

Town of Sterling Council-On-Aging Feasibility Study for potential Senior Center Properties 1 June 2007

richard alvord architects

Table of Contents

- 3 Executive Summary
- 4 Criteria for Site Selection
- 5 33 Main Street Church Building
- 29 240 Worcester Street Sterling Inn
- 46 33 Main Street Estimate
- 56 240 Worcester Street Estimate

The intention of this Feasibility Study is to investigate two properties available to the town for possible use as a Town Senior Center and offices for the Council-on-Aging, describe the modifications and parameters that will be required for each property to allow it to be used as the Senior Center and provide an estimate for those modifications. This report is not written to choose a property for the Town but to research the conditions just described to help the Town move forward in the selection of a future Senior Center site.

The Town of Sterling has the opportunity to purchase two properties within a half mile of the town center to be used as the Town's Senior Center. Both properties can provide enough interior space to meet the proposed programming needs, a program determined through an analysis of the existing Center use, discussions with Center Staff and future Center needs. Each property has site constraints and building exterior problems to remedy. Additionally, system upgrades and accessibility issues highlight building specific needs.

The first property, an 1850 Church, located in the center of town, across from the town green, sits on a highly visible site in a well visited location. While the interior and exterior need a significant amount of work to make the building useful to the town, the existing structural system and framing for the building appear to be in good shape. The renovations and addition to the church building allow it to meet the accessibility needs, the upgraded systems requirements and a better use of interior space for the Council-on-Aging. Site parking will be an issue as the parcel will not hold the amount of spaces needed for the center. Septic system requirements and location should be considered, especially with the likely scenario that the septic system is placed on site. The initial cost of the property allows for significant renovations to take place, particularly when compared to the initial cost of second property.

The second property, the circa 1908 Sterling Inn, located at 240 Worcester Road, sits just outside the town center about a half a mile from the town green. Continually used as a hotel and dining establishment, it provides many rooms and spaces required for the Senior Center. The first floor alone can hold the entire program of the Center, leaving the town with options for the use of the second floor spaces. The building is primarily a cast-in-place concrete structure with second story walls, roofing and first floor in-fill with wood framing. The building is in good shape and does not require any structural upgrades. It will however require new roofing, a new interior stair and elevator to bring it up to code for public buildings. Small interior renovations will also be required to make the building usable as a Senior Center – including the addition of offices and administrative areas, relocation and renovation of rest rooms and the construction of a new entry into the existing façade. The initial cost of the building is large when compared to the Church building but modifications and renovation costs are significantly lower. The schematic design layouts in this proposal were formulated for the purpose of determining a possible Senior Center layout and associated costs required to make these renovations. Although there may be parts of the designs that may become part of future building design, these are schematic drawings and have not been fully tested to meet all conditions as may be determined after review by Civil, MEP and Structural engineers. The final design for either building may be quite different from the schematic designs depicted in this study.

We have also attempted to quantify the costs for property acquisition, renovation and energy use. These numbers may change due to many factors (real estate market, construction cost inflation, cost of energy etc.) and do not represent a final cost to the Town. Expenditure for grant writing/ planning, architectural documentation, Title 5 compliance (in the case of the Inn), fuel use (in the case of the Church building) and yearly operational budgets have not been included. The estimates attached are to broadly understand the cost associated with each property and its renovation for use as a Senior Center and represent a best effort to quantify these requirements. The following selection criteria are offered as a means to discuss and rank the two sites in this proposal. This list is by no means exhaustive and other criteria may arise. It is offered as a way to begin to discuss the merits and liabilities of each building and site. The list is written alphabetically.

Accessibility/ Cost to make Accessible Auxiliary Uses for the Town (Emergencies, Town Offices, Storage) Calender time to Occupancy Centrality (connection to municipal center) Prominence of Location Cost to Renovate Efficiency of Operation Fulfillment of Program Requirements Future Expansion Possibilities Green Building/ Sustain-ability Issues Parking Access Van Access and Drop-off Locations Separate Delivery Location Snow Removal and/or Storage Safety Sense of Community

33 Main Street Church Building

- 6 Site
- 7 General Building Conditions
- 8 Accessibility
- 9 Systems
- 10 Building Envelope
- *11* Structure and Framing
- 13 Adaptability Schematic Design
- 14 Building Layout
- 15 Building Program
- 17 Entrances
- 18 Site Design
- 19 Final Notes
- 20 Drawings

SITE

The circa 1850 former church building is situated on the northwest corner of a fairly regular shaped (.2185 acre) 9,550 SF lot at the corner of Maple Street and Main Street. The lot is a relatively flat plane with a gentle slope running away from the Main Street towards the rear of the building lot. The gentle grade change means that the rear of the building at the basement level is roughly half a story below grade, where the front (Main Street) side is fully below grade. There are four existing entrances to the building at grade: front entrance on Main Street and a rear egress stair leading to the first floor; a side entrance on Maple Street and a rear entrance at the parking area leading to the basement level.

There are vehicular entrances on both Maple and Main Streets. The site has no vegetation, with sparse lawn on the main street side. The remainder of the lot is covered with building foot print or asphalt that is at the end of it's life cycle. There are no existing delineated car parking spaces, although the lot could accommodate roughly 10 -12 automobiles.

The site does not offer enough room to accommodate conventional drainage and sewerage disposal or processing. If this property is to be developed it will require special engineering to develop waste water, sewer and drainage strategies, likely utilizing pumping stations, and piping to another qualified town owned site or a storage tank and periodic waste removal. The parking area and walkways to the building are not at the 5% grade required by code. It is unclear at this time if that requirement can be reached on the site by changing the grade in the parking lot. A future Design Team with Civil Engineers is needed to fully assess the Site Development possibilities.

Utilities available in the street are public water, electricity and telephone only. Propane gas or oil fuel need to be delivered and stored on site.



Aerial View Town Green

The site is centrally located across from the town green, library, town hall, commercial buildings, civic buildings and religious buildings. It is prominently situated on the town common.



Yearly Sun Exposure

The building is oriented with the Main Street left corner facing North. This allows all sides to get direct sunlight during the summer months. During the winter the sun is only effectively lighting the rear of the building. The front façade of the building gets the least amount of light year round, with virtually no light in the winter.

GENERAL BUILDING DESCRIPTION

The building was originally designed to be a New England Rural church structure and it maintains that image today. The building style is derived from Greek Revival common from pattern books of the mid nineteenth century in New England. The form and mass of the building is straight forward and simple with a rectilinear base and a simple pitched roof with gable ends forming a pediment at the front and rear facades. Three large oversized double hung windows adorn each of the long sides of the building, bringing natural light to the single space of the building's original main floor. The building had a basement (finished) and a main floor used as a sanctuary. The sanctuary was approximately 20' in height ending at a flat ceiling over head. There is no indication of any other rooms original to the structure. A stair was tucked into the north east corner leading to the lower level. There is a large unfinished attic space above the ceiling with all of the structure exposed



and in good condition. This area was insulated with loose fill. There is a stair and ladder leading to the (former) bell tower and steeple. The steeple is no longer complete and sealed at the former base of the pinnacle.

A second floor was added into the main sanctuary space some time in the last 40 years. This floor is standard wood framed and added approximately 2,066 SF of usable office space. A front and rear stair were also installed providing access and egress and connecting the two upper floors. The basement floor is not connected to the first and second floors internally.

The building is currently being used as a carpentry shop in the basement, furniture storage and as (mostly) unoccupied office spaces on the two upper floors. It's recent past life was the "Sterling Professional Building"

above: view from northwest corner - 33 Main Street building

In total the building originally housed approximately 2,272 gross SF on the first floor and 2,272 gross SF of area in the basement level. Currently, the building has a gross area of 6,850 SF on three floors.

The building has no special documented Historic significance, thought it serves as an important part of the character of the town center and image situated in a prominent position on the town green.

Two "lantern" bay windows were added at an unknown time to the façade of the building on the Main Street elevation at the first floor level.







ACCESSIBILITY

The building is currently inaccessible and not in conformance with many of the Massachusetts Architectural Access Board regulations 521 CMR. In its renovation to be used as a Senior Center, it will be required to meet all of the requirements without exception due to the breadth of the work to be undertaken in the renovation. Generally these requirements will include entrance and egress, accessible stairs, doors, toilet rooms, passage clearances, and elevator.

The site is relatively flat, yet the grade change around the building and leading to the front door is higher than the maximum 5% required for accessible sidewalks and grounds. This is inherent to the natural grade of site.

It is important to note that one of the possible funding agencies focuses on the access issues of a building and is capable of funding most of the improvements needed to become compliant. That agency does not fund conveying systems other than fully sized elevators.

top: existing rear entry middle: existing front entry bottom: existing side entry

SYSTEMS







The electrical system for the building is a series of breaker panels located at the rear of the basement level. The system has additional sub-panels distributing the electricity through out the rest of the building. The 200 amp service is not adequate for the future needs of the building, especially the power requirements of an elevator.

The public water service enters the building off of Main Street in the basement. The service is distributed through out the building to non- accessible toilet rooms on the various floors. Hot water is drawn from the Boiler.

Heating and ventilating and air conditioning systems in the building are also in working order and of fair to good condition. They are all separate systems for separate uses and floors. The second floor toilet rooms have electric heat. The remainder of the building is on forced hot water baseboard delivery units. The toilet room ventilation is by ducted fan, relying on ambient air for changes. There are some through wall independent air conditioning units on the first and second floors.

top: Basement Electrical Panel - subpanels throughout middle: Oil - Fuel Storage bottom: Oil - Fuel Boiler

BUILDING ENVELOPE

The building is wood framed with clapboard siding , has an asphalt shingled roof, and has large single pane windows (could be original) on the upper story with smaller windows to the basement level and a field stone - brick foundation.





top: Northeast corner showing front facade and east elevation bottom: Southwest corner showing rear facade and west elevation The asphalt roof appears to be in fair to good condition and is approximately 10 years old. When installed, a layer of plywood was installed over the existing sheathing to shore up and provide a continuous nailing surface. There are no obvious signs on the interior that there are any roof issues from leaking or from condensation. It should be considered that the roof is in the mid life point and will need replacement within or around 15 years.

The exterior siding and trim detail is mostly original and in fair condition. It needs to be refastened over 80%, re-sealed (caulked) and prepped and painted. Note that removal of paint is likely hazardous waste. Approximately 20% of the clapboards need to be replaced. It is possible that the sheathing boards under the clapboards are in some compromised condition and will require replacement over 20% of the exterior.

The building will need to be in conformance with the current Massachusetts energy code requirements if renovated.

The existing windows and doors are in fair to poor condition. The attic and in between floors are adequately insulated for current conditions. It is not clear if the building is insulated in the walls, it is probable that there is no air barrier installed behind the finish siding.

There are no obvious signs of water seepage into the basement level. It is likely that there is no damp proofing under grade due to the age of the building, but that gentle slope along with nearly 100% coverage of the site with impenetrable asphalt probably channels the water away from the building for the most part. The two entrances to the basement are contained in concrete area ways with drains at the bottom outside the door. These drains appear to be blocked at the surface and need to be cleaned out and determined if they are still operating correctly.



Foundation - Stone & Brick - note mortar missing on right photo



Wood Timber in Stone Foundation - needs review







STRUCTURE AND FRAMING

The original building is a wood framed post and beam structural system essentially built similar to a barn structure. This is a very common building technique of the time. For the most part this framing system is in good condition with some minor defects as one would expect from the age of the building.

The perimeter foundation is made up from loose laid field stone approximately 4 feet above the floor level. There does not appear to be any mortar holding the stones together in some of the areas exposed to view. The top 4-5 feet of the foundation is comprised of 3 or 4 withe of brick and mortar providing a level base for the supporting perimeter walls. It appears that the foundation is not supporting much of the first floor loads, but supports the second floor the attic and the roof loads.

The brick is in fair shape and appears to be structurally sound. It has been painted red. There is some effervescence which indicates water pushing lime out of the mortar during freeze and thaw cycles and does not present a problem. The brickwork is not perfect and needs re-pointing over approximately 40% of the visible area.

There in a wood timber encased in the field stone foundation 1/3 down from the NE corner. This is unusual and should be removed and replaced with masonry materials.

The first floor structure is original to the building. It is wood post and beam construction with a somewhat unique configuration of double beams with "t" topped columns to bear the load and distribute to the ground in the center spans. Some of these columns have been re-worked and replaced with modern "lally columns" (concrete filled steel tube). Along the perimeter the loads are brought to bearing via wood columns adjacent to the perimeter

Various Basement Columns









top: perimeter foundation - exterior repointing required middle: second floor conventional framing bottom: Attic post and beam framing stone foundation. It is not possible for us to view the independent footings under the columns, but is assumed that they continue to properly bear the loads as there is not indication of extraordinary settling. There are some out of level issues with the first floor which are normal for a building of this age.

The second floor structure was added into the building and appears to have bearing partitions aligning with the post and beam pattern of the first floor framing. The framing for this utilized 2x10 lumber at 1'-4" centers conventionally framed bearing on wood stud walls. Though the floor is in good condition and of good workmanship, it is not able to provide the bearing capacity required for a public building and the live loads associated.

The roof structure is quite interesting with a rather sophisticated system of wooden beams, trusses, columns, purlins, and point loading distributed down to the outside walls of the building leaving the original first floor area column free. These are all heavy timber members with lighter gage wood members supporting the finish materials. The original finish ceiling (hung from this structure) is plaster with wood lath, which appears to be fairly intact and shows some fancy painted patterns, though the vision was limited for review of the entire ceiling area.

Our observations are limited to visible defects and it is recommended that the structural integrity of the entire frame and foundation system be reviewed by a structural engineer if the proposal to adaptively reuse this building goes forward beyond this report. A Chapter 34 of 780 CMR report by a Licensed Structural Engineer (PE) is also required for the repair, alteration, addition, and change of use of the existing building (not part of this report).

ADAPTABILITY

The church building, upon first examination appears to present a number of challenges impeding its renovation to be used as a Senior Center. Most of these challenges are associated with the multiple floor condition and the easy access to and between them.

Senior Centers are most often designed to be on one, at grade, easily accessible floor level for obvious reasons dealing with physical limitations of the users. However, that is not a steadfast rule, there are many examples of successful Senior Centers in multiple floor buildings. Provisions can be made to make a workable multi-story facility. It is incumbent upon the design collaborators to take advantage of the opportunities that the multi-floor situation can offer. For the best architectural re-use the existing building it is necessary to examine the various opportunities and limitations inherent in the building and site and manipulate them to achieve the best result for the design.

Access is likely the most important challenge presented for the building. Other apparent challenges are limitations of the structure as it exists currently, various ceiling heights, limitations of the site for parking and drop-off, unified whole (feeling) for the center, and the limits of the site's ability to support both sanitary and drainage systems.

As previously mentioned, a Chapter 34 review of the existing building is required to ensure the absolute ability of the building to have a change of use by a Professional Structural Engineer. This report shall examine and evaluate the structure in regards to loads within and as placed upon the structure to ensure the integrity of the safe use of the building. This examination includes but is not limited to lateral forces, seismic recommendations, wind loading, live loading for occupancy, capacity and integrity of existing members and materials, general condition of the building among items.

SCHEMATIC DESIGN

The organizational approach for the programming of the various floors of the building follows the building's inherent features to be utilized naturally, taking full advantage of existing architectural opportunities. This approach places highest activity spaces on the lower floors and the less frequent activities on upper floors.

The lower level is the easiest to access and has the strongest perceived connection to the outside grade at the rear. This floor level has low ceiling heights (7'-9" at the beams) that are better for smaller spaces or spaces with smaller groups of users. The large open community multipurpose room would not layout well on this floor because of various constraints: column locations, ceiling heights, space required for toilet rooms etc.

The first floor was originally the sanctuary floor and it is likely to be able to accommodate the loading requirements for the large space, although a structural engineering review is needed to ascertain that as fact. It too, has a lower ceiling height of 8'-0" which is also not advantageous for the larger space of the community room.

The new second floor framing will be intended to supply the loading requirements for an assembly space for the community room . The new floor placement (elevation) in the building is proposed to be the same as it is currently because that would intersect the existing windows at the midpoint furnishing natural light to both the first and second floors.

The second floor will have a ceiling height of 10'-0" minimum. The framing of the attic space can be opened up in the center of the second floor allowing for the dramatic cathedral space exhibiting the beauty of the original post and beam roof framing system. The ends of the space shall have the standard second floor ceiling height of 10'.







Lower Level Plan Recreational

First Floor Plan Administration

Second Floor Plan Multipurpose

BUILDING LAYOUT

The layout for the building whole follows these fore mentioned criteria.

The Lower Level shall house the smaller group activities with a game room for cards and billiards with the computer room in an alcove to the north-east. Additional space is allotted for general storage, mechanical equipment, toilet rooms and stairs. The corridors formed by the storage and mechanical spaces are used to provide a viewing gallery for the art classes.

It will be advantageous to have a coffee bar on this level.

The staff rooms are located centrally in the building on the first floor. These rooms are office space, reception and waiting, library - boutique, kitchen, private office for shine and nurse with storage, mechanical, storage, toilet rooms and circulation spaces. The rooms are laid out simply flanked on a double loaded corridor down the center of the building footprint to the traditional front door. The kitchen can service either the lower level or the second floor equally in this location. This simple layout provides clarity for the users. The central hall leading from front to back is another opportunity to display items pertinent to the senior center: historical photographs, paintings, special notices etc.

The Third floor is dedicated primarily to the community multipurpose room. With higher ceilings and the ceiling opened up to expose the original roof framing in the attic, the room will provide a comfortable and unique setting. Additional spaces on this floor will be larger toilet rooms, storage for chairs and tables, coat rooms, separate storage for art classes with sink and counter top and general storage. It might be advantageous to have a coffee bar on this level.

The attic level is intended to be used for HVAC equipment for the multipurpose room. Access to the attic could be from a continuation of the new stair or a separate ladder access.

Vertical circulation elements, stairs and elevator are located remotely at either end of the building, still offering gracious entrances while obeying code requirements for separation. Each floor is laid out to provide simple and clear routes for access and egress.

Church Building Pro	gram		
DESCRIPTION	AREA (sq. ft)	OCCUPANCY (persons)	NOTES
Lower Level			
Game Room	800	40	2 Pool Tables; 8 Card Tables
Computer Area	140	10	7 computers (could be located in an al- cove off a larger room); 28 sf/ station
Storage (seasonal)	120		Yard Sale; Decorations; Miscellaneous
Utility	100		Heat and Hot Water
Telephone/ Data	20		Telephone and Internet Connections
Janitor's Closet	8		Mop Sink and Storage
Toilet Rooms (Men and Women)	100		1 Lavatory and 1 WC each room
Shower Room	50	1	
Elevator	48		Full Elevator per Funding Opportunity
Gallery Space for Art Work	200	6	Walls in Corridor for art class exhibition
Stairs	192		2 Accessible Stairs, per code (11'-0" floor to floor, 20 risers)
Circulation	196		10% of floor area
Lower Level Total	2,154		
First Floor Level			
Kitchen	350		Double Reach-in Freezer; double Reach-in Refrigerator; Warming Table; Stove with Double Oven; Dishwasher; 2 Prep Tables
Food Pantry	36		
Reception Waiting	80	2	
Waiting	100	10	
Coat Closet	20		
Health Clinic/ Nurse's Office/SHINE/ Private Consultation Office	120		Desk and Exam Table, File Cabinet, Three Chairs
Storage Closet	6		Shelving
Medical Equipment Stor- age	100		Walkers, wheelchairs, beds
Office	180	4	For one person with 4 person meeting area
Automated Call Center	25		Desk and chair in office area
Boutique	120		Shelves and Hangars
Library	6		A single bookcase
Janitor's Closet	8		Mop Sink and Storage
Toilet Rooms (Men and Women)	100		1 Lavatory and 1 WC each room
Elevator	48		Full Elevator per Funding Opportunity
Stairs	192		2 Accessible Stairs, per code (11'-0" floor to floor, 20 risers)
Circulation	167		10% of floor area
First Floor Total	1,838		

Church Building Pro	gram		
DESCRIPTION	AREA (sq. ft)	OCCUPANCY (persons)	NOTES
Second Floor Level			
Large Multi-purpose Room	1,750	100	Includes a Stage Area
Arts and Crafts Wall	20		Cabinetry and Countertop
Janitor's Closet	8		Mop Sink and Storage
Toilet Rooms (Men and Women)	280		2 Lavatory and 2 WC each room
Elevator	48		Full Elevator per Funding Opportunity
Stairs	192		2 Accessible Stairs, per code (11'-0" floor to floor, 20 risers)
Circulation	23		10% of floor area
First Floor Total	2,321		
Miscellaneous			
Three Season Porch	200		Second Level Porch
Mechanical Equipment in Attic	200		To be located in Area not opened to Large Room
Mechanical Room	120		Lower Level
Parking			
Van Parking Accessible Spaces Standard Spaces Drop Off	1 1 11 1		



New Rear Entrance Addition

Provides at grade entry to elevator lobby and stair from parking and drop-off area; access to all floors; houses open air porch at 1 1/2 level

ENTRANCES

A new entry and vertical circulation system is proposed for the rear of the building. It is advantageous locating the main entrance in the rear because it can take advantage of the existing grade change for ramp access to the entry, is adjacent to the parking and drop off area and it incorporates the elevator in a new structure. A new structure for the elevator is advantageous because it is easier to construct.

The new entrance to the rear of the building also offers new opportunities: users enter at the half story level essentially at grade (short ramp up or three steps) so that a person on foot has one flight up or down to the most frequented parts of the building. The less often used multipurpose room is 1 $\frac{1}{2}$ stories from the main entrance. The split level nature of the addition allows for a sitting porch to be incorporated at the half level between the first and second floors, accessible by either elevator or stairs. It looks out over the quieter side of the building to the residences beyond.

Due to the extent of the work required to renovate this building, the former front entrance will need to be accessible also. Upon review of the conditions at the front entrance, it is possible to install a ramp on the exterior of the building with a lift on the interior to bridge the three intermediate steps. (A variance from MAAB is required for a vertical lift).

The practicality of the site leading up to the ramp at the front entrance is questionable. The sidewalk grade is above the 5% required for a maximum slope. It is not feasible to change the grade at the sidewalk. So, it might be good use of finances to seek a variance due to the incompatibility of the site. Conversely, the installation of accessible route outside the building to the sidewalk would be beneficial in the case of emergency to get disable persons out the front entrance to safety.

MAIN STREET



KEY TO LANDSCAPE PLAN

- 1 Planting with seasonal flowering Shrubs and upright Ornamental tree.
- 2 Flowering Shrubs
- 3 Flowering and Evergreen Shrubs
- 4 Evergreen Shrubs
- 5 Annual and Perennial Flower Beds
- 6 Bulbs
- 7 Front Entrance
- 8 Rear Proposed MAIN Entrance
- 9 Drop off
- 10 Parking
- 11 Accessible Parking
- 12 Van Parking

SITE DESIGN

The intent of the site design is to prioritize accessibility and ease of use for the Sterling seniors while supplying as many parking spaces as possible. Where possible, landscaping is included to help soften and beautify the lot.

The Main Street side of the building is proposed to be a one way enter only vehicle access to the lot. There are two parallel parking spaces on the entry drive =that leads to the main parking area with 9 spaces, two of which are accessible spaces. There is a one way exit onto Maple Street from the parking lot.

Though both entrances to the building are accessible, the rear entrance is intended to now be the main entrance to the building. This entrance is flanked by walks leading to stairs and ramps.

The landscape materials shall be made up of hardy deciduous tree species, easy to maintain evergreen scrubs and some ground cover and mulch beds. There will be flower beds scattered throughout the various landscape areas to accommodate perennial bulbs and flowers and well as special seasonal flower planting areas. The intention is to utilize plant materials which will required very little maintenance and nurturing beyond what a senior gardening club might be able to supply.

FINAL NOTES

It is possible to renovate and modify the existing church building to provide for all of the current and foreseen future needs of the Sterling community for a Senior Center. The site and building have many opportunities: the location is quite visible in the town's historic center, the design of the Senior Center within the existing building uses the organization of the various floors to its advantage and the proposed schematic design fosters a sense of place and clarity for the users of the building.

In the renovation of the building, most of the existing building elements shall be removed and replaced with modern materials and systems. The entire structure shall be gutted exposing original framing. Insertion of new systems and materials will be easy under these conditions. The result of these endeavors shall be an energy efficient and spatially efficient facility, easy to maintain and in new condition.

Renovation of the building will have lasting value for the Town of Sterling. First the town shall have an appropriately sized and programmed facility, a safe, new and efficient Senior Center to provide needed services. Secondly, the renovation shall provide a completed maintained town green zone, with all of the buildings alive and offering civic pride and prosperity in the center of town. Thirdly, the center's location on the town green strengthens the visibility of Sterling Seniors within the community and symbolically defines their importance to the town, situated in place of prominence.

There are constraints to the viability of the project that are site driven: limited parking and drop-off, easy access on even grade, required additional septic (not reviewed in this report) and distribution of drainage (not reviewed in this report). We highly recommend that the town retain a Civil Engineer to review the site constrains with respect to septic system alternatives and drainage concerns. It may be possible to solve the parking issue through co-operation with other Town Center businesses and an increased use of van transportation to the center. These issues need to be considered in the final directive for the town in regards to the future new home for the Sterling Senior Center.

This report outlines much of the work that needs to be considered for the renovation of 33 Main Street for a viable Senior Center. Since the existing building is 150 years old and it is not possible in a survey of this nature to uncover unforeseen conditions within unexposed areas. We further recommend that the building be reviewed by a structural engineer using some destructive methods to review in-depth the conditions of the structure in order to provide thorough remedial prescriptions. Those findings may change the costs associated with the renovation of the building as outlined in this report.



Lower Level Plan Recreation



KEY TO LOWER LEVEL PLAN

- 1 Gathering
- 2 Game tables 3
 - Billiards
- **Computer Area** 4
- 5 Stair
- 6 Toilet
- 7 Jan
- 8 Mechanical
- Storage 9
- 10 **Gallery Corridor**
- Coats 11
- Elevator 12
- 13 **Elevator Machine Rm** (1/2 Flight Down)

First Floor Plan



KEY TO FIRST FLOOR PLAN

- Main Street Entrance
- Ramp
- Lift
- Vestibule
- Stair
- Toilet
 - Jan
- Mechanical
- Storage
- Pantry
- Kitchen
- Shine -- Nurse -- Private
- Office
- Waiting Reception
- Library Boutique
- Corridor
 - Elevator
- **Proposed Entry** 1/2 level down



KEY TO FIRST FLOOR PLAN

- 1 Multi-Purpose Room
- 2 Coats
- 3 Stage Area
- 4 Art Room with sink
- 5 Storage
- 6 Chairs & Tables Storage
- 7 Jan
- 8 Toilet
- 9 Stair
- 10 Coffee Bar
- 11 Elevator
- 12 Sitting Porch 1/2 level down





GENERAL BUILDING CODE

Use Group 303.4 A-3 Assembly Recreation Centers, Clubs etc 605.1

Type 4 Construction -- Heavy Timber Type 5B Construction -- Possible if all Heavy Timber criteria are not met.

General Building Limitations:3 Story 40'(well within limitations)Type 4 Construction12,600 S.F.(well within limitations)A-3 Use Group12,600 S.F.(well within limitations)

FIRE RESISTANCE						
RATINGS FOR BUILDING	TABLE 602	Building Element			4	5B
ELEMENTS (In hours)		Exterior Walls		Loadbearing	2	0
		Exterior waits		Nonloadbearing	705.2	705.2
		Fire Walls and Party Walls		Homodaboaring	2	2
		Fire Separation Assemblies		Fire Enclosure	2	2
		-		of Exits		
				Shafts and	2	1
				Elevator		
				Hoistways Mixed Lise and	Bor	Bor
				Fire Area	31312	31312
				Separations	515.1.2	313.1.2
				Other	1	1
				Separation		
				assemblies		
		Smoke Partitions		Exit Access	1	1
				Corridors	U-WITH Sprinklore	U-WIIN Sprinklore
	TABLE 705.2			Tenant Space	1	0
				separations		Ũ
		Dwelling Unit Separations		NA	1	1
		Smoke Barriers			1	1
		Other Non-bearing partitions			0	0
		Structural Frame		Supporting		
		(including columns, girders and		more than one	605.0	0
		trusses)		floor		
				Supporting one	605.0	
		Oterrational Manufacture and income		floor only		
		Structural Members supporting V	vali		1	0
		Floor Construction			605.0	0
		(including supporting beams and	l joists)			
				Interior	605.0	0
		Roof Construction	Lioiste)	At any height	605.0	0
		(including supporting beams and	i juisis)			
		a. The fire resistance rating of exterior walls a	hall comply	with table 705.2. loadbearin	ng exterior walls sha	all also comply
		with CMR 602. The fire resistance rating of e	terior walls	with a fire separation distan	ce of greater than :	5 feet shall be
		rated for exposure to fire from the inside. The be rated from both sides.	fire resistan	ce rating of exterior waits w	ith a FSD of less th	ian Steet Shair
		Fire Separation Distance (feet)	fire resistan	ce rating of extendr wails w	ith a FSD of less th	an 5 leet snaw
		Fire Separation Distance (feet) 0 to 5	fire resistan	or exterior waits w	ith a FSD of less th	an o reet shair
		Fire Separation Distance (feet) 0 to 5 5 to 10	fire resistan 2 hours 1 hour	ce rating of extension waws w	ith a FSD of less th	an 5 reet snaw

Height and Area Modifications will be available due to perimeter access and fire suppression system inclusion, but will not be required if classified as Type 4. If classified as Type 5B, then height and area modifications shall be required.

Fire Protection Systems: Table 904.1

904.2 Use Group A-3

In buildings of 12,000 sf or greater in aggregate floor area, an automatic fire suppression system shall be provided throughout all portions or uses of all buildings. However, if a municipality adopts MGL Chapter 148 Section 26G would require sprinklers in all building of 7,500 sf.

917.0 Fire Protective Signaling Systems (Fire Alarm Systems)

917.4 .1 Group A or E:

A Fire Alarm shall be installed and maintained in all occupancies in use group A or E.

1001.0 Means of Egress:

Generally, the building needs two separate and remote means of egress from each floor within properly fire rated assemblies. If the building is equipped with a fire suppression system, it does not need to have Accessible Stairways or refuge areas, however, it still requires at least one accessible means of egress from all accessible spaces.

521 CMR Massachusetts Architectural Barriers Board

The building needs to meet all requirements of the MAAB including, accessible entrances, ramps, parking, door ways, clearances, conveying systems, means of egress, toilet rooms, seating, floor and wall obstructions and clearances etc.

A recent development from 2006 changes to the 521 CMR MAAB is that all entrances are to be accessible. Due to the costs associated with the changes to the building, all of the requirements of the MAAB need to be incorporated into the design.

Sterling Senior Center Feasibility Study - 33 Main Street Cost Estimate

At the end of the Study we have included a line item estimate for the renovation needs specifically related to the 33 Main Street property. We have included below a total of know expenditures to be expected to purchase and renovate the property.

At this stage we are unable to procure figures that could estimate the future expenditures due to energy needs or building usage. Because the building interior will be completely renovated, new equipment will be energy efficient and sized correctly for the building use.

Estimated Expenditures		
Item	Notes	Cost
Purchase Building and Property	The existing asking price for the Church	\$366,500.00
Cost of Renovation	See attached estimate for line item breakdown	\$1,772,752.00
	Total	\$2,139,252.00

240 Worcester Street Sterling Inn

- 30 Site
- 31 General Building Conditions
- 34 Accessibility
- 35 Systems
- 36 Exterior Skin
- 38 Structure and Framing
- 39 Schematic Design
- 40 Program
- 41 Final Notes
- 42 Drawings



SITE

The 1908 Sterling Inn located at 240 Worcester Road occupies a 2.9 acre property of a rural complex that includes one contiguous parcel to the south of the Inn parcel with 2.8 acres which includes a single family detached residence and a site of 3.7 acres located across Worcester Road for a total of 9.4 acres. The residential parcel and the Inn parcel are located on the western side of Worcester Road with the Inn located on the northern parcel. The parcel located on the eastern side of Worcester Road and across the street from the Inn is currently used for the Inn's septic system and contains a leach field sized for its current use as well as an area for leach field expansion. Compliance with Title 5 regulations is unclear at this point and should be explored to understand the commitment to upgrade the septic components should it be required. This parcel slope's gradually to the east after a drop of approximately four feet located approximately twenty five feet from the road. The land adjacent to the road is currently used for parking.

The Inn parcel can be entered at two locations. The formal entry which is located at the northern edge of the site is gradually sloped within the first 25 feet of Worcester Road where it levels out and provides a relatively flat surface. Access here is currently for deliveries to the bar and a drop off location for impaired users. This entry is connected back to Worcester Road by a "U" providing exit. Along the rear of the site, moving in a westerly direction diagonally across the site, an outcropping of rock and trees on a moderate to steep slope separates the back of the building from the rear property line. This is a natural area dense with trees and a little landscaping at the edge of the slope. It contains random but minimal pieces of garbage (cans, bottles, etc.). A passageway of approximately fifteen feet separates the rear of the building from the slope of the hill, allowing access to the rear of the building on foot to both sides of the property.

Between the Inn and the residential parcel is a parking lot of approximately 11,500 square feet. Although possibly once striped the current lot is essentially a large asphalt surface. This surface looks to be in fair condition as it contains quite a few cracks and some minor bubbling but no serious openings or disturbances. The lot will need to be resurfaced in the next 10 years. Based on the lot square foot area, this lot could possibly accommodate 40



spaces. Along the rear of this portion of the property a detached garage located behind some overgrown vegetation. It is currently used but in fair to poor condition. It is unclear whether this building is used for the residence of the Inn and, based on current plot plans, could be located on either property.

The Family Residence parcel contains a single house set back approximately 100 feet from Worcester Road. The site also contains an above ground swimming pool on the southeastern side of the house. The house leach field is located in the front field. The house looks to be in good condition although no research or investigation has been done to verify.

The House and Inn currently have electricity, public water and telephone service. The Inn uses oil heat (tanks located in the basement) has a large gas tank located behind the building at the eastern edge that is assumed to provide kitchen service. The house is heated by oil.

GENERAL BUILDING CONDITIONS

NOTE: This description will only describe the Inn. The house description and condition should be reviewed if that property becomes part of the acquisition.

Built in 1908, the Sterling Inn has been continually used as a dining and lodging property. It is a craftsman style building constructed out of concrete and wood with an exterior finish primarily in stucco framed with wood. An eight foot open porch/ veranda winds around the front expanse of building, approximately 230 linear feet long. The concrete walk surrounding the building is in good condition. The pillars supporting the roof have been renovated and are generally in fair to poor condition. The joists and roof framing of the porch is generally in fair to poor condition although the rubber roofing that currently covers porch was recently applied and appears to be in very good condition. The beam ends not covered by the rubber roofing and exposed to





the elements is deteriorating badly. Where covered by roofing, the beams are in good condition.

The basement, first floor and second floor flooring are all cast-in-place concrete in very good condition especially for its age. The second floor is held up by cast in place concrete columns with the main walls built of wood studs. While concrete or concrete-like materials have been around for thousands of years, the use of concrete and steel together for structural applications did not begin until the mid 1880's, primarily in Europe. It wasn't until the end of



- 14 Formal Entry
- 16 Wood Deck
- 17 Wrap Around Porch

the 19th Century when concrete was being used for typical architectural applications in Europe so it is not only surprising to see it being used here at such an early date but to have aged as well as it has is incredible. The building is generally "L" shaped with the longer arm running parallel to the street and the shorter arm facing the street at the western side.

The main dining room was enlarged, roughly doubling the dining space during a past renovation. A more recent minor renovation has made small



above: basement ledge conditions

changes primarily for the use of the kitchen and safety code upgrades. The building consists of a basement, first floor and second floor public areas, and an attic.

BASEMENT CONDITIONS

The basement consists of primarily three areas - a large multi-purpose area, a smaller storage/ maintenance area and an unused storage area - and runs the full length of the building. The large multipurpose area contains all of the building mechanical systems - the oil furnaces (2), oil storage tanks (3), hot water heaters (2) and electrical boxes. This area also contains the existing laundry services for the building. The ceiling height in this area varies but is generally low – generally around 6'-0". The flooring is generally poured-inplace concrete but also consists of rock outcropping in areas showing that the building was built on ledge. There is a slight grade upward across the width of

the basement (west to east) terminating at a stair that ends behind the building under the main first floor stair. A couple concrete footings were noticed to have some small cracking and deterioration around the footings but no other deterioration has been detected. The basement under the existing bar area is two smaller rooms – one containing the maintenance room and another for storage. The rooms have more headroom. Due to the amount of materials in these rooms, wall and foundation conditions could not be inspected. The storage area under the shorter arm of the "L" also contains ledge and conditions here were also not fully inspected as doors were locked. No mildew or mold was observed in the basement and no damp scent was present.

FIRST FLOOR CONDITIONS

The first floor contains the public rooms for the Inn. It contains approximately 6,865 square feet of usable







top: typical finish conditions bottom: attic conditions

space. Ceiling height varies throughout the floor but generally falls within 10-12 feet above the finished floor. Structure is exposed which lends itself to the craftsman feeling of the building. All other windows have been replaced with what appears to be insulated, double paned glass. Windows facing the street appear to be original and in fair to good condition. Wood trim, lighting and plumbing fixtures all appear to be in good condition. Both the men's and women's toilet rooms fail to meet ADA code requirements and will need to be moved and/or redesigned to meet current standards. The kitchen is expansive and much too big for the Senior Center needs. Many items in the kitchen are in need of repair will require some maintenance should they be kept in use. A relatively recent added walk-in refrigerator appears to be in good condition. Hallways and door openings all meet ADA requirements. Although both public staircases are in good condition, they are not code compliant for handicap requirements and at least one new, compliant stair will be required. Wall surfaces throughout contain wood wainscoting with stucco above, all in

good condition.

SECOND FLOOR CONDITIONS

The second floor contains approximately 5,069 square feet and is composed of a series of rooms that have been renovated to create 6 suites. Other rooms include a HVAC room, housekeeping and offices for the current owner. Each suite contains a bathroom, living space and sleeping areas and are generally in good condition. The bathrooms appear to be 10 years old and all the fixtures appear to be in working condition. Some faucets were observed to be leaking but were able to be fixed by tightening levers. All floors are covered in carpet. Due to recent renovation, some doors in the hallways have been mechanically fastened closed and hidden on the interior. A fire escape was added to the parking lot end of the building and requires climbing two steps to reach the door. As configured it does not meet current code requirements for egress. The concrete structure appears to stop at the flooring and the second floor walls, ceiling and roofing are built out of wood.

ATTIC CONDITIONS

The Attic gross area is approximately 4,700 square feet although because of roof slope most of it is difficult to access. Rafters, Floor boards and columns appear to be in good condition. Above the "L" section is a flat roof that received a new rubber roof similar to the veranda although it was not observed. Currently used for storage, the attic has no visible signs of deterioration to the roof. Previously, some original columns have been moved and replaced with questionable structure but this does not appear to have an effect on the roof loading conditions.

ACCESSIBILITY

The existing first floor is in compliance with the Massachusetts Architectural Access Board regulations 521 CMR except for a few notable items. Bathrooms are currently not compliant dimensionally and will require relocation. Signage will also need to be added to the existing building to bring the first floor up to code. Because the building will be used in a public capacity, an elevator will be required for access to the second floor. The large formal stair to the second floor is acceptable as a stair, but in order to meet the code requirements the existing secondary stair will need to be upgraded and a new stair will be required.









SYSTEMS

The electrical boxes system for the building is located in the basement open area. There exists a main panel and a series of sub-panels located on an exterior wall. It is assumed that the system is adequate to continue its use although wiring has not been inspected and may require upgrading. It is unclear if all panels are operable and it may be in the town's interest to have an Electrician and/or engineer review the system for possible problems and loading issues. Requirements may change should an elevator be installed or other high load devices be installed.

The public water service enters the building on the parking lot side of the building, under the existing men's room. There are at least two water heating tanks which appear to be 5 - 10 years

old and appear to be in fair condition. These tanks are 100 gallons each.

There are two furnaces located in the basement. The older model appears to have been refurbished multiple times with devices added recently and some items replaced. The newer model appears to have been added in the past 15 years. Both appear to be working. The furnaces have three oil tanks, attached in series, connected for oil supply. The tanks appear to hold 500 gallons each. It would be beneficial to have an engineer the existing system to evaluate the current system's efficiency and possibly change the heating system to take advantage of any town contracts and/or meet the specific requirements of the Senior Center.















EXTERIOR SKIN

The building is concrete and wood framed with wood framing of windows, edge boards and details, in filled with stucco. The first floor surrounding porch and the flat roof over the "L" are rubber and recently completed. The porch roof is in good to new condition and it is assumed that the "L" roof is similarly completed although is has not been observed. The sloped roof surfaces are asphalt shingles and are in fair condition with signs that they are close to the end of their life and should be replaced. There are no visual signs on the interior that any roof component is currently failing although mold and asphalt surface erosion can be viewed. Some areas have been observed missing shingle tabs.

The exterior stucco and wood detail appears to be in good to fair condition.

Small amounts of mold and dirt cover the lower portion of the porch columns and exterior wall. Minor cracking and openings can be observed in on the skin over the entire building. The stucco has been painted in the past and will require painting in the near future. Flaking and exposed stucco is observed across the exterior but especially on the eastern and western building ends particularly above the first floor.

Wood detail and corner boards appear to be in fair to good condition. Window and door sills, framing and wood trim are all in good condition. Windows located at the front of the building are all single pane glass and are generally in fair condition with some windows having more issues than others. These windows appear to be original. Windows along the rear of the building and the parking lot side have been replaced with double paned lites in the past 10-15 years.

Porch beams supporting the porch roof have exposed ends which show significant deterioration. The beams show no sign of structural failure and may be fixed by removing the exposed and deteriorating sections.

Drainage gutters and downspouts have been observed at all roofing conditions. In some cases, PVC pipe has been used to connect downspouts over the porch roofing. These pipes have cracked due to the freeze and thaw of water over the seasons and need to be replaced. Generally rain gutters appear to be in good condition and working properly.





top: deteriorating exposed beam ends left: typical exterior conditions under porch bottom, left: rear deck bottom, right: typical exposed exterior bottom: deteriorating column bases











left: dining room showing concrete columns, beams and ceiling *top:* basement cast-in-place-column base *below:* concrete ceiling and beam in small meeting room



STRUCTURE AND FRAMING

The foundation, first floor, first floor structure (columns) and second story floor are all cast in place concrete. The first story framing, second story framing and roofing are all wood structures. The foundation appears to be placed on footings where footings could be located. Approximately half of the existing foundation appears to sit on ledge. The foundation appears to be in good condition. Intermediary columns in the basement are cast-in-place as well. Some have minor cracking and chipping issues but no major structural damage.

The first floor and second floor concrete structure was on observed but no damage was felt or observed. The surfaces felt solid and stable when walked over. From beneath (in the basement and first floor) the floors look to be in good condition with no sign of deterioration. The remaining wood structure (second floor framing, attic floor and roofing) all appear to be in good condition with no signs of deterioration or diminished structural integrity. Small changes in the roof structure has occurred but appears to have no effect on the roofing structure.

780 CMR Mass	achusetts Building Code					
Section	Title	Regulation				
	Assembly Use Groups					
303.1	General	All structures which are designed or occupied for the gathering together of persons for purposes such as civic, social or religious functions, recreation, food or drink consumption or awaiting transportation shall be classified as Use Group A.				
303.4	Use Group A-3	This use group shall include all buildings with or without an auditorium in which persons assemble for amusement, entertainment or recreation purposes as well as incidental motion picture, dramatic or theatrical presentations, lectures or other similar purposes without theatrical stage.				
	Construction Classification					
602.1	General	All buildings and structures e area shall be classified in on	e of the five cor	e erected, alter nstruction type	ed or extended in height or in s defined in Table 602.	
	Table 602	Type 5B Combustible/ Unpre	otected			
	Fire Resistance Rating for Elements	elen	nent		rating	
					see 705.2	
		fire walls and party walls	<i>6</i>	of outle	2 nr.	
		tire separation assemblies	Tire enclosure	of exits	2 nr.	
			shafts and elevator hoist- ways mixed use and fire area separations		1 hr.	
					see Table 313.1.2	
			other separati blies	on assem-	1 hr.	
		smoke partitions	exit access co	orridors	see 1011.4	
			tenant space	separations	0	
		dwelling unit separations			1 hr.	
		smoke barriers			1 hr.	
		other non-loading partitions			0	
		interior loadbearing walls, non loadbearing partitions, columns, girders, trusses	supporting on	lly one floor	0	
		structural members support	ing wall		0	
		floor construction including	beams		0	
		roof construction		0		
	Interior Finish Requirements					
	Table 803.4	area			finish rating	
		required vertical exits and pa	assageways	I		
		corridors providing exit acce	ess	Ι		
		rooms or enclosed spaces		II		



11 Computer/ Small Activity Room 12 Hallway 13 Women's Room 14 Men's Room 15 Multipurpose ROom 16 Formal Entry 17 Billiards/ Library 18 Outdoor Deck 19 Wrap Around Porch

SCHEMATIC DESIGN

The schematic design for the Sterling Inn centered on using the existing first floor area for the entire Center program. The existing first floor layout is amenable to meeting the Senior Center's requirements with some relatively minor changes. These changes are either required to bring the building up to code or are needed to make the building work for the Center and the Town.

Generally, activities and proposed areas were grouped together using feedback from the current center's use or because of their relationship to some amenity (such as proximity to existing outdoor informal spaces, or administrative areas) which would allow the proposed center to provide multiple programs to occur within the building. Each group of program has access to a main entrance with one new entrance created to provide accessible entrance from the

parking lot. This new entrance also includes a required accessible connection to the 2nd floor.

The three program groups created include: the multipurpose room and informal area, administrative and service area and, last, a small group area. The multipurpose room uses what is now the dining hall and provides space for large functions or where larger space is needed. It is connected through the formal entry area and entrance to the billiards and library room. These areas will make the best use of the outdoor deck that combines the rooms. Further, people will be able to move between these two rooms and the outdoor deck without interrupting other events occurring in other parts of the building.

The Administrative and Service Area encompasses the existing kitchen and back of house. The existing kitchen area is reduced to a third of its current size, ample for the Senior Center's needs, while the bulk of the space is used for staff offices, administrative storage, privacy rooms and clerical areas that allow the staff to have access to the rest of the center but also be apart from the center, providing some privacy when needed.

The small group area is located in on the first floor closest to Worcester Street. These rooms will provide spaces for smaller groups or working on individual tasks such as a computer area. They have the ability to be closed off from the rest of the building so music for dance classes, for instance, can be played without interfering with other programs.

Last, the main bathrooms are placed in between all three areas. Along with the Boutique, these two areas sit near all of the above areas offering easy access.

Sterling Inn Progran	า		
DESCRIPTION	AREA (sq. ft)	OCCUPANCY (persons)	NOTES
Main Floor			
Multi-purpose Room	1,930	128	
Library/ Billiards	452	25	2 pool tables, cabinetry for books and sitting area
Main Entry/ Waiting	400	26	Informal Seating for 10 - 12
Existing Rear Deck	750	50	
Men's Room	142		2 stalls (1 ADA), 1 urinal
Women's Room	190		3 Stalls (1 ADA)
Card/ Computer Room	335	22	7 computers
Dance/ Fitness	612	40	
Boutique	20	2	Located in front of reception
Small Entry off Parking	167	11	Entry Area w/ informal seating; coats and hats rack
Kitchen	445	29	Ample room for all equipment, access to parking and MP Room
Pantry	80		Dry/ Canned Goods Storage
Reception	59	4	Sign-in, Countertop, Lower Cabinets
Office Area	400		2 Main offices, open office seating for three other staff
Storage	78		Administrative Storage
Circulation	620		Hallways and miscellaneous circulation areas
New Elevator	75	4 (max.)	New Elevator required to bring building up to code.
New Stair	100		New Code Compliant Stair
Total Area	6,977		
Parking			
Formal Entry			
Van Parking Accessible Spaces Standard Spaces Drop Off	1 2 0 1		
Main Parking Lot			
Van Parking Accessible Spaces Standard Spaces Drop Off	1 3 40 1		





North Elevation Existing and Proposed

FINAL NOTES

As it currently exists, the Sterling Inn can provide the space requirements needed for the Town's Senior Center - all on the first floor. Room sizes and layout will small modifications to provide an optimal space for current - and future - Sterling Seniors. Notable upgrades to bring the building up to compliance - new stairway and elevator - can be inserted in the existing footprint with minimal disruption to the existing structure. The rear exterior deck and wrap-around porch lend themselves for exterior activities. Parking and access are currently adequate for all users and adding a new entrance on the parking lot side will bring added safety and convenience to the center's operation.

There are a few issues that should be addressed, possibly before making a decision about the property. First, the existing septic system and leach field across the street from the building could be non-compliant with Title 5 requirements. Current town documentation shows an existing leach field with expansion area delineated. None of the components in the system could be viewed. It would be beneficial to the Town to hire a consultant that specializes in Title 5 compliance to investigate the existing system, list any upgrades and estimate costs to make the system compliant.

Second, the property is currently bundled with two other parcels - the residential house and the field across the street. Selling the house and associated parcel will allow the Town to recover some of the funds used to purchase the property. It would be beneficial to consult a real estate agent for advise and information regarding the property and it's current market value.

Third, this study only covers the use of the building as a possible Senior Center. The building will have the second floor essentially unused. The second floor could provide quite a bit of office space for the town, especially with the addition of the required elevators and stairways, the second floor space will be accessible and could be an excellent resource for the town.

Sterling Senior Center Feasibility Study Cost Estimate

Following this sheet, we have provided a line item cost estimate for the work required to bring the existing building up to code for use as a Senior Center. It also includes the changes delineated in the proposed First Floor Plan included in this document which includes changes to the first floor that will provide the spaces needed for Senior Center use.

We have included below a list of projected costs that may be of intrest to the Town. We have attempted to obtain as much information as possible comcerning the operational budget of the existing building. These costs may decrease should new equipment be installed with greater effeciency.

Estimated Expenditures		
Item	Notes	Cost
Purchase Building and Property	The existing asking price for the Inn and associated par- cels	\$1,500,000.00
	Sell adjacent house and property (estimate)	(\$400,000.00)
Cost of Renovation	See attached estimate for line item breakdown	\$646,506.00
	Total	\$1,746,506.00
Annual Costs (based on existing build	ing)	
	Oil Heating Costs (FY 9/04 - 8/05) Financial information recieved from Real Estate Agent	\$13,800.00
	Electric (FY 9/05 - 8/06) Financial information received from Real Estate Agent	\$17,300.00
	Gas (Ovens) Using previous years total BTU's consumed at the average price for May 2007 prices	\$14,759.00
	Total	\$45,859.00

DIVISION SUMMARY

DATE: 11 JUNE 2007

	GROSS ENCLOSED SF =	6,795
DIVISION	AMOUNT	\$ / SF
1 - GENERAL CONDITIONS	\$116,278	\$17.11
2 - SITE WORK	\$160,413	\$23.61
3 - CONCRETE	\$63,590	\$9.36
4 - MASONRY	\$3,750	\$0.55
5 - METALS	\$82,000	\$12.07
6 - CARPENTRY & MILLWORK	\$205,383	\$30.23
7 - THERMAL / MOISTURE PROTECTION	\$40,675	\$5.99
8 - DOORS & WINDOWS	\$135,450	\$19.93
9 - FINISHES	\$100,804	\$14.83
10 - SPECIALTIES	\$22,300	\$3.28
11 - EQUIPMENT	\$27,000	\$3.97
12 - FURNISHINGS	\$3,500	\$0.52
13 - SPECIAL CONSTRUCTION	50	\$0.00
14 - CONVEYING SYSTEMS	\$100,000	\$14.72
15 - MECHANICAL		
FIRE PROTECTION	\$20,988	\$3.09
PLUMBING	\$74,568	\$10.97
H.V.A.C.	\$134,025	\$19.72
16 - ELECTRICAL	\$117,530	\$17.30
17 - CONTINGENCY	\$193,800	\$28.52
18 - FEE	\$170,700	\$25.12
TOTAL	\$1,772,752	\$260.89

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
(01000) GENERAL CONDITIONS	%	9	on hard cost	116,278
TRADE CODE (01000) SUB-TOTAL=				116,278
(02050) DEMOLITION				
EXCLUDES REMEDIATION				
TEMPORARY PROTECTION	LS	1	200.00	200
DUMPSTER 30 YARD / HAUL	EA	20	650.00	13,000
EXTERIOR:				
BASEMENT FLOOR AND SUB FLOORING	SF	2,655	0.35	929
BASEMENT ENTRY	SF	100	1.00	100
FRONT ENTRY	SF	200	1.00	200
BASEMENT WINDOWS	SF	100	1.00	100
WINDOWS	SF	400	1.00	400
SIDING AND TRIM 25 %	SF	1,000	1.00	1,000
ROOFING ?%	SF	0	0.00	0
WINDOWS	SF	403	2.00	806
INTERIOR:				
REMOVE ALL FINISHES WALLS AND PARTITIONS	SF	6,800	1.00	6,800
FLOORING PREP	SF	4,500	1.00	4,500
MEP's	SF	2,265	2.00	4,530
SECOND FLOOR STRUCTURE	SF	2,265	2.00	4,530
ENTRANCE WALL	SF	700	2.00	1,400
SAWCUT FLOOR BASEMENT	LF	100	6.75	675
TRADE CODE (02050) SUB-TOTAL=				39,170
(02300) EXCAVATION, FILLING & GRADING				
SEWER SYSTEM ALLOWANCE	LS	1	30,000.00	30,000
SHORING BASEMENT TO 1st FLOOR	SF	2,655	2.00	5,310
TRADE CODE (02300) SUB-TOTAL=				35,310
(02435) DRAINAGE SYSTEM UNDER SLAB				
HOLDING TANK ALLOWANCE	LS	1	30,000.00	30,000
TRADE CODE (02435) SUB-TOTAL =				30.000
(02936) LOAMING & SEEDING				
SOD AND SPREAD EXISTING LOAM	SY	100	2.00	200
TRADE CODE (02936) SUB-TOTAL=				200

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
(02940) SITE IMPROVEMENTS				
REMOVE EXISTING PAVING	SY	575	2.50	1,438
NEW PAVING	SY	300	18.00	5,400
CAPE COD BERM	LF	275	5.00	1,375
GRANITE CURB CUT	LF	150	45.00	6,750
EXCAVATE AND BACKFILL ADDITION	CY	150	7.00	1,050
LANDSCAPING (ALLOWANCE)	LS	1	10,720.00	10,720
NEW REAR ENTRANCE STAIR AND RAMP	EA	1	20,000.00	20,000
NEW FRONT ENTRANCE AND STAIR	EA	1	9,000.00	9,000
TRADE CODE (02940) SUB-TOTAL=				55,733
(03301) CAST-IN-PLACE CONCRETE				
WALL AND EQUTING AT FRONT ENTRANCE	LF	85	384.00	32,640
PATCH EXISTING BASEMENT FLOOR	SF	400	6.00	2,400
SLAB ON GRADE 5" W/ THICKENED EDGE VAPOR BARRIER WWM	SF	2,655	10.00	26,550
COLUMN FOOTINGS	EA	10	200.00	2,000
TRADE CODE (03301) SUB-TOTAL=				63,590
(04200) MASONRY				
MASONRY REPAIR FOUNDATIONS	EA	15	250.00	3,750
TRADE CODE (04200) SUB-TOTAL=				3,750
(05500) METAL FABRICATIONS				
COLUMNS BASEMENT TO 2nd ELOOR	EA	10	350.00	3,500
EXTERIOR RAILING	LF	100	85.00	8,500
INTERIOR STAIR AND PLATFORM	FLT	7	10,000.00	70,000
TRADE CODE (05500) SUB-TOTAL=				82,000
(06100) ROUGH CARPENTRY				
CLEAN EXISTING STRUCTURE	SF	5,000	0.50	2,500
NEW SECOND FLOOR AND STRUCTURE	SF	2,265	25.00	56,625
NEW SECOND FLOOR CATHEDRAL CEILING	SF	1,100	20.00	22,000
INTERIOR PARTITION 2x4	LF	650	17.50	11,375
BLOCKING	LF	1,170	1.25	1,463
EXTERIOR BEARING WALL 2x6	LF	200	50.00	10,000
SHEATHING EXTERIOR	SF	2,772	10.00	27,720
FURNISH AND INSTALL DOORS, FRAMES, & HARDWARE EXTERIOR	EA	2	1,800.00	3,600
FURNISH AND INSTALL DOORS, FRAMES, & HARDWARE INTERIOR	EA	40	950.00	38,000
PROTECTION	LS	1	2,500.00	2,500
TRADE CODE (06100) SUB-TOTAL=				175,783

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTION	UNIT	ESTIMATED	UNIT	TOTAL
TIEM DESCRIPTION		QUANTIT	THUE	
(06200) FINISH CARPENTRY				
FURNISH AND INSTALL:				
CLOSET SHELVE AND POLE	LF	50	20.00	1,000
SHELVE	LF	350	25.00	8,750
TRADE CODE (06200) SUB-TOTAL=				9,750
(06400) INTERIOR ARCHITECTURAL WOODWORK				
KITCHEN BASE COUNTER AND WALL CABINETS	LF	10	450.00	4,500
COMPUTER COUNTER	LF	40	150.00	6,000
COFFEE CENTER 1st AND 2nd FLOOR	LF	16	350.00	5,600
RECEPTION COUNTER	LF	15	250.00	3,750
TRADE CODE (06400) SUB-TOTAL=				19,850
(07190) AIR BARRIER				
AIR BARRIER INTERIOR 6 mil POLY	SF	5,700	1.50	8,550
TRADE CODE (07190) SUB-TOTAL=				8,550
(07210) BUILDING INSULATION				
DATT INSULATE EXTERIOR WALL 6*	SF	5,700	1.15	6,555
BATT INSULATE CEILING	SF	3,000	2.00	6,000
TRADE CODE (07210) SUB-TOTAL=				12,555
(07460) WOOD SIDING				
CLAPROARD TO MATCH EXISTING 25%	SQ	10	325.00	3,250
CLAPBOARD TO MATCH EXISTING AT ADDITION	SQ	20	325.00	6,500
TRADE CODE (07460) SUB-TOTAL=				9,750
(07500) ROOFING				
NEW ROOF AT ADDITION	SQ	20	450.00	9,000
PATCH ROOF	SQ	0	0.00	0
TRADE CODE (07500) SUB-TOTAL=	-			9,000
(07700) ROOF ACCESSORIES				
ROOF PENETRATIONS	EA	10	82.00	820
TRADE CODE (07700) SUB-TOTAL=				820

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT	TOTAL COST
(08100) STEEL DOORS & FRAMES				
DOOR AND FRAME EXTERIOR AND HARDWARE	EA	3	950.00	2,850
TRADE CODE (08100) SUB-TOTAL=				2,850
(08210) WOOD DOORS				
SEE ROUGH CARPENTRY	EA			0
TRADE CODE (08210) SUB-TOTAL=				0
(08520) CLAD WINDOW				
BASEMENT WINDOWS	SF	100	50.00	5,000
WINDOWS	SF	1,000	45.00	45,000
TRADE CODE (08520) SUB-TOTAL=				50,000
(08700) DOOR HARDWARE				
SEE ROUGH CARPENTRY	EA			0
TRADE CODE (08700) SUB-TOTAL=				0
(08800) GLASS & GLAZING				
VESTIBULE ENTRANCE FRONT ENTRANCE EXTERIOR	SF	150	75.00	11,250
VESTIBULE DOORS	EA	2	16,000.00	32,000
VESTIBULE ENTRANCE REAR ENTRANCE EXTERIOR	SF	50	75.00	3,750
VESTIBULE DOORS	EA	1	16,000.00	16,000
HALL ENTRANCE FRONT DOORS	SF EA	80 2	45.00 8,000.00	16,000
TRADE CODE (08800) SUB-TOTAL=				82,600
(09250) GYPSUM WALLBOARD				
	er.	5 700	1.10	6 270
PERIMETER WALL 5/8" gwb	SF	7 900	1.10	13,650
GWB PARTITION, 5/8" gwb ea, side,	SE	1,000	4.25	4.250
GYPSUM PARTITION RATED 2 5/8 GWB AT UTILITY ROOM GYPSUM CEILING 25%	SF	1,700	2.00	3,400
TRADE CODE (09250) SUB-TOTAL=				27,570

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
(09650)RESILIENT_FLOORING				
RESILIENT FLOORING	SF	5,900	6.50	38,350
RUBBER BASE	LF	1,885	1.75	3,299
TRADE CODE (09650) SUB-TOTAL=				41,649
(09680) CARPET				
CARPET TILE (ALLOWANCE \$37.50 / YARD	SY	100	37.50	3,750
TRADE CODE (09680) SUB-TOTAL=	-			3,750
(09900) PAINTING				
2111711112	SE	21 300	0.65	13.845
PAINT WALLS DAINT CEILINGS	SF	1,700	0.65	1,105
PAINT DOOR & FRAME	EA	41	135.00	5,535
EXTERIOR PAINT AND TRIM	SF	5,800	1.25	7,250
MISC. METAL	LS	1	100.00	100
TRADE CODE (09900) SUB-TOTAL=				27,835
(10400) IDENTIFYING DEVICES				
SIGNAGE ALLOWANCE	LS	1	800.00	800
TRADE CODE (10400) SUB-TOTAL=				800
(10522) FIRE EXTINGUISHERS, CABINETS & ACCESSORIES				
FIRE EXTINGUISHERS & CABINETS	EA	6	500.00	3,000
TRADE CODE (10522) SUB-TOTAL=				3,000
(10800) TOILET ACCESSORIES				
ACCESSORIES	SET	6	1,000.00	6,000
PARTITIONS HC	SET	4	2,500.00	10,000
HC SHOWER STALL	SET	1	2,500.00	2,500
TRADE CODE (10800) SUB-TOTAL=				18,500
(11450) KITCHEN EQUIPMENT				
RITCHEN (ALLOWANCE)	FA	1	15,000.00	15,000
KITCHEN HOOD	EA	1	12,000.00	12,000
TRADE CODE (11300) SUB-TOTAL=				27,000

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT	TOTAL COST
_(12670) RUGS & MATS				
ENTRANCE MAT	SF	200	17.50	3,500
TRADE CODE (12670) SUB-TOTAL=				3,500
(14000) ELEVATOR				
ELEVATOR AND CAB FINISH	STOPS	4	25,000.00	100,000
TRADE CODE (11450) SUB-TOTAL=				100,000
(15300)) FIRE PROTECTION				
FIRE PROTECTION AND RADIO ALARM	SF	8,395	2.50	20,988
TRADE CODE (15300) SUB-TOTAL=				20,988
_(15400) PLUMBING				
SERVICE PLUMBING	LS SF	1 8,395	20,000.00 6.50	20,000 54,568
TRADE CODE (15400) SUB-TOTAL=				74,568
_(15700) H.V.A.C				
HVAC	SF	8,935	15.00	134,025
TRADE CODE (15700) SUB-TOTAL=				134,025
(16000) ELECTRICAL				
ELECTRICAL	SF	8,395	14.00	117,530
TRADE CODE (16000) SUB-TOTAL=				117,530
(17000) CONTINGENCY	%	15	of hard cost	193,796
TRADE CODE (17000) SUB-TOTAL=			1	193,800

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT	TOTAL COST
(18000) CONSTRUCTION FEE	%	5	of hard cost	70,413
TRADE CODE (18000) SUB-TOTAL=			1	70,400
(18500) PERFORMANCE BOND	%	6	of total cost	100,300
TRADE CODE (18000) SUB-TOTAL=				100,300
(19000) TOTAL				1,772,756
TRADE CODE (19000) TOTAL=				1,772,756

PARAMETER SHEET

Feasibility Study Sterling Church - 33 Main Street - Sterling Massachusetts Sterling Senior Center

Sterling, MA

CONTRACTOR:

ARCHITECT: Richard C. Alvord Architects

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

440 2,310 600 6.254 2,904 FACADE (SF) 12.00 Gabels 4.00 0.00 FLOOR 242 220 235 269 PERIMETER (LF) 112 722 3,000 3.834 (SF) sloped ROOF 8,360 2,655 325 2,690 ENCLOSED 355 425 325 30 1.135 ADDITION 2,690 2,690 5,380 STRUCTURE 2,655 2.655 ON GRADE SLAB Total: Mezzanine porch DESCRIPTION Second Floor First Floor Basement Roof

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

Feasibility Study Sterling Inn - Sterling Massachusetts Sterling Senior Center Sterling, MA ARCHITECT: Richard C. Alvord Architects CONTRACTOR:

DIVISION SUMMARY

DATE: 11 JUNE 2007

	GROSS ENCLOSED SF =		13,185
DIVISION		AMOUNT	\$ / SF
1 - GENERAL CONDITIONS		\$42,400	\$3.22
2 - SITE WORK		\$34,553	\$2.62
3 - CONCRETE		\$600	\$0.05
4 - MASONRY		\$1,000	\$0.08
5 - METALS		\$25,100	\$1.90
6 - CARPENTRY & MILLWORK		\$54,138	\$4.11
7 - THERMAL / MOISTURE PROTECTION		\$35,765	\$2.71
8 - DOORS & WINDOWS		\$44,875	\$3.40
9 - FINISHES		\$40,642	\$3.08
10 - SPECIALTIES		\$20,300	\$1.54
11 - EQUIPMENT		\$12,600	\$0.96
12 - FURNISHINGS		\$1,750	\$0.13
13 - SPECIAL CONSTRUCTION		\$0	\$0.00
14 - CONVEYING SYSTEMS		\$60,000	\$4.55
15 - MECHANICAL			
FIRE PROTECTION		\$7,470	\$0.57
PLUMBING		\$24,000	\$1.82
H.V.A.C.		\$56,025	\$4.25
16 - ELECTRICAL		\$52,290	\$3.97
17 - CONTINGENCY		\$70,700	\$5.36
18 - FEE		\$62,300	\$4.73
TOTAL		\$646.506	\$49.03

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTIO	N .	UNIT	ESTIMATED QUANTITY	UNIT	TOTAL COST
(01000) GENERAL CONI	DITIONS	%	9 or	n hard cost	42,400
TRAC	DE CODE (01000) SUB-TOTAL=				42,400
_(02050) DEMOLITI	ON				
EXCLUDES REMEDIATION					
TEMPORARY PROTECTION		LS	1	200.00	200
DUMPSTER 30 YARD / HAUL		EA	12	650.00	7,800
	EXTERIOR:				1222
DEMO PORCH BEAM ENDS		SF	150	2.00	300
DEMO ROOFING		SQ	72	50.00	3,600
SIDING AND TRIM 10%		SF	1,000	1.00	1,000
	INTERIOR:				
DEMOVE FINISHES		SF	3,735	1.00	3,735
ELOOPING PREP 1st ELOOR ONLY		SF	5,475	1.00	5,475
NED/2		SF	3,735	2.00	7,470
MEP 5 STAID ODENINGS		EA	2	500.00	1,000
STAR OPENINGS		SF	30	2.00	60
ENTRANCE WALL NEW		LE	50	6.75	338
DEMO FLOOR NEW LAVS		SF	500	6.75	3,375
TRA	DE CODE (02050) SUB-TOTAL=	-			34,353
(02300) EXCAVATION, FILLIN	G & GRADING				
EXCAVATION AND BACKFILL		LF	0	0.00	0
TRA	DE CODE (02300) SUB-TOTAL=				0
(02435) DRAINAGE SYSTEM	UNDER SLAB				
NEW DRAINAGE PIPE TIE INTO RESIDENTIAL	SYSTEM	LF	0	0.00	0
TRA	DE CODE (02435) SUB-TOTAL=				0
(02936) LOAMING & SI	EEDING				
SOD AND SPREAD EXISTING LOAM		SY	100	2.00	200
TRA	DE CODE (02936) SUB-TOTAL=				200
_(02940) SITE IMPROVI	EMENTS				
NONE REQUIRED		LS			C
TRA	DE CODE (02940) SUB-TOTAL=				0

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
(03301) CAST-IN-PLACE CONCRETE				
PATCH EXISTING FLOOR	SF	100	6.00	600
TRADE CODE (03301) SUB-TOTAL=				600
(04200) MASONRY				
MASONRY REPAIR CHIMNEYS	EA	2	500.00	1,000
TRADE CODE (04200) SUB-TOTAL=				1,000
(05500) METAL FABRICATIONS				
	0.000	~	10 000 00	24 600
INTERIOR STAIR AND PLATFORM MISC, METAL	FLT LS	2	12,300.00 500.00	24,600
TRADE CODE (05500) SUB-TOTAL=				25,100
(06100) ROUGH CARPENTRY				
	er.	500	15.00	7 500
FIRST FLOOR, FLOOR FRAMING	SF	210	17.50	5 425
INTERIOR PARTITION 2x4	LE	930	1.25	1,163
BLOCKING	LE	500	50.00	250
EXTERIOR BEARING WALL 2X0	SE	150	12.00	1,800
FIX BEAM ENDS CAP	SE	100	10.00	1,000
SHEATHING EXTERIOR WALL	SF	800	12.00	9,600
CHENISH AND INSTALL DOORS FRAMES & HARDWARE EXTERIOR	EA	1	1,200.00	1,200
FURNISH AND INSTALL DOORS, FRAMES & HARDWARE INTERIOR	EA	5	950.00	4,750
PROTECTION	LS	1	2,500.00	2,500
TRADE CODE (06100) SUB-TOTAL=				35,188
(06200) FINISH CARPENTRY				
ELIDNISH AND INSTALL				
OLOSET SUELVE AND BOLE	LF	30	20.00	600
SHELVE AND FOLE	LF	100	25.00	2,500
TRADE CODE (06200) SUB-TOTAL=				3,100
(06400) INTERIOR ARCHITECTURAL WOODWORK				
VITCHEN BASE COUNTER	LF	25	250.00	6,250
PECEPTION	LF	16	250.00	4,000
BOUTIOUE	LF	20	100.00	2,000
VANITIES	LF	12	100.00	1,200
COMPUTER COUNTER	LF	16	150.00	2,400
TRADE CODE (06400) SUB-TOTAL=				15,850

Feasibility Study Sterling Inn - Sterling Massachusetts Sterling Senior Center Sterling, MA ARCHITECT: Richard C. Alvord Architects CONTRACTOR:

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

ESTIMATED

QUANTITY

UNIT

UNIT

PRICE

TOTAL

COST

ITEM DESCRIPTION (07190) AIR BARRIER 0 SF AIR BARRIER 0 TRADE CODE (07190) SUB-TOTAL= (07210) BUILDING INSULATION 115 SF 1.15 100 BATT INSULATE EXTERIOR WALL 6" 115 TRADE CODE (07210) SUB-TOTAL= (07460) WOOD SIDING 3,250 SQ 10 325.00 CLAPBOARD TO MATCH EXISTING ?% 3,250 TRADE CODE (07460) SUB-TOTAL= (07500) ROOFING 450.00 32,400 SQ 72 CLASS A 30 YEAR ROOFING 32,400 TRADE CODE (07500) SUB-TOTAL= (07700) ROOF ACCESSORIES 0 0.00 0 EA ROOF PENETRATIONS 0 TRADE CODE (07700) SUB-TOTAL= (08100) STEEL DOORS & FRAMES 750.00 750 EA 1 DOOR AND FRAME EXTERIOR REPLACE 750 TRADE CODE (08100) SUB-TOTAL= (08210) WOOD DOORS 0 EA SEE ROUGH CARPENTRY 0 TRADE CODE (08210) SUB-TOTAL= (08520) CLAD WINDOW 20.625 37.50 SF 550

WINDOWS TO MATCH EXISTING 20,625 TRADE CODE (08520) SUB-TOTAL=

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

Feasibility Study Sterling Inn - Sterling Massachusetts **Sterling Senior Center** Sterling, MA ARCHITECT: Richard C. Alvord Architects CONTRACTOR:

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

ESTIMATED

UNIT

UNIT

TOTAL

14,066

ITEM DESCRIPTION		QUANTITY	PRICE	COST
(08700) DOOR HARDWARE				
SEE ROUGH CARPENTRY	EA			0
				0
TRADE CODE (08700) SUB-IGIAL=				
(08800) GLASS & GLAZING				
	SF	100	75.00	7,500
VESTIBULE DOORS	EA	1	16,000.00	16,000
TRADE CODE (08800) SUB-TOTAL=				23,500
(09250) GYPSUM WALLBOARD				
	05	1 000	1.10	2.046
PERIMETER WALL 5/8" gwb	SF	7,440	1.10	13.020
GWB PARTITION, 5/8" gwb ea. side, GYPSUM PARTITION RATED 2 5/8" gwb AT UTILITY ROOM	SF	1,020	4.25	4,335
TRADE CODE (09250) SUB-TOTAL=	-			19,401
(09650)RESILIENT FLOORING				
DESILIENT EL CORING	SF	500	6.50	3,250
RUBBER BASE	LF	100	1.75	175
TRADE CODE (09650) SUB-TOTAL=				3,425
(09680) CARPET				
CARPET TILE (ALLOWANCE \$37.50 / YARD	SY	100	37.50	3,750
TRADE CODE (09680) SUB-TOTAL=				3,750
_(09900) PAINTING				
PAINT WALLS	SF	10,320	0.65	6,708
PAINT CEILINGS	SF	3,735	0.65	2,428
PAINT DOOR & FRAME	EA	18	135.00	2,430
EXTERIOR PAINT AND TRIM ALLOWANCE	LS	1	2,500.00	2,500

(10400) IDENTIFYING DEVICES

SIGNAGE A	ALLOWANCE		LS	1	800.00	800
		TRADE CODE (10400) SUB-TOTAL=				800

TRADE CODE (09900) SUB-TOTAL=

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

CONTRACTOR:

ITEN	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
(10522) FIRE EXTINGUIS	SHERS, CABINETS & ACCESSORIES				
FIRE EXTINGUISHERS & CABINE	TS	EA	8	500.00	4,000
	TRADE CODE (10522) SUB-TOTAL=				4,000
(10800) T	OILET ACCESSORIES				
ACCESSORIES		SET	3	1,000.00	3,000
HC STALLS		SET	5	2,500.00	12,500
	TRADE CODE (10800) SUB-TOTAL=				15,500
(11450)_K	ITCHEN EQUIPMENT				
ADDED STEEL SHELVING		EA	6	100.00	600
KITCHEN HOOD		EA	1	12,000.00	12,000
KITCHEN (USE EXISTING)		EA	0	0.00	0
	TRADE CODE (11300) SUB-TOTAL=				12,600
(1267	0) RUGS & MATS				
ENTRANCE MAT		SF	100	17.50	1,750
	TRADE CODE (12670) SUB-TOTAL=				1,750
(140	000) ELEVATOR				
ELEVATOR AND CAB FINISH 1st	TO 2nd FLOOR	STOPS	2	30,000.00	60,000
	TRADE CODE (11450) SUB-TOTAL=				60,000
(15300])	FIRE PROTECTION				
FIRE PROTECTION		SF	3,735	2.00	7,470
	TRADE CODE (15300) SUB-TOTAL=	-			7,470
_(15-	400) PLUMBING				
PLUMBING		LS	1	24,000.00	24,000
	TRADE CODE (15400) SUB-TOTAL=	-			24,000

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

Feasibility Study Sterling Inn - Sterling Massachusetts **Sterling Senior Center** Sterling, MA **ARCHITECT: Richard C. Alvord Architects** CONTRACTOR:

HVAC

DRAWING DATE: 29 MAY 2007 DATE: 11 JUNE 2007

ESTIMATED TOTAL UNIT UNIT COST PRICE QUANTITY ITEM DESCRIPTION (15700) H.V.A.C 15.00 56,025 SF 3,735 56,025 TRADE CODE (15700) SUB-TOTAL= (16000) ELECTRICAL 3,735 14.00 52,290 SF ELECTRICAL 52,290 TRADE CODE (16000) SUB-TOTAL= 15 of hard cost 70,666 % (17000) CONTINGENCY 70,700 TRADE CODE (17000) SUB-TOTAL= 5 of hard cost 25,675 % (18000) CONSTRUCTION FEE 25,700 TRADE CODE (18000) SUB-TOTAL= 36,600 % 6 of total cost (18500) PERFORMANCE BOND 36,600 TRADE CODE (18000) SUB-TOTAL= 646,477 (19000) TOTAL 646,477 TRADE CODE (19000) TOTAL=

PARAMETER SHEET

Feasibility Study Sterling Inn - Sterling Massachusetts Sterling Senior Center DRAWING DATE: ARCHITECT: Richard C. Alvord Architects DATE: 11 JUNE 2007 CONTRACTOR:

-	Basement First Floor Second Floor Roof	DESCRIPTION
otal:		
7.035	1,000 6,035	SLAB ON GRADE
13	5	STRUCTUR
.185	,000 ,035	ñ
13,185	1,000 7,035 5,150	NCLOSED
3.73	1,000	AREA RENOVATED
9.450	4,300 5,150	AREA REFURBISHED
7,270	7,270	ROOF (SF) sloped
1.500	1,500	ROOF (SF) flat
815	440 375	PERIMETER (LF)
0.00	10.50 9.50 Gabels	FLOOR
8.763	4,620 3,563 580	FACADE (SF)

Boston Estimating Service - 450 Harrison Avenue -Suite 316 - Boston, MA 02118

-