SAMPLE

BUILDING EVALUATION AND TRANSITION STUDY

THE VILLAGE

Prepared for:
TRANSITION COMMITTEE
THE VILLAGE CONDOMINIUM ASSOCIATION

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1.0 INTRODUCTION

The Transition Committee, through John Smith, authorized Criterium Engineers to conduct a Building Evaluation and Transition Study for The Village Condominium, located in We understand that this complex has reached the point in its development that it is ready to be taken over by the association from the developer.

It is at this point (transition) in the development of a condominium project that it is important for the newly formed association to determine if the project is in reasonable compliance with the original construction documents, municipal approvals and construction industry standards. The Village Condominium Association has commissioned this study to answer that question.

As will be discussed throughout this report, to answer that question Criterium Engineers has reviewed the construction documents, municipal approvals, and the buildings themselves. Where we have found any discrepancies between the standards established and our actual observations, we have provided a transition cost estimate identifying the cost to bring those specific components into compliance with the standards noted. The determination of whether the developer or the association would be responsible for these costs and the oversight of the work required is left to the association to determine.

This report is intended to be used by The Village Association as a tool to evaluate the condition of the property it is about to accept and to determine what, if any, negotiations are needed with the developer to assure smooth transition. The recommendations in this report should also be tempered by any agreements in the bylaws or other documents related to the development and ownership of this association.

The report that follows has been prepared from the perspective of what an owner of this property would benefit from knowing. Some items, beyond those of immediate concern, may be discussed. Therefore, the report should be read in its entirety in order to fully understand all of the information that has been obtained.

2.0 EXECUTIVE SUMMARY

The building and grounds are, generally, in good condition. In this section of the report, we will address those issues that, in our opinion, will require immediate repair or replacement. For a more detailed discussion of all of our findings and any other material deficiencies that will require repair or replacement over the term of this study, refer to the appropriate sections of this report.

Based on our study, we have found this project to be generally in compliance with the construction documents, applicable municipal approvals, and construction industry standards. Therefore, we recommend the following :

- Accept complex with conditions

Based on our observations, there are immediate material deficiencies. Those items are as follows:

- Paving repairs
- Foundation crack repairs
- Sidewalk repairs
- Club House sidewalk drainage
- Irrigation leak repairs

There are, of course, other capital expenditures to be expected over the next twenty years. Those items that will require attention are discussed in detail in this report and can be found in their appropriate sections.

For your convenience, we have prepared the following summary of the condition of the major systems of the property. Please refer to the appropriate sections of this report for a more detailed discussion of these systems.

TRANSITION STUDY SUMMARY			
SYSTEM	**CONDITION**	**ACTIVITY REQUIRED**	**ANTICIPATED YEAR OF ACTIVITY**
SITE			
Paving repairs	G	Yes	2014
Sidewalk settlement repair	G	Yes	2014
Irrigation leak repair	F	Yes	2014
Grass re-sodding	G	Yes	2014
STRUCTURE			
Foundation cracks	G	Yes	2014
Dry wall settlement cracks	G	Yes	2014
EXTERIOR			
Trim re-attachment	G	Yes	2014
Brick step repair	G	Yes	2014
MISC. AMENITIES			
Drainage for Club House sidewalk	G	Yes	2014

Table 2.1: Summary

3.0 PURPOSE & SCOPE

3.1 Purpose

The purpose of this study is to determine if this project is in substantial compliance with the construction documents, applicable municipal approvals, and reasonable construction standards. The newly formed Transition Committee is soon to take responsibility for this complex. It is reasonable for the association to expect the complex has been completed consistent with the noted standards. To the extent that it is not, it is reasonable for the association to expect that the developer will complete those items noted so that the association can focus on maintenance of the complex rather than repair and/or completion at this early stage.

For any items where deficiencies or incompletions are noted, a transition cost estimate has been provided in Appendix A identifying estimated cost for the completion/repair of those items noted.

3.2 Scope

This study has been performed according to the scope as generally defined by the Transition Committee and Criterium Engineers. The findings and recommendations are based on interviews with the community's management personnel and residents; a review of available documents; and an investigation of the buildings and site. The investigation involved, in particular, the foundation and/or slab-on-grade (to the extent visible), the roof, the exterior walls, the steel and wood framing (when visible), paved areas, utilities (to the extent visible), and common amenities.

We have also inspected the interior of eight units. While this study is focused only on the components for which the association is responsible, by reviewing a sampling of interiors, we are able to gather information that might be relevant to our evaluation of the common area elements and any comments that might have been made on the Owner Survey.

The report contains the following:

- A description of the overall condition of building components and systems that are the responsibility of the Association, and conditions that may limit the expected useful life of the buildings and their components.

- Information about significant deficiencies, deferred maintenance items, and material code violations based on a visual survey of the building and grounds, research of documents, and conversations with people who have knowledge about the community.

- A transition cost estimate including a list of the individual components and the estimated cost for repair and/or completion of those components to comply with the noted standards.

The statements in this report are opinions about the present condition of the subject community. They are based on visual evidence available during a diligent investigation of all reasonably accessible areas falling under the responsibility of the Association. We did not remove any surface materials, perform any destructive testing, or move any furnishings. This study is not an exhaustive technical evaluation. Such an evaluation would entail a significantly larger scope than this effort. For additional limitations, see Section 12.0.

3.3 Sources of Information

Onsite inspections of the property occurred on the following dates:

- March 4, 2014
- April 20, 2014
- May 18, 2014

The following people were interviewed during our study:

- Property Developer
- Advisory Board/ Transition Committee
- Various Unit Owners
- Code Enforcement,
- Town Planner,
- The results of our Owner Survey were also reviewed. Those results are provided in Appendix D

The following documents were made available to us and reviewed:

- As built construction drawings
- Architectural drawings: ABC Design, AIA, Boston, MA
- Engineering drawings: CDE Engineering, Inc, Boston, MA
- Site Plan

3.4 Standards of Reference

For your reference, the following definitions may be helpful:

Excellent: Component or system is in "as new" condition, requiring no rehabilitation and should perform in accordance with expected performance.

Good: Component or system is sound and performing its function, although it may show signs of normal wear and tear. Some minor rehabilitation work may be required.

Fair: Component or system falls into one or more of the following categories: a) Evidence of previous repairs not in compliance with commonly accepted practice, b) Workmanship not in compliance with commonly accepted standards, c) Component or system is obsolete, d) Component or system approaching end of expected performance. Repair or replacement is required to prevent further deterioration or to prolong expected life.

Poor: Component or system has either failed or cannot be relied upon to continue performing its original function as a result of having exceeded its expected performance, excessive deferred maintenance, or state of disrepair. Present condition could contribute to or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.

Adequate: A component or system is of a capacity that is defined as enough for what is required, sufficient, suitable, and/or conforms to standard construction practices.

All ratings are determined by comparison to other buildings of similar age and construction type. Further, some details of workmanship and materials will be examined more closely in higher quality buildings where such details typically become more relevant.

All directions (left, right, rear, etc.), when used, are taken from the viewpoint of an observer standing in front of a building and facing it.

Repair/Replacement Reserves - Non-annual maintenance items that will require significant expenditure over the life of the buildings. Included are items that will reach the end of their estimated useful life during the course of this forecast, or, in the opinion of the investigator, will require attention during that time.

4.0 DESCRIPTION

The Village is a three part condominium complex primarily made up of a total of 140 unit residential units currently. Seven buildings remain uncompleted with 9 units (5 buildings) under construction; 4 units (2 buildings) not started; and 2 retail/ commercial condominiums yet to be constructed. The entire all under a master or Universal management condominium.

Common to all of these condominiums is a central sewage waste treatment facility with a 32,000 gallon per day capacity under the control of the Universal entity. This facility and the street lights have an emergency generator (125 kW) backup power supply.

Domestic water is supplied by the town of Norwood with the irrigation system supplied by a Trust controlled well.

The complex is bordered to the north by Main Street and a utility corridor on the southern border. A wooded area borders on the east and another condominium complex on the west. The two northerly entrance roads (North Street and Oak Road) off Main Street meet at an internal rotary to join Wood Lane which provides an egress route to the condominium complex at the western border.

The residential complex was started in 2006 with four original models of 2-story, duplexes. Later phases included four 1-story ranch style models. The building envelopes comprised architectural composite roof shingles; vinyl siding with brick accent facades. Each unit has a full or day-light basement. Units included built-in garages.

The principal amenity is a large Club House hosting a kitchen; gym; card room; library; living room with fireplace; and utility space. The roadways and driveways are paved with asphalt with granite curbing and the sidewalks are concrete at the Club House and asphalt elsewhere. The roadways have light fixtures on poles.

The property is served by the following utilities and providers:

COMMUNITY UTILITY PROVIDERS	
Potable Water	Town of Norwood
Sewer	Private – Universal managed
Storm Sewer	Private
Electricity	N-Star
Gas	Propane
Oil	N/A
Phone	Verizon or Comcast
Trash	Allied Waste

Table 3: Utility Providers

5.0 SITE IMPROVEMENTS

5.1 Topography

Description

This condominium community is situated on a relatively level site oriented with its longest boundaries on the east-west axis.

A wetland vernal pool area is at the mid-point of the southern border areas with a buffer zone. A second wetland area is located at the southeast corner of the development property.

Evaluation

The developed lots are grass covered with buildings sited to allow natural drainage away from the building to follow natural contours or constructed swales and structures. Adequate retaining walls have been constructed to accommodate higher elevations while preserving optimum level grounds.

Compliance

- Based on our evaluation, we find that this portion of the project is in compliance with the noted standards.

5.2 Storm Drainage

Description

The site has gentle slopes to the north and south where there are drainage structures and swales directing surface water to low retention areas to the north and drainage wooded areas to the south. There are nine subsurface drainage disposals areas.

Evaluation

Poor surface drainage between the buildings containing Units 28 and 30 has caused ground erosion. The recently installed drain appears to be functioning properly. This area also experiences saturated soil due to leakage in the nearby irrigation system.

The roof gutter servicing Unit 27 flows the wrong direction and needs to adjustment.

The sidewalk area leading to the Club House entrance on the parking lot side has a low area allowing water to pond creating a serious slipping hazard due to winter ice. We recommend this area be drained by improving the surface slope or the installation of an underground French drain and surface drain grate.

Compliance

Based on our evaluation, we find that this portion of the project is in compliance with the noted standards except the following:

- ***Leaking irrigation piping behind Units 27 & 28***
- ***Repair Unit 27 gutter***
- ***Correct drainage problem near Club House sidewalk***

5.3 Paving & Curbing

COMMUNITY PAVING & CURBING	
Type of Paving	Asphalt roads and driveways
Type of Curbing	Slant granite
Number of Parking Spaces	41 spaces at the Club House including two handicap

Table 5: Parking Area

Description

There are two entrances serving this property. The North Street entrance is located off Main Street near the Club House. The second entrance also off Main Street is serviced by Oak Road which leads to the central rotary feeding both Wood Lane and North Street. Wood Lane allows egress from the community on it western boundary into an abutting condominium complex with access to Main Street. Birch Lane is a loop road off Wood Lane. The final phase of construction is on going off this loop road.

Most of the buildings are clustered around a common paved driveway servicing two to five duplex buildings and their associated garages. Some duplex buildings directly access the main roadways with paved driveways.

The Club House has a dedicated parking lot with perpendicular stripped parking spaces in three clusters with room for ten spaces and an island for two clusters of six stripped spaces.

Evaluation

The parking lot and all primary roads except for Birch Lane in the complex

are paved with a top coat of asphalt and are in good condition. Birch Lane still requires a top coat of paving and is awaiting the substantial completion of the units under construction. Completion of the planned paving will not be considered in this study as outstanding issues.

With the exception of uncompleted units off Birch Lane, the paved driveways are completed. We observed damaged paving around drainage grates. Many driveways have excessive exposure of aggregate which in our opinion is due to an inferior mix and poor installation. This condition may potentially lead to premature sealing and paving maintenance.

Sealing of the asphalt pavement has been reported to be done at different portions of the community 2 and 4 years ago with approximately two thirds of the paved areas sealed only once. Sealing should be done every 4 years to maintain the asphalt matrix condition.

Compliance

Based on our evaluation, we find that this portion of the project is in compliance with the noted standards with the following exceptions:

- ***Damaged paving near drainage grates***
- ***Driveways with excessive exposed aggregate***

5.4 Flatwork

Description

The Club House has poured concrete sidewalks. There are asphalt paved sidewalks throughout the community running parallel to the roadways.

Evaluation

The Club House concrete sidewalks have had problems with surface spalling. This is often due to type of concrete not able to resist the damage excess use of winter salt. At the writing of this report, these sidewalks have been repaired. This repair should be absorbed in the construction budget and not be funded from funds set aside for capital repairs.

Compliance

The paved sideways for the most part are in good condition. We noted the sidewalk in front of Unit #29 has settled creating a dip and thus producing a tripping hazard. This sidewalk section should be repaired.

Based on our evaluation, we find that this portion of the project is in compliance with the noted standards with the following exceptions:

- ***Paved sidewalk settlement – Unit #29***

5.5 Landscaping & Appurtenances

Description

Landscaping on the site is well established. Most consists primarily of ornamental trees and shrubs throughout the property with foundation plantings surrounding many of the building footprints.

An attractive community sign with stone wall lined entrance on the beginning of North Street.

Evaluation

The landscaping and grounds are well maintained. Maintenance of the

landscaping on the site is divided between the outside maintenance service and by the owners. Maintenance of the lawns, shrubbery, and trees is the responsibility of the association. Plantings provided by the owners are the responsibility of the owners.

Compliance

- Based on our evaluation, we find that this portion of the project is in compliance with the noted standards.

6.0 STRUCTURE

6.1 Structure

Description

A limited review of the community's structures was conducted and our comments on the structural systems hidden behind the completed finishes are based on this review, visible elements, and industry standards.

The buildings are of wood-framed construction with dimensional lumber rafters on the 2-story buildings and manufactured wood trusses supporting 1-story building roofs. Girders are sistered dimensional lumber; LVL's, and/or Parallam. The exterior walls are constructed with 2x6 at 24 inch on center wood studs.

The foundations of poured concrete perimeter walls and interior steel lally columns are typical of buildings of this type. The concrete footings were not visible. All building have full basements with approximately half taking advantage of the gentling sloping terrain to allow walk-out type basements.

The exterior wall sheathing is covered with building wrap (Tyvek) for all buildings on North Street up till the rotary. The remaining buildings in the community utilize a Zip Board sheathing system.

The interior demising partitions are covered with sheetrock for firewall protection with R-13 insulation.

The construction of the buildings began in 2006 under the Massachusetts building code of 2006. Current buildings are being constructed under the 2009 code.

The building design load criteria include:

- Live Load: roof - 40 pounds per square foot
- Live Load: floor – 40 pounds per square foot
- Wind Load: Exterior – 100 pounds per square foot
- Seismic – Group 1 with performance Category C

Evaluation

Generally the structures are in good condition and structurally sound.

A number of owners mentioned in their questionnaire sheets that they were concerned with foundation cracks. Many of these specific crack conditions were directly observed. All cracks viewed were of the vertical shrinkage crack type. This type of crack is rarely of structural significance.

Vertical cracks are only significant if they either are greater than 1/8 inch in

width; allow water infiltration; or there is differential movement on either side of the crack. It is expected no more than ten foundation cracks will need repair by injection.

Compliance

Based on our evaluation, we find that this portion of the project is in compliance with the noted standards with the following exceptions:

- ***Foundation crack repair***

6.2 Ventilation

Description

Attic ventilation is provided by soffit and roof ridge vents with some roof vents.

Evaluation

The ventilation appears adequate for these buildings. The insulation observed is well installed and does not interfere with the air flow from the soffit venting. The attic vapor barrier is a 4 mill poly sheet.

The earlier buildings were insulated with fiberglass batt insulation. Later buildings have blown in cellulose insulation in the attic floors with an R-38 rating. The exterior walls have insulation values ranging from R-19 to R-21 depending on the building code in effect at the time.

Compliance

Based on our evaluation, we find that this portion of the project is in compliance with the noted standards.

The Environmental Protection Agency (EPA) has determined that some buildings may be affected by unhealthy indoor air contamination. We do not test for this and cannot provide you with an opinion about the indoor air quality of the buildings on this property as this is beyond the scope of this analysis. However, there are experts who test for indoor air contamination, and we recommend you enlist the services of such a professional should a concern over indoor air quality arise. In order to aid in healthy interior building environments, it is important that attic ventilation be adequate, bathroom, kitchen, and laundry exhausts discharge air directly to the outside, and moisture problems be immediately rectified.

7.0 EXTERIOR SYSTEMS

7.1 Roofing Systems

Description

The pitched roof surfaces are covered with composite asphalt/ fiberglass architectural shingles. The roofs have metal gutter and downspouts.

Evaluation

These types of shingles have useful lives of 25 to 30 years if properly maintained including providing good attic ventilation. These shingle roof surfaces are in good condition and should provide good service for many years.

Compliance

- Based on our evaluation, we find that this portion of the project is in compliance with the noted standards.

7.2 Exterior Finishes

Description

The exterior walls of the buildings are surfaced with vinyl clapboards and shakes with brick veneer front elevation facades. The windows are modern double-paned vinyl Harvey Vicon series.

PVC boards cover the rear porch pressure treated wood structure.

Evaluation

The building exterior surfaces are in good condition. We noted a few locations where the vinyl clapboards have been distorted by reflective heat. This is primarily due to sunlight reflecting off enclosed porch glass walls.

While vinyl siding is sometimes projected to last fifty years, it has been our experience a much shorter life span should be expected of this material. As the siding ages, the colors begin to lose their color density and show signs of oxidation, the components become unsightly from neglect and impact damage, mold, and mildew growth occurs, and replacement sections made necessary by periodic repairs become evident as colors and styles no longer match. In order to keep the standards of the community at a higher level, we suggest anticipating a vinyl siding replacement throughout the community in twenty years.

The brick veneer systems are in good condition and should only require minimal periodic joint maintenance throughout the life of the community. We noted some broken brick near the front iron railing posts. This may be due to freeze expansion.

The structural and decking components of the decks and porches are in generally good condition.

A few PVC boards have come loose and need to be reattached.

Compliance

- Based on our evaluation, we find that this portion of the project is in compliance with the noted standards

8.0 MECHANICAL SYSTEMS

8.1 Electrical Systems

COMMUNITY ELECTRICAL SYSTEMS	
Amperage	150 amp
Voltage/Phase	120/ 240 V, single phase
Service Entrance	Underground
Branch Wiring	Copper

Table 8: Electrical System Summary

Description

Underground electrical service from ground-mounted transformers. Each unit has its own electrical meter and 200 amp rated circuit breaker box. GFCI outlets are located in bathrooms, kitchen, and exterior. AFCI protection is on bedroom circuit breakers.

An emergency 125 kW generator is located at the waste treatment plant and is sized to service the treatment plant and street light fixtures.

Evaluation

Only a limited investigation of the electrical system was conducted with sample testing of outlets for proper grounding and wiring.

Compliance

- Based on our evaluation, we find that this portion of the project is in compliance with the noted standards

8.2 Plumbing Systems

Description

The domestic water distribution was primarily PEX piping and waste water piping was PVC.

There are underground 1000 gallon propane tanks servicing up to two buildings with four units.

The residential buildings do not have sprinkler systems

The community waste disposal needs and the future retail/ commercial condominiums are services by a central private waste treatment plant. The plant operates using an 'Amphidrome' system with a submerged attached growth bioreactor process, designed around a deep-bed sand filter. The plant is designed to treat up to 32,000 gallon per day. It is specifically designed for the simultaneous removal of soluble organic matter, nitrogen and suspended solids within a single reactor. Since it removes nitrogen, it may also be considered a biological nutrient removal (BNR) process.

This plant is managed by the Universal Trust whose operating and maintenance budget is separate from the residential community's budget and therefore will not be considered in this report.

Evaluation

There did not appear to be any issues of significance regarding the plumbing systems at the community at the time of the investigation.

Compliance

- Based on our evaluation, we find that this portion of the project is in compliance with the noted standards

9.0 MISCELLANEOUS AMENITIES

Description

The site has street signs; community sign; decorative stone walls; wood guard rails; and a community mailbox.

The Club House is the main amenity in the complex. It features a living room with a fireplace; a kitchen; a workout room; card playing room; and Library. The building's HVAC needs are serviced by three split-system propane gas fuel units. The systems' air handling equipment is located in the attic while the associated compressor for each unit is outside.

Evaluation

The street signs; streetlights; and property signage are in good condition. These components on the property should provide years of relatively trouble-free service.

There did not appear to be any issues of significance regarding the Club House building at the community at the time of the investigation.

- Based on our evaluation, we find that this portion of the project is in compliance with the noted standards

10.0 TRANSATION COST ESTIMATES

See Appendix A.

11.0 CONCLUSION

In Summary, we consider these buildings to be in generally good condition when compared to others of similar age and construction type. While some components are in need of a repair and replacement program, the program can be prioritized and planned in conjunction with reserve strategies.

12.0 LIMITATIONS

The observations described in this study are valid on the date of the investigation and have been made under the conditions noted in the report. We prepared this study for the exclusive use of The Village. Criterium Engineers does not intend any other individual or party to rely upon this study without our express written consent. If another individual or party relies on this study, they shall indemnify and hold Criterium Engineers harmless for any damages, losses, or expenses they may incur as a result of its use.

This study is limited to the visual observations made during our inspection. We did not remove surface materials, conduct any destructive or invasive testing, move furnishings or equipment, or undertake any digging or excavation. Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be seen or were not within the scope of our services at the time of the investigation. We did not undertake to completely assess the stability of the buildings or the underlying foundation soil since this effort would require excavation and destructive testing. Likewise, this is not a seismic assessment.

We did not investigate the following areas:

- Central treatment plant equipment and leach fields
- Most of the interiors of the residential units
- Most of the attics of the residential units

We have not rendered an opinion on uninvestigated portions of the community.

We did not perform any computations or other engineering analysis as part of this evaluation, nor did we conduct a comprehensive code compliance investigation. This study is not to be considered a warranty of condition, and no warranty is implied. The appendices are an integral part of this report and must be included in any review.

In our Transition Cost Summary, we have provided estimated costs. These costs are based on our general knowledge of building systems and the contracting and construction industry. When appropriate, we have relied on standard sources, such as Means Building Construction Cost Data, to develop estimates. However, for items that we have developed costs (e.g.: structural repairs), no standard guide for developing such costs exists. Actual costs can vary significantly, based on the availability of qualified contractors to do the work, as well as many other variables. We cannot be responsible for the specific cost estimates provided.

We have performed no design work as part of this study, nor have we obtained competitive quotations or estimates from contractors as this also is beyond the scope of the project. The actual cost to remedy deficiencies and deferred maintenance items that we have identified may vary significantly from estimates and competitive quotations from contractors.

If you have any questions about this study or the reserve fund analysis, please feel free to contact us. Thank-you for the opportunity to be of assistance to you.

Respectfully submitted,

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Kyle D. Hardy, P.E.
Criterium Engineers

Appendix A: TRANSITION COST PROJECTIONS

TRANSITION COST ESTIMATE

The following estimates are provided based on our construction cost experience. The actual costs may vary significantly, depending on the quality of work done, the degree to which experienced contractors are available to do the work and other sometimes unpredictable variables. These estimates should be considered a guide, not a guarantee of the actual cost.

Description	**Cost**
Pavement Repairs	$50,000
Foundation Crack Repair	$12,500
Sidewalk Settlement	$2,000
Drainage – Club House	$5,000
Irrigation Repair	$2,500
Install Sod to Repair Lawn	$1,000

Appendix B: PROJECT PHOTOGRAPHS