, tools, etc. that are used by Nelson and Maria. This equipment includes but is not limited to: personal computer, sewer and drain cleaner/snake, refrigerator, leaf blowers (2), ladders, etc. For the purposes of this study, this equipment has NOT been included as a reserve asset; however, the Association may wish to incorporate additional equipment in future studies. The estimated value of the miscellaneous equipment is **$7,000.00**.

6.3 SERVICES

6.3.1 Replacement Reserve Study

6.3.1.1 General: Per the request of the Board, costs to perform the reserve study are also included given that a study must be performed every five years and that the costs to perform/update the study are significant.

Appendix A

Fairlington Glen Condominium
2018 Replacement Reserve Study

SUMMARY TABLE

Full Funding Analysis of Replacement Reserves

Appendix A1.1	Supporting Estimate for Parking Lot Full Funding Amount
Appendix A1.2	Supporting Estimate for Parking Lot - Maint./Repl. Schedule
Appendix A2	Supporting Estimate for Sidewalk Full Funding Amount
Appendix A3	Supporting Estimate for Curb and Gutter Full Funding Amount
Appendix A4	Supporting Estimate for Sanitary Sewer Full Funding Amount
Appendix A5	Supporting Estimate for Storm Drainage Full Funding Amount
Appendix A6	Supporting Estimate for Water Line Replacement
Appendix A7	Supporting Estimate for Fencing Full Funding Amount
Appendix A8	Supporting Estimate for Exterior Lighting Full Funding Amount
Appendix A9	Supporting Estimate for Swimming Pool Full Funding Amount
Appendix A10	Supporting Estimate for Roofing Full Funding Amount
Appendix A10.a	Historical Costs for Roofing Replacement
Appendix A11	Supporting Estimate for Dormers Full Funding Amount
Appendix A12	Supporting Estimate for Chimneys Full Funding Amount
Appendix A13	Supporting Estimate for Masonry Maintenance/Repointing
Appendix A14	Supporting Estimate for Masonry Stoops Full Funding Amount
Appendix A15	Supporting Estimate for Portico Refurbishment
Appendix A16	Supporting Estimate for Rear Canopy Replacement

Appendix A - Full-Funding Analysis of Replacement Reserves
Summary Table

Section	Component	Year Last Replaced if Known	Historical Cost If Available	Replacement Cost Estimated in 2003 Study	Replacement Cost Estimated in 2008 Study	Replacement Cost Estimated in 2012 Update	Remaining Useful Life Estimated in 2018	Estimates for the Current Year (2018)					
								Useful Life	Remaining Useful Life	Percent Depreciated	Estimated Replacement Cost (2018)	Fully Funded Balance	Annual Depreciation Cost
1.0	**Hardscape**												
1.1	**Asphalt Pavement**												
1.1.1	Replace asphalt in parking lots					$ 1,165,135	0	30	13	58%	$980,000	$568,000	$32,655
1.1.2	Maintain asphalt in parking lots annually					$ 18,081	1	1	1	0%	$6,305	$6,305	$6,305
1.2	**Concrete**												
1.2.1	Sidewalk Replacement (Removed from Study)			$ 255,930		$ 316,950	0	-	0	0%	$0	$0	$0
1.2.2	Curb and Gutter Replacement (see "Curb/Gutter" tab)			$ -	$ -	$ 202,676	0	30	13	58%	$214,000	$121,000	$7,116
1.2.3	Concrete Alleys			$ -	$ -	$ -	10	50	10	80%	$66,000	$52,800	$1,320
2.0	**Utilities**												
2.1	**Sanitary Sewers (see "Sewers" Tab)**												
2.1.1	Relining - Terra Cotta (outside building footprint)			$ -	n/a	$ 1,117,976	36	50	36	29%	$884,949	$255,537	$20,396
2.1.2	Relining/Replacement - Cast Iron (inside footprint)			$ -	n/a	n/a	19	85	19	57%	$304,720	$173,017	$0
2.1.3	Sewer cleanouts			n/a	n/a	$ 187,961	31	75	31	59%	$187,961	$110,987	$2,506
2.1.4	Sewer manholes			n/a	n/a	n/a	10	80	10	88%	$55,800	$48,825	$698
2.2	**Storm Drainage (see "Storm" Tab)**												
2.2.1	Storm drain piping			n/a	$ 290,500	$ 312,215	47	86	41	52%	$166,490	$86,447	$1,932
2.2.2	Storm drainage structures			n/a	n/a	n/a	25	69	29	58%	$71,731	$41,726	$1,033
2.3	**Water Lines (see "Water" Tab)**												
2.3.1	Water supply piping			n/a	n/a	n/a	25	70	25	64%	$910,700	$585,450	$13,010
3.0	**Miscellaneous Site Features**												
3.1	**Signage**												
3.1.1	Replace Site Signage	2017	$ 19,400	$ 6,400	$ 10,000	$ 10,748	20	20	20	0%	$19,400.00	$0	$970
3.2	**Fencing (see "Fencing" Tab for lineal footage of fencing with unit cost information)**												
3.2.1	Replace Treated Wood Patio Fencing	1997	$ 236,000	$ 247,500		$ 306,510	9	30	9	70%	$427,744	$299,421	$14,258
3.2.2	Replace Split-Rail Fence at Ct. 4	2010	$ 4,024			$ 4,208	22	30	22	27%	$8,257	$2,202	$275
3.2.3	Perimeter Fence	1975	$ 10,000	$ 5,000	$ 35,000	$ 37,616	2	50	2	96%	$69,868	$67,073	$1,397
3.2.4	Replace Pool Perimeter Fence	2003	$ 32,200	$ 32,200		$ 39,877	15	30	15	50%	$43,551	$21,775	$1,452
3.2.5	Replace Pool Tennis Court Fence	2003		$ 24,400	$ 15,000	$ 16,121	7	30	7	77%	$14,820	$11,362	$494
3.2.6	Replace Triple Tennis Court Fence	2011	$ 20,750		$ 23,000	$ 21,373	23	30	23	23%	$22,231	$5,187	$741
3.2.7	Replace Pickle Ball Court Fence	2018	$ 7,538		$ 5,000	$ 5,374	30	30	30	0%	$8,257	$0	$275
3.2.8	Replace Short Basketball Court Fence	2011	$ 1,100	$ 1,100	$ 1,100	$ 1,362	23	30	23	23%	$1,397	$326	$47
3.3	**Handrails (see "Fencing" Tab for takeoff)**												
3.3.1	Replace Wrought Iron Handrails	1945		n/a	n/a	n/a	10	80	10	88%	$9,527	$8,337	$119
3.4	**Exterior Lighting (see "Outdoor Lighting" tab)**												
3.4.1	Replace Carriage Lt Poles, Mountings & Fixtures	1973		$ 20,000	$ 104,000	$ 111,774	5	25	5	80%	$106,320	$85,056	$4,253
3.4.2	Replace Carriage Light Pole Circuits/Conduit	1973		n/a	n/a		5	50	5	90%	$115,313	$103,781	$2,306
3.4.3	Replace Pole Lights at Swimming Pool	1973		n/a	n/a	n/a	5	50	5	90%	$10,400	$9,360	$208
3.4.4	Replace Ceiling Fixtures at Entry to B-Units			n/a	n/a	n/a	5	15	5	67%	$3,450	$2,300	$230

Appendix A - Full-Funding Analysis of Replacement Reserves
Summary Table

Section	Component	Year Last Replaced if Known	Historical Cost If Available	Replacement Cost Estimated in 2003 Study	Replacement Cost Estimated in 2008 Study	Replacement Cost Estimated in 2012 Update	Remaining Useful Life Estimated in 2018	Estimates for the Current Year (2018) Useful Life	Remaining Useful Life	Percent Depreciated	Estimated Replacement Cost (2018)	Fully Funded Balance	Annual Depreciation Cost
4.0	**Recreational Features**												
4.1	**Swimming Pool (see "Pools Revised" Tab)**												
4.1.1	**Main Swimming Pool**												
4.1.1.1	Whitecoat "Plaster"	2015						7	4	43%	$13,800	$5,910	$1,970
4.1.1.2	Coping Stone	1997				$ 14,900		30	9	70%	$19,500	$13,650	$650
4.1.1.3	Perimeter Tile	2015						14	11	21%	$11,300	$2,420	$810
4.1.1.4	Transition Tile	2015						14	11	21%	$2,700	$580	$190
4.1.1.5	Main Pool Cover	2017						18	17	6%	$9,100	$510	$510
4.1.1.6	Main Pool Beam/Structure Repair	2009						20	11	45%	$25,000	$11,250	$1,250
4.1.1.7	Main Pool Structure Replacement	1974				$ 560,000		60	16	73%	$250,000	$183,330	$4,170
4.1.2	**Main Swimming Pool Equipment**												
4.1.2.1	Main Pool Skimmers	2009						18	9	50%	$13,500	$6,750	$750
4.1.2.2	Main Pool Filters (Cartridge Style)	2009						12	3	75%	$12,800	$9,600	$1,070
4.1.2.3	Main Pool Pump (Heavy Duty-Brass)	2009						25	16	36%	$10,000	$3,600	$400
4.1.3	**Wading "Baby" Pool**												
4.1.3.1	Whitecoat "Plaster"	2014						7	3	57%	$3,700	$2,110	$530
4.1.3.2	Coping Stone	2014						30	26	13%	$5,000	$670	$170
4.1.3.3	Perimeter Tile	2014						15	11	27%	$3,100	$830	$210
4.1.3.4	Baby Pool Cover	2017						18	17	6%	$1,300	$70	$70
4.1.4	**Wading "Baby" Pool Equipment**												
4.1.4.1	Wading Pool Skimmers	2009						20	11	45%	$1,500	$680	$80
4.1.4.2	Wading Pool Filter (Cartridge Style)	2009						15	6	60%	$2,500	$1,500	$170
4.1.1.3	Wading Pool Pump (Plastic)	2009						12	3	75%	$1,500	$1,130	$130
4.1.5	**Pool Deck**												
4.1.5.1	Repair Pool Deck (7.5%)	2017				$ 2,308		5	4	20%	$15,500	$3,100	$3,100
4.1.5.2	Replace Pool Deck	1974				$ 65,367		50	6	88%	$93,700	$82,460	$1,870
4.1.6	**Pool Accessories/Furniture**												
4.1.6.1	Replace Lifeguard Chairs	2006				$ 6,880		20	8	60%	$5,000	$3,000	$250
4.1.6.2	Replace Large Canvas Awning	2005				$ 3,083		15	2	87%	$4,500	$3,900	$300
4.1.6.3	Replace Small Canvas Awning	2010				$ 3,237		15	7	53%	$3,500	$1,870	$230
4.1.6.4	Replace Pool Furniture	2017				$ -		8	7	13%	$10,000	$1,250	$1,250
4.1.6.5	Replace Dri-Dek Matting @Bathhouse	2015				$ -		5	2	60%	$1,900	$1,140	$380
4.2	**Courts**												
4.2.1	Reapply Color Coat At Pool Tennis Court	2006	$ 12,620	$ 8,000	$ 13,500	$ 14,509	3	5	3	40%	$10,000	$4,000	$2,000
4.2.2	Renovate/Reconstruct Pool Tennis Court	2011	$ 41,655	$ 20,000	$ 22,000	$ 42,905	13	15	13	13%	$42,905	$5,721	$2,860
4.2.3	Reapply Color Coat At Triple Tennis Courts	2011		$ 10,000	$ 19,250	$ 19,827	4	5	4	20%	$20,422	$4,084	$4,084
4.2.4	Renovate/Reconstruct Triple Tennis Courts	2011	$ 97,366	$ 45,000	$ 50,250	$ 100,287	18	20	18	10%	$100,287	$10,029	$5,014
4.2.5	Reapply Color Coat at Basketball Court	2012	$ 4,080	$ 6,000	$ 4,350	$ 4,675	4	5	4	20%	$4,815	$963	$963
4.2.6	Renovate/Reconstuct Basketball Court	2012	$ 17,000	$ 15,000	$ 16,600	$ 16,600	5	20	5	75%	$30,000	$22,500	$1,500
4.2.7	Reapply Color Coat At Pickleball Court		$ 3,500				2	5	2	60%	$10,000	$6,000	$2,000
4.2.8	Renovate/Reconstruct Pickleball Court		$ 12,000				2	20	2	90%	$12,360	$11,124	$618
4.3	**Tot Lot**												
4.3.1	Replace Tot Lot Playground Equipment	2014	$ 46,000	$ 15,000	$ 35,000	$ 40,138	31	35	31	11%	$47,700	$5,451	$1,363
4.3.2	Replace Tot Lot 6 x 6 Borders	2014	$ 7,000				10	15	10	33%	$7,300	$2,433	$487
4.3.3	Replenish Tot Lot Pea Gravel	2018	$ 3,600				4	4	4	0%	$3,700	$0	$925

Appendix A - Full-Funding Analysis of Replacement Reserves
Summary Table

Section	Component	Year Last Replaced if Known	Historical Cost If Available	Replacement Cost Estimated in 2003 Study	Replacement Cost Estimated in 2008 Study	Replacement Cost Estimated in 2012 Update	Remaining Useful Life Estimated in 2018	Estimates for the Current Year (2018) Useful Life	Remaining Useful Life	Percent Depreciated	Estimated Replacement Cost (2018)	Fully Funded Balance	Annual Depreciation Cost
5.0	**Building Exteriors**												
5.1	**Roofs (see "Roofing" tab)**												
5.1.1	Slate Roofing Systems			$ 4,207,400		$ 6,342,441	66	101	66	34%	$7,067,224	$2,429,094	$70,188
5.2	**Dormers (see "Dormers" tab)**												
5.2.1	Gable Dormers						30	100	57	43%	$249,400	$108,272	$2,494
5.3	**Chimneys (see "Chimneys" tab)**												
5.3.1	Chimney Brick Masonry Maint./Repointing			$ 197,184		$ 244,198	2	75	2	97%	$155,168	$151,030	$2,069
5.3.2	Chimney Caps (Copper)	1997					17	50	32	36%	$237,920	$85,651	$4,758
5.3.3	Chimney Screens						20	25	20	20%	$25,000	$5,000	$1,000
5.4	**Façade**												
5.4.1	Masonry Veneer Maintenance/Repointing			$ 197,184		$ 244,198	5	5	5	0%	$150,000	$0	$30,000
5.4.2	Replace Shutters			$ 60,000		$ 74,306	12	25	12	52%	$74,306	$38,639	$2,972
5.4.3	Replace B-Unit Doors (see "B-Units" Tab)			$ 5,000	$ 33,350	$ 35,843	5	40	5	88%	$34,500	$30,188	$863
5.4.4	Replace B-Unit Common Windows (see "B-Units" Tab)				$ 11,500	$ 12,360	2	25	2	92%	$28,750	$26,450	$1,150
5.5	**Entrances**												
5.5.1	Masonry Stoops (see "Stoops" Tab)					$ 688,966	20	80	30	63%	$1,464,290	$917,507	$18,304
5.5.2	Porticos at Main Entrances (see "Porticos" Tab)						0	100	25	75%	$975,100	$731,325	$9,751
5.5.3	Canopies at Rear Entrances (see "Rear Canopies")						0	50	0	100%	$367,200	$367,200	$7,344
5.6	**Bath House / Maintenance Building**												
5.6.1	Exterior Building Renovation						41	85	11	87%	$250,000	$217,175	$2,943
6.0	**Building Interiors & Services**												
6.1	**Interiors**												
6.1.1	Replace B-Unit Interior Finishes	2006	$ 50,220	$ 50,000		$ 57,592	5	12	5	58%	$57,592	$33,595	$4,799
6.1.2	Replace B-Unit Mailboxes (see "B-Units" Tab)	2011	$ 9,959			$ 10,258	33	35	33	6%	$11,500	$657	$329
6.1.3	Refurbish Maintenance Office & Bathhouses	2009	$ 446,909	$ 12,500		$ 479,836	41	50	41	18%	$80,000	$14,400	$1,600
6.2	**Tools/Equipment**												
6.2.1	Replace B-unit Carpet Cleaner	2011	$ 2,333			$ 2,403	7	12	7	42%	$2,500	$1,042	$208
6.2.2	Replace Tractor + Accessories	2003	$ 2,600	$ 7,500	$ 2,000	$ 2,150	3	18	3	83%	$5,000	$4,167	$278
6.2.3	Replace Snow Blower	2010	$ 1,840				5	13	5	62%	$1,700	$1,046	$131
6.2.4	Replace Pipe Camera & Locator	2015	$ 10,000			$ 10,000	17	20	17	15%	$4,000	$600	$200
6.2.5	Replace Pool/Maintenance HVAC	2016	$ 5,190			$ -	13	15	13	13%	$5,500	$733	$367
6.2.6	Replace Miscellaneous Equipment					$ -	5	10	5	50%	$7,000	$3,500	$700
6.3	**Services**												
6.2.1	Replacement Reserve Study	2018	$ 10,000			$ 16,000	5	5	5	0%	$10,000	$0	$2,000
	Total Funded Components										**$16,760,229**	**$8,242,927**	**$317,701**
	Full-Funding Percentage												

Appendix A1.1 - Supporting Estimate for Parking Lot Full Funding Amount (1.1a)

			2011 REPAIRS (NVM)				2014REPAIRS (NVM)				2018 RECONST. (PRO-PAVE)									
Court	Area (sq ft)	Curb & Gutter (LF)	Sealcoat (Y/N)	Sealcoat Approx. Cost	Overlay (Y/N)	Overlay Approx. Cost	Sealcoat (Y/N)	Sealcoat Approx. Cost	Overlay (Y/N)	Overlay Cost	Court Reconst.	Court Reconst. Cost	Useful Life	Condition (2018)	Year to be Replaced	Remaining Useful Life	Percent Depreciated	Replacement Cost (CY)	Fully Funded Balance	Annual Depreciation Cost (CY)
1	8325	412	YES	$ 930.00	NO	$ -	YES	$ 1,140.00	NO	$ -	NO	$ -	30	Average	2028	10	67%	$ 68,681	$ 45,788	$ 2,289.00
2	7600	402	YES	$ 840.00	NO	$ -	NO	$ -	NO	$ -	NO	$ -	30	Below Average	2025	7	77%	$ 62,700	$ 48,070	$ 2,090.00
3	8400	405	YES	$ 930.00	NO	$ -	NO	$ -	NO	$ -	NO	$ -	30	Below Average	2024	6	80%	$ 69,300	$ 55,440	$ 2,310.00
4	9170	497	YES	$ 1,020.00	NO	$ -	NO	$ -	NO	$ -	NO	$ -	30	Above Average	2033	15	50%	$ 75,653	$ 37,826	$ 2,522.00
5	6150	360	YES	$ 680.00	NO	$ -	YES	$ 840.00	NO	$ -	NO	$ -	30	Poor	2023	5	83%	$ 50,738	$ 42,281	$ 1,691.00
6	8250	413	YES	$ 920.00	NO	$ -	NO	$ -	YES	$ 11,600.00	NO	$ -	30	Good	2036	18	40%	$ 68,063	$ 27,225	$ 2,269.00
7	7375	366	YES	$ 820.00	NO	$ -	YES	$ 1,010.00	NO	$ -	NO	$ -	30	Average	2029	11	63%	$ 60,844	$ 38,534	$ 2,028.00
8	4850	320	YES	$ 540.00	NO	$ -	NO	$ -	NO	$ -	NO	$ -	30	Below Average	2027	9	70%	$ 40,013	$ 28,009	$ 1,334.00
9	6800	382	YES	$ 760.00	NO	$ -	YES	$ 930.00	NO	$ -	NO	$ -	30	Very Good	2042	24	20%	$ 56,100	$ 11,220	$ 1,870.00
10	7050	409	YES	$ 780.00	NO	$ -	YES	$ 960.00	NO	$ -	NO	$ -	30	Poor	2022	4	87%	$ 58,163	$ 50,408	$ 1,939.00
11	8500	495	NO	$ -	YES	$ 11,310.00	NO	$ -	NO	$ -	NO	$ -	30	Average	2030	12	60%	$ 70,125	$ 42,075	$ 2,338.00
12	7650	402	YES	$ 850.00	NO	$ -	YES	$ 1,050.00	NO	$ -	NO	$ -	30	Above Average	2032	14	53%	$ 63,113	$ 33,660	$ 2,104.00
13	7300	389	YES	$ 810.00	NO	$ -	NO	$ -	NO	$ -	NO	$ -	30	Average	2031	13	57%	$ 60,225	$ 34,128	$ 2,008.00
14	4900	497	NO	$ -	YES	$ 6,520.00	NO	$ -	NO	$ -	YES	$ 55,830.00	30	New	2048	30	0%	$ 55,830	$ -	$ 1,861.00
15	9700	456	YES	$ 1,080.00	NO	$ -	YES	$ 1,330.00	NO	$ -	NO	$ -	30	Below Average	2026	8	73%	$ 80,025	$ 58,685	$ 2,668.00
16	4850	468	YES	$ 540.00	NO	$ -	YES	$ 660.00	NO	$ -	NO	$ -	30	Above Average	2034	16	47%	$ 40,013	$ 18,673	$ 1,334.00
Total	**116,870**															**13**	57.9%	**$ 980,000.00**	$ 568,000.00	$ 32,655.00

116,870 SF
12,986 SY

Appendix A1.2 - Supporting Estimate for Parking Lot - Maintenance/Replacement Schedule (1.1b)

Recommended Annual Asphalt Maintenance (all figures in 2018 dollars)

		Unit Costs	
None	-No action for this period		
Sealcoat	-Sealcoat (2 layers) entire Court	$ 0.15	/sf
Overlay	-1 1/2" asphalt overlay	$ 1.25	/sf
Replace*	-Replace pavement and curb & gutter;	$ 8.25	/sf

Court	SF	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
1	8325	None $ -	Sealcoat $ 1,248.75	None $ -	None $ -	Sealcoat $ 1,248.75	None $ -	None $ -	Sealcoat $ 1,248.75	None $ -	None $ -	Replace $ 68,681.25	None $ -	None $ -	Sealcoat $ 1,248.75	None $ -
2	7600	None $ -	Sealcoat $ 1,140.00	None $ -	None $ -	Sealcoat $ 1,140.00	None $ -	None $ -	Sealcoat $ 1,140.00	None $ -	None $ -	Replace $ 62,700.00	None $ -	None $ -	Sealcoat $ 1,140.00	None $ -
3	8400	None $ -	Sealcoat $ 1,260.00	None $ -	None $ -	Sealcoat $ 1,260.00	None $ -	None $ -	Sealcoat $ 1,260.00	None $ -	None $ -	Replace $ 69,300.00	None $ -	None $ -	Sealcoat $ 1,260.00	None $ -
4	9170	None $ -	Sealcoat $ 1,375.50	None $ -	None $ -	Sealcoat $ 1,375.50	None $ -	None $ -	Sealcoat $ 1,375.50	None $ -	None $ -	Replace $ 75,652.50	None $ -	None $ -	Sealcoat $ 1,375.50	None $ -
5	6150	None $ -	Sealcoat $ 922.50	None $ -	None $ -	Sealcoat $ 922.50	None $ -	None $ -	Sealcoat $ 922.50	None $ -	None $ -	Replace $ 50,737.50	None $ -	None $ -	Sealcoat $ 922.50	None $ -
6	8250	Overlay $ 10,312.50	None $ -	None $ -	None $ -	Sealcoat $ 1,237.50	None $ -	None $ -	Sealcoat $ 1,237.50	None $ -	None $ -	Replace $ 68,062.50	None $ -	None $ -	Sealcoat $ 1,237.50	None $ -
7	7375	None $ -	None $ -	Sealcoat $ 1,106.25	None $ -	None $ -	Sealcoat $ 1,106.25	None $ -	None $ -	Sealcoat $ 1,106.25	None $ -	Replace $ 60,843.75	None $ -	None $ -	Sealcoat $ 1,106.25	None $ -
8	4850	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	Replace $ 40,012.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -
9	6800	None $ -	None $ -	Sealcoat $ 1,020.00	None $ -	None $ -	Sealcoat $ 1,020.00	None $ -	None $ -	Sealcoat $ 1,020.00	None $ -	Overlay $ 8,500.00	None $ -	None $ -	Sealcoat $ 1,020.00	None $ -
10	7050	None $ -	Sealcoat $ 1,057.50	None $ -	None $ -	Sealcoat $ 1,057.50	None $ -	None $ -	Sealcoat $ 1,057.50	None $ -	None $ -	Replace $ 58,162.50	None $ -	None $ -	Sealcoat $ 1,057.50	None $ -
11	8500	None $ -	None $ -	Sealcoat $ 1,275.00	None $ -	None $ -	Sealcoat $ 1,275.00	None $ -	None $ -	Sealcoat $ 1,275.00	None $ -	Replace $ 70,125.00	None $ -	None $ -	Sealcoat $ 1,275.00	None $ -
12	7650	None $ -	None $ -	Sealcoat $ 1,147.50	None $ -	None $ -	Sealcoat $ 1,147.50	None $ -	None $ -	Sealcoat $ 1,147.50	None $ -	Replace $ 63,112.50	None $ -	None $ -	Sealcoat $ 1,147.50	None $ -
13	7300	None $ -	None $ -	Sealcoat $ 1,095.00	None $ -	None $ -	Sealcoat $ 1,095.00	None $ -	None $ -	Sealcoat $ 1,095.00	None $ -	Replace $ 60,225.00	None $ -	None $ -	Sealcoat $ 1,095.00	None $ -
14	4900	None $ -	None $ -	Sealcoat $ 735.00	None $ -	None $ -	Sealcoat $ 735.00	None $ -	None $ -	Sealcoat $ 735.00	None $ -	Replace $ 40,425.00	None $ -	None $ -	Sealcoat $ 735.00	None $ -
15	9700	None $ -	Sealcoat $ 1,455.00	None $ -	None $ -	Sealcoat $ 1,455.00	None $ -	None $ -	Sealcoat $ 1,455.00	None $ -	None $ -	Replace $ 80,025.00	None $ -	None $ -	Sealcoat $ 1,455.00	None $ -
16	4850	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	Replace $ 40,012.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -
Annual "Maintenance"		$ 10,312.50	$ 8,459.25	$ 7,833.75	$ -	$ 9,696.75	$ 7,833.75	$ -	$ 9,696.75	$ 7,833.75	$ -	$ 8,500.00	$ -	$ -	$ 17,530.50	$ -
Annual Replacement Cost		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 908,077.50	$ -	$ -	$ -	$ -

Annual Maint. $ (thru 2019) $ 6,305.14

Appendix A1.2 - Supporting Estimate for Parking Lot - Maintenance/Replacement Schedule (1.1b)

Recommended Annual Asphalt Maintenance (all figures in 2018 dollars)

Court	SF	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
1	8325	None $ -	Sealcoat $ 1,248.75	None $ -	None $ -	Sealcoat $ 1,248.75	None $ -	None $ -	Sealcoat $ 1,248.75	None $ -	None $ -	Sealcoat $ 1,248.75	None $ -	None $ -	Sealcoat $ 1,248.75
2	7600	None $ -	Sealcoat $ 1,140.00	None $ -	None $ -	Sealcoat $ 1,140.00	None $ -	None $ -	Sealcoat $ 1,140.00	None $ -	None $ -	Sealcoat $ 1,140.00	None $ -	None $ -	Sealcoat $ 1,140.00
3	8400	None $ -	Sealcoat $ 1,260.00	None $ -	None $ -	Sealcoat $ 1,260.00	None $ -	None $ -	Sealcoat $ 1,260.00	None $ -	None $ -	Sealcoat $ 1,260.00	None $ -	None $ -	Sealcoat $ 1,260.00
4	9170	None $ -	Sealcoat $ 1,375.50	None $ -	None $ -	Sealcoat $ 1,375.50	None $ -	None $ -	Sealcoat $ 1,375.50	None $ -	None $ -	Sealcoat $ 1,375.50	None $ -	None $ -	Sealcoat $ 1,375.50
5	6150	None $ -	Sealcoat $ 922.50	None $ -	None $ -	Sealcoat $ 922.50	None $ -	None $ -	Sealcoat $ 922.50	None $ -	None $ -	Sealcoat $ 922.50	None $ -	None $ -	Sealcoat $ 922.50
6	8250	None $ -	Sealcoat $ 1,237.50	None $ -	None $ -	Sealcoat $ 1,237.50	None $ -	None $ -	Sealcoat $ 1,237.50	None $ -	None $ -	Sealcoat $ 1,237.50	None $ -	None $ -	Sealcoat $ 1,237.50
7	7375	None $ -	Sealcoat $ 1,106.25	None $ -	None $ -	Sealcoat $ 1,106.25	None $ -	None $ -	Sealcoat $ 1,106.25	None $ -	None $ -	Sealcoat $ 1,106.25	None $ -	None $ -	Sealcoat $ 1,106.25
8	4850	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50
9	6800	None $ -	Sealcoat $ 1,020.00	None $ -	None $ -	Sealcoat $ 1,020.00	None $ -	None $ -	Sealcoat $ 1,020.00	None $ -	None $ -	Sealcoat $ 1,020.00	None $ -	None $ -	Sealcoat $ 1,020.00
10	7050	None $ -	Sealcoat $ 1,057.50	None $ -	None $ -	Sealcoat $ 1,057.50	None $ -	None $ -	Sealcoat $ 1,057.50	None $ -	None $ -	Sealcoat $ 1,057.50	None $ -	None $ -	Sealcoat $ 1,057.50
11	8500	None $ -	Sealcoat $ 1,275.00	None $ -	None $ -	Sealcoat $ 1,275.00	None $ -	None $ -	Sealcoat $ 1,275.00	None $ -	None $ -	Sealcoat $ 1,275.00	None $ -	None $ -	Sealcoat $ 1,275.00
12	7650	None $ -	Sealcoat $ 1,147.50	None $ -	None $ -	Sealcoat $ 1,147.50	None $ -	None $ -	Sealcoat $ 1,147.50	None $ -	None $ -	Sealcoat $ 1,147.50	None $ -	None $ -	Sealcoat $ 1,147.50
13	7300	None $ -	Sealcoat $ 1,095.00	None $ -	None $ -	Sealcoat $ 1,095.00	None $ -	None $ -	Sealcoat $ 1,095.00	None $ -	None $ -	Sealcoat $ 1,095.00	None $ -	None $ -	Sealcoat $ 1,095.00
14	4900	None $ -	Sealcoat $ 735.00	None $ -	None $ -	Sealcoat $ 735.00	None $ -	None $ -	Sealcoat $ 735.00	None $ -	None $ -	Sealcoat $ 735.00	None $ -	None $ -	Sealcoat $ 735.00
15	9700	None $ -	Sealcoat $ 1,455.00	None $ -	None $ -	Sealcoat $ 1,455.00	None $ -	None $ -	Sealcoat $ 1,455.00	None $ -	None $ -	Sealcoat $ 1,455.00	None $ -	None $ -	Sealcoat $ 1,455.00
16	4850	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50	None $ -	None $ -	Sealcoat $ 727.50
Annual "Maintenance"		$ -	$ 17,530.50	$ -	$ -	$ 17,530.50	$ -	$ -	$ 17,530.50	$ -	$ -	$ 17,530.50	$ -	$ -	$ 17,530.50
Annual Replacement Cost		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Appendix A2 - Supporting Estimate for Sidewalk Full Funding Amount (1.2.1)

Estimated Amounts

[1] *From Arlington County Survey Map (1 inch = 50 feet)*

[2] *From Restoration Engineering Site Plan*

This tab was not updated as part of the 2018 CRS as the Board has elected to transfer sidewalk maintenance to the annual maintenance budget in lieu of committing reserves to future repair/replacement.

	Sidewalks (2008)[1]			Sidewalks (2013)[2]
Court	**Map Inches**	**Linear Feet**	**Square Feet**	**Square Feet**
1	10.750	538	2,150	2669
2	8.600	430	1,720	2442
3	10.550	528	2,110	3115
4	19.825	991	3,965	4925
5	10.875	544	2,175	2092
6	12.000	600	2,400	2748
7	12.750	638	2,550	1945
8	9.600	480	1,920	2334
9	10.750	538	2,150	3087
10	18.175	909	3,635	3018
11	17.250	863	3,450	3155
12	11.450	573	2,290	2393
13	9.100	455	1,820	2248
14	5.300	265	1,060	893
15	22.300	1,115	4,460	4538
16	6.250	313	1,250	911
Pool Area	17.750	888	3,550	4956
Total	213.275	10,664	**42,655**	**47469**

Replacement cost per sq ft (2003)	$6.00	
Replacement cost per sq ft (2008)	$7.43	
Replacement cost per sq ft (CY)		**$7.99**
Total replacement cost -- 2003	$255,930	
Total replacement cost -- 2008	$316,950	
Total replacement cost -- CY		**$379,087**
Life expectancy	20	15

Appendix A3 - Supporting Estimate for Curb and Gutter Full Funding Amount (1.2.b)

Estimated Amounts

[1] *2008 From Arlington County Survey Map (1 inch = 50 feet)*

[2] *2013 From Restoration Engineering Site Plan*

Section

	Curb and Gutter[1]		Curb and Gutter[2]		Useful	Year to be	Replacement
Court	Map Inches	Linear feet	Takeoff	Status	Life	Replaced	Cost (CY)
1	8.000	400	412	Overlaid	30	2028	$13,184
2	7.500	375	402	Overlaid	30	2025	$12,864
3	7.250	363	405	Overlaid	30	2024	$12,960
4	9.250	463	497	Overlaid	30	2033	$15,904
5	6.750	338	360	Overlaid	30	2023	$11,520
6	7.375	369	413	Overlaid	30	2036	$13,216
7	6.475	324	366	Overlaid	30	2029	$11,712
8	6.375	319	320	Overlaid	30	2027	$10,240
9	6.250	313	382	Replaced	30	2042	$12,224
10	7.475	374	409	Overlaid	30	2022	$13,088
11	8.750	438	495	Overlaid	30	2030	$15,840
12	6.875	344	402	Overlaid	30	2032	$12,864
13	6.875	344	389	Overlaid	30	2031	$12,448
14	8.250	413	497	Replaced	30	2048	$15,904
15	8.600	430	456	Overlaid	30	2026	$14,592
16	7.875	394	468	Replaced	30	2034	$14,976
Total	**119.925**	**5,996**	**6,673**				**$214,000**

Replacement cost per linear ft (2003)	$25.00
Replacement cost per linear ft (CY)	$30.96

Appendix A4 - Supporting Estimate for Sewer Full Funding Amount (2.1)

$118	Outside Relining Cost Per Foot (6" diameter)
$145	Outside Relining Cost Per Foot (4" diameter)
$195	Inside Relining Cost Per Foot (4" diameter)
$5,266	Average excavation cost

SEWER LATERALS							Inside Section								Outside Section							Total		
Court	Building	Inside Length (feet)	Outside Length (feet)	Outside Diameter (inches)	Outside Cleanout ? (1=Yes)	Notes/Comments Many comments provided by Maynard Dixon per February 2019 "Sewer Pipe Data by Unit"	Replaced or Relined	Year Last Replaced or Relined	Useful Life	Remain. Useful Life	Percent Depreciated	Relining Cost (CY $)	Fully Funded Balance (CY $)	Anticipated Year of Reline/ Replace	Replaced or Relined	Year Last Replaced or Relined	Useful Life	Remaining Useful Life	Percent Depreciated	Excavation & Relining Cost (CY $)	Fully Funded Balance (CY $)	Excavation & Relining Cost (CY $)	Fully Funded Balance (CY $)	Annual Depreciation Cost
1	3501-3503	25	50	6	1		Original	1943	80	4	95%	$4,875	$4,631	2022	RL	2009	50	40	20%	$11,177	$2,235	$16,052	$6,867	$284
1	3507-3513	20	55	6	0	In 2009, the 4" line under the building looked degraded but was experiencing no problems. Interior clean-out tiled over (2007).	Original	1943	80	4	95%	$3,900	$3,705	2022	RL	2008	50	39	22%	$11,769	$2,589	$15,669	$6,294	$284
1	3515-3519	20	65	6	0		Original	1943	80	4	95%	$3,900	$3,705	2022	RL	2008	50	39	22%	$12,951	$2,849	$16,851	$6,554	$308
1	3521-3525	25	65	6	0	In 2009, the 4" cast iron line under the building looked degraded but was experiencing no problems. Interior clean-out carpeted-over (2007). In early 2019, Dwyer replaced a 16'8" segment of the cast iron line between (1) the interior clean-out and (2) its junction outside the building with the line connecting with the manhole.	Replaced	2019	100	100	0%	$4,875	$0	2118	RL	2008	50	39	22%	$12,951	$2,849	$17,826	$2,849	$308
1	3527-3529	25	45	6	0	A concrete barrier from the old steam heating system blocked re-lining. The interior clean-out is just outside the door to the back room and a bit to the right but within the width of the door (carpeted-over in 2007).	Original	1943	80	4	95%	$4,875	$4,631	2022		1943	80	4	95%	$10,586	$10,057	$15,461	$14,688	$193
2	3535-3541	25	64	6	0	In 2007, owner stated that (1) the bathroom had a standard slotted drain that once backed-up and (2) she did not know whether there was any other access point under the carpet.	Original	1943	85	9	89%	$4,875	$4,359	2027	RL	2009	50	40	20%	$12,833	$2,567	$17,708	$6,925	$314
2	3543-3547	26	86	6	0	In 2007, owner said that an interior clean-out point could be under the carpet.	Original	1943	85	9	89%	$5,070	$4,533	2027	RL	2009	50	40	20%	$15,433	$3,087	$20,503	$7,620	$368
2	3549-3555	20	70	6	0		Original	1943	85	9	89%	$3,900	$3,487	2027	RL	2009	50	40	20%	$13,542	$2,708	$17,442	$6,195	$317
3	3561-3563	25	68	6	1	New interior bi-directional clean-out installed in washer room in 2014. In 2007, the old clean-out could not be found under thick carpet, and, as in 2014, it is probably covered by expensive tile. The down-stack pipe in the washer room has an access point about a yard above the floor. In August 2015, Dwyer: (1) repaired the junction between (a) the line extending out from under the building and (b) the re-lined pipe leading to the street, replacing nearby portions of both lines in the process; and (2) installed a second (further from the building) exterior clean-out allowing access toward the building.	Original	1943	80	4	95%	$4,875	$4,631	2022	RL	2015	50	46	8%	$13,305	$1,064	$18,180	$5,696	$327
3	3565-3567	25	53	6	1		Relined	2009	50	40	20%	$4,875	$975	2058	RL	2008	50	39	22%	$11,532	$2,537	$16,407	$3,512	$328
3	3569-3573	25	75	6	1	RP 1978; RL 2008; 2017: Replaced 12 feet of the line between: (a) the junction of the 2008 replacement pipe running from under building with the pipe running thence to street; and (b) the sidewalk.	Replaced	2008	80	69	14%	$4,875	$670	2087	RL	2008	50	39	22%	$14,133	$3,109	$19,008	$3,780	$344
3	3575-3579	25	64	4	1	In March 2018, line was snaked and jetted from basement clean-out to point outside building footprint.	Original	1943	80	4	95%	$4,875	$4,631	2022	RP	1983	50	14	72%	$14,552	$10,478	$19,427	$15,109	$352
3	3581-3585	25	61	6	1	Interior clean-out not located in 2007.	Original	1943	80	4	95%	$4,875	$4,631	2022	RL	2009	50	40	20%	$12,478	$2,496	$17,353	$7,127	$310
4	4101-4111	21	199	6	0	Interior clean-out near the wall in the front room.	Original	1943	88	12	86%	$4,095	$3,537	2030	RL	2009	50	40	20%	$28,793	$5,759	$32,888	$9,295	$622
4	4113-4117	23	109	6	0	Interior clean-out covered by 5" metal plate.	Original	1943	88	12	86%	$4,485	$3,873	2030	RL	2009	50	40	20%	$18,153	$3,631	$22,638	$7,504	$414
4	4119-4123	20	81	6	0		Original	1943	88	12	86%	$3,900	$3,368	2030	RL	2009	50	40	20%	$14,842	$2,968	$18,742	$6,337	$341
4	4125-4139	27	27	6	0	In 2007, owner said that interior clean-out may be in bathroom.	Original	1943	88	12	86%	$5,265	$4,547	2030	RL	2009	50	40	20%	$8,458	$1,692	$13,723	$6,239	$229
5	4100-4110	20	74	6	0		Original	1943	85	9	89%	$3,900	$3,487	2027	RL	2009	50	40	20%	$14,015	$2,803	$17,915	$6,290	$326
5	4112-4116	20	76	6	0	In 2015: (1) replaced 15 feet of lateral running toward street from junction with line running out from under leftmost unit of building and added outside cleanout; (2) repaired this junction to remedy blockage.	Original	1943	85	9	89%	$3,900	$3,487	2027	RL + Part. RP	2009	50	40	20%	$14,251	$2,850	$18,151	$6,337	$331
5	4118	17	93	6	0		Original	1943	85	9	89%	$3,315	$2,964	2027	RL	2009	50	40	20%	$16,261	$3,252	$19,576	$6,216	$364
5	4122-4128	20	41	6	1		Original	1943	85	9	89%	$3,900	$3,487	2027	RL	2009	50	40	20%	$10,113	$2,023	$14,013	$5,510	$248
6	4130-4144	20	31	6	1		Original	1943	85	9	89%	$3,900	$3,487	2027	RL	2008	50	39	22%	$8,931	$1,965	$12,831	$5,452	$225
6	4146-4156	20	62	6	0	Interior clean-out tiled over (2007).	Original	1943	85	9	89%	$3,900	$3,487	2027	RL	2008	50	39	22%	$12,596	$2,771	$16,496	$6,258	$298

Appendix A4 - Supporting Estimate for Sewer Full Funding Amount (2.1)

$118	Outside Relining Cost Per Foot (6" diameter)
$145	Outside Relining Cost Per Foot (4" diameter)
$195	Inside Relining Cost Per Foot (4" diameter)
$5,266	Average excavation cost

SEWER LATERALS							Inside Section								Outside Section							Total		
6	4158-4170	20	72	6	1	Cost of Replacement in 2009 = $17,300; Lateral exits from the rear into the driveway, not (as shown in County map) from the front.	Original	1943	85	9	89%	$3,900	$3,487	2027	RP	2009	50	40	20%	$18,575	$3,715	$22,475	$7,202	$417
6	4172-4176	20	17	6	0	Clean-out tiled over. Cleaned-out October 2018	Original	1943	85	9	89%	$3,900	$3,487	2027	RL	2008	50	39	22%	$7,276	$1,601	$11,176	$5,088	$191
7	4200-4208	20	20	6	1		Original	1943	85	9	89%	$3,900	$3,487	2027	RP	2002	50	33	34%	$7,631	$2,594	$11,531	$6,082	$198
7	4210-4212	20	132	6	1		Original	1943	85	9	89%	$3,900	$3,487	2027	RL	2005	50	36	28%	$20,872	$5,844	$24,772	$9,331	$463
8	3601-3609	20	51	6	1		Original	1943	90	14	84%	$3,900	$3,293	2032	RL	2009	50	40	20%	$11,296	$2,259	$15,196	$5,552	$269
8	3611-3613	20	115	6	1		Original	1943	90	14	84%	$3,900	$3,293	2032	RP	2001	50	32	36%	$18,862	$6,790	$22,762	$10,084	$421
8	3615-3625	20	110	6	1		Original	1943	90	14	84%	$3,900	$3,293	2032	RL	2007	50	38	24%	$18,271	$4,385	$22,171	$7,678	$409
9	3513-3523	8	101	6	1	Interior cleanout under carpet (2007). The sewer line for the building runs along the rear and is served by an exterior clean-out that is on the left rear side of 3513 S. Utah.	Original	1943	90	14	84%	$1,560	$1,317	2032	RL	2007	50	38	24%	$17,207	$4,130	$18,767	$5,447	$361
9	3525-3533	25	176	6	1		Original	1943	90	14	84%	$4,875	$4,117	2032	RP	2001	50	32	36%	$26,073	$9,386	$30,948	$13,503	$576
9	3535-3549	20	50	6	1	In November 2018, after sewer blockage, Dwyer: (1) installed a second outside clean-out allowing snaking toward the building; and, as part of this job, (2) replaced a section of pipe running from the new exterior clean-out to its connection with the lateral running out from under the slab and toward the street. In early 2019, after continuing problems, Dwyer re-lined the aforementioned lateral.	Relined	2019	90	90	0%	$3,900	$0	2108	RP	2001	50	32	36%	$11,177	$4,024	$15,077	$4,024	$267
10	4301-4309	20	60	6	1	$33,650	Original	1943	90	14	84%	$3,900	$3,293	2032	RP	2009	50	40	20%	$36,129	$7,226	$40,029	$10,519	$766
10	4311-4321	20	200	6	1	Replaced 6" terra cotta line between (a) the connection with the line under the unit and (b) the county connection in the middle of S.36. No replacement of the line under the building, but minor digging (a) to eliminate out-of-code link between interior storm drain and sewer and (b) add sump pump with link to court drain basin. This long lateral has 2 clean-outs: one close to the building in a patio; and another off the corner of 4301 S. 36th. Cost of 2007 Work by JED = $45,450	Original	1943	90	14	84%	$3,900	$3,293	2032	RP	2007	50	38	24%	$28,911	$6,939	$32,811	$10,232	$622
10	4323-4343	20	138	6	1	Problems found by 2007 camera inspection. Snaked by Dwyer in 2009. Snaking or root destroyer 2X/year.	Original	1943	90	14	84%	$3,900	$3,293	2032	RL	2004	50	35	30%	$21,581	$6,474	$25,481	$9,768	$475
11	3588-3598	20	57	6	1	Exterior clean-out at 3592, where the lateral enters that unit and then enters low basement of 3594. Interior clean-out under basement stairs of 3592. Continuing problems. Belly requiring camera 2X/year.	Reline	2009	50	40	20%	$3,900	$780	2058	RL	2007	50	38	24%	$12,005	$2,881	$15,905	$3,661	$318
11	4201-4209	20	118	4	1	Tree roots at junction with county line. Snaked by county and Glen in 2007.	Original	1943	90	14	84%	$3,900	$3,293	2032	RP	1983	50	14	72%	$22,387	$16,119	$26,287	$19,412	$491
11	4215-4223	20	115	6	1		Original	1943	90	14	84%	$3,900	$3,293	2032	RL	2007	50	38	24%	$18,862	$4,527	$22,762	$7,820	$421
11	4227-4237	20	64	6	1		Original	1943	90	14	84%	$3,900	$3,293	2032	RL	2007	50	38	24%	$12,833	$3,080	$16,733	$6,373	$300
12	3548-3562	20	45	6	1		Original	1943	95	19	80%	$3,900	$3,120	2037	RP	2000	50	31	38%	$10,586	$4,023	$14,486	$7,143	$253
12	3564-3574	20	215	6	1		Original	1943	95	19	80%	$3,900	$3,120	2037	RP	2000	50	31	38%	$30,684	$11,660	$34,584	$14,780	$655
12	3576-3584	20	80	6	1	Inside clean-out tiled over. Backflow blocker installed in bathroom drain, which prevents snaking.	Original	1943	95	19	80%	$3,900	$3,120	2037	RL	2003	50	34	32%	$14,724	$4,712	$18,624	$7,832	$336

Appendix A4 - Supporting Estimate for Sewer Full Funding Amount (2.1)

$118	Outside Relining Cost Per Foot (6" diameter)
$145	Outside Relining Cost Per Foot (4" diameter)
$195	Inside Relining Cost Per Foot (4" diameter)
$5,266	Average excavation cost

SEWER LATERALS							**Inside Section**								**Outside Section**							**Total**		
13	3512-3522	20	150	6	1	This line connects with the line exiting from the rear of a nearby building rear of the one from Ct. 14. The outside clean-out is in the patio of this unit.	Original	1943	95	19	80%	$3,900	$3,120	2037	RP	2002	50	33	34%	$23,000	$7,820	$26,900	$10,940	$501
13	3524-3532	20	185	6	1		Original	1943	95	19	80%	$3,900	$3,120	2037	RL	2004	50	35	30%	$27,137	$8,141	$31,037	$11,261	$584
13	3534-3544	20	140	6	1	Outside clean-out is in the patio of this unit.	Original	1943	95	19	80%	$3,900	$3,120	2037	RP	2000	50	31	38%	$21,817	$8,291	$25,717	$11,411	$477
14	4202-4210 + 350(	20	22	6	1	This line exits from the rear and connects with a line exiting from the front of a nearby building in Ct. 13. The outside clean-out is in the patio of this unit. After a back-up in April 2017, the line was snaked and videoed: (1) no break; (2) paper towels pulled from line.	Original	1943	95	19	80%	$3,900	$3,120	2037	RP	2002	50	33	34%	$7,867	$2,675	$11,767	$5,795	$198
14	4216-4218	20	75	6	1		Original	1943	95	19	80%	$3,900	$3,120	2037	RL	2007	50	38	24%	$14,133	$3,392	$18,033	$6,512	$324
15	4226-4234	20	50	6	1	Removable tile over the interior clean-out (2007).	Reline	2009	50	40	20%	$3,900	$780	2058	RL	2008	50	39	22%	$11,177	$2,459	$15,077	$3,239	$302
15	4236-4244	20	95	6	1		Original	1943	95	19	80%	$3,900	$3,120	2037	RL	2008	50	39	22%	$16,497	$3,629	$20,397	$6,749	$371
15	4246-4254	20	75	6	1	Interior clean-out not covered (2007).	Reline	2009	50	40	20%	$3,900	$780	2058	RL	2008	50	39	22%	$14,133	$3,109	$18,033	$3,889	$361
15	4256-4264	20	78	6	1		Original	1943	95	19	80%	$3,900	$3,120	2037	RL	2008	50	39	22%	$14,488	$3,187	$18,388	$6,307	$331
15	4266-4274	20	91	6	1		Reline	2009	50	40	20%	$3,900	$780	2058	RL	2008	50	39	22%	$16,025	$3,525	$19,925	$4,305	$398
15	4276-4284	20	50	6	1	Interior clean-out carpeted-over (2007)	Original	1943	95	19	80%	$3,900	$3,120	2037	RL/RP	2003	50	34	32%	$11,177	$3,577	$15,077	$6,697	$265
16	4300-4304	20	61	6	1		Original	1943	95	19	80%	$3,900	$3,120	2037	RL	2007	50	38	24%	$12,478	$2,995	$16,378	$6,115	$291
16	4310-4320	20	70	4	1	Interior clean-out filled-in with removable plaster-of-Paris mold and then carpeted-over but still accessible.	Original	1943	95	19	80%	$3,900	$3,120	2037	RP	1980	50	11	78%	$15,423	$12,030	$19,323	$15,150	$350
Totals (CY $)		1172			40							**$228,540**	**$173,017**							**$884,949**	**$255,537**	**$1,113,489**	**$428,554**	**$20,396**
Averages									85	19		$4,081						36	29%	$15,803		$19,884	$7,653	$364

SEWER CLEANOUTS	
buildings with cleanouts (CY)	40
buildings without cleanouts	16
replacement cost per cleanout (CY $)	3,356
total replacement cost of all cleanouts (CY $)	###
assumed life expectancy for cleanouts	75
assume existing cleanouts were 20 years old on average in 2007	
average age of existing cleanouts in current year	32
43% accumulated depreciation of existing cleanouts in current year	
100% equivalent depreciation applied to buildings without cleanouts	
59% total percent depreciated	
31 remaining useful years of life of sewer cleanouts	

Contingency Percentage*	20%	
For the purposes of this study it is assumed that, at a certain percentage of locations, relining of the interior cast iron laterals will not be possible and complete replacement will be necessary		
Total Lineal Footage of Interior Cast Iron Lateral	1172	
Total Lineal Footage Estimated for Complete Replacement	234.4	
Additional Unit Cost for Interior Lateral Replacement	$ 325.00	/lf
This is an additional unit cost (above and beyond standard relining cost allocated above, which accounts for the difficulty of working within the finished basement and accounting for damage and replacement of certain interior		
Total Interior Lateral Contingency Allocation	**$76,180.00**	

Appendix A5 - Supporting Estimate for Storm Drainage Full Funding Amount (2.2)

STORM DRAINAGE PIPING

Court		Type	Size (Diameter in Inches)	From	To	Length (ft)	Age (yrs)	Useful Life (yrs)	Remaining Service Life	Percent Deprec.	Installation Cost	Repair Options: Relining Cost $2013	Repair Options: Repl. Cost $2013	Fully Funded Balance
	1	Terra Cotta	12"	Parking Lot Catch Basin	Arl. County Main - S. Stafford Street	170	70	100	30	70%		$ 23,800.00		$ 16,660.00
	1	Corrugated PE	4"	Common Area betweeen 3519B and 3521	French Drain	100	2	20	18	10%	$ 1,138.00		$ 1,500.00	$ 150.00
	2	Terra Cotta	12"	Parking Lot Catch Basin	Arl. County Main - S. Stafford Street	154	70	100	30	70%		$ 21,560.00		$ 15,092.00
	2	PVC	6"	Tie in with Orangeburg pipe behind 3555 (see below)	Arl. County Catch Basin - S. Stafford Street	70	8	100	92	8%		$ 8,400.00		$ 672.00
	2	Orangeburg	6"	Catch Basin behind 3551	Tie in with PVC (see above)	68	70	75	5	93%			$ 8,160.00	$ 7,616.00
	9	PVC S&D	6"	Front yard of 3519	Catch Basin behind Court 16	150	5	100	95	5%	$ 12,000.00		$ 14,861.10	$ 743.06
	9	PVC S&D	4"	Misc. downspouts and basins from 3517 to 3525	Main 6" PVC line (see previous)	80	5	100	95	5%	$ 2,500.00		$ 3,096.06	$ 154.80
	9	PVC S&D	3"	Misc. downspouts and basins from 3517 to 3525	4" PVC line (see previous)	36	5	100	95	5%	$ 1,500.00		$ 1,857.64	$ 92.88
	10	PVC	6"	Catch Basin at NW corner of parking lot	Catch Basin at NE corner of parking lot	100	3	100	97	3%	$ 16,500.00		$ 17,249.93	$ 517.50
	10	Terra Cotta	8"	Catch basin at NE corner of parking lot	Yard Inlet Catch Basin in common area	64	70	100	30	70%		$ 8,000.00		$ 5,600.00
	10	Terra Cotta	8"	Yard Inlet Catch Basin in common area	12" Diameter Line from Tot Lot Catch Basin	123	70	100	30	70%		$ 15,375.00		$ 10,762.50
	11	Corrugated PE	4"	Trench between Pool Amenities Building and 4223		36	5	20	15	25%			$ 900.00	$ 225.00
	11	PVC S&D	4"	Trench between Pool Amenities Building and 4223		70	5	50	45	10%			$ 1,750.00	$ 175.00
	11	Terra Cotta	6"	Culvert beneath sidewalk to Swimming Pool entrance		20	70	100	30	70%			$ 1,900.00	$ 1,330.00
	12	Terra Cotta	12"	Parking Lot Catch Basin	Arl. County Main - S. Stafford Street	98	70	100	30	70%		$ 13,720.00		$ 9,604.00
	13	Terra Cotta	12"	Parking Lot Catch Basin	Arl. County Main - S. Stafford Street	76	70	100	30	70%		$ 10,640.00		$ 7,448.00
	14	Terra Cotta	12"	Yard Inlet Catch Basin in common area	Arl. County Main - S. 35th Street	98	70	100	30	70%		$ 13,720.00		$ 9,604.00
							Averages	**86**	**47**					
												$ 115,215.00	$ 51,274.73	
										PIPING TOTAL		**$**	**166,489.73**	
										FULLY FUNDED TOTAL				$ 86,446.74
										Overall Depreciation				52%

Appendix A5 - Supporting Estimate for Storm Drainage Full Funding Amount (2.2)

STORM DRAINAGE STRUCTURES

Court	Type	Location	Age (yrs)	Useful Life (yrs)	Remaining Service Life	Percent Deprec.	Installation Cost	Repair Options Repl. Cost $2013	Fully Funded Balance
1	Grade Inlet Catch Basin	Back of Parking Lot	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
1	French Drain	Common Area betweeen 3519B and 3521	2	20	18	10%	$ 2,452.00	$ 3,036.62	$ 303.66
2	Grade Inlet Catch Basin	Back of Parking Lot	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
2 and 3	Yard Inlet Catch Basin	Common Area between Courts 2 and 3	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
9	Miscellaneous PE Catch Basins	Front yards of 3515, 17, 19, 21 and 23	5	20	15	25%	$ 4,000.00	$ 4,953.70	$ 1,238.43
10	Grade Inlet Catch Basin	NW corner of parking lot	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
10	Grade Inlet Catch Basin	NE corner of parking lot	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
10	Trench Drain	Along North Side of Parking Lot	3	30	27	10%	$ 7,500.00	$ 7,840.88	$ 784.09
10	Yard Inlet Catch Basin	Common Area in Center of Court	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
10 and Tot Lot	Yard Inlet Catch Basin	Common Area between Tot Lot, Swings, and Court 10	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
9, 15 and Tot Lot	Miscellaneous PE Catch Basins	Common Area between Courts 9 and 15 extending toward Tot Lot	0	20	20	0%	$ 1,200.00	$ 1,200.00	$ -
11	Miscellaneous PE Catch Basins	Common Area between Court 11 and Pool House	10	20	10	50%	unknown	$ 1,200.00	$ 600.00
12	Grade Inlet Catch Basin	Along North Side of Parking Lot	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
13	Grade Inlet Catch Basin	Along North Side of Parking Lot	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
13 and 14	Miscellaneous PE Catch Basins	Common Area behind 4216 South 35th Street	0	20	20	0%	$ 2,000.00	$ 2,000.00	$ -
13 and 14	Yard Inlet Catch Basin	Common Area behind 4210 South 35th Street	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
15 and 16	Miscellaneous PE Catch Basins	Along Fence Line behind 4276-4284 South 35th Street	4	20	16	20%	unknown	$ 1,500.00	$ 300.00
16	Yard Inlet Catch Basin	Common Area between/behind 4304 and 4310 South 35th	70	100	30	70%	unknown	$ 5,000.00	$ 3,500.00
		Averages	**69**	**25**					
							$ -	$ 71,731.19	

STRUCTURES TOTAL	**$**	**71,731.19**
FULLY FUNDED TOTAL		$ 41,726.17
DEPRECIATION TOTAL		58%

Appendix A6 - Supporting Estimate for Water Line Replacement (2.3)

Assumed Useful Life of Water Lines **70 yrs**

Court	Line	Starting Point	Termination	Length	Units Serviced	Size	Type	Age	Condition	Surface Characteristics: PVMT?	%	S/W?	%	LNDSC	%	Est. Repl. Cost	Useful Life	Remain. Useful Life	Percent Deprec.	Fully Funded Balance	Annual Deprec. Cost
1	-- 1	Arlington County Main	3501 S. Stafford St.	42 ft	5	?	Copper	45	Unknown	NO	0%	YES	10%	YES	90%	$ 5,100.00	70	25	64%	$ 3,278.57	$ 72.86
1	-- 2	Arlington County Main	W1-3 & W1-4	210 ft	22	?	Copper	45	Unknown	YES	90%	NO	0%	YES	10%	$ 37,500.00	70	25	64%	$ 24,107.14	$ 535.71
1	-- 3	W1-2	3509B S. Stafford St.	68 ft	7	?	Copper	45	Unknown	NO	0%	YES	8%	YES	92%	$ 8,200.00	70	25	64%	$ 5,271.43	$ 117.14
1	-- 4	W1-2	3517A S. Stafford St.	38 ft	6	?	Copper	45	Unknown	NO	0%	YES	15%	YES	85%	$ 4,600.00	70	25	64%	$ 2,957.14	$ 65.71
1	-- 5	W1-2	3523B S. Stafford St.	48 ft	5	?	Copper	45	Unknown	NO	0%	YES	18%	YES	82%	$ 5,900.00	70	25	64%	$ 3,792.86	$ 84.29
1	-- 6	W1-2	3529A S. Stafford St.	39 ft	4	?	Copper	45	Unknown	YES	15%	YES	10%	YES	75%	$ 5,100.00	70	25	64%	$ 3,278.57	$ 72.86
2	-- 1	Arlington County Main	3537A2 S. Stafford St.	94 ft	9	?	Copper	45	Unknown	NO	0%	YES	12%	YES	88%	$ 11,400.00	70	25	64%	$ 7,328.57	$ 162.86
2	-- 2	Arlington County Main	3545A2 S. Stafford St.	180 ft	8	?	Copper	45	Unknown	YES	80%	YES	4%	YES	16%	$ 31,100.00	70	25	64%	$ 19,992.86	$ 444.29
2	-- 3	Arlington County Main	3551A1 S. Stafford St.	136 ft	9	?	Copper	45	Unknown	NO	0%	YES	18%	YES	82%	$ 16,700.00	70	25	64%	$ 10,735.71	$ 238.57
3	-- 1	Arlington County Main	W3-4 & W3-5	162 ft	27	?	Copper	45	Unknown	YES	85%	NO	0%	YES	15%	$ 28,400.00	70	25	64%	$ 18,257.14	$ 405.71
3	-- 2	W3-1	3563A1 S. Stafford St.	76 ft	5	?	Copper	45	Unknown	YES	70%	YES	5%	YES	25%	$ 12,600.00	70	25	64%	$ 8,100.00	$ 180.00
3	-- 3	W3-1	3565A S. Stafford St.	81 ft	3	?	Copper	45	Unknown	YES	30%	YES	8%	YES	62%	$ 11,400.00	70	25	64%	$ 7,328.57	$ 162.86
3	-- 4	W3-1	3571A2 S. Stafford St.	59 ft	8	?	Copper	45	Unknown	NO	0%	YES	9%	YES	91%	$ 7,200.00	70	25	64%	$ 4,628.57	$ 102.86
3	-- 5	W3-1	3577A S. Stafford St.	43 ft	5	?	Copper	45	Unknown	NO	0%	YES	15%	YES	85%	$ 5,300.00	70	25	64%	$ 3,407.14	$ 75.71
3	-- 6	W3-1	3581A2 S. Stafford St.	42 ft	6	?	Copper	45	Unknown	YES	40%	YES	12%	YES	48%	$ 6,200.00	70	25	64%	$ 3,985.71	$ 88.57
4	-- 1	Arlington County Main	4135 S. 36th St.	111 ft	8	?	Copper	45	Unknown	NO	0%	YES	20%	YES	80%	$ 13,700.00	70	25	64%	$ 8,807.14	$ 195.71
4	-- 2	Arlington County Main	4123A2 S. 36th St.	200 ft	6	?	Copper	45	Unknown	YES	7%	YES	3%	YES	90%	$ 25,000.00	70	25	64%	$ 16,071.43	$ 357.14
4	-- 3	Arlington County Main	4117 S. 36th St.	226 ft	3	?	Copper	45	Unknown	YES	20%	YES	5%	YES	75%	$ 30,200.00	70	25	64%	$ 19,414.29	$ 431.43
4	-- 4	Arlington County Main	4105 S. 36th St.	128 ft	6	?	Copper	45	Unknown	NO	0%	YES	8%	YES	92%	$ 15,500.00	70	25	64%	$ 9,964.29	$ 221.43
5	-- 1	Arlington County Main	4106 s. 36th St.	84 ft	6	?	Copper	45	Unknown	YES	45%	YES	10%	YES	45%	$ 12,700.00	70	25	64%	$ 8,164.29	$ 181.43
5	-- 2	Arlington County Main	4112 S. 36th St.	127 ft	3	?	Copper	45	Unknown	YES	30%	YES	12%	YES	58%	$ 17,900.00	70	25	64%	$ 11,507.14	$ 255.71
5	-- 3	Arlington County Main	4116A1 S. 36th St.	113 ft	4	?	Copper	45	Unknown	NO	0%	YES	10%	YES	90%	$ 13,700.00	70	25	64%	$ 8,807.14	$ 195.71
5	-- 4	Arlington County Main	4126 S. 36th St.	32 ft	4	?	Copper	45	Unknown	NO	0%	YES	15%	YES	85%	$ 3,900.00	70	25	64%	$ 2,507.14	$ 55.71
6	-- 1	Arlington County Main	W6-3 & W6-4	156 ft	24	?	Copper	45	Unknown	YES	95%	NO	0%	YES	5%	$ 28,400.00	70	25	64%	$ 18,257.14	$ 405.71
6	-- 2	W6-1	4136 S. 36th St.	73 ft	8	?	Copper	45	Unknown	YES	33%	YES	10%	YES	57%	$ 10,400.00	70	25	64%	$ 6,685.71	$ 148.57
6	-- 3	W6-1	4152 S. 36th St.	57 ft	6	?	Copper	45	Unknown	NO	0%	YES	8%	YES	92%	$ 6,900.00	70	25	64%	$ 4,435.71	$ 98.57
6	-- 4	W6-1	4164 S. 36th St.	50 ft	7	?	Copper	45	Unknown	NO	0%	YES	12%	YES	88%	$ 6,100.00	70	25	64%	$ 3,921.43	$ 87.14
6	-- 5	W6-1	4172 S. 36th St.	49 ft	3	?	Copper	45	Unknown	YES	45%	YES	10%	YES	45%	$ 7,400.00	70	25	64%	$ 4,757.14	$ 105.71
7	-- 1	Arlington County Main	4204A2 S. 36th St.	130 ft	8	?	Copper	45	Unknown	NO	0%	YES	8%	YES	92%	$ 15,800.00	70	25	64%	$ 10,157.14	$ 225.71
7	-- 2	Arlington County Main	4212A1 S. 36th St.	93 ft	8	?	Copper	45	Unknown	NO	0%	YES	10%	YES	90%	$ 11,300.00	70	25	64%	$ 7,264.29	$ 161.43
8	-- 1	Arlington County Main	3605 S. Taylor St.	53 ft	5	?	Copper	45	Unknown	NO	0%	YES	15%	YES	85%	$ 6,500.00	70	25	64%	$ 4,178.57	$ 92.86
8	-- 2	Arlington County Main	3611A1 S. Taylor St.	198 ft	5	?	Copper	45	Unknown	YES	50%	YES	3%	YES	47%	$ 30,300.00	70	25	64%	$ 19,478.57	$ 432.86
8	-- 3	Arlington County Main	3619 S. Taylor St.	82 ft	6	?	Copper	45	Unknown	YES	75%	YES	8%	YES	17%	$ 13,900.00	70	25	64%	$ 8,935.71	$ 198.57
9	-- 1	Arlington County Main	3517 S. Utah St.	105 ft	6	?	Copper	45	Unknown	NO	0%	YES	8%	YES	92%	$ 12,700.00	70	25	64%	$ 8,164.29	$ 181.43
9	-- 2	Arlington County Main	3529A2 S. Utah St.	183 ft	8	?	Copper	45	Unknown	YES	50%	YES	25%	YES	25%	$ 28,600.00	70	25	64%	$ 18,385.71	$ 408.57
9	-- 3	Arlington County Main	3541 S. Utah St.	147 ft	8	?	Copper	45	Unknown	YES	55%	YES	15%	YES	30%	$ 23,200.00	70	25	64%	$ 14,914.29	$ 331.43
10	-- 1	Arlington County Main	4305 S. 36th St.	98 ft	5	?	Copper	45	Unknown	NO	0%	YES	15%	YES	85%	$ 12,000.00	70	25	64%	$ 7,714.29	$ 171.43
10	-- 2	Arlington County Main	4317A1 S 36th St.	228 ft	9	?	Copper	45	Unknown	YES	40%	YES	6%	YES	54%	$ 33,500.00	70	25	64%	$ 21,535.71	$ 478.57
10	-- 3	Arlington County Main	4333 S. 36th St.	142 ft	11	?	Copper	45	Unknown	YES	55%	YES	8%	YES	37%	$ 22,300.00	70	25	64%	$ 14,335.71	$ 318.57
11	-- 1	Arlington County Main	3596 S. Stafford St.	37 ft	6	?	Copper	45	Unknown	NO	0%	YES	12%	YES	88%	$ 4,500.00	70	25	64%	$ 2,892.86	$ 64.29
11	-- 2	Arlington County Main	4205 S. 36th St.	107 ft	5	?	Copper	45	Unknown	YES	44%	YES	13%	YES	43%	$ 16,100.00	70	25	64%	$ 10,350.00	$ 230.00
11	-- 3	Arlington County Main	4219 S. 36th St.	109 ft	5	?	Copper	45	Unknown	YES	45%	YES	13%	YES	42%	$ 16,500.00	70	25	64%	$ 10,607.14	$ 235.71
11	-- 4	Arlington County Main	4233 S. 36th St.	40 ft	6	?	Copper	45	Unknown	NO	0%	YES	20%	YES	80%	$ 4,900.00	70	25	64%	$ 3,150.00	$ 70.00

Appendix A6 - Supporting Estimate for Water Line Replacement (2.3)

Assumed Useful Life of Water Lines **70 yrs**

Court	Line	Starting Point	Termination	Length	Units Serviced	Size	Type	Age	Condition	Surface Characteristics						Est. Repl. Cost	Useful Life	Remain. Useful Life	Percent Deprec.	Fully Funded Balance	Annual Deprec. Cost
										PVMT?	%	S/W?	%	LNDSC	%						
12	-- 1	Arlington County Main	3556 S. Stafford St.	145 ft	8	?	Copper	45	Unknown	YES	60%	YES	5%	YES	35%	$ 23,200.00	70	25	64%	$ 14,914.29	$ 331.43
12	-- 2	Arlington County Main	3570A2 S. Stafford St.	190 ft	9	?	Copper	45	Unknown	YES	70%	YES	3%	YES	27%	$ 31,500.00	70	25	64%	$ 20,250.00	$ 450.00
12	-- 3	Arlington County Main	3582 S. Stafford St.	99 ft	5	?	Copper	45	Unknown	YES	35%	YES	6%	YES	59%	$ 14,200.00	70	25	64%	$ 9,128.57	$ 202.86
13	-- 1	Arlington County Main	3520A2 S. Stafford St.	150 ft	9	?	Copper	45	Unknown	YES	45%	YES	6%	YES	49%	$ 22,500.00	70	25	64%	$ 14,464.29	$ 321.43
13	-- 2	Arlington County Main	3528 S. Stafford St.	175 ft	5	?	Copper	45	Unknown	YES	76%	YES	5%	YES	19%	$ 29,800.00	70	25	64%	$ 19,157.14	$ 425.71
13	-- 3	Arlington County Main	3536A1 S. Stafford St.	142 ft	9	?	Copper	45	Unknown	YES	50%	YES	4%	YES	46%	$ 21,700.00	70	25	64%	$ 13,950.00	$ 310.00
14	-- 1	Arlington County Main	4204 S. 35th St.	40 ft	6	?	Copper	45	Unknown	NO	0%	YES	10%	YES	90%	$ 4,900.00	70	25	64%	$ 3,150.00	$ 70.00
14	-- 2	Arlington County Main	4218A1 S. 35th St.	39 ft	8	?	Copper	45	Unknown	YES	75%	YES	12%	YES	13%	$ 6,700.00	70	25	64%	$ 4,307.14	$ 95.71
15	-- 1	Arlington County Main	W15-4 & W15-5	222 ft	36	?	Copper	45	Unknown	YES	83%	YES	2%	YES	15%	$ 38,700.00	70	25	64%	$ 24,878.57	$ 552.86
15	-- 2	W15-1	4230 S. 35th St.	49 ft	5	?	Copper	45	Unknown	YES	55%	YES	9%	YES	36%	$ 7,700.00	70	25	64%	$ 4,950.00	$ 110.00
15	-- 3	W15-1	4240A2 S. 35th St.	95 ft	8	?	Copper	45	Unknown	NO	0%	YES	10%	YES	90%	$ 11,500.00	70	25	64%	$ 7,392.86	$ 164.29
15	-- 4	W15-1	4250 S. 35th St.	85 ft	5	?	Copper	45	Unknown	NO	0%	YES	5%	YES	95%	$ 10,300.00	70	25	64%	$ 6,621.43	$ 147.14
15	-- 5	W15-1	4260 S. 35th St.	102 ft	5	?	Copper	45	Unknown	NO	0%	YES	10%	YES	90%	$ 12,400.00	70	25	64%	$ 7,971.43	$ 177.14
15	-- 6	W15-1	4270A2 S. 35th St.	103 ft	8	?	Copper	45	Unknown	YES	20%	YES	9%	YES	71%	$ 13,800.00	70	25	64%	$ 8,871.43	$ 197.14
15	-- 7	W15-1	4280 S. 35th St.	53 ft	5	?	Copper	45	Unknown	YES	65%	YES	8%	YES	27%	$ 8,700.00	70	25	64%	$ 5,592.86	$ 124.29
16	-- 1	Arlington County Main	4300A2 S. 35th St.	40 ft	6	?	Copper	45	Unknown	YES	70%	YES	10%	YES	20%	$ 6,700.00	70	25	64%	$ 4,307.14	$ 95.71
16	-- 2	Arlington County Main	4314 S. 35th St.	40 ft	6	?	Copper	45	Unknown	YES	35%	YES	10%	YES	55%	$ 5,800.00	70	25	64%	$ 3,728.57	$ 82.86
															TOTALS	$ 910,700.00	70	25	64.29%	$ 585,450.00	$ 13,010.00

Appendix A7 - Supporting Estimate for Fencing Full Funding Amount (3.3)

Location	LF of Treated Wood Patio Fence	LF of Chain Link Fence (10')	LF of Chain Link Perimeter Fence (6')	LF of Chain Link Fence (3')	LF of Aluminum Fencing - 6'	LF of Vinyl Split Rail Fencing	LF of Wood Split Rail Fencing	Wrought Iron Railings (per Section)	$ Totals per Location
Court 1	1081	0	0	0	0	0	0	0	$ 34,894.62
Court 2	874	0	0	0	0	0	0	0	$ 28,219.20
Court 3	951	0	0	0	0	0	0	3	$ 31,419.88
Court 4	894	0	0	0	0	300	0	1	$ 37,344.09
Court 5	653	0	0	0	0	0	0	12	$ 23,941.91
Court 6	989	0	0	0	0	0	0	4	$ 32,884.99
Court 7	525	0	0	0	0	0	0	4	$ 17,903.63
Court 8	604	0	0	0	0	0	0	6	$ 20,930.71
Court 9	848	0	0	0	0	0	0	2	$ 27,856.09
Court 10	939	0	0	0	0	0	0	2	$ 30,778.11
Court 11	910	0	0	0	0	0	0	0	$ 29,365.40
Court 12	843	0	0	0	0	0	0	5	$ 28,409.21
Court 13	844	0	0	0	0	0	16	0	$ 27,487.70
Court 14	486	0	0	0	0	0	0	0	$ 15,691.68
Court 15	1364	0	0	0	0	0	0	1	$ 44,278.21
Court 16	445	0	0	0	0	0	0	0	$ 14,359.83
Triple Tennis Court	0	525	0	0	0	0	0	0	$ 22,230.68
Single Tennis Court	0	350	0	0	0	0	0	0	$ 14,820.45
Swimming Pool	0	0	0	0	400	0	0	0	$ 43,550.99
Tot Lot	0	0	0	0	0	0	20	0	$ 296.41
Pickle Ball Court	0	195	0	0	0	0	0	0	$ 8,257.11
Basketball Court	0	0		80	0	0	0	0	$ 1,397.36
Perimeter Fencing			2200						$ 69,867.84
Total	**13248**	**1070**	**2200**	**80**	**400**	**300**	**36**	**40**	**$ 606,186.08**

Unit Replacement Cost (Previous CRS - 2013$)	$ 30.50	$ 40.00	$ 30.00	$ 16.50	$ 80.00	$ 26.00	$ 14.00	$ 225.00
Unit Replacement Cost (Current Year - 2018$)	$ 32.29	$ 42.34	$ 31.76	$ 17.47	$ 108.88	$ 27.52	$ 14.82	$ 238.19
Replacement Cost (Current Year)	$ 427,744	$ 45,308	$ 69,868	$ 1,397	$ 43,551	$ 8,257	$ 534	$ 9,527

Appendix A8 - Supporting Estimate for Exterior Lighting Full Funding Amount (3.4)

[1]Not Common Elements (Excluded from Summary Table Calculations)

	Carriage Lights									
Location	**Fixtures**	**Poles**	**New Concrete Mountings**	**Photocells**	**Exterior Conductor/ Conduit (lf)**	**Commercial Pole Lights**	Sconce Lights at Rear Entries[1]	Entry Soffit Fixtures at non-B Units[1]	**Entry Soffit Fixtures at B Units**	**$ Totals per Location (excluding non-common elements)**
Court 1	12	12	12	1	500	0	24	25	1	$ 3,050.00
Court 2	9	9	9	1	450	0	20	14	3	$ 2,675.00
Court 3	11	11	11	1	500	0	21	15	3	$ 3,125.00
Court 4	18	18	18	1	800	0	21	19	1	$ 4,400.00
Court 5	10	10	10	1	425	0	15	13	1	$ 2,600.00
Court 6	11	11	11	1	600	0	24	24	0	$ 2,675.00
Court 7	6	6	6	1	500	0	13	4	3	$ 2,000.00
Court 8	11	11	11	1	500	0	14	12	1	$ 2,825.00
Court 9	10	10	10	1	500	0	20	18	1	$ 2,600.00
Court 10	13	13	13	1	550	0	23	21	1	$ 3,275.00
Court 11	13	13	13	1	700	0	22	22	0	$ 3,125.00
Court 12	12	12	12	1	400	0	20	18	1	$ 3,050.00
Court 13	11	11	11	1	500	0	19	15	2	$ 2,975.00
Court 14	6	6	6	1	350	0	10	6	2	$ 1,850.00
Court 15	17	17	17	1	800	0	32	28	2	$ 4,325.00
Court 16	6	6	6	1	350	0	10	8	1	$ 1,700.00
Triple Tennis Court	0	0	0	0		0	0	0	0	$ -
Single Tennis Court	0	0	0	0		0	0	0	0	$ -
Swimming Pool	10	10	10	1	500	13	0	0	0	$ 12,850.00
Tot Lot	6	6	6	1	300	0	0	0	0	$ 1,550.00
Paddle Ball Court	0	0	0	0		0	0	0	0	$ -
Basketball Court	0	0	0	0		0	0	0	0	$ -
Total	**192**	**192**	**192**	**18**	**9225**	**13**	308	262	**23**	**$ 60,650.00**
Unit Estimated Replacement Cost (Current Year)	$ 225.00	$ 205.00	$ 105.00	$ 200.00	$ 12.50	$ 800.00	$ 50.00	$ 95.00	$ 150.00	
Replacement Cost (Current Year)	$ 43,200.00	$ 39,360.00	$ 20,160.00	$ 3,600.00	$ 115,312.50	$ 10,400.00	$ 15,400.00	$ 24,890.00	$ 3,450.00	
									REPL	**$ 106,320.00**

Appendix A9 - REVISED Supporting Estimate for Swimming Pool Full Funding Amount (4.1)

	POOL ELEMENTS	Qty	Unit	Installation Year	Age (yrs)	Estimated Unit Repl. Cost (in $2018)	Est. Repl. Cost (in $2018)	Useful Life (yrs)	Remain. Useful Life (yrs)	Percent Deprec.	Fully Funded Balance	Annual Depreciation
4.1.1	**Main Swimming Pool**											
4.1.1.1	Whitecoat "Plaster"	3930	sf	2015	3	$ 3.50 / sf	$ 13,800.00	7	4	42.9%	$ 5,910.00	$ 1,970.00
4.1.1.2	Coping Stone	260	lf	1997	21	$ 75.00 / lf	$ 19,500.00	30	9	70.0%	$ 13,650.00	$ 650.00
4.1.1.3	Perimeter Tile	250	lf	2015	3	$ 45.00 / lf	$ 11,300.00	14	11	21.4%	$ 2,420.00	$ 810.00
4.1.1.4	Transition Tile	60	lf	2015	3	$ 45.00 / lf	$ 2,700.00	14	11	21.4%	$ 580.00	$ 190.00
4.1.1.5	Main Pool Cover	3100	sf	2017	1	$ 2.95 / sf	$ 9,100.00	18	17	5.6%	$ 510.00	$ 510.00
4.1.1.6	Main Pool Beam/Structure Repair	1	LS	2009	9	$ 25,000.00 / LS	$ 25,000.00	20	11	45.0%	$ 11,250.00	$ 1,250.00
4.1.1.7	Main Pool Structure Replacement	1	LS	1974	44	$ 250,000.00 / LS	$ 250,000.00	60	16	73.3%	$ 183,330.00	$ 4,170.00
4.1.2	**Main Swimming Pool Equipment**											
4.1.2.1	Main Pool Skimmers	9	ea	2009	9	$ 1,500.00 / ea	$ 13,500.00	18	9	50.0%	$ 6,750.00	$ 750.00
4.1.2.2	Main Pool Filters (Cartridge Style)	3	ea	2009	9	$ 4,250.00 / ea	$ 12,800.00	12	3	75.0%	$ 9,600.00	$ 1,070.00
4.1.2.3	Main Pool Pump (Heavy Duty-Brass)	1	ea	2009	9	$ 10,000.00 / ea	$ 10,000.00	25	16	36.0%	$ 3,600.00	$ 400.00
4.1.3	**Wading "Baby" Pool**											
4.1.3.1	Whitecoat "Plaster"	340	sf	2014	4	$ 10.75 / sf	$ 3,700.00	7	3	57.1%	$ 2,110.00	$ 530.00
4.1.3.2	Coping Stone	66	lf	2014	4	$ 75.00 / lf	$ 5,000.00	30	26	13.3%	$ 670.00	$ 170.00
4.1.3.3	Perimeter Tile	57	lf	2014	4	$ 55.00 / lf	$ 3,100.00	15	11	26.7%	$ 830.00	$ 210.00
4.1.3.4	Baby Pool Cover	390	sf	2017	1	$ 3.25 / sf	$ 1,300.00	18	17	5.6%	$ 70.00	$ 70.00
4.1.4	**Wading "Baby" Pool Equipment**											
4.1.4.1	Wading Pool Skimmers	1	ea	2009	9	$ 1,500.00 / ea	$ 1,500.00	20	11	45.0%	$ 680.00	$ 80.00
4.1.4.2	Wading Pool Filter (Cartridge Style)	1	ea	2009	9	$ 2,500.00 / ea	$ 2,500.00	15	6	60.0%	$ 1,500.00	$ 170.00
4.1.1.3	Wading Pool Pump (Plastic)	1	ea	2009	9	$ 1,500.00 / ea	$ 1,500.00	12	3	75.0%	$ 1,130.00	$ 130.00
4.1.5	**Pool Deck**											
4.1.5.1	Repair Pool Deck (7.5%)	485	sf	2017	1	$ 32.00 / sf	$ 15,500.00	5	4	20.0%	$ 3,100.00	$ 3,100.00
4.1.5.2	Replace Pool Deck	6465	sf	1974	44	$ 14.50 / sf	$ 93,700.00	50	6	88.0%	$ 82,460.00	$ 1,870.00
4.1.6	**Pool Accessories/Furniture**											
4.1.6.1	Replace Lifeguard Chairs	2	ea	2006	12	$ 2,500.00 / ea	$ 5,000.00	20	8	60.0%	$ 3,000.00	$ 250.00
4.1.6.2	Replace Large Canvas Awning	1	ea	2005	13	$ 4,500.00 / ea	$ 4,500.00	15	2	86.7%	$ 3,900.00	$ 300.00
4.1.6.3	Replace Small Canvas Awning	1	ea	2010	8	$ 3,500.00 / ea	$ 3,500.00	15	7	53.3%	$ 1,870.00	$ 230.00
4.1.6.4	Replace Pool Furniture	1	ea	2017	1	$ 10,000.00 / ea	$ 10,000.00	8	7	12.5%	$ 1,250.00	$ 1,250.00
4.1.6.5	Replace Dri-Dek Matting @Bathhouse	312	sf	2015	3	$ 6.00 / sf	$ 1,900.00	5	2	60.0%	$ 1,140.00	$ 380.00

Appendix A10 - Supporting Estimate for Roofing Full Funding Amount (5.1)

CY: 2019
Cost/sq. ft.: $26.82

Court	Building	Notes	Number of Roofs	Year Last Replaced (Actual)	Year to be Replaced (Planned)	Useful Life	Remaining Useful Life	Percent Depreciated (CY)	Roof Area (sq ft)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
1	3501-3503 S Stafford St	Vermont	1.00	2010	2110	100	91	9%	3,200	$85,834	$7,725	$858
1	3507-3513 S Stafford St	Vermont	1.00	1943	2038	95	19	80%	4,800	$128,751	$103,001	$1,355
1	3515-3519 S Stafford St	Vermont	1.00	2006	2106	100	87	13%	6,000	$160,939	$20,922	$1,609
1	3521-3525 S Stafford St	Vermont	1.00	1943	2038	95	19	80%	3,500	$93,881	$75,105	$988
1	3527-3529 S Stafford St	Vermont	1.00	2005	2105	100	86	14%	4,000	$107,293	$15,021	$1,073
2	3535-3541B S Stafford St	Vermont	0.50	2013	2113	100	94	6%	3,400	$91,199	$5,472	$912
2	3535-3541F S Stafford St	Vermont	0.50	2013	2113	100	94	6%	3,400	$91,199	$5,472	$912
2	3543-3547 S Stafford St	Vermont	1.00	1943	2039	96	20	79%	5,500	$147,527	$116,792	$1,537
2	3549-3555B S Stafford St	Vermont	0.50	2013	2113	100	94	6%	3,800	$101,928	$6,116	$1,019
2	3549-3555F S Stafford St	Vermont	0.50	2013	2113	100	94	6%	3,800	$101,928	$6,116	$1,019
3	3561-3563 S Stafford St	Vermont	1.00	2014	2114	100	95	5%	3,200	$85,834	$4,292	$858
3	3565-3567 S Stafford St	Vermont	1.00	2007	2107	100	88	12%	3,000	$80,469	$9,656	$805
3	3569-3573 S Stafford St	Vermont	1.00	1943	2039	96	20	79%	4,800	$128,751	$101,928	$1,341
3	3575-3579B S Stafford St	Vermont	0.50	2002	2102	100	83	17%	1,900	$50,964	$8,664	$510
3	3575-3579F S Stafford St	Vermont	0.50	2014	2114	100	95	5%	1,900	$50,964	$2,548	$510
3	3581-3585B S Stafford St	Vermont	0.50	2004	2104	100	85	15%	2,300	$61,693	$9,254	$617
3	3581-3585F S Stafford St	Vermont	0.50	2004	2104	100	85	15%	2,300	$61,693	$9,254	$617
4	4101-4111 S 36th St	Vermont	1.00	1943	2040	97	21	78%	3,700	$99,246	$77,759	$1,023
4	4113-4117Bt S 36th St	Vermont	0.50	2011	2111	100	92	8%	1,400	$37,552	$3,004	$376
4	4113-4117To S 36th St	Vermont	0.50	1996	2096	100	77	23%	1,800	$48,282	$11,105	$483
4	4123B S 36th St	Vermont	0.30	1996	2096	100	77	23%	1,230	$32,992	$7,588	$330
4	4119/21 + 4123F S 36th St	Vermont	0.70	2012	2112	100	93	7%	2,870	$76,982	$5,389	$770
4	4125-4139 S 36th St	Vermont	1.00	1943	2040	97	21	78%	6,000	$160,939	$126,096	$1,659
5	4118 S 36th St	Vermont	1.00	2012	2112	100	93	7%	4,400	$118,022	$8,262	$1,180
5	4100-4110 S 36th St	Buckingham	1.00	1943	2063	120	44	63%	3,700	$99,246	$62,856	$827
5	4112-4116B S 36th St	Vermont	0.50	2012	2112	100	93	7%	2,200	$59,011	$4,131	$590
5	4112-4116F S 36th St	Vermont	0.50	2012	2112	100	93	7%	2,200	$59,011	$4,131	$590
5	4122-4128 S 36th St	Vermont	1.00	2003	2103	100	84	16%	4,400	$118,022	$18,883	$1,180
6	4130-4144 S 36th St	Vermont	1.00	1943	2041	98	22	78%	6,000	$160,939	$124,810	$1,642
6	4146-4156 S 36th St	Vermont	1.00	1943	2041	98	22	78%	3,600	$96,563	$74,886	$985
6	4158-4170 S 36th St	Vermont	1.00	1943	2042	99	23	77%	4,500	$120,704	$92,662	$1,219
6	4172-4176 S 36th St	Vermont	1.00	1943	2042	99	23	77%	3,000	$80,469	$61,774	$813
7	4200-4208B S 36th St	Vermont	0.50	2003	2103	100	84	16%	3,350	$89,857	$14,377	$899
7	4200-4208F S 36th St	Vermont	0.50	2011	2111	100	92	8%	3,350	$89,857	$7,189	$899
7	4210-4212B S 36th St	Vermont	0.50	2011	2111	100	92	8%	2,500	$67,058	$5,365	$671
7	4210-4212F S 36th St	Vermont	0.50	1998	2098	100	79	21%	2,500	$67,058	$14,082	$671
8	3601-3609B S Taylor St	Vermont	0.50	2017	2117	100	98	2%	2,000	$53,646	$1,073	$536
8	3601-3609F S Taylor St	Vermont	0.50	2000	2100	100	81	19%	2,000	$53,646	$10,193	$536
8	3611-3613 S Taylor St	Vermont	1.00	2003	2103	100	84	16%	3,200	$85,834	$13,733	$858
8	3615-3625 S Taylor St	Vermont	1.00	2006	2106	100	87	13%	3,600	$96,563	$12,553	$966
9	3513-3523 S Utah Street	Buckingham	1.00	1943	2063	120	44	63%	4,400	$118,022	$74,747	$984
9	3525-3533B S Utah Street	Vermont	0.50	1999	2099	100	80	20%	2,900	$77,787	$15,557	$778
9	3525-3533F S Utah Street	Vermont	0.50	2015	2115	100	96	4%	2,900	$77,787	$3,111	$778
9	3535-3549B S Utah Street	Vermont	0.50	2001	2101	100	82	18%	3,900	$104,610	$18,830	$1,046
9	3535-3549F S Utah Street	Vermont	0.50	2015	2115	100	96	4%	3,900	$104,610	$4,184	$1,046
10	4301-4309B S 36th St	Vermont	0.50	2003	2103	100	84	16%	2,000	$53,646	$8,583	$536
10	4301-4309F S 36th St	Vermont	0.50	2015	2115	100	96	4%	2,000	$53,646	$2,146	$536
10	4311-4321 S 36th St	Vermont	1.00	1943	2043	100	24	76%	5,600	$150,210	$114,159	$1,502
10	4323-4343B S 36th St	Vermont	0.50	2015	2115	100	96	4%	4,300	$115,339	$4,614	$1,153
10	4323-4343F S 36th St	Vermont	0.50	2000	2100	100	81	19%	4,300	$115,339	$21,914	$1,153
11	3588-3598 S Stafford St	Vermont	1.00	1943	2044	101	25	75%	4,400	$118,022	$88,808	$1,169
11	4201-4209 S 36th St	Vermont	1.00	1943	2044	101	25	75%	4,000	$107,293	$80,735	$1,062
11	4215-4223 S 36th St	Vermont	1.00	1943	2045	102	26	75%	3,500	$93,881	$69,951	$920
11	4227-4237 S 36th St	Vermont	1.00	1943	2045	102	26	75%	5,200	$139,480	$103,926	$1,367
11	Pool House	Vermont	1.00	2009	2109	100	90	10%	3,000	$80,469	$8,047	$805

Appendix A10 - Supporting Estimate for Roofing Full Funding Amount (5.1)

CY: 2019
Cost/sq. ft.: $26.82

Court	Building	Notes	Number of Roofs	Year Last Replaced (Actual)	Year to be Replaced (Planned)	Useful Life	Remaining Useful Life	Percent Depreciated (CY)	Roof Area (sq ft)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
12	3548-3562 S Stafford St	Buckingham	1.00	1943	2063	120	44	63%	7,000	$187,762	$118,916	$1,565
12	3564-3574B S Stafford St	Vermont	0.50	2017	2117	100	98	2%	3,500	$93,881	$1,878	$939
12	3564-3574F S Stafford St	Vermont	0.50	1997	2097	100	78	22%	3,500	$93,881	$20,654	$939
12	3576-3584B S Stafford St	Vermont	0.50	1998	2098	100	79	21%	1,900	$50,964	$10,702	$510
12	3576-3584F S Stafford St	Vermont	0.50	2017	2117	100	98	2%	1,900	$50,964	$1,019	$510
13	3512-3522B S Stafford St	Vermont	0.50	2018	2118	100	99	1%	2,800	$75,105	$751	$751
13	3512-3522F S Stafford St	Vermont	0.50	1995	2095	100	76	24%	2,800	$75,105	$18,025	$751
13	3524-3532 S Stafford St	Vermont	1.00	2010	2110	100	91	9%	4,000	$107,293	$9,656	$1,073
13	3534-3544B S Stafford St	Vermont	0.50	1998	2098	100	79	21%	3,500	$93,881	$19,715	$939
13	3534-3544F S Stafford St	Vermont	0.50	2018	2118	100	99	1%	3,500	$93,881	$939	$939
14	4204-4210B S Stafford St	Vermont	0.32	2004	2104	100	85	15%	1,280	$34,334	$5,150	$343
14	4202B S 35th + 3500B S Stafford St	Vermont	0.16	1996	2096	100	77	23%	640	$17,167	$3,948	$172
14	4202-4210F S 35th + 3500F S Stafford S	Vermont	0.52	2014	2114	100	95	5%	2,080	$55,792	$2,790	$558
14	4216-4218 S 35th St	Vermont	1.00	2010	2110	100	91	9%	4,000	$107,293	$9,656	$1,073
15	4226-4234 S 35th St	Vermont	1.00	2018	2118	100	99	1%	2,200	$59,011	$590	$590
15	4236-4244B S 35th St	Vermont	0.50	1998	2098	100	79	21%	2,700	$72,422	$15,209	$724
15	4236-4244F S 35th St	Vermont	0.50	1943	2046	103	27	74%	2,700	$72,422	$53,438	$703
15	4246-4254B S 35th St	Vermont	0.50	2007	2107	100	88	12%	1,800	$48,282	$5,794	$483
15	4246-4254F S 35th St	Vermont	0.50	2018	2118	100	99	1%	1,800	$48,282	$483	$483
15	4256-4264 S 35th St	Vermont	1.00	2007	2107	100	88	12%	3,600	$96,563	$11,588	$966
15	4266-4270B S 35th St	Vermont	0.35	2018	2118	100	99	1%	1,700	$45,599	$456	$456
15	4266-4274F + 4272/4B S 35th St	Vermont	0.65	1999	2099	100	80	20%	3,175	$85,163	$17,033	$852
15	4276-4284 S 35th St	Vermont	1.00	1943	2046	103	27	74%	2,400	$64,376	$47,500	$625
16	4300-4304 S 35th St	Vermont	1.00	1943	2047	104	28	73%	4,000	$107,293	$78,406	$1,032
16	4310-4320 S 35th St	Vermont	1.00	1943	2047	104	28	73%	4,400	$118,022	$86,247	$1,135
Totals			57.00						263,475	**$7,067,224**	**$2,429,094**	**$70,188**
Avg. Per Building									4,622	$123,986	$42,616	$1,231
Avg. Per Square Foot						101	66	34%		$26.82	$9.22	

Appendix A10.a - Historical Costs for Roofing Replacement (5.1)

Average Inflation since 2000: 2.54%

2004	4204-4210B S Stafford St	1280									
	3581-3585B S Stafford St	2300									
	3581-3585F S Stafford St	2300									
	Total SF	5880 sf	Total Cost:	$ 112,275.00	Unit Cost:	$ 19.09 /sf	Inflation:	1.4207%	Adjusted Unit Cost:	27.13 /sf	
2005	3527-3529 S Stafford St	4000									
	Total SF	4000 sf	Total Cost:	$ 66,017.00	Unit Cost:	$ 16.50 /sf	Inflation:	1.3855%	Adjusted Unit Cost:	22.87 /sf	
2006	3515-3519 S Stafford St	6000									
	3615-3625 S Taylor St	3600									
	Total SF	9600 sf	Total Cost:	$ 186,537.70	Unit Cost:	$ 19.43 /sf	Inflation:	1.3512%	Adjusted Unit Cost:	26.26 /sf	
2007	4256-4264 S 35th St	3600									
	3565-3567 S Stafford St	3000									
	4246-4254B S 35th St	1800									
	Total SF	8400 sf	Total Cost:	$ 201,300.00	Unit Cost:	$ 23.96 /sf	Inflation:	1.3177%	Adjusted Unit Cost:	31.58 /sf	
2011	4113-4117Bt S 36th St	1400									
	4200-4208F S 36th St	3350									
	4210-4212F S 36th St	2500									
	4119/21 + 4123F S 36th St	2870									
	Total SF	10120 sf	Total Cost:	$ 233,255.00	Unit Cost:	$ 23.05 /sf	Inflation:	1.1919%	Adjusted Unit Cost:	27.47 /sf	
2012	4118 S 36th St	4400									
	4112-4116B S 36th St	2200									
	4112-4116F S 36th St	2200									
	Total SF	8800 sf	Total Cost:	$ 128,221.00	Unit Cost:	$ 14.57 /sf	Inflation:	1.1624%	Adjusted Unit Cost:	16.94 /sf	
2013	3535-3541B S Stafford St	3400									
	3535-3541F S Stafford St	3400									
	3549-3555B S Stafford St	3800									
	3549-3555F S Stafford St	3800									
	Total SF	14400 sf	Total Cost:	$ 354,172.00	Unit Cost:	$ 24.60 /sf	Inflation:	1.1336%	Adjusted Unit Cost:	27.88 /sf	
2014	3561-3563 S Stafford St	3200									
	3575-3579F S Stafford St	1900									
	4202-4210F S 35th + 3500F S Stafford S	2080									
	Total SF	7180 sf	Total Cost:	$ 164,200.00	Unit Cost:	$ 22.87 /sf	Inflation:	1.1055%	Adjusted Unit Cost:	25.28 /sf	
2015	3525-3533F S Utah Street	2900									
	3535-3549F S Utah Street	3900									
	4301-4309F S 36th St	2000									
	4323-4343B S 36th St	4300									
	Total SF	13100 sf	Total Cost:	$ 399,997.00	Unit Cost:	$ 30.53 /sf	Inflation:	1.0782%	Adjusted Unit Cost:	32.92 /sf	
2017	3601-3609F S Taylor St	2000									
	3576-3584F S Stafford St	1900									
	3564-3574B S Stafford St	3500									
	Total SF	7400 sf	Total Cost:	$ 201,544.00	Unit Cost:	$ 27.24 /sf	Inflation:	1.0254%	Adjusted Unit Cost:	27.93 /sf	
2018	3534-3544F S Stafford St	3500									
	3512-3522B S Stafford St	2800									
	4266-4270B S 35th St	1700									
	4246-4254F S 35th St	1800									
	4236-4244F S 35th St	2700									
	Total SF	12500 sf	Total Cost:	$ 360,052.00	Unit Cost:	$ 28.80 /sf	Inflation:	1.0000%	Adjusted Unit Cost:	28.80 /sf	

HISTORICAL AVERAGE UNIT REPLACEMENT COST 26.82 /sf

Appendix A11 - Supporting Estimate for Gable Dormers

CY: 2019
Cost/sq. ft.: $ 72.50

Attic Dormers (Gable)

Court Dormer	Address	Dormer Type	Slate Type	Condition	Year Last Replaced (actual)	Year to be Replaced (planned)	Useful Life (years)	Remaining Useful Life (years)	Percent Depreciated (CY)	Dormer Area (ft^2)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
1 - 1	Unit 1 3501 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2010	2110	100	91	9%	20	$ 1,450	$ 131	$ 15
1 - 2	Unit 1 3501 B1 F S. Stafford Street Unit 2 3501 B2 F	Gable	Vermont	Unknown	2010	2110	100	91	9%	20	$ 1,450	$ 131	$ 15
1 - 3	Unit 1 3501 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2010	2110	100	91	9%	20	$ 1,450	$ 131	$ 15
1 - 4	Unit 1 3509 B F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
1 - 5	Unit 1 3509 B F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
1 - 6	Unit 1 3517 A F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2006	2106	100	87	13%	20	$ 1,450	$ 189	$ 15
1 - 7	Unit 1 3517 A F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2006	2106	100	87	13%	20	$ 1,450	$ 189	$ 15
1 - 8	Unit 1 3517 A B S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2006	2106	100	87	13%	20	$ 1,450	$ 189	$ 15
1 - 9	Unit 1 3517 A B S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2006	2106	100	87	13%	20	$ 1,450	$ 189	$ 15
1 - 10	Unit 1 3519 A F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2006	2106	100	87	13%	20	$ 1,450	$ 189	$ 15
1 - 11	Unit 1 3519 A F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2006	2106	100	87	13%	20	$ 1,450	$ 189	$ 15
1 - 12	Unit 1 3523 A F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
1 - 13	Unit 1 3523 A F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
2 - 1	Unit 1 3537 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2013	2113	100	94	6%	20	$ 1,450	$ 87	$ 15
2 - 2	Unit 1 3537 B1 F S. Stafford Street Unit 2 3537 B1 F	Gable	Vermont	Unknown	2013	2113	100	94	6%	20	$ 1,450	$ 87	$ 15
2 - 3	Unit 1 3537 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2013	2113	100	94	6%	20	$ 1,450	$ 87	$ 15
2 - 4	Unit 1 3545 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
2 - 5	Unit 1 3545 B1 F S. Stafford Street Unit 2 3545 B2 F	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
2 - 6	Unit 1 3545 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
2 - 7	Unit 1 3551 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2013	2113	100	94	6%	20	$ 1,450	$ 87	$ 15
2 - 8	Unit 1 3551 B1 F S. Stafford Street Unit 2 3551 B2 F	Gable	Vermont	Unknown	2013	2113	100	94	6%	20	$ 1,450	$ 87	$ 15
2 - 9	Unit 1 3551 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2013	2113	100	94	6%	20	$ 1,450	$ 87	$ 15

Appendix A11 - Supporting Estimate for Gable Dormers

CY: 2019
Cost/sq. ft.: $ 72.50

Attic Dormers (Gable)

Court Dormer	Address	Dormer Type	Slate Type	Condition	Year Last Replaced (actual)	Year to be Replaced (planned)	Useful Life (years)	Remaining Useful Life (years)	Percent Depreciated (CY)	Dormer Area (ft^2)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
3 - 1	Unit 1 3563 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2014	2114	100	95	5%	20	$ 1,450	$ 73	$ 15
3 - 2	Unit 1 3563 B1 F S. Stafford Street Unit 2 3563 B2 F	Gable	Vermont	Unknown	2014	2114	100	95	5%	20	$ 1,450	$ 73	$ 15
3 - 3	Unit 1 3563 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2014	2114	100	95	5%	20	$ 1,450	$ 73	$ 15
3 - 4	Unit 1 3571 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
3 - 5	Unit 1 3571 B1 F S. Stafford Street Unit 2 3571 B2 F	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
3 - 6	Unit 1 3571 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
3 - 7	Unit 1 3575 B F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2014	2114	100	95	5%	20	$ 1,450	$ 73	$ 15
3 - 8	Unit 1 3577 B F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2014	2114	100	95	5%	20	$ 1,450	$ 73	$ 15
3 - 9	Unit 1 3581 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2004	2104	100	85	15%	20	$ 1,450	$ 218	$ 15
3 - 10	Unit 1 3581 B1 F S. Stafford Street Unit 2 3581 B2 F	Gable	Vermont	Unknown	2004	2104	100	85	15%	20	$ 1,450	$ 218	$ 15
3 - 11	Unit 1 3581 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2004	2104	100	85	15%	20	$ 1,450	$ 218	$ 15
3 - 12	Unit 1 3583 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2004	2104	100	85	15%	20	$ 1,450	$ 218	$ 15
3 - 13	Unit 1 3585 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2004	2104	100	85	15%	20	$ 1,450	$ 218	$ 15
4 - 1	Unit 1 4139 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 2	Unit 1 4137 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 3	Unit 1 4135 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 4	Unit 1 4135 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 5	Unit 1 4135 B S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 6	Unit 1 4135 B S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 7	Unit 1 4131 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 8	Unit 1 4129 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 9	Unit 1 4123 B1 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2012	2112	100	93	7%	20	$ 1,450	$ 102	$ 15
4 - 10	Unit 1 4123 B1 F S. 36th Street Unit 2 4123 B2	Gable	Vermont	Unknown	2012	2112	100	93	7%	20	$ 1,450	$ 102	$ 15
4 - 11	Unit 1 4123 B2 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2012	2112	100	93	7%	20	$ 1,450	$ 102	$ 15
4 - 12	Unit 1 4121 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2012	2112	100	93	7%	20	$ 1,450	$ 102	$ 15
4 - 13	Unit 1 4119 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2012	2112	100	93	7%	20	$ 1,450	$ 102	$ 15
4 - 14	Unit 1 4109 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 15	Unit 1 4107 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 16	Unit 1 4103 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
4 - 17	Unit 1 4101 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15

Appendix A11 - Supporting Estimate for Gable Dormers

CY: 2019
Cost/sq. ft.: $ 72.50

Attic Dormers (Gable)

Court Dormer	Address	Dormer Type	Slate Type	Condition	Year Last Replaced (actual)	Year to be Replaced (planned)	Useful Life (years)	Remaining Useful Life (years)	Percent Depreciated (CY)	Dormer Area (ft^2)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
5 - 1	Unit 1 4100 F S. 36th Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
5 - 2	Unit 1 4102 F S. 36th Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
5 - 3	Unit 1 4106 F S. 36th Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
5 - 4	Unit 1 4108 F S. 36th Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 1	Unit 1 4130 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 2	Unit 1 4132 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 3	Unit 1 4134 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 4	Unit 1 4134 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 5	Unit 1 4134 B S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 6	Unit 1 4134 B S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 7	Unit 1 4138 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 8	Unit 1 4140 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 9	Unit 1 4164 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
6 - 10	Unit 1 4164 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
7 - 1	Unit 1 4204 B1 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2011	2111	100	92	8%	20	$ 1,450	$ 116	$ 15
7 - 2	Unit 1 4204 B1 F S. 36th Street Unit 2 4204 B2 F	Gable	Vermont	Unknown	2011	2111	100	92	8%	20	$ 1,450	$ 116	$ 15
7 - 3	Unit 1 4204 B2 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2011	2111	100	92	8%	20	$ 1,450	$ 116	$ 15
7 - 4	Unit 1 4210 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2011	2111	100	92	8%	20	$ 1,450	$ 116	$ 15
7 - 5	Unit 1 4212 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2011	2111	100	92	8%	20	$ 1,450	$ 116	$ 15
8 - 1	Unit 1 3603 F S. Taylor Street Unit 2 n/a	Gable	Vermont	Unknown	2000	2100	100	81	19%	20	$ 1,450	$ 276	$ 15
8 - 2	Unit 1 3605 F S. Taylor Street Unit 2 n/a	Gable	Vermont	Unknown	2000	2100	100	81	19%	20	$ 1,450	$ 276	$ 15
8 - 3	Unit 1 3607 F S. Taylor Street Unit 2 n/a	Gable	Vermont	Unknown	2000	2100	100	81	19%	20	$ 1,450	$ 276	$ 15
8 - 4	Unit 1 3611 B1 F S. Taylor Street Unit 2 n/a	Gable	Vermont	Unknown	2003	2103	100	84	16%	20	$ 1,450	$ 232	$ 15
8 - 5	Unit 1 3611 B1 F S. Taylor Street Unit 2 3611 B2 F	Gable	Vermont	Unknown	2003	2103	100	84	16%	20	$ 1,450	$ 232	$ 15
8 - 6	Unit 1 3611 B2 F S. Taylor Street Unit 2 n/a	Gable	Vermont	Unknown	2003	2103	100	84	16%	20	$ 1,450	$ 232	$ 15

Appendix A11 - Supporting Estimate for Gable Dormers

CY: 2019
Cost/sq. ft.: $ 72.50

Attic Dormers (Gable)

Court Dormer	Address	Dormer Type	Slate Type	Condition	Year Last Replaced (actual)	Year to be Replaced (planned)	Useful Life (years)	Remaining Useful Life (years)	Percent Depreciated (CY)	Dormer Area (ft^2)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
9 - 1	Unit 1 3517 F S. Utah Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
9 - 2	Unit 1 3517 F S. Utah Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
9 - 3	Unit 1 3517 B S. Utah Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
9 - 4	Unit 1 3517 B S. Utah Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
9 - 5	Unit 1 3521 F S. Utah Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
9 - 6	Unit 1 3521 F S. Utah Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
9 - 7	Unit 1 3529 B1 F S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
9 - 8	Unit 1 3529 B1 F S. Utah Street Unit 2 3529 B2 F	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
9 - 9	Unit 1 3529 B2 F S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
9 - 10	Unit 1 3539 F S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
9 - 11	Unit 1 3541 F S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
9 - 12	Unit 1 3545 F S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
9 - 13	Unit 1 3545 F S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
9 - 14	Unit 1 3545 B S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2001	2101	100	82	18%	20	$ 1,450	$ 261	$ 15
9 - 15	Unit 1 3545 B S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2001	2101	100	82	18%	20	$ 1,450	$ 261	$ 15
9 - 16	Unit 1 3547 F S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
9 - 17	Unit 1 3549 F S. Utah Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
10 - 1	Unit 1 4339 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2000	2100	100	81	19%	20	$ 1,450	$ 276	$ 15
10 - 2	Unit 1 4339 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2000	2100	100	81	19%	20	$ 1,450	$ 276	$ 15
10 - 3	Unit 1 4339 B S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
10 - 4	Unit 1 4339 B S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
10 - 5	Unit 1 4335 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2000	2100	100	81	19%	20	$ 1,450	$ 276	$ 15
10 - 6	Unit 1 4335 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2000	2100	100	81	19%	20	$ 1,450	$ 276	$ 15
10 - 7	Unit 1 4317 B1 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
10 - 8	Unit 1 4317 B1 F S. 36th Street Unit 2 4317 B2 F	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
10 - 9	Unit 1 4317 B2 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
10 - 10	Unit 1 4307 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15
10 - 11	Unit 1 4303 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	2015	2115	100	96	4%	20	$ 1,450	$ 58	$ 15

Appendix A11 - Supporting Estimate for Gable Dormers

CY: 2019
Cost/sq. ft.: $ 72.50

Attic Dormers (Gable)

Court Dormer	Address	Dormer Type	Slate Type	Condition	Year Last Replaced (actual)	Year to be Replaced (planned)	Useful Life (years)	Remaining Useful Life (years)	Percent Depreciated (CY)	Dormer Area (ft^2)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
11 - 1	Unit 1 3592 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 2	Unit 1 3592 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 3	Unit 1 3592 B S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 4	Unit 1 3592 B S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 5	Unit 1 3596 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 6	Unit 1 3596 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 7	Unit 1 4203 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 8	Unit 1 4205 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 9	Unit 1 4207 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 10	Unit 1 4217 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 11	Unit 1 4217 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 12	Unit 1 4229 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 13	Unit 1 4229 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 14	Unit 1 4233 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 15	Unit 1 4233 F S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 16	Unit 1 4233 B S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
11 - 17	Unit 1 4233 B S. 36th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 1	Unit 1 3552 F S. Stafford Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 2	Unit 1 3554 F S. Stafford Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 3	Unit 1 3558 F S. Stafford Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 4	Unit 1 3558 F S. Stafford Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 5	Unit 1 3558 B S. Stafford Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 6	Unit 1 3558 B S. Stafford Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 7	Unit 1 3560 F S. Stafford Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 8	Unit 1 3562 F S. Stafford Street Unit 2 n/a	Gable	Buckingham	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
12 - 9	Unit 1 3570 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1997	2097	100	78	22%	20	$ 1,450	$ 319	$ 15
12 - 10	Unit 1 3570 B2 F S. Stafford Street Unit 2 3570 B1 F	Gable	Vermont	Unknown	1997	2097	100	78	22%	20	$ 1,450	$ 319	$ 15
12 - 11	Unit 1 3570 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1997	2097	100	78	22%	20	$ 1,450	$ 319	$ 15
12 - 12	Unit 1 3578 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2017	2117	100	98	2%	20	$ 1,450	$ 29	$ 15
12 - 13	Unit 1 3582 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2017	2117	100	98	2%	20	$ 1,450	$ 29	$ 15

Appendix A11 - Supporting Estimate for Gable Dormers

CY: 2019
Cost/sq. ft.: $ 72.50

Attic Dormers (Gable)

Court Dormer	Address	Dormer Type	Slate Type	Condition	Year Last Replaced (actual)	Year to be Replaced (planned)	Useful Life (years)	Remaining Useful Life (years)	Percent Depreciated (CY)	Dormer Area (ft^2)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
13 - 1	Unit 1 3520 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1995	2095	100	76	24%	20	$ 1,450	$ 348	$ 15
13 - 2	Unit 1 3520 B2 F S. Stafford Street Unit 2 3520 B F	Gable	Vermont	Unknown	1995	2095	100	76	24%	20	$ 1,450	$ 348	$ 15
13 - 3	Unit 1 3520 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	1995	2095	100	76	24%	20	$ 1,450	$ 348	$ 15
13 - 4	Unit 1 3526 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2010	2110	100	91	9%	20	$ 1,450	$ 131	$ 15
13 - 5	Unit 1 3530 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2010	2110	100	91	9%	20	$ 1,450	$ 131	$ 15
13 - 6	Unit 1 3536 B2 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2018	2118	100	99	1%	20	$ 1,450	$ 15	$ 15
13 - 7	Unit 1 3536 B2 F S. Stafford Street Unit 2 3536 B1 F	Gable	Vermont	Unknown	2018	2118	100	99	1%	20	$ 1,450	$ 15	$ 15
13 - 8	Unit 1 3536 B1 F S. Stafford Street Unit 2 n/a	Gable	Vermont	Unknown	2018	2118	100	99	1%	20	$ 1,450	$ 15	$ 15
14 - 1	Unit 1 4216 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	2010	2110	100	91	9%	20	$ 1,450	$ 131	$ 15
14 - 2	Unit 1 4218 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	2010	2110	100	91	9%	20	$ 1,450	$ 131	$ 15
15 - 1	Unit 1 4228 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
15 - 2	Unit 1 4230 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
15 - 3	Unit 1 4232 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
15 - 4	Unit 1 4240 B1 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	2018	2118	100	99	1%	20	$ 1,450	$ 15	$ 15
15 - 5	Unit 1 4240 B1 F S. 35th Street Unit 2 4240 B2 F	Gable	Vermont	Unknown	2018	2118	100	99	1%	20	$ 1,450	$ 15	$ 15
15 - 6	Unit 1 4240 B2 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	2018	2118	100	99	1%	20	$ 1,450	$ 15	$ 15
15 - 7	Unit 1 4252 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	2018	2118	100	99	1%	20	$ 1,450	$ 15	$ 15
15 - 8	Unit 1 4252 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	2018	2118	100	99	1%	20	$ 1,450	$ 15	$ 15
15 - 9	Unit 1 4258 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	2007	2107	100	88	12%	20	$ 1,450	$ 174	$ 15
15 - 10	Unit 1 4258 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	2007	2107	100	88	12%	20	$ 1,450	$ 174	$ 15
15 - 11	Unit 1 4270 B1 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1999	2099	100	80	20%	20	$ 1,450	$ 290	$ 15
15 - 12	Unit 1 4270 B1 F S. 35th Street Unit 2 4270 B2 F	Gable	Vermont	Unknown	1999	2099	100	80	20%	20	$ 1,450	$ 290	$ 15
15 - 13	Unit 1 4270 B2 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1999	2099	100	80	20%	20	$ 1,450	$ 290	$ 15
15 - 14	Unit 1 4278 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
15 - 15	Unit 1 4280 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
15 - 16	Unit 1 4282 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15

Appendix A11 - Supporting Estimate for Gable Dormers

CY: 2019
Cost/sq. ft.: $ 72.50

Attic Dormers (Gable)

Court Dormer	Address	Dormer Type	Slate Type	Condition	Year Last Replaced (actual)	Year to be Replaced (planned)	Useful Life (years)	Remaining Useful Life (years)	Percent Depreciated (CY)	Dormer Area (ft^2)	Est. Replacement Cost (CY $)	Fully Funded Balance (CY)	Annual Depreciation Cost (CY)
16 - 1	Unit 1 4300 B1 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 2	Unit 1 4300 B1 F S. 35th Street Unit 2 4300 B2 F	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 3	Unit 1 4300 B2 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 4	Unit 1 4302 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 5	Unit 1 4304 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 6	Unit 1 4312 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 7	Unit 1 4312 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 8	Unit 1 4316 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 9	Unit 1 4316 F S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 10	Unit 1 4316 B S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15
16 - 11	Unit 1 4316 B S. 35th Street Unit 2 n/a	Gable	Vermont	Unknown	1943	2043	100	24	76%	20	$ 1,450	$ 1,102	$ 15

TOTALS/AVERAGES

Year Last Replaced	Year to be Replaced	Useful Life	Remaining Useful Life	Percent Depreciated	Est. Replacement Cost
1976	2076	100.0	56.6	43%	$ 249,400

Appendix A12 - Supporting Estimate for Chimney Caps and Chimney Masonry

Unit Cost of Chimney Cap Fabrication (per sf) $ 175.00 | Unit Cost of Chimney Repointing (sf) $ 40.00
Unit Cost of Chimney Cap Installation (each) $ 650.00

			Chimney INFO				Chimney Vent/Screen Information								Chimney Cap Information								Masonry Information					
Court	Chimney	Address	Wdth (in)	Lgth (ln)	Ht above pk (ln)	Roof Pitch (?:12)	# of Vents	Vents Covered	Vent Cover Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Cap?	Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Estimated SF of Masonry	Condition of Masonry	Useful Life (yrs)	Remain. Useful Life	Proposed Year of Repair	Estimated Rep./Repl. Cost (2018$)
1	1	Unit 1 3501 A1 S. Stafford Street Unit 2 3501 B1	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Average	60	15	2033	$ 1,000.00
1	2	Unit 1 3501 A2 S. Stafford Street Unit 2 3501 B2	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Average	60	15	2033	$ 1,000.00
1	3	Unit 1 3509 A S. Stafford Street Unit 2 3509 B	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
1	4	Unit 1 3509 B S. Stafford Street Unit 2 3511	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
1	5	Unit 1 3515 B S. Stafford Street Unit 2 n/a	20	36	40	7	4	NO	n/a	??	n/a	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	23.80	Unknown	60	??	??	$ 952.00
1	6	Unit 1 3517 A S. Stafford Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
1	7	Unit 1 3517 B S. Stafford Street Unit 2 n/a	20	36	40	10	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	24.60	Unknown	60	??	??	$ 984.00
1	8	Unit 1 3519 B S. Stafford Street Unit 2 n/a	20	36	40	10	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	24.60	Unknown	60	??	??	$ 984.00
1	9	Unit 1 3521 S. Stafford Street Unit 2 3523 A	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
1	10	Unit 1 3523 A S. Stafford Street Unit 2 3523 B	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
1	11	Unit 1 3525 B S. Stafford Street Unit 2 n/a	20	36	40	7	4	NO	n/a	??	n/a	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	23.80	Unknown	60	??	??	$ 952.00
1	12	Unit 1 3527 A S. Stafford Street Unit 2 n/a	20	68	40	7	8	YES	Pref. Al	2	Excellent	25	23	2041	$ 235.00	YES	Copper	20	Good	50	30	2048	$ 2,300.00	35.00	Unknown	60	??	??	$ 1,400.00
1	13	Unit 1 3529 B S. Stafford Street Unit 2 n/a	20	68	40	7	8	YES	Pref. Al	2	Excellent	25	23	2041	$ 235.00	YES	Copper	20	Good	50	30	2048	$ 2,300.00	35.00	Unknown	60	??	??	$ 1,400.00
2	1	Unit 1 3535 A S. Stafford Street Unit 2 3535 B	20	52	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,910.00	31.20	Unknown	60	??	??	$ 1,248.00
2	2	Unit 1 3537 A1 S. Stafford Street Unit 2 3537 B1	20	36	40	12	4	YES	Pref. Al	7	Good	25	18	2036	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
2	3	Unit 1 3537 A2 S. Stafford Street Unit 2 3537 B2	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
2	4	Unit 1 3539 A S. Stafford Street Unit 2 3539 B	20	52	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,910.00	31.20	Unknown	60	??	??	$ 1,248.00
2	5	Unit 1 3545 A1 S. Stafford Street Unit 2 3545 B1	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
2	6	Unit 1 3545 A2 S. Stafford Street Unit 2 3545 B2	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
2	7	Unit 1 3549 A S. Stafford Street Unit 2 3549 B	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
2	8	Unit 1 3551 A1 S. Stafford Street Unit 2 3551 B1	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
2	9	Unit 1 3551 A2 S. Stafford Street Unit 2 3551 B2	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
2	10	Unit 1 3553 A S. Stafford Street Unit 2 3553 B	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00

Appendix A12 - Supporting Estimate for Chimney Caps and Chimney Masonry

Unit Cost of Chimney Cap Fabrication (per sf) $ 175.00 | Unit Cost of Chimney Repointing (sf) $ 40.00
Unit Cost of Chimney Cap Installation (each) $ 650.00

			Chimney INFO				Chimney Vent/Screen Information									Chimney Cap Information								Masonry Information					
Court	Chimney	Address	Wdth (in)	Lgth (In)	Ht above pk (In)	Roof Pitch (?:12)	# of Vents	Vents Covered	Vent Cover Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Cap?	Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Estimated SF of Masonry	Condition of Masonry	Useful Life (yrs)	Remain. Useful Life	Proposed Year of Repair	Estimated Rep./Repl. Cost (2018$)
3	1	Unit 1 3563 A1 S. Stafford Street Unit 2 3563 B1	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	2	Unit 1 3563 A2 S. Stafford Street Unit 2 3563 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	3	Unit 1 3565 A S. Stafford Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	4	Unit 1 3567 S. Stafford Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	5	Unit 1 3571 A1 S. Stafford Street Unit 2 3571 B1	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	6	Unit 1 3571 A2 S. Stafford Street Unit 2 3571 B2	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	7	Unit 1 3575 A S. Stafford Street Unit 2 3575 B	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	8	Unit 1 3577 B S. Stafford Street Unit 2 3579	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	9	Unit 1 3581 A1 S. Stafford Street Unit 2 3581 B1	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	10	Unit 1 3581 A2 S. Stafford Street Unit 2 3581 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
3	11	Unit 1 3585 S. Stafford Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	1	Unit 1 4101 S. 36th Street Unit 2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	2	Unit 1 4103 S. 36th Street Unit 2	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	3	Unit 1 4105 S. 36th Street Unit 2	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	4	Unit 1 4111 S. 36th Street Unit 2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	5	Unit 1 4113 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	6	Unit 1 4117 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	7	Unit 1 4119 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	8	Unit 1 4123 A2 S. 36th Street Unit 2 4123 B2	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	9	Unit 1 4123 A1 S. 36th Street Unit 2 4123 B1	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	10	Unit 1 4127 S. 36th Street Unit 2 4129	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
4	11	Unit 1 4131 S. 36th Street Unit 2 4133	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00

Appendix A12 - Supporting Estimate for Chimney Caps and Chimney Masonry

Unit Cost of Chimney Cap Fabrication (per sf) $ 175.00 | Unit Cost of Chimney Repointing (sf) $ 40.00
Unit Cost of Chimney Cap Installation (each) $ 650.00

			Chimney INFO				Chimney Vent/Screen Information									Chimney Cap Information								Masonry Information					
Court	Chimney	Address	Wdth (in)	Lgth (ln)	Ht above pk (ln)	Roof Pitch (?:12)	# of Vents	Vents Covered	Vent Cover Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Cap?	Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Estimated SF of Masonry	Condition of Masonry	Useful Life (yrs)	Remain. Useful Life	Proposed Year of Repair	Estimated Rep./Repl. Cost (2018$)
4	12	Unit 1 4137 S. 36th Street Unit 2 4139	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	1	Unit 1 4100 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	2	Unit 1 4102 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	3	Unit 1 4104 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	4	Unit 1 4110 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	5	Unit 1 4112 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	6	Unit 1 4116 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	7	Unit 1 4118 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	8	Unit 1 4122 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
5	9	Unit 1 4128 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
6	1	Unit 1 4136 S. 36th Street Unit 2 4138	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
6	2	Unit 1 4140 S. 36th Street Unit 2 4142	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
6	3	Unit 1 4146 S. 36th Street Unit 2 4148	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
6	4	Unit 1 4154 S. 36th Street Unit 2 4156	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
6	5	Unit 1 4162 S. 36th Street Unit 2 4164	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
6	6	Unit 1 4164 S. 36th Street Unit 2 4166	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
6	7	Unit 1 4172 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
6	8	Unit 1 4176 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
7	1	Unit 1 4204 A1 S. 36th Street Unit 2 4204 B1	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
7	2	Unit 1 4204 A2 S. 36th Street Unit 2 4204 B2	20	36	40	12	6	YES	Pref. Al	2	Excellent	25	23	2041	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
7	3	Unit 1 4210 A1 S. 36th Street Unit 2 4210 B1	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
7	4	Unit 1 4210 S. 36th Street Unit 2 4212	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
7	5	Unit 1 4212 A2 S. 36th Street Unit 2 4212 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
8	1	Unit 1 3601 S. Taylor Street Unit 2 3603	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
8	2	Unit 1 3607 S. Taylor Street Unit 2 3609	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
8	3	Unit 1 3611 A1 S. Taylor Street Unit 2 3611 B1	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
8	4	Unit 1 3611 A2 S. Taylor Street Unit 2 3611 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
8	5	Unit 1 3615 S. Taylor Street Unit 2 3617	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
8	6	Unit 1 3623 S. Taylor Street Unit 2 3625	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00

Appendix A12 - Supporting Estimate for Chimney Caps and Chimney Masonry

Unit Cost of Chimney Cap Fabrication (per sf) $ 175.00 | Unit Cost of Chimney Repointing (sf) $ 40.00
Unit Cost of Chimney Cap Installation (each) $ 650.00

			Chimney INFO				Chimney Vent/Screen Information								Chimney Cap Information								Masonry Information					
Court	Chimney	Address	Wdth (in)	Lgth (ln)	Ht above pk (ln)	Roof Pitch (?:12)	# of Vents	Vents Covered	Vent Cover Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Cap?	Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Estimated SF of Masonry	Condition of Masonry	Useful Life (yrs)	Remain. Useful Life	Proposed Year of Repair	Estimated Rep./Repl. Cost (2018$)
9	1	Unit 1 3515 S. Utah Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
9	2	Unit 1 3517 S. Utah Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
9	3	Unit 1 3519 S. Utah Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
9	4	Unit 1 3523 S. Utah Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
9	5	Unit 1 3529 A1 S. Utah Street Unit 2 3529 B1	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
9	6	Unit 1 3529 A2 S. Utah Street Unit 2 3529 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
9	7	Unit 1 3537 S. Utah Street Unit 2 3539	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
9	8	Unit 1 3541 S. Utah Street Unit 2 3543	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
9	9	Unit 1 3547 S. Utah Street Unit 2 3549	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	1	Unit 1 4341 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	2	Unit 1 4339 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	3	Unit 1 4337 S. 36th Street Unit 2 4335	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	4	Unit 1 4335 S. 36th Street Unit 2 4333	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	5	Unit 1 4329 S. 36th Street Unit 2 4327	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	6	Unit 1 4325 S. 36th Street Unit 2 4323	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	7	Unit 1 4321 S. 36th Street Unit 2 4319	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	8	Unit 1 4317 A1 S. 36th Street Unit 2 4317 B1	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	9	Unit 1 4317 A2 S. 36th Street Unit 2 4317 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	10	Unit 1 4315 S. 36th Street Unit 2 4313	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	11	Unit 1 4309 S. 36th Street Unit 2 4307	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
10	12	Unit 1 4303 S. 36th Street Unit 2 4301	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00

Appendix A12 - Supporting Estimate for Chimney Caps and Chimney Masonry

Unit Cost of Chimney Cap Fabrication (per sf) $ 175.00 | Unit Cost of Chimney Repointing (sf) $ 40.00
Unit Cost of Chimney Cap Installation (each) $ 650.00

			Chimney INFO				Chimney Vent/Screen Information									Chimney Cap Information								Masonry Information					
Court	Chimney	Address	Wdth (in)	Lgth (In)	Ht above pk (In)	Roof Pitch (?:12)	# of Vents	Vents Covered	Vent Cover Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Cap?	Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Estimated SF of Masonry	Condition of Masonry	Useful Life (yrs)	Remain. Useful Life	Proposed Year of Repair	Estimated Rep./Repl. Cost (2018$)
11	1	Unit 1 3590 S. Stafford Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	2	Unit 1 3592 S. Stafford Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	3	Unit 1 3594 S. Stafford Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	4	Unit 1 3598 S. Stafford Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	5	Unit 1 4201 S. 36th Street Unit 2 4203	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	6	Unit 1 4207 S. 36th Street Unit 2 4209	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	7	Unit 1 4215 S. 36th Street Unit 2 4217	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	8	Unit 1 4217 S. 36th Street Unit 2 4219	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	9	Unit 1 4223 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	10	Unit 1 4227 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	11	Unit 1 4231 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	12	Unit 1 4233 S. 36th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
11	13	Unit 1 4235 S. 36th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
12	1	Unit 1 3550 S. Stafford Street Unit 2 3552	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
12	2	Unit 1 3554 S. Stafford Street Unit 2 3556	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
12	3	Unit 1 3566 S. Stafford Street Unit 2 3568	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
12	4	Unit 1 3570 A2 S. Stafford Street Unit 2 3570 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
12	5	Unit 1 3570 A1 S. Stafford Street Unit 2 3570 B1	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
12	6	Unit 1 3572 S. Stafford Street Unit 2 3574	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
12	7	Unit 1 3576 S. Stafford Street Unit 2 3578	20	36	40	12	4	YES	Pref. Al	2	Excellent	25	23	2041	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
12	8	Unit 1 3582 S. Stafford Street Unit 2 3584	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	1	Unit 1 3512 S. Stafford Street Unit 2 3514	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	2	Unit 1 3516 S. Stafford Street Unit 2 3518	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	3	Unit 1 3520 A2 S. Stafford Street Unit 2 3520 B2	20	36	40	12	6	YES	Pref. Al	3	Excellent	25	23	2040	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	4	Unit 1 3520 A1 S. Stafford Street Unit 2 3520 B1	20	36	40	12	6	YES	Pref. Al	3	Excellent	25	23	2040	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	5	Unit 1 3524 S. Stafford Street Unit 2 3526	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	6	Unit 1 3530 S. Stafford Street Unit 2 3532	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	22	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	7	Unit 1 3536 A2 S. Stafford Street Unit 2 3536 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	8	Unit 1 3536 A1 S. Stafford Street Unit 2 3536 B1	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	9	Unit 1 3538 S. Stafford Street Unit 2 3540	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
13	10	Unit 1 3542 S. Stafford Street Unit 2 3544	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00

Appendix A12 - Supporting Estimate for Chimney Caps and Chimney Masonry

Unit Cost of Chimney Cap Fabrication (per sf) $ 175.00 | Unit Cost of Chimney Repointing (sf) $ 40.00
Unit Cost of Chimney Cap Installation (each) $ 650.00

			Chimney INFO				Chimney Vent/Screen Information								Chimney Cap Information								Masonry Information					
Court	Chimney	Address	Wdth (in)	Lgth (ln)	Ht above pk (ln)	Roof Pitch (?:12)	# of Vents	Vents Covered	Vent Cover Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Cap?	Type	Approx. Age (years)	Condition	Useful Life (yrs)	Remain. Useful Life	Prop. Repl. Year	Estimated Replacement Cost (2018$)	Estimated SF of Masonry	Condition of Masonry	Useful Life (yrs)	Remain. Useful Life	Proposed Year of Repair	Estimated Rep./Repl. Cost (2018$)
14	1	Unit 1 3500 S. Stafford Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
14	2	Unit 1 4202 S. 35th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
14	3	Unit 1 4204 S. 35th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
14	4	Unit 1 4210 S. 35th Street Unit 2 n/a	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	22	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
14	5	Unit 1 4216 A1 S. 35th Street Unit 2 4216 B1	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
14	6	Unit 1 4216 S. 35th Street Unit 2 4218	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
14	7	Unit 1 4218 A2 S. 35th Street Unit 2 4218 B2	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	1	Unit 1 4226 S. 35th Street Unit 2 4228	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	2	Unit 1 4232 S. 35th Street Unit 2 4234	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	3	Unit 1 4240 A1 S. 35th Street Unit 2 4240 B1	20	36	40	12	6	YES	Pref. Al	3	Excellent	25	23	2040	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	4	Unit 1 4240 A2 S. 35th Street Unit 2 4240 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	5	Unit 1 4246 S. 35th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	6	Unit 1 4250 S. 35th Street Unit 2 4252	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	7	Unit 1 4252 S. 35th Street Unit 2 4254	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	22	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	8	Unit 1 4256 S. 35th Street Unit 2 4258	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	9	Unit 1 4258 S. 35th Street Unit 2 4260	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	10	Unit 1 4264 S. 35th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	11	Unit 1 4270 A1 S. 35th Street Unit 2 4270 B1	20	36	40	12	6	YES	Pref. Al	3	Excellent	25	23	2040	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	12	Unit 1 4270 A2 S. 35th Street Unit 2 4270 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	13	Unit 1 4276 S. 35th Street Unit 2 4278	20	36	40	12	4	YES	Pref. Al	3	Excellent	25	23	2040	$ 175.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
15	14	Unit 1 4282 S. 35th Street Unit 2 4284	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
16	1	Unit 1 4300 A1 S. 35th Street Unit 2 4300 B1	20	36	40	12	6	YES	Pref. Al	3	Excellent	25	23	2040	$ 210.00	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
16	2	Unit 1 4300 A2 S. 35th Street Unit 2 4300 B2	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
16	3	Unit 1 4304 S. 35th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
16	4	Unit 1 4310 S. 35th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
16	5	Unit 1 4314 S. 35th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
16	6	Unit 1 4316 S. 35th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00
16	7	Unit 1 4318 S. 35th Street Unit 2 n/a	20	36	40	12	2	NO	n/a	??	Unknown	??	--	--	$ -	YES	Copper	20	Good	50	30	2048	$ 1,530.00	25.00	Unknown	60	??	??	$ 1,000.00

ESTIMATED REPLACEMENT COST OF CHIMNEY CAPS $237,920.00 | **ESTIMATED COST TO REPOINT ALL CHIMNEYS** $ 155,168.00

Appendix A13 - Supporting Estimate for Masonry Maintenance/Repointing (5.4.1)

Tuckpointing & Miscellaneous Periodic Masonry/Stone Veneer Repair

Repair Cost per Repair Cycle =	$ 150,000
Frequency of Repairs =	5 years
Repair Extent Inflator	10%

1st Repair Cycle	2022	$ 150,000
2nd Repair Cycle	2027	$ 165,000
3rd Repair Cycle	2032	$ 181,500
4th Repair Cycle	2037	$ 199,650

Appendix A14 - Supporting Estimate for Masonry Stoop Repair/Replacement (5.5.1)

Anticipated Avg Life Expectancy of New Stoop (yrs)	80

TP = tuckpointing

Court	Address	Street	Dimensions (inches)		Area (SF)	Bond Pattern	Steps	Columns ? (Y/N)	Year Last Rebuilt	Historical Cost to Rebuild	Historical Unit Cost to Rebuild (per sf) adj for infl.	Anticipated Cost to Rebuild in Phase II (2019) by KGS	2019 Unit Cost to Rebuild per KGS Bid	Anticipated Cost of Repointing in Phase II (2019) by KGS			Determ. Remaining Useful Life	Antic. Rebuild Year	Calc. Remain. Useful Life	Estimated Replacement Cost in 2018$	2016 Ranking 0-5 (5=worst)	2018 Ranking 0-5 (5=worst)	2016 Comments	2018 Comments
1	3501	S. Stafford	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	0	1	some TP has been done	
1	3503	S. Stafford	76	50	26.39	basket	1		2006		--		--		-	0.00		2086	68	$ 4,880.00	0	0		
1	3507 A/B	S. Stafford	118	63	51.63	running	2	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	2	1	needs TP	
1	3509 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	2	1	needs TP	
1	3511	S. Stafford	76	50	26.39	running	2		1943		--		--	195	lf	$ 1,170.00		2045	27	$ 4,880.00	2	2	needs TP	
1	3513 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP	
1	3515 A/B	S. Stafford	118	63	51.63	basket	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	4	0		renovated under 2016 contract
1	3517 A/B	S. Stafford	118	63	51.63	basket	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	4	0		renovated under 2016 contract
1	3519 A/B	S. Stafford	118	63	51.63	basket	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	5	0		renovated under 2016 contract
1	3521	S. Stafford	76	50	26.39	running	2		2017	$ 5,150.00	$ 195.16		--		-	0.00		2097	79	$ 4,880.00	5	0		renovated under 2016 contract
1	3523 A/B	S. Stafford	118	63	51.63	running	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	4	0		renovated under 2016 contract
1	3525 A/B	S. Stafford	118	63	51.63	running	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	4	0		renovated under 2016 contract
1	3527 A/B	S. Stafford	118	63	51.63	basket	1	Y	1943		--		--	405	lf	$ 2,430.00		2045	27	$ 9,540.00	1	2	needs TP	give to N&M
1	3529 A/B	S. Stafford	118	63	51.63	basket	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	4	0	bad TP job; left tripping hazard	renovated under 2016 contract
2	3535 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1		
2	3537	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1		
2	3539 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	0	1		
2	3541	S. Stafford	76	50	26.39	running	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs TP	
2	3543 A/B	S. Stafford	118	63	51.63	basket	4		1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP; efflorescence on bricks	looks like it has been redone before
2	3545	S. Stafford	118	63	51.63	basket	3	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	4	0	very bad appearance on front two steps	renovated under 2016 contract
2	3547 A/B	S. Stafford	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3		
2	3549 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2023	5	$ 9,540.00	0	0		
2	3551	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	needs TP	high 3
2	3553 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--	$ 6,400.00	$ 123.97		-	0.00	1	2019	1	$ 9,540.00	3	4	needs TP	front edge falling forward
2	3555	S. Stafford	76	50	26.39	running	1		1943		--		--		-	0.00		2028	10	$ 4,880.00	3	3	needs TP	
3	3561	S. Stafford	76	50	26.39	basket	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs TP	
3	3563	S. Stafford	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP	
3	3565 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--		--	405	lf	$ 2,430.00		2040	22	$ 9,540.00	3	3	needs TP	
3	3567	S. Stafford	76	50	26.39	running	1		1943		--		--	25	lf	$ 150.00		2041	23	$ 4,880.00	1	1	needs TP	
3	3569 A/B	S. Stafford	118	63	51.63	basket	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	5	0	tilted front course is hazardous	renovated under 2016 contract
3	3571	S. Stafford	118	63	51.63	basket	1	Y	1943		--		--	375	lf	$ 2,250.00		2045	27	$ 9,540.00	3	2	needs TP	give to N&M
3	3573 A/B	S. Stafford	118	63	51.63	basket	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	5	0		renovated under 2016 contract
3	3575 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--		--	15	lf	$ 90.00		2031	13	$ 9,540.00	3	3	needs TP	
3	3577 A/B	S. Stafford	118	63	51.63	running	1	Y	1943		--		--	405	lf	$ 2,430.00		2045	27	$ 9,540.00	3	2	needs TP	give to N&M
3	3579	S. Stafford	76	50	26.39	running	1		1943		--		--		-	0.00		2028	10	$ 4,880.00	3	3	needs TP	
3	3581	S. Stafford	118	63	51.63	basket	1	Y	1943		--	$ 6,400.00	$ 123.97		-	0.00	1	2019	1	$ 9,540.00	1	2	needs TP	give to N&M
3	3583	S. Stafford	76	50	26.39	basket	1		2006	$ 3,425.00	$ 162.29		--		-	0.00		2086	68	$ 4,880.00	0	0		
3	3585	S. Stafford	76	50	26.39	basket	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs TP	

Appendix A14 - Supporting Estimate for Masonry Stoop Repair/Replacement (5.5.1)

Anticipated Avg Life Expectancy of New Stoop (yrs)	80

TP = tuckpointing

Court	Address	Street	Dimensions (inches)		Area (SF)	Bond Pattern	Steps	Columns ? (Y/N)	Year Last Rebuilt	Historical Cost to Rebuild	Historical Unit Cost to Rebuild (per sf) adj for infl.	Anticipated Cost to Rebuild in Phase II (2019) by KGS	2019 Unit Cost to Rebuild per KGS Bid	Anticipated Cost of Repointing in Phase II (2019) by KGS			Determ. Remaining Useful Life	Antic. Rebuild Year	Calc. Remain. Useful Life	Estimated Replacement Cost in 2018$	2016 Ranking 0-5 (5=worst)	2018 Ranking 0-5 (5=worst)	2016 Comments	2018 Comments
4	4101	S. 36th	76	50	26.39	basket	2		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs minor TP	
4	4103	S. 36th	76	50	26.39	basket	2		1943		--		--	220	lf	$ 1,320.00		2045	27	$ 4,880.00	2	2		
4	4105/07	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP	
4	4109/11	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	needs TP	
4	4113	S. 36th	76	50	26.39	running	1		1943		--		--	220	lf	$ 1,320.00		2045	27	$ 4,880.00	2	2	needs TP	
4	4115-17	S. 36th	118	63	51.63	running	1	Y	1943		--		--	405	lf	$ 2,430.00		2045	27	$ 9,540.00	3	2	very ugly patch job	ugly but stable; give to N&M
4	4119	S. 36th	76	50	26.39	basket	3		1943		--		--	55	lf	$ 330.00		2036	18	$ 4,880.00	2	2		
4	4121	S. 36th	76	50	26.39	basket	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1		
4	4123	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3		
4	4125	S. 36th	76	50	26.39	running	1		1943		--		--		-	0.00		2028	10	$ 4,880.00	3	3	tilted front course	
4	4127/29	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
4	4131/33	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
4	4135	S. 36th	76	50	26.39	running	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs minor TP	
4	4137	S. 36th	76	50	26.39	running	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs minor TP	
4	4139	S. 36th	76	50	26.39	running	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs minor TP	
5	4100	S. 36th	76	50	26.39	basket	3		1943		--		--	410	lf	$ 2,460.00		2045	27	$ 4,880.00	2	2		
5	4102	S. 36th	76	50	26.39	basket	7		1943		--		--		-	0.00		2023	5	$ 4,880.00	0	0	rebuilt	
5	4104/06	S. 36th	118	63	51.63	basket	1	Y	1943		--		--	60	lf	$ 360.00		2036	18	$ 9,540.00	1	2	needs TP	missing grout
5	4108/10	S. 36th	118	63	51.63	basket	1	Y	1943		--	$ 6,400.00	$ 123.97		-	0.00	1	2019	1	$ 9,540.00	1	5	needs TP	front step falling apart
5	4112/14	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	needs TP	
5	4116	S. 36th	76	50	26.39	running	1		1943		--		--	195	lf	$ 1,170.00		2045	27	$ 4,880.00	2	2	needs TP	
5	4118	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1		
5	4122-24	S. 36th	118	63	51.63	running	5	Y	1943		--	$ 6,400.00	$ 123.97		-	0.00	1	2019	1	$ 9,540.00	2	2	needs TP	
5	4126-28	S. 36th	118	63	51.63	running	5	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3		
6	4130	S. 36th	76	50	26.39	basket	1		2006	$ 3,030.00	$ 143.57		--		-	0.00		2086	68	$ 4,880.00	1	1	needs TP	
6	4132	S. 36th	76	63	33.25	basket	1		2006	$ 3,425.00	$ 128.80		--		-	0.00		2086	68	$ 6,150.00	1	3	needs TP	
6	4134	S. 36th	76	50	26.39	basket	1		1943		--	$ 5,400.00	$ 204.63		-	0.00	1	2019	1	$ 4,880.00	2	2	needs TP; repaired in 2006	
6	4136/38	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP	
6	4140/42	S. 36th	118	63	51.63	basket	1	Y	1943		--		--	65	lf	$ 390.00		2036	18	$ 9,540.00	2	2	needs TP	
6	4144	S. 36th	76	50	26.39	basket	1		1943		--	$ 5,400.00	$ 204.63		-	0.00	1	2019	1	$ 4,880.00	2	2	needs TP	
6	4146-48	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	2	3	needs TP	loose brick on right
6	4150/52	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP	
6	4154/56	S. 36th	118	63	51.63	running	1	Y	1943		--		--	405	lf	$ 2,430.00		2050	32	$ 9,540.00	1	1	needs TP	
6	4158/60	S. 36th	118	63	51.63	basket	1	Y	1943		--		--	405	lf	$ 2,430.00		2045	27	$ 9,540.00	1	2	one loose brick at end	loose brick on left
6	4162/64	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	2	1	needs TP	
6	4166	S. 36th	76	50	26.39	basket	1		2018	$ 5,150.00	$ 195.16		--		-	0.00		2098	80	$ 4,880.00	4	0	front course tilted forward	renovated under 2016 contract
6	4168/70	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	broken brick in front
6	4172/74	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP	
6	4176	S. 36th	76	50	26.39	running	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs TP	

Appendix A14 - Supporting Estimate for Masonry Stoop Repair/Replacement (5.5.1)

Anticipated Avg Life Expectancy of New Stoop (yrs)	80

TP = tuckpointing

Court	Address	Street	Dimensions (inches)		Area (SF)	Bond Pattern	Steps	Columns ? (Y/N)	Year Last Rebuilt	Historical Cost to Rebuild	Historical Unit Cost to Rebuild (per sf) adj for infl.	Anticipated Cost to Rebuild in Phase II (2019) by KGS	2019 Unit Cost to Rebuild per KGS Bid	Anticipated Cost of Repointing in Phase II (2019) by KGS			Determ. Remaining Useful Life	Antic. Rebuild Year	Calc. Remain. Useful Life	Estimated Replacement Cost in 2018$	2016 Ranking 0-5 (5=worst)	2018 Ranking 0-5 (5=worst)	2016 Comments	2018 Comments
7	4200-02	S. 36th	118	63	51.63	basket	1	Y	2006	$ 6,650.00	$ 161.07		--		-	0.00		2086	68	$ 9,540.00	1	1	needs TP	
7	4204	S. 36th	118	63	51.63	basket	1	Y	2018	$ 9,995.00	$ 193.61		--		-	0.00		2098	80	$ 9,540.00	4	0		renovated under 2016 contract
7	4206-08	S. 36th	118	63	51.63	basket	1	Y	2006	$ 6,650.00	$ 161.07		--	405	lf	$ 2,430.00		2098	80	$ 9,540.00	2	2	needs TP	missing grout at front edge
7	4210	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
7	4212	S. 36th	118	63	51.63	basket	1	Y	1943		--		--	375	lf	$ 2,250.00		2045	27	$ 9,540.00	2	2	needs TP	
8	3601/03	S. Taylor	118	63	51.63	running	1	Y	1943		--		--	405	lf	$ 2,430.00		2045	27	$ 9,540.00	2	2	effluoresence	
8	3605/07	S. Taylor	118	63	51.63	running	1	Y	1943		--		--	170	lf	$ 1,020.00		2045	27	$ 9,540.00	2	2		
8	3609	S. Taylor	76	50	26.39	running	1		1943		--		--	220	lf	$ 1,320.00		2045	27	$ 4,880.00	2	2		
8	3611	S. Taylor	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
8	3613	S. Taylor	76	50	26.39	running	1		2018	$ 5,150.00	$ 195.16		--		-	0.00		2098	80	$ 4,880.00	4	0		renovated under 2016 contract
8	3615-17	S. Taylor	118	63	51.63	basket	3	Y	2006	$ 6,650.00	$ 161.07		--	495	lf	$ 2,970.00		2098	80	$ 9,540.00	3	2		
8	3619-21	S. Taylor	118	63	51.63	basket	3	Y	2018	$ 9,995.00	$ 193.61		--		-	0.00		2098	80	$ 9,540.00	4	0	cracking on steps	renovated under 2016 contract
8	3623/25	S. Taylor	118	63	51.63	basket	4	Y	2018	$ 9,995.00	$ 193.61		--		-	0.00		2098	80	$ 9,540.00	5	0	section OK, unequal risers are hazardous	renovated under 2016 contract
9	3513/15	S. Utah	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP	
9	3517/19	S. Utah	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs TP	
9	3521/23	S. Utah	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
9	3525-27	S. Utah	110	63	48.13	running	1	Y	2006	$ 6,210.00	$ 161.35		--		-	0.00		2086	68	$ 8,900.00	1	1	needs minor TP	
9	3529	S. Utah	118	63	51.63	running	1	Y	2016	$ 9,995.00	$ 195.31		--		-	0.00		2096	78	$ 9,540.00	4	0	cracking in front step	renovated under 2016 contract
9	3531-33	S. Utah	110	63	48.13	running	1	Y	2006	$ 6,210.00	$ 161.35		--		-	0.00		2086	68	$ 8,900.00	1	1	needs minor TP	needs TP on first course
9	3535	S. Utah	76	50	26.39	basket	1		1943		--		--	155	lf	$ 930.00		2040	22	$ 4,880.00	2	2		needs TP; loose brick on right
9	3537/39	S. Utah	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1		
9	3541/43	S. Utah	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	minor TP needed on column
9	3545	S. Utah	76	50	26.39	basket	1		2016	$ 5,150.00	$ 196.88		--		-	0.00		2096	78	$ 4,880.00	5	0	needs complete rebuild	renovated under 2016 contract
9	3547	S. Utah	76	50	26.39	basket	1		2016	$ 5,150.00	$ 196.88		--		-	0.00		2096	78	$ 4,880.00	5	0	needs complete rebuild	renovated under 2016 contract
9	3549	S. Utah	76	50	26.39	basket	2		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	patched; co-owner is happy but repair	
10	4301	S. 36th	67	50	23.26	running	1		2017	$ 4,790.00	$ 205.90		--		-	0.00		2097	79	$ 4,300.00	5	0	forward; past patch job did not last, co-	renovated under 2016 contract
10	4303/05	S. 36th	118	63	51.63	running	1	Y	1943		--		--	90	lf	$ 540.00		2040	22	$ 9,540.00	2	2	brick	
10	4307/09	S. 36th	118	63	51.63	running	1	Y	1943		--		--	80	lf	$ 480.00		2036	18	$ 9,540.00	2	2	brick	
10	4311	S. 36th	67	50	23.26	basket	1		2017	$ 4,790.00	$ 205.90		--		-	0.00		2097	79	$ 4,300.00	4	0		renovated under 2016 contract
10	4313-15	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	2	3		needs TP in front
10	4317	S. 36th	110	63	48.13	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 8,900.00	3	3	railings	needs TP in front
10	4319-21	S. 36th	118	63	51.63	basket	1	Y	1943		--	$ 6,400.00	$ 123.97		-	0.00	1	2019	1	$ 9,540.00	3	4	tripping hazard on front edge	repairable by TP; have REI inspect
10	4323	S. 36th	67	50	23.26	running	1		1943		--		--	50	lf	$ 300.00		2036	18	$ 4,300.00	1	2		needs TP in front
10	4325/27	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
10	4329/31	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1		
10	4333/35	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	2	1	needs TP	
10	4337/39	S. 36th	118	63	51.63	running	1	Y	1943		--		--	405	lf	$ 2,430.00		2045	27	$ 9,540.00	2	2	needs TP	
10	4341/43	S. 36th	118	63	51.63	running	1	Y	1943		--		--	405	lf	$ 2,430.00		2045	27	$ 9,540.00	2	2	needs TP	

Appendix A14 - Supporting Estimate for Masonry Stoop Repair/Replacement (5.5.1)

Anticipated Avg Life Expectancy of New Stoop (yrs)	80

TP = tuckpointing

Court	Address	Street	Dimensions (inches)		Area (SF)	Bond Pattern	Steps	Columns ? (Y/N)	Year Last Rebuilt	Historical Cost to Rebuild	Historical Unit Cost to Rebuild (per sf) adj for infl.	Anticipated Cost to Rebuild in Phase II (2019) by KGS	2019 Unit Cost to Rebuild per KGS Bid	Anticipated Cost of Repointing in Phase II (2019) by KGS			Determ. Remaining Useful Life	Antic. Rebuild Year	Calc. Remain. Useful Life	Estimated Replacement Cost in 2018$	2016 Ranking 0-5 (5=worst)	2018 Ranking 0-5 (5=worst)	2016 Comments	2018 Comments
11	4201	S. 36th	67	50	23.26	basket	1		1943		--		--	220	lf	$ 1,320.00		2045	27	$ 4,300.00	3	2	needs one brick reset and TP	
11	4203/05	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	loose brick on left side
11	4207/09	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
11	4215	S. 36th	67	50	23.26	running	1		1943		--		--		-	0.00		2038	20	$ 4,300.00	1	1	no cracks; looks like it was repaired	
11	4217/19	S. 36th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	2	1	needs TP	needs minor TP in front
11	4221/23	S. 36th	118	63	51.63	running	1	Y	1943		--		--	55	lf	$ 330.00		2036	18	$ 9,540.00	3	2	needs TP	needs TP in front
11	4227-29	S. 36th	118	63	51.63	basket	1	Y	2018	$ 9,995.00	$ 193.61		--		-	0.00		2098	80	$ 9,540.00	4	0		renovated under 2016 contract
11	4231-33	S. 36th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3		
11	4235-37	S. 36th	118	63	51.63	basket	1	Y	1943		--		--	65	lf	$ 390.00		2036	18	$ 9,540.00	2	2		
11	3588-90	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	crack under column on right	
11	3592-94	S. Stafford	118	63	51.63	running	1	Y	2018	$ 9,995.00	$ 193.61		--		-	0.00		2098	80	$ 9,540.00	5	0	needs rebuild	renovated under 2016 contract
11	3596/98	S. Stafford	118	63	51.63	running	1	Y	1943		--		--	55	lf	$ 330.00		2036	18	$ 9,540.00	2	2	needs TP	
12	3548	S. Stafford	76	50	26.39	basket	1		1943		--		--		-	0.00		2028	10	$ 4,880.00	3	3	loose brick on right side	
12	3550/52	S. Stafford	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2023	5	$ 9,540.00	1	0	needs minor TP	don't see any problems
12	3554/56	S. Stafford	118	63	51.63	basket	1		1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
12	3558	S. Stafford	76	50	26.39	basket	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	2	1	needs TP	needs minor TP
12	3560	S. Stafford	76	50	26.39	basket	1		2006	$ 3,425.00	$ 162.29		--		-	0.00		2086	68	$ 4,880.00	2	1	reset the brick	reset
12	3562	S. Stafford	76	50	26.39	basket	0		1943		--		--	135	lf	$ 810.00		2040	22	$ 4,880.00	3	2	needs TP soon; significant missing grout	
12	3564	S. Stafford	67	50	23.26	running	1		1943		--	$ 5,200.00	$ 223.52		-	0.00	1	2019	1	$ 4,300.00	2	2	needs TP	
12	3566/68	S. Stafford	118	63	51.63	running	1	Y	1943		--		--	90	lf	$ 540.00		2040	22	$ 9,540.00	3	2	needs TP	needs TP in front
12	3570	S. Stafford	110	63	48.13	running	1	Y	1943		--		--		-	0.00		2038	20	$ 8,900.00	1	1	needs minor TP	
12	3572/74	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
12	3576	S. Stafford	67	50	23.26	basket	1		2018	$ 5,150.00	$ 221.37		--		-	0.00		2098	80	$ 4,300.00	5	0	major cracking	renovated under 2016 contract
12	3578/80	S. Stafford	118	63	51.63	basket	1	Y	1943		--		--	65	lf	$ 390.00		2036	18	$ 9,540.00	2	2	needs TP	
12	3582-84	S. Stafford	118	63	51.63	basket	1	Y	2018	$ 9,995.00	$ 193.61		--		-	0.00		2098	80	$ 9,540.00	4	0	front edge is falling forward	renovated under 2016 contract
13	3512/14	S. Stafford	118	63	51.63	running	1	Y	1943		--		--	45	lf	$ 270.00		2036	18	$ 9,540.00	2	2	needs TP	
13	3516/18	S. Stafford	118	63	51.63	running	1	Y	1943		--		--	50	lf	$ 300.00		2036	18	$ 9,540.00	2	2	needs TP	
13	3520	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
13	3522	S. Stafford	67	50	23.26	running	1		1943		--		--		-	0.00		2038	20	$ 4,300.00	1	1	needs minor TP	
13	3524	S. Stafford	67	50	23.26	basket	1		1943		--		--		-	0.00		2038	20	$ 4,300.00	1	1	needs minor TP	
13	3526/28	S. Stafford	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
13	3530/32	S. Stafford	118	63	51.63	basket	1	Y	1943		--	$ 6,400.00	$ 123.97		-	0.00	1	2019	1	$ 9,540.00	3	4	tuckpointing needed	tuckpointing needed
13	3534	S. Stafford	67	50	23.26	running	1		1943		--		--		-	0.00		2038	20	$ 4,300.00	1	1	hairline crack	
13	3536	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
13	3538-40	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	needs TP	
13	3542-44	S. Stafford	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	needs TP	
14	3500	S. Stafford	67	50	51.63	basket	1		1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
14	4202	S. 35th	67	50	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
14	4204/06	S. 35th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
14	4208/10	S. 35th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	section is good; needs major TP now;	
14	4216	S. 35th	110	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	high 3	regular 3
14	4218	S. 35th	110	63	51.63	running	1		1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	high 3	loose brick on first step, right side

Appendix A14 - Supporting Estimate for Masonry Stoop Repair/Replacement (5.5.1)

Anticipated Avg Life Expectancy of New Stoop (yrs)	80

TP = tuckpointing

Court	Address	Street	Dimensions (inches)		Area (SF)	Bond Pattern	Steps	Columns ? (Y/N)	Year Last Rebuilt	Historical Cost to Rebuild	Historical Unit Cost to Rebuild (per sf) adj for infl.	Anticipated Cost to Rebuild in Phase II (2019) by KGS	2019 Unit Cost to Rebuild per KGS Bid	Anticipated Cost of Repointing in Phase II (2019) by KGS			Determ. Remaining Useful Life	Antic. Rebuild Year	Calc. Remain. Useful Life	Estimated Replacement Cost in 2018$	2016 Ranking 0-5 (5=worst)	2018 Ranking 0-5 (5=worst)	2016 Comments	2018 Comments
15	4226/28	S. 35th	118	63	51.63	basket	1	Y	1943		--		--	405	lf	$ 2,430.00		2045	27	$ 9,540.00	3	2	TP job didn't work	
15	4230-32	S. 35th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	rebuilt; needs minor TP	
15	4234	S. 35th	67	50	23.26	basket	1		1943		--		--	195	lf	$ 1,170.00		2045	27	$ 4,300.00	2	2	needs TP	
15	4236-38	S. 35th	110	63	48.13	running	1	Y	1943		--		--		-	0.00		2028	10	$ 8,900.00	3	3	needs TP	high 3
15	4240	S. 35th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	needs TP	
15	4242-44	S. 35th	110	63	48.13	running	1	Y	2017	$ 9,995.00	$ 207.69		--		-	0.00		2097	79	$ 8,900.00	5	0	cracked front step falling forward	renovated under 2016 contract
15	4246/48	S. 35th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	front step; high 3	
15	4250/52	S. 35th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	3	1	shape	
15	4254	S. 35th	76	50	26.39	basket	1		1943		--		--		-	0.00		2028	10	$ 4,880.00	2	3	needs TP	left edge leaning over
15	4256	S. 35th	76	50	26.39	running	1		2006	$ 3,425.00	$ 162.29		--	220	lf	$ 1,320.00		2098	80	$ 4,880.00	2	2	needs TP	
15	4258/60	S. 35th	118	63	51.63	running	1	Y	2017	$ 9,995.00	$ 193.61		--		-	0.00		2097	79	$ 9,540.00	4	0	long widening crack on front step	renovated under 2016 contract
15	4262/64	S. 35th	118	63	51.63	running	1	Y	2006	$ 6,650.00	$ 161.07		--		-	0.00		2086	68	$ 9,540.00	1	1	needs minor TP	
15	4266/68	S. 35th	110	63	48.13	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 8,900.00	3	3	needs TP	
15	4270	S. 35th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
15	4272/74	S. 35th	110	63	48.13	basket	1	Y	1943		--		--		-	0.00		2028	10	$ 8,900.00	2	3	needs TP	front edge moving forward
15	4276/78	S. 35th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	hairline cracks needs caulk	
15	4280/82	S. 35th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
15	4284	S. 35th	67	50	23.26	running	1		1943		--		--		-	0.00		2038	20	$ 4,300.00	1	1	needs minor TP	
16	4300	S. 35th	118	63	51.63	basket	1	Y	1943		--		--		-	0.00		2023	5	$ 9,540.00	0	0		
16	4302	S. 35th	76	50	26.39	basket	1		1943		--		--	220	lf	$ 1,320.00		2045	27	$ 4,880.00	2	2	needs TP	
16	4304	S. 35th	76	50	26.39	basket	1		1943		--		--		-	0.00		2038	20	$ 4,880.00	1	1	needs minor TP	
16	4310/12	S. 35th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
16	4314/16	S. 35th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2028	10	$ 9,540.00	3	3	reappearing	
16	4318/20	S. 35th	118	63	51.63	running	1	Y	1943		--		--		-	0.00		2038	20	$ 9,540.00	1	1	needs minor TP	
Totals	181		##	-	216	-																-		
%						0%					Historical adj for Inflation		2019											
Average						Average Unit Cost to Rebuild Stoop				**$ 184.85**	/sf		**$ 152.96**	**/sf**	**$ 309.61**	/stoop					1.78	1.46		

Average Remaining Useful Life	**29.87**
Total Estimated Replacement Value of all Stoops	**$1,464,290.00**

Appendix A15 - Supporting Estimate for Portico Refurbishment (5.5.2)

Court	Address	Street	Portico Style (A, B, C or D)	Columns ? (Y/N)	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$	2018 Comments
1	3501	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
1	3503	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
1	3507 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
1	3509 A/B	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
1	3511	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
1	3513 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
1	3515 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
1	3517 A/B	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
1	3519 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
1	3521	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
1	3523 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
1	3525 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
1	3527 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
1	3529 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
2	3535 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
2	3537	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
2	3539 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
2	3541	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
2	3543 A/B	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
2	3545	S. Stafford	Style C	Y	75	100	25	2043	$ 5,400.00	
2	3547 A/B	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
2	3549 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
2	3551	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
2	3553 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
2	3555	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
3	3561	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
3	3563	S. Stafford	Style C	Y	75	100	25	2043	$ 5,400.00	
3	3565 A/B	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
3	3567	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
3	3569 A/B	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
3	3571	S. Stafford	Style C	Y	75	100	25	2043	$ 5,400.00	
3	3573 A/B	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
3	3575 A/B	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
3	3577 A/B	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
3	3579	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
3	3581	S. Stafford	Style C	Y	75	100	25	2043	$ 5,400.00	
3	3583	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
3	3585	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
4	4101	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
4	4103	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
4	4105/07	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
4	4109/11	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
4	4113	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
4	4115-17	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
4	4119	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
4	4121	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
4	4123	S. 36th	Style C	Y	75	100	25	2043	$ 5,400.00	
4	4125	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
4	4127/29	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
4	4131/33	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
4	4135	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
4	4137	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
4	4139	S. 36th	Style A		75	100	25	2043	$ 4,500.00	

Appendix A15 - Supporting Estimate for Portico Refurbishment (5.5.2)

Court	Address	Street	Portico Style (A, B, C or D)	Columns ? (Y/N)	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$	2018 Comments
5	4100	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
5	4102	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
5	4104/06	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
5	4108/10	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
5	4112/14	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
5	4116	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
5	4118	S. 36th	Style C	Y	75	100	25	2043	$ 5,400.00	
5	4122-24	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
5	4126-28	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
6	4130	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
6	4132	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
6	4134	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
6	4136/38	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
6	4140/42	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
6	4144	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
6	4146-48	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
6	4150/52	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
6	4154/56	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
6	4158/60	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
6	4162/64	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
6	4166	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
6	4168/70	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
6	4172/74	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
6	4176	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
7	4200-02	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
7	4204	S. 36th	Style C	Y	75	100	25	2043	$ 5,400.00	
7	4206-08	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
7	4210	S. 36th	Style C	Y	75	100	25	2043	$ 5,400.00	
7	4212	S. 36th	Style C	Y	75	100	25	2043	$ 5,400.00	
8	3601/03	S. Taylor	Style D	Y	75	100	25	2043	$ 6,200.00	
8	3605/07	S. Taylor	Style D	Y	75	100	25	2043	$ 6,200.00	
8	3609	S. Taylor	Style A		75	100	25	2043	$ 4,500.00	
8	3611	S. Taylor	Style C	Y	75	100	25	2043	$ 5,400.00	
8	3613	S. Taylor	Style A		75	100	25	2043	$ 4,500.00	
8	3615-17	S. Taylor	Style B	Y	75	100	25	2043	$ 5,225.00	
8	3619-21	S. Taylor	Style B	Y	75	100	25	2043	$ 5,225.00	
8	3623/25	S. Taylor	Style B	Y	75	100	25	2043	$ 5,225.00	
9	3513/15	S. Utah	Style D	Y	75	100	25	2043	$ 6,200.00	
9	3517/19	S. Utah	Style B	Y	75	100	25	2043	$ 5,225.00	
9	3521/23	S. Utah	Style D	Y	75	100	25	2043	$ 6,200.00	
9	3525-27	S. Utah	Style B	Y	75	100	25	2043	$ 5,225.00	
9	3529	S. Utah	Style C	Y	75	100	25	2043	$ 5,400.00	
9	3531-33	S. Utah	Style B	Y	75	100	25	2043	$ 5,225.00	
9	3535	S. Utah	Style A		75	100	25	2043	$ 4,500.00	
9	3537/39	S. Utah	Style D	Y	75	100	25	2043	$ 6,200.00	
9	3541/43	S. Utah	Style D	Y	75	100	25	2043	$ 6,200.00	
9	3545	S. Utah	Style A		75	100	25	2043	$ 4,500.00	
9	3547	S. Utah	Style A		75	100	25	2043	$ 4,500.00	
9	3549	S. Utah	Style A		75	100	25	2043	$ 4,500.00	

Appendix A15 - Supporting Estimate for Portico Refurbishment (5.5.2)

Court	Address	Street	Portico Style (A, B, C or D)	Columns ? (Y/N)	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$	2018 Comments
10	**4301**	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
10	**4303/05**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
10	**4307/09**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
10	**4311**	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
10	**4313-15**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
10	**4317**	S. 36th	Style C	Y	75	100	25	2043	$ 5,400.00	
10	**4319-21**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
10	**4323**	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
10	**4325/27**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
10	**4329/31**	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
10	**4333/35**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
10	**4337/39**	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
10	**4341/43**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
11	**4201**	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
11	**4203/05**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
11	**4207/09**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
11	**4215**	S. 36th	Style A		75	100	25	2043	$ 4,500.00	
11	**4217/19**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
11	**4221/23**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
11	**4227-29**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
11	**4231-33**	S. 36th	Style B	Y	75	100	25	2043	$ 5,225.00	
11	**4235-37**	S. 36th	Style D	Y	75	100	25	2043	$ 6,200.00	
11	**3588-90**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
11	**3592-94**	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
11	**3596/98**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
12	**3548**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
12	**3550/52**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
12	**3554/56**	S. Stafford	Style D		75	100	25	2043	$ 6,200.00	
12	**3558**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
12	**3560**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
12	**3562**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
12	**3564**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
12	**3566/68**	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
12	**3570**	S. Stafford	Style C	Y	75	100	25	2043	$ 5,400.00	
12	**3572/74**	S. Stafford	Style B	Y	75	100	25	2043	$ 5,225.00	
12	**3576**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
12	**3578/80**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
12	**3582-84**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
13	**3512/14**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
13	**3516/18**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
13	**3520**	S. Stafford	Style C	Y	75	100	25	2043	$ 5,400.00	
13	**3522**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
13	**3524**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
13	**3526/28**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
13	**3530/32**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
13	**3534**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
13	**3536**	S. Stafford	Style C	Y	75	100	25	2043	$ 5,400.00	
13	**3538-40**	S. Stafford	Style D	Y	75	100	25	2043	$ 6,200.00	
13	**3542-44**	S. Stafford	Style C	Y	75	100	25	2043	$ 5,400.00	
14	**3500**	S. Stafford	Style A		75	100	25	2043	$ 4,500.00	
14	**4202**	S. 35th	Style A	Y	75	100	25	2043	$ 4,500.00	
14	**4204/06**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
14	**4208/10**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
14	**4216**	S. 35th	Style C	Y	75	100	25	2043	$ 5,400.00	
14	**4218**	S. 35th	Style C		75	100	25	2043	$ 5,400.00	

Appendix A15 - Supporting Estimate for Portico Refurbishment (5.5.2)

Court	Address	Street	Portico Style (A, B, C or D)	Columns ? (Y/N)	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$	2018 Comments
15	**4226/28**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
15	**4230-32**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
15	**4234**	S. 35th	Style A		75	100	25	2043	$ 4,500.00	
15	**4236-38**	S. 35th	Style B	Y	75	100	25	2043	$ 5,225.00	
15	**4240**	S. 35th	Style C	Y	75	100	25	2043	$ 5,400.00	
15	**4242-44**	S. 35th	Style B	Y	75	100	25	2043	$ 5,225.00	
15	**4246/48**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
15	**4250/52**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
15	**4254**	S. 35th	Style A		75	100	25	2043	$ 4,500.00	
15	**4256**	S. 35th	Style A		75	100	25	2043	$ 4,500.00	
15	**4258/60**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
15	**4262/64**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
15	**4266/68**	S. 35th	Style B	Y	75	100	25	2043	$ 5,225.00	
15	**4270**	S. 35th	Style C	Y	75	100	25	2043	$ 5,400.00	
15	**4272/74**	S. 35th	Style B	Y	75	100	25	2043	$ 5,225.00	
15	**4276/78**	S. 35th	Style B	Y	75	100	25	2043	$ 5,225.00	
15	**4280/82**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
15	**4284**	S. 35th	Style A		75	100	25	2043	$ 4,500.00	
16	**4300**	S. 35th	Style C	Y	75	100	25	2043	$ 5,400.00	
16	**4302**	S. 35th	Style A		75	100	25	2043	$ 4,500.00	
16	**4304**	S. 35th	Style A		75	100	25	2043	$ 4,500.00	
16	**4310/12**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	
16	**4314/16**	S. 35th	Style B	Y	75	100	25	2043	$ 5,225.00	
16	**4318/20**	S. 35th	Style D	Y	75	100	25	2043	$ 6,200.00	

Totals 181

TOTALS/AVERAGES

Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$
75	**100**	**25**	**2043**	**$975,100.00**

Appendix A16 - Supporting Estimate for Rear Canopy Replacement

Court	Address	Street	Number of Rear Canopies	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$	2018 Comments
1	3501	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3503	S. Stafford	1	75	85	10	2028	$ 1,200.00	
1	3507 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3509 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3511	S. Stafford	1	75	85	10	2028	$ 1,200.00	
1	3513 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3515 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3517 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3519 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3521	S. Stafford	1	75	85	10	2028	$ 1,200.00	
1	3523 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3525 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3527 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
1	3529 A / B	S. Stafford	2	75	85	10	2028	$ 2,400.00	
2	3535 A / B	S. Stafford	2	75	84	9	2027	$ 2,400.00	
2	3537	S. Stafford	2	75	84	9	2027	$ 2,400.00	
2	3539 A / B	S. Stafford	2	75	84	9	2027	$ 2,400.00	
2	3541	S. Stafford	1	75	84	9	2027	$ 1,200.00	
2	3543 A / B	S. Stafford	2	75	84	9	2027	$ 2,400.00	
2	3545	S. Stafford	2	75	84	9	2027	$ 2,400.00	
2	3547 A	S. Stafford	1	75	84	9	2027	$ 1,200.00	
2	3547 B	S. Stafford	1	2	100	98	2116	$ 1,200.00	
2	3549 A / B	S. Stafford	2	75	84	9	2027	$ 2,400.00	
2	3551	S. Stafford	2	75	84	9	2027	$ 2,400.00	
2	3553 A / B	S. Stafford	2	75	84	9	2027	$ 2,400.00	
2	3555	S. Stafford	1	75	84	9	2027	$ 1,200.00	
3	3561	S. Stafford	1	75	83	8	2026	$ 1,200.00	
3	3563	S. Stafford	2	75	83	8	2026	$ 2,400.00	
3	3565 A / B	S. Stafford	2	75	83	8	2026	$ 2,400.00	
3	3567	S. Stafford	1	75	83	8	2026	$ 1,200.00	
3	3569 A / B	S. Stafford	2	75	83	8	2026	$ 2,400.00	
3	3571	S. Stafford	2	75	83	8	2026	$ 2,400.00	
3	3573 A / B	S. Stafford	2	75	83	8	2026	$ 2,400.00	
3	3575 A / B	S. Stafford	2	75	83	8	2026	$ 2,400.00	
3	3577 A / B	S. Stafford	2	75	83	8	2026	$ 2,400.00	
3	3579	S. Stafford	1	75	83	8	2026	$ 1,200.00	
3	3581	S. Stafford	2	75	83	8	2026	$ 2,400.00	
3	3583	S. Stafford	1	75	83	8	2026	$ 1,200.00	
3	3585	S. Stafford	1	75	83	8	2026	$ 1,200.00	
4	4101	S. 36th	1	75	82	7	2025	$ 1,200.00	
4	4103	S. 36th	1	75	82	7	2025	$ 1,200.00	
4	4105 / 07	S. 36th	2	75	82	7	2025	$ 2,400.00	
4	4109 / 11	S. 36th	2	75	82	7	2025	$ 2,400.00	
4	4113	S. 36th	1	75	82	7	2025	$ 1,200.00	
4	4115 / 17	S. 36th	2	75	82	7	2025	$ 2,400.00	
4	4119	S. 36th	1	75	82	7	2025	$ 1,200.00	
4	4121	S. 36th	1	75	82	7	2025	$ 1,200.00	
4	4123	S. 36th	2	75	82	7	2025	$ 2,400.00	
4	4125	S. 36th	1	75	82	7	2025	$ 1,200.00	
4	4127 / 29	S. 36th	2	75	82	7	2025	$ 2,400.00	
4	4131 / 33	S. 36th	2	75	82	7	2025	$ 2,400.00	
4	4135	S. 36th	1	75	82	7	2025	$ 1,200.00	
4	4137	S. 36th	1	75	82	7	2025	$ 1,200.00	
4	4139	S. 36th	1	75	82	7	2025	$ 1,200.00	

Appendix A16 - Supporting Estimate for Rear Canopy Replacement

Court	Address	Street	Number of Rear Canopies	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$	2018 Comments
5	4100	S. 36th	1	75	81	6	2024	$ 1,200.00	
5	4102	S. 36th	1	75	81	6	2024	$ 1,200.00	
5	4104 / 06	S. 36th	2	75	81	6	2024	$ 2,400.00	
5	4108 / 10	S. 36th	2	75	81	6	2024	$ 2,400.00	
5	4112 / 14	S. 36th	2	75	81	6	2024	$ 2,400.00	
5	4116	S. 36th	1	75	81	6	2024	$ 1,200.00	
5	4118	S. 36th	2	75	81	6	2024	$ 2,400.00	
5	4122 / 24	S. 36th	2	75	81	6	2024	$ 2,400.00	
5	4126 / 28	S. 36th	2	75	81	6	2024	$ 2,400.00	
6	4130	S. 36th	1	2	100	98	2116	$ 1,200.00	
6	4132	S. 36th	1	2	100	98	2116	$ 1,200.00	
6	4134	S. 36th	1	75	80	5	2023	$ 1,200.00	
6	4136 / 38	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4140 / 42	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4144	S. 36th	1	75	80	5	2023	$ 1,200.00	
6	4146 / 48	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4150 / 52	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4154 / 56	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4158 / 60	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4162 / 64	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4166	S. 36th	1	75	80	5	2023	$ 1,200.00	
6	4168 / 70	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4172 / 74	S. 36th	2	75	80	5	2023	$ 2,400.00	
6	4176	S. 36th	1	75	80	5	2023	$ 1,200.00	
7	4200 / 02	S. 36th	2	75	86	11	2029	$ 2,400.00	
7	4204	S. 36th	2	75	86	11	2029	$ 2,400.00	
7	4206 / 08	S. 36th	2	75	86	11	2029	$ 2,400.00	
7	4210	S. 36th	2	75	86	11	2029	$ 2,400.00	
7	4212	S. 36th	2	75	86	11	2029	$ 2,400.00	
8	3601 / 03	S. Taylor	2	75	86	11	2029	$ 2,400.00	
8	3605 / 07	S. Taylor	2	75	86	11	2029	$ 2,400.00	
8	3609	S. Taylor	1	75	86	11	2029	$ 1,200.00	
8	3611	S. Taylor	2	75	86	11	2029	$ 2,400.00	
8	3613	S. Taylor	1	75	86	11	2029	$ 1,200.00	
8	3615 / 17	S. Taylor	2	75	86	11	2029	$ 2,400.00	
8	3619 / 21	S. Taylor	2	75	86	11	2029	$ 2,400.00	
8	3623 / 25	S. Taylor	2	75	86	11	2029	$ 2,400.00	
9	3513 / 15	S. Utah	2	75	87	12	2030	$ 2,400.00	
9	3517 / 19	S. Utah	2	75	87	12	2030	$ 2,400.00	
9	3521 / 23	S. Utah	2	75	87	12	2030	$ 2,400.00	
9	3525 / 27	S. Utah	2	75	87	12	2030	$ 2,400.00	
9	3529	S. Utah	2	75	87	12	2030	$ 2,400.00	
9	3531 / 33	S. Utah	2	75	87	12	2030	$ 2,400.00	
9	3535	S. Utah	1	75	87	12	2030	$ 1,200.00	
9	3537 / 39	S. Utah	2	75	87	12	2030	$ 2,400.00	
9	3541 / 43	S. Utah	2	75	87	12	2030	$ 2,400.00	
9	3545	S. Utah	1	75	87	12	2030	$ 1,200.00	
9	3547	S. Utah	1	75	87	12	2030	$ 1,200.00	
9	3549	S. Utah	1	75	87	12	2030	$ 1,200.00	

Appendix A16 - Supporting Estimate for Rear Canopy Replacement

Court	Address	Street	Number of Rear Canopies	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$	2018 Comments
10	**4301**	S. 36th	1	75	88	13	2031	$ 1,200.00	
10	**4303 / 05**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4307 / 09**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4311**	S. 36th	1	75	88	13	2031	$ 1,200.00	
10	**4313 / 15**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4317**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4319 / 21**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4323**	S. 36th	1	75	88	13	2031	$ 1,200.00	
10	**4325 / 27**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4329 / 31**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4333 / 35**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4337 / 39**	S. 36th	2	75	88	13	2031	$ 2,400.00	
10	**4341 / 43**	S. 36th	2	75	88	13	2031	$ 2,400.00	
11	**4201**	S. 36th	1	75	89	14	2032	$ 1,200.00	
11	**4203 / 05**	S. 36th	2	75	89	14	2032	$ 2,400.00	
11	**4207 / 09**	S. 36th	2	75	89	14	2032	$ 2,400.00	
11	**4215**	S. 36th	1	75	89	14	2032	$ 1,200.00	
11	**4217 / 19**	S. 36th	2	75	89	14	2032	$ 2,400.00	
11	**4221 / 23**	S. 36th	2	75	89	14	2032	$ 2,400.00	
11	**4227 / 29**	S. 36th	2	75	89	14	2032	$ 2,400.00	
11	**4231 / 33**	S. 36th	2	75	89	14	2032	$ 2,400.00	
11	**4235 / 37**	S. 36th	2	75	89	14	2032	$ 2,400.00	
11	**3588 / 90**	S. Stafford	2	75	89	14	2032	$ 2,400.00	
11	**3592 / 94**	S. Stafford	2	75	89	14	2032	$ 2,400.00	
11	**3596 / 98**	S. Stafford	2	75	89	14	2032	$ 2,400.00	
12	**3548**	S. Stafford	1	75	90	15	2033	$ 1,200.00	
12	**3550 / 52**	S. Stafford	2	75	90	15	2033	$ 2,400.00	
12	**3554 / 56**	S. Stafford	2	75	90	15	2033	$ 2,400.00	
12	**3558**	S. Stafford	1	75	90	15	2033	$ 1,200.00	
12	**3560**	S. Stafford	1	75	90	15	2033	$ 1,200.00	
12	**3562**	S. Stafford	1	75	90	15	2033	$ 1,200.00	
12	**3564**	S. Stafford	1	75	90	15	2033	$ 1,200.00	
12	**3566 / 68**	S. Stafford	2	75	90	15	2033	$ 2,400.00	
12	**3570**	S. Stafford	2	75	90	15	2033	$ 2,400.00	
12	**3572 / 74**	S. Stafford	2	75	90	15	2033	$ 2,400.00	
12	**3576**	S. Stafford	1	75	90	15	2033	$ 1,200.00	
12	**3578 / 80**	S. Stafford	2	75	90	15	2033	$ 2,400.00	
12	**3582 / 84**	S. Stafford	2	75	90	15	2033	$ 2,400.00	
13	**3512 / 14**	S. Stafford	2	75	85	10	2028	$ 2,400.00	
13	**3516 / 18**	S. Stafford	2	75	85	10	2028	$ 2,400.00	
13	**3520**	S. Stafford	2	75	85	10	2028	$ 2,400.00	
13	**3522**	S. Stafford	1	75	85	10	2028	$ 1,200.00	
13	**3524**	S. Stafford	1	75	85	10	2028	$ 1,200.00	
13	**3526 / 28**	S. Stafford	2	75	85	10	2028	$ 2,400.00	
13	**3530 / 32**	S. Stafford	2	75	85	10	2028	$ 2,400.00	
13	**3534**	S. Stafford	1	75	85	10	2028	$ 1,200.00	
13	**3536**	S. Stafford	2	75	85	10	2028	$ 2,400.00	
13	**3538 / 40**	S. Stafford	2	75	85	10	2028	$ 2,400.00	
13	**3542 / 44**	S. Stafford	2	75	85	10	2028	$ 2,400.00	

Appendix A16 - Supporting Estimate for Rear Canopy Replacement

Court	Address	Street	Number of Rear Canopies	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$	2018 Comments
14	**3500**	S. Stafford	1	75	89	14	2032	$ 1,200.00	
14	**4202**	S. 35th	1	75	89	14	2032	$ 1,200.00	
14	**4204 / 06**	S. 35th	2	75	89	14	2032	$ 2,400.00	
14	**4208 / 10**	S. 35th	2	75	89	14	2032	$ 2,400.00	
14	**4216**	S. 35th	2	75	89	14	2032	$ 2,400.00	
14	**4218**	S. 35th	2	75	89	14	2032	$ 2,400.00	
15	**4226 / 28**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4230 / 32**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4234**	S. 35th	1	75	81	6	2024	$ 1,200.00	
15	**4236 / 38**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4240**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4242 / 44**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4246 / 48**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4250 / 52**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4254**	S. 35th	1	75	81	6	2024	$ 1,200.00	
15	**4256**	S. 35th	1	75	81	6	2024	$ 1,200.00	
15	**4258 / 60**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4262 / 64**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4266 / 68**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4270**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4272 / 74**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4276 / 78**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4280 / 82**	S. 35th	2	75	81	6	2024	$ 2,400.00	
15	**4284**	S. 35th	1	75	81	6	2024	$ 1,200.00	
16	**4300**	S. 35th	2	75	83	8	2026	$ 2,400.00	
16	**4302**	S. 35th	1	75	83	8	2026	$ 1,200.00	
16	**4304**	S. 35th	1	75	83	8	2026	$ 1,200.00	
16	**4310 / 12**	S. 35th	2	75	83	8	2026	$ 2,400.00	
16	**4314 / 16**	S. 35th	2	75	83	8	2026	$ 2,400.00	
16	**4318 / 20**	S. 35th	2	75	83	8	2026	$ 2,400.00	

Totals 182

TOTALS/AVERAGES

Number of Rear Canopies	Approx. Age (yrs)	Estimated Useful Life (yrs)	Determ. Remaining Useful Life	Antic. Rebuild Year	Estimated Replacement Cost in 2018$
306	**74**	**85**	**11**	**2029**	**$367,200.00**

Appendix B

Fairlington Glen Condominium
2018 Replacement Reserve Study

Multi-Year Expenditure Table

(3 pages)

Appendix B - Multi-year Reserve Expenditures Table

Section	Component	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
1.0	**Hardscape**																					
1.1	**Asphalt Pavement**																					
1.1.1	Replace asphalt in parking lots	$0	$0	$0	$58,163	$50,738	$69,300	$62,700	$80,025	$40,013	$68,681	$60,844	$70,125	$60,225	$63,113	$75,653	$40,013	$0	$68,063	$0	$0	$0
1.1.2	Maintain asphalt in parking lots annually	$8,459	$7,834	$0	$9,697	$7,834	$0	$9,697	$7,834	$0	$8,500	$0	$0	$17,531	$0	$0	$17,531	$0	$0	$17,531	$0	$0
1.2	**Concrete**																					
1.2.1	Sidewalk Replacement (Removed from Study)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1.2.2	Curb and Gutter Replacement (see "Curb/Gutter" tab)	$0	$0	$0	$13,088	$11,520	$12,960	$12,864	$14,592	$10,240	$13,184	$11,712	$15,840	$12,448	$12,864	$15,904	$14,976	$0	$13,216	$0	$0	$0
1.2.3	Concrete Alleys	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2.0	**Utilities**																					
2.1	**Sanitary Sewers (see "Sewers" Tab)**																					
2.1.1	Relining - Terra Cotta (outside building footprint)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2.1.2	Relining/Replacement - Cast Iron (inside footprint)	$0	$0	$0	$42,761	$0	$0	$0	$0	$52,260	$0	$15,423	$17,745	$0	$78,474	$0	$0	$0	$0	$50,700	$0	$0
2.1.3	Sewer cleanouts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2.1.4	Sewer manholes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$55,800	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2.2	**Storm Drainage (see "Storm" Tab)**																					
2.2.1	Storm drain piping	$0	$0	$0	$0	$8,160	$0	$0	$0	$0	$0	$0	$0	$0	$0	$900	$0	$0	$1,500	$0	$0	$0
2.2.2	Storm drainage structures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,200	$0	$0	$0	$0	$4,954	$1,500	$0	$3,037	$0	$3,200	$0
3.0	**Miscellaneous Site Features**																					
3.1	**Signage**																					
3.1.1	Replace Site Signage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$19,400	$0
3.2	**Fencing (see "Fencing" Tab for lineal footage of fencing with unit cost information)**																					
3.2.1	Replace Treated Wood Patio Fencing	$0	$0	$0	$0	$0	$0	$0	$0	$427,744	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.2.2	Replace Split-Rail Fence at Ct. 4	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.2.3	Perimeter Fence	$0	$69,868	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.2.4	Replace Pool Perimeter Fence	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$43,551	$0	$0	$0	$0	$0	$0
3.2.5	Replace Pool Tennis Court Fence	$0	$0	$0	$0	$0	$0	$14,820	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.2.6	Replace Triple Tennis Court Fence	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.2.7	Replace Pickle Ball Court Fence	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.2.8	Replace Short Basketball Court Fence	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.3	**Handrails (see "Fencing" Tab for takeoff)**																					
3.3.1	Replace Wrought Iron Handrails	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,527	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.4	**Exterior Lighting (see "Outdoor Lighting" tab)**																					
3.4.1	Replace Carriage Lt Poles, Mountings & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.4.2	Replace Carriage Light Pole Circuits/Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.4.3	Replace Pole Lights at Swimming Pool	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3.4.4	Replace Ceiling Fixtures at Entry to B-Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,450	$0	$0	$0	$0	$0	$0

Appendix B - Multi-year Reserve Expenditures Table

Section	Component	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
4.0	**Recreational Features**																					
4.1	**Swimming Pool (see "Pools Revised" Tab)**																					
4.1.1	**Main Swimming Pool**																					
4.1.1.1	Whitecoat "Plaster"	$0	$13,800	$0	$0	$0	$0	$0	$0	$13,800	$0	$0	$0	$0	$0	$0	$13,800	$0	$0	$0	$0	$0
4.1.1.2	Coping Stone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.1.3	Perimeter Tile	$0	$0	$0	$0	$0	$0	$0	$0	$11,300	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.1.4	Transition Tile	$0	$0	$0	$0	$0	$0	$0	$0	$2,700	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.1.5	Main Pool Cover	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,100	$0	$0	$0	$0	$0	$0	$0	$0
4.1.1.6	Main Pool Beam/Structure Repair	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$25,000	$0	$0	$0	$0	$0	$0
4.1.1.7	Main Pool Structure Replacement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.2	**Main Swimming Pool Equipment**																					
4.1.2.1	Main Pool Skimmers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$13,500	$0	$0	$0	$0	$0	$0	$0	$0
4.1.2.2	Main Pool Filters (Cartridge Style)	$0	$0	$0	$0	$0	$0	$12,800	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,800	$0	$0
4.1.2.3	Main Pool Pump (Heavy Duty-Brass)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,000	$0
4.1.3	**Wading "Baby" Pool**																					
4.1.3.1	Whitecoat "Plaster"	$0	$3,700	$0	$0	$0	$0	$0	$0	$3,700	$0	$0	$0	$0	$0	$0	$3,700	$0	$0	$0	$0	$0
4.1.3.2	Coping Stone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.3.3	Perimeter Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,100	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.3.4	Baby Pool Cover	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,300	$0	$0	$0	$0	$0	$0	$0	$0
4.1.4	**Wading "Baby" Pool Equipment**																					
4.1.4.1	Wading Pool Skimmers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,500	$0	$0	$0	$0	$0	$0
4.1.4.2	Wading Pool Filter (Cartridge Style)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.1.3	Wading Pool Pump (Plastic)	$0	$0	$0	$0	$0	$0	$1,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,500	$0	$0
4.1.5	**Pool Deck**																					
4.1.5.1	Repair Pool Deck (7.5%)	$0	$0	$0	$0	$15,500	$0	$0	$0	$0	$15,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.5.2	Replace Pool Deck	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.6	**Pool Accessories/Furniture**																					
4.1.6.1	Replace Lifeguard Chairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,000	$0	$0	$0	$0	$0	$0
4.1.6.2	Replace Large Canvas Awning	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.6.3	Replace Small Canvas Awning	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.1.6.4	Replace Pool Furniture	$0	$0	$10,000	$0	$0	$0	$0	$0	$0	$0	$10,000	$0	$0	$0	$0	$0	$0	$0	$10,000	$0	$0
4.2	**Courts**																					
4.2.1	Reapply Color Coat At Pool Tennis Court	$0	$0	$10,000	$0	$0	$0	$0	$10,000	$0	$0	$0	$0	$10,000	$0	$0	$0	$0	$0	$0	$0	$0
4.2.2	Renovate/Reconstruct Pool Tennis Court	$0	$0	$0	$0	$0	$0	$0	$42,905	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.2.3	Reapply Color Coat At Triple Tennis Courts	$0	$0	$0	$20,422	$0	$0	$0	$0	$20,422	$0	$0	$0	$0	$20,422	$0	$0	$0	$0	$0	$0	$0
4.2.4	Renovate/Reconstruct Triple Tennis Courts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$100,287	$0	$0	$0	$0	$0	$0	$0	$0
4.2.5	Reapply Color Coat at Basketball Court	$0	$0	$0	$4,815	$0	$0	$0	$0	$4,815	$0	$0	$0	$0	$4,815	$0	$0	$0	$0	$0	$0	$0
4.2.6	Renovate/Reconstuct Basketball Court	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$30,000	$0
4.3	**Tot Lot**																					
4.3.1	Replace Tot Lot Playground Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4.3.3	Replenish Tot Lot Pea Gravel	$0	$0	$3,700	$0	$0	$0	$3,700	$0	$0	$0	$3,700	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

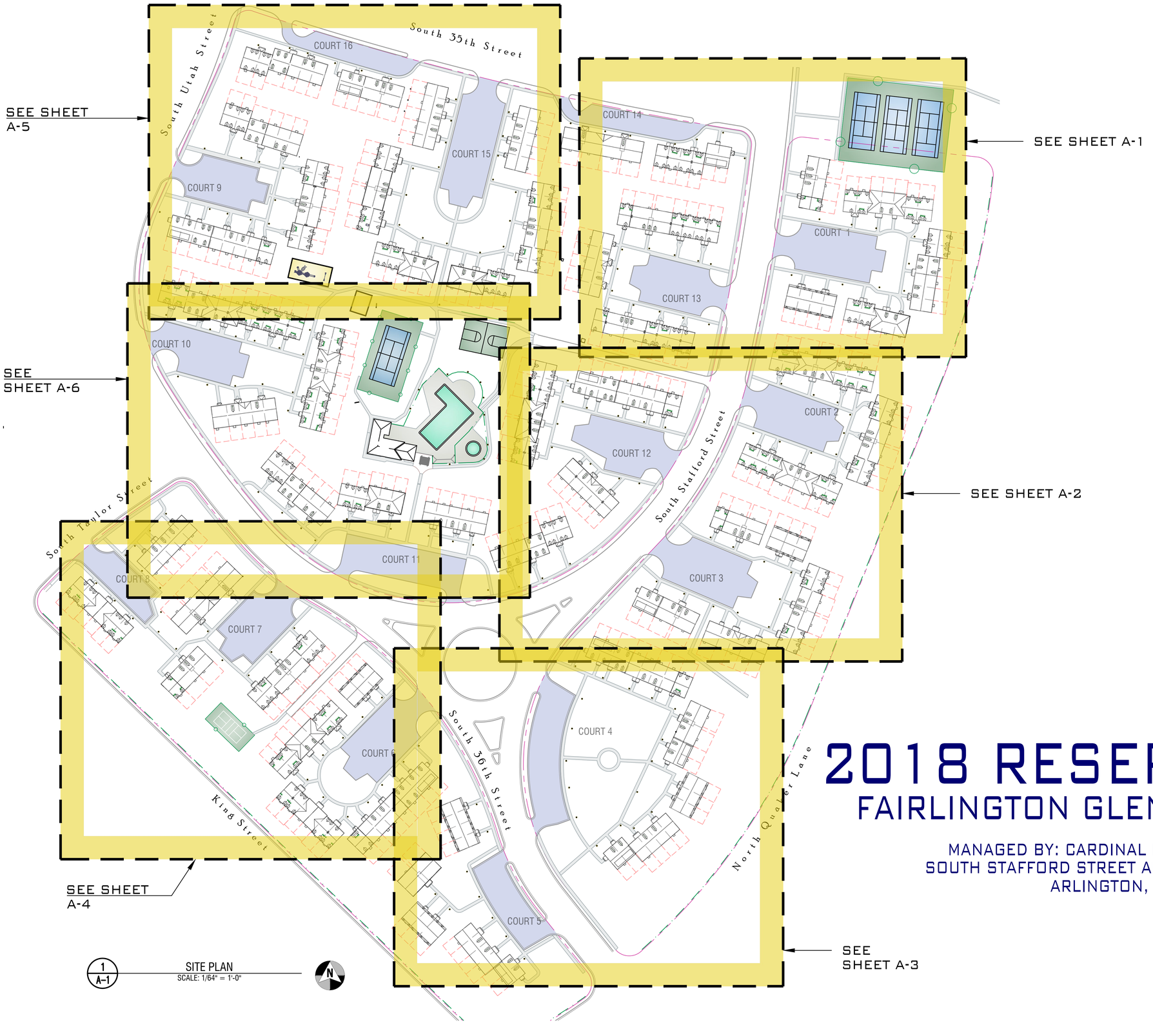
Appendix B - Multi-year Reserve Expenditures Table

Section	Component	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
5.0	**Building Exteriors**																					
5.1	**Roofs (see "Roofing" tab)**																					
5.1.1	Slate Roofing Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.2	**Dormers (see "Dormers" tab)**																					
5.2.1	Gable Dormers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.3	**Chimneys (see "Chimneys" tab)**																					
5.3.1	Chimney Brick Masonry Maint./Repointing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.3.2	Chimney Caps (Copper)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.3.3	Chimney Screens	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.4	**Façade**																					
5.4.1	Masonry Veneer Maintenance/Repointing	$0	$0	$0	$150,000	$0	$0	$0	$0	$165,000	$0	$0	$0	$0	$181,500	$0	$0	$0	$0	$199,650	$0	$0
5.4.2	Replace Shutters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$74,306	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.4.3	Replace B-Unit Doors (see "B-Units" Tab)	$0	$0	$0	$0	$34,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.4.4	Replace B-Unit Common Windows (see "B-Units" Tab)	$0	$28,750	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.5	**Entrances**																					
5.5.1	Masonry Stoops (see "Stoops" Tab)	$71,300	$0	$0	$0	$33,500	$0	$0	$0	$0	$231,720	$0	$0	$9,540	$0	$0	$0	$0	$95,040	$0	$527,800	$0
5.5.2	Porticos at Main Entrances (see "Porticos" Tab)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5.5.3	Canopies at Rear Entrances (see "Rear Canopies")	$0	$0	$0	$0	$26,400	$56,400	$25,200	$37,200	$22,800	$52,800	$28,800	$24,000	$27,600	$38,400	$24,000	$0	$0	$0	$0	$0	$0
6.0	**Building Interiors & Services**																					
6.1	**Interiors**																					
6.1.1	Replace B-Unit Interior Finishes	$0	$0	$0	$0	$57,592	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$57,592	$0	$0	$0	$0
6.1.2	Replace B-Unit Mailboxes (see "B-Units" Tab)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6.1.3	Refurbish Maintenance Office & Bathhouses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6.2	**Tools/Equipment**																					
6.2.1	Replace B-unit Carpet Cleaner	$0	$0	$0	$0	$0	$0	$2,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,500	$0	$0
6.2.2	Replace Tractor + Accessories	$0	$0	$5,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,000
6.2.3	Replace Snow Blower	$0	$0	$0	$0	$1,700	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,700	$0	$0	$0
6.2.4	Replace Pipe Camera & Locator	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,000	$0	$0	$0	$0
6.2.5	Replace Pool/Maintenance HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,500	$0	$0	$0	$0	$0	$0	$0	$0
6.2.6	Replace Miscellaneous Equipment	$0	$0	$0	$0	$7,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$7,000	$0	$0	$0	$0	$0	$0
6.3	**Services**																					
6.2.1	Replacement Reserve Study	$0	$0	$0	$0	$10,000	$0	$0	$0	$0	$10,000	$0	$0	$0	$0	$10,000	$0	$0	$0	$0	$10,000	$0
	TOTAL PER YEAR	**$79,759**	**$123,952**	**$28,700**	**$298,946**	**$247,443**	**$138,660**	**$145,781**	**$192,555**	**$774,793**	**$536,513**	**$130,478**	**$202,016**	**$261,530**	**$399,588**	**$199,911**	**$91,519**	**$61,592**	**$182,555**	**$294,681**	**$590,400**	**$5,000**
		2019	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**

Appendix C

Fairlington Glen Condominium
2018 Replacement Reserve Study

Plat Drawings
(7 Sheets)



1 A-1 SITE PLAN
SCALE: 1/64" = 1'-0"

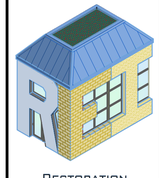
SHEET INDEX

2018 RESERVE STUDY
FAIRLINGTON GLEN CONDOMINIUM

MANAGED BY: CARDINAL MANAGEMENT GROUP
SOUTH STAFFORD STREET AND SOUTH 36TH STREET
ARLINGTON, VIRGINIA

#	DATE	SUBMISSION DESCRIPTION
1	1/31/19	PRELIMINARY DRAFT
2	5/23/19	MAY 2019 UPDATE
3	6/17/19	FINAL

2018 RESERVE STUDY
FAIRLINGTON GLEN CONDOMINIUM
CARDINAL MANAGEMENT, INC.
SOUTH STAFFORD ST. & SOUTH 36TH ST.
ARLINGTON, VA



RESTORATION ENGINEERING, INC.
10503 West Drive, Suite A
Fairfax, VA 22030

DRAWING TITLE: COVER SHEET
DATE: 6/17/19 | SUBMISSION: FINAL
DRAWN BY: GBG | CHECKED: | SCALE: 1" = 100'
KEY PROJECT NUMBER | CAD FILE:

C-0V

COURT 14

COURT 14
ASPHALT PAVEMENT
(4,900 SF)

12" TERRA COTTA
STORM LATERAL
(RELINE - 20??)

SAN SEW14-2 75LF
TC RELINED-2007 / (2057)

W14-2 (39')

W14-1 (40')

TO ACM

WM

SMH

SWMH

CB-CI

CH14-4

CH14-1

CH14-2

CH14-3

CH14-5

CH14-6

CH14-7

XCO

4218 A2/B2

4218 A1/B1

4216 A2/B2

4216 A1/B1

2010
VRMT GREEN
4,000sf
(2110)

2014
VRMT GRN
1,500 sf
(2114)

4210

4208

4206

4204

4202

3500

2004
VRMT GREEN
1,500sf
(2104)

1996
VRMT GREEN
1,000sf
(2096)

SAN SEW14-1 22LF
PVC REPLACED-2002 / (2052)

SAN SEW13-1 150LF
PVC REPLACED-2002 / (2052)

CB-YI

SHALLOW
POLYETHYLENE
CATCH BASIN, TYP.
-2013 (2033)

PVC S&D STORM
LATERAL - 2013
(2043)

CH13-4

CH13-3

CH13-2

CH13-1

CH13-5

CH13-6

CH13-7

CH13-8

CH13-9

CH13-10

2018 (REAR)
VRMT GRN
2,800sf
(2118)

3522

3520 A1/B1

3520 A2/B2

3518

3516

3514

3512

1995 (FRONT)
VRMT GREEN
2,800sf
(2095)

2010
VRMT GREEN
4,000sf
(2110)

3524

3526

3528

3530

3532

STOOPS to be Repaired
(2019)

COURT 13
ASPHALT PAVEMENT
(7,300 SF)

SAN SEW13-2 185LF
TC RELINED-2002 / (2052)

W13-1 (150')

W13-2 (175')

W13-3 (142')

STOOP to be REBUILT
(2019)

COURT 13

2018 (FRONT)
VRMT GRN
3,500sf
(2118)

3534

3536 A2/B2

3536 A1/B1

3538

3540

3542

3544

1998 (REAR)
VRMT GRN
3,500sf
(2098)

ED WATER
IGINAL
USE

STOOP to be REBUILT
(2019)

MASONRY STOOP
REBUILT - 2006

SAN SEW13-3 140LF
PVC REPLACED-2000 / (2050)

ORIGINAL
BUCKINGHAM
7,000sf

CH12-1

CH12-2

3562

3560

3558

TRIPLE TENNIS COURT
FENCING - REPLACED IN
2011 (2041)

TRIPLE TENNIS COURTS
RECONSTRUCTED &
RESURFACED IN 2011 (2031)

W1-1 (42')

SAN SEW 1-1 43LF
TC RELINED-2009 / (2059)

3501-A1/B1

3501-A2/B2

3503

CH1-1

CH1-2

2010
VRMT GRN
3,200sf
(2110)

MASONRY STOOP
REBUILT - 2006

CH1-3

CH1-4

ORIGINAL
VRMT GRN
4,800sf
(2043)

3507A

3507B

3509A

3509B

3511

3513A

3513B

COURT 1

COURT 1
ASPHALT PAVEMENT
(8,300 SF)

12" ARLINGTON COUNTY STORM SEWER LATERAL

ARLINGTON COUNTY SAN SEWER LATERAL

SAN SEW 1-2 68LF
TC RELINED-2008 / (2058)

W1-2 (210')

W1-3 (68')

W1-4 (38')

W1-5 (48')

W1-6 (39')

52LF (????)

SAN SEW 1-5
ORIGINAL

LINE COULD NOT BE RELINED
DUE TO OBSTRUCTION FROM
OLD STEAM PLANT DUCT BANK

SAN SEW 1-3 66LF
TC RELINED-2008 / (2056)

SAN SEW 1-4 68LF
TC RELINED-2008 / (2056)

CB-GI

3515A

3515B

3517A

3517B

3519A

3519B

2006
VRMT GRN
6,000sf
(2106)

CH1-6

CH1-7

CH1-8

STOOPS REBUILT
PHASE I (2017)

STOOP REBUILT
PHASE I (2017)

STOOP REBUILT
PHASE I (2017)

3529B

3529A

3527B

3527A

2005
VRMT GRN
4,000sf
(2105)

CH1-13

CH1-12

3525B

3525A

ORIGINAL
VRMT GRN
3,500sf
(2043)

3523B

3523A

3521

16'-8"

CH1-11

CH1-10

CH1-9

ORIGINAL CI LATERAL
REPLACED W/PVC - 2019
BY DWYER

FRENCH DRAIN & SERIES OF PE
CATCH BASINS AND PIPING
INSTALLED 2011/ 12 IN THIS AREA -
EXACT CONFIGURATION UNKNOWN

FRENCH DRAIN & SERIES OF PE
CATCH BASINS AND PIPING
INSTALLED NOV 2011 IN THIS AREA

CH2-1

CH2-2

CH2-3

CH2-4

3535A

3535B

3537 A1/B1

3537 A2/B2

2013
VRMT GRN
7,000sf
(2113)

3539A

3539B

3541

60LF (2059)

W2-1 (94')

1
A-1

COURTS 1, 13 & 14
SCALE: 1" = 20'-0"

N

LEGEND

GENERAL
PROPERTY LINE

BACKYARD FENCELINE

BUILDING OUTLINE

4310 ADDRESS

SIDEWALK

CURB AND GUTTER

EXISTING TREE (NOTE: NOT ALL TREES SHOWN)

SANITARY SEWER
ARLINGTON COUNTY MAIN

CAST IRON LATERAL

TERRA COTTA LATERAL

PVC LATERAL

SMH SANITARY MANHOLE

XCO EXTERIOR CLEANOUT

ICO INTERIOR CLEANOUT

STORM SEWER
ARLINGTON COUNTY MAIN

FG STORM LATERAL
(TYPE, AGE, REPL DATE)

FG STORM PIPING -
CORRUGATED POLYETHYLEN

STORM DRAIN CATCH BASIN
CB-CI - CURB INLET
CB-GI - GRADE INLET
CB-YI - YARD INLET
CB-PE - POLYETHYLENE

SWMH STORM WATER MANHOLE

WATER SUPPLY LINES
WATER MAIN

WM WATER METER

W2-1 (94') WATER LINE IDENTIFIER
(APPROX LGTH OF LINE)

ROOFING
EXTENT OF ROOF SECTION

2010
VRMT GREEN
4,000sf
(2110)

AGE OF ROOF
TYPE OF SLATE ROOFING
APPROX. SQUARE FOOTAGE
ANTICIPATED REPL DATE

ORIGINAL ROOFING
- BUCKINGHAM SLATE
- VERMONT SLATE

REPLACED ROOFING
- VERMONT GREEN SLATE (INSTALLED 1995-2010)
- VERMONT GREEN SLATE (INSTALLED SINCE 2011)

FENCING
WOODEN PRIVACY FENCE

WOODEN SPLIT RAIL FENCE

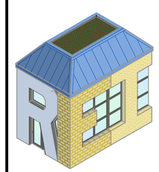
CHAIN LINK FENCING

ALUMINUM FENCING

#	DATE	SUBMISSION DESCRIPTION
1	1/31/19	PRELIMINARY DRAFT
2	5/23/19	MAY 2019 UPDATE
3	6/17/19	FINAL

2018 RESERVE STUDY
FAIRLINGTON GLEN CONDOMINIUM

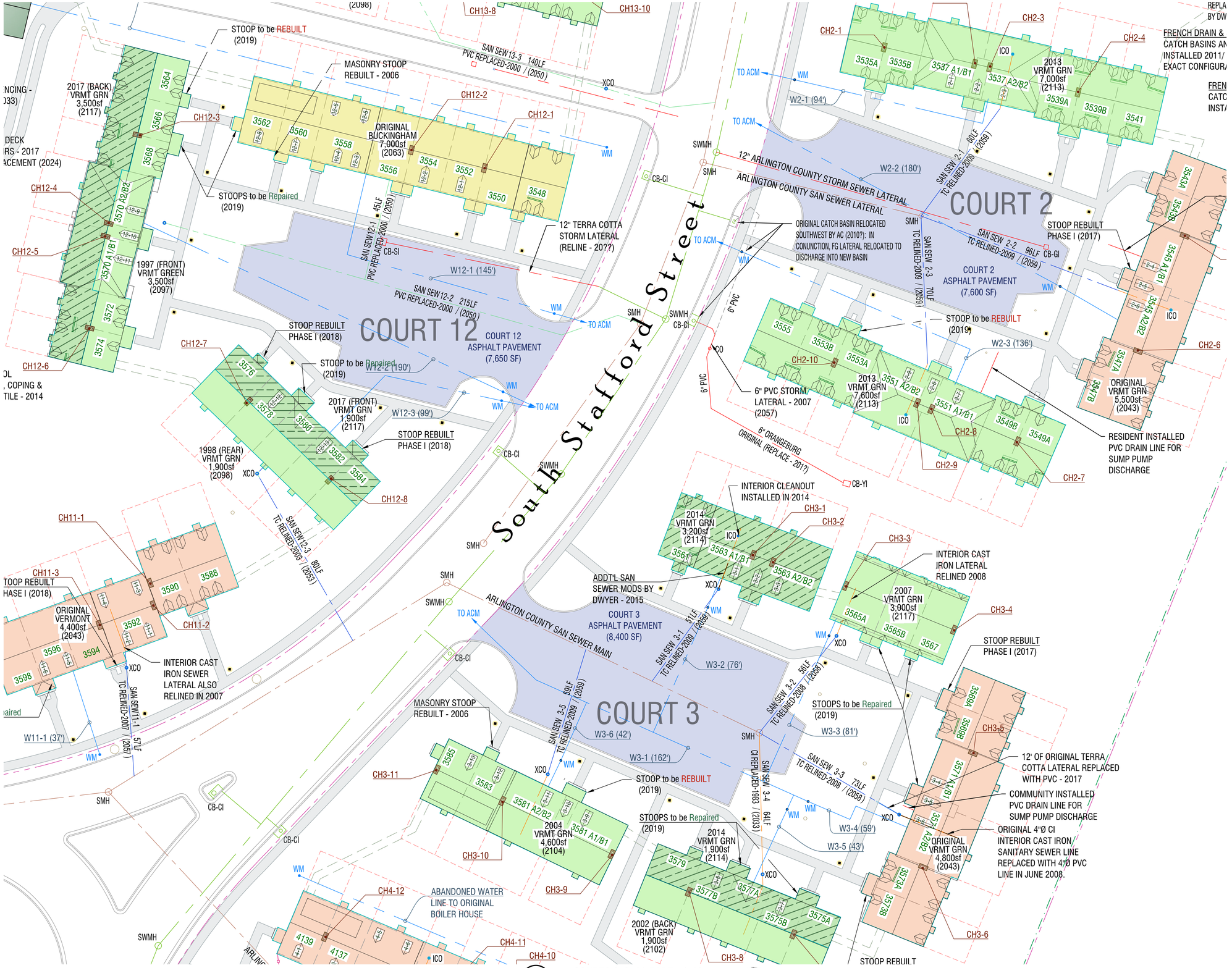
CARDINAL MANAGEMENT, INC.
SOUTH STAFFORD ST. & SOUTH 36TH ST.
ARLINGTON, VA



RESTORATION
ENGINEERING, INC.
10503 West Drive, Suite A
Fairfax, VA 22030

DRAWING TITLE: COURTS 1, 13 & 14
DATE: 6/17/19
SUBMISSION: FINAL
DRAWN BY: GBG
CHECKED:
SCALE: 1" = 20'
REF. PROJECT NUMBER:
CAD FILE:

A-1



LEGEND

- GENERAL PROPERTY LINE
- BACKYARD FENCELINE
- BUILDING OUTLINE
- 4310 ADDRESS
- SIDEWALK
- CURB AND GUTTER
- EXISTING TREE (NOTE: NOT ALL TREES SHOWN)
- SANITARY SEWER ARLINGTON COUNTY MAIN
- CAST IRON LATERAL
- TERRA COTTA LATERAL
- PVC LATERAL
- SMH SANITARY MANHOLE
- XCO EXTERIOR CLEANOUT
- ICO INTERIOR CLEANOUT
- STORM SEWER ARLINGTON COUNTY MAIN
- FG STORM LATERAL (TYPE, AGE, REPL DATE)
- FG STORM PIPING - CORRUGATED POLYETHYLEN
- CB-CI - CURB INLET
- CB-GI - GRADE INLET
- CB-YI - YARD INLET
- CB-PE - POLYETHYLENE
- STORM DRAIN CATCH BASIN
- SWMH STORM WATER MANHOLE
- WATER SUPPLY LINES WATER MAIN
- WATER METER
- WATER LINE IDENTIFIER (APPROX LGTH OF LINE)
- ROOFING EXTENT OF ROOF SECTION
- 2010 VRMT GREEN 4,000sf (2110) AGE OF ROOF TYPE OF SLATE ROOFING APPROX. SQUARE FOOTAGE ANTICIPATED REPL DATE
- ORIGINAL ROOFING - BUCKINGHAM SLATE
- ORIGINAL ROOFING - VERMONT SLATE
- REPLACED ROOFING - VERMONT GREEN SLATE (INSTALLED 1995-2010)
- REPLACED ROOFING - VERMONT GREEN SLATE (INSTALLED SINCE 2011)
- FENCING WOODEN PRIVACY FENCE
- WOODEN SPLIT RAIL FENCE
- CHAIN LINK FENCING
- ALUMINUM FENCING

#	DATE	SUBMISSION DESCRIPTION
1	1/31/19	PRELIMINARY DRAFT
2	5/23/19	MAY 2019 UPDATE
3	6/17/19	FINAL

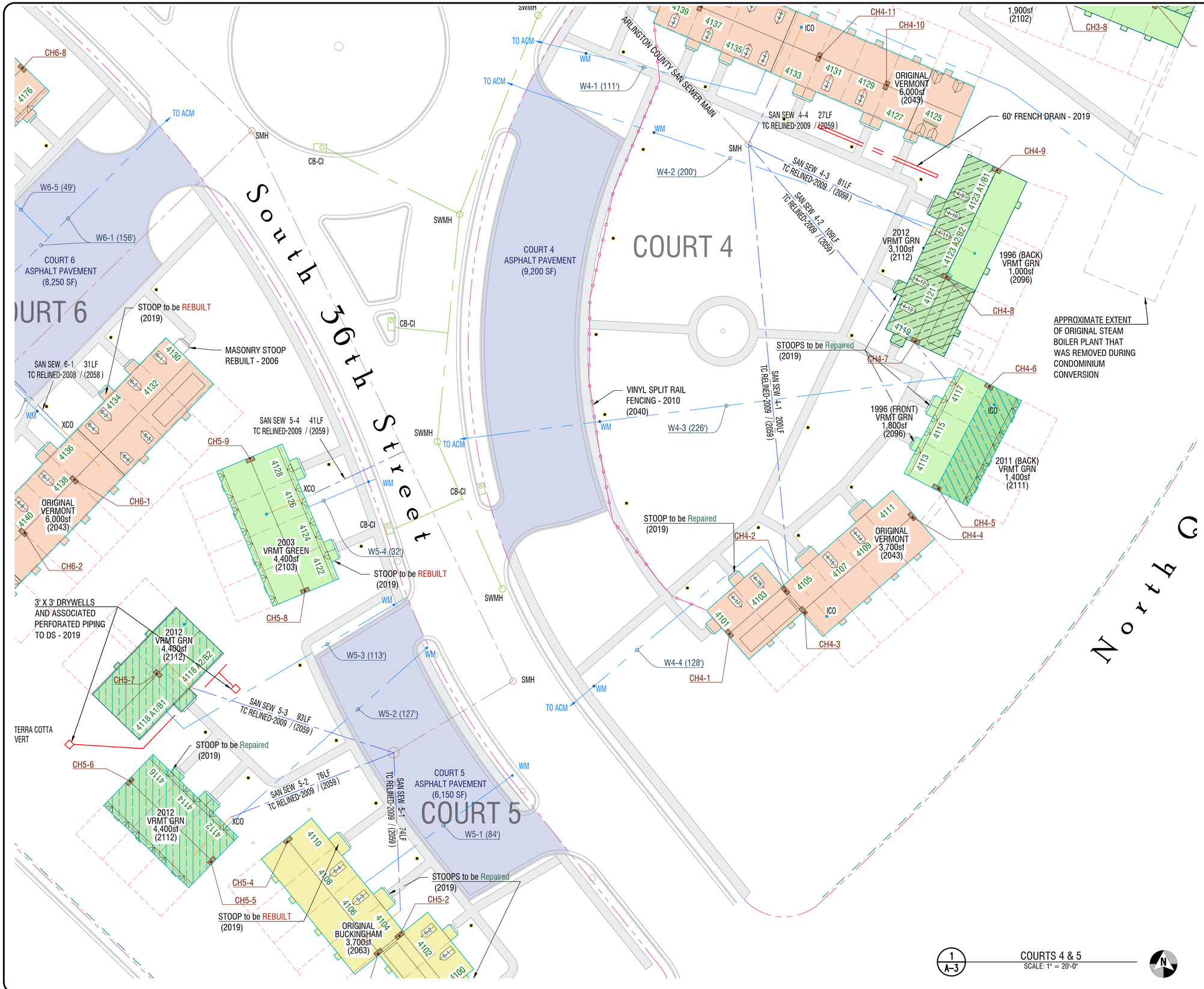
2018 RESERVE STUDY
FAIRLINGTON GLEN CONDOMINIUM

CARDINAL MANAGEMENT, INC.
SOUTH STAFFORD ST. & SOUTH 36TH ST.
ARLINGTON, VA

RESTORATION ENGINEERING, INC.
15503 WEST OAKS, SUITE A
FAIRFAX, VA 22030

DRAWING TITLE	COURTS 2, 3, 11(PT.) & 12
DATE	6/17/19
SUBMISSION	FINAL
DRAWN BY	GBG
CHECKED	
SCALE	1" = 20'
REF. PROJECT NUMBER	
CAD FILE	

A-2



LEGEND

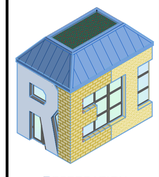
- GENERAL PROPERTY LINE
- BACKYARD FENCELINE
- BUILDING OUTLINE
- 4310 — ADDRESS
- SIDEWALK
- CURB AND GUTTER
- EXISTING TREE (NOTE: NOT ALL TREES SHOWN)
- SANITARY SEWER ARLINGTON COUNTY MAIN
- CAST IRON LATERAL
- TERRA COTTA LATERAL
- PVC LATERAL
- SMH — SANITARY MANHOLE
- XCO — EXTERIOR CLEANOUT
- ICO — INTERIOR CLEANOUT
- STORM SEWER ARLINGTON COUNTY MAIN
- FG STORM LATERAL (TYPE, AGE, REPL DATE)
- FG STORM PIPING - CORRUGATED POLYETHYLEN
- STORM DRAIN CATCH BASIN
  - CB-CI - CURB INLET
  - CB-GI - GRADE INLET
  - CB-YI - YARD INLET
  - CB-PE - POLYETHYLENE
- SWMH — STORM WATER MANHOLE
- WATER SUPPLY LINES WATER MAIN
- WATER METER
- WATER LINE IDENTIFIER (APPROX LGTH OF LINE)
- ROOFING EXTENT OF ROOF SECTION
- 2010 VRMT GREEN 4,000sf (2110) — AGE OF ROOF TYPE OF SLATE ROOFING APPROX. SQUARE FOOTAGE ANTICIPATED REPL DATE
- ORIGINAL ROOFING
  - BUCKINGHAM SLATE
  - VERMONT SLATE
- REPLACED ROOFING
  - VERMONT GREEN SLATE (INSTALLED 1995-2010)
  - VERMONT GREEN SLATE (INSTALLED SINCE 2011)
- FENCING WOODEN PRIVACY FENCE
- WOODEN SPLIT RAIL FENCE
- CHAIN LINK FENCING
- ALUMINUM FENCING

1 / A-3 COURTS 4 & 5
SCALE: 1" = 20'-0"

#	DATE	SUBMISSION DESCRIPTION
1	1/31/19	PRELIMINARY DRAFT
2	5/23/19	MAY 2019 UPDATE
3	6/17/19	FINAL

2018 RESERVE STUDY
FAIRLINGTON GLEN CONDOMINIUM

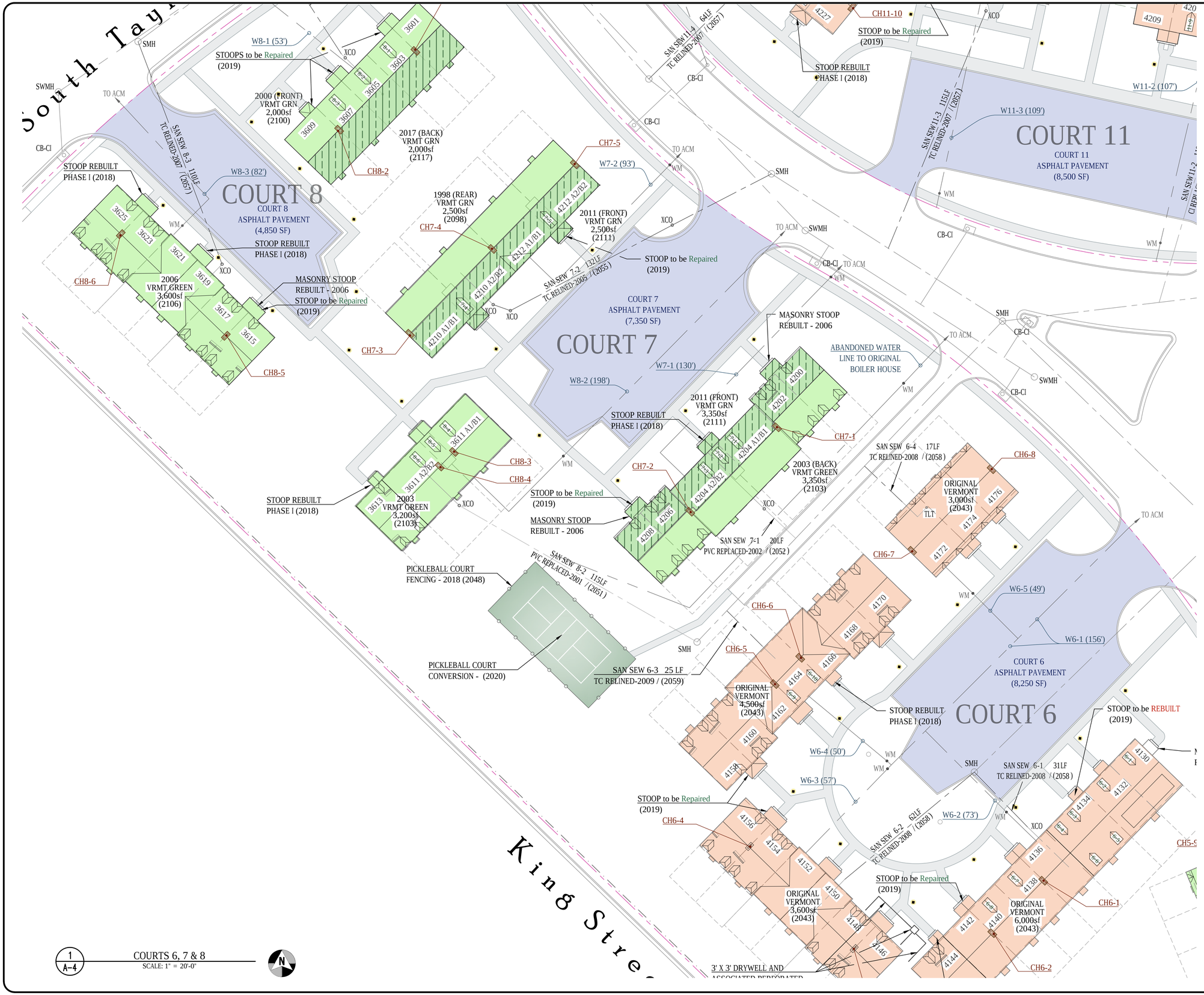
CARDINAL MANAGEMENT, INC.
SOUTH STAFFORD ST. & SOUTH 36TH ST.
ARLINGTON, VA



RESTORATION ENGINEERING, INC.
10503 WEST DRIVE, SUITE A
FAIRFAX, VA 22030

DRAWING TITLE: COURTS 4 & 5
DATE: 6/17/19
SUBMISSION: FINAL
DRAWN BY: GBG
CHECKED:
SCALE IN: 1" = 20'
KEY PROJECT NUMBER:
CAD FILE:

A-3



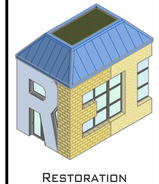
LEGEND

- GENERAL
  - PROPERTY LINE
  - BACKYARD FENCELINE
  - BUILDING OUTLINE
  - 4310 — ADDRESS
  - SIDEWALK
  - CURB AND GUTTER
  - EXISTING TREE (NOTE: NOT ALL TREES SHOWN)
- SANITARY SEWER
  - ARLINGTON COUNTY MAIN
  - CAST IRON LATERAL
  - TERRA COTTA LATERAL
  - PVC LATERAL
  - SMH — SANITARY MANHOLE
  - XCO — EXTERIOR CLEANOUT
  - ICO — INTERIOR CLEANOUT
- STORM SEWER
  - ARLINGTON COUNTY MAIN
  - FG STORM LATERAL (TYPE, AGE, REPL DATE)
  - FG STORM PIPING - CORRUGATED POLYETHYLEN
  - STORM DRAIN CATCH BASIN
    - CB-CI - CURB INLET
    - CB-GI - GRADE INLET
    - CB-YI - YARD INLET
    - CB-PE - POLYETHYLENE
  - SWMH — STORM WATER MANHOLE
- WATER SUPPLY LINES
  - WATER MAIN
  - WATER METER
  - WATER LINE IDENTIFIER (APPROX LGTH OF LINE)
- ROOFING
  - EXTENT OF ROOF SECTION
  - 2010 VRMT GREEN 4,000sf (2110) — AGE OF ROOF; TYPE OF SLATE ROOFING; APPROX. SQUARE FOOTAGE; ANTICIPATED REPL DATE
  - ORIGINAL ROOFING
    - BUCKINGHAM SLATE
    - VERMONT SLATE
  - REPLACED ROOFING
    - VERMONT GREEN SLATE (INSTALLED 1995-2010)
    - VERMONT GREEN SLATE (INSTALLED SINCE 2011)
- FENCING
  - WOODEN PRIVACY FENCE
  - WOODEN SPLIT RAIL FENCE
  - CHAIN LINK FENCING
  - ALUMINUM FENCING

#	DATE	SUBMISSION DESCRIPTION
1	1/31/19	PRELIMINARY DRAFT
2	5/23/19	MAY 2019 UPDATE
3	6/17/19	FINAL

2018 RESERVE STUDY
FAIRLINGTON GLEN CONDOMINIUM

CARDINAL MANAGEMENT, INC.
SOUTH STAFFORD ST. & SOUTH 36TH ST.
ARLINGTON, VA



RESTORATION ENGINEERING, INC.
10503 West Drive, Suite A
Fairfax, VA 22030

DRAWING TITLE: COURTS 4 & 5
DATE: 6/17/19 | SUBMISSION: FINAL
DRAWN BY: GBG | CHECKED: | SCALE: 1" = 20'
REF. PROJECT NUMBER: | CAD FILE:

A-4

5 OF 7

1 / A-4 — COURTS 6, 7 & 8
SCALE: 1" = 20'-0"

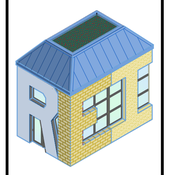
LEGEND

- GENERAL PROPERTY LINE
- BACKYARD FENCELINE
- BUILDING OUTLINE
- 4310 ADDRESS
- SIDEWALK
- CURB AND GUTTER
- EXISTING TREE (NOTE: NOT ALL TREES SHOWN)
- SANITARY SEWER ARLINGTON COUNTY MAIN
- CAST IRON LATERAL
- TERRA COTTA LATERAL
- PVC LATERAL
- SMH SANITARY MANHOLE
- XCO EXTERIOR CLEANOUT
- ICO INTERIOR CLEANOUT
- STORM SEWER ARLINGTON COUNTY MAIN
- FG STORM LATERAL (TYPE, AGE, REPL DATE)
- FG STORM PIPING - CORRUGATED POLYETHYLEN
- STORM DRAIN CATCH BASIN
  - CB-CI - CURB INLET
  - CB-GI - GRADE INLET
  - CB-YI - YARD INLET
  - CB-PE - POLYETHYLENE
- SWMH STORM WATER MANHOLE
- WATER SUPPLY LINES WATER MAIN
- WATER METER
- WATER LINE IDENTIFIER (APPROX LGTH OF LINE)
- ROOFING EXTENT OF ROOF SECTION
- AGE OF ROOF TYPE OF SLATE ROOFING APPROX. SQUARE FOOTAGE ANTICIPATED REPL DATE
- ORIGINAL ROOFING
  - BUCKINGHAM SLATE
  - VERMONT SLATE
- REPLACED ROOFING
  - VERMONT GREEN SLATE (INSTALLED 1995-2010)
  - VERMONT GREEN SLATE (INSTALLED SINCE 2011)
- FENCING
- WOODEN PRIVACY FENCE
- WOODEN SPLIT RAIL FENCE
- CHAIN LINK FENCING
- ALUMINUM FENCING

#	DATE	SUBMISSION DESCRIPTION
1	1/31/19	PRELIMINARY DRAFT
2	5/23/19	MAY 2019 UPDATE
3	6/17/19	FINAL

2018 RESERVE STUDY
FAIRLINGTON GLEN CONDOMINIUM

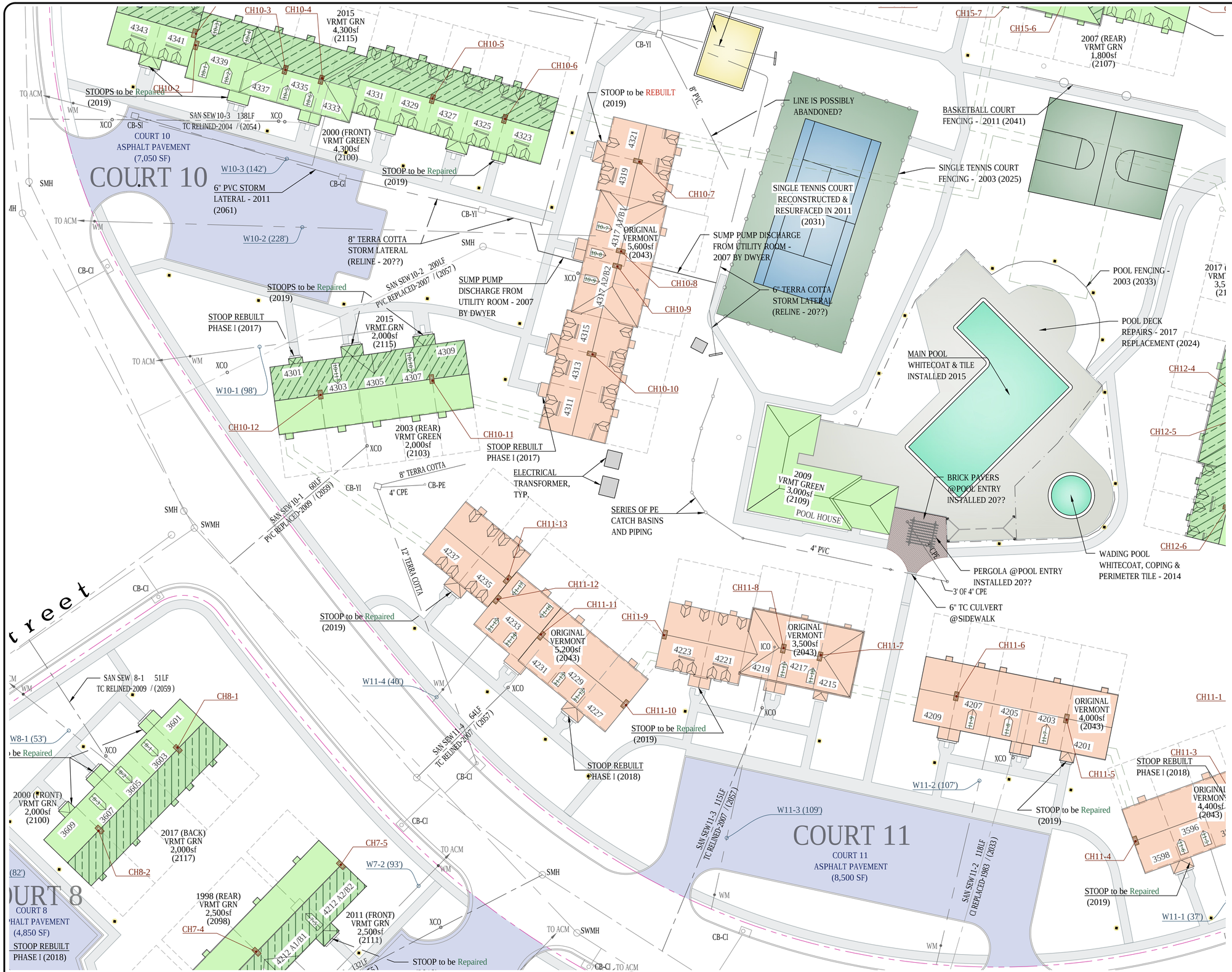
CARDINAL MANAGEMENT, INC.
SOUTH STAFFORD ST. & SOUTH 36TH ST.
ARLINGTON, VA



RESTORATION ENGINEERING, INC.
10503 West Drive, Suite A
Fairfax, VA 22030

DRAWING TITLE	COURTS 9, 15 & 16
DATE: 6/17/19	SUBMISSION: FINAL
DRAWN BY: GBG	CHECKED:
SCALE: 1" = 20'	
REV. PROJECT NUMBER	FILE NO.

A-5



1 / A-5 COURTS 10, 11(PARTIAL) & POOL
SCALE: 1" = 20'-0"

LEGEND

- GENERAL PROPERTY LINE
- BACKYARD FENCELINE
- BUILDING OUTLINE
- 4310 ADDRESS
- SIDEWALK
- CURB AND GUTTER
- EXISTING TREE (NOTE: NOT ALL TREES SHOWN)
- SANITARY SEWER ARLINGTON COUNTY MAIN
- CAST IRON LATERAL
- TERRA COTTA LATERAL
- PVC LATERAL
- SMH SANITARY MANHOLE
- XCO EXTERIOR CLEANOUT
- ICO INTERIOR CLEANOUT
- STORM SEWER ARLINGTON COUNTY MAIN
- FG STORM LATERAL (TYPE, AGE, REPL DATE)
- FG STORM PIPING - CORRUGATED POLYETHYLEN
- STORM DRAIN CATCH BASIN
  - CB-CI - CURB INLET
  - CB-GI - GRADE INLET
  - CB-YI - YARD INLET
  - CB-PE - POLYETHYLENE
- SWMH STORM WATER MANHOLE
- WATER SUPPLY LINES WATER MAIN
- WATER METER
- WATER LINE IDENTIFIER (APPROX LGTH OF LINE)
- ROOFING EXTENT OF ROOF SECTION
- 2010 VRMT GREEN 4,000sf (2110) AGE OF ROOF TYPE OF SLATE ROOFING APPROX. SQUARE FOOTAGE ANTICIPATED REPL DATE
- ORIGINAL ROOFING
  - BUCKINGHAM SLATE
  - VERMONT SLATE
- REPLACED ROOFING
  - VERMONT GREEN SLATE (INSTALLED 1995-2010)
  - VERMONT GREEN SLATE (INSTALLED SINCE 2011)
- FENCING WOODEN PRIVACY FENCE
- WOODEN SPLIT RAIL FENCE
- CHAIN LINK FENCING
- ALUMINUM FENCING

#	DATE	SUBMISSION DESCRIPTION
1	1/31/19	PRELIMINARY DRAFT
2	5/23/19	MAY 2019 UPDATE
3	6/17/19	FINAL

2018 RESERVE STUDY
FAIRLINGTON GLEN CONDOMINIUM

CARDINAL MANAGEMENT, INC.
SOUTH STAFFORD ST. & SOUTH 36TH ST.
ARLINGTON, VA

RESTORATION ENGINEERING, INC.
10565 WEST DRIVE, SUITE A
FAIRFAX, VA 22030

PROJECT TITLE:	CTS 10, 11(PT.) & POOL
DATE:	6/17/19
SUBMISSION:	FINAL
DRAWN BY:	GBG
CHECKED:	
SCALE:	1" = 20'
REF. PROJECT NUMBER	
CAD FILE:	

A-6

Appendix A - Full-Funding Analysis of Replacement Reserves

Summary Table

Section	Component	Year Last Replaced if Known	Historical Cost If Available	Replacement Cost Estimated 2003 Study	Replacement Cost Estimated 2008 Study	Replacement Cost Estimated 2012 Update	Remaining Useful Life Estimated 2018	Estimates for the Current Year (2018)					
								Useful Life	Remaining Useful Life	Percent Depreciated	Estimated Replacement Cost (2018)	Fully Funded Balance	Annual Depreciation Cost
1.0	**Hardscape**												
1.1	**Asphalt Pavement**												
1.1.1	Replace asphalt in parking lots					$ 1,165,135	0	30	13	58%	$980,000	$568,000	$32,655
1.1.2	Maintain asphalt in parking lots annually					$ 18,081	1	1	1	0%	$6,305	$6,305	$6,305
1.2	**Concrete**												
1.2.1	Sidewalk Replacement (Removed from Study)			$ 255,930		$ 316,950	0	-	0	0%	$0	$0	$0
1.2.2	Curb and Gutter Replacement (see "Curb/Gutter" tab)			$ -	$ -	$ 202,676	0	30	13	58%	$214,000	$121,000	$7,116
1.2.3	Concrete Alleys			$ -	$ -	$ -	10	50	10	80%	$66,000	$52,800	$1,320
2.0	**Utilities**												
2.1	**Sanitary Sewers (see "Sewers" Tab)**												
2.1.1	Relining - Terra Cotta (outside building footprint)			$ -	n/a	$ 1,117,976	36	50	36	29%	$884,949	$255,537	$20,396
2.1.2	Relining/Replacement - Cast Iron (inside footprint)			$ -	n/a	n/a	19	85	19	57%	$304,720	$173,017	$0
2.1.3	Sewer cleanouts			n/a	n/a	$ 187,961	31	75	31	59%	$187,961	$110,987	$2,506
2.1.4	Sewer manholes			n/a	n/a	n/a	10	80	10	88%	$55,800	$48,825	$698
2.2	**Storm Drainage (see "Storm" Tab)**												
2.2.1	Storm drain piping			n/a	$ 290,500	$ 312,215	47	86	41	52%	$166,490	$86,447	$1,932
2.2.2	Storm drainage structures			n/a	n/a	n/a	25	69	29	58%	$71,731	$41,726	$1,033
2.3	**Water Lines (see "Water" Tab)**												
2.3.1	Water supply piping			n/a	n/a	n/a	25	70	25	64%	$910,700	$585,450	$13,010
3.0	**Miscellaneous Site Features**												
3.1	**Signage**												
3.1.1	Replace Site Signage	2017	$ 19,400	$ 6,400	$ 10,000	$ 10,748	20	20	20	0%	$19,400.00	$0	$970
3.2	**Fencing (see "Fencing" Tab for lineal footage of fencing with unit cost information)**												
3.2.1	Replace Treated Wood Patio Fencing	1997	$ 236,000	$ 247,500		$ 306,510	9	30	9	70%	$427,744	$299,421	$14,258
3.2.2	Replace Split-Rail Fence at Ct. 4	2010	$ 4,024			$ 4,208	22	30	22	27%	$8,257	$2,202	$275
3.2.3	Perimeter Fence	1975	$ 10,000	$ 5,000	$ 35,000	$ 37,616	2	50	2	96%	$69,868	$67,073	$1,397
3.2.4	Replace Pool Perimeter Fence	2003	$ 32,200	$ 32,200		$ 39,877	15	30	15	50%	$43,551	$21,775	$1,452
3.2.5	Replace Pool Tennis Court Fence	2003		$ 24,400	$ 15,000	$ 16,121	7	30	7	77%	$14,820	$11,362	$494
3.2.6	Replace Triple Tennis Court Fence	2011	$ 20,750		$ 23,000	$ 21,373	23	30	23	23%	$22,231	$5,187	$741
3.2.7	Replace Pickle Ball Court Fence	2018	$ 7,538		$ 5,000	$ 5,374	30	30	30	0%	$8,257	$0	$275
3.2.8	Replace Short Basketball Court Fence	2011	$ 1,100	$ 1,100	$ 1,100	$ 1,362	23	30	23	23%	$1,397	$326	$47
3.3	**Handrails (see "Fencing" Tab for takeoff)**												
3.3.1	Replace Wrought Iron Handrails	1945		n/a	n/a	n/a	10	80	10	88%	$9,527	$8,337	$119
3.4	**Exterior Lighting (see "Outdoor Lighting" tab)**												
3.4.1	Replace Carriage Lt Poles, Mountings &	1973		$ 20,000	$ 104,000	$ 111,774	5	25	5	80%	$106,320	$85,056	$4,253
3.4.2	Replace Carriage Light Pole Circuits/Co	1973		n/a	n/a		5	50	5	90%	$115,313	$103,781	$2,306
3.4.3	Replace Pole Lights at Swimming Pool	1973		n/a	n/a	n/a	5	50	5	90%	$10,400	$9,360	$208
3.4.4	Replace Ceiling Fixtures at Entry to B-Units			n/a	n/a	n/a	5	15	5	67%	$3,450	$2,300	$230

Appendix A - Full-Funding Analysis of Replacement Reserves

Summary Table

Section	Component	Year Last Replaced if Known	Historical Cost If Available	Replacement Cost Estimated 2003 Study	Replacement Cost Estimated 2008 Study	Replacement Cost Estimated 2012 Update	Remaining Useful Life Estimated 2018	Estimates for the Current Year (2018)					
								Useful Life	Remaining Useful Life	Percent Depreciated	Estimated Replacement Cost (2018)	Fully Funded Balance	Annual Depreciation Cost
4.0	**Recreational Features**												
4.1	**Swimming Pool (see "Pools Revised" Tab)**												
4.1.1	**Main Swimming Pool**												
4.1.1.	Whitecoat "Plaster"	2015						7	4	43%	$13,800	$5,910	$1,970
4.1.1.	Coping Stone	1997				$ 14,900		30	9	70%	$19,500	$13,650	$650
4.1.1.	Perimeter Tile	2015						14	11	21%	$11,300	$2,420	$810
4.1.1.	Transition Tile	2015						14	11	21%	$2,700	$580	$190
4.1.1.	Main Pool Cover	2017						18	17	6%	$9,100	$510	$510
4.1.1.	Main Pool Beam/Structure Repair	2009						20	11	45%	$25,000	$11,250	$1,250
4.1.1.	Main Pool Structure Replacement	1974				$ 560,000		60	16	73%	$250,000	$183,330	$4,170
4.1.2	**Main Swimming Pool Equipment**												
4.1.2.	Main Pool Skimmers	2009						18	9	50%	$13,500	$6,750	$750
4.1.2.	Main Pool Filters (Cartridge Style)	2009						12	3	75%	$12,800	$9,600	$1,070
4.1.2.	Main Pool Pump (Heavy Duty-Brass)	2009						25	16	36%	$10,000	$3,600	$400
4.1.3	**Wading "Baby" Pool**												
4.1.3.	Whitecoat "Plaster"	2014						7	3	57%	$3,700	$2,110	$530
4.1.3.	Coping Stone	2014						30	26	13%	$5,000	$670	$170
4.1.3.	Perimeter Tile	2014						15	11	27%	$3,100	$830	$210
4.1.3.	Baby Pool Cover	2017						18	17	6%	$1,300	$70	$70
4.1.4	**Wading "Baby" Pool Equipment**												
4.1.4.	Wading Pool Skimmers	2009						20	11	45%	$1,500	$680	$80
4.1.4.	Wading Pool Filter (Cartridge Style)	2009						15	6	60%	$2,500	$1,500	$170
4.1.1.	Wading Pool Pump (Plastic)	2009						12	3	75%	$1,500	$1,130	$130
4.1.5	**Pool Deck**												
4.1.5.	Repair Pool Deck (7.5%)	2017				$ 2,308		5	4	20%	$15,500	$3,100	$3,100
4.1.5.	Replace Pool Deck	1974				$ 65,367		50	6	88%	$93,700	$82,460	$1,870
4.1.6	**Pool Accessories/Furniture**												
4.1.6.	Replace Lifeguard Chairs	2006				$ 6,880		20	8	60%	$5,000	$3,000	$250
4.1.6.	Replace Large Canvas Awning	2005				$ 3,083		15	2	87%	$4,500	$3,900	$300
4.1.6.	Replace Small Canvas Awning	2010				$ 3,237		15	7	53%	$3,500	$1,870	$230
4.1.6.	Replace Pool Furniture	2017				$ -		8	7	13%	$10,000	$1,250	$1,250
4.1.6.	Replace Dri-Dek Matting @Bathhouse	2015				$ -		5	2	60%	$1,900	$1,140	$380
4.2	**Courts**												
4.2.1	Reapply Color Coat At Pool Tennis Cour	2006	$ 12,620	$ 8,000	$ 13,500	$ 14,509	3	5	3	40%	$10,000	$4,000	$2,000
4.2.2	Renovate/Reconstruct Pool Tennis Cour	2011	$ 41,655	$ 20,000	$ 22,000	$ 42,905	13	15	13	13%	$42,905	$5,721	$2,860
4.2.3	Reapply Color Coat At Triple Tennis Cou	2011		$ 10,000	$ 19,250	$ 19,827	4	5	4	20%	$20,422	$4,084	$4,084
4.2.4	Renovate/Reconstruct Triple Tennis Cou	2011	$ 97,366	$ 45,000	$ 50,250	$ 100,287	18	20	18	10%	$100,287	$10,029	$5,014
4.2.5	Reapply Color Coat at Basketball Court	2012	$ 4,080	$ 6,000	$ 4,350	$ 4,675	4	5	4	20%	$4,815	$963	$963
4.2.6	Renovate/Reconstuct Basketball Court	2012	$ 17,000	$ 15,000	$ 16,600	$ 16,600	5	20	5	75%	$30,000	$22,500	$1,500
4.2.7	Reapply Color Coat At Pickleball Court		$ 3,500				2	5	2	60%	$10,000	$6,000	$2,000
4.2.8	Renovate/Reconstruct Pickleball Court		$ 12,000				2	20	2	90%	$12,360	$11,124	$618
4.3	**Tot Lot**												
4.3.1	Replace Tot Lot Playground Equipment	2014	$ 46,000	$ 15,000	$ 35,000	$ 40,138	31	35	31	11%	$47,700	$5,451	$1,363
4.3.2	Replace Tot Lot 6 x 6 Borders	2014	$ 7,000				10	15	10	33%	$7,300	$2,433	$487
4.3.3	Replenish Tot Lot Pea Gravel	2018	$ 3,600				4	4	4	0%	$3,700	$0	$925
5.0	**Building Exteriors**												

Appendix A - Full-Funding Analysis of Replacement Reserves

Summary Table

Section	Component	Year Last Replaced if Known	Historical Cost If Available	Replacement Cost Estimated 2003 Study	Replacement Cost Estimated 2008 Study	Replacement Cost Estimated 2012 Update	Remaining Useful Life Estimated 2018	Estimates for the Current Year (2018)					
								Useful Life	Remaining Useful Life	Percent Depreciated	Estimated Replacement Cost (2018)	Fully Funded Balance	Annual Depreciation Cost
5.1	**Roofs (see "Roofing" tab)**												
5.1.1	Slate Roofing Systems			$ 4,207,400		$ 6,342,441	66	101	66	34%	$7,067,224	$2,429,094	$70,188
5.2	**Dormers (see "Dormers" tab)**												
5.2.1	Gable Dormers						30	100	57	43%	$249,400	$108,272	$2,494
5.3	**Chimneys (see "Chimneys" tab)**												
5.3.1	Chimney Brick Masonry Maint./Repointing			$ 197,184		$ 244,198	2	75	2	97%	$155,168	$151,030	$2,069
5.3.2	Chimney Caps (Copper)	1997					17	50	32	36%	$237,920	$85,651	$4,758
5.3.3	Chimney Screens						20	25	20	20%	$25,000	$5,000	$1,000
5.4	**Façade**												
5.4.1	Masonry Veneer Maintenance/Repointing			$ 197,184		$ 244,198	5	5	5	0%	$150,000	$0	$30,000
5.4.2	Replace Shutters			$ 60,000		$ 74,306	12	25	12	52%	$74,306	$38,639	$2,972
5.4.3	Replace B-Unit Doors (see "B-Units" Tab)			$ 5,000	$ 33,350	$ 35,843	5	40	5	88%	$34,500	$30,188	$863
5.4.4	Replace B-Unit Common Windows (see "B-Units" Tab)				$ 11,500	$ 12,360	2	25	2	92%	$28,750	$26,450	$1,150
5.5	**Entrances**												
5.5.1	Masonry Stoops (see "Stoops" Tab)					$ 688,966	20	80	30	63%	$1,464,290	$917,507	$18,304
5.5.2	Porticos at Main Entrances (see "Porticos" Tab)						0	100	25	75%	$975,100	$731,325	$9,751
5.5.3	Canopies at Rear Entrances (see "Rear Canopies")						0	50	0	100%	$367,200	$367,200	$7,344
5.6	**Bath House / Maintenance Building**												
5.6.1	Exterior Building Renovation						41	85	11	87%	$250,000	$217,175	$2,943

Appendix A - Full-Funding Analysis of Replacement Reserves

Summary Table

Section	Component	Year Last Replaced if Known	Historical Cost If Available	Replacement Cost Estimated 2003 Study	Replacement Cost Estimated 2008 Study	Replacement Cost Estimated 2012 Update	Remaining Useful Life Estimated 2018	Estimates for the Current Year (2018)					
								Useful Life	Remaining Useful Life	Percent Depreciated	Estimated Replacement Cost (2018)	Fully Funded Balance	Annual Depreciation Cost
6.0	**Building Interiors & Services**												
6.1	**Interiors**												
6.1.1	Replace B-Unit Interior Finishes	2006	$ 50,220	$ 50,000		$ 57,592	5	12	5	58%	$57,592	$33,595	$4,799
6.1.2	Replace B-Unit Mailboxes (see "B-Units	2011	$ 9,959			$ 10,258	33	35	33	6%	$11,500	$657	$329
6.1.3	Refurbish Maintenance Office & Bathhou	2009	$ 446,909	$ 12,500		$ 479,836	41	50	41	18%	$80,000	$14,400	$1,600
6.2	**Tools/Equipment**												
6.2.1	Replace B-unit Carpet Cleaner	2011	$ 2,333			$ 2,403	7	12	7	42%	$2,500	$1,042	$208
6.2.2	Replace Tractor + Accessories	2003	$ 2,600	$ 7,500	$ 2,000	$ 2,150	3	18	3	83%	$5,000	$4,167	$278
6.2.3	Replace Snow Blower	2010	$ 1,840				5	13	5	62%	$1,700	$1,046	$131
6.2.4	Replace Pipe Camera & Locator	2015	$ 10,000			$ 10,000	17	20	17	15%	$4,000	$600	$200
6.2.5	Replace Pool/Maintenance HVAC	2016	$ 5,190			$ -	13	15	13	13%	$5,500	$733	$367
6.2.6	Replace Miscellaneous Equipment					$ -	5	10	5	50%	$7,000	$3,500	$700
6.3	**Services**												
6.2.1	Replacement Reserve Study	2018	$ 10,000			$ 16,000	5	5	5	0%	$10,000	$0	$2,000
	Total Funded Components										**$16,760,229**	**$8,242,927**	**$317,701**
	Full-Funding Percentage												