St. Joseph's Parcel Reuse Study

2.7 Acre Site 135 Lafayette Street Salem, Massachusetts

> Prepared for Department of Planning and Community Development City of Salem Lynn Duncan, Director

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ACKNOWLEDGEMENTS

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ST. JOSEPH'S PARCEL REUSE STUDY

CITY OF SALEM DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

Dear Citizens of Salem:

I am pleased to be able to present this St. Joseph's Parcel Reuse Study Final Report to you. Last year, a diverse community of Salem residents, businesses and community organizations joined together with Mayor Usovicz, and the City of Salem Department of Planning & Community Development to plan for the future use of this parcel and its relationship the Point neighborhood and all of Salem.

This report is the product of the dedication of the members of the St. Joseph's Reuse Committee and its able chair, Linda Locke. Thank you for sharing your thoughtful comments and valuable time in the many community meetings, and for your commitment to work for the future of the neighborhood.

The St. Joseph's parcel represents a hinge between the Point Neighborhood residential community and downtown Salem. This area includes the walking commerical corridor along Lafayette Street, single and multifamily houses and apartments, mix-used medical office buildings and a college. Lafayette Street is also an important thoroughfare connecting Marblehead to Salem and major roadways.

Planning for the future of this site requires weighing many competing interests, both social and economic: the desire to reinforce residential uses and open spaces; the need to increase the city's tax base; and the need to structure a financially viable future for the site now home only to abandoned buildings.

The challenges presented by the diverse interests in this parcel have been carefully considered. The report recommends a strategy for developing the site in which a financially viable project can be made to address community concerns. The suggested parameters for a Planned Unit Development builds on the neighborhood's existing urban character and provides a framework for the site to be thoughtfully redeveloped.

The findings of this study represent a blending of community preferences with the goal of a financially feasible reuse for the parcel. The study does not specify how the site should be developed, but proposes zoning parameters of use, floor area, and density that may be prerequisites for a financially feasible redevelopment of the parcel.

This report represents an early step in the future of this site as many development issues are yet to be resolved. It does lay the foundation for further discussion, and is a valuable record of the community's preferences as we extend our cooperative planning process for the St. Joseph's parcel. I encourage all of you who have invested your time in this effort to remain engaged in this process as we move forward together.

Sincerely,

Lynn Duncan, Director

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INTRODUCTION

ST. JOSEPH'S PARCEL REUSE STUDY

Background

In the spring of 2004 St. Joseph's Church was closed under the Parish Reconfiguration Plan of the Archdiocese of Boston. The 2.4 acre parcel bounded by Lafayette Street, Harbor Street, Salem Street, and Dow Street contains four buildings including a church, rectory, school, and convent building, and a large parking lot. The Salem Department of Planning and Community Development began working with a group of interested citizens, the St. Joseph's Reuse Committee, to plan for the future use of the parcel. In November of 2004 the City of Salem commissioned this reuse study of the parcel.

Purpose of the Study

The primary objective of the study was to identify the most likely market supported uses of the parcel, and from among those, a preferred use which would benefit both the abutting neighborhood and the community at-large. A secondary objective of the study was to identify appropriate zoning for the parcel, a contextually non conforming use, through which the City of Salem may make the preferred reuse possible by making it legally permissible.

The Study Process

The reuse of a former church or school site can be a complicated matter simply because so many people, by virtue of both their residential adjacency, and their personal use and occupancy of the premises, feel a real sense of ownership of the community asset, and will follow with keen interest the process leading to its redevelopment. The singular contribution of the consultant is to bring a dispassionate, objective and informed opinion to the process. The truly useful study should go beyond an imagining of the *possible* physical development of the site to an understanding of the *probable* development of the parcel. It is development economics - revenues and costs, sources and uses of funds, which will inevitably define the probable use of the parcel.

In real property development, determination of the highest and best use results from analyzing a range of development options through a succession of criteria screens representing, legal permissibility, physical possibility, financial feasibility, and finally maximum profitability. This economic view of highest and best use assumes that the eventual use will be the allowed use which is most profitable within the market represented by the supply and demand for those uses.

The process for determining a preferred reuse benefiting the neighborhood and the community at large would differ somewhat from the strictly economic process of determining the highest and best use of the property.

In this study the order of evaluation is to be reversed, with legal permissibility the last screen to be considered. After identifying the development alternatives, the likely physical dimensions of the preferred use among the financially feasible development alternatives will be envisioned, and the prerequisite zoning use, bulk and density approvals will be identified.

This reverse order of analysis makes sense because the subject is essentially a contextually non conforming use and the specification of a appropriate zoning would be a useful objective of the study. The regulatory role of the City would then be to make the preferred reuse possible by making it legally permissible.

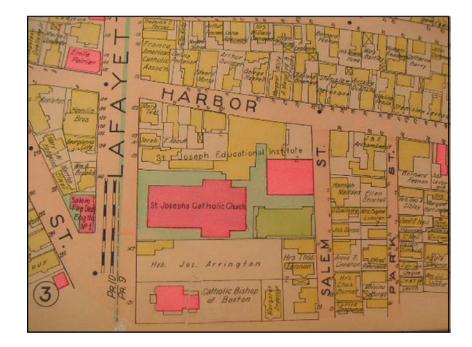
The existence of development rights does not result in development unless there is effective demand for that use in that location. Preference or desire alone does not represent market demand. Effective demand requires the ability to pay.

INTRODUCTION

The reuse of special-purpose properties such as churches and schools requires a thorough exploration of market demand to discover whether the locational and physical characteristics of the property, which are frequently inconsistent with the neighborhood context, can satisfy the expectations of the potential user of the site. The hard question to ask is at what price, if any, does the site become attractive to users willing and able to pay for occupancy.

So the requisite perspective is to think like a developer about this real estate venture. To this end, we have examined the history of the site development, the physical characteristics of the existing buildings, the reuse preferences of the adjacent community, the financial feasibility of alternate development scenarios, and the zoning required to legally permit the preferred reuse.

There are three basic components to any real estate venture: the property, the participants, and the project. The property is understood at this point. The participants include the owners, the adjacent community, and the City. In this case the proposed project description is not an up-front given, rather it is to result from the considerations of this study.



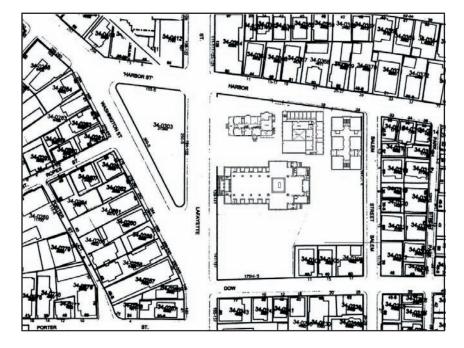
St. Joseph's Parcel 1911 Walker Atlas

PARCEL DESCRIPTION

The St. Joseph's parcel is a 2.7 acre site located just south of the Salem central business district. It is bounded to the west by Lafayette Street, to the north by Harbor Street, to the east by Salem Street, and to the south by Dow Street.

The parcel encompasses almost an entire city block with the exception of three single-family house lots located in the southeastern corner. Basically regular in its geometric configuration, the site has 415 feet of frontage along Lafayette Street to its west, 330 feet of frontage along Harbor Street to the north, 285 feet of frontage along Salem Street to the east, and 175 feet of frontage along Dow Street to the south. The grade changes by three feet over the 415 foot north-south dimension from Harbor Street to Dow Street, and changes by one foot across the 330 foot lot depth easterly from Lafayette to Salem Street.

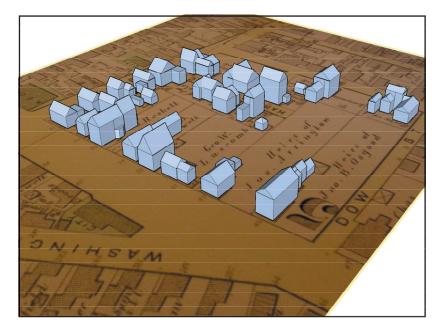
The site is currently improved by four buildings including a church, rectory, school, and convent. There is asphalt paving on about 56 percent (1.5 acres) of the site, with landscaped area comprising another 11 percent. The existing buildings cover approximately 33 percent of the site. The total floor area of the existing buildings is about 97,000 square feet and represents a .8 floor area to lot area ratio (FAR).



St. Joseph's Parcel 2005

PARCEL DEVELOPMENT HISTORY

The current 2.7 acre site was assembled from smaller residential parcels between 1881 and 1887. The creation of this super block required the closing of a smaller internal street. Building construction on the original smaller residential parcels within the current site occurred prior to 1881, but the buildings for church use were constructed between 1884 and 1962. Demolition of various structures on the site occurred between 1884 and 1962. The entire site was burned to grade by the Great Salem Fire of 1914. The earliest of the current buildings is the rectory, built in 1917, and the most recent is the convent, constructed in 1962.

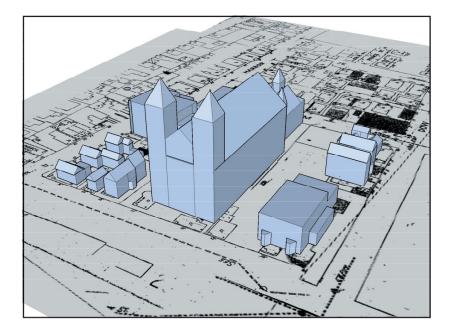


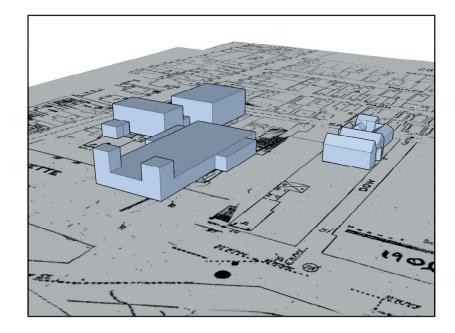


Time Line

- 1821 Parish of St. Joseph purchases Protestant Seaman's Bethel Church on Herbert Street.
- 1881 George Luscomb sells sizable parcel of land on Lafayette Street to John J. Williams - the first Roman Catholic Archbishop of Boston.
- 1884 First church opens for services in March the building was wood frame and Gothic Revival.
- 1886 Roman Catholic Archdiocese of Boston purchases Charles Elwell's property immediately north of the newly built St. Joseph's Church - it was purchased for use as a parochial residence for the pastorate.
- 1887 Rev. Joseph Gadoury appointed pastor purchases additional property around church resulting in a parcel that is almost a full city block.
- 1889 Parish consists of 5,000 congregants and a strong emphasis is placed on preserving French Canadian culture.

- 1892 Parish constructs first school on corner of Salem and Harbor streets on a parcel purchased in 1889. The building was wood frame and over the next years a small wood frame convent was built adjacent to the school and was connected by a small door.
- 1904 Rev. Gadoury dies and leaves \$37,427.73 to be used for educational purposes. Rev. George A. Rainville appointed pastor.
- 1905 A new brick church and rectory is constructed -
- -1911 the old wooden church is moved to Salem Street almost directly behind the new church.





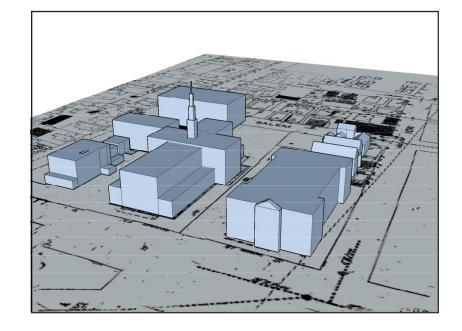


1914 June 25th - The Great Salem Fire guts the entire block including the new church. The basement of the charred church was remodeled to accommodate church services. New classrooms were constructed on the roof of the re modeled basement behind the remains of the church.

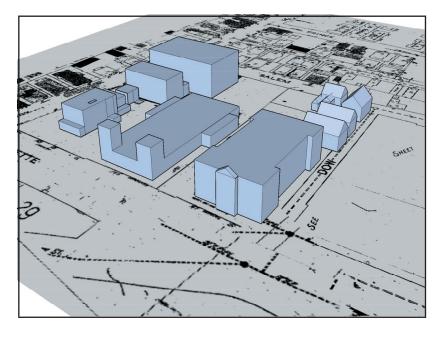
PARCEL DEVELOPMENT HISTORY

- 1917 Parishioners raise enough money to construct a new rectory on the comer of Lafayette and Harbor Streets.
- 1921 A new St. Joseph's High School is built on the corner of Harbor and Salem Streets.
- 1925 A new brick parochial school is built on the corner of Dow and Lafayette Streets. The Sisters of Assumption arrive from Canada to staff the school.

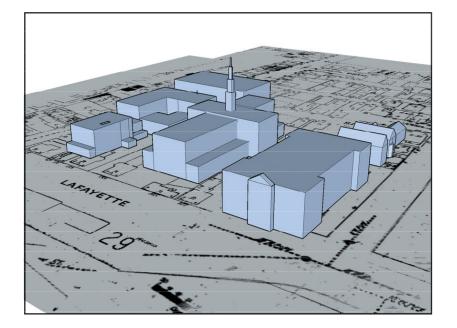
1949 May - the cornerstone is laid for the new St. Joseph's Church designed by Boston architect James J. O'Shaunessey.



1950



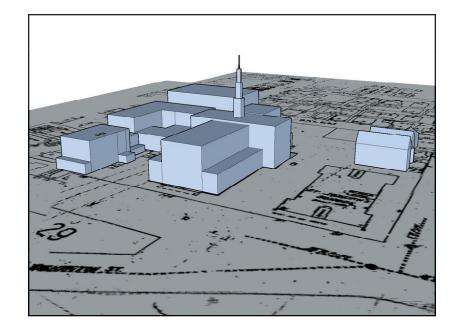






1962 New convent designed by Fontaine and Del Sesto Architects of Rhode Island is built for the Sisters of the Assumption.

- 1973 Parish includes 2,200 families.
- 1982 Ecole St. Joseph on the corner of Dow and Lafayette Streets is demolished. The parish was unable to continue to maintain the school.
- 2004 St. Joseph's Parish Closes.



2005

The church, rectory, convent, and school constitute the existing improvements to the parcel and total some 97,080 square feet of floor area as detailed in the table below.

	Church	Rectory	Convent	School	Total
Basement	17,700	3,660			21,360
First	17,700	3,660	7,990	7,750	37,100
Second	960	3,660	7,990	7,750	20,360
Third		2,250	7,990	7,750	18,260
Total	36,360	13,500	23,970	23,250	97,080

St. Joseph's Parcel 2005

In the following sections we detail the findings from our inspection of the condition of each building, and our assessment for each building of its suitability for adaptation to a use other than its original one.

ST. JOSEPH'S PARCEL REUSE STUDY

EXISTING CONDITIONS

The Church Building



Date: Architect: Foot Print: Stories: Gross s/f: Net s/f:		1949-51 James J. O'Shaunessey 192' x 110' 2 36,360 29,150
Net s/f at:		-,
	Basement First Floor Organ Loft	15,740 12,510 900
Ceiling Heigh	t:	
	Basement First Floor	11'6″ 44'

Organ Loft

32'

Description

The church building is the third Saint Joseph's Church on the site. It was designed in 1948 and constructed in 1949-50 in the International Style with a glazed white brick exterior and very little exterior adornment. The structure is cruciform in plan and was constructed atop the remaining stone foundations of the second church on the site, which burned in the great Salem fire in 1914. There is a full basement level and a grand, high-bay main floor level (former sanctuary) with a balcony over the entry hall (former narthex) at the west end. A five-tiered tower sits upon the roof, centered about the transept crossing.

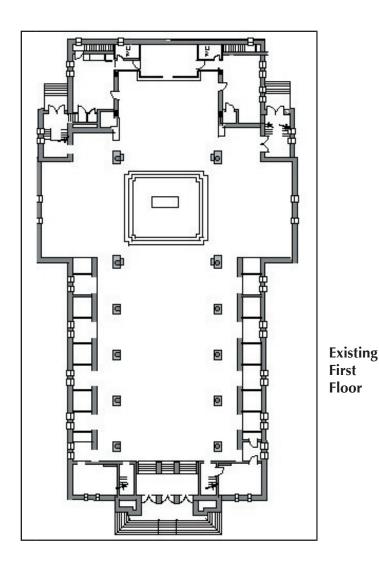
The brick exterior is header-bonded to a multi-wythe, back-up wall system of load-bearing concrete brick and red common brick. This typically lands on the earlier foundations, except where plan changes were made from the original church and it lands on newer foundations, presumed to be of board-formed cast-in-place concrete.

The roofs are constructed of a 2" concrete slab on mesh-reinforced Kraft paper draped between bar-joists on steel beams that span between exterior walls. The tower consists of a louvered and sheet metal-clad, wood-sheathed steel frame supported on transfer beams in the roof structure.

The main floor is constructed of a reinforced concrete rib-slab on concrete encased steel beams and steel columns. The basement floor is a concrete slab-on-grade.

According to the original drawings, the present structure may include parts of the original church that were repaired or altered for interim use between the 1914 fire and the 1949-50 reconstruction. These elements include steel beams of the first floor that were apparently sistered and lowered and then encased to provide beam-support for the first floor rib-slab, the original foundations (presumed to be stone but referred in the original

drawings as concrete), and portions of the original red brick masonry walls which must have been covered with the present white glazed brick.



Conditions

At every vertical corner of the building, a long, deep vertical crack has occurred approximately 4" from the corner on both faces. The face-brick (white glazed) has not demonstrated compatibility with either the brick or concrete back-up material.

Prior to any repairing of the corners of the face brick, an investigation and analysis will have to be performed to demonstrate that the ties between the backup brick and the face brick have retained their structural integrity.

If it is determined upon inspection that the backup and ties are currently sound, only the corners of the face brick will need to be stripped and rebuilt.

The brick over the windows is supported by embedded steel lintels, of which the bottom flanges can be seen from the exterior. Stress lines can be seen in the form of horizontal cracks and movement in and near the joint in which the lintel sits, often for long stretches of wall such as the north and south elevations, which have repetitive closely spaced windows that share the same top elevation. The cause of the cracking and movement is most likely the corrosion of the steel lintels and subsequent rust jacking.

To halt further damage to the building facade, veneer brick should be stripped off the existing lintels, which should then be removed and replaced with new, corrosion-resistant galvanized steel. If it is evident that the corrosion is only occurring on the outside face of a given steel lintel, it may be possible to remove the rust and corrosion-protect the steel from the outside. Cracks caused by rust jacking should be pinned, knitted back together or repointed as necessary, depending upon the situation.

ST. JOSEPH'S PARCEL REUSE STUDY

EXISTING CONDITIONS

There are thermal cracks at the north and south facing walls to the east of the transept. These relatively short walls are rigidly attached via the roof structure to the longer walls on the west side of the transept. When thermal expansion and contraction occurs in the roof structure, it creates a "tug of war" between the two respective sections of, causing diagonal shear cracks to occur in the shorter ones.

Thermal effects of this nature are unavoidable in this type and scale of construction and can best be accommodated by the introduction of sawcut control joints in the brickwork that will allow the stresses caused by these movements to be relieved.

The chimney near the northeast corner of the building is in a cracked and somewhat fragmented condition. While it remains serviceable at present, it will eventually need to be reconstructed.

The steel structure within the tower is rusting. *The steel structure* will need to be cleaned and painted if the tower is to be retained.

Water is entering the interior of the structure through the exterior envelope at several scattered locations, as is evident in staining on the interior surfaces of walls.

Structural Considerations for Reuse

Having been purpose-built as a church, the structure is limited as to future uses without significant modifications. Per code, the renovated structure would have been constructed to support 60 pounds per square foot (psf) for a fixed-seating assembly area.

The original structural drawings indicate that the rib-slab system as designed would have had live load capacity of approximately 70 psf and the steel beams, if not considered to act compositely, would have a capacity of 80 psf, both of which are less than the 100 psf that the code would require for a flexible plan, non-fixed seating assembly area or gymnasium.

Also, the column size that was specified has a live load capacity of 70 psf, meaning that the columns would need to be reinforced were the live loads to be increased above this level.

The roof structure was clearly constructed as a roof, and a vertical addition over the top of the church would require the roof to be replaced or over-framed.

It is not clear what additional capacity the existing, re-used original foundations have as they are not described on the reconstruction drawings. Therefore, it cannot be assumed that the existing foundations can take additional load. Also, the damaged condition of the brick walls that bear on them and the fact that they are a mix of earlier and later construction could be problematic.

Given the tall interior space that this structure contains, the logical place for any additions would be to the interior. Because of the above limitations and concerns, however, such an addition may need to rest on its own columns and foundations that bear through the existing first floor slab system.

If additional floor area or mass is added beyond 10% of the present condition, the existing structure would also need to be analyzed for seismic loading. Un-reinforced masonry wall construction is hard to make compliant with seismic loading requirements and would likely need to be supplemented with additional masonry walls on the interior or by the filling of several window or door openings. Given the independent vertical support requirements of an interior addition, it might be feasible to laterally brace such an addition independently from the surrounding construction.

ST. JOSEPH'S PARCEL REUSE STUDY

EXISTING CONDITIONS

The Rectory Building



Date: Architect: Foot Print: Stories: Gross s/f: Net s/f:		1917 Unknown 50' x 85' 3 13,500 9,630	
Net s/f At:	Basement First Floor Second Floor Third Floor	2,590 2,360 2,940 1,740	8/ 1bath 9/ 2 bath 7/ 1 bath

Ceiling Height

Basement	7′11
First Floor	9'6"
Second Floor	9'
Third Floor	8'7"

"

Description

The rectory building is a colonial revival-style, three-story structure with a full basement and a flat roof, constructed ca. 1917. There are porches at front and rear elevations, multiple stair vestibules and bay windows.

The roof and floors are constructed of board-sheathed dimensional lumber joists that are believed to run in the north-south direction, between the exterior masonry walls and interior wood-stud bearing walls. These are supported on timber beams and metal columns at basement level.

The exterior elevations consist of a complex, "butter-jointed" bonded brick veneer, presumably over a brick back-up with concealed headers (diagonally cocked bricks that are let into angled recesses in the back of the veneer). Window and door openings have cast stone lintels and sills, there is a cast stone band crossing the front elevation, a cast stone dentil and modillioned cornice with string course below, and brick quoining at the corners. There is also a patterned condition between the lower cast stone band and the foundation which steps in and out every 2 courses to create a banding effect with a 1½" reveal.

Conditions

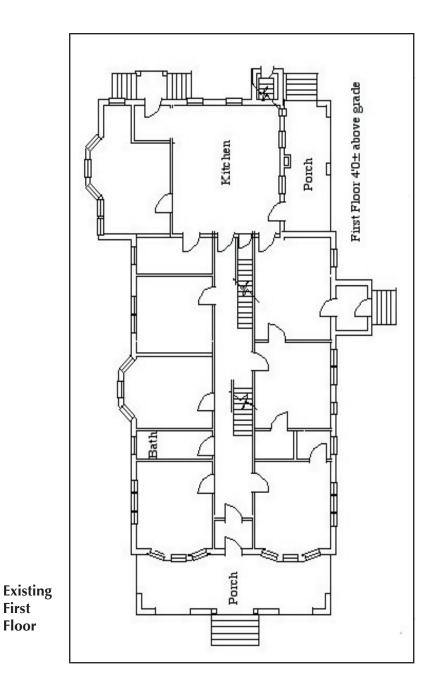
The exterior brick seems well fired and the mortar appropriate for the brick. That being the case, we have still noted significant damage (most likely due to the use of concealed headers) which is described below.

In areas where the exterior wall is a story or less such as at the porches and vestibules, the low brick banding has experienced significant movement in the form of bowing horizontally and / or vertically along the wall.

This condition specifically occurs on all three sides of the west facing (front) porch and entry steps. The piers at the bottom of the steps show significant movement as well as cracks in the lower concrete foundation wall. The south-east porch (south wall), south facing porched entrance canopy housing stairs up to the first floor, and the north facing porch have also all incurred movements due to the instability of the brick banding.

The resultant bowing of the lower bricks caused by the redistribution of support is in and of itself a potentially unstable arrangement that will increase in magnitude as mortar joints naturally weather and erode losing their tensile strength. The outer wythe (10 courses) of the single story segments of wall between the belt course and the foundation would need to be sequentially disassembled and rebuilt using galvanized or stainless steel brick anchors to stabilize the projecting bands.

The brick over the windows is supported by embedded steel lintels, of which the bottom flanges can be seen from the exterior. Most of the steel lintels are currently deflected (sagging in the middle), and stress lines can be seen in the form of horizontal cracks in the joint that the lintel sits in, or step cracks originating at the top corner of the window and projecting diagonally upward.



The cause of the sagging of the lintels and adjacent cracking is directly attributable to corrosion of the steel lintel and subsequent rust jacking.

To halt further damage to the facade of the building, veneer brick should be stripped off at the lintels and the lintels should be removed and replaced with new galvanized steel. If it is evident that the corrosion is only occurring on the outside face of the steel lintel, it may be possible to remove the rust and corrosion and protect the steel from the outside. Cracks caused by rust jacking should be individually assessed, and pinned, knitted back together or repointed as necessary.

Many of the mortar joints between the upper string course and the cornice, as well as at other scattered locations on the building have eroded and need to be repointed.

One of the cast stone units in the north façade's string course has spalled and is about to fall to the single-story roof below, possibly damaging it or rebounding onto the sidewalk. The spalled piece of stone should be removed and stored.

There are several cracks and spalls in the cast-in-place concrete steps that should be repaired using standard concrete restoration methods such as adhesive-injecting cracks, exposing and corrosion-treating embedded steel (if any) and applying formed or trowel-grade restoration mortar to spalls.

The ceilings in several of the interior spaces of the first, second and third floors have diagonal cracks, particularly near the southeast and northeast corners of the building. These are most likely to be from normal deflection and seasonal moisture changes in the wood construction in contrast with the unchanging masonry at the exterior. Damage is most severe at the roof scuttle stair at the east end of the third floor, where the plaster is water-stained. This corresponds to an area of the exterior where the mortar joints are eroded. These cracks will need to be patched and then watched to see if they reoccur. The exterior masonry should be checked and repointed if needed to eliminate water entry points.

There is fairly extensive water damage to the finishes at the third floor, within the west half of the north wall. This corresponds to eroded mortar joints and some diagonal cracks in the exterior masonry, and some rust staining on the cornice. The masonry should be repointed and the crack repaired. The roof edge flashing should be checked for leaks.

The exterior foundation brickwork of the north wall is efflorescing in the basement, suggesting infiltration of water. The mortar and the brick units themselves still look sound. *Restoration of the exterior masonry would be required to alleviate this problem*.

Structural Considerations for Reuse

Having been purpose-built as a rectory, the structure would have been constructed for a relatively light (40 psf) floor load and would lend itself easily to a residential use (with the same 40 psf live loading) but not necessarily anything heavier without additional investigation to justify heavier loads.

The room and basement column layout would suggest that there are interior bearing walls running down each side of the central corridor. This means that any future use that does not retain at least these two walls will require the supplemental re-support of the floor or roof structures, most likely involving the insertion of beams and columns in place of the walls.

One or more additional floors on top of the structure would most likely require the removal or building-over of the existing roof structure, which is pitched to drain (toward the interior) and has most likely been constructed only to support snow loads, which are lighter than design floor loads. In the case of the lower roof, a build-over would push the floor level above that of the present third floor, making access to the new space more difficult. In this case, replacement would probably be required.

Whether or not the perimeter foundations could support one or more additional levels would need to be determined by structural analysis. By the nature of their construction, the interior bearing lines probably would not have much additional support capacity and would most likely need to be reinforced. If additional floor area or mass is added beyond 10% of the present condition, the existing structure would also need to be analyzed for seismic loading. Unreinforced masonry wall construction is hard to make compliant with seismic loading requirements and would likely need to be supplemented with additional masonry walls on the interior or by the filling of several window or door openings.

ST. JOSEPH'S PARCEL REUSE STUDY

EXISTING CONDITIONS

The Convent Building



Date: Architect: Foot Print: Stories: Gross s/f: Net s/f: Net s/f at:		1962 Fontaine and Del Sesto 92' x 95'9" 2 23,970 18,045
	Basement	6,325
	First Floor	5,580
	Second Floor	6,140
Ceiling Height	•	
	Basement	8'
	First Floor	9′11″

Second Floor

7'6"

Description

The convent is a two-story-plus-basement, brick-clad residential structure of a modern style that typical of the 1960's. Roofs are constructed of precast concrete plank on steel bar joists, and the first and second floors are concrete slabs on metal deck supported by bar joists. The bar joist framing is supported by the exterior walls at the perimeter and by steel beams and columns at the interior. The exterior walls are concrete unit masonry with header-bonded brick veneer supported on cast-in-place concrete foundations. The basement floor is a concrete slab on grade.

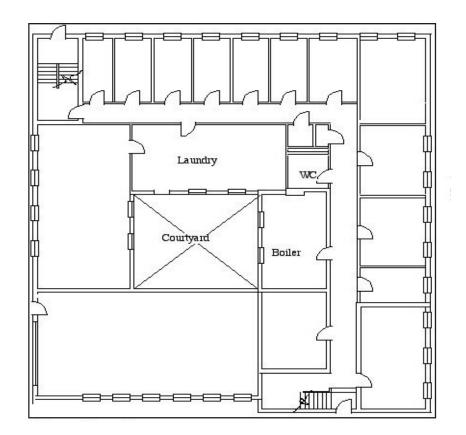
Conditions

Typically the masonry appears tightly bonded and sound. The mortar is in adequate condition and no re-pointing is necessary for the foreseeable future.

The brick over the windows is supported by embedded steel lintels, the bottom flanges of which can be seen from the exterior. The masonry on either side of the window is revealing early signs of lintel corrosion and rust jacking illustrated by short lengths of mortar being pushed out of the joint common to that containing the flange of the lintel. The required repair would include dismantling veneer brick to access lintels, removing the rust and corrosion protecting the steel from the outside. Local repointing at damaged joints would also be required as part of the lintel repair.

There is a large garage door opening on the west facing façade of the building, the masonry over which is supported by a steel Wflange beam with a full-wall thickness steel plate welded to the bottom flange (visible from the opening). The top surface of the plate is rusting and jacking itself downward away from the beam.

The repair would include: shoring of the garage door opening, removal of the bottom plate and subsequent repair and corrosionprotection of the beam flange and replacement of the bottom plate using galvanized steel.





Structural Considerations for Reuse

Having been purpose-built as a convent, the structure would normally have been constructed for a relatively light (40 psf) floor load. Looking at the original structural drawings for the building, the framing plans indicate design loads of 100 psf and 150 psf for the residential and public areas, respectively. A cursory check of the specified members, however, found that these are total dead plus live loads and that the actual design loads are on the order to 40-50 psf and 100 psf, respectively, in keeping with applicable code requirements.

This being the case, a closer analysis will be required to determine whether and where the 50 psf threshold can be reached (to allow for office or educational occupancy), or whether the floor loads are simply limited to a residential, 40 psf use. Preliminary calculations suggest that the floors will be good for 50 psf, although this must be more thoroughly verified.

The interior masonry walls are all load bearing. This means that any future use that does not retain them will require the addition of beams and columns to support the widened spans. Removal of walls may also have seismic ramifications, see below.

The high roof appears to have been designed for just the dead load plus snow load (noted as 60 psf total capacity on the structural drawings). Subsequently, the addition of one or more additional floors above this level would require removal or building-over of the existing roof structure.

The present low roof, which appears to have been utilized as a porch, was framed like the first floor (with the same noted capacities), meaning that it could theoretically be turned into a floor without requiring reinforcement.

Whether or not the perimeter foundations could support one or more additional levels above the present high roof level would need to be determined by structural analysis. Because of the consistency of the specified construction, it appears likely the walls and foundations that support the low roof portion of the structure could support one additional floor, bringing the roof to all the same level. If additional floor area or mass is added beyond 10% of the present, the existing structure would also need to be analyzed for seismic loading. Unreinforced masonry wall construction is hard to make compliant with seismic loading requirements, however, the large number of masonry walls increase the chances that the existing structure will comply. The removal of masonry walls from the interior, even if the structure is not expanded, would require a seismic analysis to be done and the structure to be maintained at a level of either its original lateral strength or that is compliant with the code for new construction.

The School Building



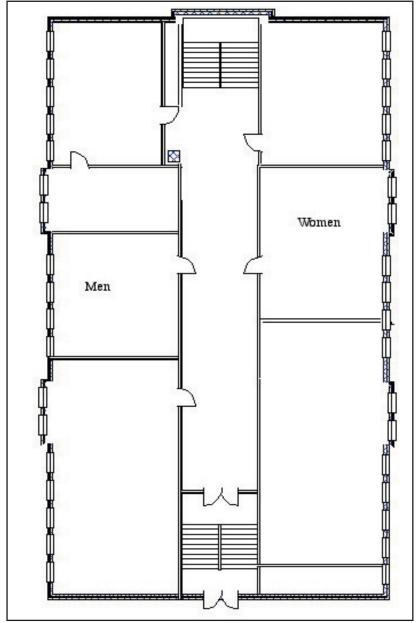
Date: Architect: Foot Print: Stories:		1921 Unknown 66'3" x 117'2" 3
Gross s/f:		23,250
Net s/f: (include	es basement)	15,560
Net s/f at:		
	Basement	5,610
	First Floor	4,630
	Second Floor	5,320
Ceiling Height:		
0 0	Basement	11′
	First Floor	11'10"
	Second Floor	13'10"

Description

The school building is a colonial revival-style, two-story structure with a full basement and a flat roof, constructed in 1921.

The roof and floor construction is believed to be boardsheathed dimensional lumber joists supported by the perimeter walls and interior, wood and masonry bearing walls, and by steel beams over the large open-plan area at the second floor.

The exterior elevations consist of "butter-jointed" bonded brick veneer, presumably over a brick back-up with concealed headers. Window and door openings are headed with cast stone or brick soldier coursing supported on steel angle lintels. Windowsills, belt courses, cornices and other adornments are all of cast stone. There are raised pediments along each of the long sides (east and west facing) of the building and one at front entrance on Harbor Street, where the cast stone front entrance is ornamented with Doric capitals.



Existing First Floor

Conditions

The exterior brick seems well fired and the mortar appropriate for the brick. However, the south pediment on the west-facing wall is showing signs of local shifting in the masonry, and the north pediment on the east-facing wall has seen some step-cracking. Also, the north corner of the east facing wall appears to have eroded mortar joints between the top of the wall and the "cornice" / top cast stone belt course.

All five of the pediments appear to be in need of repointing, at a minimum. The pediments will need to be more closely inspected via aerial lift to determine the extent of rebuilding and re-pointing, and to pinpoint any causes of local movement and cracking such as embedded corroding metal.

On the east and west-facing long walls, between the 1st and 2nd floors, a small patch has been consistently made along the length to infill a likely previous cast stone ornament. The brick patch has not been knit into the adjacent masonry and the patches appear unsightly. *Although not structural, consideration should be given to re-patching the masonry and knitting the patch into the adjacent masonry for aesthetic reasons.*

Damage has occurred in a few locations in the cast stone belt course between the basement and 1st floors on the west facing elevation. Specifically, the cast stone has cracked along the central segment of the wall toward the south and at the very south end of the wall. The cast stone has also spalled on the south segment. *Commonly this type of damage occurs due to embedded metal pipe in the cast stone that corrodes and causes rust jacking. The presence of embedded steel pipe should be verified, and removed if present. The belt course should be patched with similar material.*

The cast stone modillion comprising part of the ornamental assembly over the 1st floor windows on the south projecting bay of the west facing elevation have been damaged and suffered loss. *The modillion should be cleanly cut, removed and replaced in like kind.*

The brick over the windows is supported by embedded steel lintels, of which the bottom flanges can be seen from the exterior. Lintels on the north segment of the east facing walls appear to be deflected (sagging in the middle), and some minor movements are visible adjacent to the windows. The cause of the sagging of the lintels and adjacent movement is directly attributable to corrosion of the steel lintel and subsequent rust jacking. *The extent of damage will need to be determined, and the affected lintels subsequently replaced or corrosion protected depending on their condition*.

The "cornice" or belt course below the roof has cracked at the north projecting bay on the east facing wall. *The cast stone unit will need to be pinned following corrosion protection of any exposed steel reinforcement.*

There are multiple miscellaneous (but not extensive) cracks along the façade. Most notably, the south facing back wall has vertical cracks above the window and at the east corner. There are also cracks scattered on the north, west and east facades. *Cracks should be further evaluated, sources of rust jacking neutralized, and cracks should be pinned or knitted back together and repointed*.

There is a cracked concrete step tread at the bottom of the east stair's basement run *that must be repaired*.

There is a localized depression in the east wall-to-ceiling intersection, directly in line with a perpendicular ceiling soffit over the second floor assembly hall. This may be related to crushing or movement that is occurring at the bearing end of whatever beam or girder may be within the ceiling soffit and *would need to be investigated*.

ST. JOSEPH'S PARCEL REUSE STUDY

EXISTING CONDITIONS

Structural Considerations for Reuse

Having been purpose-built as a school, the structure would have been constructed for a live load of 50 psf in the classrooms and 75 psf in the corridors. This compares favorably with residential at 40 psf, office at 50 psf and, of course, continued use as a school, although the current code now requires 80 psf for corridors rather than the previous 75 psf.

The room layout would suggest that there are interior bearing walls running down each side of the central corridor at the basement and first floor. This means that any future use that does not retain at least these two walls will require the supplemental re-support of the floor or roof structures, most likely involving the insertion of beams and columns in place of the walls.

One or more additional floors on top of the structure would most likely require the removal or building-over of the existing roof structure, which is pitched to drain (toward the interior) and has most likely been constructed only to support snow loads, which are lighter than design floor loads. Reinforcement of the long clear roof span over the second floor assembly hall would most likely be extensive and the many windows in the exterior make it doubtful that the exterior walls would support much, if any, additional load.

Assuming the added floor area or mass would be beyond 10% of the present, the existing structure would need to be analyzed for seismic loading. The unreinforced masonry walls with the many window openings would almost certainly not qualify seismically for present or even increased seismic loads and would either require significant reinforcement or supplementation in the interior.

Whether the building is added to or not, re-use as an educational facility would require seismic upgrade in addition to reinforcement of the floor construction.

	Summary of Structural Conditions			
Building	Existing Condition	Reuse Potential		
School	Fair	Could support school, limited office or residential use. Additional floors can not be added to the building without addi- tional support and seismic upgrades.		
Convent	Good	Currently the floor supports required residential loads. Additional examina- tion is needed to determine feasibility of other uses without additional supports. All interior walls are load bearing. Their removal would require the insertion of beams and columns.		
Rectory	Fair-Good	Currently the floor supports required residential loads. Additional examina- tion is needed to determine feasibility of other uses without additional supports. The central hall walls are load bearing. Some interior partition walls could be removed without additional support.		
Church	Fair	Currently the church meets requirements for a fixed floor assembly plan but not for a non-fixed seating or assembly area or gymnasium. Any additional floors within the building would require the construction of a structure within a structure.		

Historic Preservation Status and Reviews

The St. Joseph's Church Complex has not been inventoried and therefore is not listed on either the National Register of Historic Places or the State Register of Historic Places. In our opinion, the complex is eligible for listing on both registers once inventoried. The Salem Historical Commission, the Massachusetts Historical Commission and the National Park Service would be required to approve listing on the National Register.

Significant Building Features

Due to its height, scale and massing, St. Joseph's Church (1948) is a landmark structure at the north end of Lafayette Street and in the Point neighborhood. The primary significance of St. Joseph's Church and Parish buildings is as an interrelated complex that provided religious, educational and social services and spaces for the parish. The complex also is significant for its religious and cultural associations with Salem's French Canadian community and in particular with the Point neighborhood. St. Joseph's Church and Parish buildings are eligible for listing in the National Register of Historic Places under criteria A and C at the local level.

The scale of the buildings on this block has changed over time. Following the Salem Fire in 1914, the scale of the parish buildings increased dramatically, reflecting the growth and prosperity of St. Joseph's Parish through the early twentieth century. The scale of the current church is the same as that of the church built in 1911. The one incongruous feature of the site today is the empty lot at the corner of Lafayette and Dow streets. Historically, there has been a building located here, defining this corner of the block and continuing the street wall along Lafayette Street. The church building is a rare example in Salem of an architectdesigned International Style building. The interior and exterior are substantially intact and represent a competent execution of a coherent design. This building is of primary significance to the St. Joseph's Parish complex.

The rectory building is an intact example of the Late Gothic Revival Style with fine interior Arts & Crafts detail. It retains its original front door with leaded glass transom and sidelights and original 1/1 wood sash with some original glass. It defines the corner of the block Harbor and Lafayette Streets and architecturally it is a good example of its style. It is a contributing building to the St. Joseph's Parish complex.

The school building is an example of an eclectic combination of Late Classical Revival and Paneled Brick Styles with much of its interior plan and original features intact. Despite the replacement of windows and doors, it is a good example of a 1920's school and contributes to the significance of the complex.

Architecturally, the convent building is not significant. It does not meet the typical 50-year age requirement for National Register eligible buildings. The Massachusetts Historical Commission will have to be consulted to determine whether this building is a contributing structure to the St. Joseph's Church and Parish Buildings eligible property. The convent is important for its function as part of the complex, representing a use that has been associated with the church and located on this block at least since 1906. The building also defines the street wall along Harbor Street with the adjacent school.

PRESERVATION ISSUES

Adaptive Use Issues

A building listed individually in the National Register of Historic Places or certified as a contributing structure in a National Register district may be eligible for the 20% federal investment tax credit.

If a single owner redeveloping the site chooses to qualify for the 20% federal historic tax credit on one building in the complex, work on all of the contributing buildings in the complex must meet the Standards for Rehabilitation, regardless of whether the tax credit is taken on the other buildings. In addition, the rehabilitation plans must be approved by the Massachusetts Historical Commission (MHC) and the National Park Service (NPS).

The same owner of a complex of buildings that were functionally related historically cannot demolish one contributing building in the complex and still qualify for a historic tax credit on any other remaining building in the complex.

The church, rectory and school buildings have many exterior and interior features that are significant and will have to be retained if a project intends to comply with the Secretary of the Interior's Standards for Rehabilitation and qualify for the 20% federal historic tax credit. If a certified rehabilitation is considered, the church and the rectory buildings will have to retain much of their existing plan and interior detail; the school building will have a bit more flexibility.

ST. JOSEPH'S PARCEL REUSE STUDY

COMMUNITY PROCESS

The St. Joseph's Parcel Reuse Study was a community based process led by the City of Salem Department of Planning and Community Development in conjunction with the St. Joseph's Church Reuse Committee chaired by Salem resident Linda Locke. One of the stated goals of the process was to understand the community's interest in the site. This was achieved through a series of stakeholder interviews and public meetings. Stakeholders were identified as individuals who had a unique interest or understanding of the site. Working with the Reuse Committee and Department of Planning and Community Development, the consulting team identified the stakeholders.

Stakeholder Interviews

A series of stakeholder interviews were undertaken with individuals identified during the first phase of the process. The list of stakeholders included individuals who either had a defined role in the process or could offer a unique perspective based on their relationship to the complex, the Point Neighborhood or future use.

- Lucy Corchado, Salem City Council, Ward One
- Jim Haskell, Executive Director, Salem Harbor CDC
- Linda Locke, Chair, St. Joseph's Reuse Committee
- Tom Philbin, Executive Director, Boys & Girls Club
- Walter Power III, Chair, City of Salem Planning Board
- Stanley Usovicz, Jr, Mayor, City of Salem

Public Meetings

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Additionally, a series of seven public meetings were held to help understand the role the site played in the community and to receive feedback about the future of the complex.

- December 12, 2004 Reuse Committee Meeting
- December 14, 2004 Public Meeting
 - March 2, 2005 Reuse Committee Meeting
 - March 8, 2005 Public Meeting
 - April 25, 2005 Reuse Committee Meeting
 - June 2, 2005 Reuse Committee Meeting
 - June 21, 2005 Public Meeting

COMMUNITY PROCESS

Major Themes

Certain major themes emerged during the interview and public hearing process. Buildings on the site have been lost to fire and demolition. Demographics have changed based on the availability of work and opportunity. But the parcel has remained as the center of Point Neighborhood. Whether providing a place for worship or a space for celebration, the site has been an integral part of the community.

The following themes reflect over a century of social services that occured on this parcel and the desire for the site to continue to be an important component of the neighborhood and city. • Site is integral part of Point Neighborhood.

- Any project should be "Part of and serving" the Point Neighborhood.
- Need for affordable and market rate housing in the neighborhood.

• Mixed use and mixed income development necessary.

- Development of the site should include commercial and community uses.
- Housing should include rental and home ownership opportunites.
- Development should replace meeting spaces lost with church closure.
 - •Church basement held 100 to 200 people with smaller meeting spaces in convent.
- Development should deliver community services.
 - Health center.
 - Boys & Girls Clubs.
 - Community Center.
 - Performing Arts Space.
- •Scale and massing of new construction should be consistent with existing neighborhood.
- Development should address neighborhood traffic, parking and pedestrian concerns.
- •Site should remain publicly accessible "part of the community".
- Site should generate tax revenue for Salem.

The locational characteristics of the site would likely be of interest to both residential and office developers, and possibly as an accessory use, for commercial retail at the street-level.

Our market research indicated that office use would not command more than \$23 per square foot which less nine dollars per square foot operating expense would leave \$14 per square foot for net operating income. At a 10 percent ratio of income to office value, the \$14 per square foot of net operating income would represent \$140 (\$14 / .10) per square foot of completed value. However, we concluded the cost to complete office construction would be about \$150 per square foot.

As the cost to complete would exceed the completed value, we determined that the development of new office space was not financially feasible at this time.

There has been evidence in the market area of both residential condominium and residential apartment development. Our market research indicated the completed value of residential condominiums would likely be about \$330 per square foot, less a six percent sales cost resulting in a net revenue of about \$310 per square foot. For this scale of project, we determined the developers profit expectation for a multiyear sellout would be about 30 percent of revenue, or about \$93 per square foot. We concluded the cost to complete the condominium units to be at least \$165 per square foot.

Deducting the cost to complete and the expected profit from the sellout resulted in a positive value indicating residential condominium development would be feasible if the parcel acquisition cost did not exceed about \$52 per square foot of developable floor area.

Use	Cost to Complete	Return on Cost	Completed Value	Residual Value
Office	\$150 PNSF Construction	\$23 PSF gross rents less \$9 PNSF expense = \$14 PSF net operating income (NOI)	\$14 PNSF NOI capitalized at 10% = \$140 PNSF capitalized value	\$140 PNSF value less \$150 PNSF cost to complete = cost exceeds value = not feasible
Residential Condominium	\$165 PNSF Construction	Developer profit expectation for multiyear sellout = 30% of sellout = \$93 PNSF	\$330 PNSF sellout as completed less 6% sales = \$310 PNSF net sellout	\$310 PNSF net sellout less \$165 PNSF cost to complete less \$93 PNSF profit = \$52 PNSF residual value = feasible if acquisition cost does not exceed \$52 PNSF
Residential Apartment	\$125 PNSF Construction	\$16 PNSF (1,075 SF @ \$1,435/ mo.) less \$6 PNSF expense = \$10 PNSF net operating income (NOI)	\$10 PNSF NOI capitalized at 8% = \$125 PNSF capital value	\$125 PNSF value less \$125 PSF cost to complete = cost equals value = not feasible

Our market research indicated that the average rental apartment would command about \$16 per square foot which would represent about \$1,435 per month rent for a 1,075 square foot apartment. Deducting the developers operating expense of six dollars per square foot would leave \$10 per square foot of net operating income. At an 8 percent ratio of income to apartment value the \$10 per square foot of net operating income would represent \$125 (\$10 / .08) per square foot of completed value. However, we concluded the cost to complete apartment construction would exceed \$125 per square foot.

As the cost to complete would exceed the completed value, we determined that the development of new rental apartments was not financially feasible at this time.

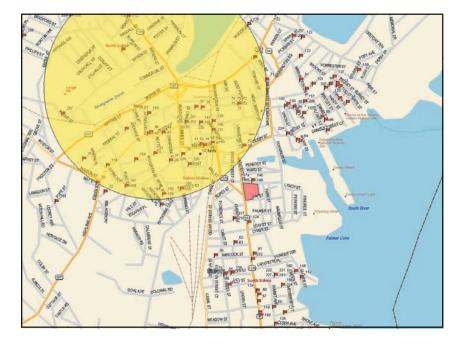
Analysis indicated that among the physically possible and market supported uses, the only one which was also a community preference was housing, the community preference being for affordable housing.

There was also community interest in the continued use of the school has a school. The school is a financially feasible use of the structure because the capital cost of completion for continued school use is minimal. However, absent a school operator, it is physically possible to adapt the school for use as housing.

Use Analysis

Zones & Buildings	Physically Possible	Community Preference	Market Supported	
Empty Lot Lafayette St.	New Construction	Affordable Home Ownership	Housing	
Church	Church Assembly space	Arts Performance Space	None	
Rectory	Housing Office Medical office	Meeting space Health Center	Housing Office	
Convent	Dormitory Other SRO Housing	Meeting space Other SRO Housing	SRO Housing	
School	Housing Office School	School Youth services	School Housing	
Empty Lot Salem St.	New Construction	Parking	Housing Parking	

Residential condominium sales have occurred both north and south of the site indicating it would likely attract buyers of residential condominiums. As the parcel is roughly a one half mile walk to the Salem train station, residential development on the site would likely be regarded as smart growth.

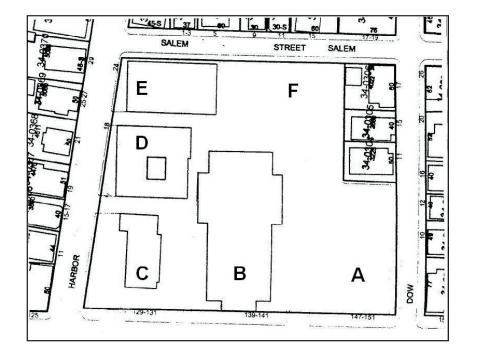


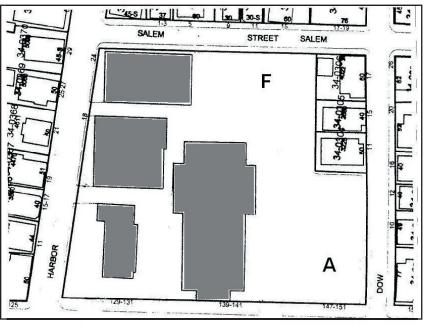
Half-mile Radius from Salem Station

Certain uses preferred by the community including community meeting space, arts performance space, health center and youth services, are not typically market supported as for-profit uses, but are usually sponsored by nonprofit organizations that fund the cost of facility use.

PARCEL DEVELOPMENT SCENARIOS

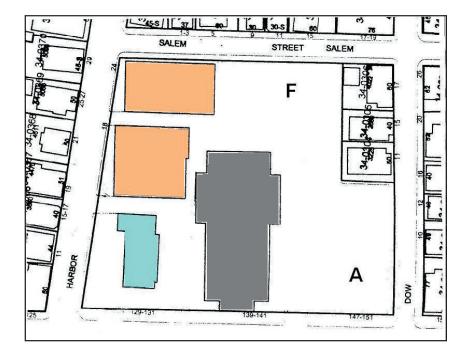
There are six areas of possible development or adaptive use on the 2.4 acre site: the four existing structures (B,C,D and E) and two vacant areas (A and F). The size of the site and the placement of the existing improvements, suggests the potential for iterative or phased development of the site.

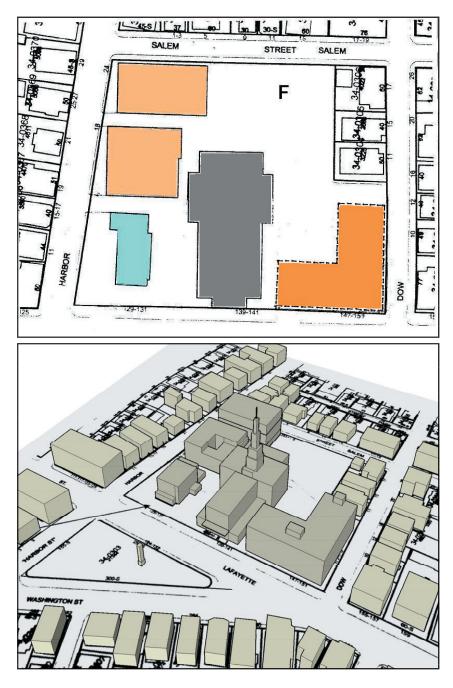






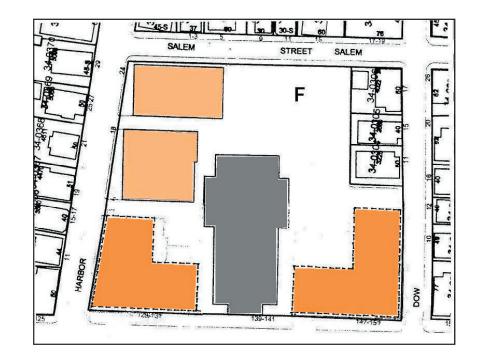
Aside from adaptive use of some of the existing structures, the first location of iterative new development on site would be area A, the northeast corner of Lafayette and Dow. Lafayette Street is a major arterial, and the context of a corner building in this location would likely support a structure about five stories in height. Parking for new development could be at grade in area F.

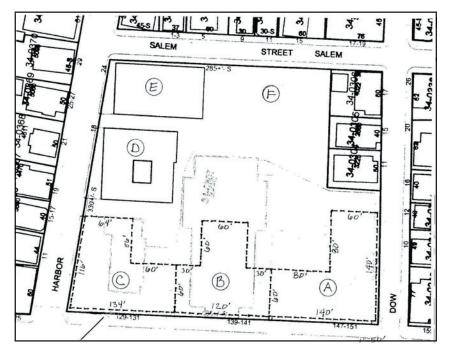




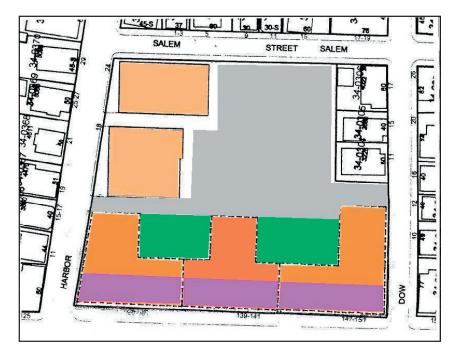
PARCEL DEVELOPMENT SCENARIOS

The next logical location for new development would be the southeast corner of Lafayette and Harbor, area C, now occupied by the rectory. Again, the context would support a corner building about five stories in height. However, new development at that scale on both the northwest and southwest corners of the site would likely require more parking than would be available at grade in area F.





From an urban design and development efficiency perspective, it would be desirable to complete the street wall along Lafayette Street from Dow to Harbor with a single structure of uniform height. The plan would require the removal of the existing structures on the footprint, the church and the rectory.



The completion of the street wall along Lafayette Street with the development of a five story residential building would not be out of context along this major arterial. Pedestrian oriented neighborhood commercial uses at the store front level along Lafayette Street would extend the ribbon of retail uses that now stop at the northerly edge of the site. This concept represents the most probable parcel development scenario.

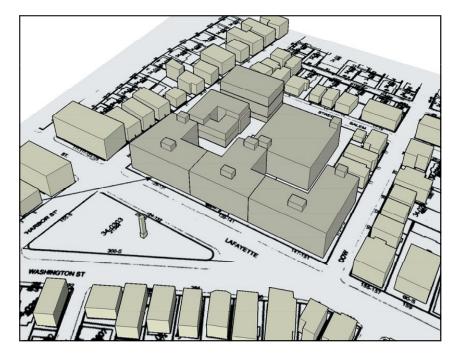
Combined with the adaptive use of both the convent and school buildings, the development of a new five story building along Lafayette Street would result in about 265,000 square feet of developed floor area on the site.

Thus, the likely market supported residential development scenario would probably be about 167 residential units representing a density of about 62 units per acre. The resulting gross building area of about 265,000 square feet would represent a 2.3 ratio of floor area to lot area.

This probable parcel development scenario would require more parking than could be provided at grade on the interior of the site. It is likely that an above grade parking structure would need to be developed in area F.

While provision of 2.0 parking spaces per unit would likely enhance marketability, the parcel's location within one half mile of the train station suggests that a ratio of 1.5 spaces per unit would be appropriate. For 167 residential units, a required parking ratio of 1.5 spaces per unit would necessitate 250 parking spaces onsite.

At an average of 325 square feet per parking space, the total parking area required would be approximately 81,250 square feet. To accommodate this parking requirement, construction of a five level above grade parking structure of about 16,250 square feet per level would likely be required on the southeastern portion of the site, in area F.



The parcel is located the R-3 residential zoning district. The current uses are nonconforming, and the existing building area of about 97,000 square feet represents a .8 ratio of floor area to lot area.

As-of-right development in this R-3 zone would allow some 33 residential units with a gross building area of about 45,000 square feet representing a .4 ratio of floor area to lot area, about half of what currently exists. The as-of-right residential density would be about 12 units per acre.

However, it is likely that the developer of this parcel will require from the City of Salem development approvals for a reuse of the parcel which is not as-of-right.

The approval of a Special Permit in the R-3 zoning district would allow some 116 units with a gross building area of 157,000 square feet representing a 1.3 ratio of building area to lot area. The residential density under a Special Permit would be about 43 units per acre.

The community has expressed a preference for residential redevelopment of the parcel. The developer of a market supported residential development scenario would likely seek approval of a PUD zoning designation allowing some 167 residential units representing a density of about 62 units per acre. The resulting gross building area of about 265,000 square feet would represent a 2.3 ratio of floor area to lot area.

The building envelope for 265,000 square feet of developed floor area on the site would need to be about five stories along Lafayette Street, which would not be out of context along this major arterial.

While provision of 2.0 parking spaces per unit would likely enhance marketability, the parcel's location within one half mile of the train station suggests that a ratio of 1.5 spaces per unit would be appropriate.

The granting of a planned unit development designation for the parcel having these development parameters would allow a

project scale that would be financially feasible, and would enable the City to negotiate the development of community preferred uses.

For the St. Joseph's parcel, the likely result would be the realization of the community preferred uses: a mixture of market rate and affordable residential units, accessible community meeting space, and if market supported, neighborhood commercial uses.

St. Joseph's Parcel Zoning Buildout Comparison

	Existing Condition	R-3 As of Right	R-3 Special Permit	PUD Scenario
Lot Area SF	116,685	116,685	116,685	116,685
Lot Area Acres	2.68	2.68	2.68	2.68
Min. SF Lot Per Unit	NA	3,500	1,000	699
No. Units	NA	33	116	167
Units Per Acre	NA	12	43	62
GSF Per Unit		1,350	1,350	1,589
Gross Residential Building Area	97,080	44,550	156,600	265,320
Residential FAR	0.8	0.4	1.3	2.3
Parking Ratio	1.5	1.5	1.5	1.5
Parking Spaces		50	174	250
Parking Area Required		16,088	56,550	81,250

