

Reserve Study

Southern Village HOA

Chapel Hill, NC

Inspection Date:
December 19, 2007

Prepared For:
Southern Village Homeowners Association

Prepared By:
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A handwritten signature of Bruce Raymond in cursive script.

Professional Engineer's License Number: 30017



RESERVE SCOPE

The scope of the Reserve Study for the Southern Village Homeowners' Association in Chapel Hill, North Carolina, is based on the proposal submitted September 10, 2008. As delineated in the proposal, the study covers the following portions of Southern Village Ridge:

- Parks owned by the HOA
 - Playground equipment and other amenities
- Retaining walls owned by the HOA
- Green spaces owned by the HOA
- Alleyways owned by the HOA

Added to the study at the December 5, 2008 meeting were:

- Town Home Exteriors (roof and exterior painting)
- Four ponds

Excluded from the study are:

- Sidewalks and roadways, maintained by others
- Alleyway owned by Chapel Hill (behind High Grove Town Homes)
- Street lighting
- Entrance signage and lighting at Market Street entrance

The subdivision property was inspected on December 17, 2008. This included walking the roofs of the townhomes in buildings:

- 200-212 Greenview
- 400-410 Copperline
- 104-116 Westgreen
- 1000-1020 Highgrove
- 100-122 Nolen

CONDITIONS & ASSUMPTIONS

The study projects the cost over the next twelve years for the maintenance and the replacement of major items and systems. Routine and customary maintenance are not included. The landscape cost was included even though it is a routine and customary maintenance because of its large amount. Estimates used were provided by Ecoscapes. As with any study of this nature, the further into the future the study goes, the less reliable the data. Unforeseen economical events can alter cost significantly. The study is based on industry standard replacement costs (National Construction Estimator, Means Building Construction Cost Data or Means Facilities Maintenance & Repair Cost Data Publications). A flat inflation rate of 4.5% was used to project costs calculated in year 2008 dollars.

SUMMARY

Table I provides an overview of immediate repairs and reserves that will be necessary. Details are provided in Table II (Immediate Repairs) and Table III (Replacement Reserves).

The overall condition of portions of Southern Village is good. The subdivision is relatively young and therefore, major items will not require replacement in the near future. There are three items noted (see Observation section below) that provide additional information/improvements.

OBSERVATIONS

- **Observation:** The pond by the school and the one next to Brookgreen appear to have “bubblers” There was no evidence of “bubblers” in the other two ponds. Based on conversation with board members bubblers were added to these two ponds only to help prevent “fishkills” due to stagnant water.
- **Observation:** The ponds are not fenced. Consideration of fencing the ponds should be given to reduce liability to the Homeowners’ Association. According to conversation with board members previous legal advise was to leave ponds “unfenced”
- **Observation:** The stoops in front of the townhomes located in 500-516 Cooperline have settled. This may be a safety issue as the first step down is significantly larger than the others (trip hazard).



Excessive settlement

- **Observation:** When painting building exteriors (townhomes), contractors should include the rake trim between the units. In several areas this appears to have been left out of the most recent painting.

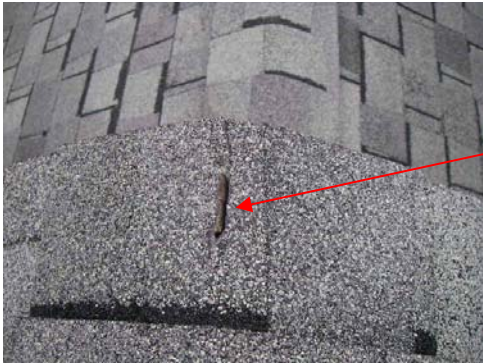


Sample – rake trim left out of the most recent painting

IMMEDIATE REPAIRS

The following items are in need of immediate repair. A cost estimate is provided in Table II for each item, with the exception of the exterior building repairs (rot in trim/windowsills) and the railing repainting, as these are being quoted by others.

- **Repair:** All of the walked roofs were in need of minor repair: torn shingles (exposed wood), deteriorated vent boots, loose shingle and missing shingles. Table II includes monies to repair all townhome roofs on the buildings listed in the “Exterior Wood Trim, Door and Fences Maintenance on Southern Village Townhomes” chart provided. The estimate assumes that the roofs inspected from the ground will have similar issues.



Sample – roof repairs:
Torn shingle (wood exposed)
Deteriorated vent boot



Sample – roof repairs:
Loose shingle
Missing shingle



- **Repair:** The trail around the playing field in central Park is severely eroded. The erosion run-off is being deposited on the sidewalk on Brookgreen. Measures to prevent new erosion should be employed. The estimate in the Table II is a rough estimate. It is recommended a qualified landscaper be contracted to provide a firm estimate. .



Sample – trail erosion



Erosion deposited on sidewalk

- **Repair:** There is exposed re-bar in Arlen Park (approximate middle of Eastgreen side). This is a safety issue and the exposed re-bar needs to be removed.



Sample – exposed re-bar (several in same area)

- **Repair:** One of the plastic rim pieces at the Meeting Park is loose. This should be removed or re-installed. The cost for this is insignificant and has not been included in table II.



Loose rim piece

RESERVES

The following information is being provided in support of Table III, Reserves.

- It is predicated that the alleys will need to be repaved in 15 years. The estimated cost in 2008 dollars is approximately \$126, 500. As this is beyond the 12 year window it is not totaled in Table III, however it is listed for planning purposes.
- The landscape dollars are not included in the Reserve Study as they are an operational expense. A monthly estimate of \$6900 was provided by Ecoscapes (Jimmy Lloyd). Leaf removal and mulching pricing is not included as it outside of the contract according to Mr. Lloyd.
- Park maintenance includes minor repairs to playground equipment, painting the fencing at the Market Park and resurfacing the basketball court in Central Park.
- The reserve includes replacement of the footbridge beyond Hillsprings Park.
- Pond inspections include inspection of the ponds and emergency over flow. No monies are included for repairs as a result of these inspections. As the inspections are every three years, this should provide early warning of the need for repairs.
- Sealing the cracks in the alley pavement and weed killing the vegetation in the cracks will extend the life of the pavement. Also in some areas homeowners’ erosion run-off is collecting on the alley. This will accelerate the silt collection in catch basins and storm drains. Homeowners should control run-off to prevent this. In one location leaves were deposited in the alleyway. This will hold moisture on the pavement and will shorten the life of the pavement. Monies to periodically perform this task are included in Table III.



Sample – weed killing/crack to be sealed

- Most of the rock walls are missing stones and in some places the stones are loose. Monies have been budgeted to periodically inspect and repair the walls as necessary



Samples:
Missing stones
Loose stones



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Table I, Reserve Summary

Client: Southern Village
 Address: US 15-501
 City & State: Chapel Hill, North Carolina
 Buildings: 16

Survey Date: December 17, 2008
 Analysis Term: 12 years

Item	Condition					Immediate Repairs	Reserves
	Excellent	Good	Fair	Poor	N/A		
Site/Grounds							
Topography/Drainage		✓					\$10,400.00
Pavement & Parking		✓					\$11,700.00
Landscaping		✓				\$3,500.00	\$0.00
Signage		✓					
Amenities					✓		\$23,500.00
Lighting					✓		
Buildings							
Roofing		✓				\$8,000.00	\$308,766.38
Exterior		✓					\$217,465.20
Framing					✓		
Foundations					✓		
Basement/Attic					✓		
Interiors							
Finishes					✓		
Components					✓		
Systems							
Plumbing					✓		
HVAC					✓		
Electrical					✓		
Fire/Safety					✓		
Code Compliance							
Code Compliance					✓		
Other							

Dollars shown are current (2009) dollars

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Table II, Immediate Repairs

Client: Southern Village
 Address: US 15-501
 City & State: Chapel Hill, North Carolina
 Buildings: 16

Survey Date: December 17, 2008
 Analysis Term: 12 years

Item	Recommended Work	Qty	Unit Cost	Unit Description	Est. Cost	Comments
Site/Grounds						
Topography/Drainage						
Pavement & Parking						
Landscaping	Remove Re-bar	1 lot			\$500.00	Remove re-bar protruding in Arlen park, Pg 5
	Improve trail drainage				\$3,000.00	Rough estimate, improve trail drainage, Central park, contractor should quote, Pg 4
Signage						
Amenities	Replace Rim Piece	1			N/A	Replace Rim piece in Meeting park, Pg 5
Lighting	None					
Buildings						
Roofing	Minor repair	16	\$500	Per building	\$8,000.00	Estimate assumes all building in similar condition, Pg 4
Exterior	None					
Framing	None (not inspected)					
Foundations	None (not inspected)					
Basement/Attic	None (not inspected)					
ADA	None (not inspected)					
Interiors						
Finishes	None (not inspected)					
Components	None (not inspected)					
Systems						
Plumbing	None (not inspected)					
HVAC	None (not inspected)					
Electrical	None (not inspected)					
Fire/Safety	None (not inspected)					
Code Compliance						
Code Compliance	None (not inspected)					
Other	N/A					
N/A						

Total \$11,500.00
 1.25 Multiplier \$14,375.00

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Table III, Reserve Details

Client: Southern Village
 Address: US 15-501
 City & State: Carrboro, North Carolina
 Buildings: 16

Survey Date: December 17, 2008
 Analysis Term: 12 Years

Recommended Work	Ave. Life (Yrs)	Effective Age	Remaining life	Qty	Qty/Yr	Unit Cost	Unit Description	Est. Cost/Yr	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Total Over Term		
Site/Grounds																							
Topo/Drain																							
Culvert Cleaning/Inspect	50	10	40	52	26	\$2,000.00	Lot sum	\$5,200					\$5,200					\$5,200				\$10,400	
Pave/Park																							
Minor Repair between paving	25	10	15	194,515	39,900	\$0.10	Sq Ft	\$3,900	\$3,900				\$3,900					\$3,900				\$11,700	
New asphalt, see Pg 6	25	10	15	194,515	194,515	\$0.68	Sq Ft	\$126,435															
Landscape																							
Operational Expense	N/A																						
Amenities																							
Park Maintenance	N/A								\$2,500				\$2,500					\$2,500				\$7,500	
Wall maintenance	N/A								\$1,500				\$1,500					\$1,500				\$4,500	
Replace Bridge (Hillspring)	20	10	10	1	1	\$1,500.00	Lot Sum	\$1,500	\$1,500				\$1,500					\$1,500				\$1,500	
Pond Inspection	50	10	40	4	4	\$2,500.00	Lot Sum	\$2,500	\$2,500				\$2,500					\$2,500				\$10,000	
Buildings																							
Roofing																							
Roof Replacement: 104-116 Westgreen 100-214 Westgreen 200-212 Greenview	20	15	5	29185	29185	\$1.30	Sq Ft	\$37,941					\$37,941										\$37,941
Roof Replacement: 201-207 Greenview 100-123 Westside 100-122 Nolen	20	13	7	60309.6	60309.6	\$1.30	Sq Ft	\$78,402							\$78,402								\$78,402
Roof Replacement: 101-123 Nolen 100-122 Glade	20	12	8	57215.6	57215.6	\$1.30	Sq Ft	\$74,380							\$74,380								\$74,380
Roof Replacement: 200-210 Brookgreen 412-422 Copperline 900-920 Highgrove 1000-1020 Highgrove	20	11	9	44272.8	44272.8	\$1.30	Sq Ft	\$57,555									\$57,555						\$57,555
Roof Replacement: 401-415 Copperline 400-410 Copperline 500-516 Copperline 520-536 Copperline	20	10	10	46529.6	46529.6	\$1.30	Sq Ft	\$60,488									\$60,488						\$60,488
Exterior																							
Exterior paint: 200-210 Brookgreen 401-415 Copperline 400-410 Copperline 412-422 Copperline 200-212 Greenview 100-123 Westside 100-122 Nolen	5	4	2	54420	54420	\$0.50	Sq Ft	\$27,210	\$27,210														\$27,210
Exterior paint: 104-116 Westgreen 100-214 Westgreen 500-516 Copperline 520-536 Copperline 201-207 Greenview 900-920 Highgrove 1000-1020 Highgrove 101-123 Nolen 122 Glade	100	4	2	90556.8	90556.8	\$0.50	Sq Ft	\$45,278	\$45,278														\$45,278
Interiors																							
									\$35,110	\$45,278	\$2,500	\$0	\$51,041	\$29,710	\$123,681	\$74,380	\$60,055	\$75,088	\$27,210	\$47,778	\$81,630	\$571,832	
									\$1.04	\$1.08	\$1.12	\$1.17	\$1.22	\$1.27	\$1.32	\$1.37	\$1.42	\$1.48	\$1.54	\$1.60	\$1.66	\$1.72	
									\$36,514	\$48,973	\$2,812	\$0	\$62,099	\$37,593	\$162,756	\$101,795	\$85,476	\$111,149	\$41,889	\$76,495	\$133,335	\$767,550	
									Annual Requirements, Uninflated												\$133,335		
									Inflation Factor (1.04%/year)												\$133,335		
									Annual Requirements, Inflated												\$133,335		