

**April 13, 2018**

**FEASIBILITY STUDY**

For

**Simcoe Manor Campus Redevelopment**

For

**Simcoe County**



Prepared by

**salterpilon**architecture

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## 1. EXECUTIVE SUMMARY

Further to Item CCW 16-035, in January 2016 County Council authorized staff to proceed with market, feasibility and related studies with regard to the potential redevelopment of Simcoe Manor and Village in Beeton Ontario.

In early 2016 staff completed a public procurement process for the Feasibility Study resulting in Salter Pilon Architecture Inc. being awarded the contract in April 2016.

The major objectives established at the outset were to obtain an understanding of the market need for a development of this nature in southern Simcoe County, the appropriate location for the facility, and a high level building design and budget estimate that would best support multiple housing types and allow for the potential acquisition of lands to occur in the near future. One of the basic requirements of the MOHLTC is that a building site be owned and ready for development should a project and its associated funding want consideration by the Province.

Following site visits of similar projects, a physical review of the existing facility, a review of the available existing facility drawings and the completion of the Housing Market Study, the Feasibility Study explored several identified options:

1. Redevelop in Phases on the existing site and adjacent lands.
2. Redevelop on a new Site in Beeton.
3. Redevelop on a Site within the general South Simcoe area eg. Alliston

In review of the needs identified through the Market Study and the Central LHIN, this feasibility study included the current Simcoe Manor and Village facilities as well as several additional components. The core components are modelled after our Georgian Village Campus to ensure a complete, efficient and sustainable continuum of services and housing for our aging population.

To encompass this full continuum, this feasibility study determined that approximately 30 acres of land would be required.

In addition, given the proposed scope of this project, this project has been planned in a phased approach.

To achieve optimal operational efficiencies in long term care operations and to accommodate increasing waitlists, the redevelop from a 126 to 160 bed long term care home is recommended. The feasibility plan also includes the existing 32 unit Supportive Housing apartments, along with 32 Affordable Housing units, a 9 unit Co-Housing complex, 40 Market Rental/Life Lease suites, 40 Retirement suites, 10 semi-detached townhomes and 10 garden homes. The proposed site design would include supporting parking lots for each building type, a perimeter ring road to provide the required internal access points, community hub, retail space and gathering place, outdoor amenity spaces, walking trails and green space.

The consultant team is being led by the prime consultant Salter Pilon with Gerry Pilon; President and Ryan Stitt; Associate as the project architects. The consultant team is comprised of SHS Consulting providing the market assessment, Ravens Engineering providing the structural assessment of the existing facility, and Turner and Townsend providing the cost analysis for the project.

Following a comprehensive multi stakeholder review process, the proposed Simcoe Manor redevelopment model design utilizes approximately 30 acres of property to fully include all campus components and maximize operational flow and efficiencies.

The team collaborated to establish a high level proposed design that supports the existing and future components while providing a tasteful design which will fit in with the built fabric of the community.

The project is proposed to target a minimum LEED® Silver Certification. As such there is a desire to provide an integrated green campus that is functionally efficient with cost effective construction and lean building operations. The design conversations to date have included renewable resources, the use of green roofs (active and non-active), sustainable materials and respect of environmental conditions. Photovoltaic and geothermal systems have been discussed as viable options to support the Campus' service needs.

The project design was developed to what is considered a Master Plan stage, which has inherent qualities of a Schematic Design. The layout and sizing of the different buildings on the site are representative of the functional program elements required to support each resident type. Supporting programs for patient care, community areas, service areas and M&E spaces have all been included in the developed Master Plan design. The redevelopment of the Simcoe Manor Campus is currently designed as 396,330sf spread over 12 buildings that vary in height from one to three storeys.

## 2. EXISTING SIMCOE MANOR

The site on which the existing Simcoe Manor resides today dates back to 1898 where the original House of Refuge existed giving the property a storied history. Some of the most notable changes to the original facility were a 47 bed addition in 1952, the demolition of the original House of Refuge in 1973 to accommodate an addition that supported 158 residents and a major renovation/addition in 1992 that allowed the facility to house 126 residents in modernized rooms including a 32 bed supportive housing unit. 80% of the rooms are private with the rest being semi-private. The resident rooms are supported by Nursing Stations, Dining Rooms, Activation rooms, Lounges and Family Rooms.

Due to the nature and timing in which multiple additions and renovations have occurred over time at Simcoe Manor the facility is disjointed, and is starting to age inconsistently across its various components. The following is a list of Architectural and building conditions that are of concern that were identified through site tour by Salter Pilon and conversations with the onsite facility staff.

### Building Interior

- The interior of the building while kept clean and in average condition does not support the resident's quality of life as best it can do to the limitations of the existing spaces. The finishes and fixtures are dated and are in need of a revitalization and renovation program so that the interior space would feel more modern and inviting.
- Some spaces in Simcoe Manor such as hallways, stairwells, and vestibules are much larger than they need to be, creating inefficient space requiring additional heating and cooling.
- While reviewing the facility it was shown to Salter Pilon how the ground water condition is affecting the lower Levels of the facility with flooding and water leeching. In Sump Pit locations the ground water can be seen at less than a meter below the lowest finish floor elevations. This condition provides high air moisture content that is creating paint to peel and constant water in the structure and walls of the basement and crawl space areas.
- Room and amenity standards from the era of 1992 are very different than those designed today. Amenity spaces like Lounges and Activity rooms are now provided with a higher level of technology and a useful function of the space. Conveniences such as a pharmacy, hair dresser, tuck shops and shared spaces are all provided in the new typical design of a facility providing the type of care and services as Simcoe Manor.
- With the varying age and structural design of the multiple building additions there is differentiation in the finish floor elevations. Some of these are as designed conditions and some are due to the settling of buildings. Temporary fixes have been implemented to keep barrier free conditions but these will need to be reevaluated periodically to ensure the conditions are not worsening.

### Building Exterior

- The exterior of the building is showing signs of failure in its façade, canopies, terraces and windows which is compromising the integrity of the building envelope.
- On the façade of the building there is evidence of deteriorating brick cladding with the loss of mortar, partial bricks and in some instances multiple full bricks. This could be caused by water infiltrating the exterior walls from the outside of the building or from interior leaks. In some instances the failures are to a degree where full sections of brick should be removed and replaced before sections come away from the building.
- While reviewing different sections of exterior curtain wall it was found that multiple glazed units have failed and are showing condensation between the panes of glass. This means that the seals have failed

creating the loss of compressed gasses and all energy efficiency properties.

- The building is designed with outdoor terraces at Level 2. The terraces are constantly showing signs of roofing membrane failures which is allowing water to penetrate into the structure and building envelope below causing unsafe conditions. Rust stains and brick spalling are visually evident. Because of the severe nature of this issue most of the terraces at the facility are closed for use.

### **Site Conditions**

- Around the perimeter of the building in various instances there are retaining walls supporting landscaping and soil next to the building foundation. These retaining walls are showing their age with significant shifting, bowing and cracking.
- The asphalt in the parking lots and drive aisles is broken in numerous spots compromising the site water control and are unsafe for pedestrian use in certain areas. It was also visually noticed that the grading in the parking lots on the north side of the property are graded to slope back towards the building in some instances and not towards catch basins. This promotes storm water runoff towards the foundation of the facility and is compromising the soil in those areas.
- The improper grading around the perimeter of the building has created erosion next to the foundation of the building. This erosion is leading to the failure of the building's foundation and promoting water infiltration in the basement and crawlspaces of the facility. These conditions will only worsen over time and continue to deteriorate the building's structure
- The building is designed with outdoor patios at Level 1. The patios are suffering from site grading issues that are the benefactor of erosion and settling over time. This has caused the patio stone and concrete surfaces to become uneven creating tripping hazards and non-barrier free conditions that are unsafe for patrons.

### **Facility Drains**

- The stormwater management infrastructure system on site is experiencing water flow limitations. This is due to drain lines becoming clogged. The clogging is a result of continual build of calcified deposits that are not able to be mechanically removed. This has limited the drains to not be large enough to accommodate rainfall events of today and have caused building flooding in 2017.
- Facility staff currently is required to use their resources to pump water from the building onto parking lot surfaces and to nearby catch. This is a facility issue that can be dealt with temporary solutions in the warm months of the year but is not feasible during winter months with below zero temperatures.

### **Mechanical and Electrical Systems**

- The existing Mechanical and Electrical systems require more than the typical amount of support and repair to keep them running. This creates the need for a considerable amount of maintenance efforts and funds to keep the systems in good working order. This amount is expected to grow exponentially as the infrastructure continues to grow.
- The mechanical units and infrastructure have an average age approaching greater than thirty years and they are not energy efficient to today's standards.
- The facility is still using incandescent and fluorescent lighting in the majority of its spaces. To provide better energy efficiency the existing facility could use an upgrade to LED fixtures.

Below are images that depict some of the existing conditions:



**Image 1: Building Envelope – Brick Cladding Failure**



**Image 2: Building Envelope – Failed Glazing Unit**



**Image 3: Existing Site Condition – Failing Retaining Wall**



**Image 4: Existing Site Condition – Broken Asphalt Paving and Curb**





Image 5: Interior Conditions – Existing Lounge



Image 6: Interior Conditions – Dated Suite



**Image 7: Site Conditions Calcified Drain Lines**



**Image 8: Interior Conditions – Water Damage**



**Image 9: Interior Conditions – Water Damage**

### **3. PROJECT PROCESS**

Salter Pilon began working with Simcoe County in April of 2016 and has been working alongside their internal departments and consultant team to produce the preferred Master Plan Option. Key fields of work that have been initiated throughout the process to date are as follows;

#### **Real Estate Investigation**

- A Real Estate investigation was performed by Simcoe County to assess all land options in the Beeton area and other nearby communities. This investigation looked at properties that were between 25 and 30 acres to support the size of the campus redevelopment, access to required services, community support, etc. The Real Estate investigation provided greater than 10 possible sites included an assembly of adjacent properties to the existing Simcoe Manor site.

#### **Market Assessment**

- To gain an understanding of the local demographics, housing needs and current market trends a Market Assessment Survey was initiated. This assessment used local data and interview sessions to develop an understanding of the current market and to predict housing trends for when the Simcoe Manor Campus Redevelopment is slated to be open for occupancy. This information allowed for Simcoe County to determine the correct make up housing types and the percentages of occupancies over the entire redevelopment.

#### **Project Costing**

- During the design of the Master Plan costing was provided at major design milestone. Turner and Townsend provided updated costing based on the Master Plan drawings in line with the proposed construction phasing. This allowed the team to evaluate the budget as the design changed.

#### **Phase Construction**

- The three above exercises informed the design of the project and how it would require a phased construction. By phasing the construction we were able to provide the Village Centre and a majority of the immediate housing needs in the first phase of construction allowing for residents to move from their current accommodations into a more complete community with enhanced services and amenities.

#### **4. DESIGN APPROACH**

Master Planning design relies on the fundamental program elements which are based on the needs of a project that get modified through discussions from all involved parties. This leads to a refined plan that reflects the collaboration of all parties to ultimately put forward the best design solution. Typically the initial thoughts do not fully reflect the final product as discussion and commentary between the owner and design team allow for modification and help to flush out the preferred design. This has been found to be true with this project as the preliminary design conversations have directed the project to morph and evolve.

#### **PROPOSED PROJECT GOALS AND OBJECTIVES**

To implement this project successfully, the following objectives should be considered in the feasibility/preliminary study:

1. To provide a high quality of life for our residents within a pleasing environment conducive to activities and family visits.
2. A cost effective, highly functional, operationally efficient and aesthetically pleasing design through a consultative process, including input from all stakeholders.
3. A target to achieve LEED® Silver Certification with a focus on sustainability and energy efficient systems as well as the use of environmentally friendly products, materials and construction practices at every opportunity.
4. A design that establishes a relationship between interior building activity and the exterior environment.
5. Place a high priority on facility operation and maintenance efficiency, security and safety.
6. Consider building designs and materials that are complimentary to the context of the community.
7. Fully accessible facilities and landscape features incorporating the principles of universal design as reflected in the current codes.

#### **MARKET STUDY**

The first step in proposing such as facility was to investigate the Seniors Housing Market in southern Simcoe County. The consulting firm SHS Consulting was utilized for this study (attached as Appendix 1)

The Summary and Recommendations section of the report is provided here:

#### **Summary and Recommendations**

From the above discussion, it would be our recommendations to proceed as follows:

From our analysis of demographic, housing market, literature review, interview and focus group evidence, it is clear that there is strong evidence of the potential market success of a continuing care community in South Simcoe. We believe Simcoe County should support this type of development.

#### **Recommendations for Long-Term Care**

The purpose of this report was not to give specific recommendations for the design of the long term care home; however, some important observations were made.

- a. Expand hospice care into the community
- b. Expand memory care into the community

Develop structure and process which attempt to bring the seniors and staff more closely together between long term care and other forms of housing on site. For example, have central recreation and dining areas.

### **Recommendations for Other Housing Options**

1. A major emphasis should be put on supportive independent rental apartments, similar to Simcoe Village. They should each be designed in a similar way to Simcoe Village and linked to the overall complex. They would each offer a menu of meals and services which could expand over time, enabling people to age in place. Units should also be adaptable to modifications to meet the increasing needs of residents as they age.

Current funding programs for seniors housing should be taken advantage of in order to emphasize creation of more affordable rental apartments. We are confident, given the income data for the area, that if charges are increased as a person ages in order to provide more services, many seniors would be able to cover these costs.

2. Include higher end assisted living/retirement facility
3. Include higher end rental garden homes and apartment units. This element is aimed at seniors with higher incomes who may be downsizing from an existing house and want a rental option to free up cash flow.
4. Include co-housing facilities with sufficient capacity for 6 – 12 seniors who would share on a rental basis similar to Green House or Abbeyfield residences.
5. All elements should all be tied together with a central fitness, recreation, and dining complex.
6. There is a lot of support for expanding the adult day program, particularly the length of its service hours. This program also depends heavily on accessibility and transportation.
7. The County should consider the important amenities and services described by stakeholders which are outlined in section 6.0 in order to enhance the success of the development.
8. Adequate parking for residents, staff and visitors is of strong importance to the success of the project.

### **CAMPUS PROGRAM**

The Campus is comprised of 12 building types that support the different clientele and services that will be provided in the new Simcoe Manor. Please refer to Appendix D for the graphical representation of the Campus design.

The types are as follows;

#### **Building 1 – MAIN BUILDING**

**FOOTPRINT** – 54,350 SF

**GFA** – 54,350 SF

**# OF STOREYS** – 1

**PROGRAM ELEMENTS** – Central Dining, Cafe/Bar, Server, Fireplace Lounge, Tuck Shop, Adult Day Care, Theatre/Place of Worship, Pastoral Office, Bookable Meeting Spaces, Washrooms, Housekeeping (with Office),

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Community Program Space, Leaseable Space (for public business Hairdressers, Shops, Hearing Aid Clinic etc., Restaurant, Pharmacy), Waste Management, Consultant Multi-Purpose Rooms, Adult day program, Therapy Pool, Spa, Fitness Centre, Green House, Library/IT Resource Centre, Auditorium, Spa/Tub Room

**Building 2 – LTC SUPPORT**

**FOOTPRINT** – 16,000 SF

**GFA** – 48,000 SF

**# OF STOREYS** – 3

**PROGRAM ELEMENTS** – Meeting Rooms, Staff Offices, Therapeutic Programs, Reception, Human Resources, Director of Resident Care, Activation Supervisor, LTC Administration, IT, Open Floor Cubicles, Workroom, Copy Room, Resource Office, Staff Dining & Lounge, Board Room, Laundry, Kitchen, Auditorium, Respite Bedrooms, Spa/Tub Room

**Building 3 & 4 – LTC**

**FOOTPRINT** – 12,800 SF (each)

**GFA** – 38,400 SF (each)

**# OF STOREYS** – 3

**PROGRAM ELEMENTS** – Resident Rooms, Dining Rooms, Activity Rooms, Family Rooms, Showers, Soiled Utility, Clean Supply, Washrooms, Housekeeping, Storage, Laundry, Kitchen, Spa/Tub Room

**Building 5 – AFFORDABLE HOUSING**

**FOOTPRINT** – 12,480 SF

**GFA** – 37,440 SF

**# OF STOREYS** – 3

**PROGRAM ELEMENTS** – Resident Apartments, Mail Room, Locker Storage, Waste Management/Recycling, Multi-Purpose Room with Kitchenette, Washrooms, Spa/Tub Room, Guest Suite

**Building 6 – SUPPORTIVE HOUSING**

**FOOTPRINT** – 12,400 SF

**GFA** – 37,400 SF

**# OF STOREYS** – 3

**PROGRAM ELEMENTS** – Resident Apartments, Guest Suites, Mail Room, Locker Storage, Waste Management/Recycling, Multi-Purpose Room with Kitchen, Meeting Room/Library, Sitting Area, Washrooms, Spa/Tub Room, Guest Suite

**Building 7 – CO-HOUSING**

**FOOTPRINT** – 5,400 SF

**GFA** – 5,400 SF

**# OF STOREYS** – 1

**PROGRAM ELEMENTS** – Resident Bedrooms, Great Room, Multi-Purpose Rooms, Storage, Kitchen, Family Rooms

**Building 8 – MARKET RENTAL/LIFE LEASE**

**FOOTPRINT** – 22,000 SF

**GFA** – 57,000 SF

**# OF STOREYS** – 3

**PROGRAM ELEMENTS** – Resident Apartments, Mail Room, Locker Storage, Waste Management/Recycling, Multi-Purpose Room with Kitchenette, Washrooms, Guest Suite, Spa/Tub Room

**Building 9 – RETIREMENT**

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**FOOTPRINT** – 22,000 SF

**GFA** – 57,000 SF

**# OF STOREYS** – 3

**PROGRAM ELEMENTS** – Resident Apartments, Mail Room, Locker Storage, Waste Management/Recycling, Multi-Purpose Room with Kitchen, Meeting/Library, Sitting Area, Washrooms, Guest Suites, Spa/Tub Room

**Building 10 & 11 – RENTAL TOWNHOMES**

**FOOTPRINT** – 1,000 SF (per unit)

**GFA** – 4,000 SF (building 10) & 6,000 SF (building 11)

**# OF STOREYS** – 1

**PROGRAM ELEMENTS** – Single Car Garage, Laundry, Kitchen, Dining Room, Living Room, Washroom, Bedroom, Storage

**Building 12 – RENTAL DETACHED GARDEN HOMES**

**FOOTPRINT** – 1,000 SF (per unit)

**GFA** – 10,000 SF (total for 10 units)

**# OF STOREYS** – 1

**PROGRAM ELEMENTS** – Single Car Garage, Laundry, Kitchen, Dining Room, Living Room, Washroom, Bedroom, Storage

**Building 13 – MAINTENANCE BUILDING**

**FOOTPRINT** – 2,400 SF

**GFA** – 2,400 SF

**# OF STOREYS** – 1

**PROGRAM ELEMENTS** – For storage of Maintenance Vehicles, Grounds Equipment and Bus, Open Space

**PHASING AND PRELIMINARY COST ESTIMATES**

At the start of the design process it was established that this Master Plan would be implemented through a phased construction approach. Cost consultants Turner and Townsend were utilized to provide high level design costs.

The proposed Master Plan has a 2 Phase construction plan with a demolition phase of work (Phase 2A) near the beginning of Phase 2's construction commencement. The major reasons for a phased approach are to allow for the existing Simcoe Manor to stay operational while Phase 1 of construction is completed and for Capital financial reasons. The entire project would cross over 2.5 years with a phased approach as follows:

**Phase 1 - Construction**

**DURATION – 20 months**

Phase 1 will see 254,030 GSF of space constructed consisting of Buildings 1 – 6 (MAIN BUILDING, LTC SUPPORT, LTC, AFFORDABLE HOUSING and SUPPORTIVE HOUSING) which will provide 160 LTC beds, 32 Supportive Housing Units, 32 Affordable Housing Units, Adult Day Program and all the required services to bring the clientele from the existing Simcoe Village over to the new space.

A major portion of the site works will be completed in the Phase 1 construction. The ring road around the perimeter of the campus will be constructed along with the main Village parking lot, Staff Parking, Affordable and Supportive Housing parking lots. The majority of site services including gas, hydro, water and Storm Water Management will also be implemented in Phase 1.



**Phase 2 – Construction****DURATION – 19 Months**

Phase 2 will see 142,300 GSF of space constructed consisting of buildings 7 – 12 (CO-HOUSING, RETIREMENT, MARKET RENTAL/LIFE LEASE, TOWNHOMES, RENTAL DETACHED GARDEN HOMES) plus a link from the Market Rentals and Retirement Buildings. These buildings back to the Main Building which will provide, 40 Retirement and 40 Market Rental / Life Lease Units.

The parking lots and drop off loop for the Co-Housing, Rental Units Retirement and Market Rental / Life Lease buildings will be constructed during Phase 2 along with Outdoor Amenity spaces, necessary landscaping and continuation of services.

## **APPENDICES**

### **APPENDIX A - Market Assessment for a Continuing Care Community in South Simcoe**

Please refer to the following document Simcoe County – Market Assessment for a continuing Care Community in South Simcoe, dated December, 2016 prepared by SHS Consulting.

### **APPENDIX B – Structural Feasibility Study**

Please refer to the following document Feasibility Study - Structural, prepared by Ravens Engineering Inc.

### **APPENDIX C – Master Plan Drawing**

### **APPENDIX D - Simcoe Manor Redevelopment Cost Analysis**

At this time Turner and Townsend has provided a Class D cost estimate that is based on the Master Plan Diagram provided by Salter Pilon Architecture Inc.

Please refer to the following documents Simcoe Manor Redevelopment Phase 1 Master Plan Option 1 Cost Analysis, dated October 26, 2017 and Simcoe Manor Redevelopment Phase 2 Master Plan Option 1 Cost Analysis, dated October 26, 2017 prepared by Turner & Townsend.