FEA

Report of

Condition Assessment and Reserve Study

for

WESTERLEY HOMEOWNERS ASSOCIATION

Sterling, Virginia

Prepared for:

Westerley Homeowners Association

March 20, 2005

Facility Engineering Associates, P.C.

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March 20, 2005

Westerley Homeowners Association
46845 Northbrook Way
Sterling, Virginia 20164

ATTENTION: Mr. Larry Katzman

SUBJECT: **REPORT OF CONDITION ASSESSMENT AND RESERVE STUDY**
Westerley Homeowners Association
Sterling, Virginia
FEA Project No.: 01.2004.4008

Dear Mr. Katzman:

Facility Engineering Associates, P.C. (FEA) has completed the report of our Condition Assessment and Reserve Study for the Westerley Homeowners Association (HOA) in Sterling, Virginia.

The Westerley HOA maintains three separate reserve funds. The Common Reserves are used to fund repairs and replacements of common elements used by the entire community, including swimming pool, pool bathhouse, fencing and entrance signage. The Townhouse Reserves include elements within the townhouse sections such as asphalt pavement, sidewalks, curb and gutter, street signage, and lighting. The Single-family Home Reserve Fund elements include the sidewalks and curb and gutter lining the single-family home areas. It was not determined whether the concrete elements in the single-family home community are the responsibility of the county or state, or the Association; therefore, the expenditures to repair and replace these elements have been included in the reserve study.

According to information provided by Legum & Norman, estimated reserve fund balances and annual contributions to each fund for Fiscal Year (FY) 2005 (August 1, 2004 to July 31, 2005) are as follows:

Reserve Fund	Estimated Reserves August 1, 2004	FY2005 Budget Contribution
Common	$113,375	$16,090
Townhouse	$19,100	$9,550
Single-family Home	$518	$259

An average interest rate of 1.59% is earned on the community's reserve investments, and the interest rate earnings are put into operations funding. However, it was reported that the community would be receptive to putting the interest back into the reserve funds. The reserve tables reflect the interest being returned to the reserve funds.

After the review of the draft report by the Board of Directors and a meeting with FEA to discuss possible reserve fund options for the Association, it was determined that the funding within the three reserves (Common, Townhouse, and Single-family Home) would be reallocated. The following table show the results of the reallocation for the Westerley Homeowners Association. With the monetary transfer, the Common, Townhouse, and Single-family Home Reserve Funds show sufficient funding throughout the 20-year study period.

Reserve Fund	FY2005 Starting Balance	FY2005 Contribution	FY2006 – FY2024 Contribution
Common	$56,375	$16,090	$16,090
Townhouse	$19,100	$30,000	$18,240
Single-family Home	$518	$17,712	$7,380

Updates to the Reserve Study are recommended every three to five years, so adjustments to funding can be made pending the results of those updates.

We have enjoyed working with you on this project. If we can be of assistance to you in the future, please feel free to call us at your convenience.

Very truly yours,
FACILITY ENGINEERING ASSOCIATES, P.C.

Rebecca A. Hummel

Rebecca A. Hummel, E.I.T.
Project Engineer

for Thomas W. Larson, P.E., R.S.
Principal

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INTRODUCTORY SUMMARY

Westerley is a residential community of townhomes and single-family homes, off of Augusta Drive in Sterling, Virginia. Development of the community began in 1997 and was completed in 2001. The community includes a total of 313 residential lots: 123 single-family homes and 190 townhouses. Community pool facilities are located off Augusta Drive near the entrance to the community.

Westerley maintains three separate reserve funds. The Common Reserves are used for repair and replacement of community elements used by the residents, including such amenities the swimming pool facilities, site fencing, and entrance sign. The Townhouse Reserves are used to fund repairs to the streets, sidewalks, curb and gutter, and storm water drainage features in the townhome sections of the community. The Single-Family Reserves are used to fund such elements as the sidewalks, and curb and gutter.

Facility Engineering Associates, P.C. (FEA) was requested to perform a Condition Assessment and Reserve Study for the community. This effort included an evaluation of the condition of the common elements of the community, and an estimate of life-cycle costs and reserve expenditures for the common elements. This report summarizes our findings, provides recommendations for repairs and replacements, and includes a Reserve Fund Plan for anticipation of future spending needs.

Rebecca Hummel, Jared Call, and David Boldt of FEA visited the community on several occasions in September and October of 2004 to quantify and assess the condition of the elements under the responsibility of the community association. The survey was visual in nature, and involved no destruction to gain access to hidden conditions. Ms. Lynn House, the community manager, provided access to restricted areas, and information regarding previous expenditures.

This report summarizes our findings, provides brief descriptions of the components, describes their condition, provides recommendations for corrective action, and includes a Reserve Fund Plan for anticipating future spending needs. Photographs of observed conditions are provided in the attached appendix. All information presented is based on the condition of common elements at the time our survey was conducted. Reserve Fund Plan cost data is based on published construction cost data, conversations with local contractors, cost information provided by the Community Manager for previous and planned expenditures, and experience with similar projects. Actual construction costs can vary significantly due to time of season, material costs, material availability, unforeseen conditions, and other factors beyond our control.

COMMON RESERVES

The Common Reserve fund covers expenditures for the swimming pool facilities, as well as site features throughout the community such as foot paths, fencing, retaining walls, storm water management ponds, and some site signage. Since the community was developed between 1997 and 2001, we have assumed that a majority of the common elements responsible by the Common Reserves were installed around 1997, with the exception of two of the four storm water retention ponds located in the single-family home division.

1.0 Swimming Pool Facilities

Features discussed in this section include both the large swimming pool and the smaller wading pool, as well as the bathhouse and all equipment related to the operation of the pools.

1.1 Description

Pool Area

The pool area at Westerley is surrounded by a vinyl-covered, 6-foot-high chain-link fence. We measured approximately 380 linear feet of this fencing. This fencing includes one 8-foot-wide double gate (reference Photograph 1 in Appendix D). A 4-foot-high chain-link fence, also vinyl-covered, surrounds the wading pool, with a swinging gate and is approximately 80 feet long. A third fence separates the picnic area from the pool area; this fence is 3 feet tall and has a run of about 80 linear feet.

The concrete deck surrounding both the main swimming pool and the wading pool consists of rectangular sections typically 10-foot by 14-foot in size. Based on our measurements, we estimated a total concrete area of 5,750 square feet. Penetrating the deck are five small metal storm water drains.

The main pool is rectangular in shape, with approximate dimensions of 75 feet by 42 feet, for a total surface area of about 3,150 square feet. The linear perimeter of the main pool is roughly 235 feet. The wading pool is circular in shape, with an approximate linear perimeter of 50 feet and surface area of roughly 200 square feet.

Coping stones surround the edge of the main pool. These stones are typically 24 inches wide and 12 inches deep. According to the markings on the coping stones, the main pool depth varies from three and a half feet to five feet.

Due to the time of our site visit, we were unable to closely inspect the pools due to the season and the pool was covered. However, based on a previous engineering report completed in 2001 by Gardner Engineering, the pools are constructed of whitecoated concrete with some decorative inlaid tiles. We observed that lane markers were in place at the bottom of the larger pool but could not ascertain if these were painted or tiled.

The main pool cover is a Merlin brand cover with tiebacks anchored into the concrete pool deck (reference Photograph 2 in Appendix D). A similar cover is installed over the wading pool (reference Photograph 3 in Appendix D).

Outdoor furniture in the pool area includes nine circular picnic tables with plastic tops, three rectangular plastic picnic tables with metal bases, and three wood picnic tables with metal bases (reference Photograph 4 in Appendix D). There are also three garbage can holders made of metal tubing with green and white vinyl strapping. Chairs and loungers with the same green and white vinyl strapping had been stacked in the bathhouse for the winter (reference Photograph 5 in Appendix D). We counted about 50 chairs and 50 loungers. We also noted that two aluminum-framed lifeguard stands have been installed near the main pool (reference Photograph 6 in Appendix D).

Additional pool-related equipment included various handrail sections that were being stored in the bathhouse at the time of our visit.

Bathhouse

Adjacent to the pool is a small bathhouse structure where changing rooms are located (reference Photograph 7 in Appendix D). This building also includes a reception desk. The bathhouse has vinyl siding and a moderately-pitched asphalt-shingled roof (reference Photograph 8 in Appendix D). About 150 linear feet of aluminum gutters and half a dozen downspouts provide for drainage off the roof.

Within the bathhouse are eight metal doors, typically 3 feet wide and 6'-8" tall. The front entrance and main rear exit doors are double-paneled 15-lite wood and glass entry doors. These units are each 6 feet wide and 6'-8" tall. Vinyl double-hung windows with frosted glass are used to bring natural light into the Bathhouse. There are two 2-feet-wide by 4-feet-high windows at the rear of the bathhouse, and four 2½-feet-wide by 5-feet-high windows in other locations.

The walls of the bathhouse appeared to be painted drywall. Floors in the bathhouse were painted concrete. Interior furnishings included an upper and lower row of cabinets and a reception desk. Office equipment appeared to be limited to telephones.

Mechanical

We observed one exhaust fan in each bathroom, located above the toilet stalls.

The main pool is serviced by three Purex Triton Triton II Commercial TR-100 C sand filters (reference Photograph 9 in Appendix D), a Sta-Rite PKG-184 strainer, and a 7.5 horsepower Sta-Rite pump/motor assembly. Location of the pump/motor assembly next to a wall prevented further identification of this item. This system utilizes a series of seven valves. The wading pool is serviced by a Purex Triton Triton II sand filter, a Purex Triton PAC-FAB 2" Hi-Flow strainer, and a Purex Triton Challenger pump with a 3/4 horsepower Centurion motor by Magnatec (reference Photograph 10 in Appendix D). There are only 2 valves for this system, a skimmer valve and a return valve. Operating instructions for both systems are posted on the wall of the equipment room.

Both pools are treated with a 10% sodium hypochlorite mixture. This agent is stored in 55-gallon drums and is added to the pool water through Mec-O-Matic inflow regulators. There are separate supply tanks and flow regulators for each pool.

Electrical

Lighting in the bathhouse consisted of about 23 circular ceiling-mounted fixtures. There are fluorescent tube-style fixtures in the pool filter room as well. We noted six sets of emergency lights. Five of these included illuminated exit signs.

Site lighting included exterior and walkway lighting. Exterior lighting consisted of circular wall-mounted fixtures; five of these are located on the rear side of the building, and two are located on the front side of the building. Along the sidewalk in front of the pool house are two lights consisting of spherical glass globes mounted on 8-foot-tall metal poles.

Based on our observations of the electrical panel box, we believe that there are underwater pool lights, although we were not able to confirm this during our site visit.

Plumbing

A 119-gallon State Sandblaster, self-cleaning, electric domestic water heater is located in the mechanical room in the bathhouse. The water heater was installed around 2000.

Each bathroom includes one handicapped-access shower, one general use shower, two sinks, and two toilets. The men's bathroom also includes one urinal. There is a small janitor's closet accessible from the men's bathroom which includes one utility sink. On the exterior of the building are two wall-mounted drinking fountains (reference Photograph 11 in Appendix D). Between the picnic area and the pool area are two small foot showers (reference Photograph 612n Appendix D). The replacement of the plumbing fixtures in the bathhouse and around the pool area are included in the renovation costs budgeted for 2031.

1.2 Condition

Pool Area

Fencing around the pool appeared to be in good condition. Concrete surrounding the pool was in fair condition. We observed one area of severe deterioration near one of the fence posts (reference Photograph 13 Appendix D). Elsewhere, we observed a number of cracks that had previously been routed and sealed (reference Photograph 14 in Appendix D). No settling of the pool deck was observed. Coping stones around the edges of both pools appeared to be in good condition. The pool covers and attachment anchorages appear to be in good condition, and reports from the property management company indicate the pool covers were replaced in February 2004.

The pool furniture appeared to be in good condition. The picnic tables and garbage cans were also in good condition. The lifeguard stands were observed to be in good condition.

Our experience indicates that swimming pools typically undergo a major renovation after approximately 30 to 35 years of service life.

Bathhouse

The bathhouse was in good condition. No leaks or staining were noted on the exterior of the building. The bathhouse roof appeared to be in good condition. Gutters and downspouts appeared to be functional, but were stained. This may indicate that the gutters overflow during heavy rains. The vinyl siding appeared to be in good condition.

Paint on the interior walls was in good condition. Paint on the concrete floors was peeling badly in a number of areas, particularly at doorways. Metal doors showed some minor rusting at the edges. The wood entry doors were in good condition.

Mechanical

The bathroom exhaust fans appeared to be in good condition.

The pool equipment was in good condition and showed no signs of distress.

Electrical

Generally, electrical systems and equipment have a typical service life of from 40 to 50 years with minimal maintenance. A preventive maintenance program would involve inspection of all switchgear, panelboards and connections, cleaning (where required) and retorqing connections. *(It is important to note that arcing failures occur where connections have loosened as a result of thermal cycling.)* The preventive maintenance program is considered an operational issue, and is not included in the reserve tables.

Interior and exterior lighting, including walkway lighting, appeared to be in good condition.

Plumbing

The electric water heater was in good condition and had a service log posted next to it indicating that regularly-scheduled maintenance is performed.

Plumbing fixtures appeared to be in good condition.

1.3 Recommended Repairs/Replacements

The following repairs or replacements have been scheduled in the tables in the attached appendices.

Pool Area

1.3.a - The chain-link fences at the pool area should have an estimated useful life of 20 years. The reserve tables include a lump sum of $9,500 to replace the fences in 2017.

1.3.b - The reserve tables include an allowance of $3,450 every five years to repair or replace cracked, damaged, or settled sections of the concrete pool deck. The first cycle of repairs is projected in 2005. This is based on replacing 10% of the total concrete area every five years. Periodic routing and sealing of cracks that develop is considered a maintenance issue.

1.3.c - Both pools should be budgeted for whitecoating every eight years, starting in 2005. Our opinion of cost for whitecoating both pools is $15,000. This includes an allowance to replace broken tiles in the main pool at the time of whitecoating.

1.3.d - Pool coping has an expected service life of at least 15 years. Replacement of the pool coping stones would probably occur on an as-needed basis, rather than all at once. We have included an allowance of $2,000 every five years starting in 2006 for coping stone replacements.

1.3.e - The reserve tables include an allowance of $7,000 to purchase new pool covers for the main and wading pools every 10 years.

1.3.f - We have included a sum of $100,000 for a major renovation of both pools. This work is shown in 2031 in the tables and may include repair of cracks in the pool structures, replacement of piping under the deck, and other major repairs.

1.3.g - We recommend that replacement of the picnic tables and garbage cans at the pool area are budgeted for replacement every 15 years. Our opinion of cost to replace the tables and garbage cans is $7,000.

1.3.h - Pool furniture should be replaced or restrapped on an as-needed basis. We have included an allowance of $5,000 every five years to replace or re-strap furniture, starting in 2006.

1.3.i - Replacement of lifeguard stands and ladders into the pool should be anticipated every 25 years. Our opinion of cost to replace these items is $6,000, which is based on $2,000 for each lifeguard stand and a total of $2,000 for the ladders.

Bathhouse

1.3.j - The reserve tables include an allowance of $3,800 to replace the vinyl siding of the bathhouse after 30 years. This expenditure is projected in 2027.

1.3.k - The roofs should have an estimated useful life of 20 years. Our opinion of cost to replace the roof is $6,000, including replacement of gutters and downspouts. Our opinion of cost also includes removal of the existing roof.

1.3.l - We have included an allowance of $3,600 for replacement of the interior and exterior doors at the bathhouse, every 25 years starting in 2022.

1.3.m - We have included an allowance of $1,600 to replace the windows at the bathhouse. For reserve funding purposes, we recommend budgeting for this project after 25 years of service life.

1.3.n - We recommend budgeting for a bathhouse renovation around 2031. We have included $35,000 for the bathhouse renovation, which incorporates such items as replacing plumbing fixtures, lighting fixtures, wall coverings and floor coverings.

Mechanical

1.3.o - Replacement of pool filtration equipment will mostly likely occur on an as-needed basis rather than all at once. We have included an allowance of $2,500 every five years for pool equipment repairs and replacements.

Electrical

1.3.p - The reserve tables include a cost of $2,400 in 2022 for the replacement of the exterior lighting at the pool area. This cost includes the replacement of the wall-mounted lighting as well as the pole-mounted fixtures. Replacement of lamps is considered routine maintenance. Interior lighting fixtures are changed due to aesthetic preferences, rather than failure.

Plumbing

1.3.q - The 119-gallon electric water heater in the bath house has a typical service life of 15 years, and is scheduled for replacement in 2015. Our opinion of cost to replace the water heater is $5,000.

2.0 Amenities and Site Features

2.1 Description

Common elements at the community include footpaths, site fencing, a retaining wall, and storm water retention ponds. The Common Reserves fund the repairs and replacements for the pool area parking area, the sidewalk running along Augusta Drive, and the wood fence along the northeast side of the community off of Colby Court. Additional items that are the responsibility of the community include the entrance monument, the community information board, and "pet stations".

Asphalt foot paths approximately four feet wide are found throughout the community (reference Photograph 15 in Appendix D). A total of about 1,350 linear feet of pathways were observed during our site visits.

Fencing at the site includes approximately 725 feet of split-rail fencing around the storm water retention ponds and 1,000 linear feet of sound-attenuation fencing along Route 7 (reference Photograph 16 in Appendix D). The split-rail fencing consists of weathered timbers pocketed into round posts (reference Photograph 17 in Appendix D). The sound-attenuation fence is 8 feet high.

The retaining wall that is the responsibility of the HOA is a modular block retaining wall roughly 130 feet in length with a height of roughly 3 feet; the wall is located behind the storm water retention pond on the west side of Backwater Drive.

Four storm water retention ponds are located throughout the community. Cylindrical concrete overflow risers are located in each of the retention ponds.

The Common Reserves fund the repairs and maintenance of the pool parking area. The asphalt paved area is approximately 595 square yards, and is lined with concrete curb and gutter. There are lined parking spaces for the pool area with one Accessible parking space. There is a concrete sidewalk running along the southwest

side of Augusta drive, which was measured to be approximately 1,250 linear feet, or a total of 5,000 square feet.

There is a 6-foot-high wood fence that runs along the northeast of the Westerley property behind Colby Court and Antioch Place. It was reported by property management that the fence is the responsibility of the HOA. The length of the fence is approximately 555 linear feet.

The entrance feature for the community is a curved stone wall roughly 35 feet in length. The feature has a stone inset carved with WESTERLEY and is surrounded by stone masonry (reference Photograph 18 in Appendix D). The feature is situated on a heavily-landscaped area with stone masonry columns (reference Photograph 19 in Appendix D) lining the community footpath. The masonry columns connect with split rail fencing.

The community information board stands near the pool parking lot with a plastic viewing window (reference Photograph 20 in Appendix D). The information board is mounted on metal posts and has a metal frame.

There is an aluminum bike rack by the pool parking lot (reference Photograph 21 in Appendix D).

We observed three "pet stations" within the community. Each pet station consists of a pole-mounted wastebasket, above which is mounted a dispenser providing plastic baggies (reference Photograph 22 in Appendix D).

2.2 Condition

Asphalt walking paths in the community were in fair condition. Prior crack sealing work has been performed and several areas were cracking and showing minor signs of deterioration.

The split-rail fencing lining the storm water retention ponds was observed to be in fair condition. Instances of some splitting in the wood and slight deterioration were observed, but did not appear to be critical to the integrity of the fence.

The sound-attenuation fence was in good condition, and it was reported that boards were replaced, and sealing and painted were performed in 1999. No signs of cracking were observed.

Typically, no major expenditures are anticipated for the storm water management ponds beyond normal maintenance costs, which should include removal of excessive vegetation, and re-seeding of eroded areas.

The pool parking area was in good condition, as was the concrete curb and gutter surrounded the asphalt pavement. No major cracking or failures were observed in the asphalt or concrete features. The sidewalk lining Augusta drive was in overall good condition and no major concrete failures were observed.

The 6-foot-high wood fence that runs along the northeast of the Westerley property was in overall fair condition. It appeared that the fence was installed before the Westerley community was developed. A significant amount of split wood was observed and sections of the fence were leaning (reference Photograph 23 in Appendix D).

The entrance feature appeared to be in good condition. Occasional repairs to deteriorated mortar joints or damaged stone should be anticipated.

The metal community information board appeared to be in fair condition. Some corrosion was noted on the metal posts, and the viewing window appeared to have some discoloration.

The bike rack was in good condition.

Pet stations appeared to be in good condition.

2.3 Recommended Repairs/Replacements

The following repairs/replacements have been scheduled in the tables in the attached appendices.

2.3.a - Rather than scheduling a full replacement of the asphalt footpath, we have included an allowance in the reserve tables for periodic repairs or replacements to the footpath. The reserve tables include an allowance of $1,500 every three years for necessary asphalt repairs.

2.3.b - The reserve tables include a sum of $10,875 to replace the split-rail fencing throughout the community in 2017. Minor repairs to the fencing are considered an operational expense.

2.3.c - The reserve tables include an allowance for repairs, and sealing and painting of the sound-attenuation fence. Our opinion of cost for the repairs and refinishing is $3,000, and we have included it in the reserve tables every seven years.

2.3.d - The reserve tables include a sum of $15,000 to replace the sound-attenuation fence in 2017.

2.3.e - The reserve tables include a sum of $11,700 for replacement of the modular block retaining wall in 2027.

2.3.f - We have included a sum of $5,000 in the reserve tables for major maintenance and repairs to the storm water management ponds every 10 years. This sum would cover the costs of re-grading, removal of vegetation, and repair of concrete structures, as necessary, starting in 2010.

2.3.g - The pool parking area should be seal coated and re-striped every five years. Our opinion of cost to seal coat and re-stripe the parking area is $595. We recommend budgeting for this project beginning in 2007 and every five years thereafter. This cost should cover minor patching and crack filling. Seal coating and re-striping is not scheduled in 2017, when a pavement overlay is projected.

2.3.h - Periodic full-depth asphalt repairs are included in the reserve tables every five years. These repairs typically involve removing failed pavement, improving the sub-grade if necessary, and replacing the failed asphalt. The tables include an allowance to repair approximately 30 square yards of pavement, or about 5% of the total pavement area, every five years. Our opinion of cost for the full-depth repairs is $900, or $30 per square yard.

2.3.i - Pavements should normally last 20 years before resurfacing (mill and overlay) is required, based on expected service life. Our opinion of cost to overlay the asphalt parking area at the pool in 2017 is $5,950.

2.3.j - The concrete curb and gutter along the pool parking area are typically replaced on an as-needed basis rather than all at once. The reserve tables include an allowance of $300 to replace damaged or settled concrete curb and gutter sections. This allowance is based on budgeting for the replacement of approximately 2% of the total curb and gutter linear footage every three years at our opinion of cost of $30 per linear foot. The allowance is scheduled to begin in 2006.

2.3.k - The sidewalk along Augusts Drive will typically be replaced on an as-needed basis rather than all at once. The reserve tables include an allowance of $600 to replace damaged or settled concrete sidewalk sections. This allowance is based on budgeting for the replacement of approximately 2% of the total sidewalk area every three years at our opinion of cost of $6 per square foot. The allowance is scheduled to begin in 2006.

2.3.l - We recommend budgeting for the replacement of the wood fence located at the northeast end of the property around 2006. Our opinion of cost to replace the fence is $8,325.

2.3.m - An allowance of $2,000 is included in the reserve tables every 10 years, for repairs to the entrance features. Repairs would include cleaning, tuckpointing, and replacement of damaged or cracked stone elements. The first repair cycle is projected in 2010.

2.3.n - An allowance of $2,000 is included in the reserve tables every 15 years, for the replacement of the community information board.

2.3.o - An allowance of $1,200 is included in the reserve tables for replacement of pet stations after 15 years of use.

TOWNHOUSE RESERVES

The Townhouse Reserve fund covers expenditures that are the responsibility of the 190 townhouses in the Westerley Homeowners Association community in Sterling, Virginia. The townhouse community has asphalt streets, lined with concrete sidewalk and concrete curb and gutter, and various parking areas. The Townhouse Reserves fund the replacement and repair of such features as the asphalt pavement, concrete sidewalk and curb and gutter, community lighting, street signs, and metal enforcement signs. The Townhouse community also includes two timber retaining walls along Tamarach Ridge Drive.

3.0 Asphalt Pavement

3.1 Description

The streets in the townhouse sections of Westerley are accessed from either side of Augusta Drive near the intersection of Route 7. The townhouse community has nine asphalt-paved streets with several parking areas along the streets (reference Photograph 24 in Appendix D). There is a total of approximately 10,800 square yards of street asphalt area and approximately 1,100 square yards of parking areas. We counted about 87 parking spaces within the townhouse sections.

The repair and replacement of the asphalt pavement area for swimming pool parking is included in the Common Reserves.

3.2 Condition

The Townhouse community asphalt paved areas were in good condition. No major cracking or failures were observed. Some minor cracking was seen along the joints of the various sections of the streets (reference Photograph 25 in Appendix D). In addition, several patches were located along the roadway sections (reference Photograph 26 in Appendix D).

3.3 Recommended Repairs/Replacements

The following repairs or replacements are included in the tables in the attached appendices.

3.3.a - The townhouse community pavement should be seal coated and re-striped every five years. The community was developed around 1997 to 2001, and it appeared that the asphalt had been seal coated sometime between development and our site visit. Our opinion of cost to seal coat and re-stripe the townhouse streets and parking areas is $11,900. We recommend budgeting for this project beginning in 2007 and every five years thereafter. This cost should cover minor patching and crack filling. Seal coating and re-striping is not scheduled in 2017 due to the projected asphalt overlay project.

3.3.b - Periodic full-depth asphalt repairs are included in the reserve tables every five years. These repairs typically involve removing failed pavement, improving the sub-grade if necessary, and replacing the failed asphalt. The tables include an allowance to repair approximately 595 square yards of pavement, or about 5% of the total pavement area, every five years. Our opinion of cost for the full-depths repairs is $17,850.

3.3.c - Pavements should normally last 20 years before resurfacing (mill and overlay) is required, based on expected service life. Our opinion of cost to overlay the asphalt-paved areas of the townhouse community in 2017 is $119,000.

4.0 Concrete Features

4.1 Description

The asphalt-paved streets and parking areas in the townhouse community are lined with concrete sidewalks, and curbs and gutters. The concrete sidewalk panels are typically 4-foot by 4-foot sections (reference Photograph 27 in Appendix D). FEA measured a total of approximately 34,000 square feet of concrete sidewalk area. The curb in the townhouse community was measured to be approximately 8 inches high and 4 inches wide, and the gutter was about 24 inches wide. A total of approximately 9,300 linear feet of curb and gutter is included in the townhouse areas.

The repair and replacement of the sidewalk sections along Augusta Drive is included in the Common Reserves.

4.2 Condition

Sidewalks were in overall good condition. The curb and gutter is in good condition. No major cracking or failed sections, or settled sections were observed during our on-site visit. Several sections of both sidewalk and curb and gutter appeared to have been replaced since the community's development (reference Photograph 28 in Appendix D). Minor cracking was observed in such areas as the curb surrounding the storm water drainage inlets.

4.3 Recommended Repairs/Replacements

The following repairs or replacements are included in the tables in the attached appendices.

4.3.a - Concrete sidewalks will typically be replaced on an as-needed basis rather than all at once. The reserve tables include an allowance of $4,100 every three years to replace damaged or settled concrete sidewalk sections in the townhouse community. This allowance is based on budgeting for the replacement of approximately 2% of the total sidewalk area at our opinion of cost of $6 per square foot. The allowance is scheduled to begin in 2006.

4.3.b - Concrete curb and gutter are also typically replaced on an as-needed basis rather than all at once. The reserve tables include an allowance of $5,600 every three years to replace damaged or settled concrete curb and gutter sections in the townhouse community. This allowance is based on budgeting for the replacement of approximately 2% of the total curb and gutter linear footage at our opinion of cost of $30 per linear foot. The allowance is scheduled to begin in 2006.

5.0 Townhouse Site Drainage

Site drainage responsibilities for the townhouse community are limited to incidental repairs to storm water drainage inlets.

5.1 Description

Storm drainage is routed by curbs and gutters to inlet structures along the streets.

5.2 Condition

Storm water drainage inlets appeared to be in overall good condition.

5.3 Recommended Repairs/Replacements

5.3.a - The reserve tables include an allowance of $2,500 every ten years for periodic repairs to storm water drainage inlets. Budgeting is recommended to begin in 2009.

6.0 Townhouse Community Site Features

6.1 Description

The townhouse community site lighting is provided by 15-foot-high, woven fiberglass pole-mounted plastic ornamental light fixtures. There is a total of approximately 16 street light fixtures.

The townhouse community has numerous street signs, located at the street intersections, and various types of directional and enforcement metal signs. Most of the signs are mounted on metal poles and the stop signs in the community are mounted on wood posts.

Two timber retaining walls are located in the townhouse community along Tamarach Ridge Drive. The retaining walls are each about 60 to 70 feet long and range in height from about 1 foot to 2 feet high.

6.2 Condition

The townhouse section site lighting appeared to be in good condition. FEA observed a light fixture at the northwest end of Southern Oaks Ridge that was leaning (reference Photograph 29 in Appendix D). We recommend that the fiberglass pole be re-set and secured to prevent any future problems. Lamp replacements are not included in the reserve study; however, budgeting for the replacement of the poles and fixtures is included the reserve tables.

The metal signage in the community was in good condition. Replacement of the signage, along with the mounting poles, will most likely be on an as-needed basis. We recommend budgeting for an allowance for sign replacement every 3 years.

The wood retaining walls in the townhouse community were in good condition. No splitting in the wood was observed during our on-site visit.

6.3 Recommended Repairs/Replacements

The following repairs or replacements are included in the tables in the attached appendices.

6.3.a - We recommend budgeting for the replacement of the townhouse community light poles and fixtures in 2022, after 25 years of service life. Our opinion of cost to replace the lighting is $24,000.

6.3.b - The reserve tables include an allowance of $2,000 to replace worn or damaged signage every five years, beginning in 2007. This cost includes the replacement of both street signage and directional/enforcement signage.

6.3.c - We recommend budgeting for the replacement of the wood retaining walls in 2017, after 20 years of service life. Our opinion of cost to replace the timber walls is $6,500.

SINGLE-FAMILY HOME RESERVES

The single-family home reserve fund covers expenditures for the single-family homes in Westerley Homeowners Association, which includes concrete sidewalks and driveway aprons, and concrete curbs and gutters.

7.0 Concrete Features

7.1 Description

Concrete sidewalks in the single-family home areas typically consist of 4-foot by 4-foot panels. Streets in this section of the community generally have sidewalks located on one side. Concrete driveway aprons are a feature of the single-family homes. On the side of the road which has sidewalks, the aprons have a width at the curb of about 20 feet, a width at the start of the driveway of 16 feet, and a length of 8 feet from curb to driveway. On the side of the road without sidewalks, apron dimensions vary. Most of these aprons are the same size as those previously mentioned. However, in some instances, the length of the apron was as little as 2 to 4 feet (reference Photograph 30 in Appendix D). The approximate total concrete sidewalk and driveway apron area of the single-family home community is 55,738 square feet.

Street	Sidewalk (SF)	Aprons (SF)
Hollow Mountain	3,890	7,142
Cliff Haven	820	1,494
Maple Hollow	820	1,494
Backwater 1	1,940	3,547
North Brook	1,970	3,617
Augusta	3,180	5,835
Kenyon	640	1,167
Antioch	2,750	5,041
Backwater 2	1,410	2,591
Colby	1,070	1,960
Wesleyan	1,190	2,170
TOTAL		55,738

Concrete curbs and gutters line the streets of the single-family home sections. Curbs are typically 6 inches high, and gutters are 24 inches wide (reference Photograph 31 in Appendix D). FEA measured approximately 14,040 linear feet of curb and gutter in the single-family home sections.

Street	Length (LF)
Hollow Mountain	3,060
Cliff Haven	560
Maple Hollow	560
Backwater 1	1,520
North Brook	1,550
Augusta	1,250
Kenyon	500
Antioch	2,160
Backwater 2	1,110
Colby	840
Wesleyan	930
TOTAL	14,040

7.2 Condition

Sidewalks were generally in overall good condition. However, we noted some sidewalk sections that had settled relative to adjacent sections (reference Photograph 32 in Appendix D). We observed that several sections of sidewalk have been replaced since their original installation.

Curbs and gutters generally appeared to be in good condition as well. During our site visits, we observed some damaged curb and gutter sections, usually limited to minor cracks or broken concrete. The overall condition of curbs and gutters and concrete sidewalks was consistent with their age. Minor deterioration of paint was observed throughout the community

7.3 Recommended Repairs/Replacements

The following repairs or replacements are included in the tables in the attached appendices.

7.3.a - The reserve tables include an allowance of $6,690 to replace concrete sidewalk and driveway apron sections every three years, starting in 2006. Our opinion of cost is based on the replacement of about 1,675 square feet of concrete each cycle, or about 2% of the total square footage.

7.3.b - The reserve tables include an allowance of $8,400 every three years for repairs to concrete curb and gutter. The first cycle of repairs is projected in 2006. Our opinion of cost is based on the replacement of about 280 linear feet of curb and gutter each cycle, or about 2% of the total linear footage at the community.

8.0 Single-family Community Site Drainage

Site drainage responsibilities for the single-family home community are limited to incidental repairs to storm water drainage inlets.

8.1 Description

Storm drainage is routed by curbs and gutters to inlet structures along the streets. Inlets are generally located in pairs, one on each side of the street, at low points along the roads.

8.2 Condition

Storm water drainage inlets appeared to be in good condition. We observed over 30 inlets in the single-family home community. The inlets we observed were similar in design (reference Photograph 33 in Appendix D).

8.3 Recommended Repairs/Replacements

8.3.a - The reserve tables include an allowance of $5,000 every ten years for periodic repairs to storm water drainage inlets. The allowance begins in 2009.

APPENDIX A
COMMON RESERVE TABLES

RESERVE FUND PLAN MODEL EXPLANATION

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Table 1 - Expenditure Summary by System

This table lists the components surveyed as part of the study, and presents a summary of the cost data used for developing the reserve fund plan. A description of the columns in the table follows:

Column 1. **Text Section No.** refers to the section in the report text which describes the repairs listed in table.

Column 2. **Item Description** is a brief description of the component.

Column 3. **Typical Useful Life**, which shows the life expectancy of similar components in average conditions, and does not necessarily reflect the conditions observed during the study.

Column 4. **Target Replacement/Repair** gives the year in which capital expenditure is anticipated. Cycles are used if an item will require replacement more than once during the study period, or if a phased repair approach is required.

Column 5. **Quantity** of the component studied, which may be an exact number, a rough estimate, or simply a (1) if the expenditure forecast is a lump sum allowance for replacement of an unquantified component.

Column 6. **Units** used to quantify the component.

Column 7. **Unit Cost** used to calculate the required expenditure. This unit cost includes demolition or removal of existing components and installation of new components, including materials, labor, and overhead and profit for the contractor. These costs can vary significantly due to time of season, material costs, material availability, and other factors beyond our control.

Column 8. **Cost to Replace/Repair** the component, in 2004 dollars. Some items may show only a fraction of the total cost, which is referred to as "Partial Replacement." This is because wholesale replacement of such items is not likely, and partial replacement has been programmed in the model.

COMMON RESERVES
TABLE 1
EXPENDITURE SUMMARY BY SYSTEM

Text Section No.	Item Description	Typical Useful Life (yrs)	Target Replacement/Repair (year) Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Quantity	Units	Unit Cost	Cost to Replace/Repair** (present worth)
	SITE FEATURES										
1.0	Pool Facilities										
1.3.a	Replace Chain-Link Fences	20	2017	2037				1	lump sum	$9,500	$9,500
1.3.b	Repair/Replace Concrete Pool Deck Sections	5	2005	2010	2015	2020	2025	575	sq. ft.	$6	$3,450
1.3.c	Whitecoat Both Pools	8	2005	2013	2021	2029		1	lump sum	$15,000	$15,000
1.3.d	Repair/Replace Pool Coping	5	2006	2011	2016	2021	2026	1	lump sum	$2,000	$2,000
1.3.e	Replace Pool Cover	10	2014	2024	2032			1	lump sum	$7,000	$7,000
1.3.f	Major Pool Renovation	30	2031					1	lump sum	$100,000	$100,000
1.3.g	Replace Picnic Tables and Garbage Cans	15	2012	2027				1	lump sum	$7,000	$7,000
1.3.h	Replace or Re-strap Pool Furniture	5	2006	2011	2016	2026		1	lump sum	$5,000	$5,000
1.3.i	Replace Lifeguard Stands and Ladders	25	2022	2047				1	lump sum	$6,000	$6,000
1.3.j	Replace Vinyl Siding on Bathhouse	30	2027					1	lump sum	$3,800	$3,800
1.3.k	Replace Bathhouse Roof, Including Gutters & Downs	20	2017	2037				1	lump sum	$6,000	$6,000
1.3.l	Replace Bathhouse Doors	25	2022	2047				1	lump sum	$3,600	$3,600
1.3.m	Replace Bathhouse Windows	25	2022	2047				1	lump sum	$1,600	$1,600
1.3.n	Bathhouse Renovation	30	2031					1	lump sum	$35,000	$35,000
1.3.o	Pool Equipment Repairs and Replacements	5	2005	2010	2015	2020	2025	1	lump sum	$2,500	$2,500
1.3.p	Replace Exterior Lighting Fixtures	25	2022	2047				1	lump sum	$2,400	$2,400
1.3.q	Replace Water Heater	15	2015	2030				1	lump sum	$5,000	$5,000
2.0	Amenities and Site Features										
2.3.a	Asphalt Footpath Repairs	3	2005	2008	2011	2014	2017	1	lump sum	$1,500	$1,500
2.3.b	Replace Split-Rail Fencing around Storm Water Ponds	20	2017	2037				725	lin. ft.	$15	$10,875
2.3.c	Repaint and Repair Sound-Attenuation Fence	7	2006	2013	2024	2031		12,000	sq. ft.	$0.25	$3,000
2.3.d	Replace Sound-Attenuation Fence	20	2017	2037				1,000	lin. ft.	$15	$15,000
2.3.e	Replace Brick Retaining Wall	30	2027					390	sq. ft.	$30	$11,700
2.3.f	Stormwater Management Pond Allowance	10	2010	2020	2030			1	lump sum	$5,000	$5,000
2.3.g	Seal Coat and Re-stripe Asphalt	5	2007	2012	2022	2027		595	sq. yds.	$1.00	$595
2.3.h	Asphalt Full-depth Repairs	5	2007	2012	2022	2027		30	sq. yds.	$30	$900
2.3.i	Asphalt Resurfacing (Mill and Overlay)	20	2017	2037				595	sq. yds.	$10	$5,950
2.3.j	Curb and Gutter Section Replacement Allowance	3	2006	2009	2012	2015	2018	10	lin. ft.	$30	$300
2.3.k	Sidewalk Section Replacement Allowance	3	2006	2009	2012	2015	2018	100	sq. ft.	$6	$600
2.3.l	Wood Fence Replacement	15	2006	2021	2036			555	lin. ft.	$15	$8,325
2.3.m	Repair Entrance Feature	10	2010	2020	2023			1	lump sum	$2,000	$2,000
2.3.n	Replace Community Information Board	15	2012	2027				1	lump sum	$2,000	$2,000
2.3.o	Replace Pet Stations	15	2019	2034				3	each	$400	$1,200
											$283,795

RESERVE FUND PLAN MODEL EXPLANATION

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Table 2 - Expenditure Forecast By Year

This table lists components that are scheduled for replacement during a given year. A description of the columns in the table follows:

Column 1. **Text Section No.** refers to the section in the report text which describes in detail the repairs listed in table.

Column 2. **Item Description** is a brief description of the component.

Column 3. **Cost to Replace/Repair** the component, in 2004 dollars (present worth).

Column 4. **Cost to Replace/Repair** the component in the given year (future worth).

Column 5. **Yearly Contribution** for the component.

Column 6. **Total Contribution** for only those components being replaced in the given year.

Column 7. **Total Expenditures** for all components being replaced in the given year.

COMMON RESERVES

TABLE 2

EXPENDITURE FORECAST BY YEAR

Text Section No.	Item Description	Cost to Replace/Repair *(present worth)*	Cost to Replace/Repair *(future worth)*	Yearly Contribution	Total Contribution	Total Expenditures
2005						
1.3.b	Repair/Replace Concrete Pool Deck Sections	$3,450	$3,450			
1.3.c	Whitecoat Both Pools					
1.3.o	Pool Equipment Repairs and Replacements	$2,500	$2,500			
2.3.a	Asphalt Footpath Repairs	$1,500	$1,500			**$7,450**
2006						
1.3.d	Repair/Replace Pool Coping	$2,000	$2,048	$1,763		
1.3.h	Replace or Re-strap Pool Furniture	$5,000	$5,121	$4,409		
2.3.c	Repaint and Repair Sound-Attenuation Fence	$3,000	$3,073	$2,645		
2.3.j	Curb and Gutter Section Replacement Allowance	$300	$307	$265		
2.3.k	Sidewalk Section Replacement Allowance	$600	$615	$529		
2.3.l	Wood Fence Replacement	$8,325	$8,526	$7,341	**$16,952**	**$19,690**
2007						
2.3.g	Seal Coat and Re-stripe Asphalt	$595	$624	$266		
2.3.h	Asphalt Full-depth Repairs	$900	$944	$403	**$669**	**$1,568**
2008						
2.3.a	Asphalt Footpath Repairs	$1,500	$1,612	$529	**$529**	**$1,612**
2009						
2.3.j	Curb and Gutter Section Replacement Allowance	$300	$330	$108		
2.3.k	Sidewalk Section Replacement Allowance	$600	$660	$217	**$325**	**$990**
2010						
2.3.f	Stormwater Management Pond Allowance	$5,000	$5,635	$935		
2.3.m	Repair Entrance Feature	$2,000	$2,254	$374		
1.3.b	Repair/Replace Concrete Pool Deck Sections	$3,450	$3,888	$753		
1.3.o	Pool Equipment Repairs and Replacements	$2,500	$2,817	$546	**$2,608**	**$14,595**
2011						
1.3.d	Repair/Replace Pool Coping	$2,000	$2,309	$447		
1.3.h	Replace or Re-strap Pool Furniture	$5,000	$5,771	$1,118		
2.3.a	Asphalt Footpath Repairs	$1,500	$1,731	$568	**$2,133**	**$9,811**
2012						
1.3.g	Replace Picnic Tables and Garbage Cans	$7,000	$8,275	$963		
2.3.n	Replace Community Information Board	$2,000	$2,364	$275		
2.3.g	Seal Coat and Re-stripe Asphalt	$595	$703	$136		
2.3.h	Asphalt Full-depth Repairs	$900	$1,064	$206		
2.3.j	Curb and Gutter Section Replacement Allowance	$300	$355	$116		
2.3.k	Sidewalk Section Replacement Allowance	$600	$709	$233	**$1,929**	**$13,471**
2013						
1.3.c	Whitecoat Both Pools	$15,000	$18,162	$2,147		
2.3.c	Repaint and Repair Sound-Attenuation Fence	$3,000	$3,632	$495	**$2,642**	**$21,795**
2014						
1.3.e	Replace Pool Cover	$7,000	$8,681	$771		
2.3.a	Asphalt Footpath Repairs	$1,500	$1,860	$610	**$1,381**	**$10,541**
2015						
1.3.q	Replace Water Heater	$5,000	$6,351	$503		
1.3.b	Repair/Replace Concrete Pool Deck Sections	$3,450	$4,382	$849		
1.3.o	Pool Equipment Repairs and Replacements	$2,500	$3,175	$615		
2.3.j	Curb and Gutter Section Replacement Allowance	$300	$381	$125		
2.3.k	Sidewalk Section Replacement Allowance	$600	$762	$250	**$2,342**	**$15,051**

COMMON RESERVES

TABLE 2

EXPENDITURE FORECAST BY YEAR

Text Section No.	Item Description	Cost to Replace/Repair *(present worth)*	Cost to Replace/Repair *(future worth)*	Yearly Contribution	Total Contribution	Total Expenditures
2016						
1.3.d	Repair/Replace Pool Coping	$2,000	$2,602	$504		
1.3.h	Replace or Re-strap Pool Furniture	$5,000	$6,504	$1,260	**$1,764**	**$9,106**
2017						
1.3.a	Replace Chain-Link Fences	$9,500	$12,657	$819		
1.3.k	Replace Bathhouse Roof, Including Gutters & Downs	$6,000	$7,994	$518		
2.3.b	Replace Split-Rail Fencing around Storm Water Ponds	$10,875	$14,489	$938		
2.3.d	Replace Sound-Attenuation Fence	$15,000	$19,985	$1,294		
2.3.i	Asphalt Resurfacing (Mill and Overlay)	$5,950	$7,927	$513		
2.3.a	Asphalt Footpath Repairs	$1,500	$1,999	$656	**$4,738**	**$65,052**
2018						
2.3.j	Curb and Gutter Section Replacement Allowance	$300	$409	$134		
2.3.k	Sidewalk Section Replacement Allowance	$600	$819	$269	**$403**	**$1,228**
2019						
2.3.o	Replace Pet Stations	$1,200	$1,677	$91	**$91**	**$1,677**
2020						
2.3.f	Stormwater Management Pond Allowance	$5,000	$7,157	$666		
2.3.m	Repair Entrance Feature	$2,000	$2,863	$266		
1.3.b	Repair/Replace Concrete Pool Deck Sections	$3,450	$4,938	$957		
1.3.o	Pool Equipment Repairs and Replacements	$2,500	$3,579	$693	**$2,582**	**$18,537**
2021						
2.3.l	Wood Fence Replacement	$8,325	$12,205	$727		
1.3.c	Whitecoat Both Pools	$15,000	$21,991	$2,600		
1.3.d	Repair/Replace Pool Coping	$2,000	$2,932	$568		
2.3.j	Curb and Gutter Section Replacement Allowance	$300	$440	$144		
2.3.k	Sidewalk Section Replacement Allowance	$600	$880	$289	**$4,327**	**$38,448**
2022						
1.3.i	Replace Lifeguard Stands and Ladders	$6,000	$9,009	$392		
1.3.l	Replace Bathhouse Doors	$3,600	$5,406	$235		
1.3.m	Replace Bathhouse Windows	$1,600	$2,402	$105		
1.3.p	Replace Exterior Lighting Fixtures	$2,400	$3,604	$157		
2.3.g	Seal Coat and Re-stripe Asphalt	$595	$893	$83		
2.3.h	Asphalt Full-depth Repairs	$900	$1,351	$126	**$1,098**	**$22,666**
2023						
2.3.m	Repair Entrance Feature	$2,000	$3,076	$1,009	**$1,009**	**$3,076**
2024						
1.3.e	Replace Pool Cover	$7,000	$11,026	$1,026		
2.3.c	Repaint and Repair Sound-Attenuation Fence	$3,000	$4,725	$397		
2.3.j	Curb and Gutter Section Replacement Allowance	$300	$473	$155		
2.3.k	Sidewalk Section Replacement Allowance	$600	$945	$310	**$1,888**	**$17,169**

RESERVE FUND PLAN MODEL EXPLANATION

Table 3 - Component Contribution By Year

This table lists each studied component requiring replacement, and gives the contribution which would be required in each year for each component under the *component method* of analysis. The total contribution given in the bottom row of the table is the "Component Method Contribution" given in column 5 of Table 4.

The spreadsheet allocates a portion of the existing reserve balance to each component listed in the table based on a ratio of the individual component value to the total value of all components, as well as the next replacement date for the component. Any required expenditures in the first year are fully funded from the existing balance before the remaining balance is allocated to the components.

COMMON RESERVES
TABLE 3
COMPONENT CONTRIBUTION BY YEAR

Text Section No.	Item Description	1 Contribution 2005	2 Contribution 2006	3 Contribution 2007	4 Contribution 2008	5 Contribution 2009	6 Contribution 2010	7 Contribution 2011	8 Contribution 2012	9 Contribution 2013	10 Contribution 2014
	SITE FEATURES										
1.0	Pool Facilities										
1.3.a	Replace Chain-Link Fences	$819	$819	$819	$819	$819	$819	$819	$819	$819	$819
1.3.b	Repair/Replace Concrete Pool Deck Sections	$753	$753	$753	$753	$753	$849	$849	$849	$849	$849
1.3.c	Whitecoat Both Pools	$2,147	$2,147	$2,147	$2,147	$2,147	$2,147	$2,147	$2,147	$2,600	$2,600
1.3.d	Repair/Replace Pool Coping	$1,763	$447	$447	$447	$447	$447	$447	$504	$504	$504
1.3.e	Replace Pool Cover	$771	$771	$771	$771	$771	$771	$771	$771	$771	$1,026
1.3.f	Major Pool Renovation	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857
1.3.g	Replace Picnic Tables and Garbage Cans	$963	$963	$963	$963	$963	$963	$963	$706	$706	$706
1.3.h	Replace or Re-strap Pool Furniture	$4,409	$1,118	$1,118	$1,118	$1,118	$1,118	$1,260	$1,260	$1,260	$1,260
1.3.i	Replace Lifeguard Stands and Ladders	$392	$392	$392	$392	$392	$392	$392	$392	$392	$392
1.3.j	Replace Vinyl Siding on Bathhouse	$206	$206	$206	$206	$206	$206	$206	$206	$206	$206
1.3.k	Replace Bathhouse Roof, Including Gutters & Downs	$518	$518	$518	$518	$518	$518	$518	$518	$518	$518
1.3.l	Replace Bathhouse Doors	$235	$235	$235	$235	$235	$235	$235	$235	$235	$235
1.3.m	Replace Bathhouse Windows	$105	$105	$105	$105	$105	$105	$105	$105	$105	$105
1.3.n	Bathhouse Renovation	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700
1.3.o	Pool Equipment Repairs and Replacements	$546	$546	$546	$546	$546	$615	$615	$615	$615	$615
1.3.p	Replace Exterior Lighting Fixtures	$157	$157	$157	$157	$157	$157	$157	$157	$157	$157
1.3.q	Replace Water Heater	$503	$503	$503	$503	$503	$503	$503	$503	$503	$503
2.0	Amenities and Site Features										
2.3.a	Asphalt Footpath Repairs	$529	$529	$529	$568	$568	$568	$610	$610	$610	$656
2.3.b	Replace Split-Rail Fencing around Storm Water Ponds	$938	$938	$938	$938	$938	$938	$938	$938	$938	$938
2.3.c	Repaint and Repair Sound-Attenuation Fence	$2,645	$495	$495	$495	$495	$495	$495	$495	$397	$397
2.3.d	Replace Sound-Attenuation Fence	$1,294	$1,294	$1,294	$1,294	$1,294	$1,294	$1,294	$1,294	$1,294	$1,294
2.3.e	Replace Brick Retaining Wall	$635	$635	$635	$635	$635	$635	$635	$635	$635	$635
2.3.f	Stormwater Management Pond Allowance	$935	$935	$935	$935	$935	$666	$666	$666	$666	$666
2.3.g	Seal Coat and Re-stripe Asphalt	$266	$266	$136	$136	$136	$136	$136	$83	$83	$83
2.3.h	Asphalt Full-depth Repairs	$403	$403	$206	$206	$206	$206	$206	$126	$126	$126
2.3.i	Asphalt Resurfacing (Mill and Overlay)	$513	$513	$513	$513	$513	$513	$513	$513	$513	$513
2.3.j	Curb and Gutter Section Replacement Allowance	$265	$108	$108	$108	$116	$116	$116	$125	$125	$125
2.3.k	Sidewalk Section Replacement Allowance	$529	$217	$217	$217	$233	$233	$233	$250	$250	$250
2.3.l	Wood Fence Replacement	$7,341	$727	$727	$727	$727	$727	$727	$727	$727	$727
2.3.m	Repair Entrance Feature	$374	$374	$374	$374	$374	$266	$266	$266	$266	$266
2.3.n	Replace Community Information Board	$275	$275	$275	$275	$275	$275	$275	$202	$202	$202
2.3.o	Replace Pet Stations	$91	$91	$91	$91	$91	$91	$91	$91	$91	$91
		$37,876	$24,037	$23,710	$23,750	$23,774	$23,562	$23,803	$23,365	$23,719	$24,020

COMMON RESERVES
TABLE 3
COMPONENT CONTRIBUTION BY YEAR

Text Section No.	Item Description	11 Contribution 2015	12 Contribution 2016	13 Contribution 2017	14 Contribution 2018	15 Contribution 2019	16 Contribution 2020	17 Contribution 2021	18 Contribution 2022	19 Contribution 2023	20 Contribution 2024
	SITE FEATURES										
1.0	Pool Facilities										
1.3.a	Replace Chain-Link Fences	$819	$819	$875	$875	$875	$875	$875	$875	$875	$875
1.3.b	Repair/Replace Concrete Pool Deck Sections	$957	$957	$957	$957	$957	$1,078	$1,078	$1,078	$1,078	$1,078
1.3.c	Whitecoat Both Pools	$2,600	$2,600	$2,600	$2,600	$2,600	$2,600	$3,148	$3,148	$3,148	$3,148
1.3.d	Repair/Replace Pool Coping	$504	$568	$568	$568	$568	$568	$640	$640	$640	$640
1.3.e	Replace Pool Cover	$1,026	$1,026	$1,026	$1,026	$1,026	$1,026	$1,026	$1,026	$1,026	$1,578
1.3.f	Major Pool Renovation	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857	$4,857
1.3.g	Replace Picnic Tables and Garbage Cans	$706	$706	$706	$706	$706	$706	$706	$706	$706	$706
1.3.h	Replace or Re-strap Pool Furniture	$1,260	$769	$769	$769	$769	$769	$769	$769	$769	$769
1.3.i	Replace Lifeguard Stands and Ladders	$392	$392	$392	$392	$392	$392	$392	$539	$539	$539
1.3.j	Replace Vinyl Siding on Bathhouse	$206	$206	$206	$206	$206	$206	$206	$206	$206	$206
1.3.k	Replace Bathhouse Roof, Including Gutters & Downs	$518	$518	$553	$553	$553	$553	$553	$553	$553	$553
1.3.l	Replace Bathhouse Doors	$235	$235	$235	$235	$235	$235	$235	$323	$323	$323
1.3.m	Replace Bathhouse Windows	$105	$105	$105	$105	$105	$105	$105	$144	$144	$144
1.3.n	Bathhouse Renovation	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700	$1,700
1.3.o	Pool Equipment Repairs and Replacements	$693	$693	$693	$693	$693	$781	$781	$781	$781	$781
1.3.p	Replace Exterior Lighting Fixtures	$157	$157	$157	$157	$157	$157	$157	$215	$215	$215
1.3.q	Replace Water Heater	$541	$541	$541	$541	$541	$541	$541	$541	$541	$541
2.0	Amenities and Site Features										
2.3.a	Asphalt Footpath Repairs	$656	$656								
2.3.b	Replace Split-Rail Fencing around Storm Water Ponds	$938	$938	$1,002	$1,002	$1,002	$1,002	$1,002	$1,002	$1,002	$1,002
2.3.c	Repaint and Repair Sound-Attenuation Fence	$397	$397	$397	$397	$397	$397	$397	$397	$397	$761
2.3.d	Replace Sound-Attenuation Fence	$1,294	$1,294	$1,382	$1,382	$1,382	$1,382	$1,382	$1,382	$1,382	$1,382
2.3.e	Replace Brick Retaining Wall	$635	$635	$635	$635	$635	$635	$635	$635	$635	$635
2.3.f	Stormwater Management Pond Allowance	$666	$666	$666	$666	$666	$846	$846	$846	$846	$846
2.3.g	Seal Coat and Re-stripe Asphalt	$83	$83	$83	$83	$83	$83	$83	$195	$195	$195
2.3.h	Asphalt Full-depth Repairs	$126	$126	$126	$126	$126	$126	$126	$295	$295	$295
2.3.i	Asphalt Resurfacing (Mill and Overlay)	$513	$513	$548	$548	$548	$548	$548	$548	$548	$548
2.3.j	Curb and Gutter Section Replacement Allowance	$134	$134	$134	$144	$144	$144	$155	$155	$155	$167
2.3.k	Sidewalk Section Replacement Allowance	$269	$269	$269	$289	$289	$289	$310	$310	$310	$333
2.3.l	Wood Fence Replacement	$727	$727	$727	$727	$727	$727	$1,041	$1,041	$1,041	$1,041
2.3.m	Repair Entrance Feature	$266	$266	$266	$266	$266	$1,009	$1,009	$1,009		
2.3.n	Replace Community Information Board	$202	$202	$202	$202	$202	$202	$202	$202	$202	$202
2.3.o	Replace Pet Stations	$91	$91	$91	$91	$143	$143	$143	$143	$143	$143
		$24,272	$23,845	$23,467	$23,497	$23,549	$24,681	$25,647	$26,260	$25,251	$26,202

CASH FLOW SUMMARY EXPLANATION

The following table presents the cash flow over the 20-year study period for the Common Reserve Fund.

Table 4 shows the cash flow impact of using a starting balance of $56,375 for FY2005, based on the reallocation of reserves within the Westerley community. The annual contribution is scheduled to remain constant at $16,090 for the study period.

The table is followed by a bar chart showing expenditures vs. reserve balance.

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Individual columns in each table contain the following information:

Column 1. **Year**

Column 2. **Total Component Value - total worth** of all reserve component repair/replacement costs in that year

Column 3. **Beginning Reserve Balance**, which shows the amount after all activity in the prior year is completed

Column 4. **Yearly Contribution**

Column 5. **Component Method Contribution**, which represents the sum of all component contributions required for each year

Column 6. **Interest** Paid on Reserve Balance (if applicable). This is the interest paid on the reserve balance calculated as if the annual expenditures were paid at the beginning of the year.

Column 7. **Capital Expenditures**. This is the sum of all replacement reserve projects that need to be completed in a given year.

Column 8. **Ending Reserve Balance**. This is the result of the beginning reserve balance, plus annual contribution, plus interest income, less expenditures made during the year.

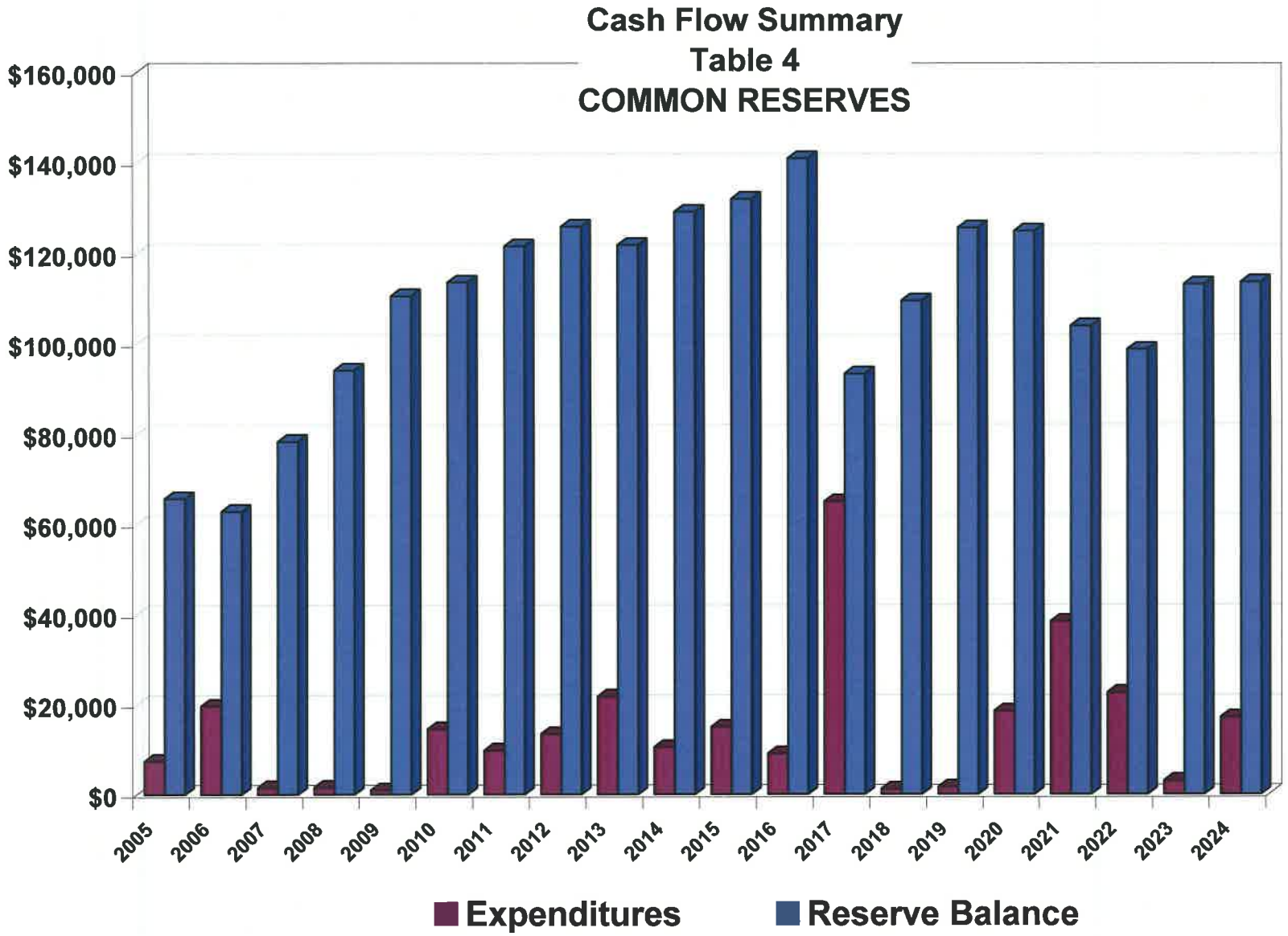
Column 9. **% Total Component Value**. Ratio of the ending reserve balance to the total component value, expressed as a percentage.

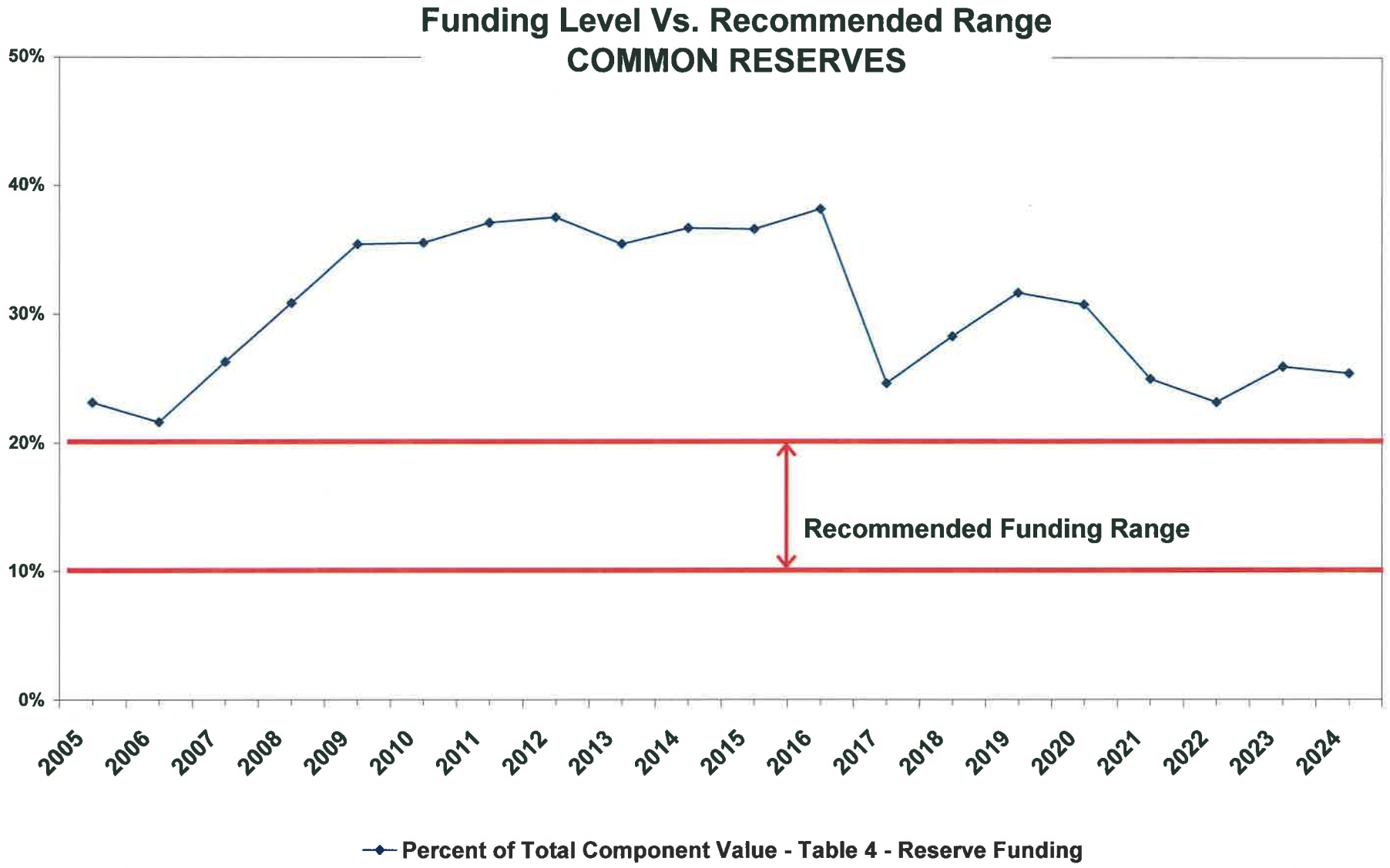
COMMON RESERVES
TABLE 4
CASH FLOW SUMMARY
(Reserve Funding)

WESTERLY HOMEOWNERS ASSOCIATION

Initial Contribution:	**$16,090**	**Begin Study Period:**	**2005**
Projected Increase:	**N/A**	**End Study Period:**	**2024**
Beginning Balance:	**$56,375**		

Year	Total Component Value	Beginning Reserve Balance	Yearly Contribution	Component Method Contribution	Interest Paid On Reserve Balance	Capital Expenditures	Ending Reserve Balance	% Total Component Value
2005	$283,795	$56,375	$16,090	$37,876	$778	$7,450	$65,793	23%
2006	$290,663	$65,793	$16,090	$24,037	$733	$19,690	$62,926	22%
2007	$297,697	$62,926	$16,090	$23,710	$976	$1,568	$78,423	26%
2008	$304,901	$78,423	$16,090	$23,750	$1,221	$1,612	$94,123	31%
2009	$312,280	$94,123	$16,090	$23,774	$1,481	$990	$110,703	35%
2010	$319,837	$110,703	$16,090	$23,562	$1,528	$14,595	$113,727	36%
2011	$327,577	$113,727	$16,090	$23,803	$1,652	$9,811	$121,658	37%
2012	$335,504	$121,658	$16,090	$23,365	$1,720	$13,471	$125,997	38%
2013	$343,624	$125,997	$16,090	$23,719	$1,657	$21,795	$121,949	35%
2014	$351,939	$121,949	$16,090	$24,020	$1,771	$10,541	$129,269	37%
2015	$360,456	$129,269	$16,090	$24,272	$1,816	$15,051	$132,124	37%
2016	$369,179	$132,124	$16,090	$23,845	$1,956	$9,106	$141,064	38%
2017	$378,113	$141,064	$16,090	$23,467	$1,209	$65,052	$93,311	25%
2018	$387,264	$93,311	$16,090	$23,497	$1,464	$1,228	$109,637	28%
2019	$396,635	$109,637	$16,090	$23,549	$1,717	$1,677	$125,766	32%
2020	$406,234	$125,766	$16,090	$24,681	$1,705	$18,537	$125,024	31%
2021	$416,065	$125,024	$16,090	$25,647	$1,377	$38,448	$104,043	25%
2022	$426,134	$104,043	$16,090	$26,260	$1,294	$22,666	$98,761	23%
2023	$436,446	$98,761	$16,090	$25,251	$1,521	$3,076	$113,296	26%
2024	$447,008	$113,296	$16,090	$26,202	$1,528	$17,169	$113,746	25%


Cash Flow Summary
Table 4
COMMON RESERVES
$160,000
$140,000
$120,000
$100,000
$80,000
$60,000
$40,000
$20,000
$0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
Expenditures
Reserve Balance


Funding Level Vs. Recommended Range
COMMON RESERVES
50%
40%
30%
20%
10%
0%
Recommended Funding Range
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
Percent of Total Component Value - Table 4 - Reserve Funding

APPENDIX B
TOWNHOUSE RESERVE TABLES

RESERVE FUND PLAN MODEL EXPLANATION

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Table 1 - Expenditure Summary by System

This table lists the components surveyed as part of the study, and presents a summary of the cost data used for developing the reserve fund plan. A description of the columns in the table follows:

Column 1. **Text Section No.** refers to the section in the report text which describes the repairs listed in table.

Column 2. **Item Description** is a brief description of the component.

Column 3. **Typical Useful Life**, which shows the life expectancy of similar components in average conditions, and does not necessarily reflect the conditions observed during the study.

Column 4. **Target Replacement/Repair** gives the year in which capital expenditure is anticipated. Cycles are used if an item will require replacement more than once during the study period, or if a phased repair approach is required.

Column 5. **Quantity** of the component studied, which may be an exact number, a rough estimate, or simply a (1) if the expenditure forecast is a lump sum allowance for replacement of an unquantified component.

Column 6. **Units** used to quantify the component.

Column 7. **Unit Cost** used to calculate the required expenditure. This unit cost includes demolition or removal of existing components and installation of new components, including materials, labor, and overhead and profit for the contractor. These costs can vary significantly due to time of season, material costs, material availability, and other factors beyond our control.

Column 8. **Cost to Replace/Repair** the component, in 2004 dollars. Some items may show only a fraction of the total cost, which is referred to as "Partial Replacement." This is because wholesale replacement of such items is not likely, and partial replacement has been programmed in the model.

TOWNHOUSE RESERVES
TABLE 1
EXPENDITURE SUMMARY BY SYSTEM

Text Section No.	Item Description	Typical Useful Life (yrs)	Target Replacement/Repair *(year)* Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Quantity	Units	Unit Cost	Cost to Replace/Repair** *(present worth)*
	SITE FEATURES										
3.0	**Pavements**										
3.3.a	Seal Coat and Re-stripe Asphalt	5	2007	2012	2022	2027		11,900	sq. yds.	$1.00	$11,900
3.3.b	Asphalt Full-depth Repairs	20	2017	2037				595	sq. yds.	$30	$17,850
3.3.c	Asphalt Resurfacing (Mill and Overlay)	20	2017	2037				11,900	sq. yds.	$10	$119,000
4.0	**Concrete Site Features**										
4.3.a	Sidewalk Section Replacement Allowance	3	2006	2009	2012	2015	2018	683	sq. ft.	$6	$4,100
4.3.b	Curb and Gutter Section Replacement Allowance	3	2006	2009	2012	2015	2018	187	lin. ft.	$30	$5,600
5.0	**Townhouse Site Drainage**										
5.3.a	Stormwater and Sanitary Sewer Repairs	10	2009	2019	2029			1	lump sum	$2,500	$2,500
6.0	**Townhouse Community Site Features**										
6.3.a	Replace Community Lighting	25	2022	2047				1	lump sum	$24,000	$24,000
6.3.b	Replace Community Signage	5	2007	2012	2017	2022	2027	1	lump sum	$2,000	$2,000
6.3.c	Replace Wood Timber Retaining Walls	20	2017	2037				260	sq. ft.	$25	$6,500
											$193,450

RESERVE FUND PLAN MODEL EXPLANATION

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Table 2 - Expenditure Forecast By Year

This table lists components that are scheduled for replacement during a given year. A description of the columns in the table follows:

Column 1. **Text Section No.** refers to the section in the report text which describes in detail the repairs listed in table.

Column 2. **Item Description** is a brief description of the component.

Column 3. **Cost to Replace/Repair** the component, in 2004 dollars (present worth).

Column 4. **Cost to Replace/Repair** the component in the given year (future worth).

Column 5. **Yearly Contribution** for the component.

Column 6. **Total Contribution** for only those components being replaced in the given year.

Column 7. **Total Expenditures** for all components being replaced in the given year.

TOWHOUSE RESERVES

TABLE 2

EXPENDITURE FORECAST BY YEAR

Text Section No.	Item Description	Cost to Replace/Repair *(present worth)*	Cost to Replace/Repair *(future worth)*	Yearly Contribution	Total Contribution	Total Expenditures
2005						
2006						
4.3.a	Sidewalk Section Replacement Allowance	$4,100	$4,199	$3,850		
4.3.b	Curb and Gutter Section Replacement Allowance	$5,600	$5,736	$5,259	**$9,110**	**$9,935**
2007						
3.3.a	Seal Coat and Re-stripe Asphalt	$11,900	$12,483	$5,674		
6.3.b	Replace Community Signage	$2,000	$2,098	$954	**$6,627**	**$14,581**
2008						
2009						
5.3.a	Stormwater and Sanitary Sewer Repairs	$2,500	$2,751	$614		
4.3.a	Sidewalk Section Replacement Allowance	$4,100	$4,512	$1,480		
4.3.b	Curb and Gutter Section Replacement Allowance	$5,600	$6,162	$2,022	**$4,116**	**$13,425**
2010						
2011						
2012						
3.3.a	Seal Coat and Re-stripe Asphalt	$11,900	$14,068	$2,726		
6.3.b	Replace Community Signage	$2,000	$2,364	$458		
4.3.a	Sidewalk Section Replacement Allowance	$4,100	$4,847	$1,590		
4.3.b	Curb and Gutter Section Replacement Allowance	$5,600	$6,620	$2,172	**$6,946**	**$27,900**
2013						
2014						
2015						
4.3.a	Sidewalk Section Replacement Allowance	$4,100	$5,208	$1,709		
4.3.b	Curb and Gutter Section Replacement Allowance	$5,600	$7,113	$2,334	**$4,042**	**$12,320**
2016						
2017						
3.3.b	Asphalt Full-depth Repairs	$17,850	$23,782	$1,650		
3.3.c	Asphalt Resurfacing (Mill and Overlay)	$119,000	$158,549	$11,002		
6.3.c	Replace Wood Timber Retaining Walls	$6,500	$8,660	$601		
6.3.b	Replace Community Signage	$2,000	$2,665	$516	**$13,770**	**$193,657**
2018						
4.3.a	Sidewalk Section Replacement Allowance	$4,100	$5,595	$1,836		
4.3.b	Curb and Gutter Section Replacement Allowance	$5,600	$7,642	$2,507	**$4,343**	**$13,237**
2019						
5.3.a	Stormwater and Sanitary Sewer Repairs	$2,500	$3,494	$325	**$325**	**$3,494**
2020						
2021						
4.3.a	Sidewalk Section Replacement Allowance	$4,100	$6,011	$1,972		
4.3.b	Curb and Gutter Section Replacement Allowance	$5,600	$8,210	$2,694	**$4,666**	**$14,221**
2022						
6.3.a	Replace Community Lighting	$24,000	$36,037	$1,688		
3.3.a	Seal Coat and Re-stripe Asphalt	$11,900	$17,868	$1,663		
6.3.b	Replace Community Signage	$2,000	$3,003	$582	**$3,932**	**$56,909**
2023						
2024						
4.3.a	Sidewalk Section Replacement Allowance	$4,100	$6,458	$2,119		
4.3.b	Curb and Gutter Section Replacement Allowance	$5,600	$8,821	$2,894	**$5,013**	**$15,279**

RESERVE FUND PLAN MODEL EXPLANATION

Table 3 - Component Contribution By Year

This table lists each studied component requiring replacement, and gives the contribution which would be required in each year for each component under the *component method* of analysis. The total contribution given in the bottom row of the table is the "Component Method Contribution" given in column 5 of Table 4.

The spreadsheet allocates a portion of the existing reserve balance to each component listed in the table based on a ratio of the individual component value to the total value of all components, as well as the next replacement date for the component. Any required expenditures in the first year are fully funded from the existing balance before the remaining balance is allocated to the components.

TOWNHOUSE RESERVES
TABLE 3
COMPONENT CONTRIBUTION BY YEAR

Text Section No.	Item Description	1 Contribution 2005	2 Contribution 2006	3 Contribution 2007	4 Contribution 2008	5 Contribution 2009	6 Contribution 2010	7 Contribution 2011	8 Contribution 2012	9 Contribution 2013	10 Contribution 2014
	SITE FEATURES										
3.0	Pavements										
3.3.a	Seal Coat and Re-stripe Asphalt	$5,674	$5,674	$2,726	$2,726	$2,726	$2,726	$2,726	$1,663	$1,663	$1,663
3.3.b	Asphalt Full-depth Repairs	$1,650	$1,650	$1,650	$1,650	$1,650	$1,650	$1,650	$1,650	$1,650	$1,650
3.3.c	Asphalt Resurfacing (Mill and Overlay)	$11,002	$11,002	$11,002	$11,002	$11,002	$11,002	$11,002	$11,002	$11,002	$11,002
4.0	Concrete Site Features										
4.3.a	Sidewalk Section Replacement Allowance	$3,850	$1,480	$1,480	$1,480	$1,590	$1,590	$1,590	$1,709	$1,709	$1,709
4.3.b	Curb and Gutter Section Replacement Allowance	$5,259	$2,022	$2,022	$2,022	$2,172	$2,172	$2,172	$2,334	$2,334	$2,334
5.0	Townhouse Site Drainage										
5.3.a	Stormwater and Sanitary Sewer Repairs	$614	$614	$614	$614	$325	$325	$325	$325	$325	$325
6.0	Townhouse Community Site Features										
6.3.a	Replace Community Lighting	$1,688	$1,688	$1,688	$1,688	$1,688	$1,688	$1,688	$1,688	$1,688	$1,688
6.3.b	Replace Community Signage	$954	$954	$458	$458	$458	$458	$458	$516	$516	$516
6.3.c	Replace Wood Timber Retaining Walls	$601	$601	$601	$601	$601	$601	$601	$601	$601	$601
		$31,293	$25,685	$22,242	$22,242	$22,213	$22,213	$22,213	$21,488	$21,488	$21,488

TOWNHOUSE RESERVES
TABLE 3
COMPONENT CONTRIBUTION BY YEAR

Text Section No.	Item Description	11 Contribution 2015	12 Contribution 2016	13 Contribution 2017	14 Contribution 2018	15 Contribution 2019	16 Contribution 2020	17 Contribution 2021	18 Contribution 2022	19 Contribution 2023	20 Contribution 2024
	SITE FEATURES										
3.0	Pavements										
3.3.a	Seal Coat and Re-stripe Asphalt	$1,663	$1,663	$1,663	$1,663	$1,663	$1,663	$1,663	$3,902	$3,902	$3,902
3.3.b	Asphalt Full-depth Repairs	$1,650	$1,650	$1,645	$1,645	$1,645	$1,645	$1,645	$1,645	$1,645	$1,645
3.3.c	Asphalt Resurfacing (Mill and Overlay)	$11,002	$11,002	$10,964	$10,964	$10,964	$10,964	$10,964	$10,964	$10,964	$10,964
4.0	Concrete Site Features										
4.3.a	Sidewalk Section Replacement Allowance	$1,836	$1,836	$1,836	$1,972	$1,972	$1,972	$2,119	$2,119	$2,119	$2,276
4.3.b	Curb and Gutter Section Replacement Allowance	$2,507	$2,507	$2,507	$2,694	$2,694	$2,694	$2,894	$2,894	$2,894	$3,109
5.0	Townhouse Site Drainage										
5.3.a	Stormwater and Sanitary Sewer Repairs	$325	$325	$325	$325	$413	$413	$413	$413	$413	$413
6.0	Townhouse Community Site Features										
6.3.a	Replace Community Lighting	$1,688	$1,688	$1,688	$1,688	$1,688	$1,688	$1,688	$2,155	$2,155	$2,155
6.3.b	Replace Community Signage	$516	$516	$582	$582	$582	$582	$582	$656	$656	$656
6.3.c	Replace Wood Timber Retaining Walls	$601	$601	$599	$599	$599	$599	$599	$599	$599	$599
		$21,788	$21,788	$21,807	$22,130	$22,218	$22,218	$22,565	$25,345	$25,345	$25,717

CASH FLOW SUMMARY EXPLANATION

The following table presents the cash flow over the 20-year study period for the Townhouse Reserve Fund.

Table 4 shows the cash flow impact of using a starting balance of $19,100 for FY2005 with a contribution of $30,000 for FY2005, based on the reallocation of reserves within the Westerley community. Then, the annual contribution is increased to $18,240 for FY2006 – 2024.

The table is followed by a bar chart showing expenditures vs. reserve balance.

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Individual columns in each table contain the following information:

Column 1. **Year**

Column 2. **Total Component Value - total worth** of all reserve component repair/replacement costs in that year

Column 3. **Beginning Reserve Balance**, which shows the amount after all activity in the prior year is completed

Column 4. **Yearly Contribution**

Column 5. **Component Method Contribution**, which represents the sum of all component contributions required for each year

Column 6. **Interest** Paid on Reserve Balance (if applicable). This is the interest paid on the reserve balance calculated as if the annual expenditures were paid at the beginning of the year.

Column 7. **Capital Expenditures**. This is the sum of all replacement reserve projects that need to be completed in a given year.

Column 8. **Ending Reserve Balance**. This is the result of the beginning reserve balance, plus annual contribution, plus interest income, less expenditures made during the year.

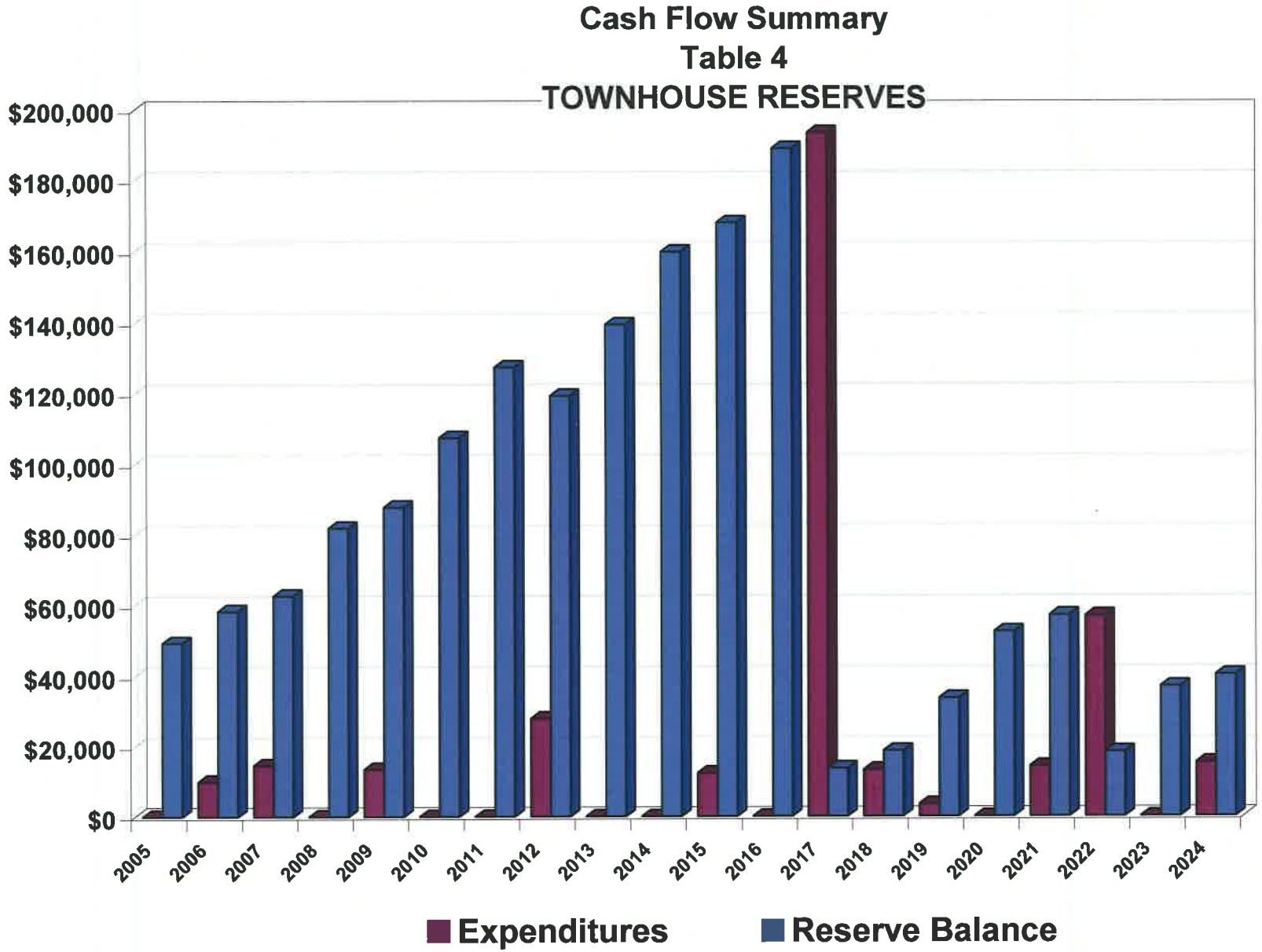
Column 9. **% Total Component Value**. Ratio of the ending reserve balance to the total component value, expressed as a percentage.

TOWNHOUSE RESERVES
TABLE 4
CASH FLOW SUMMARY
(Reserve Funding)

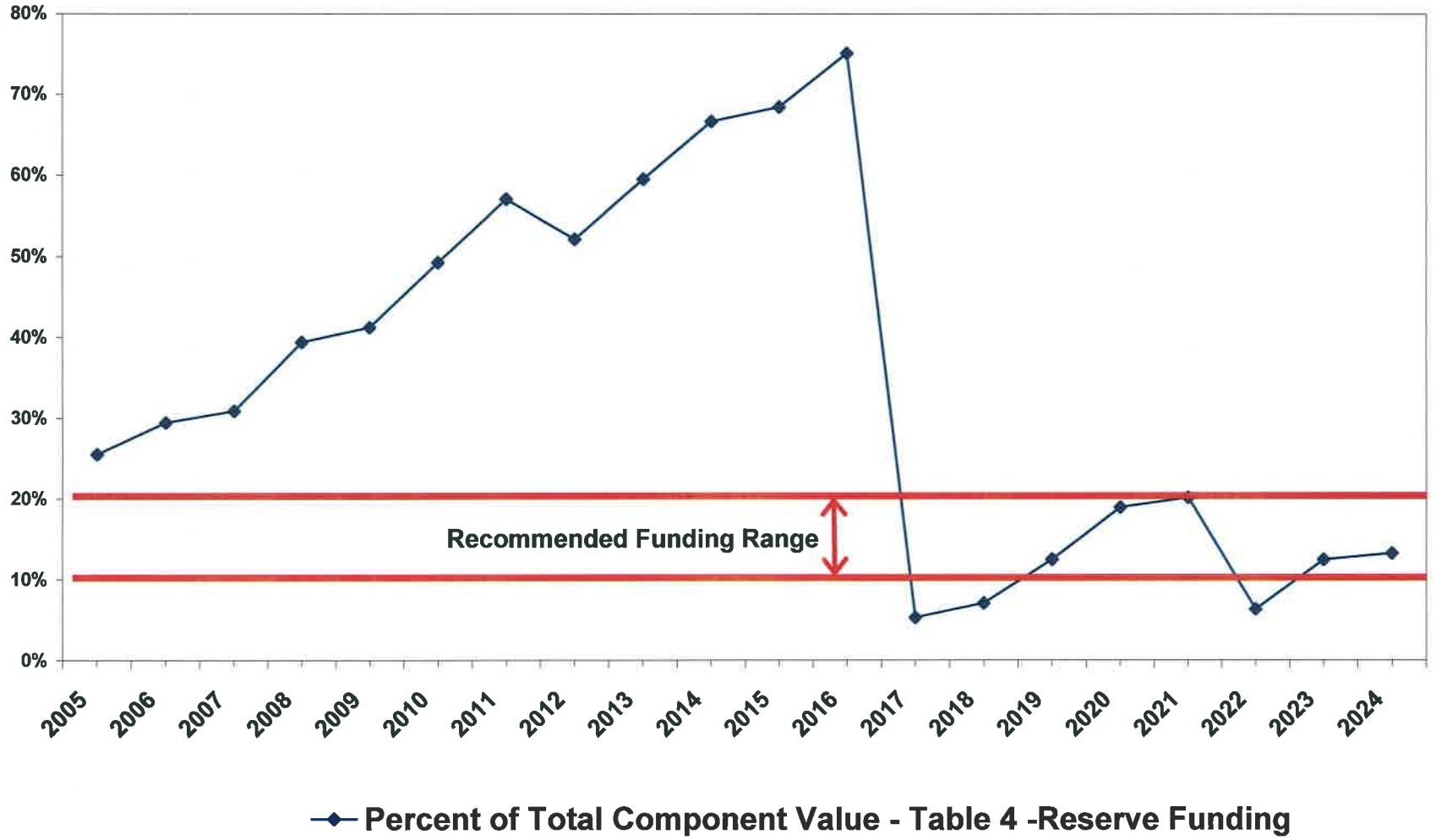
WESTERLY HOMEOWNERS ASSOCIATION

Initial Contribution:	**$9,550**	**Begin Study Period:**	**2005**
Projected Increase:	**FY 2005 Increase from $9,500 to $30,000, then FY2006 - 2024 Increase to $18,240**	**End Study Period:**	**2024**
Beginning Balance:	**$19,100**		

Year	Total Component Value	Beginning Reserve Balance	Yearly Contribution	Component Method Contribution	Interest Paid On Reserve Balance	Capital Expenditures	Ending Reserve Balance	% Total Component Value
2005	$193,450	$19,100	$30,000	$31,293	$304		$49,404	26%
2006	$198,131	$49,404	$18,240	$25,685	$628	$9,935	$58,337	29%
2007	$202,926	$58,337	$18,240	$22,242	$696	$14,581	$62,691	31%
2008	$207,837	$62,691	$18,240	$22,242	$997		$81,928	39%
2009	$212,867	$81,928	$18,240	$22,213	$1,089	$13,425	$87,833	41%
2010	$218,018	$87,833	$18,240	$22,213	$1,397		$107,469	49%
2011	$223,294	$107,469	$18,240	$22,213	$1,709		$127,418	57%
2012	$228,698	$127,418	$18,240	$21,488	$1,582	$27,900	$119,340	52%
2013	$234,232	$119,340	$18,240	$21,488	$1,898		$139,478	60%
2014	$239,901	$139,478	$18,240	$21,488	$2,218		$159,936	67%
2015	$245,706	$159,936	$18,240	$21,788	$2,347	$12,320	$168,202	68%
2016	$251,652	$168,202	$18,240	$21,788	$2,674		$189,117	75%
2017	$257,742	$189,117	$18,240	$21,807		$193,657	$13,700	5%
2018	$263,980	$13,700	$18,240	$22,130	$7	$13,237	$18,711	7%
2019	$270,368	$18,711	$18,240	$22,218	$242	$3,494	$33,699	12%
2020	$276,911	$33,699	$18,240	$22,218	$536		$52,475	19%
2021	$283,612	$52,475	$18,240	$22,565	$608	$14,221	$57,102	20%
2022	$290,476	$57,102	$18,240	$25,345	$3	$56,909	$18,436	6%
2023	$297,505	$18,436	$18,240	$25,345	$293		$36,969	12%
2024	$304,705	$36,969	$18,240	$25,717	$345	$15,279	$40,276	13%


Cash Flow Summary
Table 4
TOWNHOUSE RESERVES
$200,000
$180,000
$160,000
$140,000
$120,000
$100,000
$80,000
$60,000
$40,000
$20,000
$0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
Expenditures
Reserve Balance

Funding Level Vs. Recommended Range



APPENDIX C
SINGLE-FAMILY HOME RESERVE TABLES

RESERVE FUND PLAN MODEL EXPLANATION

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Table 1 - Expenditure Summary by System

This table lists the components surveyed as part of the study, and presents a summary of the cost data used for developing the reserve fund plan. A description of the columns in the table follows:

Column 1. **Text Section No.** refers to the section in the report text which describes the repairs listed in table.

Column 2. **Item Description** is a brief description of the component.

Column 3. **Typical Useful Life**, which shows the life expectancy of similar components in average conditions, and does not necessarily reflect the conditions observed during the study.

Column 4. **Target Replacement/Repair** gives the year in which capital expenditure is anticipated. Cycles are used if an item will require replacement more than once during the study period, or if a phased repair approach is required.

Column 5. **Quantity** of the component studied, which may be an exact number, a rough estimate, or simply a (1) if the expenditure forecast is a lump sum allowance for replacement of an unquantified component.

Column 6. **Units** used to quantify the component.

Column 7. **Unit Cost** used to calculate the required expenditure. This unit cost includes demolition or removal of existing components and installation of new components, including materials, labor, and overhead and profit for the contractor. These costs can vary significantly due to time of season, material costs, material availability, and other factors beyond our control.

Column 8. **Cost to Replace/Repair** the component, in 2004 dollars. Some items may show only a fraction of the total cost, which is referred to as "Partial Replacement." This is because wholesale replacement of such items is not likely, and partial replacement has been programmed in the model.

SINGLE-FAMILY RESERVES
TABLE 1
EXPENDITURE SUMMARY BY SYSTEM

Text Section No.	Item Description	Typical Useful Life (yrs)	Target Replacement/Repair *(year)* Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Quantity	Units	Unit Cost	Cost to Replace/Repair** *(present worth)*
	SITE FEATURES										
7.0	**Concrete Site Features**										
7.3.a	Replace Sidewalk and Apron Sections	3	2006	2009	2012	2015	2018	1,115	sq. ft.	$6	$6,690
7.3.b	Replace Curb & Gutter Sections	3	2006	2009	2012	2015	2018	280	lin. ft.	$30	$8,400
8.0	**Site Drainage**										
8.3.a	Stormwater and Sanitary Sewer Repairs	10	2009	2019	2029			1	lump sum	$5,000	$5,000
											$20,090

RESERVE FUND PLAN MODEL EXPLANATION

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Table 2 - Expenditure Forecast By Year

This table lists components that are scheduled for replacement during a given year. A description of the columns in the table follows:

Column 1. **Text Section No.** refers to the section in the report text which describes in detail the repairs listed in table.

Column 2. **Item Description** is a brief description of the component.

Column 3. **Cost to Replace/Repair** the component, in 2004 dollars (present worth).

Column 4. **Cost to Replace/Repair** the component in the given year (future worth).

Column 5. **Yearly Contribution** for the component.

Column 6. **Total Contribution** for only those components being replaced in the given year.

Column 7. **Total Expenditures** for all components being replaced in the given year.

SINGLE-FAMILY HOME RESERVES

TABLE 2

EXPENDITURE FORECAST BY YEAR

Text Section No.	Item Description	Cost to Replace/Repair *(present worth)*	Cost to Replace/Repair *(future worth)*	Yearly Contribution	Total Contribution	Total Expenditures
2005						
2006						
7.3.a	Replace Sidewalk and Apron Sections	$6,690	$6,852	$6,679		
7.3.b	Replace Curb & Gutter Sections	$8,400	$8,603	$8,386	**$15,065**	**$15,455**
2007						
2008						
2009						
8.3.a	Stormwater and Sanitary Sewer Repairs	$5,000	$5,502	$1,308		
7.3.a	Replace Sidewalk and Apron Sections	$6,690	$7,361	$2,415		
7.3.b	Replace Curb & Gutter Sections	$8,400	$9,243	$3,033	**$6,756**	**$22,106**
2010						
2011						
2012						
7.3.a	Replace Sidewalk and Apron Sections	$6,690	$7,909	$2,595		
7.3.b	Replace Curb & Gutter Sections	$8,400	$9,931	$3,258	**$5,853**	**$17,840**
2013						
2014						
2015						
7.3.a	Replace Sidewalk and Apron Sections	$6,690	$8,497	$2,788		
7.3.b	Replace Curb & Gutter Sections	$8,400	$10,669	$3,500	**$6,288**	**$19,166**
2016						
2017						
2018						
7.3.a	Replace Sidewalk and Apron Sections	$6,690	$9,129	$2,995		
7.3.b	Replace Curb & Gutter Sections	$8,400	$11,463	$3,761	**$6,756**	**$20,592**
2019						
8.3.a	Stormwater and Sanitary Sewer Repairs	$5,000	$6,988	$650	**$650**	**$6,988**
2020						
2021						
7.3.a	Replace Sidewalk and Apron Sections	$6,690	$9,808	$3,218		
7.3.b	Replace Curb & Gutter Sections	$8,400	$12,315	$4,040	**$7,258**	**$22,123**
2022						
2023						
2024						
7.3.a	Replace Sidewalk and Apron Sections	$6,690	$10,537	$3,457		
7.3.b	Replace Curb & Gutter Sections	$8,400	$13,231	$4,341	**$7,798**	**$23,768**

RESERVE FUND PLAN MODEL EXPLANATION

Table 3 - Component Contribution By Year

This table lists each studied component requiring replacement, and gives the contribution which would be required in each year for each component under the *component method* of analysis. The total contribution given in the bottom row of the table is the "Component Method Contribution" given in column 5 of Table 4.

The spreadsheet allocates a portion of the existing reserve balance to each component listed in the table based on a ratio of the individual component value to the total value of all components, as well as the next replacement date for the component. Any required expenditures in the first year are fully funded from the existing balance before the remaining balance is allocated to the components.

SINGLE-FAMILY RESERVES
TABLE 3
COMPONENT CONTRIBUTION BY YEAR

Text Section No.	Item Description	1 Contribution 2005	2 Contribution 2006	3 Contribution 2007	4 Contribution 2008	5 Contribution 2009	6 Contribution 2010	7 Contribution 2011	8 Contribution 2012	9 Contribution 2013	10 Contribution 2014
	SITE FEATURES										
7.0	Concrete Site Features										
7.3.a	Replace Sidewalk and Apron Sections	$6,679	$2,415	$2,415	$2,415	$2,595	$2,595	$2,595	$2,788	$2,788	$2,788
7.3.b	Replace Curb & Gutter Sections	$8,386	$3,033	$3,033	$3,033	$3,258	$3,258	$3,258	$3,500	$3,500	$3,500
8.0	Site Drainage										
8.3.a	Stormwater and Sanitary Sewer Repairs	$1,308	$1,308	$1,308	$1,308	$650	$650	$650	$650	$650	$650
		$16,373	$6,756	$6,756	$6,756	$6,503	$6,503	$6,503	$6,938	$6,938	$6,938

SINGLE-FAMILY RESERVES
TABLE 3
COMPONENT CONTRIBUTION BY YEAR

Text Section No.	Item Description	11 Contribution 2015	12 Contribution 2016	13 Contribution 2017	14 Contribution 2018	15 Contribution 2019	16 Contribution 2020	17 Contribution 2021	18 Contribution 2022	19 Contribution 2023	20 Contribution 2024
	SITE FEATURES										
7.0	**Concrete Site Features**										
7.3.a	Replace Sidewalk and Apron Sections	$2,995	$2,995	$2,995	$3,218	$3,218	$3,218	$3,457	$3,457	$3,457	$3,714
7.3.b	Replace Curb & Gutter Sections	$3,761	$3,761	$3,761	$4,040	$4,040	$4,040	$4,341	$4,341	$4,341	$4,664
8.0	**Site Drainage**										
8.3.a	Stormwater and Sanitary Sewer Repairs	$650	$650	$650	$650	$826	$826	$826	$826	$826	$826
		$7,406	$7,406	$7,406	$7,909	$8,084	$8,084	$8,624	$8,624	$8,624	$9,204

CASH FLOW SUMMARY EXPLANATION

The following table presents the cash flow over the 20-year study period for the Single-family Home Reserve Fund.

Table 4 shows the cash flow impact of using a starting balance of $518 for FY2005 with a contribution of $17,712 for FY2005, based on the reallocation of reserves within the Westerley community. Then, the annual contribution is increased to $7,380 for FY2006 – 2024.

The table is followed by a bar chart showing expenditures vs. reserve balance.

Tables assume a 2.42% inflation rate. This is the average annual CPI increase for the period 2003 - 2008, as projected by the Congressional Budget Office. Tables assume a 1.59% interest rate, based on the average of the interest rates provided by Legum & Norman for the reserve fund investments of the Westerly Homeowners Association.

Individual columns in each table contain the following information:

Column 1. **Year**

Column 2. **Total Component Value - total worth** of all reserve component repair/replacement costs in that year

Column 3. **Beginning Reserve Balance**, which shows the amount after all activity in the prior year is completed

Column 4. **Yearly Contribution**

Column 5. **Component Method Contribution**, which represents the sum of all component contributions required for each year

Column 6. **Interest** Paid on Reserve Balance (if applicable). This is the interest paid on the reserve balance calculated as if the annual expenditures were paid at the beginning of the year.

Column 7. **Capital Expenditures**. This is the sum of all replacement reserve projects that need to be completed in a given year.

Column 8. **Ending Reserve Balance**. This is the result of the beginning reserve balance, plus annual contribution, plus interest income, less expenditures made during the year.

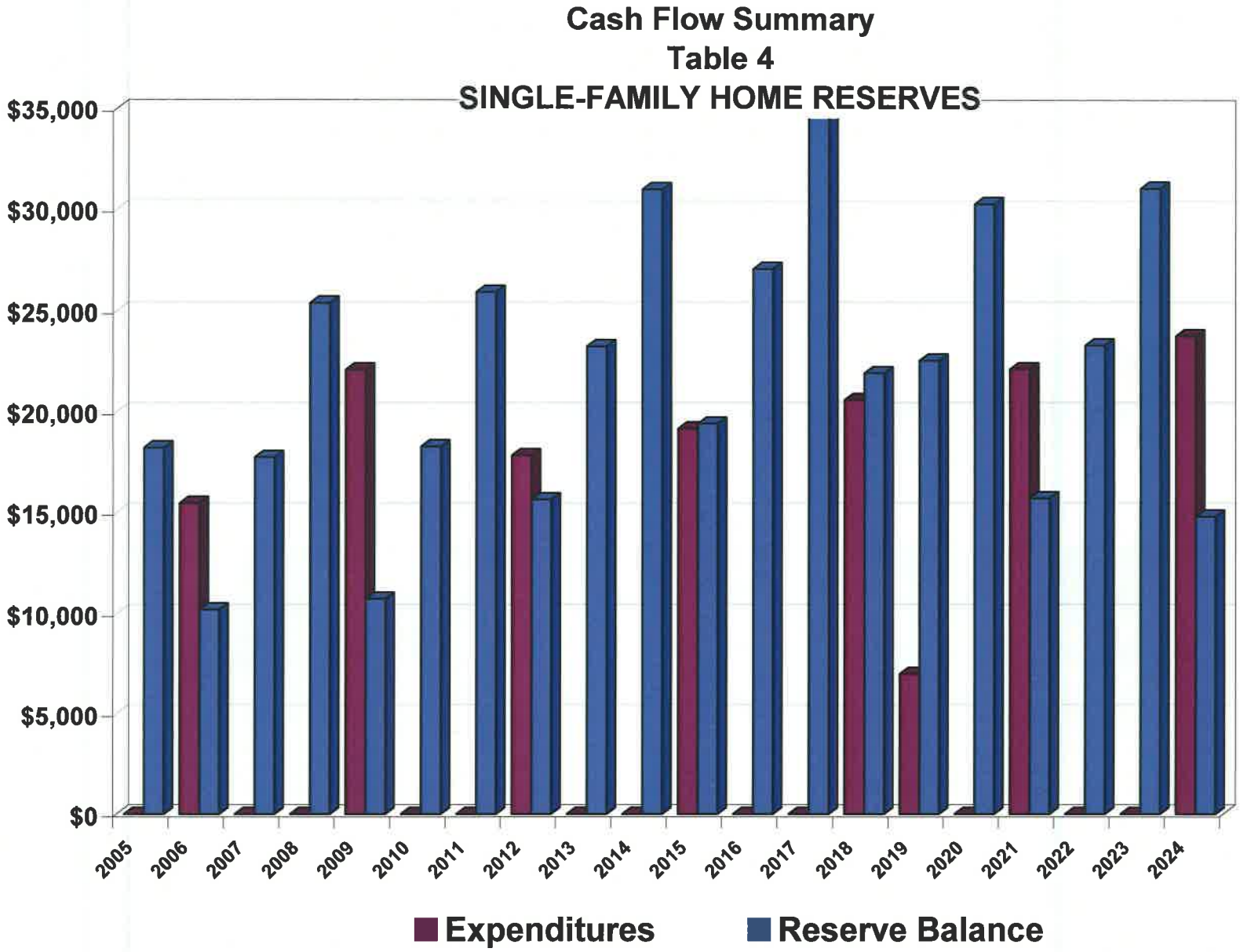
Column 9. **% Total Component Value**. Ratio of the ending reserve balance to the total component value, expressed as a percentage.

SINGLE-FAMILY HOME RESERVES
TABLE 4 - CURRENT CASH FLOW SUMMARY
(Reserve Funding)

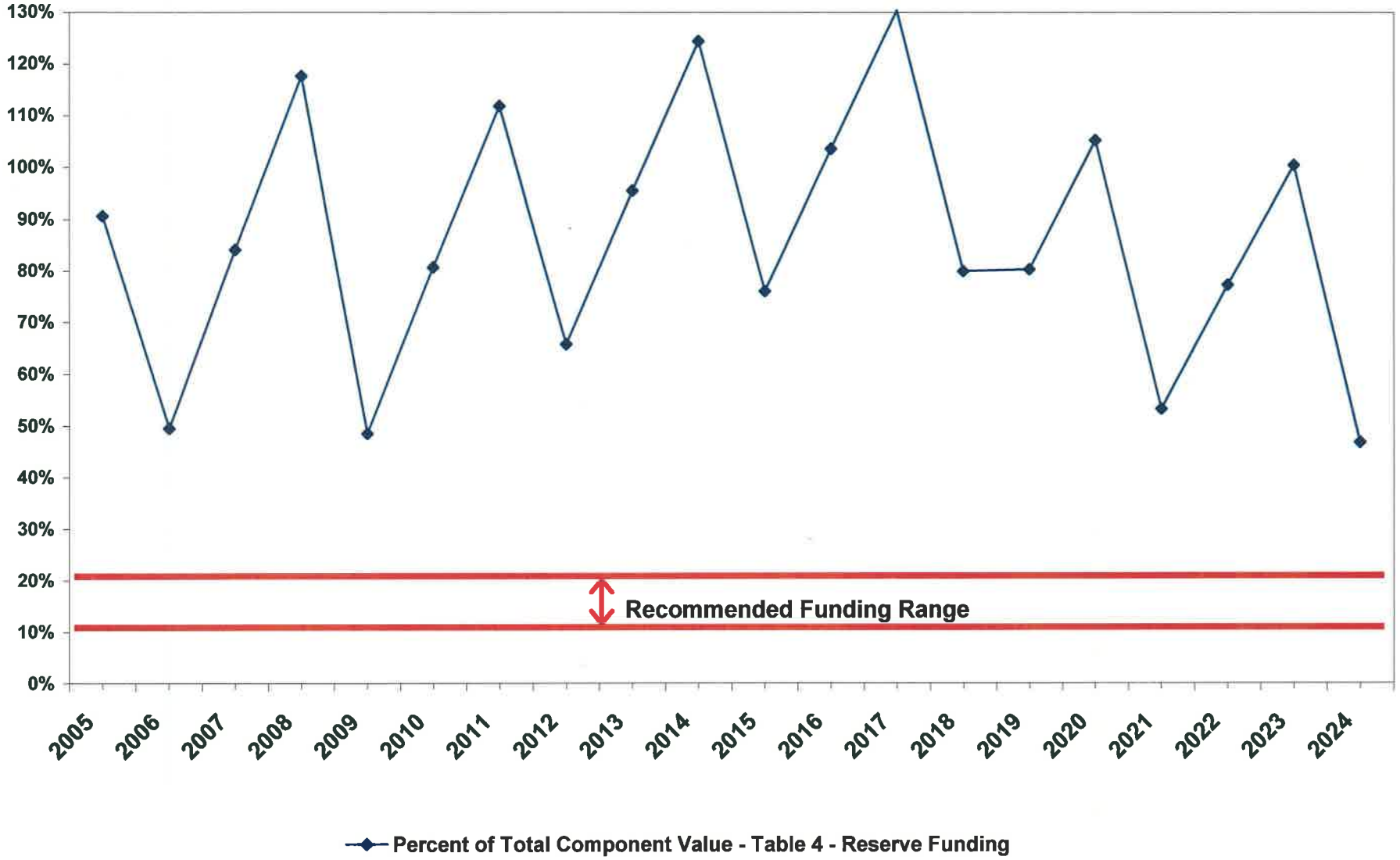
WESTERLY HOMEOWNERS ASSOCIATION

Initial Contribution: $259
Projected Increase: FY 2005 Increase from $259 to $17,712, then FY2006 - 2024 Increase to $7,380
Beginning Balance: $518
Begin Study Period: 2005
End Study Period: 2024

Year	Total Component Value	Beginning Reserve Balance	Yearly Contribution	Component Method Contribution	Interest Paid On Reserve Balance	Capital Expenditures	Ending Reserve Balance	% Total Component Value
2005	$20,090	$518	$17,712	$16,373	$8		$18,238	91%
2006	$20,576	$18,238	$7,380	$6,756	$44	$15,455	$10,207	50%
2007	$21,074	$10,207	$7,380	$6,756	$162		$17,750	84%
2008	$21,584	$17,750	$7,380	$6,756	$282		$25,412	118%
2009	$22,106	$25,412	$7,380	$6,503	$53	$22,106	$10,738	49%
2010	$22,641	$10,738	$7,380	$6,503	$171		$18,289	81%
2011	$23,189	$18,289	$7,380	$6,503	$291		$25,959	112%
2012	$23,751	$25,959	$7,380	$6,938	$129	$17,840	$15,629	66%
2013	$24,325	$15,629	$7,380	$6,938	$249		$23,258	96%
2014	$24,914	$23,258	$7,380	$6,938	$370		$31,007	124%
2015	$25,517	$31,007	$7,380	$7,406	$188	$19,166	$19,409	76%
2016	$26,134	$19,409	$7,380	$7,406	$309		$27,098	104%
2017	$26,767	$27,098	$7,380	$7,406	$431		$34,909	130%
2018	$27,415	$34,909	$7,380	$7,909	$228	$20,592	$21,925	80%
2019	$28,078	$21,925	$7,380	$8,084	$237	$6,988	$22,554	80%
2020	$28,758	$22,554	$7,380	$8,084	$359		$30,293	105%
2021	$29,453	$30,293	$7,380	$8,624	$130	$22,123	$15,680	53%
2022	$30,166	$15,680	$7,380	$8,624	$249		$23,309	77%
2023	$30,896	$23,309	$7,380	$8,624	$371		$31,060	101%
2024	$31,644	$31,060	$7,380	$9,204	$116	$23,768	$14,787	47%


Cash Flow Summary
Table 4
SINGLE-FAMILY HOME RESERVES
$35,000
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
Expenditures
Reserve Balance

Funding Level Vs. Recommended Range



APPENDIX D
PHOTOGRAPHS

PHOTOGRAPH 1:

Vinyl-Covered Chain-Link Fencing at Pool Area

PHOTOGRAPH 2:

Main Pool with Cover

PHOTOGRAPH 3:

Wading Pool with Cover

PHOTOGRAPH 4:

Picnic Tables Near Pool Area

PHOTOGRAPH 5:

Pool Furniture in Storage

PHOTOGRAPH 6:

Aluminum Lifeguard Stand

PHOTOGRAPH 7:

Bathhouse Front Façade

PHOTOGRAPH 8:

Bathhouse Roof

PHOTOGRAPH 9:

Sand Filters and Valve System for Main Pool

PHOTOGRAPH 10:

Sand Filter for Wading Pool

PHOTOGRAPH 11:

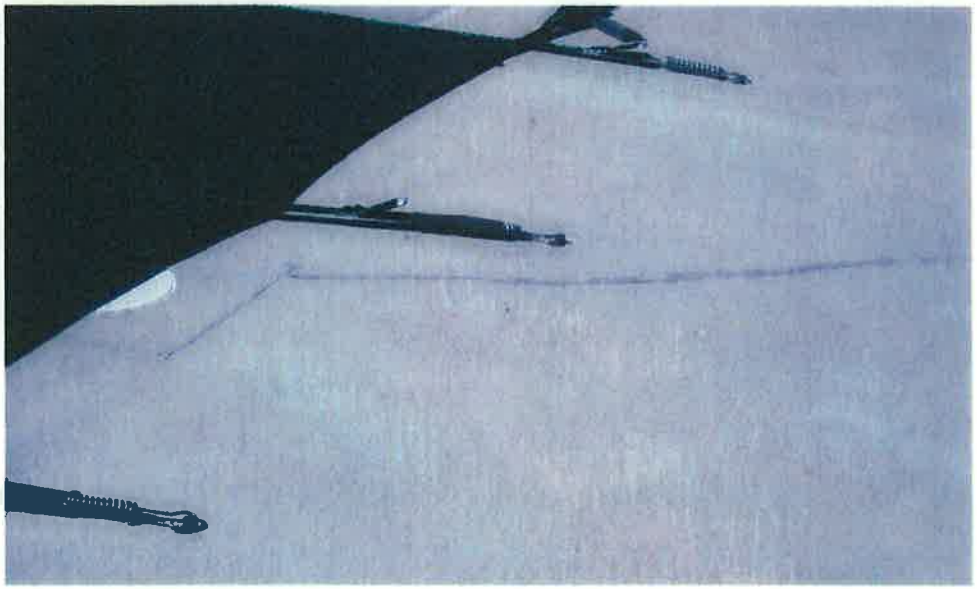
Wall-Mounted Drinking Fountains on Bathhouse Exterior

PHOTOGRAPH 12:

Foot Showers Near Picnic Area

PHOTOGRAPH 13:

Severe Deterioration of Concrete in Pool Area



PHOTOGRAPH 14:

Concrete Pool Deck with Previously Sealed Crack

PHOTOGRAPH 15:

Asphalt Foot Path and Sound-Attenuation Fence

PHOTOGRAPH 16:

Sound Attenuation Fence

PHOTOGRAPH 17:

Split-Rail Fencing at Retention Pond

PHOTOGRAPH 18:

Entrance Monument and Surrounding Foliage

PHOTOGRAPH 19:

Stone Piers at Entrance Monument

PHOTOGRAPH 20:

Community Information Board

PHOTOGRAPH 21:

Bike Rack at Pool Parking Lot

PHOTOGRAPH 22:

Pet Station

PHOTOGRAPH 23:

Leaning Wood Fence at Stormwater Retention Pond in Single-Family Home Area

PHOTOGRAPH 24:

Parking Areas in Townhouse Community

PHOTOGRAPH 25:

Example of Minor Asphalt Cracking at Joints

PHOTOGRAPH 26:

Asphalt Patch in Townhouse Community

PHOTOGRAPH 27:

Typical Townhouse Community Sidewalk

PHOTOGRAPH 28:

Replaced Curb Section in Townhouse Community

PHOTOGRAPH 29:

Lighting Fixture Beginning to Lean in Townhouse Community

PHOTOGRAPH 30:

Concrete Apron in Single-Family Home Community

PHOTOGRAPH 31:

Typical Curb and Gutter in Single-Family Home Community

PHOTOGRAPH 32:

Settled Sidewalk Section in Single-Family Home Community

PHOTOGRAPH 33:

Storm Water Drainage Inlet

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