



Detail from 'Foghorn' – 1929 – Arthur Dove



Arthur Dove

“It is the Form the Idea takes in the Imagination, rather than the Form as it Exists Outside that is Essential”

459-465 Exchange Street Dove Block Feasibility Study

May 2017

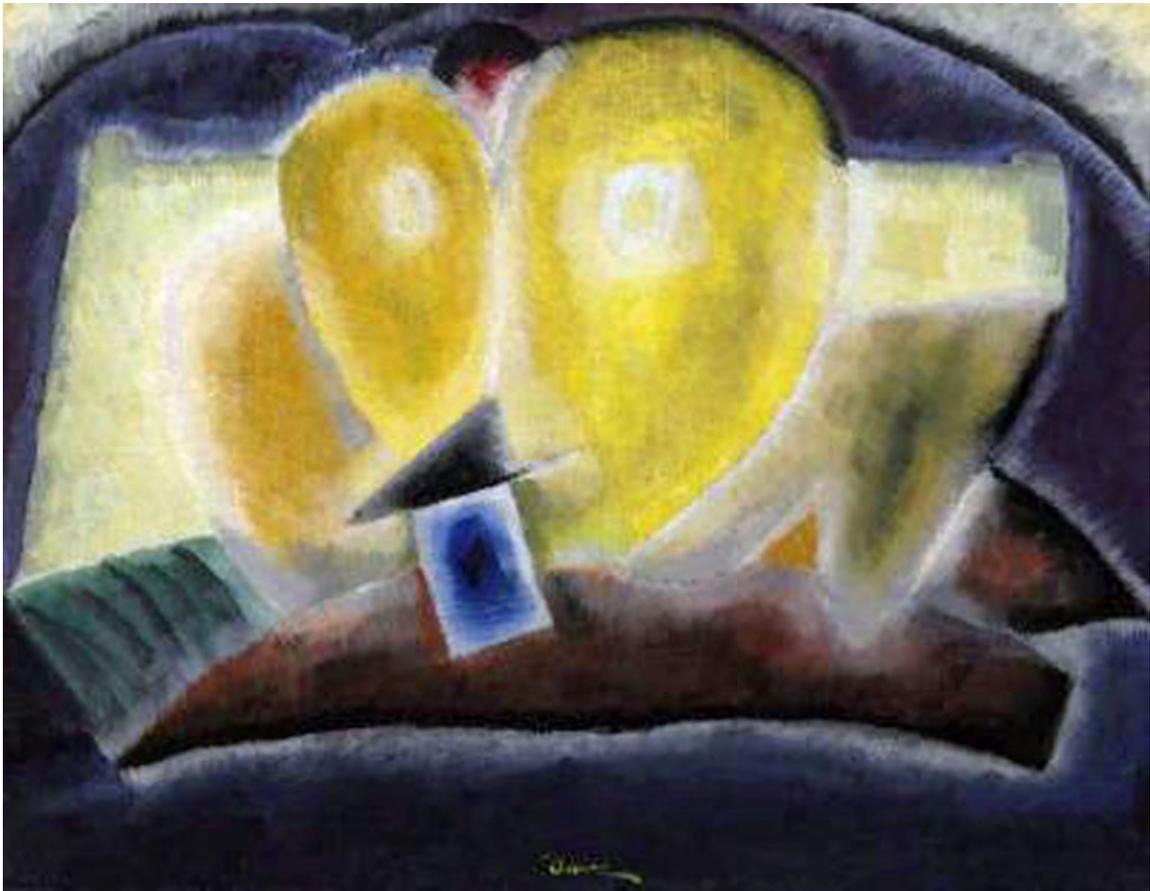


Dove Block c. 1895-1900

Prepared for: the City of Geneva and the Dove Block Restoration Group, inc.

Prepared by: **Bero Architecture PLLC 32 Winthrop Street Rochester, New York 14607**

This Report was funded in part by a Technical Assistance Grant through the New York Main Street Program SHARS ID-20160361, REDC CFA #65207



'Sunday' – 1930-1 Arthur Dove

459-465 Exchange Street - Dove Block Feasibility Study

Prepared for: the City of Geneva and the Dove Block Restoration Group, inc.

"In the end, Dove found that Geneva had fueled both his intensity and productivity as an artist. Never before had he been able to sustain such focused exploration in his work. Never again would he be so prolific."

Elizabeth Hutton Turner: *Arthur Dove: A Retrospective* (MIT Press, 1997)



TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	5
1.1	Repair and Stabilization.....	5
1.2	Structural Improvements and Basic Finishes.....	6
1.3	Tenant Build-Out Options.....	6
1.4	Condominium Consideration.....	6
1.5	Key Decisions.....	6
1.6	Specific Recommendations.....	7
1.7	Historic Tax Credits.....	8
1.8	City of Geneva Comprehensive Plan 2016.....	8
2	Organization of the Report	8
2.1	Report.....	8
2.2	Report of Site Visit.....	8
3	REPORT OF SITE VISIT	9
3.1	Purpose.....	9
3.2	Method	9
3.3	Limitations.....	9
3.4	Construction Quality	9
3.5	Cyclical Maintenance.....	10
4	DESCRIPTION	10
5	OBSERVATIONS	13
5.1	Site	14
5.2	Stormwater Management.....	14
5.3	Roofing.....	15
5.4	Masonry	16
5.4.1	Façade	16
5.4.2	Interior	18
5.5	Metals.....	22
5.5.1	Cast Iron Storefront Façade	22
5.5.2	Decorative Sheet Metal.....	25
5.5.3	Fire Escape	26
5.6	Structure	27
5.7	Carpentry.....	27
5.7.1	Exterior Storefront Elements.....	27
5.7.2	Interior Flooring	27
5.8	STOREFRONT, DOORS, AND WINDOWS.....	27
5.8.1	Storefront and Windows	27
5.8.2	Second and Third Floor Windows.....	29
5.8.3	Exterior Doors.....	32
5.8.4	Interior Doors.....	32
5.9	Finishes.....	33
5.10	Other	38
5.10.1	Abatement.....	38
5.11	Mechanical.....	39
5.12	Opinions Of Probable Construction Cost.....	39
5.13	Prevailing Wages.....	39
5.14	Markup	40
5.15	Accuracy	40
5.16	Estimate Structure	40
5.16.1	Basic:	40
5.16.2	Build-Out Improvements By Scheme & Occupant Type:.....	40
6	REHABILITATION PRESERVATION REVIEW	41
6.1	The Dove Block: Description	41

6.2 **Brief History** 43

6.3 **Significance** 43

6.4 **Period of Significance** 44

6.5 **Federal and State Tax Credits for Rehabilitation**..... 44

6.6 **Distinguishing Features** 46

6.7 **Building Exterior**..... 46

 6.7.1 **West Elevation (Exchange Street)** 46

 6.7.2 **North Elevation (Castle Street)** 47

 6.7.3 **East Elevation (Rear Parking Area)**..... 47

6.8 **Building Interior** 47

 6.8.1 **Basement** 47

 6.8.2 **First Floor** 48

 6.8.3 **Second Floor** 48

 6.8.4 **Third Floor** 48

7 **PRELIMINARY BUILDING CODE REVIEW** 48

 7.1 **Applicable Construction Codes:** 48

 7.2 **Path Of Code Compliance:**..... 49

 7.3 **Building Data:** 50

 7.4 **Code Data Summary:** 50

 7.4.1 **International Existing Building Code**..... 50

 7.4.2 **International Building Code** 51

 7.4.3 **International Plumbing Code** 55

ATTACHMENTS

1. Measured Drawings – Bero Architecture PLLC, March 20, 2017
2. Schematic Design Rehabilitation Schemes - Bero Architecture PLLC, May 2017
3. Estimates of Probable Construction Costs – Bero Architecture PLLC, May 2017
4. The Secretary of the Interior’s *Standards for Rehabilitation*; December 2002.
5. Structural Report - Jensen BRV Engineering, PLLC, May 16, 2014, updated April 2017
6. Report of Site Visit – Steve Jordan, March 29, 2017
7. Mechanical / Electrical Report – CW Engineering, May 18, 2017
8. Geneva Downtown Commercial Historic District– National Register of Historic Places, Karen D. Osburn, City of Geneva Historian (edited by Ruth Pierpont, NYS OPRHP), May 26, 2014. Dove Block – contributing building.
9. Storefront Design, National Park Service, Presentation Handout
10. “Preservation Briefs 11. Rehabilitating Historic Storefronts,” H. Ward Jandl,



‘Flour Mill’ – 1935

- National Park Service, 1982.
11. "Preservation Briefs 27. The Maintenance and Repair of Architectural Cast Iron," John G. Waite, AIA, National Park Service, 1991.
 12. "Some Thoughts on Preservation Funding," Bero Architecture PLLC, 2015.
 13. "Some Thoughts on Construction Quality," Bero Architecture PLLC, 2012.
 14. "Some Thoughts on Choosing a Contractor," Bero Architecture PLLC, 2009.
 15. "Some Thoughts on Maintenance of Historic Buildings," Bero Architecture PLLC, 2008.
 16. "Some Thoughts on Stormwater Management," Bero Architecture PLLC, 2009.
 17. "Preservation Briefs 4: Roofing for Historic Buildings," Sarah M. Sweetser, National Park Service, 1978.
 18. "Building Components: Flat Roofs," Common Bond, 12:3, 1996.
 19. "Preservation Briefs 2: Repointing Mortar Joints in Historic Masonry Buildings," Robert C. Mack, FAIA and John P. Speweik, National Park Service, 1998.
 20. "What Moisture Does to Masonry," *Masonry: How to Care for Old and Historic Brick and Stone*, Mark London, National Trust for Historic Preservation, 1988.
 21. "Preservation Briefs 21: Repairing Historic Flat Plaster – Walls and Ceilings," Mary Lee MacDonald, National Park Service, 1989.
 22. "Preservation Briefs : Repair of Historic Wood Windows," John H. Myers, 1981.
 23. Glossary, Bero Architecture PLLC.



'Italy Goes to War' – 1941 Arthur Dove



'Exchange Street' – 1938 Arthur Dove

1 EXECUTIVE SUMMARY

This feasibility study documents our review of the Dove Block building. It is based on our understanding that you would like to rehabilitate the building to be 'Tenant Ready' for a variety of possible commercial uses, with the third floor tentatively being developed as an exhibition space for the work of renowned artist Arthur Dove and for community use.

The Secretary of the Interior's *Standards for Rehabilitation* are used as guidelines for recommendations made in this report.

The findings and recommendations are based on a series of observations at the building by Bero Architecture PLLC staff and their consultants, consideration of programming criteria, review of historic documentation and applicable codes, and consideration of various design options.

This information has been used to produce recommendations for basic interior and exterior rehabilitation strategies including estimated costs and consideration of a variety of interior build-out options for a variety of occupancies with associated cost estimates. We also reviewed the idea of developing several separate owners, creating condominiums within the building.

Our recommendations and estimates are organized in order of priority with the knowledge that rehabilitation may be accomplished in phases.

1.1 Repair and Stabilization

Work intended to stabilize the building from further incremental deterioration and salvage or remove significantly deteriorated finishes in preparation for future improvements. This work will support a variety of future build-out options.

- Structural Repairs identified in the structural engineer's report
- Exterior repairs including replacement of deteriorated stone elements and recommended pointing

- Interior repairs including abatement and deteriorated finishes salvage and demolition
- Mechanical/Electrical/Fire Safety – minimal to protect and make the building safer

Estimated Costs	\$389,600
-----------------	-----------

1.2 Structural Improvements and Basic Finishes

Work intended to rehabilitate the historic building exterior, interior finishes and egress elements, and provide new utility services to the building. . This work will support a variety of future build-out options.

- Structural Repairs primarily to meet current code requirements
- Exterior improvements including window repair or replacement, replacement of Castle Street porch and basement enclosure, and refinishing painted elements
- Interior improvements and finishes at exterior walls, ceilings, floors, and egress elements
- Mechanical/Electrical/Fire Safety – New water service and back-flow preventers, new electrical service, basic sprinkler service, emergency lighting and fire alarm system.

Estimated Costs	\$828,400
-----------------	-----------

These costs are in addition to the Repair and Stabilization work listed above.

1.3 Tenant Build-Out Options

Options are based on a variety of tenant types, elevator types and locations, the extent of interior rehabilitation considered, and the extent of exterior work required on City property. These options are broad examples from which one or two new options may be developed that reflect a consensus of programming choices.

Estimated Cost Range	\$984,000 to \$1,514,100
----------------------	--------------------------

These costs are in addition to the Repair and Stabilization Work, and Structural Improvements and Basic Finishes listed above listed above.

1.4 Condominium Consideration

We do not recommend sub-dividing the building into separate condominiums. There are many complications that come with this approach.

- Owner-occupied properties, including residential condominiums, do not qualify for Historic tax credits.
- Developing code required fire separations required for condominiums are difficult and expensive. Additional floor structure would be required and may involve floor structure replacement.
- Separations will be required at all common spaces.
- Developing secure access to separated condominiums will be complicated, expensive, and may require consideration of additional new enclosed stairs.
- Separating and/or administering utilities will be complicated and expensive.

Rehabilitation estimates do not include costs to develop condominiums.

1.5 Key Decisions

There are certain key decisions that will clarify the rehabilitation program and support or limit future tenant build-out options.

- City Partnership
Many of the rehabilitation Options considered require modifications to the City sidewalk and Castle Street on-street parking to accommodate a proposed accessible entrance. Several Options include additions on City property, either to provide a one story accessible entrance vestibule and elevator lobby or a full three story addition housing a new elevator and elevator lobby which also would require substantial modifications to Castle Street. These approaches require agreement and legal cooperation by the City.
- Elevator Location

Based on our review we believe that the elevator will need to be located in either the south commercial bay with an accessible entrance from Exchange Street or the north commercial bay with an accessible entrance from Castile Street (refer to the City Partnership discussion above).

- **Structural Improvements**
Structural improvements, beyond required structural repairs, are necessary to meet current building code loading requirements. Depending on the rehabilitation approach selected this work may or may not be required to obtain a building permit and certificate of occupancy.
- **Egress Improvements**
The existing stair system can be rehabilitated as is and we may be able to develop tenant plans that will be sufficient to obtain a building permit. This approach will severely limit tenant options.
- **Building Use/Occupancy Flexibility**
In order to maximize future building use options it will be necessary to make the recommended structural improvements, providing a sprinkler system, and making egress improvements that might not be required if a minimal rehabilitation approach is selected.

1.6 Specific Recommendations

- Complete all recommended structural improvements to meet current code requirements.
- Provide a full, NFPA 13 compliant sprinkler system throughout the building.
- Retain the Castle Street entrance with a new, traditional wood porch and new traditional door with sidelite – consider adding a traditional awning. If it is decided to work with the City and to provide an elevator lobby and elevator addition at this location provide a transparent lobby that allows the original arched masonry opening to remain visible.
- Restore the 3rd floor ceiling including the decorative metal gravity vents, painted wood trim, plaster, and stenciling.
- Provide a new, enclosed stair in the SE corner of the building – or – develop an enclosed stair that incorporates the west center stair to Exchange Street.
- Develop any major rehabilitation project as an income producing building so that the available 40% historic tax credits are realized.
- Continue to work with the City to coordinate an appropriate rehabilitation project.



1.7 Historic Tax Credits

Because it is a contributing building in a National Register-listed historic district, the Dove Block qualifies for federal tax credits for rehabilitation of historic commercial buildings. The credit amount is 20% of qualified expenses, which are costs associated with the rehabilitation of the building's architectural and structural features (acquisition, landscaping, new additions, and furnishings are among the costs that do not qualify). If obtaining historic tax credits is desired then consideration of certain interior egress modifications studied will require careful review.



'Sun on the Lake' – 1935 Arthur Dove

1.8 City of Geneva Comprehensive Plan 2016

At the Corner of Exchange and Castle Streets, the Dove Block is an important commercial building that anchors this historic intersection identified in the 2016 Comprehensive Plan as the nexus of Gateway and Residential Corridors in downtown Geneva. With its rich history and strong local support, the Dove Block is an exquisite candidate for the kind of mixed-use rehabilitation described in the report and memorialized in the Traditional Urban Design District (TUDD) local ordinance. The City and the prospective owners should continue to work closely together to help insure the appropriate rehabilitation and subsequent success of this building.

2 ORGANIZATION OF THE REPORT

2.1 Report

This Report consists of the Executive Summary, Report of Site Visit, Rehabilitation Preservation Review, and Preliminary Code Review. Attachments include supplemental consultant reports, Measured Drawings, Conceptual Floor Plan Schemes, and estimates of probable construction costs.

2.2 Report of Site Visit

The Report of Site Visit includes a description of existing conditions, suggestions for rehabilitation and restoration, with photographs to illustrate recommended work items. Supplements to the Report include a phased *Estimate of Probable Construction Costs, Measured Drawings, and Schematic Design Plan Studies*. Finally there are *Attachments* including consultant reports and technical supplements.

3 REPORT OF SITE VISIT

3.1 Purpose

This report of site visit is part of a Feasibility Study for the Rehabilitation of the Dove Block which is being funded, in part, by a Technical Assistance Grant through New York Main Street Program SHARS ID-20160361, REDC CFA #65207. The owner of the project is the Dove Block Restoration Group, Inc. The objective is to document existing conditions, recommend appropriate repairs, and estimate their costs.

3.2 Method

This survey is based on observations made by John Page of Bero Architecture PLLC, during site visits on February 23, March 28, and April 5, 2017. Chuck White, our mechanical and electrical engineering consultant and Steve Jordan, our window and masonry consultant were also at the building on March 28th. Bero was the project architect for the reconstruction of the rear wall and selective interior demolition in 2007. Our structural consultant, Jensen BRV have made detailed observations at the building in 2007, 2014, and have reviewed updated conditions in 2017.

3.3 Limitations

No remaining finishes or trim were removed. One concealed space on the first floor between the side entrance and kitchen was opened for observation. Several other, normally concealed spaces were open due to deterioration and observations made. Exterior observations were made from the ground and the roof. Interior observations were made from the floor. Access to the space above a dropped ceiling in the kitchen through an existing hatch, above the third floor main stair using a ladder, and in the original attic through an existing hatch allowed for limited observations. Photographs were taken to document observations and are included in this report.

3.4 Construction Quality

Building construction varies in quality. The following list is arranged from low standards to high: residential, commercial, institutional, and museum. The lowest level, residential, is also the least expensive, the least durable, and the most susceptible to destruction by natural forces. As preservationists interested in retaining of our cultural memory, we urge owners to consider high quality construction and repairs.

As day-to-day decisions are made regarding how to repair your building, beware of conventional wisdom. Conventional wisdom is that wisdom promulgated by suppliers and contractors who are engaged in conventional construction, most of which is residential. The fundamental premise behind this wisdom and advice is that cost is of utmost importance and durability is secondary. Since the average homeowner is reputed to sell his home every seven years, conventional wisdom may be appropriate for many homeowners. But for an institution planning to own a building for a long period, replacing sound original materials with modern short-lived materials is almost always a bad idea, for example, replacing your existing wood windows with modern vinyl windows. Similarly, the use of temporary materials like aluminum flashing and pressure-treated wood is ultimately more expensive than more durable materials. When planning future improvements you may wish to focus on durability and costs vs. benefits over time, as befits an institutional building. Attachment 4 contains further information on construction quality.

It is important to hire the right contractor for the task at hand. For example, roofers will inevitably use the techniques of their trade even if asked to work on masonry, but roofing cement is not a suitable substitution for mortar. Similarly, a carpenter asked to repair leaded glass will use the caulking he has in his truck rather than lead used by leaded glass specialists. Please refer to Attachment 5 for further discussion on choosing a contractor.

3.5 Cyclical Maintenance

Many owners respond well when faced with undeniable evidence of obvious failing building components and rally to fund large repair and restoration projects. But routine, unglamorous cyclical maintenance is what helps to preserve valuable buildings with the least amount of damage to historic fabric and lowest cost. Another advantage to doing work routinely in small chunks is that it can be budgeted annually and recognized as an ongoing expense. For those reasons it is important to set up an ongoing cyclical maintenance program. The list of work doesn't have to be complicated or long but it is necessary to remind staff of routine chores and administrative activities necessary to preserve the building and minimize maintenance costs. We suggest the list include work for each season, as well as tasks, such as roofing and boiler replacement, which have multi-year cycles. An inspection checklist to be used by the staff should be included for each season. These lists, if used properly, will grow and evolve over time to reflect actual experience with the building and skills of an ever-changing staff.

For repairs larger and more specialized than can be carried out by staff, scaffolding and lift costs may suggest tackling one area at a time on a rotating basis; to maximize efficiency, do all maintenance on a single wall or tower: masonry, gutters, windows, painting, etc. before moving on, perhaps one segment per year. Please refer to Attachment 7 for further discussion and resources on maintaining historic buildings.

4 DESCRIPTION

(excerpted from the 2013 national register nomination and supplemented by Bero Architecture PLLC)

The Dove Block of Geneva, built in 1878. It was designed by architects Warner & Brocket of Rochester for William G. Dove a successful local businessman.

A three story, six bay (three interior commercial bays separated by brick masonry bearing walls from the basement to the third floor framing), Victorian Gothic, brick commercial building. A simple metal cornice wraps the front façade north elevation. A small decorative sheet metal pediment with large fluted corbels displays the building name. A large fluted corbel is at each end of the building. Stepped brick corbelling and cross insets decorate the frieze. Third story windows were modified when apartments were developed and consist of one over one, double-hung sash that replaced the lower sash of the original large double-hung windows. The original, round arched, upper sash with mutins removed and glass replaced, remain in place. The brick arched openings are enhanced with stone keystones and have simple stone sills. Beneath each of the third-story windows is a rectangular, niche in the brick façade. Decorative brick banding spans the building at the window arch and just above the stone sills.

Second story windows are two over two, double-hung segmentally arched with the exception of the two southern windows. The arched openings are enhanced with stone keystones and corner blocks and have simple stone sills. The original cast iron storefront remains in north and center bay and features decorative wood paneled bulkheads, divided - full height display windows, and decorative cast iron columns. The original storefront of the south commercial bay has been replaced with an early twentieth century storefront with a deep recessed opening, simple low bulkheads, and a full width transom. A simple wood sign panel and decorative sheet metal bracketed cornice remains continuous above all storefronts.

The building had a public hall on the third floor and store entrances on Castle Street as well as Exchange Street. For several years, a garment factory occupied the second floor. William's son Arthur, a renown early twentieth century abstract artist utilized the third floor for about two years before it was converted into apartments. This building is significant for its association with important local residents, its intact Victorian commercial building design and almost intact cast iron storefront features.



Figure 1 – Exchange Street Facade



Figure 2 – Castle Street Façade



Figure 3 – Rear Façade

5 OBSERVATIONS



Figure 4 – View from NE



Figure 5 – View from SE



Figure 6 – NE Basement Frame Enclosure



Figure 7 – East Wall, South Vines



Figure 8 – North Basement Window Well



Figure 9 – North Center First Floor Frame Porch

5.1 Site

The Dove Block sits on the corner of a downtown commercial site, the exterior walls representing the entire property. The site slopes downward from front to rear (west to east). The east side, along Exchange Street, has public sidewalks gently sloping from south to north. The north side, along Castle Street, has public sidewalks sloping from west to east. A single masonry window well is located at the west end. A recessed masonry basement entrance with frame enclosure is located at the east end. There is a modern frame porch at the first floor side entrance. Both the frame porch and basement entrance enclosure are in poor condition. The porch should be replaced with a more traditional porch, possibly with a traditional awning canopy. If the basement entrance is to be retained, it should be replaced. The west, rear, wall faces a public alley. A majority of this wall was rebuilt in 2007. The south end of this wall has vines growing on it. This area should be evaluated and a determination made whether or not to retain the vines. If retained, they should be pruned annually to contain their spread.

5.2 Stormwater Management

Normal stormwater is collected on the roof by two roof drains at the east, rear, of the building and conducted through interior storm piping installed in 2007 to the City stormwater system. Excess and overflow stormwater is collected in a galvanized steel half-round gutter along east wall and conducted to grade in a galvanized steel downspout and deposited to grade. The downspout has been damaged at grade which is part of the drive connecting Castle Street and the rear parking area. Ideally the downspout would terminate in a cast iron hub and the stormwater conducted below grade to the municipal system. Further study will be required to determine if this is feasible.



Figure 10 – Damaged Downspout to grade

5.3 Roofing

During the time this building was owned by the City, prior to 2007, the roof was repaired and reroofed with a single ply EPDM membrane roofing system. We do not have information on the level of associated framing and sheathing repair work or the specifics of the membrane system. There do not appear to be any major failures in the system as inspected. The installation has numerous minor flaws that are showing accelerated wear. Flashings at vertical walls and parapets are compatible EPDM membrane that has been extended either over the top of the parapet (west and north wall), or partially up the masonry parapet wall terminated with a metal compression strip (south and east walls). This is an incomplete method of termination on masonry. A qualified roofing contractor should make an inspection and seal the few open joints. When it is time for re-roofing the existing single-ply EPDM system should be removed, roof sheathing inspected and repaired, and a new multiple ply bituminous system installed. Compatible flashings should be terminated with metal counter-flashing set into mortar joints.

Several loose, abandoned items remain on the roof including an old aluminum gutter (south bay), satellite dish and concrete block (center bay). These items should be removed.



Figure 11- North bay looking west – Roof sloping south.



Figure 13 – South bay looking NW – south and center bay sloping east.



Figure 12 – South bay looking SW – abandoned aluminum gutter – compression bar termination.



Figure 14 – Center bay looking east –abandoned satellite dish and vent – membrane wrapped trusses.

The original metal gravity vent in the center bay has had its opening stuffed with loose materials. These materials should be removed and a decision on how to address this original element made. It may be possible to incorporate it into a comprehensive ventilation plan. This will help identify an appropriate rehabilitation. Access to the roof is through a loose, manual wood hatch that is covered with EPDM

membrane. This hatch should be replaced with a larger, commercial grade, metal roof hatch coordinated with access from the interior and a security system that is provided by the new occupant.

The south and east masonry parapet walls have a mortar wash sitting on impregnated copper mesh flashing. The mortar wash is showing signs of stress. Where masonry parapet walls step up the wall flashing has been turned up but is not adhered to the vertical surface or provided with cap flashing. The mortar wash should be replaced in the next five years and a metal counter-flashing installed at all vertical terminations.

The west center gable parapet is constructed of concealed wood framing with painted, pressed steel metal covering at a decorative pediment. This thin sheet metal shows signs of deterioration with several open seams noted. A close inspection of the pediment metal should be made and all open joints sealed.



Figure 15 – Manual hatch from attic – north bay east end.



Figure 17 – Center bay abandoned vent.



Figure 16 – East parapet mortar wash and folded flashing.

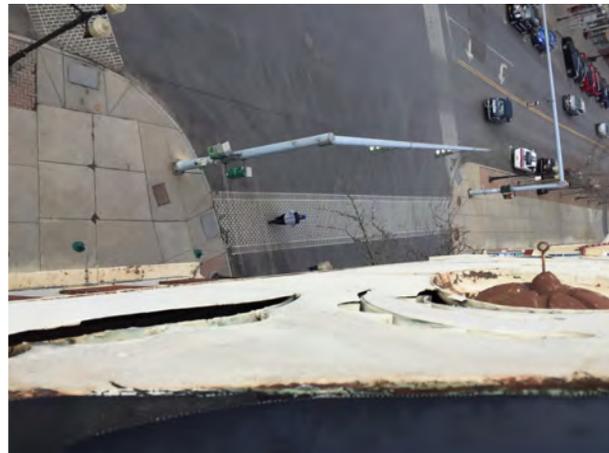


Figure 18 – West parapet sheet metal pediment – open metal seam.

5.4 Masonry

5.4.1 Façade

(refer to Structural report prepared by Jensen BRV and the Report of Site Visit prepared by Steve Jordan for additional and supporting information)

The three exterior walls are constructed of soft red/orange brick with limestone window sills and window arch stone detailing on a stone foundation partially exposed on the north and east facades. In general, the original brick is in good condition. Exceptions occur in a number of locations below and above the second and third floor limestone appointments that have shifted due to deterioration, primarily on the north

façade. As noted, a substantial portion of the rear, east, wall was rebuilt in 2007 with sympathetic brick and limestone. At that time deteriorated brick above the north side entrance was rebuilt.



Figure 19 – Typical detailed brick banding, 2nd floor flat arch brick and stone at window head, and 3rd floor recess



Figure 20 – Typical detailed brick cornice and 3rd floor round arch brick and stone keystone at window head



Figure 21 – East façade with 2007 rebuilt brick wall



Figure 22 – 2007 repointed cracks above side entrance arch

Many of the limestone sills on the second and third floor have levels of failure from tight cracking to large areas of missing material, some replaced by inappropriate patching. Damaged sills should be replaced with new limestone.

The masonry stoop at the diagonal corner of the building is severely deteriorated with large areas of spalling. This stone should be replaced with limestone.

The masonry center bay entrance stoop is delaminating and has many large cracks. This stoop may be repaired with stone patching material or replaced entirely.

A brick planter has been developed below the side entrance porch that does not appear to be original. This should be removed as part of a replacement side entrance porch.



Figure 23 – Cracked 2nd floor stone sill

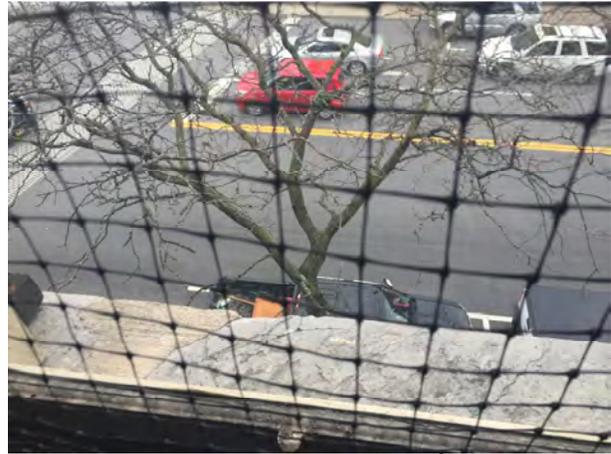


Figure 25 – Patched 3rd floor stone sill



Figure 24 – Brick planter below side entrance porch



Figure 26 – Spalled NW stoop

The small area of exposed stone foundation on the north façade is in generally good condition, but has some deteriorated joints that require repointing (Attachment 20).



Figure 27 - Deteriorated center bay stoop



Figure 28 North façade stone foundation and window well

5.4.2 Interior

(refer to Structural report prepared by Jensen BRV for additional and supporting information)

The building consists of three commercial bays, separated in the basement, on the first and second floors by solid brick masonry bearing walls from the basement to the third floor. Additionally, in the North bay,

east end there are several other bearing walls and in the south bay there are several brick columns providing additional support. Due to the rear wall failure in 2007 new sections of the separation walls have been built of reinforced concrete masonry units tied into the rear wall and the existing interior separation walls. To reinforce the rear wall tie into the exterior north wall and the south common wall, steel strapping was also installed in 2007.

5.4.2.1 Basement

The masonry walls separating the bays are in fairly good condition with some surface spalling near the floor. Spalled brick should be replaced and missing mortar re-pointed. The north bay, east end masonry walls have significant deterioration. These walls should be substantially rebuilt. The south bay columns are in relatively good condition with a few missing brick. Missing brick should be replaced and the mortar re-pointed.

5.4.2.2 First Floor

Visible exterior and interior brick walls are in good condition. Interior cracking and missing mortar is visible at the east end of the north exterior wall. The common wall with the building to the south has open mortar joints, some spalled brick, and a recessed shaft for abandoned conduit and piping. Spalled brick should be replaced, open mortar joints re-pointed, and utility recesses filled in.

Two arched openings between the north and center bay wall and one arched opening between the center and south bay were created to connect the three commercial bays at some point. The arches connecting the commercial bays are in good condition.

5.4.2.3 Second Floor

Exterior and interior brick are mostly concealed by plaster except at the east end. There are open joints and cracking separations at the east end where the brick is exposed and at junctions with the 2007 concrete masonry unit rebuild. Areas of open joints at the east end should be either filled with mortar or have new masonry stitched in.

5.4.2.4 Third Floor

Similar to the second floor at the exterior and common walls. There are no interior masonry walls on this floor.



Figure 29 – NE basement interior brick bearing wall deterioration



Figure 30 – Interior basement brick bearing wall deterioration



Figure 31 – Basement south bay brick columns



Figure 33 – Basement north wall window – deteriorated brick jamb



Figure 32 – 1st floor south common wall with recess for utilities



Figure 34 – 1st floor arched openings between north and center bay



Figure 35 – 1st floor arched opening between center and south bay



Figure 36 – 2nd floor interior brick bearing wall at CMU infill



Figure 37 – NE exterior wall strapping reinforcement added in 2007



Figure 38 – 3rd floor SE exterior wall strapping reinforcement added in 2007

5.5 Metals

5.5.1 Cast Iron Storefront Façade

(Refer to Report of Site Visit prepared by Steve Jordan for additional and supporting information)

The West (front), NW cutaway corner, and the west portion of the north (side), storefront originally consisted of cast iron columns, large fixed glass display windows with short paneled bulkheads, topped off with a large wood sign band and decorative sheet metal cornice. All of these elements are in good condition with small areas of deterioration noticed. The cast iron columns were manufactured by the W.H. Cheney Company in Rochester, NY. All previously painted elements of the storefront should be prepped and painted.

Elements of the original storefront construction and composition remain in the north and center bays. The south bay storefront display bulkheads, and display windows were replaced at some point with another traditional storefront style consisting of flush bulkheads, large glass display windows with a deeply recessed entrance, and a full width transom set above the entrance door, (likely in the 1920's or later). The south commercial bay did not have a separate entrance (refer to figures 49 and 62). You may want to consider an Optional rehabilitation project that restores the original cast iron columns and storefront elements to this commercial bay, with or without a separate entrance.



Figure 39 – Corner storefront at NW corner

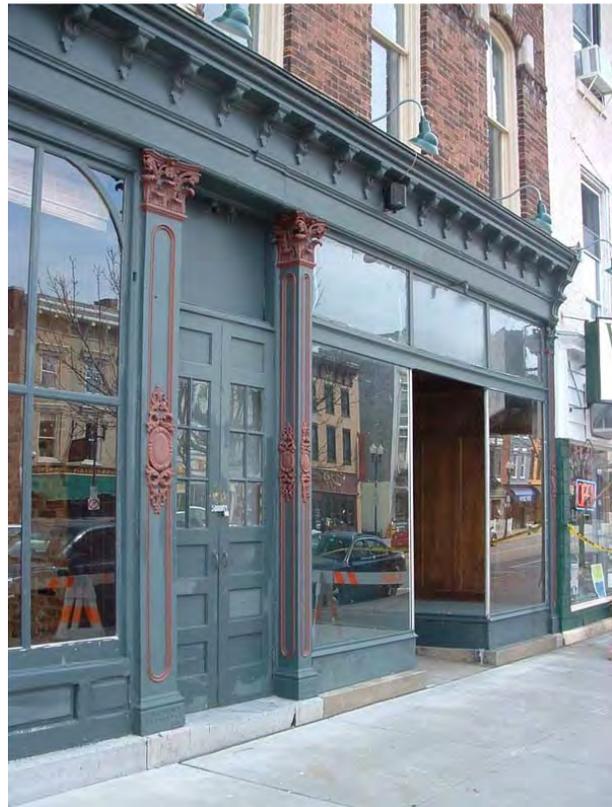


Figure 40 - West storefront with replaced south bay



Figure 41 – West lower facade c. 1895-1900 – display windows not divided - original south bay storefront with no separate entrance.



Figure 42– West lower facade c. 1970 – display windows with transoms added- replaced south bay storefront (with separate entrance)



Figure 43 – West storefront cast iron columns



Figure 44 – West storefront cast iron column detail



Figure 45 – West storefront cast iron column capital



Figure 46 - West storefront cast iron column base

5.5.2 Decorative Sheet Metal

Decorative sheet metal is effectively used as a Victorian design element in this building, first as a separation between the storefront and upper stories and second to crown the building's street facades, and commemorate the original builder. These elements should be prepped and painted.

Decorative, painted sheet metal tops the horizontal sign board with a simple projected cornice with metal dentils and brackets. All of the visible sheet metal elements visible from the street appear in good condition. From the second floor windows we observed a sloping sheet metal cap showing signs of rust. The cap should be lightly prepped for rust control and painted.



Figure 47 – Decorative sheet metal storefront bracket and cornice



Figure 48 – Decorative sheet metal storefront dentils and cornice

Terminating the two street facades is a simple metal cornice. A large decorative sheet metal pediment flanked by large fluted brackets displays the building name. Large fluted brackets are also located at each end of the two street facades and at the cutaway corner. These elements appear to be in good condition with the exception of the pediment where an open horizontal seam was observed (refer to notes about the Roof above). These elements should be prepped and painted.



Figure 49 – North façade decorative metal cornice, brackets and pediment

5.5.3 Fire Escape

The fire escape, seen in early twentieth century photos, appears to be in good condition and well secured to the building.



Figure 50 – West façade fire escape

5.6 Structure

(Refer To Structural Report Prepared By Jensen BRV for additional and Supporting information)

5.7 Carpentry

refer to 10 **Finishes** for detail and figures about interior trim

5.7.1 Exterior Storefront Elements

Wood storefront elements include paneled wood bulkheads at the north and center commercial bays; wood display window and door trim; and the signboard above the storefront. All elements are painted and are in good condition. The bulkheads show signs of deterioration due to their proximity to grade. Refer to Figures 48-53.

5.7.2 Interior Flooring



Figure 51 – Second floor center hall damaged floor and wainscot. Also added floor structure.



Figure 52 – Third floor center damaged floor and ceiling.

5.8 STOREFRONT, DOORS, AND WINDOWS

Refer to 6 METALS for discussion about cast iron and sheet metal storefront elements.

5.8.1 Storefront and Windows

The following photographs show transformations to the storefront, exterior doors and windows on Exchange Street. The original cast iron, full height display window storefront shows in the earliest photograph. By the 1970's the south commercial bay storefront has been replaced with another early twentieth century storefront with larger areas of display windows, full width transoms, and deeply recessed entrance door that supports raised interior display platforms. In the early photograph the south commercial bay does not have an entrance.

All storefront doors, including the center doors to the second floor, are paneled door pairs. By the 1970's the door pair to the north commercial bay has been replaced by a single, full glass, panel door.

Other storefront changes include replacing the half round transom over the pair of doors to the second floor and replacing the large glass display windows with multiple panes separated by vertical and arched painted wood muntins.



Figure 53 – West façade storefront, doors, and windows – current



Figure 54 – West façade c. 1895-1900 – original storefront, doors, and windows



Figure 55 – West façade c. 1970's – storefront, doors, and windows (replaced bottom sash on 3rd floor)

5.8.2 Second and Third Floor Windows

(Refer to Report of Site Visit prepared by Steve Jordan for additional and supporting information)

Bero Architecture PLLC

Original second floor windows are two over two elliptical head double hung sash. Most of the original sash remain. Some original sash have had their muntins removed and multiple panes replaced with single panes. These windows are in good to poor condition. These sash are salvageable and should be repaired and fitted with custom exterior aluminum, double hung storm windows in keeping with the Secretary of the Interiors Standards.

Original third floor windows were four over four, round arch head, double hung sash. When apartments were inserted in the large community space the lower sash were removed and replaced with shorter one over one double hung sash. The top of the new window and the bottom of the original upper sash formed the stop for a lowered apartment ceiling system. Most original upper sash remain with original muntins having been removed and multiple glass panes replaced by single panes. The original upper sash and new lower windows are in poor condition. Original and replacement sash at most openings on the east wall were destroyed prior to the east wall reconstruction project. The original openings were incorporated into the reconstruction project and new, painted wood, double hung windows installed. Except for the east wall windows installed in 2007, all sash should be removed and replacement wood, double hung, 2 over 2 simulated divided lite, arch head windows installed.

Several exterior wood sills on the second and third floors are deteriorated. Many interior stops are missing. Deteriorated sills should be replaced with a rot resistant wood such as American mahogany, white oak, cypress, or Spanish cedar, be prepared, primed with an oil-based primer, and painted.



Figure 56 – 3rd floor deteriorated, non-original lower double-hung inserted sash



Figure 57 – 3rd floor windows

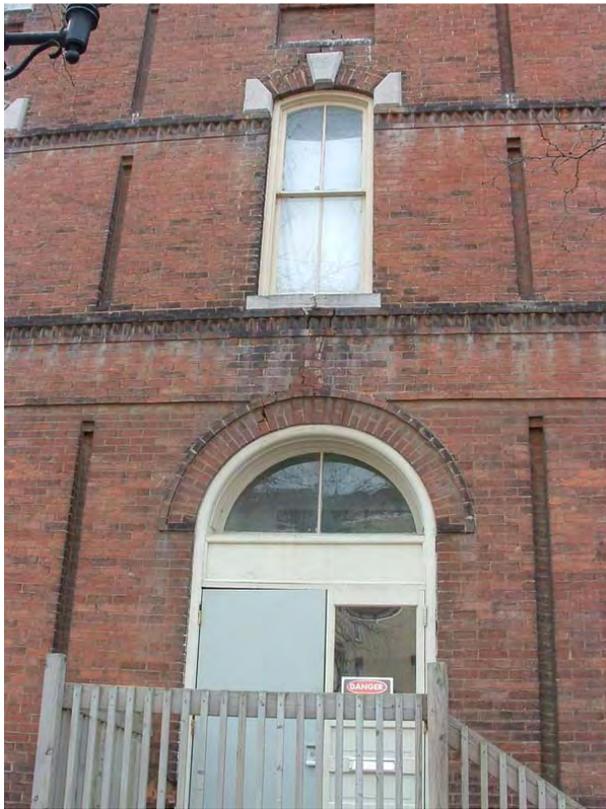


Figure 58 – North Façade First Floor Side Entrance



Figure 59 – Cutaway corner pair of doors

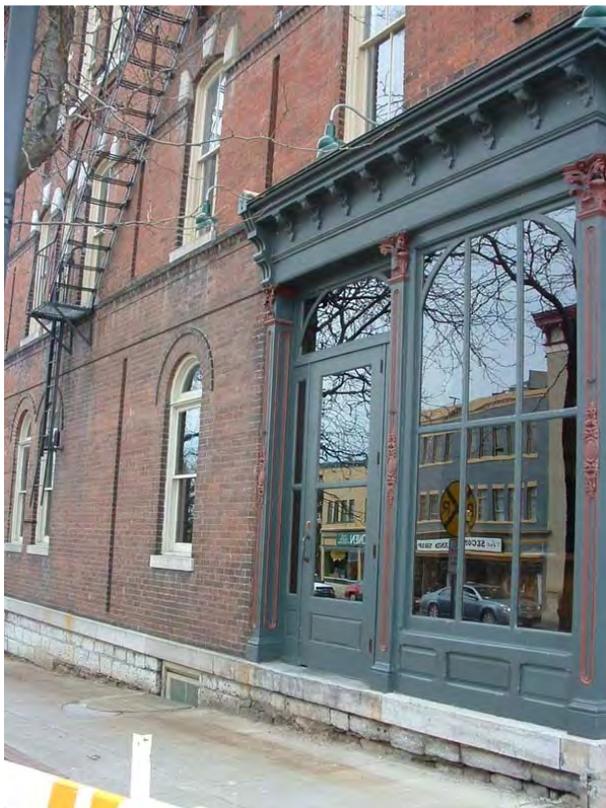


Figure 60 – North Façade Storefront replacement door with transom and sidelites



Figure 61 – West Storefront Center Bay replacement door and transom

5.8.3 Exterior Doors

The north façade, first floor side entrance had a pair of original paneled wood doors below an arched transom. The east door was removed and a larger, modern, flush steel door installed. The remaining west paneled door has been cut down and remains as a fixed sidelite. Neither door is in good condition. Replace doors with single, larger painted wood panel door and one or two sidelites.

The cutaway corner has a pair of paneled wood doors with a full transom. The doors and transom are similar to the original but have likely been replaced when the transom had muntins added. These doors should probably remain fixed in place. They should be prepped and painted.

The north storefront would have had a pair of doors. A new, larger, single door with sidelites and a multi-pane transom has been installed. The west center bay had a pair of doors that have been replaced by a larger single door with a multi-pane transom. These storefront elements are in good condition and have a reasonable compatibility with the original storefront. They should be prepped and painted.



Figure 62 – Replacement Storefront with deep recessed Door and Transom

The south commercial bay storefront did not have a door originally and has been replaced entirely.

5.8.4 Interior Doors

No original interior doors remain on the first or third floors. A few traditional doors remain on the second floor. Doors off of the hallways are wood panel with borrowed lite transoms. They have an obscure half glass upper panel and two lower wood panels. Closet doors are four panel wood. All doors are painted. The traditional doors are in poor condition. These doors, trim, and transoms should be repaired, prepped, and painted if they can be utilized in the new use. Otherwise these elements should be salvaged for reuse if the floor is repurposed, and if this is acceptable to the SHPO.



Figure 63 – Four panel closet door



Figure 64 – Obscure half glass apartment entrance door with 2 lower panels & operable 2 pane transom

5.9 Finishes

There are no finishes in the basement. Along the west end of each floor the finishes have either been removed as part of the 2007 wall reconstruction or are severely deteriorated.



Figure 65 – 1st floor south bay looking NW



Figure 66 – 1st floor south bay looking west

The first floor south commercial bay has had all of the original wall and ceiling finishes removed exposing the brick walls and second floor framing. Wood wall paneling, part of the storefront replacement remains. A fire rated gypsum drywall ceiling system should be installed throughout (coordinate with supplemental structure). The south, common, brick wall should be furred out and finished with gypsum drywall. The stair to the basement, if it is to be retained, should be rehabilitated with a fire rated gypsum drywall system on both sides. The common brick wall to the center commercial bay should be left alone, to be developed when a tenant is identified.



Figure 67 – 1st floor center bay 2nd floor stair from grade

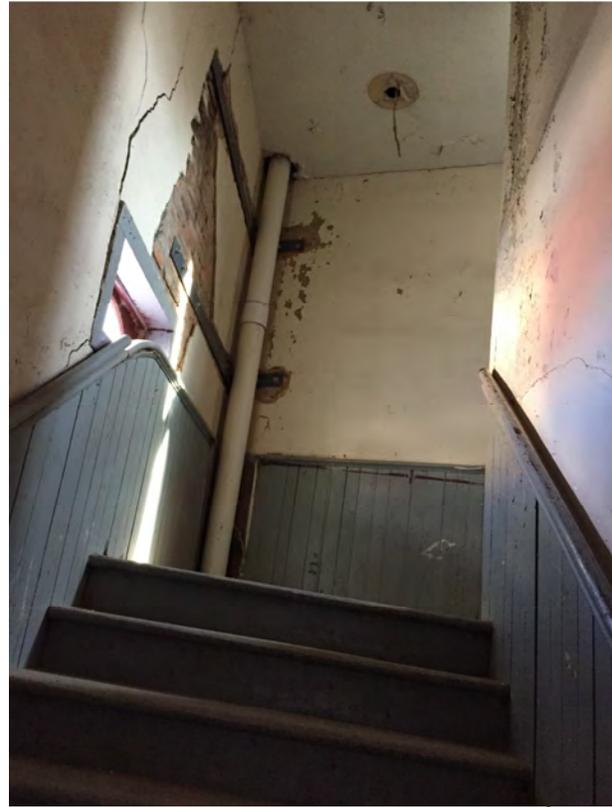


Figure 68 – 1st floor NE stair to 2nd floor

The center stair from Exchange Street to the second floor and the NE stair from the north side entrance to the second and third floors have a wood board wainscot, simple bullnose chair rail, and plaster walls. The wainscot is in poor condition. The plaster is severely deteriorated in both locations. Salvage the wainscot and chair rail, remove deteriorated, fur out and provide gypsum drywall, rehabilitate and reinstall wainscot and chair rail, prep and paint.



Figure 69 – 1st floor center bay east – abandoned kitchen



Figure 70 – 1st floor north bay looking east - bar

The bar area of the first floor has been built out in a traditional style with painted gypsum drywall, stained wood floors, painted-stamped metal ceiling, and stained wood bar and built-in seating elements. These finishes are in good condition. This area should remain intact until the needs of a new tenant are determined.

The kitchen and toilet rooms at the east end of the north and center bays have painted gypsum drywall ceilings and walls and vinyl flooring. These finishes are in poor condition due to leaks and associated damage from the rear wall reconstruction. A vestibule with gypsum drywall walls and ceilings was developed at the north side entrance and the vinyl flooring extended into it. These finishes are in poor condition. Remove the lowered ceiling, all gypsum drywall finishes, all flooring, and all equipment in the kitchen. The vestibule and toilet rooms should be left alone until a tenant for the first floor is identified.



Figure 71 – 2nd floor SW bedroom looking east



Figure 72 – 2nd floor north bay-east looking west



Figure 73 – 2nd floor NE stair to 3rd floor

The second floor occupied rooms originally had plaster walls and ceilings, painted wood trim, and stained strip wood flooring. All finishes are in poor condition with areas of severe deterioration. One rear room has thin sheet wood wall paneling. Some of the floors have vinyl flooring or another layer of wood. Salvage wood trim and remove all plaster to brick or frame walls. Remove all non-original walls completely. Remove all non-original finish flooring. Provide a fire rated gypsum drywall ceiling system throughout (coordinate with supplemental floor structure). Fur out and provide gypsum drywall at exterior masonry walls. Interior, non-bearing frame walls should be left alone until the needs of a future tenant are determined.

The second floor public space originally had plaster upper walls and ceilings; painted wood wainscot, chair rail, and trim; and stained wood flooring. All finishes are in poor condition with areas of severe deterioration. Salvage the wainscot and chair rail, remove deteriorated, fur out and provide gypsum drywall, rehabilitate and reinstall wainscot and chair rail, prep and paint.



Figure 74 – 2nd floor center bay east bedroom looking west



Figure 75 – 2nd floor north bay corridor looking SW



Figure 76 – 2nd floor south bay closet

The third floor was originally one large, high ceiling community space with small enclosures at the NE and SE corners for stairs down. Finishes include stained wood flooring; painted wood trim, wainscoting and bullnose chair rail, painted plaster upper walls and ceiling. The plaster ceilings and walls are severely deteriorated. Much of the wood flooring is either severely deteriorated or warped due to previous leaks.

The ceiling has five decorative metal gravity vents, one in each corner and one in the center, all connected by painted wood ceiling trim. Faint painted stenciling is visible along the edges of the ceiling trim. Carefully document ceiling stenciling including color, size, and spacing. Salvage decorative metal gravity vent grilles and wood ceiling trim. Remove remaining ceiling plaster. Provide fire rated gypsum drywall ceiling system (coordinate with structural reinforcement). Prep and paint salvaged metal gravity vents and wood ceiling trim, and reinstall in original locations.

Salvage remaining perimeter wood wainscot and chair rail. Remove remaining wall plaster. Fur out and provide gypsum drywall, rehabilitate and reinstall wainscot and chair rail, prep and paint.

The SE stair, like the other stairs has a painted wood wainscot and bullnose chair rail with plaster upper ceiling and walls. A guardrail of the wood wainscoting is on the north side of the stair. Salvage chair rail finishes. Remove deteriorated plaster masonry wall plaster. Remove non-bearing wall construction. At the masonry walls, fur out and provide gypsum drywall, rehabilitate and reinstall wainscot and chair rail, prep and paint. New enclosure walls will be developed when a specific layout is identified.

The NE rooms have a dropped ceiling forming a lower attic with a hatch to the attic below the roof. These rooms are severely deteriorated. Salvage chair rail finishes. Remove deteriorated plaster. Remove non-bearing wall and ceiling construction. At the masonry walls, fur out and provide gypsum drywall,

rehabilitate and reinstall wainscot and chair rail, prep and paint. New enclosure walls will be developed when a specific layout is identified. A fixed ladder access to the roof hatch will be required as part of any future rehabilitation.



Figure 77 – 3rd floor south side looking NE



Figure 79 – 3rd floor SE looking west – stair to 2nd floor



Figure 78 – 3rd floor decorative ceiling vent and painted wood trim



Figure 80 – 3rd floor SE looking north

There are several areas of severely deteriorated finish wood flooring and sub-flooring. Areas of deteriorated flooring should be cut back, in rectangular sections, to sound original material. Replacement sub-flooring should be installed in these areas.



Figure 81 – 3rd floor NE stair attic floor



Figure 82 – 3rd floor – damaged floor system



Figure 83 – 3rd floor NE stair attic – stair to attic



Figure 84 – 3rd floor decorative ceiling grille, trim, and stenciling



Figure 85 – 3rd floor decorative ceiling trim and stenciling

5.10 Other

5.10.1 Abatement

Although most of the previously identified asbestos containing materials (ACM's) were removed during the 2007 rehabilitation work, it is likely that small areas of interior flooring and/or non-original second floor wall joint compound may contain ACM's. Exterior window caulk and window glazing may also

contain ACM's and/or PCP's. A new testing report should be obtained to identify remaining ACM's and PCP's so that the cost of abatement can be confirmed and included in your budgeting.

5.11 Mechanical

Refer to Attachment: Mechanical and Electrical Review for more description.

Existing building utilities are insufficient to meet code requirements or expected loading for uses being considered. Existing services will need to be replaced or supplemented.



Figure 86 – Misc added water and sanitary piping



Figure 87 – 1st floor kitchen lowered ceiling hatch – where there is abandoned equipment

5.12 Opinions Of Probable Construction Cost

(Refer to Attachment Estimate of Probable Construction Costs)

5.13 Prevailing Wages

Prevailing wages were used for the estimates in this report. Prevailing wages are determined by the Secretary of Labor and closely approximate union wages. Wage rates are supplied by the NYS Department of Labor and the overhead and profit percentages are from *Means Repair & Remodeling Cost Data*, 36th edition.

Prevailing Wage Rates		Ontario County - 7/1/2016 until 06/30/2017		
Trade	Hourly Wage	O & P *	Billing Rate	Crew Rate
Asbestos Laborer	\$ 45.01	60.70%	\$ 72	.
Carpenter - Building	\$ 49.84	63.90%	\$ 82	.
4th year apprentice	\$ 36.48	63.90%	\$ 60	\$ 141
Electrician	\$ 51.72	54.80%	\$ 80	.
6th year apprentice	\$ 45.23	54.80%	\$ 70	\$ 150
Elevator Constructor	\$ 77.83	54.30%	\$ 120	.
5th year apprentice	\$ 63.48	54.30%	\$ 98	\$ 218
Glazier	\$ 46.00	62.30%	\$ 75	.
Ironworker	\$ 52.69	80.70%	\$ 95	.
Laborer - Building (basic)	\$ 43.01	63.90%	\$ 70	.
Mason - Building	\$ 50.79	62.70%	\$ 83	.
4th year apprentice	\$ 40.58	62.70%	\$ 66	\$ 149
Operating Engineer - Building (crane 2)	\$ 60.77	58.70%	\$ 96	.
Painter	\$ 44.05	60.70%	\$ 71	.
Plumber	\$ 52.81	56.00%	\$ 82	.
5th year apprentice	\$ 36.35	56.00%	\$ 57	\$ 139

Roofer	\$ 46.97	80.70%	\$ 85	.
6th year apprentice	\$ 38.70	80.70%	\$ 70	\$ 155
Sheet Metal worker	\$ 54.79	57.80%	\$ 86	.
10th year apprentice	\$ 42.31	57.80%	\$ 67	\$ 153
Tile Setter	\$ 51.60	57.90%	\$ 81	.

* O & P percentages obtained from: RS Means - Building Construction Cost Data 2015

5.14 Markup

Included in the estimated costs for general construction work is a markup of 1.68. For selected work of a "Prime-Sub," a sub-contractor with a substantial contract for equipment or specialty services, the markup is 1.33. When estimating professional services (engineering, etc.) we recommend a markup of 1.15. See the table below for the process by which we arrived at these markups.

Markups	GC	Prime Sub	
General conditions	10.00%		
NYS special conditions	10.00%	5.00%	
General contractor's overhead	8.00%	8.00%	
General contractor's profit	7.00%	7.00%	
Contingency	20.00%	10.00%	
Professional fees (allowance)	0.00%		15.00%
Compounded and rounded	1.68	1.33	1.15

5.15 Accuracy

Cost estimates should be used with considerable caution since they are based on limited visits and information available in our office: estimating handbooks and past experience. No contractors were consulted. Prices are also highly dependent on the size of the project and the construction environment at the time of bidding. A more elaborate planning process is required to determine the actual costs you can expect; prices included in this report are, at best, guesses based on limited time and budget. Accordingly, Bero Architecture cannot warrant or represent that bids or negotiated prices will not vary from the prices shown.

Estimated Costs between \$1 and \$9,999 are rounded off to the nearest \$100, between \$10,000 and \$99,999 to the nearest \$1000, between \$100,000 and \$999,999 to the nearest \$10,000, etc.

5.16 Estimate Structure

The Estimate for this study is organized as follows:

5.16.1 Basic:

Work generally included in the Report of Site Visit

REPAIR / STABILIZATION: Repairs required and/or recommended for basic stabilization of the building.

STRUCTURAL IMPROVEMENTS / BASIC FINISHES & MEP: Additional structural improvements, demolition, and repairs that are the next step in a basic rehabilitation of the building and the development of a 'white box' with tenant ready spaces. Work which is deferrable but required for long-term stabilization and longevity of building fabric. Improvements in this section are limited to floor and exterior work that will not limit future interior build-out Options.

5.16.2 Build-Out Improvements By Scheme & Occupant Type:

Conceptual estimate for a complete build-out by occupant type and including a variety of optional improvements. In all cases this work includes the addition of an elevator serving all four floors, accessible toilet facilities and other accessibility improvements making the entire building

accessible, mechanical and electrical improvements associated with the selected occupant type, and restoration of historic detail.

Occupant Types that are considered include:

- A-2 Gallery : all Optional Schemes include a 3rd Floor Gallery
- B Business : 1st and/or 2nd floor.
- M Mercantile : 1st and/or 2nd floor.
- A-2 Restaurant : 1st floor only - existing bar retained where a restaurant is considered
- R-2 Apartment : 2nd floor only.



CASTLE STREET, LOOKING WEST, SHOWING MILLER FOUNTAIN AND KIRKWOOD HOTEL, GENEVA, N. Y.

6 REHABILITATION PRESERVATION REVIEW

This is a summary of considerations relevant to the use of State and Federal Historic Tax Credits for the rehabilitation of the Dove Block. In cases when state and federal credits are combined, the total reduction in taxes equals 40% of qualified expenses, amounting to a significant incentive for rehabilitation of historic properties. Advance planning, and understanding of the requirements and process, can help minimize delays and expenses that can arise when credit use is an afterthought.

6.1 The Dove Block: Description

The Dove Block is located at the southeast corner of Castle and Exchange streets, in the heart of Geneva's central business district. The two streets intersect at an angle, creating an obtuse angle at the southeast corner; the Dove Block conforms to the shape of the lot.

The first floor is divided into two storefronts on the Exchange Street (west) side, with cast-iron columns separating most window and door openings. The storefront at right (south) has a deeply recessed wood door with large glass panel and transom, flanked by display windows with narrow aluminum frames. This storefront has a low, plain bulkhead and is spanned by a three-part transom whose divisions align with storefront divisions. Just north of this storefront is a pair of narrow double paneled doors with blind transom; this provides upper-floor access.

The north storefront on the west side, which wraps around the northwest corner of the building, is defined by a series of narrower and wider original square metal columns with low-relief ornament and Corinthian capitals. Three doors provide access to this storefront: one at the cutaway corner (a pair of double doors with large glass lites above a low wood panel, with a transom), one on the north side (a similarly configured single door with glass above a low wood panel, flanked by sidelites, with a transom), and one on the west side (recessed single door, same configuration of glass and panel). Display windows fill the entire opening from the low paneled bulkhead to the storefront entablature, consisting of sheet metal sign board and storefront cornice; display windows are divided into either four or six lites by vertical, horizontal, and arched muntins. The storefront on both west and north sides is topped by a continuous bracketed cornice.

Because the grade slopes downward to the east, the stone foundation is exposed on the north side of the building. Beyond (east of) the storefront, window and door openings are round-arched. The easternmost window opening consists only of an arched fanlight. A double-width door opening, accessed by a set of modern wood stairs, now contains a fixed wood panel door and modern steel door.

Second-floor window openings are segmentally arched and contain a mix of 2/2, 2/1, and 1/1 double-hung wood sash (based on historic photos, 2/2 is the historic configuration). These have keystones and corner blocks, and stone sills. Openings are evenly spaced on the west side, with varied spacing on the north side. Third-floor window openings are round-arched and are considerably taller than second-floor window openings, and have keystones and stone sills. These openings contain a fixed round-arched upper sash above a 1/1 double-hung window (original configuration was 4/4). Below each window is a blind recessed panel; there are also slit-shaped recesses between windows.



Dove Block corner of Exchange and Castle - c.1890-1910

6.2 Brief History

The Dove Block was built in 1878 by William G. Dove, a brickmaker and contractor. It was a typical late nineteenth-century downtown commercial block with space for shops at the first floor, offices at the second floor, and high-ceilinged public hall at the third floor, distinguishable from the exterior by its tall windows.

Sanborn maps and Geneva city directories indicate the building housed a variety of different functions over the years, including a saloon, clothing store, wallpaper and store, and telegraph office. The third floor, shown as the IOOF (International Order of Odd Fellows, a fraternal organization) on the 1884 Sanborn map, was later shown as simply, “Hall.” Uses associated with that space included a National Guard drill hall (mid-1880s), performance venue (1890s), and roller skating rink (1910). From 1937-1938, it was the home and studio of Arthur Dove and Helen Torr Dove (see Significance, below). In the early 1940s the space was converted into apartments.

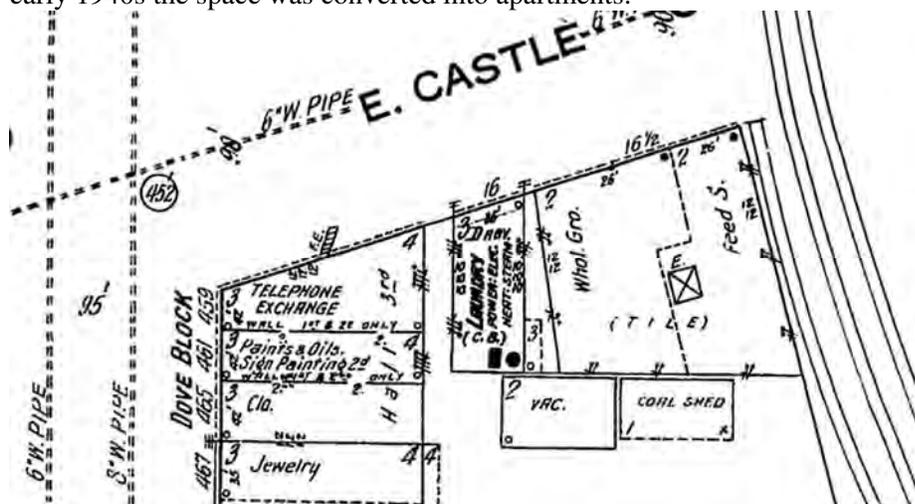


Figure 88 - 1915 Sanborn Map portion

6.3 Significance

The Dove Block is listed in the National Register as a contributing building in the Geneva Downtown Commercial Historic District. According to the nomination, “The building is significant because it retains one of the best examples of a cast iron storefront in the district.” The nomination also indicates the building was, and remains, “one of the focal points in the downtown architectural display,” notable for its highly intact Victorian Gothic architecture. The architectural firm Warner & Brocket designed the building for owner William Dove.

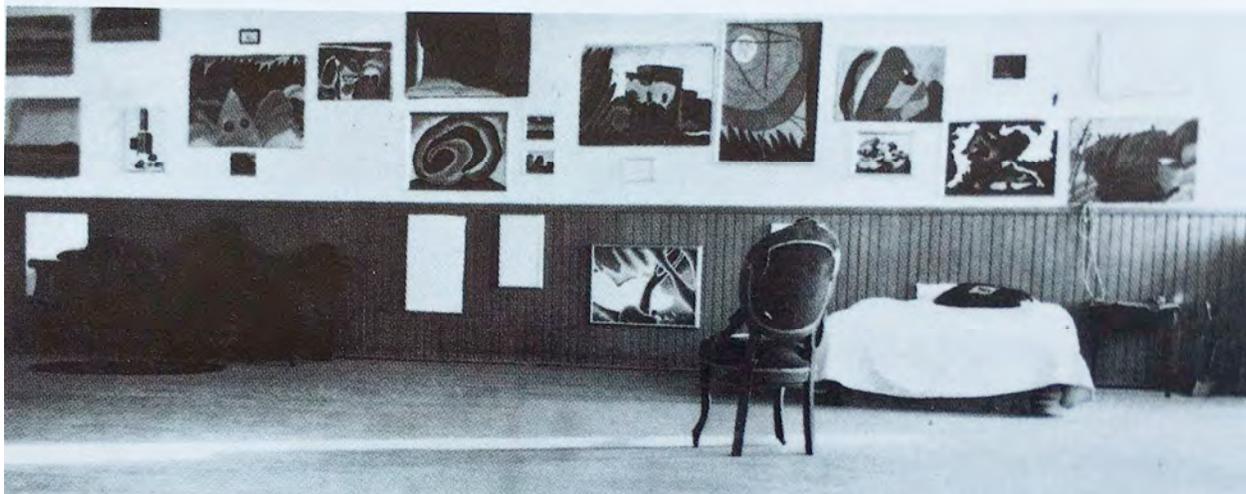
Although not mentioned in the historic district nomination, the building is also significant for its association with artist Arthur Dove (1880-1946). Dove, the son of William Dove, was a prominent painter who spent most of his career in the New York City area. Dove graduated from Cornell University in 1903, and studied in Paris from 1907-1909. He spent most of his career living in New York City and Long Island, where he was part of a small circle of artists centered around photographer Alfred Stieglitz, who regularly exhibited Dove’s works in his influential gallery (others in this group included John Marin and Georgia O’Keeffe).¹

In 1933, after his mother’s death, Arthur Dove moved back to Geneva with his second wife, Helen Torr Dove (known as “Reds”). They initially lived in the family farmhouse, which was in poor condition and had no electricity.² From May 1937 until sometime in 1938, Arthur Dove and his second wife, Helen

¹ “Arthur G. Dove,” *Encyclopedia Britannica*, <https://www.britannica.com/biography/Arthur-G-Dove>.

² Jennifer Settler Parsons, “Absence and Presence: Arthur Dove’s Paintings ‘From the Radio.’” *Archives of American Art*, <https://www.aaa.si.edu/publications/essay-prize/2012-essay-prize-jennifer-settler-parsons>.

Torr Dove, who was also an artist, lived in the third floor of the Dove Block. Their joint diary records the process of moving into the Dove Block on May 7, followed by weeks of unpacking, painting, and settling into the third-floor space that previously housed the roller-skating rink. According to a 1967 article in the *Geneva Times*, they “painted the walls in white, decorated them with paintings, divided it into rooms with curtains, and painted an abundance of pictures.”³ The Doves lived in the building until sometime in 1938, when they moved to Centerport, New York.



3rd Floor c. 1937 – Arthur Dove in Residence – Paintings displayed on south wall

In August 1942, the hall on the third floor was used to provide emergency housing to men working at the Sampson Naval Base, after 122 war workers arrived in Geneva with no place to stay. Ninety-eight men slept in cots in the “Dove Social Hall” the first night the shelter was opened. (*Geneva Daily Times*, August 7 and 8, 1942). 1942 marks the first time “Dove Apartments” is listed in the city directory, suggesting conversion to apartments also occurred that year, after the shelter was no longer needed.

6.4 Period of Significance

The period of significance of the Geneva Downtown Commercial Historic District is 1840-1940. A period of significance specific to this building would begin in 1878 when the building was constructed, and could be considered to end in 1938, when Arthur and Helen Dove moved to Long Island, or 1940, to coincide with the end of the district’s period of significance. Alterations to the building after 1940, include conversion of the third-floor hall to apartments (after 1942), would therefore not be considered part of the significance of the building. The configuration of the southernmost storefront is typical of the early twentieth century and may date to the 1910s-20s. This may therefore be an alteration that occurred during the period of significance and is considered part of the historic development of the building. As such, an alteration to reverse this to its original appearance may be considered contrary to the Secretary of the Interior’s Standards, which state that “changes that have acquired historic significance in their own right shall be retained and preserved.”

6.5 Federal and State Tax Credits for Rehabilitation

Because it is a contributing building in a National Register-listed historic district, the Dove Block qualifies for federal tax credits for rehabilitation of historic commercial buildings. The credit amount is 20% of qualified expenses, which are costs associated with the rehabilitation of the building’s architectural and structural features (acquisition, landscaping, new additions, and furnishings are among the costs that do not qualify).

Criteria for qualifying for the federal rehabilitation tax credit:

- The building must be listed in the National Register, either individually or as a contributing building in a district. The Dove Block is a contributing building in the Geneva Downtown Commercial Historic District.

³ “Artwork of Genevan Arthur G. Dove On Display Here,” *Geneva Times*, 14 October 1967.

- The project must be used after rehabilitation for an income-producing purpose, such as rental apartments, hotel, or offices. Owner-occupied properties, including residential condominiums, do not qualify. Properties owned by nonprofit entities can qualify through partnership with a for-profit entity with an ownership stake in the property.
- The project cost must exceed the adjusted basis, which is essentially the value of the building (purchase price of the property, minus cost of the land at the time of purchase, minus depreciation, plus the cost of any improvements made since purchase).
- The project must be consistent with the Secretary of the Interior's Standards for Rehabilitation; both the State Historic Preservation Office (SHPO) and National Park Service (NPS) must review and approve the project before work begins to ensure the work will meet the standards.
- After the project is complete, the owner who claimed the credit must retain ownership for at least five years, during which time any exterior or interior alterations must be reviewed and approved by SHPO and the NPS.

The tax credit application is in three parts: Part 1 documents that the building is a contributing building in a district and therefore qualifies for the credits; Part 2 describes the current condition of the building and proposed work, in detail; Part 3 consists of photographs taken after the project is complete to verify work was done as approved. Part 1 can be submitted before or with Part 2; Part 2 is submitted when designs are substantially complete; Part 3 is submitted after rehabilitation work is complete. Each application is reviewed first by SHPO, then by the NPS, with each agency striving to complete its review within 30 days. Work should not begin until the Part 2 has been approved by the National Park Service.

In addition, the Dove Block is in a census tract that qualifies for state commercial rehabilitation tax credits. The two credits dovetail each other; projects in qualifying census tracts that receive the federal credit will also receive the state credit. No additional paperwork is required. The state credit amount, like the federal credit, is 20% of qualified rehabilitation costs.

SHPO and the NPS both charge fees for reviewing tax credit applications. These are based on the size of the project. For a \$2 million project, for example, the SHPO fee is \$2,500 (10% to be submitted with Part 2, the rest with Part 3), and the NPS fee is \$3,845 (half billed upon NPS receipt of Part 2, the rest upon receipt of Part 3). For full fee schedules, see <https://parks.ny.gov/shpo/tax-credit-programs/> and <https://www.nps.gov/tps/tax-incentives/app-process/fees.htm>.

Please note that there are additional requirements and regulations not addressed in this summary, which are particularly relevant if there are nonprofit entities involved in the project. We are qualified to assist you with the architectural aspects of the project and to act as your liaison to SHPO and the NPS; your attorney and/or accountant should assist with aspects of the project related to financing and the IRS.

Please note also that the status of tax credits in future federal budgets is uncertain.



'The Brothers' – 1941 Arthur Dove



6.6 Distinguishing Features

This review is based on our very preliminary research and observations at the building. Features identified are original features or features that are distinguished from having likely been installed during the Period of Significance. Rehabilitation projects should make every effort to retain and incorporate distinguishing features in proposed modifications.

* Note, unless otherwise identified, all features listed below are assumed to be original.

6.7 Building Exterior

6.7.1 West Elevation (Exchange Street)

- North and Center Commercial Bays
 - Cast iron columns
 - Wood paneled bulkheads
 - Full height display window openings
 - Note: Original full opening glass panels have been replaced by multiple panes separated by vertical and arched wood muntins
- All Commercial Bays
 - Cut stone watertable / step at sidewalk.
 - Continuous wood signboard
 - Continuous decorative sheet metal cornice, decorative dentils, and brackets
 - Second Floor arch head masonry window openings with limestone keystone, corner blocks, and sills with rectangular recesses below each masonry opening.
 - Second Floor 2/2 arch head double hung windows.
 - Third Floor round arch head masonry window openings with limestone keystones and sills.
 - Third floor, 4 inch wide vertical brick recess centered between each window
 - Decorative brick banding at second and third floor window arch spring line and just above third floor stone sill.
 - Highly detailed brick corbeling frieze below sheet metal cornice and between sheet metal large corbels.

- Simple decorative sheet metal cornice interrupted by a large decorative sheet metal pediment with the building name.
- Large, decorative, fluted sheet metal corbels on either side of the pediment and at each end of the building
- Cutaway Corner between the West and North Facade

6.7.2 North Elevation (Castle Street)

- West End Storefront
 - Cast iron columns
 - Wood paneled bulkheads
 - Full height display windows openings
 - Note: Original full opening glass panels have been replaced by multiple panes separated by vertical and arched wood muntins
 - Continuous wood signboard
 - Continuous decorative sheet metal cornice, decorative dentils, and corbels.
- Entire Elevation
 - Exposed brick - first through third floors.
 - Cut stone watertable with dressed stone blocks below at basement wall.
 - Second Floor segmentally arched head masonry window openings with limestone keystone, corner blocks, and sills with rectangular recesses below each masonry opening.
 - Second Floor 2/2 segmentally arched head double hung windows.
 - Third Floor round arch head masonry window openings with limestone keystones and sills.
 - First, second, and third floor, 4 inch wide vertical brick recess centered between each window.
 - Decorative brick banding at second and third floor window arch spring line and just above third floor stone sill.
 - Highly detailed brick corbeling frieze below sheet metal cornice and between sheet metal large corbels.
 - Simple decorative sheet metal.
 - Large, decorative, fluted sheet metal at each end of the building.
- Side Center Entrance to First Floor.
 - Wide masonry door opening with round arch and decorative head brick soldier.
 - Original wood trim and two panel glass transom.
- Round arch transom window with decorative head brick soldier at east end.
- Rear Entrance to Basement
 - Stone foundation.
 - Frame enclosure with wood clapboard siding.

6.7.3 East Elevation (Rear Parking Area)

- Original large rectangular masonry window openings in remaining original brick walls at north and south ends.
 - Note: Center 75%+/- of this wall was reconstructed in 2007 following a catastrophic failure – original window openings were reconstructed.

6.8 Building Interior

6.8.1 Basement

- Stone rubble exterior walls

6.8.2 First Floor

- Three commercial bays separated by masonry bearing walls.
 - There are two arched openings between the north and center commercial bay, and one between the center and south commercial bay.
- High ceilings.
- North center entrance and NE stair to the second and third floor.
 - The wood wainscot and simple bullnose chair rail are consistent with the same elements in the public spaces of the second floor and the public space of the third floor.
- West center entrance stair to the second floor.
 - The wood wainscot and simple bullnose chair rail that continue in the public spaces of the second floor.
- North windows wood trim.

6.8.3 Second Floor

- High ceilings.
- Plaster upper walls and ceilings.
- Wood flooring.
- Wood wainscot and simple bullnose chair rail in the public spaces.
- NE Stair to the third floor.
 - The wood wainscot and simple bullnose chair rail are consistent with the same elements in stair to the first floor and the public space of the third floor.
 - Note: There is evidence that the route of this stair may have originally terminated at the east wall heading south rather than on the north wall heading west.
- Window trim.
- Door and transom wood trim.
- Paneled wood doors.
 - Four panel closet doors
 - Obscure half glass and two lower panel apartment entrance doors.
 - Note: Only a few panel doors remain – in poor condition.

6.8.4 Third Floor

- High ceiling, large open community space.
- Decorative gravity ventilation grilles, connecting ceiling trim, and stenciling.
- Wood wainscot and simple bullnose chair rail in the community space.
- Window trim.
- SE Stair wood wainscot guard rail.

7 PRELIMINARY BUILDING CODE REVIEW

7.1 Applicable Construction Codes:

2015 International Building Code
 2015 International Existing Building Code
 2015 International Fire Code
 2015 International Plumbing Code
 2015 International Property Maintenance Code

New York State 2016 Uniform Code Supplement
 Accessible and Usable Building and Facilities, ICC A117.1-
 2009 Edition



Arthur Dove with dog c. 1907 - Paris



'Centerpoint 2' – 1941 - Arthur Dove

7.2 Path Of Code Compliance:

As an existing building the path of code compliance is as follows:

2015 International Existing Building Code (IEC)

301.1.2 Work Area Compliance Method (Applicable Chapters)

Chapter 5 Classification of Work

502 Repairs (Chapter 6)

503 Alteration - Level 1 (Chapter 7)

504 Alteration - Level 2 (Chapter 8)

505 Alteration - Level 3 (Chapter 9)

Level 3 alterations apply where the work area exceeds 50% of building area.

Applicability will be determined when a specific scope of work has been identified.

506 Change of Occupancy (Chapter 10)

507 Additions (Chapter 11)

508 Historic Buildings (Chapter 12)

New construction is required to comply with will comply with requirements of the International Building Code (IBC) except as specifically modified by the IEBC.

Definition:

Work area: "That portion or portions of a building consisting of all reconfigured spaces as indicated in the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code."

Example: the 3rd Floor of Schemes 2b and 2c have a similar layout that reconfigures the east end of the floor – the area of ‘reconfiguration is 920 SF or 20% of 3,900 total net area.

7.3 Building Data:

Building : Dove Block
459-465 Exchange Street
Geneva, NY 14456

Description: Three-story masonry building with a full basement.
Year Built: 1878

Building Area:	Gross	Interior Gross (at interior of exterior walls)
Basement:	4,180 sf	3,750 sf
1st Floor:	4,180 sf	3,880 sf
2nd Floor:	4,180 sf	3,900 sf
3rd Floor:	4,180 sf	3,900 sf
TOTAL 1 st -3 rd	12,540 sf	11,680 sf
TOTAL B+1 st -3 rd	16,720 sf	15,430 sf

Building Height: 46.5' (average above grade)

7.4 Code Data Summary:

Following is a selective, general review of applicable building codes that will be used to develop specific criteria when a specific program for future occupancy is identified.

7.4.1 International Existing Building Code

This code provides certain levels of relief from the IBC acknowledging that the building was built under previous requirements and based on the extent of rehabilitation work proposed. Some possible items of relief include:

702.4 Relief from residential window controls where existing windows are retained.

803.2 Relief from some enclosure requirements for vertical openings between floors particularly when sprinklers are provided.

804.3 Relief from the requirement for a standpipe for building height from 30' to 50'.

805.6 Possible added length of a dead end corridor if fire alarm and/or sprinkler system is provided.

805.9 Handrails may be provided on one side of existing stairs.

1012 Change of Occupancy

Review of Hazard Categories – some relief is provided when changing occupancy within the same occupancy hazard classification or to a lower classification.

Table 1012.4 – Means of Egress Hazard Categories

Occupancy A, M, R	Haz Level 3
Occupancy B	Haz Level 4

Table 1012.5 – Heights and Areas Hazard Categories

Occupancy A, R	Haz Level 2
Occupancy M	Haz Level 3
Occupancy B	Haz Level 4
Table 1012.6 – Exposure of Exterior Walls Hazard Categories	
Occupancy A, B, M, R	Haz Level 3



'Two Forms ' – 1931 Arthur Dove

7.4.2 International Building Code

Building was constructed and subsequent alterations made in compliance with codes in existence at that time.

Occupancy Type (Chapter 3):

Most Recent (the building has been vacant since before 2007):

- First Floor: A-2 Restaurant
- Second Floor: B Business
- Third Floor: R-2 : Residential (Apartments)

Occupancies identified for consideration:

First Floor:	M Mercantile (Retail) A-2 Assembly (Restaurant/Tavern)
Second Floor:	M Mercantile (Retail) B Business R-2 : Residential (Apartments)
Third Floor:	A-3 : Assembly (Gallery/Museum)

Construction Type (Table 601): Type III-B

Type III has noncombustible exterior walls (masonry). Type B allows interior construction without a fire rating except as required in other sections of the Code.

Allowable Building Height above grade plane (Table 504.3 – based on Construction Type):

Occupancy A, B, M	
Sprinklers	75'
No Sprinklers	55'
Occupancy R	
Sprinklers	75'
No Sprinklers	60'

Allowable Number of Stories above grade plane (Table 504.4 – based on Construction Type)

Occupancy A, M	
Sprinklers	3
No Sprinklers	2
Occupancy B	
Sprinklers	4
No Sprinklers	3
Occupancy R	
Sprinklers	5
No Sprinklers	4

Allowable Area Factor (Table 506.2 – basic area per floor based on Construction Type):)

Occupancy Type		Frontage Increase	Total + increase
Occupancy A			
Sprinklers	28,500 sf	4,560 sf	33,060 sf
No Sprinklers	9,500 sf	4,560 sf	14,060 sf
Occupancy B			
Sprinklers	57,000 sf	9,120 sf	66,120 sf
No Sprinklers	19,000 sf	9,120 sf	21,120 sf
Occupancy M			
Sprinklers	37,500 sf	6,000 sf	43,500 sf
No Sprinklers	12,500 sf	6,000 sf	18,500 sf
Occupancy R			
Sprinklers	48,000 sf	7,680 sf	55,680 sf
No Sprinklers	16,000 sf	7,680 sf	23,680 sf

Note: Occupancy type A is controlling

Frontage Increase – Mixed Occupancy, Multistory building (506.3)

Calculated factor: 0.48 (139.17/189.92 – 0.25)

Required Separation between Occupancies (Table 508.4)

A – B, A – M, A – R, B – R, M – R	
Sprinklers	1 hour
No sprinklers	2 hour

510.2 Horizontal Building Separation Allowance (may be relevant to Condominium development)

Allowed if:

3 Hour horizontal separation provided

Floor below is Type I construction

Shafts shall have 2 hour rated construction

Automatic sprinklers provided

Occupancy Type A above shall be limited to 300 occupants

Section 706 Fire Walls

Fire walls can be used to create separate buildings

3 hour rated construction required

Section 713 Shaft Enclosures

2 hour construction where connecting 4 or more floors

1 hour construction where connecting 3 or less floors

718.4 Draftstopping in Attics

Required at max 3,000 sf

Fire barriers: Exit access interior stairways = 1 hr

Exit passageway = 1 hr

Shaft enclosures = 1 hr

Fire partitions: Corridor walls = 1/2 hr

Walls separating sleeping units = 1/2 hr

Horizontal assemblies = 1/2 hr

Opening protectives:

Exit access stairways - 1 hour

Corridor walls - 20 minutes

Section 903 Automatic Sprinkler Systems

Occupancy A-2 and A-3

NFPA 13

Floors other than grade

Occupant load > 100 or 300 respectively

Occupancy R-2

NFPA 13R required

Occupancy B – not required

Occupancy M – not required based on min. area

Required throughout in non-separated mixed use building



'Fire in the SauerKraut Factory' – 1936 Arthur Dove

Section 905 Standpipe Systems

May be required due to building height

Will be required if the building is not sprinklered and has an Assembly Occupancy

Section 906 Fire Extinguishers
Required throughout

Section 907 Fire Alarm and Detection
NFPA 72
Occupancy A, B, M – required
Occupancy R – smoke detection required

Section 915 Carbon Monoxide Detection
Occupancy R - required

Section 1004 Occupant Load (Table 1004.1.2)
Assembly Occupancy

Gallery/Museum	1/30 net sf
Concentrated (not fixed seating)	1/7 net sf
Standing space	1/5 net sf
Unconcentrated (tables and chairs)	1/15 net sf
Business Occupancy	1/100 gross sf
Commercial Kitchen	1/200 gross sf
Mercantile Occupancy	1/60 gross sf
Storage	1/300 gross sf
Residential Occupancy	1/200 gross sf

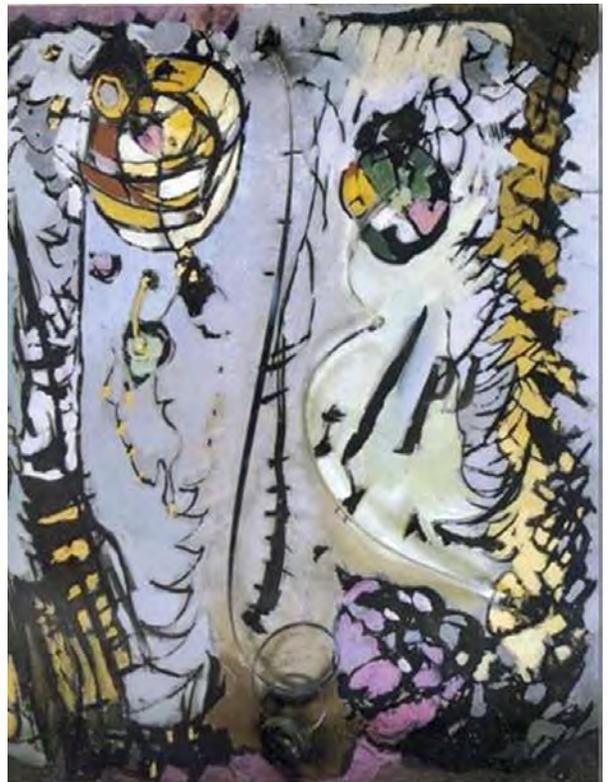
Section 1007 Exit Door Configuration
Locate separate from one another
Sprinklers min. 1/3 building diagonal
No Sprinklers min 1/2 building diagonal

Section 1009 Accessible Means of Egress
Area of Refuge Required
Sprinklers Not required
No Sprinklers Required

Section 1011 Stairways
Min. width – 44 inches (36” if < 50 occupants served)
Headroom min. 80 inches
Treads min. 11 inches
Risers max. 7 inches
Handrails required both sides – 34”-38” high

Section 1015 Guards
Guardrails required where landing is > 30” above adjacent – 36”-42” high
+ requirements for max. openings
1015.8 Windows
R-2 Occupancy – Opening prevention controls required

Section 1017 Exit Access Travel Distance (Table 1017.2)
Path of travel from most remote location on a floor to an enclosed exit
Occupancy A, M, R



'Rhapsody in Blue-tribute to George Gershwin'
– 1927 Arthur Dove

Sprinklers	250 feet
No Sprinklers	200 feet
Occupancy B	
Sprinklers	300 feet
No Sprinklers	200 feet

Section 1020 Corridors

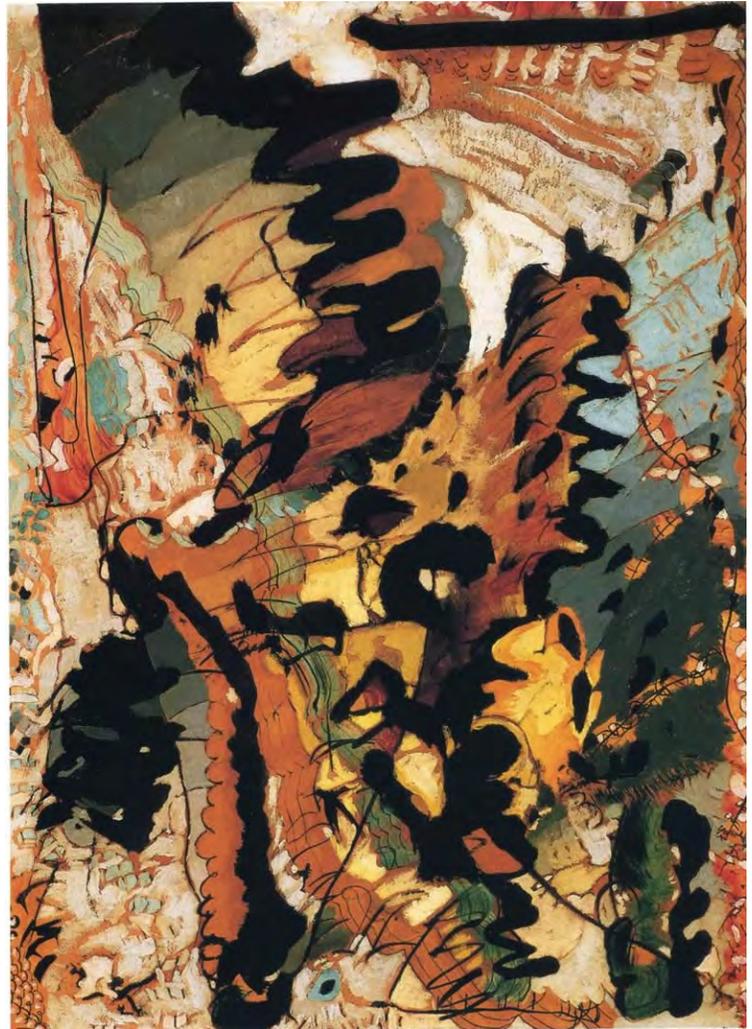
Corridor rating (1020.1)	
Occupancy A, B, M	
Sprinklers	no rating
No Sprinklers	1 hour
Occupancy R	
Sprinklers	1/2 hour
No Sprinklers	not permitted
Corridor Width Minimum (1020.2)	
<50 occupants	36"
>50 occupants	44"
Dead Ends maximum distance allowed (1020.4)	
Sprinklers	50 feet
No Sprinklers	20 feet

Section 1029 Assembly

1029.2 Assembly Main Exit
 Buildings with occupant load > 300
 require main exit capacity of 50%

7.4.3 International Plumbing Code

Table 401.1 Minimum Required Number of Required Plumbing Fixtures (per occupant load)



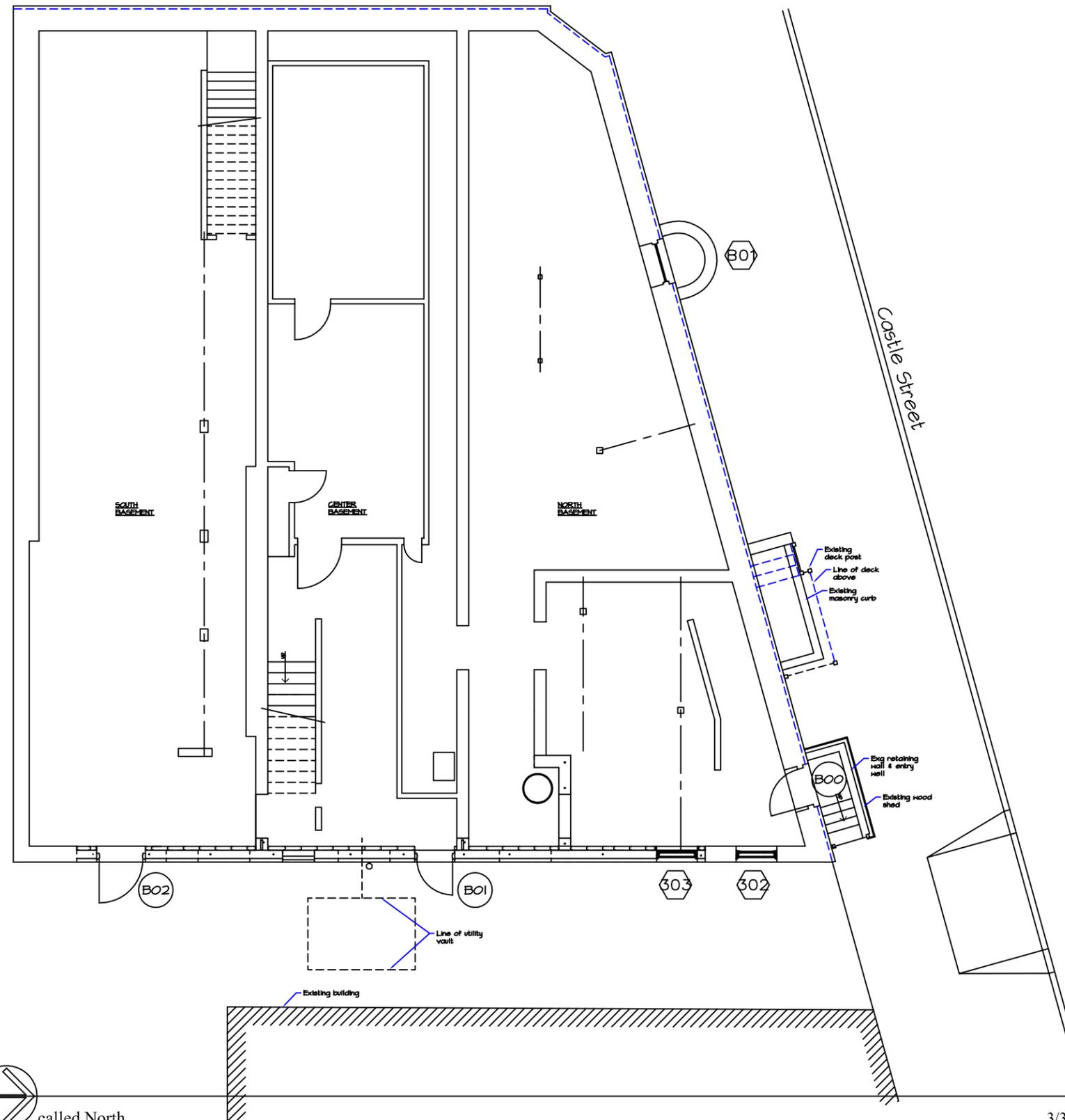
'Orange Grove in California-tribute to Irving Berlin'
 - 1927 Arthur Dove

Occupancy	Water Closet		Lavatories		Drinking Fountain	Service Sink
	male	female	male	female		
A-2 Restaurant	1/75	1/75	1/200		1/500	1
A-3 Gallery/Museum	1/125	1/65	1/200		1/500	1
B Business	1/25< 50 occupants 1/50> 50 occupants		1/40< 80 occupants 1/80> 80 occupants		1/100	1
M Mercantile	1/500		1/750		1/100	1
R Residential	1/dwelling unit		1/dwelling unit		-	1

ATTACHMENTS

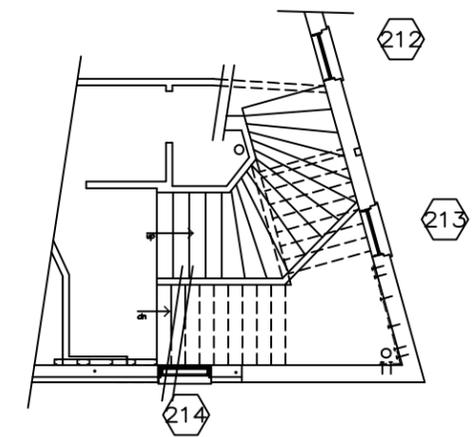
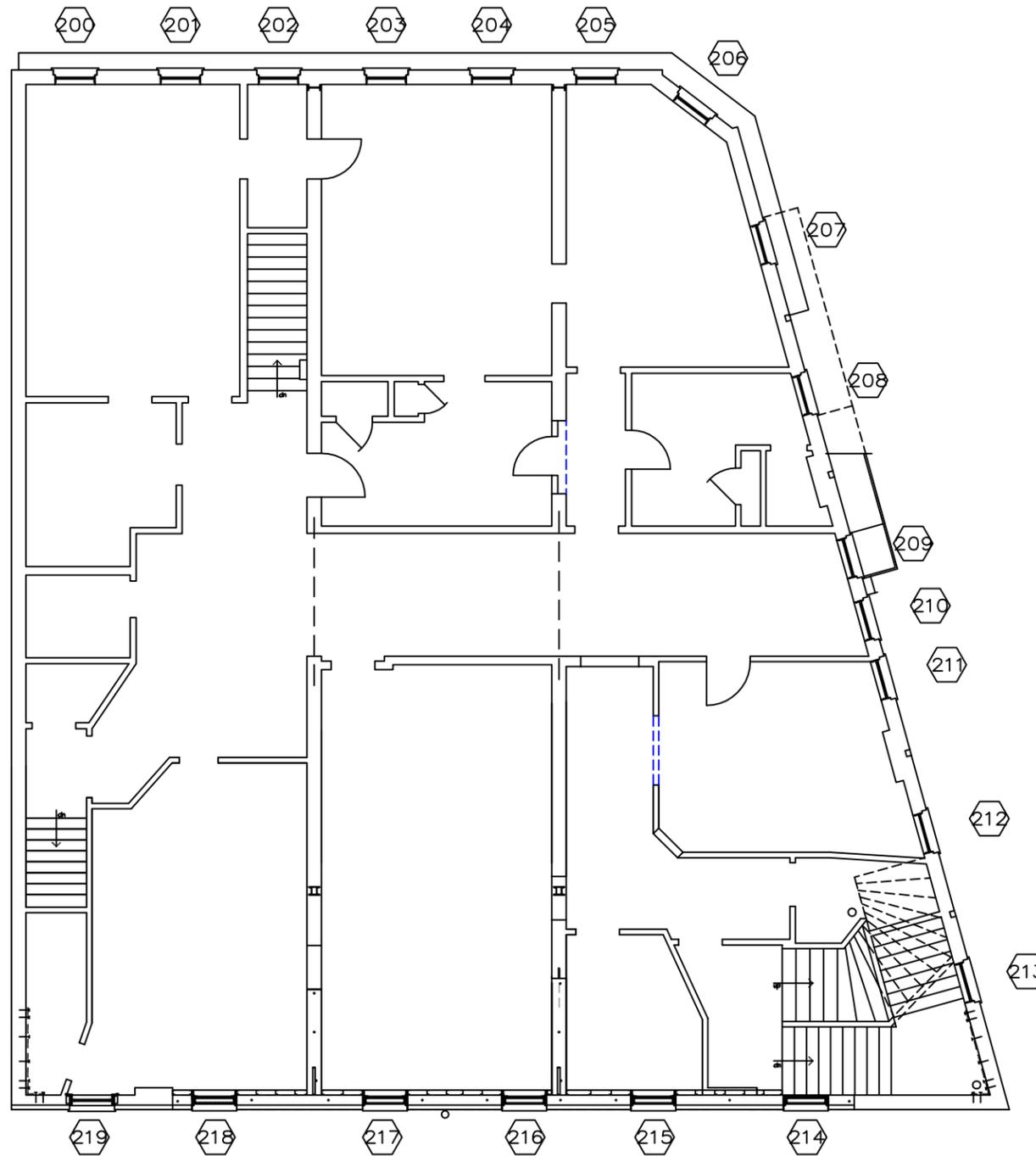


'Square on the Pond' – 1942 - Arthur Dove



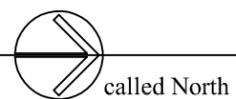
Basement Plan

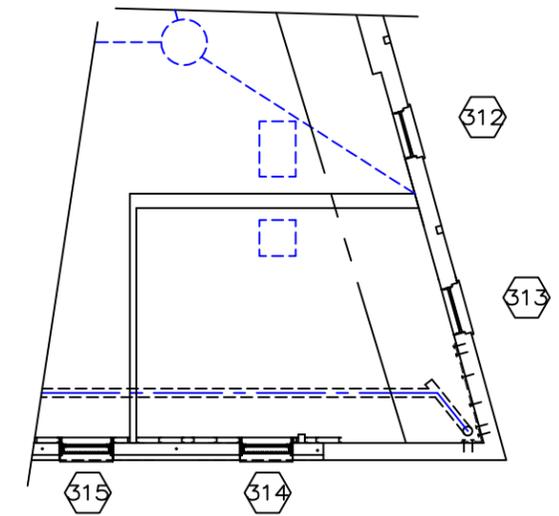
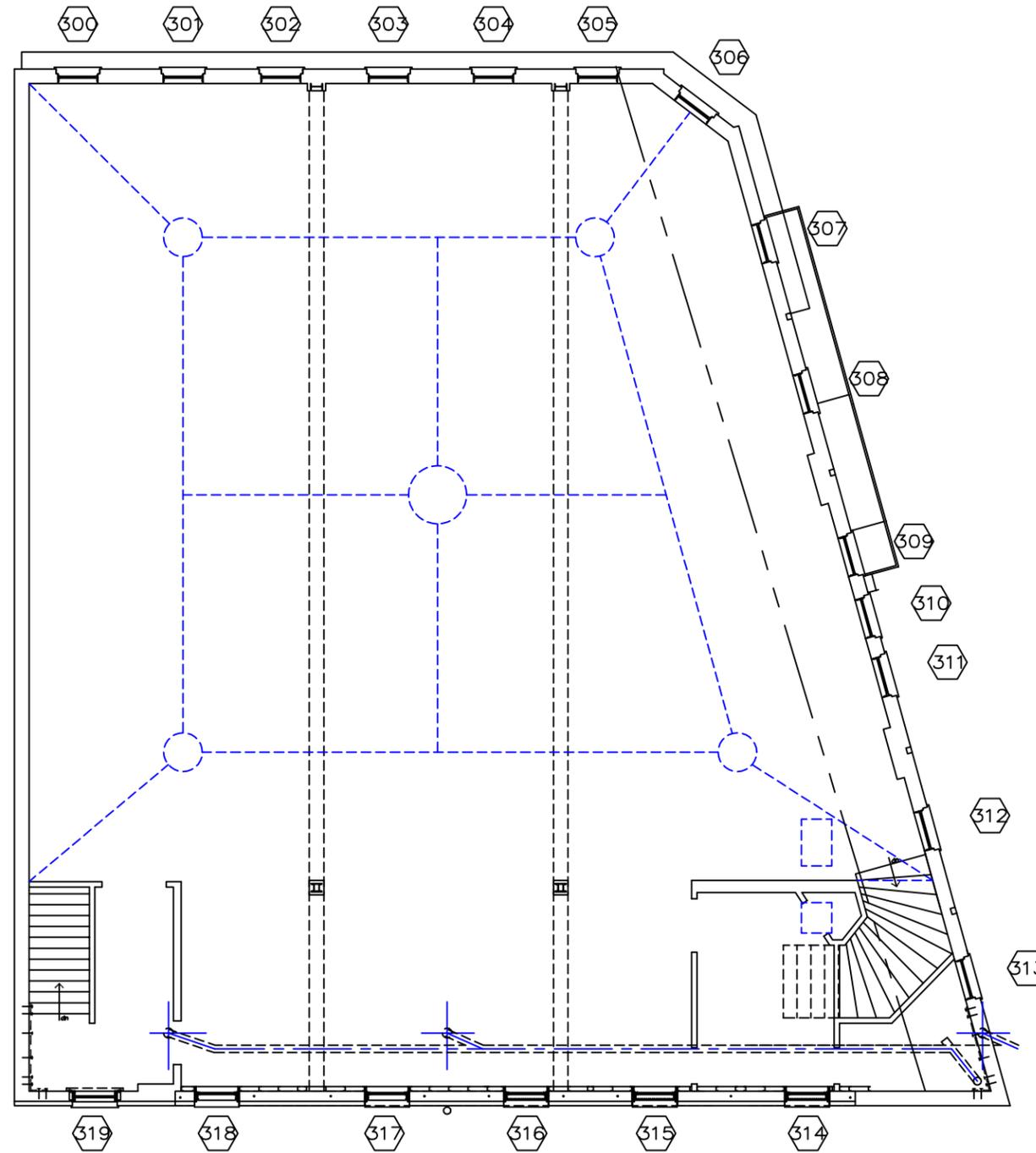




INTERSTITIAL SPACE
between 2nd & 3rd floor stairs

2nd Floor Plan





INTERSTITIAL SPACE
 between attic & 3rd floor stairs

3rd Floor Plan



MD 13



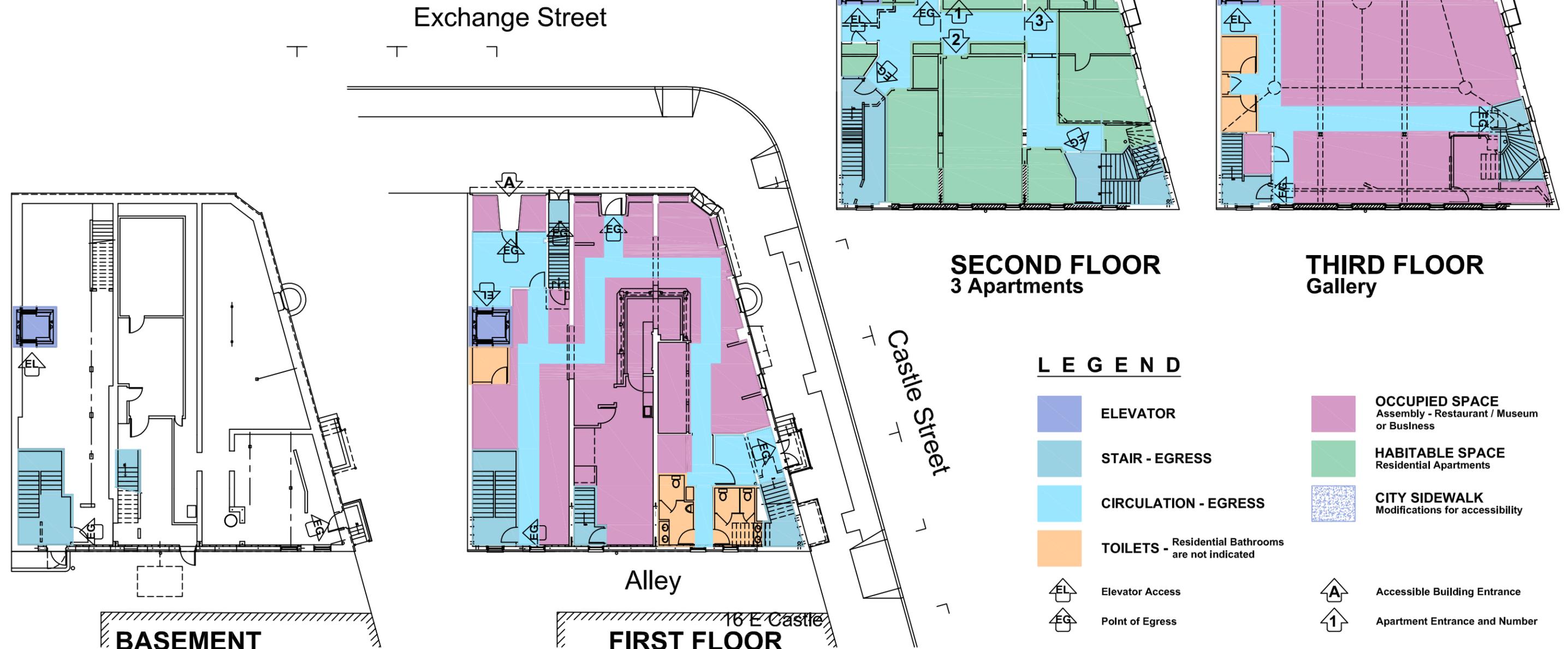
SCHEME 1a : REVIEW

PROS

- * Main floor access
- * No exterior modification required
- * Improved egress - SE stair
- * 3rd Floor open to rear, east, windows

CONS

- * Loss of 1st Floor Commercial space
- * Elevator located in 3rd Floor open community spa
- * Basement egress to Alley at SE may not be feasible
- *



SCHEME 1a : South Bay Front/Back Elevator

SD 1a



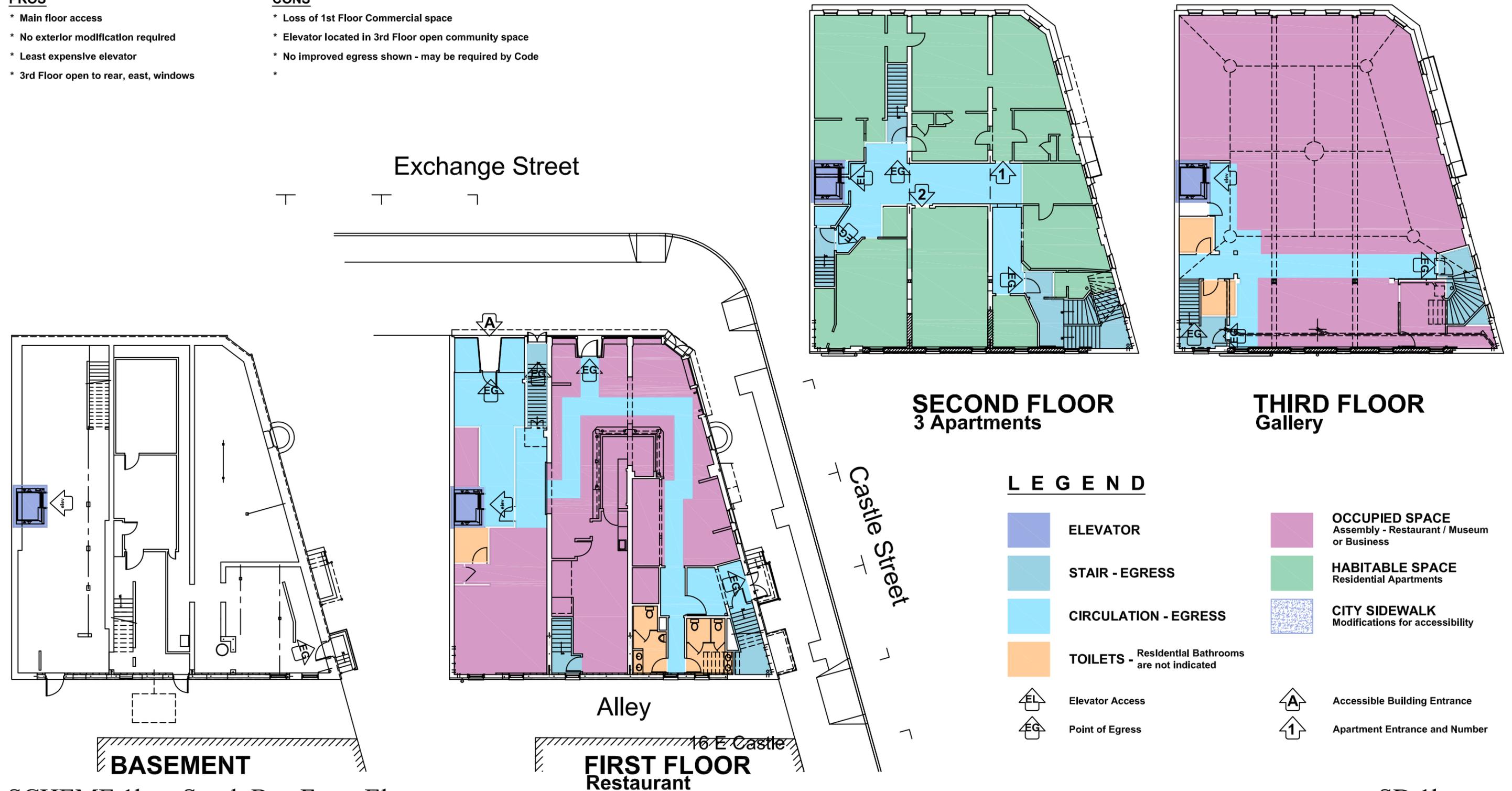
SCHEME 1b : REVIEW

PROS

- * Main floor access
- * No exterior modification required
- * Least expensive elevator
- * 3rd Floor open to rear, east, windows

CONS

- * Loss of 1st Floor Commercial space
- * Elevator located in 3rd Floor open community space
- * No improved egress shown - may be required by Code
- *



SCHEME 1b : South Bay Front Elevator

SD 1b



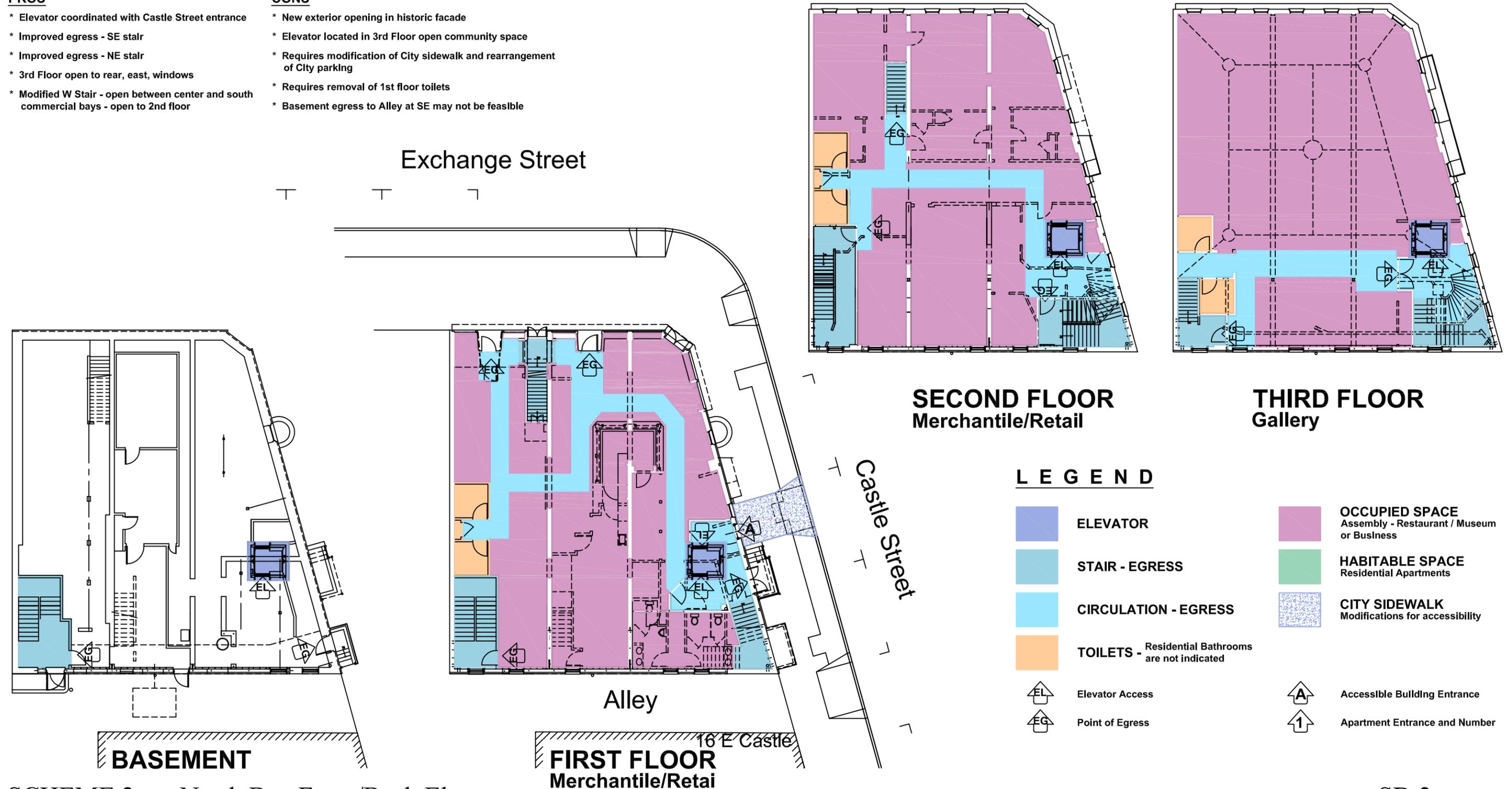
SCHEME 2a : REVIEW

PROS

- * Elevator coordinated with Castle Street entrance
- * Improved egress - SE stair
- * Improved egress - NE stair
- * 3rd Floor open to rear, east, windows
- * Modified W Stair - open between center and south commercial bays - open to 2nd floor

CONS

- * New exterior opening in historic facade
- * Elevator located in 3rd Floor open community space
- * Requires modification of City sidewalk and rearrangement of City parking
- * Requires removal of 1st floor toilets
- * Basement egress to Alley at SE may not be feasible



SCHEME 2a : North Bay Front/Back Elevator

SD 2a



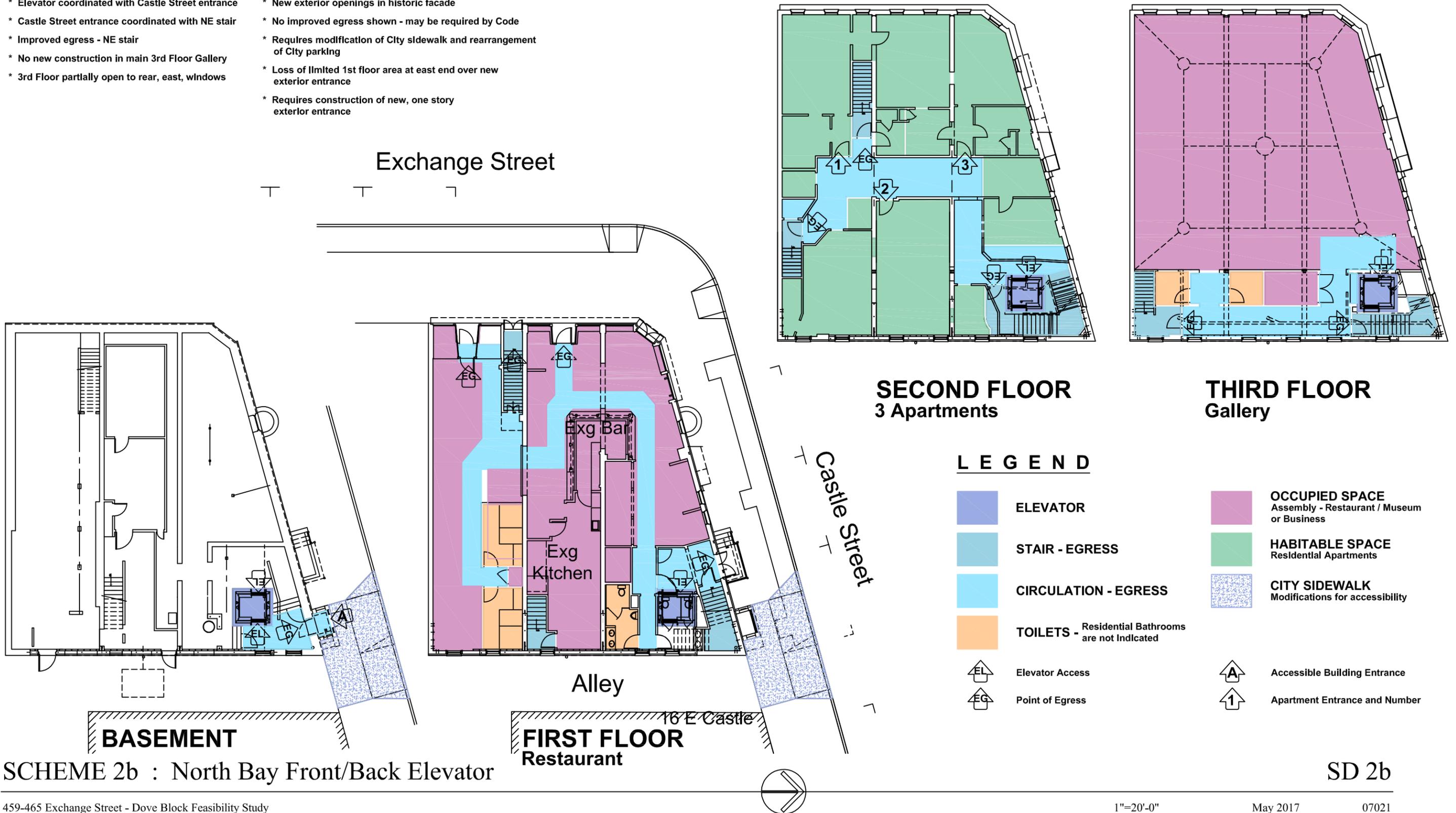
SCHEME 2b : REVIEW

PROS

- * Elevator coordinated with Castle Street entrance
- * Castle Street entrance coordinated with NE stair
- * Improved egress - NE stair
- * No new construction in main 3rd Floor Gallery
- * 3rd Floor partially open to rear, east, windows

CONS

- * New exterior openings in historic facade
- * No improved egress shown - may be required by Code
- * Requires modification of City sidewalk and rearrangement of City parking
- * Loss of limited 1st floor area at east end over new exterior entrance
- * Requires construction of new, one story exterior entrance



SCHEME 2b : North Bay Front/Back Elevator

SD 2b



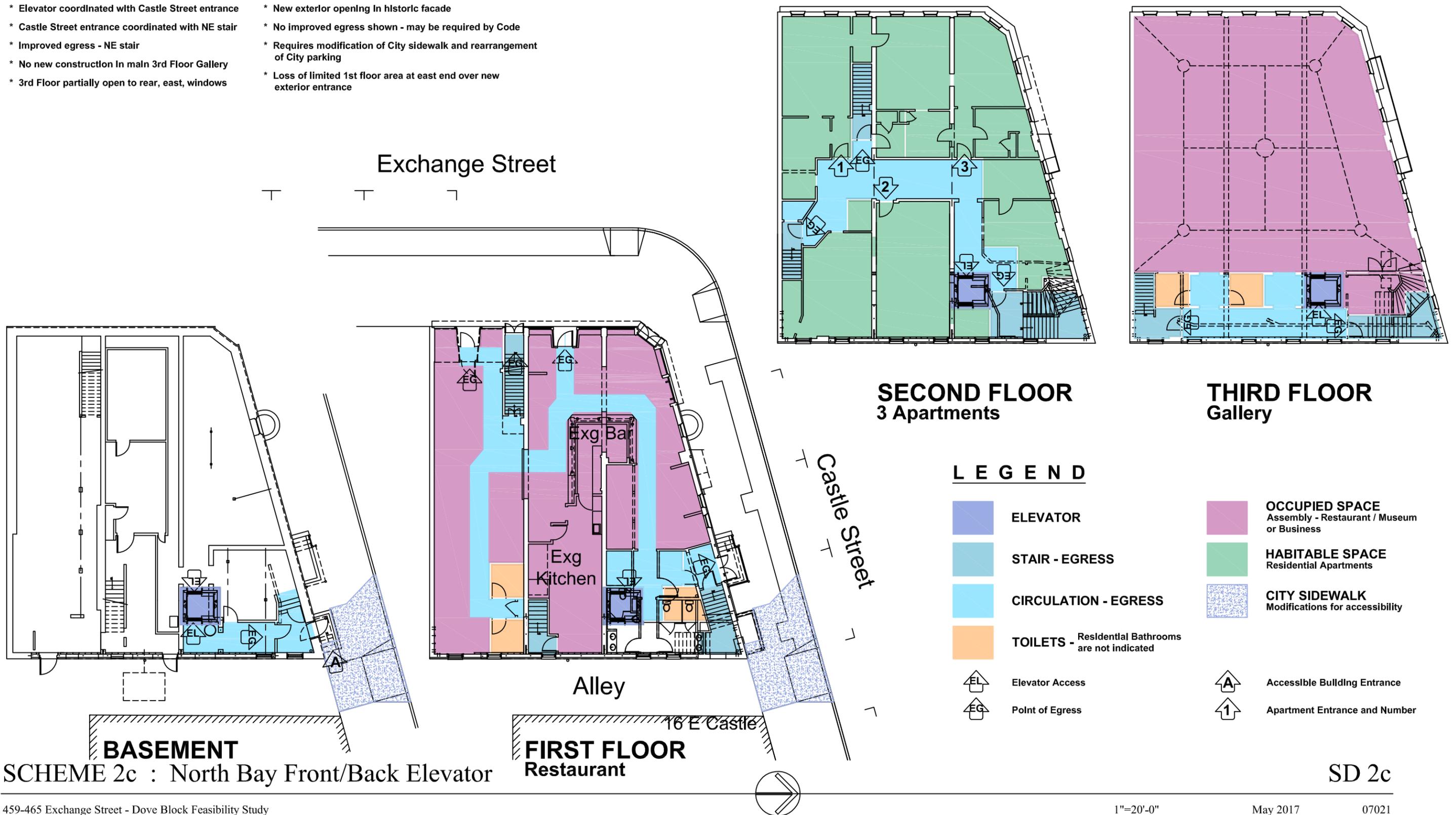
SCHEME 2c : REVIEW

PROS

- * Elevator coordinated with Castle Street entrance
- * Castle Street entrance coordinated with NE stair
- * Improved egress - NE stair
- * No new construction in main 3rd Floor Gallery
- * 3rd Floor partially open to rear, east, windows

CONS

- * New exterior opening in historic facade
- * No improved egress shown - may be required by Code
- * Requires modification of City sidewalk and rearrangement of City parking
- * Loss of limited 1st floor area at east end over new exterior entrance



BASEMENT
 SCHEME 2c : North Bay Front/Back Elevator

FIRST FLOOR
 Restaurant

SECOND FLOOR
 3 Apartments

THIRD FLOOR
 Gallery

LEGEND

- ELEVATOR
- STAIR - EGRESS
- CIRCULATION - EGRESS
- TOILETS - Residential Bathrooms are not indicated
- OCCUPIED SPACE
 Assembly - Restaurant / Museum or Business
- HABITABLE SPACE
 Residential Apartments
- CITY SIDEWALK
 Modifications for accessibility
- Elevator Access
- Point of Egress
- A Accessible Building Entrance
- 1 Apartment Entrance and Number



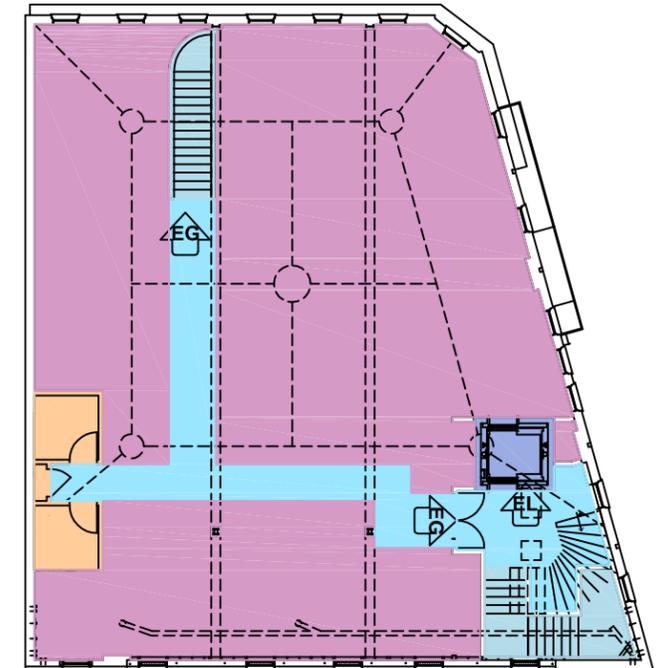
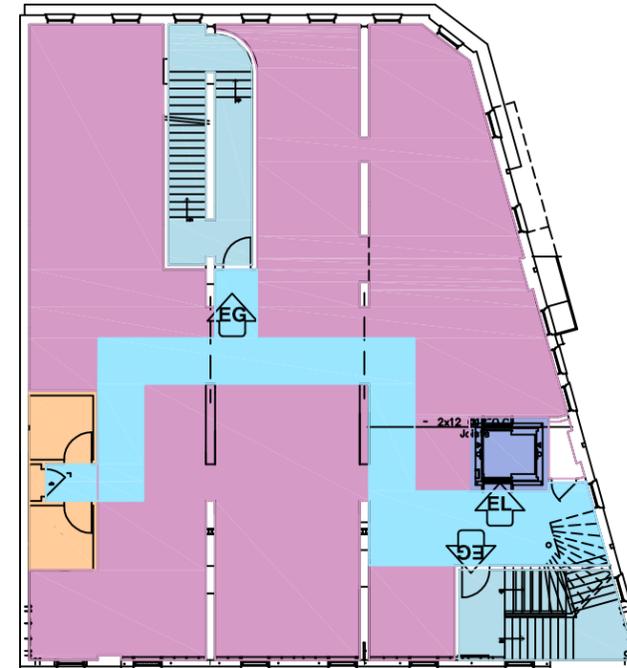
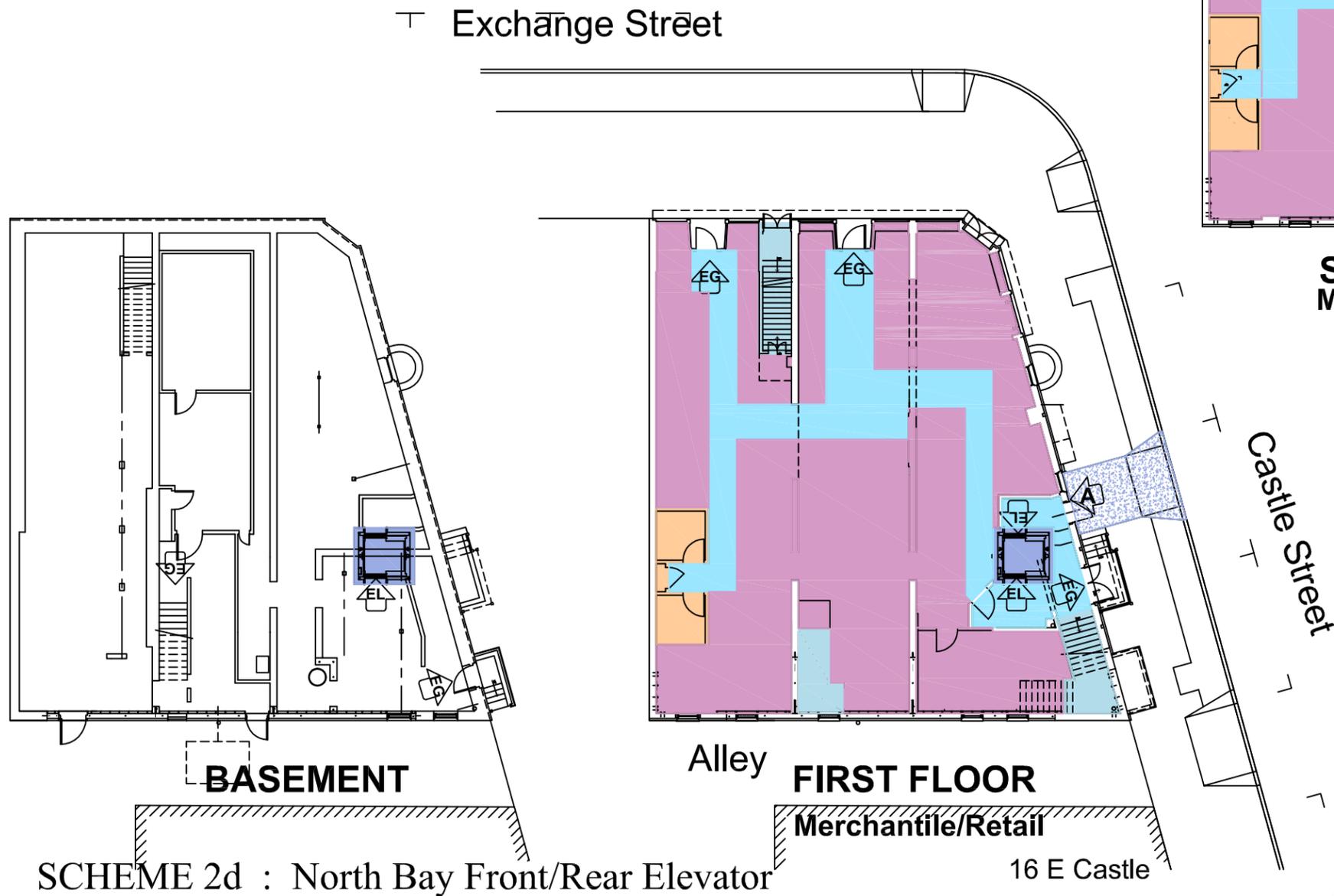
SCHEME 2d : REVIEW

PROS

- * Elevator coordinated with Castle Street entrance
- * Improved egress - W Center stair - extend to 3rd Floor
- * Improved egress - NE stair
- * 3rd Floor open to rear, east, windows

CONS

- * New exterior opening in historic facade
- * Elevator located in 3rd Floor open community space
- * Requires modification of City sidewalk and rearrangement of City parking
- * Requires removal of 1st floor toilets
- * New W stair to 3rd Floor modifies open Gallery area



LEGEND

- ELEVATOR
- STAIR - EGRESS
- CIRCULATION - EGRESS
- TOILETS - Residential Bathrooms are not Indicated
- OCCUPIED SPACE
Assembly - Restaurant / Museum or Business
- HABITABLE SPACE
Residential Apartments
- CITY SIDEWALK
Modifications for accessibility
- Elevator Access
- Point of Egress
- Accessible Building Entrance
- Apartment Entrance and Number

SCHEME 2d : North Bay Front/Rear Elevator

SD 2d



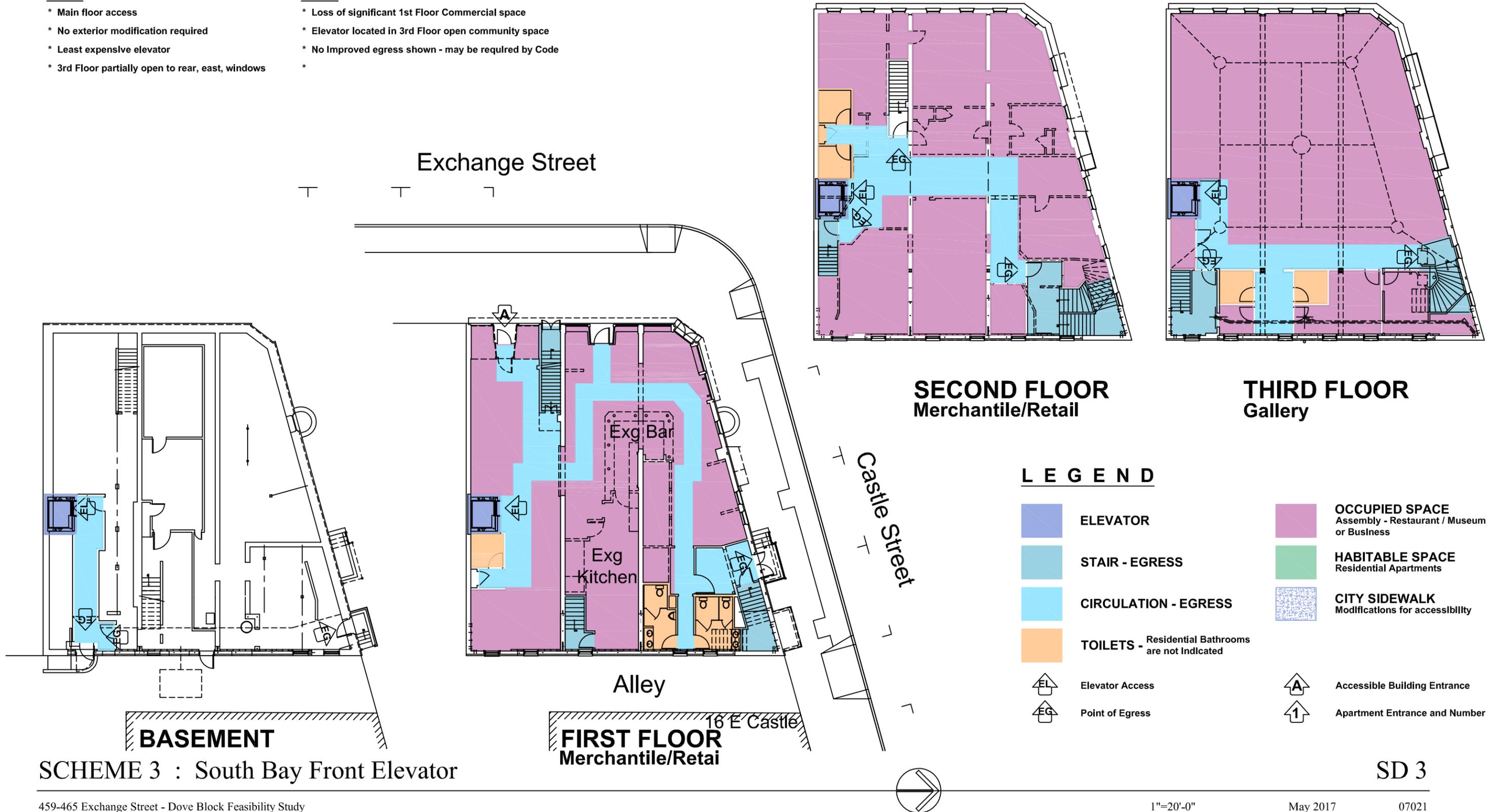
SCHEME 3 : REVIEW

PROS

- * Main floor access
- * No exterior modification required
- * Least expensive elevator
- * 3rd Floor partially open to rear, east, windows

CONS

- * Loss of significant 1st Floor Commercial space
- * Elevator located in 3rd Floor open community space
- * No Improved egress shown - may be required by Code
- *



SCHEME 3 : South Bay Front Elevator

SECOND FLOOR
Merchantile/Retail

THIRD FLOOR
Gallery

LEGEND

- | | | | |
|--|--|--|--|
| | ELEVATOR | | OCCUPIED SPACE
Assembly - Restaurant / Museum
or Business |
| | STAIR - EGRESS | | HABITABLE SPACE
Residential Apartments |
| | CIRCULATION - EGRESS | | CITY SIDEWALK
Modifications for accessibility |
| | TOILETS - Residential Bathrooms
are not Indicated | | Elevator Access |
| | Elevator Access | | Accessible Building Entrance |
| | Point of Egress | | Apartment Entrance and Number |



SCHEME 4 : REVIEW

PROS

- * Exterior Elevator coordinated with Castle Street entrance - high visibility
- * No loss of interior space - all floors
- * Improved egress - SE stair
- * 3rd Floor partially open to rear, east, windows

CONS

- * Most expensive project
- * Multiple new exterior opening in historic facade
- * Requires Construction of compatible three story addition on City property
- * Requires significant modification of City sidewalk, City parking, and City Street



SCHEME 4 : North Exterior Front/Back Elevator

SD 4

THE FOLLOWING THREE DRAWINGS WERE DEVELOPED FOLLOWING A JUNE MEETING TO REVIEW THE DRAFT REPORT. TWO OPTIONS WERE FURTHER DEVELOPED THAT REPRESENT THE TWO PREFERRED OPTIONS, ONE WITH AN EXTERIOR ELEVATOR ON CASTLE STREET, ONE WITH AN INTERIOR ELEVATOR JUST INSIDE THE SOUTH STOREFRONT. THERE IS ALSO A NEW DRAWING WITH ELEVATIONS FOR THE EXTERIOR ELEVATOR OPTION.



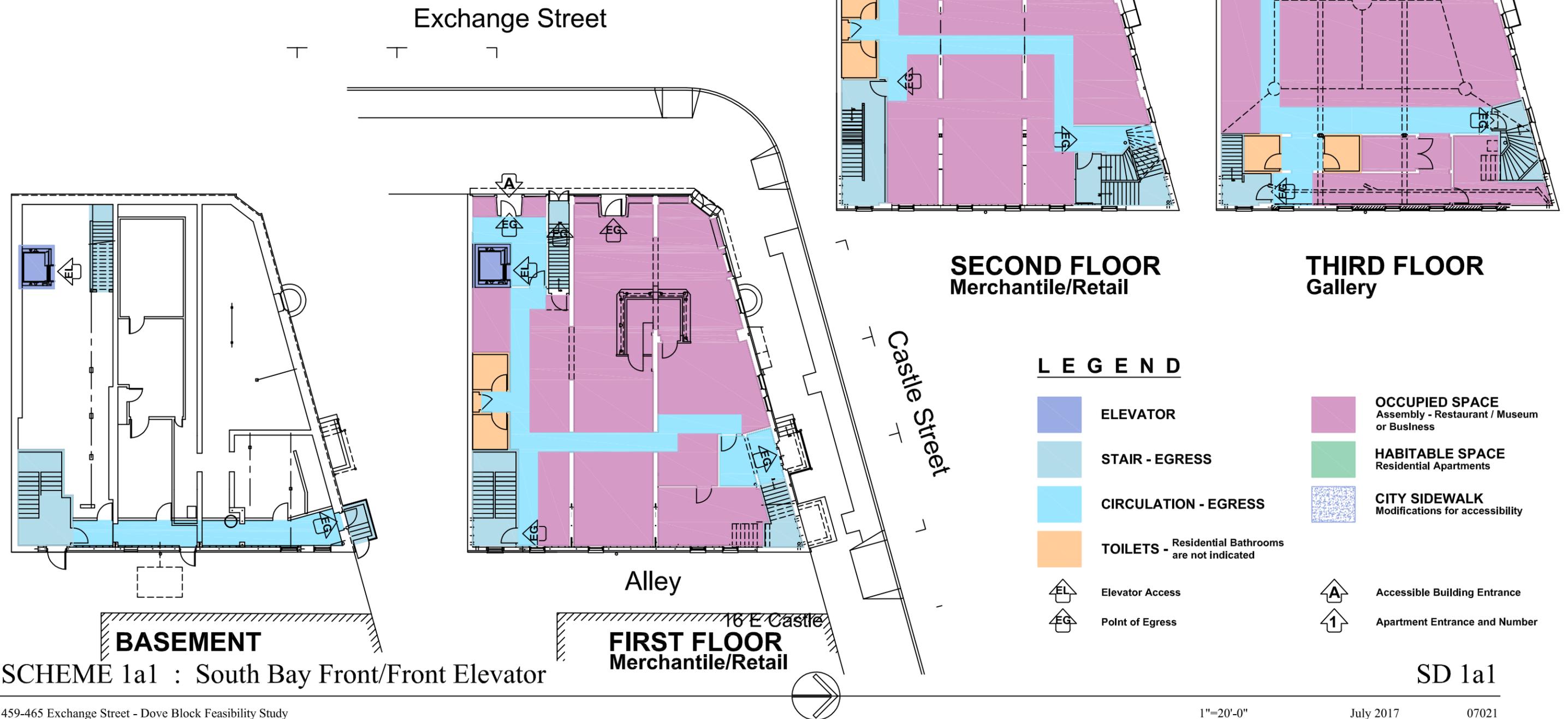
SCHEME 1a1 : REVIEW

PROS

- * Main floor access
- * No exterior modification required
- * Improved egress - SE stair
- * 3rd Floor open to rear, east, windows

CONS

- * Loss of 1st Floor Commercial space
- * Elevator located in 3rd Floor open community spa
- * Basement egress to Alley at SE may not be feasible
- *



SCHEME 1a1 : South Bay Front/Front Elevator



SCHEME 4b : REVIEW

PROS

- * Exterior Elevator coordinated with Castle Street entrance - increased visibility
- * No loss of interior space - all floors
- * No elevator in third floor community space
- * 3rd Floor partially open to rear, east, windows

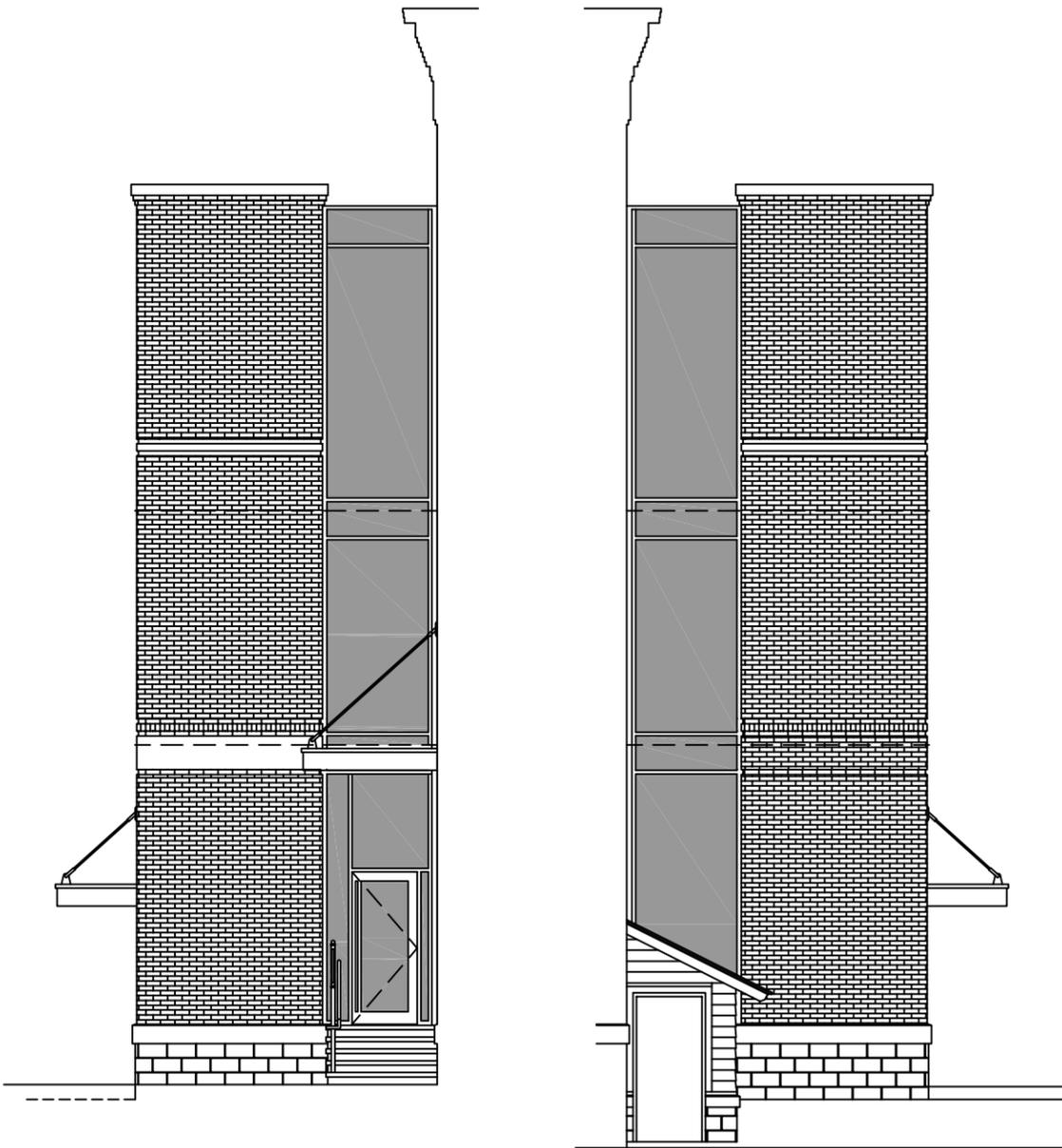
CONS

- * Most expensive rehabilitation project
- * Requires removal of original building fabric on all floors
- * Requires Construction of compatible three story addition on City property-review by SHPO if tax credit project
- * Requires significant modification of City sidewalk, City parking, and City Street



SCHEME 4b : Exterior Front/Rear Elevator





Partial
WEST ELEVATION
Exchange Street

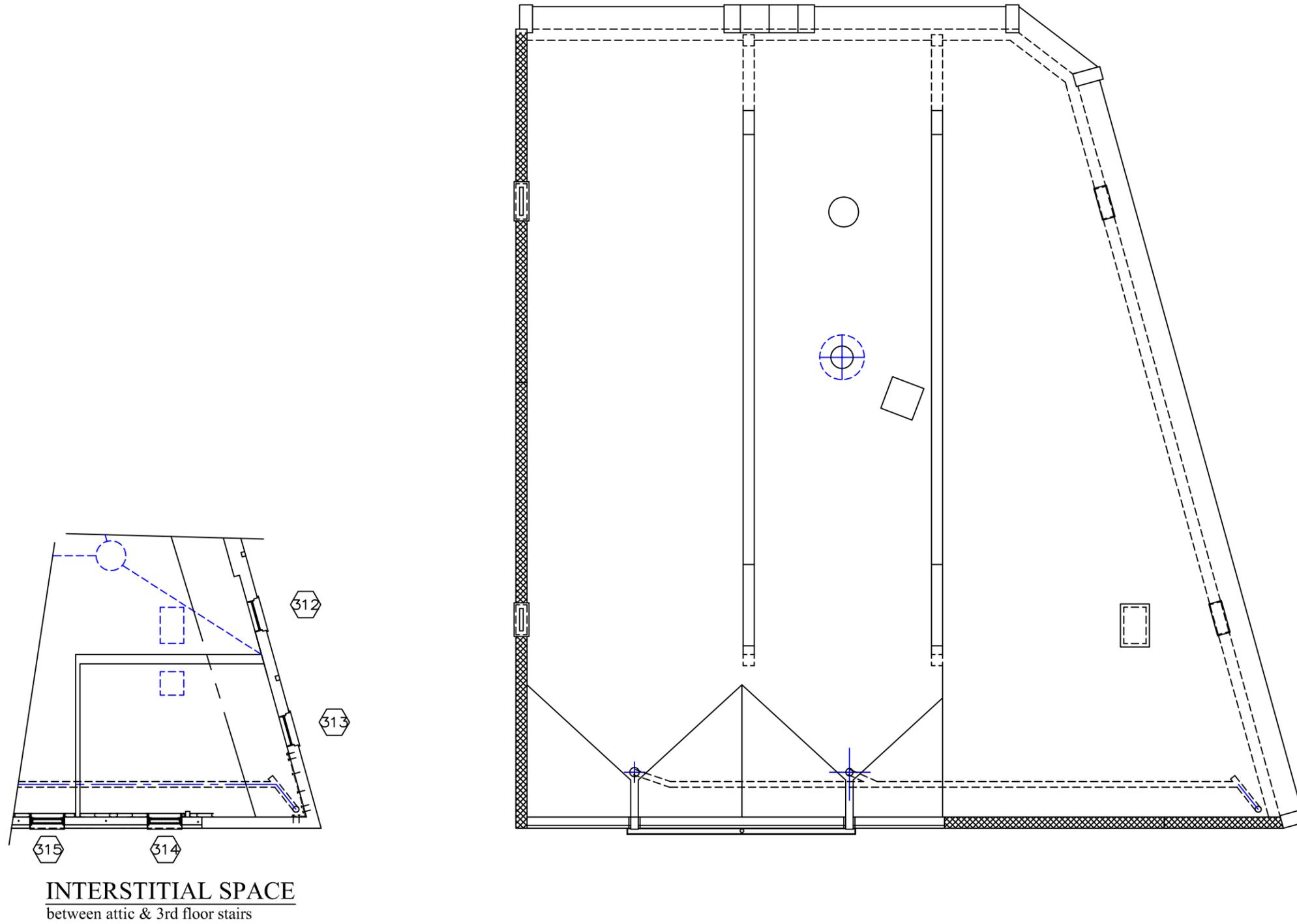
Partial
EAST ELEVATION
Alley



NORTH ELEVATION
Castle Street

SCHEME 4b : Elevation Studies

SD 4b1



Roof Plan

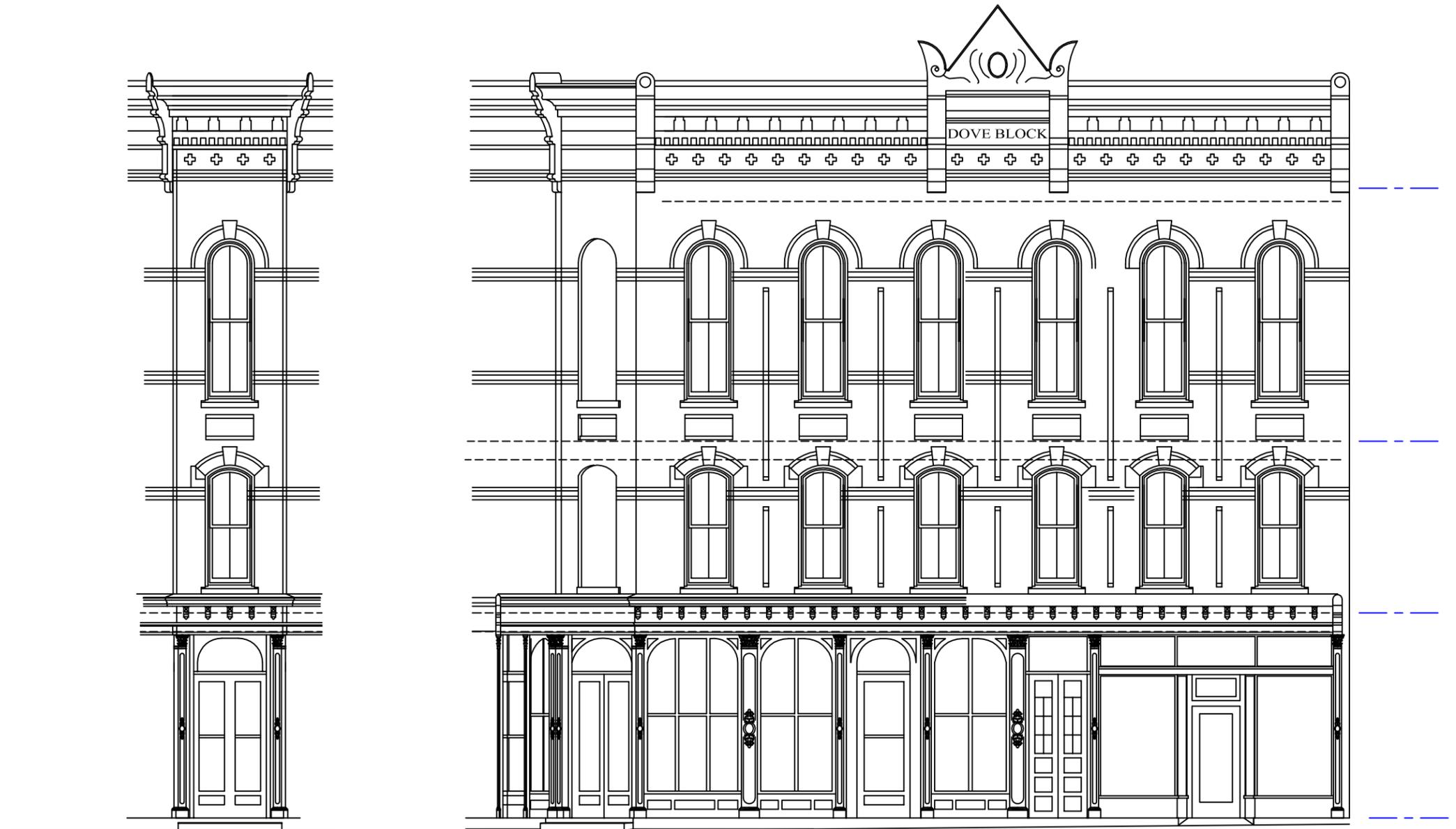
MD 14





North Elevation

MD 20



NW Elevation

West Elevation

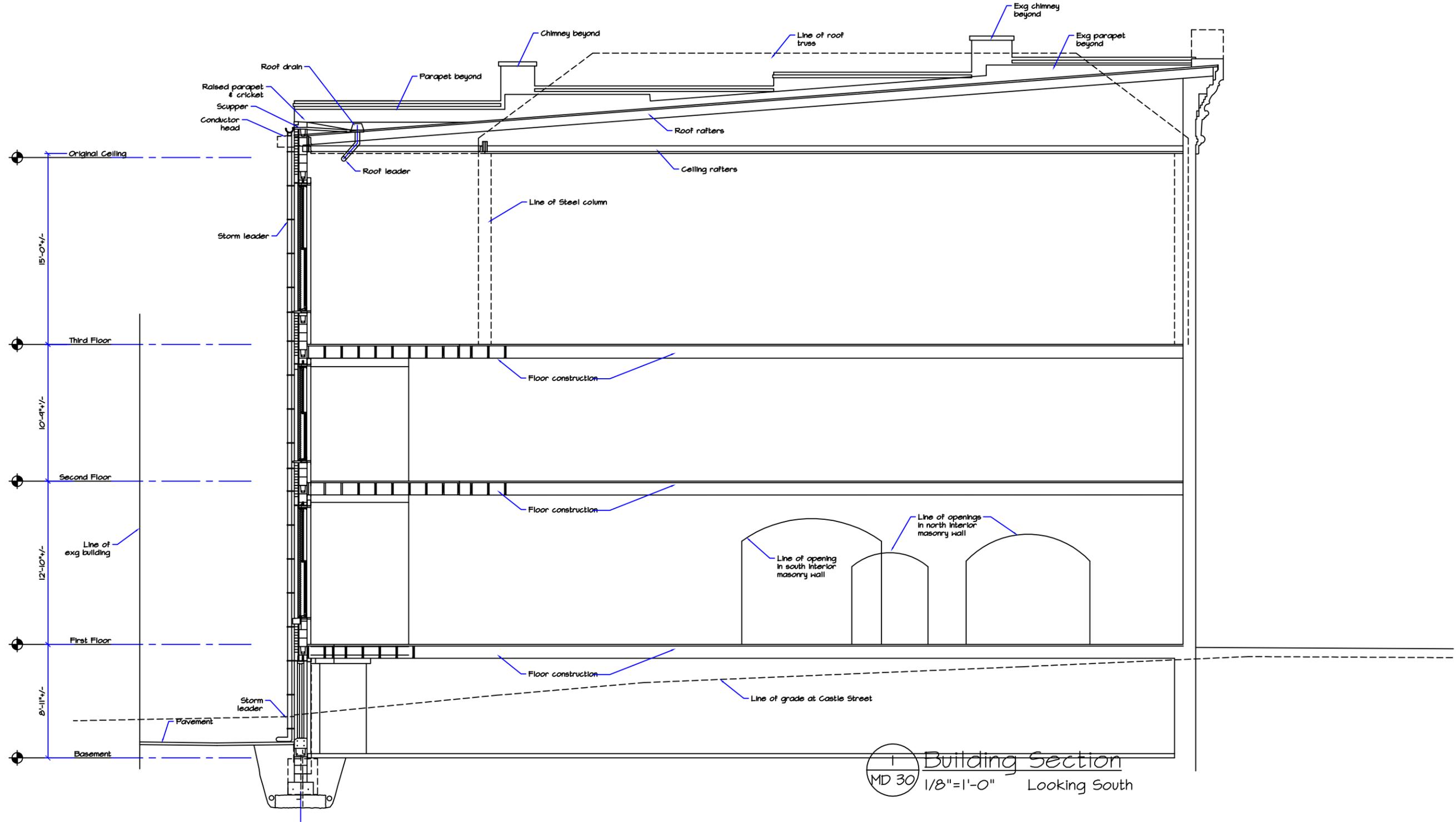


South Elevation

MD 22



Thirty-Two Winthrop Street Rochester, New York 14607
 (585) 262-2035 | contact@beroarchitecture.com



Building Section

MD 30

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
REPAIR AND STABILIZATION - DOVE BLOCK							
STRUCTURAL REPAIRS							
Structural Repairs - Essential							
Bsmt-remove rotted wood floors and debris	1	ls	\$ 3,200	\$ 3,200	1.68	\$ 5,400	
Bsmt-reinforce S Bay W Stair framing	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
1stFlr-replace S Bay flr framing portion-E end	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
1stFlr-replace C Bay flr framing portion-E end	1	ls	\$ 900	\$ 900	1.68	\$ 1,500	
1stFlr-replace N Bay flr ledgers portion-E end	1	ls	\$ 900	\$ 900	1.68	\$ 1,500	
2ndFlr-replace rotted floor joists & sub-flooring	1	ls	\$ 3,200	\$ 3,200	1.68	\$ 5,400	
2ndFlr-Replace E/W beams between Bays (2)	1	ls	\$ 1,800	\$ 1,800	1.68	\$ 3,000	
3rdFlr-replace rotted floor joists & sub-flooring	1	ls	\$ 6,200	\$ 6,200	1.68	\$ 10,400	
3rdFlr-remove Attic debris	1	ls	\$ 1,800	\$ 1,800	1.68	\$ 3,000	
3rdFlr-Replace beam-N Bay-E end	1	ls	\$ 1,800	\$ 1,800	1.68	\$ 3,000	
ExtMasWall-N @ E end-add reinf-point	1	ls	\$ 900	\$ 900	1.68	\$ 1,500	
2nd/3rdFlr-Code Req'd anchorage	1	ls	\$ 5,900	\$ 5,900	1.68	\$ 9,900	
Roof-Code Req'd uplift resistance	1	ls	\$ 4,200	\$ 4,200	1.68	\$ 7,000	
Subtotal							\$ 60,000
Structural Repairs - Recommended							
Bsmt-Replace selected deteriorated brick	20	cw/hrs	\$ 140	\$ 2,800	1.68	\$ 4,700	
Bsmt-Replace selected brick walls	280	sf	\$ 28	\$ 7,840	1.68	\$ 13,200	
1stFlr-Reinf below N Bay bearing walls-E end	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
2ndFlr-Reinf below N Bay bearing walls-E end	1	ls	\$ 900	\$ 900	1.68	\$ 1,500	
2ndFlr-Reinf below S Bay bearing walls-E end	1	ls	\$ 900	\$ 900	1.68	\$ 1,500	
Misc Ext Wall pointing	48	cw/hrs	\$ 140	\$ 6,720	1.68	\$ 11,300	
Subtotal							\$ 36,400
EXTERIOR MAINTENANCE / REPAIRS / REHABILITATION							
General Maintenance							
Roof-Remove debris	1	ls	\$ 800	\$ 800	1.68	\$ 1,300	
Rear downspout-rework, replace damaged sect.	1	ls	\$ 600	\$ 600	1.68	\$ 1,000	
Side entrance casing - Prep & paint	4	cw/hrs	\$ 120	\$ 480	1.68	\$ 800	
Repair cornice pediment allowance	1	ls	\$ 800	\$ 800	1.68	\$ 1,300	
Prep & paint cornice	20	cw/hrs	\$ 120	\$ 2,400	1.68	\$ 4,000	
Subtotal							\$ 8,400
Storefront							
Storefront sheet metal canopy roof-Prep & paint	12	cw/hrs	\$ 120	\$ 1,440	1.68	\$ 2,400	
Storefront-Prep & paint	20	cw/hrs	\$ 120	\$ 2,400	1.68	\$ 4,000	
Subtotal							\$ 6,400
Masonry							
Roof-Refresh mortar wash @ parapets	12	cw/hrs	\$ 140	\$ 1,680	1.68	\$ 2,800	
Roof-Improve parapet flashings	20	cw/hrs	\$ 140	\$ 2,800	1.68	\$ 4,700	
Façade - replace damaged sill stone	10	ea	\$ 1,400	\$ 14,000	1.68	\$ 23,500	
Façade - replace west center recessed entrance stone	1	ls	\$ 1,800	\$ 1,800	1.68	\$ 3,000	
Façade - replace clipped corner step	1	ls	\$ 1,200	\$ 1,200	1.68	\$ 2,000	
Subtotal							\$ 36,000

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
Windows and Doors							
Abatement allowance (requires testing report)	1	ls	\$ 4,000	\$ 4,000	1.68	\$ 6,700	
1st, 2nd, 3rd floor window casings-Prep & paint	31	ea	\$ 140	\$ 4,340	1.68	\$ 7,300	
2nd floor window rehabilitation	14	ea	\$ 800	\$ 11,200	1.68	\$ 18,800	
2nd floor storm windows	14	ea	\$ 250	\$ 3,500	1.68	\$ 5,900	
3rd floor replacement windows	14	ea	\$ 3,700	\$ 51,800	1.68	\$ 86,900	
Replace side entrance doors	1	ls	\$ 4,300	\$ 4,300	1.68	\$ 7,200	
Exchange Street door rehabilitation / hardware	4	ea	\$ 200	\$ 800	1.68	\$ 1,300	
Subtotal							\$ 134,100
INTERIOR MAINTENANCE / REPAIRS / REHABILITATION							
Finishes - Demolition							
3rd Floor / Attic							
Abatement allowance (requires testing report)	1	ls	\$ 1,500	\$ 1,500	1.68	\$ 2,500	
Document ceiling stenciling	1	ls	\$ 300	\$ 300	1.68	\$ 500	
Document & salvage ceil'g trim & gravity vents	1	ls	\$ 1,500	\$ 1,500	1.68	\$ 2,500	
Document & salvage wainscot & chair rail	1	ls	\$ 1,500	\$ 1,500	1.68	\$ 2,500	
Remove deteriorated ceiling & wall plaster	20	cw/hrs	\$ 130	\$ 2,600	1.68	\$ 4,400	
Remove deteriorated flooring system	20	cw/hrs	\$ 130	\$ 2,600	1.68	\$ 4,400	
Subtotal							\$ 16,800
2nd Floor							
Abatement allowance (requires testing report)	1	ls	\$ 4,000	\$ 4,000	1.68	\$ 6,700	
Document & salvage wainscot & chair rail	1	ls	\$ 3,000	\$ 3,000	1.68	\$ 5,000	
Remove deteriorated ceiling & wall plaster	40	cw/hrs	\$ 130	\$ 5,200	1.68	\$ 8,700	
Remove deteriorated finish flooring	24	cw/hrs	\$ 130	\$ 3,120	1.68	\$ 5,200	
Subtotal							\$ 25,600
1st Floor							
Abatement allowance (requires testing report)	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
Demo kitchen complete to framing	20	cw/hrs	\$ 130	\$ 2,600	1.68	\$ 4,400	
Demo side entrance vestibule complete to fram'g	12	cw/hrs	\$ 130	\$ 1,560	1.68	\$ 2,600	
Demo damaged plaster-NE & W stair	1	ls	\$ 1,200	\$ 1,200	1.68	\$ 2,000	
Document&salvage wainscot&chair rail-NE&W stair	1	ls	\$ 2,200	\$ 2,200	1.68	\$ 3,700	
Misc flooring repair allowance	12	cw/hrs	\$ 140	\$ 1,680	1.68	\$ 2,800	
Subtotal							\$ 19,700
Basement							
Abatement allowance (requires testing report)	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
Demo remaining finishes, equipt, framing	22	cw/hrs	\$ 130	\$ 2,860	1.68	\$ 4,800	
Subtotal							\$ 9,000
MECHANICAL / ELECTRICAL / FIRE SAFETY							
Emergency lighting allowance - Basic	1	ls	\$4,000	\$ 4,000	1.68	\$ 6,700	
Fire alarm system - Basic	#####	sf	\$0.4	\$ 6,200	1.68	\$ 10,400	
Temporary heating	1	ls	\$12,000	\$ 12,000	1.68	\$ 20,100	
Subtotal							\$ 37,200
TOTAL							\$ 389,600
						cost/gross SF : floors 1-3 (12,540 SF)	\$31.07 /SF

Estimate of Probable Construction Costs-
Feasibility Study
**STRUCTURAL IMPROVEMENTS
and BASIC FINISHES**

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
STRUCTURAL IMPROVEMENTS AND BASIC FINISHES - DOVE BLOCK							
STRUCTURAL REPAIRS							
Structural Repairs - Recommended							
Bsmt-conc slab on on stone subbase	1,300	sf	\$4.5	\$ 5,850	1.68	\$ 9,800	
1stFlr-Add struct for 100psf @ 1st flr-all Bays	3,200	sf	\$3.8	\$ 12,160	1.68	\$ 20,400	
3rdFlr-Add struct for 100psf @ 1st flr-all Bays	2,800	sf	\$4.7	\$ 13,160	1.68	\$ 22,100	
Ceiling/Roof-Add N/S struct-all Bays	1	ls	\$ 6,000	\$ 6,000	1.68	\$ 10,100	
Subtotal							\$ 62,400
EXTERIOR MAINTENANCE / REPAIRS / REHABILITATION							
Carpentry - Exterior							
Remove Castle Street side entrance porch	1	ls	\$ 300	\$ 300	1.68	\$ 500	
Remove Castle St side basement entrance enclosure	1	ls	\$ 300	\$ 300	1.68	\$ 500	
Provide traditional wood porch	24	cw/hrs	\$ 140	\$ 3,360	1.68	\$ 5,600	
Provide traditional wood enclosure, door, & int. steps	60	cw/hrs	\$ 140	\$ 8,400	1.68	\$ 14,100	
Large, secure metal roof hatch	1	ls	\$ 2,000	\$ 2,000	1.68	\$ 3,400	
Subtotal							\$ 24,100
Windows and Doors							
Bsmt window rehab + storm	1	ls	\$ 900	\$ 900	1.68	\$ 1,500	
Bsmt, 1st, 2nd, 3rd floor window casings-Prep&paint	32	ea	\$ 200	\$ 6,400	1.68	\$ 10,700	
2nd floor window rehabilitation	14	ea	\$ 800	\$ 11,200	1.68	\$ 18,800	
2nd floor storm windows	14	ea	\$ 250	\$ 3,500	1.68	\$ 5,900	
3rd floor replacement windows	14	ea	\$ 3,800	\$ 53,200	1.68	\$ 89,300	
Replace side entrance doors	1	ls	\$ 4,500	\$ 4,500	1.68	\$ 7,600	
Exchange Street door rehabilitation / hardware	4	ea	\$ 200	\$ 800	1.68	\$ 1,300	
Subtotal							\$ 133,600
Finishes - Interior Carpentry							
3rd Floor							
Roof access ladders & attic access hatch	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
Provide gypsum drywall wall system	3,200	sf	\$2.4	\$ 7,680	1.68	\$ 12,900	
Provide gypsum drywall ceiling system	3,800	sf	\$4.2	\$ 15,960	1.68	\$ 26,800	
Provide finish wood flooring system	3,800	sf	\$8.0	\$ 30,400	1.68	\$ 51,000	
Reinstall or replace ceiling trim	16	cw/hrs	\$ 140	\$ 2,240	1.68	\$ 3,800	
Reinstall or replace wainscot & chair rail	48	cw/hrs	\$ 140	\$ 6,720	1.68	\$ 11,300	
Provide stair enclosure	24	cw/hrs	\$ 140	\$ 3,360	1.68	\$ 5,600	
Paint all exposed surfaces	6,700	sf	\$1.2	\$ 8,040	1.68	\$ 13,500	
Subtotal							\$ 129,100
2nd Floor							
Provide gypsum drywall wall system	9,200	sf	\$2.4	\$ 22,080	1.68	\$ 37,000	
Provide gypsum drywall ceiling system	3,800	sf	\$5.0	\$ 19,000	1.68	\$ 31,900	
Provide finish wood flooring system	1,800	sf	\$10.0	\$ 18,000	1.68	\$ 30,200	
Refinish existing wood flooring system	2,000	sf	\$4.6	\$ 9,200	1.68	\$ 15,400	
Misc trim rehabilitation allowance	48	cw/hrs	\$ 140	\$ 6,720	1.68	\$ 11,300	

Estimate of Probable Construction Costs-
Feasibility Study
**STRUCTURAL IMPROVEMENTS
and BASIC FINISHES**

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
Reinstall or replace wainscot & chair rail	60	cw/hrs	\$ 140	\$ 8,400	1.68	\$ 14,100	
Provide stair enclosure	16	cw/hrs	\$ 140	\$ 2,240	1.68	\$ 3,800	
Paint all exposed surfaces	#####	sf	\$1.1	\$ 14,300	1.68	\$ 24,000	
Provide stair handrails	40	lf	\$ 40	\$ 1,600	1.68	\$ 2,700	
Subtotal							\$ 170,400
1st Floor							
Provide gypsum drywall wall system-south bay	2,600	sf	\$2.4	\$ 6,240	1.68	\$ 10,500	
Provide gypsum drywall ceiling system-south bay	1,310	sf	\$5.0	\$ 6,550	1.68	\$ 11,000	
Provide finish wood flooring system-south bay	1,310	sf	\$10.0	\$ 13,100	1.68	\$ 22,000	
Provide painted wood trim base & crown-south bay	36	cw/hrs	\$ 140	\$ 5,040	1.68	\$ 8,500	
Reinstall or replace wainscot & chair rail-NE&W stair	48	cw/hrs	\$ 140	\$ 6,720	1.68	\$ 11,300	
Provide gypsum drywall wall system-NE&W stair	600	sf	\$3.4	\$ 2,040	1.68	\$ 3,400	
Misc refinishing allowance	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
Misc trim rehabilitation allownace	48	cw/hrs	\$ 140	\$ 6,720	1.68	\$ 11,300	
Provide stair enclosure-NE stair	16	cw/hrs	\$ 140	\$ 2,240	1.68	\$ 3,800	
Provide stair handrails	40	lf	\$ 40	\$ 1,600	1.68	\$ 2,700	
Subtotal							\$ 88,700
Basement							
Provide gypsum drywall ceiling system-all bays	3,400	sf	\$2.5	\$ 8,500	1.68	\$ 14,300	
Replace W stair	16	cw/hrs	\$ 140	\$ 2,240	1.68	\$ 3,800	
Subtotal							\$ 40,100
Fire Extinguishers							
Provide fire extinguishers throughout	1	ls	\$ 2,200	\$ 2,200	1.68	\$ 3,700	
Subtotal							\$ 3,700
MECHANICAL / ELECTRICAL / FIRE SAFETY							
4" Water Service and 2 RPZ's	1	ls	\$14,000	\$ 14,000	1.68	\$ 23,500	
600 Amp Electric Service w/ meter stack	1	ls	\$20,000	\$ 20,000	1.68	\$ 33,600	
Electrical House Panel	1	ls	\$9,000	\$ 9,000	1.68	\$ 15,100	
Emergency lighting allowance - Interim w/ finishes	1	ls	\$3,500	\$ 3,500	1.68	\$ 5,900	
Fire alarm system - Interim w/ finishes	#####	sf	\$0.3	\$ 4,620	1.68	\$ 7,800	
Sprinkler system - Interim w/ finishes	#####	sf	\$3.5	\$ 53,900	1.68	\$ 90,400	
Subtotal							\$ 176,300
TOTAL							\$ 828,400
						cost/gross SF : floors 1-3 (12,540 SF)	\$66.06 /SF

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
BUILD-OUT IMPROVEMENTS OPTIONS - DOVE BLOCK							
EXTERIOR OPTIONAL IMPROVEMENTS							
South Bay Storefront Restoration							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Remove storefront construction	1	ls	\$ 750	\$ 750	1.68	\$ 1,300	
Provide pilasters matching original	2	ea	\$ 3,000	\$ 6,000	1.68	\$ 10,100	
Provide painted wd bulkhead&large display windows	170	sf	\$ 125	\$ 21,250	1.68	\$ 35,700	
Subtotal							\$ 47,900
Add recessed door	1	ls	\$ 7,000	\$ 7,000	1.68	\$ 11,700	
							\$ 59,600
Exterior Masonry Door Opening + sidewalk							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
City sidewalk modifications / curb cut / expansion	200	sf	\$ 50	\$ 10,000	1.68	\$ 16,800	
Cut out ext wall masonry for opening / lintel	1	ea	\$ 1,500	\$ 1,500	1.68	\$ 2,500	
Exterior Door	1	ea	\$ 1,500	\$ 1,500	1.68	\$ 2,500	
Associated Interior Floor Const.	54	sf	\$ 100	\$ 5,400	1.68	\$ 9,100	
Subtotal							\$ 31,700
Exterior 4 Story Elevator Lobby+1 Story Bsmt+walk							
Temporary protections	1	ls	\$ 1,000	\$ 1,000	1.68	\$ 1,700	
City sidewalk modifications / curb cut / expansion	1,100	sf	\$ 40	\$ 44,000	1.68	\$ 73,800	
Foundation and pit construction	1	ls	\$ 6,000	\$ 6,000	1.68	\$ 10,100	
Underpin Mas Bearing Wall	8	lf	\$ 560	\$ 4,480	1.68	\$ 7,500	
Cut out ext wall masonry for opening / lintel	4	ea	\$ 1,500	\$ 6,000	1.68	\$ 10,100	
Exterior Door	2	ea	\$ 1,500	\$ 3,000	1.68	\$ 5,000	
Exterior Masonry Walls / Storefont / tie-in	600	sf	\$ 50	\$ 30,000	1.68	\$ 50,300	
Floor Const.	150	sf	\$ 25	\$ 3,750	1.68	\$ 6,300	
Slab on grade	50	sf	\$ 18	\$ 900	1.68	\$ 1,500	
Roof Const. + tie-in	50	sf	\$ 40	\$ 2,000	1.68	\$ 3,400	
Associated Interior Floor Const.	30	sf	\$ 150	\$ 4,500	1.68	\$ 7,600	
MEP allowance	200	sf	\$ 30	\$ 6,000	1.68	\$ 10,100	
Subtotal							\$ 187,400
Exterior 1 Story Entrance Lobby+sidewalk							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
City sidewalk modifications / curb cut	200	sf	\$ 30	\$ 6,000	1.68	\$ 10,100	
Foundation and pit construction	1	ls	\$ 6,000	\$ 6,000	1.68	\$ 10,100	
Underpin Mas Bearing Wall	8	lf	\$ 560	\$ 4,480	1.68	\$ 7,500	
Cut out ext wall masonry for opening / lintel	1	ea	\$ 1,500	\$ 1,500	1.68	\$ 2,500	
Exterior Door	1	ea	\$ 1,500	\$ 1,500	1.68	\$ 2,500	
Exterior Masonry Walls / Storefont / tie-in	140	sf	\$ 50	\$ 7,000	1.68	\$ 11,700	
Slab on grade	50	sf	\$ 18	\$ 900	1.68	\$ 1,500	
Roof Const. + tie-in	50	sf	\$ 40	\$ 2,000	1.68	\$ 3,400	
Associated Interior Floor Const.	80	sf	\$ 100	\$ 8,000	1.68	\$ 13,400	
MEP allowance	50	sf	\$ 35	\$ 1,750	1.68	\$ 2,900	
Subtotal							\$ 66,400
INTERIOR OPTIONAL IMPROVEMENTS							

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
First Floor Bar Removal							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Salvage / remove decorative bar	1	ls	\$ 1,000	\$ 1,000	1.68	\$ 1,700	
Remove remaining non-bearing frame walls	16	cw/hrs	\$ 130	\$ 2,080	1.68	\$ 3,500	
Remove toilet fixtures	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Subtotal							\$ 6,800
Second Floor Non-Bearing Wall Removal							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Remove remaining non-bearing frame walls	40	cw/hrs	\$ 130	\$ 5,200	1.68	\$ 8,700	
Subtotal							\$ 9,500
NE Stair 2-3 Reconfiguration							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Demolition/Cut out allowance	1	ls	\$ 1,000	\$ 1,000	1.68	\$ 1,700	
Floor Infill	60	sf	\$ 40	\$ 2,400	1.68	\$ 4,000	
Flight of stairs / railings	1	ea	\$ 8,000	\$ 8,000	1.68	\$ 13,400	
Stair reconfiguration, enclosure, door	400	sf	\$ 20	\$ 8,000	1.68	\$ 13,400	
Subtotal							\$ 33,300
SE Stair expansion/enclosure to Basement and Exterior							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Demolition/Cut out allowance	1	ls	\$ 2,000	\$ 2,000	1.68	\$ 3,400	
Floor restructure	120	sf	\$ 40	\$ 4,800	1.68	\$ 8,100	
Flight of stairs / railings	2	ea	\$ 8,000	\$ 16,000	1.68	\$ 26,800	
Enclosure & door/Floor	800	sf	\$ 18	\$ 14,400	1.68	\$ 24,200	
Basement enclosure & doors to north egress	300	sf	\$ 50	\$ 15,000	1.68	\$ 25,200	
Subtotal							\$ 88,500
Rehab Exchange St Stair - open to 1st Floor							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Demolition / Opening allowance	1	ls	\$ 4,000	\$ 4,000	1.68	\$ 6,700	
Rehab allowance	1	ls	\$ 3,500	\$ 3,500	1.68	\$ 5,900	
Subtotal							\$ 13,400
Reconfigure Exchange St Stair - open to 1st Floor							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Demolition / Opening allowance	1	ls	\$ 4,000	\$ 4,000	1.68	\$ 6,700	
Reconfigure / Rehab allowance	1	ls	\$ 6,500	\$ 6,500	1.68	\$ 10,900	
Subtotal							\$ 18,400
SE Stair removal							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Demolition allowance	1	ls	\$ 1,000	\$ 1,000	1.68	\$ 1,700	
Floor Infill & restructure	120	sf	\$ 40	\$ 4,800	1.68	\$ 8,100	
Subtotal							\$ 10,600

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
West Center Stair expansion/enclosure to 3rd Floor							
Temporary protections	1	ls	\$ 500	\$ 500	1.68	\$ 800	
Demolition allowance	1	ls	\$ 1,000	\$ 1,000	1.68	\$ 1,700	
2nd Floor enclosure & door	400	sf	\$ 20	\$ 8,000	1.68	\$ 13,400	
3rd Floor guard rail	40	lf	\$ 100	\$ 4,000	1.68	\$ 6,700	
Flight of stairs / railings	1	ea	\$ 8,000	\$ 8,000	1.68	\$ 13,400	
Subtotal							\$ 35,200
INTERIOR BASIC BUILD-OUT IMPROVEMENTS							
Plumbing Options							
Rehabilitate 1st Floor toilet rooms allowance	1	ea	\$ 4,500	\$ 4,500	1.7	\$ 7,600	
Subtotal							\$ 7,600
Unisex, accessible Toilet Room							
Interior walls	300	sf	\$ 10	\$ 3,000	1.7	\$ 5,000	
New finishes	100	sf	\$ 18	\$ 1,800	1.7	\$ 3,000	
Toilet accessories	1	ls	\$ 800	\$ 800	1.7	\$ 1,300	
Interior door/hardware	1	ea	\$ 1,200	\$ 1,200	1.7	\$ 2,000	
MEP work	1	ls	\$ 8,500	\$ 8,500	1.7	\$ 14,300	
Subtotal							\$ 25,600
Two stall accessible Toilet Room							
Interior walls	450	sf	\$ 10	\$ 4,500	1.7	\$ 7,600	
New finishes	150	sf	\$ 18	\$ 2,700	1.7	\$ 4,500	
Toilet accessories	1	ls	\$ 1,200	\$ 1,200	1.7	\$ 2,000	
Interior door/hardware	1	ea	\$ 1,200	\$ 1,200	1.7	\$ 2,000	
MEP work	1	ls	\$ 10,000	\$ 10,000	1.7	\$ 16,800	
Subtotal							\$ 32,900
Apartment Bathroom							
Interior walls	300	sf	\$ 10	\$ 3,000	1.7	\$ 5,000	
New finishes	100	sf	\$ 18	\$ 1,800	1.7	\$ 3,000	
Toilet accessories	1	ls	\$ 800	\$ 800	1.7	\$ 1,300	
Interior door/hardware	1	ea	\$ 1,200	\$ 1,200	1.7	\$ 2,000	
MEP work	1	ls	\$ 8,500	\$ 8,500	1.7	\$ 14,300	
Subtotal							\$ 25,600
ELEVATOR OPTIONS							
Elevator (Interior-5-stop, front/rear access)							
Elevator - furnished and installed	1	ea	\$ 105,000	\$ 105,000	1.33	\$ 140,100	
Shaft construction-CMU	1,400	sf	\$ 15	\$ 21,000	1.68	\$ 35,200	
Interior wall finish	1,400	sf	\$ 5.8	\$ 8,120	1.68	\$ 13,600	
Roof to shaft	70	sf	\$ 20	\$ 1,400	1.68	\$ 2,300	
Foundation and pit construction	1	ls	\$ 12,000	\$ 12,000	1.68	\$ 20,100	
Underpin Mas Bearing Wall	8	lf	\$ 600	\$ 4,800	1.68	\$ 8,100	
Pit sump pump	1	ls	\$ 1,800	\$ 1,800	1.68	\$ 3,000	
Electrical work	1	ls	\$ 10,500	\$ 10,500	1.68	\$ 17,600	

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
Subtotal							\$ 240,000
Elevator (Exterior-5-stop, front/rear access)							
Elevator - furnished and installed	1	ea	\$ 105,000	\$ 105,000	1.33	\$ 140,100	
Shaft construction-CMU	1,400	sf	\$ 15	\$ 21,000	1.68	\$ 35,200	
Exterior brick w/ detailing	800	sf	\$ 30	\$ 24,000	1.68	\$ 40,300	
Interior wall finish	400	sf	\$5.8	\$ 2,320	1.68	\$ 3,900	
Roof to shaft	70	sf	\$ 32	\$ 2,240	1.68	\$ 3,800	
Foundation and pit construction	1	ls	\$ 12,000	\$ 12,000	1.68	\$ 20,100	
Underpin Mas Bearing Wall	8	lf	\$ 600	\$ 4,800	1.68	\$ 8,100	
Pit sump pump	1	ls	\$ 1,800	\$ 1,800	1.68	\$ 3,000	
Electrical work	1	ls	\$ 10,500	\$ 10,500	1.68	\$ 17,600	
Subtotal							\$ 272,100
Elevator (Interior-4-stop, front access)							
Elevator - furnished and installed	1	ea	\$ 87,000	\$ 87,000	1.33	\$ 116,100	
Shaft construction-CMU	1,400	sf	\$ 15	\$ 21,000	1.68	\$ 35,200	
Interior wall finish	1,000	sf	\$5.8	\$ 5,800	1.68	\$ 9,700	
Roof to shaft	70	sf	\$ 20	\$ 1,400	1.68	\$ 2,300	
Foundation and pit construction	1	ls	\$ 12,000	\$ 12,000	1.68	\$ 20,100	
Underpin Mas Bearing Wall	8	lf	\$ 600	\$ 4,800	1.68	\$ 8,100	
Pit sump pump	1	ls	\$ 1,800	\$ 1,800	1.68	\$ 3,000	
Electrical work	1	ls	\$ 10,000	\$ 10,000	1.68	\$ 16,800	
Subtotal							\$ 211,300
INTERIOR TENANT BUILD-OUT IMPROVEMENT OPTIONS							
Retail / Mercantile Build-Out / Floor (net)							
Interior walls (incl trim-finishes) allowance	800	sf	\$ 20	\$ 16,000	1.68	\$ 26,800	
Interior doors allowance	6	ea	\$ 800	\$ 4,800	1.68	\$ 8,100	
Lighting and Power allowance	3400	sf	\$6.8	\$ 23,120	1.68	\$ 38,800	
HVAC allowance	3400	sf	\$ 14	\$ 47,600	1.68	\$ 79,900	
Additional plumbing allowance	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
Sprinkler modifications / expansion allow	3400	sf	\$0.7	\$ 2,380	1.68	\$ 4,000	
Fire Protection modifications / expansion allow	3400	sf	\$1.6	\$ 5,440	1.68	\$ 9,100	
Subtotal / floor cost							\$ 170,900
Restaurant Build-Out / Floor - retain Bar (net)							
Interior walls (incl trim-finishes) allowance	1000	sf	\$ 20	\$ 20,000	1.68	\$ 33,600	
Finishes / Trim upgrades allowance	3400	sf	\$ 8	\$ 27,200	1.68	\$ 45,600	
Interior doors allowance	8	ea	\$ 800	\$ 6,400	1.68	\$ 10,700	
Lighting and Power allowance	3400	sf	\$ 15	\$ 51,000	1.68	\$ 85,600	
HVAC allowance	3400	sf	\$ 20	\$ 68,000	1.68	\$ 114,100	
Additional plumbing allowance per fixture	5	ea	\$ 2,500	\$ 12,500	1.68	\$ 21,000	
Commercial Kitchen hood allowance	1	ls	\$ 18,000	\$ 18,000	1.68	\$ 30,200	
Commercial Kitchen equipment allowance	1	ls	\$ 22,000	\$ 22,000	1.68	\$ 36,900	
Sprinkler modifications / expansion allow	3400	sf	\$0.8	\$ 2,720	1.68	\$ 4,600	
Fire Protection modifications / expansion allow	3400	sf	\$1.8	\$ 6,120	1.68	\$ 10,300	
Subtotal / floor cost							\$ 392,600

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
Business / Office Build-Out / Floor (net) (retain 50% of existing frame walls & openings w/ transoms)							
Interior walls (incl trim-finishes) allowance	2200	sf	\$ 20	\$ 44,000	1.68	\$ 73,800	
Interior doors allowance	12	ea	\$ 800	\$ 9,600	1.68	\$ 16,100	
Lighting and Power allowance	3400	sf	\$6.8	\$ 23,120	1.68	\$ 38,800	
HVAC allowance	3400	sf	\$ 12	\$ 40,800	1.68	\$ 68,500	
Additional plumbing allowance	1	ls	\$ 2,000	\$ 2,000	1.68	\$ 3,400	
Sprinkler modifications / expansion allow	3400	sf	\$0.8	\$ 2,720	1.68	\$ 4,600	
Fire Protection modifications / expansion allow	3400	sf	\$1.6	\$ 5,440	1.68	\$ 9,100	
Subtotal / floor cost							\$ 214,300
Apartments Build-Out / Floor (net) (retain 60% of existing frame walls & openings w/ transoms)							
Interior walls (incl trim-finishes) allowance	2400	sf	\$ 18	\$ 43,200	1.68	\$ 72,500	
Interior doors allowance	18	ea	\$ 800	\$ 14,400	1.68	\$ 24,200	
Lighting and Power allowance	3400	sf	\$7.5	\$ 25,500	1.68	\$ 42,800	
HVAC allowance	3400	sf	\$ 8	\$ 27,200	1.68	\$ 45,600	
Additional plumbing allowance	4	ls	\$ 4,500	\$ 18,000	1.68	\$ 30,200	
Kitchen allowance	4	ea	\$ 12,000	\$ 48,000	1.68	\$ 80,500	
Sprinkler modifications / expansion allow	3400	sf	\$0.8	\$ 2,720	1.68	\$ 4,600	
Fire Protection modifications / expansion allow	3400	sf	\$1.8	\$ 6,120	1.68	\$ 10,300	
Subtotal / floor cost							\$ 310,700
Gallery Build-Out / Floor (net)							
Interior walls (incl trim-finishes) allowance	600	sf	\$ 20	\$ 12,000	1.68	\$ 20,100	
Finishes / Trim upgrades allowance	3400	sf	\$ 4	\$ 13,600	1.68	\$ 22,800	
Replicate ceiling stenciling	40	cw/hrs	\$ 150	\$ 6,000	1.68	\$ 10,100	
Interior doors allowance	4	ea	\$ 800	\$ 3,200	1.68	\$ 5,400	
Lighting and Power allowance	3400	sf	\$ 8	\$ 27,200	1.68	\$ 45,600	
HVAC allowance - Basic	3400	sf	\$ 12	\$ 40,800	1.68	\$ 68,500	
Additional plumbing allowance	1	ls	\$ 2,500	\$ 2,500	1.68	\$ 4,200	
Sprinkler modifications / expansion allow	3400	sf	\$0.8	\$ 2,720	1.68	\$ 4,600	
Fire Protection modifications / expansion allow	3400	sf	\$1.6	\$ 5,440	1.68	\$ 9,100	
Subtotal / floor cost							\$ 190,400
Basement Basic Build-Out (non-occupied-net)							
Interior walls (incl trim-finishes) allowance	400	sf	\$ 20	\$ 8,000	1.68	\$ 13,400	
Interior doors allowance	4	ea	\$ 800	\$ 3,200	1.68	\$ 5,400	
Lighting and Power allowance	3400	sf	\$3.2	\$ 10,880	1.68	\$ 18,300	
HVAC allowance	3400	sf	\$ 5	\$ 17,000	1.68	\$ 28,500	
Additional plumbing allowance	1	ls	\$ 1,500	\$ 1,500	1.68	\$ 2,500	
Sprinkler modifications / expansion allow	3400	sf	\$0.3	\$ 1,020	1.68	\$ 1,700	
Fire Protection modifications / expansion allow	3400	sf	\$0.6	\$ 2,040	1.68	\$ 3,400	
Subtotal / floor cost							\$ 73,200

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
BUILD-OUT OPTIONS - DOVE BLOCK							
OPTION 1a: EXCHANGE STREET (F/R-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
2nd Floor non-bearing wall removal						\$9,500	
SE Stair expansion / enclosure to basement						\$88,500	
Rehabilitate 1st Floor toilet rooms						\$7,600	
1st Floor unisex accessible toliet						\$25,600	
Apartment Bathrooms-3						\$76,800	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Int. Elevator 5-stop, front/rear access-complete						\$240,000	
1st Floor Restaurant build-out (retain bar)						\$392,600	
2nd Floor Apartment build-out						\$310,700	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,466,100
TOTAL							\$2,684,100
			cost/gross SF : floors 1-3 (12,540 SF)			\$214.04 /SF	
OPTION 1b: EXCHANGE STREET (F-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
2nd Floor non-bearing wall removal						\$9,500	
Rehabilitate 1st Floor toilet rooms						\$7,600	
1st Floor unisex accessible toliet						\$25,600	
Apartment Bathrooms-2						\$51,200	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Int. Elevator 4-stop, front/front access-complete						\$211,300	
1st Floor Restaurant build-out (retain bar)						\$392,600	
2nd Floor Apartment build-out						\$310,700	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,323,300
TOTAL							\$2,541,300
			cost/gross SF : floors 1-3 (12,540 SF)			\$202.66 /SF	

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
OPTION 2a: CASTLE STREET (F/R-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
Exterior Masonry Door Opening						31,700	
2nd Floor non-bearing wall removal						\$9,500	
SE Stair expansion / enclosure to basement						\$88,500	
1st Floor - 2 unisex accessible toliets						\$51,200	
2nd Floor-2 unisex accessible toliets						\$51,200	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Int. Elevator 5-stop, front/rear access-complete						\$240,000	
1st Floor Retail/Merchantile						\$170,900	
2nd Floor Retail/Merchantile						\$170,900	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,128,700
TOTAL							\$2,346,700
				cost/gross SF : floors 1-3 (12,540 SF)		\$187.14	/SF
OPTION 2b: CASTLE STREET (F/R-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
Exterior Masonry Door Opening						\$31,700	
Exterior 1 Story Entrance Lobby						\$66,400	
Rehabilitate one 1st Floor toilet room						\$3,800	
1st Floor-2-Two stall accessible Toilet Rooms						\$65,800	
Apartment Bathrooms-3						\$76,800	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Int. Elevator 5-stop, front/rear access-complete						\$240,000	
1st Floor Restaurant build-out (retain bar)						\$392,600	
2nd Floor Apartment build-out						\$310,700	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,502,600
TOTAL							\$2,720,600
				cost/gross SF : floors 1-3 (12,540 SF)		\$216.95	/SF

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
OPTION 2c: CASTLE STREET (F/R-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
South Bay Storefront Restoration						59,600	
2nd Floor non-bearing wall removal						\$9,500	
NE Stair 2-3 reconfiguration						\$33,300	
1st Floor : 3 unisex accessible toliets						\$76,800	
Apartment Bathrooms-3						\$76,800	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Int. Elevator 5-stop, front/rear access-complete						\$240,000	
1st Floor Restaurant build-out (retain bar)						\$392,600	
2nd Floor Apartment build-out						\$310,700	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,514,100
TOTAL							
							\$2,732,100
						cost/gross SF : floors 1-3 (12,540 SF)	\$217.87 /SF
OPTION 2d: CASTLE STREET (F/R-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
South Bay Storefront Restoration						59,600	
Exterior Masonry Door Opening						31,700	
1st Floor Bar Removal						6,800	
2nd Floor non-bearing wall removal						\$9,500	
NE Stair 2-3 reconfiguration						\$33,300	
SE Stair Removal						\$10,600	
West Center Stair expansion/enclosure to 3rd floor						\$35,200	
1st Floor-2 unisex accessible toliets						\$51,200	
2nd Floor-2 unisex accessible toliets						\$51,200	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Int. Elevator 5-stop, front/rear access-complete						\$240,000	
1st Floor Retail/Merchantile						\$170,900	
2nd Floor Retail/Merchantile						\$170,900	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,087,600
TOTAL							
							\$2,305,600
						cost/gross SF : floors 1-3 (12,540 SF)	\$183.86 /SF

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
OPTION 3: EXCHANGE STREET (F-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
South Bay Storefront Restoration						59,600	
2nd Floor non-bearing wall removal						\$31,700	
Rehabilitate 1st Floor toilet rooms						\$7,600	
1st Floor unisex accessible toliet						\$25,600	
2nd Floor-2 unisex accessible toliets						\$51,200	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Int. Elevator 4-stop, front/front access-complete						\$211,300	
1st Floor Retail/Merchantile						\$170,900	
2nd Floor Retail/Merchantile						\$170,900	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$984,000
TOTAL							\$2,202,000
						cost/gross SF : floors 1-3 (12,540 SF)	\$175.60 /SF
OPTION 4: CASTLE STREET EXTERIOR (F/R-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
Exterior Masonry Door Opening						\$31,700	
Exterior 3 Story Elevator Lobby + 1 Story Bsmt						\$187,400	
1st Floor Bar Removal						\$6,800	
2nd Floor non-bearing wall removal						\$9,500	
SE Stair expansion / reconfiguration						\$88,500	
Rehab Exchange St Stair - open to 1st Floor						\$13,400	
Rehabilitate 1st Floor toilet rooms						\$7,600	
2nd Floor-2 unisex accessible toliets						\$51,200	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Ext. Elevator 5-stop, front/rear access-complete						\$272,100	
1st Floor Retail/Merchantile						\$170,900	
2nd Floor Retail/Merchantile						\$170,900	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,324,800
TOTAL							\$2,542,800
						cost/gross SF : floors 1-3 (12,540 SF)	\$202.78 /SF

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
OPTIONS ADDED JULY FOLLOWING JUNE REVIEW : these represent two preferred Options							
OPTION 1a1: EXCHANGE STREET (F-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
South Bay Storefront Restoration						59,600	
2nd Floor non-bearing wall removal						\$9,500	
1st Floor Bar Removal						\$6,800	
SE Stair expansion / enclosure to basement						\$88,500	
1st Floor 2 unisex accessible toilets						\$51,200	
2nd Floor-2 unisex accessible toilets						\$51,200	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Int. Elevator 4-stop, front access-complete						\$211,300	
1st Floor Retail/Merchantile						\$170,900	
2nd Floor Retail/Merchantile						\$170,900	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,075,100
TOTAL							\$2,293,100
				cost/gross SF : floors 1-3 (12,540 SF)		\$182.86	/SF
OPTION 4b: EXCHANGE STREET (F-elevator)							
Repair / Stabalization							\$389,600
Structural Improvements / Basic Finishes & MEP							\$828,400
Build-Out Improvements by Scheme & Occupant Type							
Exterior 4 Story Elevator Lobby+ sidewalk						\$168,660	
Exterior 1 Story Entrance Lobby+sidewalk						\$66,400	
1st Floor Bar Removal						\$6,800	
2nd Floor non-bearing wall removal						\$9,500	
SE Stair expansion / reconfiguration						\$88,500	
Rehab Exchange St Stair - open to 1st Floor						\$13,400	
1st Floor 2 unisex accessible toilets						\$51,200	
2nd Floor-2 unisex accessible toilets						\$51,200	
3rd Floor - 2 unisex accessible toilet rooms						\$51,200	
Ext. Elevator 5-stop, front/rear access-complete						\$272,100	
1st Floor Retail/Merchantile						\$170,900	
2nd Floor Retail/Merchantile						\$170,900	
3rd Floor Gallery build-out						\$190,400	
Basement basic build-out						\$73,200	
Sub-total							\$1,384,360
TOTAL							\$2,602,360
				cost/gross SF : floors 1-3 (12,540 SF)		\$207.52	/SF

Work Item	Qty	Units	Unit Cost	Subtotal	Markup	\$	Subtotal \$
ADDITIONAL COSTS ASSOCIATED WITH CONSTRUCTION							
<u>Note:</u> The following costs are not included:			Low	High			
Hazardous Materials Testing			\$2,500	\$4,500			
Third party air monitoring services for asbestos abatement - allowance			\$3,000	\$3,500			
Special inspections : reinf masonry (code req'd independent testing/observations)			\$4,000	\$6,000			
Furniture, casework, and associated moving			no estimate				
Gallery casework and display lighting			no estimate				
Gallery high-level security			no estimate				
Telecommunication equipment			no estimate				
Security system or electronic access systems			no estimate				
Window treatment			no estimate				
Tax Credit Administration: Parts 1-3 (excluding financing and IRS issues)			\$12,000	\$16,000			
Professional Fees: Architectural/Engineering-full services : 12% - 15%			see below	see below			
BASIC							
Repair / Stabalization			\$46,752	\$58,440			
Structural Improvements/Basic Finishes & MEP			\$99,408	\$124,260			
FULL BUILD-OUT (includes BASIC costs)							
Option 1a: Exchange Street (F/R-elevator)			\$322,092	\$402,615			
Option 1b: Exchange Street (F-elevator)			\$304,956	\$381,195			
Option 2a: Castle Street (F/R-elevator)			\$281,604	\$352,005			
Option 2b: Castle Street (F/R-elevator)			\$180,312	\$225,390			
Option 2c: Castle Street (F/R-elevator)			\$327,852	\$409,815			
Option 2d: Castle Street (F/R-elevator)			\$130,512	\$163,140			
Option 3: Exchange Street (F-elevator)			\$264,240	\$330,300			
Option 4: Exchange Street Exterior (F/R-elevator)			\$305,136	\$381,420			
Added following June Review							
Option 1a1: Exchange Street (F-elevator)			\$275,172	\$343,965			
Option 4a: Exchange Street Exterior (F/R-elevator)			\$312,283	\$390,354			
Markups			GC	Prime Sub	Abbreviations		
General conditions			10.0%		ls		lump sum
NYS special conditions			10.0%	5.0%	lf		linear foot
General contractor's overhead			8.0%	8.0%	sf		square foot
General contractor's profit			7.0%	7.0%	ea		each
Contingency			20.0%	10.0%	hr		hour
Professional fees (allowance - not included)					12%-15%	crew/hr	crew hour
Compounded and rounded			1.68	1.33	1.12 - 1.15		



TPS

Technical Preservation Services

**STANDARDS FOR REHABILITATION**

REHABILITATION IS DEFINED AS the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.



1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Rehabilitation as a Treatment

When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment.

[Home](#)[Program in Brief](#)[Publications](#)[Tax Incentives](#)[Online Education](#)[Standards and Guidelines](#)[Conferences](#)[Features](#)[Heritage Preservation Services »](#)[NPS History & Culture »](#)[Search »](#)[Contact Us »](#)



STRUCTURAL ENGINEERING CONSULTANTS

DONALD JENSEN, P.E.
JOHN BAUMLER, P.E.
STEPHEN RUDNICKI, P.E.
JASON VIGIL, P.E.
JOE ROSENSTIEL, P.E.
PATRICIA MCKEE, P.E.

May 16, 2014

The Plotkin Foundation, Inc.

c/o Murray P. Heaton, Esq.
Heaton and Venuti, LLP
Attorneys
118 Genesee Street
Geneva, NY 14456

Subject: The Dove Block, 459-465 Exchange Street, Geneva, NY

Dear Mr. Heaton:

At your request, and in accordance with our proposal to you of April 11, 2014, we have investigated the building's structural system. The purpose of the investigation was to update the assessment of the condition of the structural system which we made in 2007. The investigation consisted of a field review on April 22, 2014, an analysis of pertinent portions of the structural system, and preparation of an opinion of probable construction cost for selected structural repairs.

This letter is a modification of the report on our original investigation, which was addressed to John Page, Architect, Bero Architecture, PC, 32 Winthrop Street, Rochester, NY 14607, and which was dated July 23, 2007.

Attached to the original report were four 11x17 drawings, numbered S-1 through S-4, which documented certain features of the structural system. Although some of the features shown on the drawings have changed since 2007 – primarily the removal of most of the partitions on the third floor – the drawings are enclosed with this letter, in order to give you a visual picture of the building.

In the spring of 2007 a portion of the east wall collapsed. During the spring and summer of 2007, an approximately 47' length of the of the east wall was removed and replaced with a wall built of 4" brick and 8" concrete masonry, extending the full height of the wall, on a new foundation. While I was at the site, I also checked to see whether this new portion of the wall had been built in accordance with the construction documents.

When I was at the site, I was not able to see all features of the structural system. There was no electricity, so despite a good flashlight, it was hard to see in the south and central bays in the

basement, which have no windows. The bottom of most of the second and third floor joists are covered by tin or plaster ceilings. Some of the walls are covered with plaster. Connections between floors and walls are concealed by finishes. The distance between the third floor ceiling joists and the roof joists reduces to zero at the east edge of the roof, so it was difficult to see close up some of the features in that area.

Description of Building

The Dove Block was built about 1888 as a typical three story 19th century commercial building. The footprint is trapezoidal in plan and has a gross area of about 4150 square feet (sf). The 49' long front wall, on Exchange Street, faces west, and extends about 45'-6" from first floor to top of cornice. The south and two intermediate walls run about 71' east-west and are perpendicular to the front wall. The rear, east, wall is 68' long and faces an alley. The alley is about 6' lower than Exchange Street and slopes down towards the south, so that there are several doors from the basement to the alley. The 74' long north wall is angled about 15 degrees with respect to the other east-west walls. Floor to floor heights are: basement to first - 8'-5"; first to second - 12'-10"; second to third - 11'-0"; third to ceiling - 15'-0"; ceiling to top of cornice - about 6'-8". The basement, first, and second floors are divided into three bays by the two intermediate walls. The third floor was originally one large open hall intended for public events, but was subdivided into offices and apartments with 8' ceilings, probably in the 1920's or 30's.

The west and north foundation walls, which retain soil outside, are 1'-9" thick rubble masonry. The original portion of the east foundation wall is 16" thick, four-wythe brick. The new portion is 12" thick, built up of 4" brick and 8" concrete masonry. Most other walls are 12" thick, three-wythe brick. The south wall, including the foundation wall, appears to be a party wall which is shared with the adjacent building to the south, up to roughly 8'-0" above the third floor. Above that height, the south wall becomes an exterior wall, because the adjacent building is lower than the Dove Block. Floors are framed with 1 3/4" x 11 1/2" wood joists at 12" on center, except as noted under Observations below. The wood-framed roof is supported by two steel trusses which project above the roof and which are centered on the two east-west intermediate walls. The trusses span about 56' and are supported on steel columns at each end, which in turn bear on the intermediate walls below third floor level. The west ends of the trusses are close to the west wall; the east ends are set in about 15' west of the east wall. The roof slopes downward from west to east, with a secondary downward slope from the north wall, so that the low point extends roughly 37' along the south end of the east wall.

Observations

Basement and Foundation Walls

The basement floor of the south bay is wood resting on soil. The wood is completely rotted. There is quite a bit of other debris on the floor.

A 20' long portion of the foundation wall of the south intermediate wall is 1'-9" thick rubble masonry; the rest is brick. The brick in the foundation wall of the north intermediate wall, as

seen from the center bay, is in fair condition, except that there is some powdering and deterioration of face bricks, at an estimated 16" on center horizontally and vertically.

First Floor

In the south bay, the first floor joists are spaced at 12" on center, but the sizes alternate between 2" x 11 3/4" and 2 1/2" x 11 3/4". At the west end, the 2-2x12 headers around the stair opening are sagging and cracked. They are connected with double 2x2 tenons into mortises of the same size, where a number of the cracks have initiated. The wall above the opening is a bearing wall which supports the second floor.

In the east portion of the south bay, a 10" wide x 6" deep wood beam parallel to and 4' south of the intermediate wall, on 8"x12" brick piers, was installed just below the joists around 1900 to provide additional support to the first floor. The beam extends over about 27'; the piers are spaced at roughly 9' on center.

The first floor framing of the south bay from the east wall to about 12' west of the east wall is in poor condition: it is rotted, cut up, notched and headered off with inadequately sized and connected members.

In the center bay, the first floor joists are 1 3/4" x 11 1/2" at 12" on center. Toward the east end of this bay, there are two layers of 3/4" plywood on top of the original 7/8" subfloor. Approximately 4' of the easternmost framing is rotted or missing.

In the east half of the north bay, some of the stud walls above the first floor are bearing walls which support the second and third floors, the third floor ceiling, and the roof. The inside dimensions of the north bay vary from 10' at the west to 29' at the east because the north wall is angled with respect to the other east-west walls. The west half of the north bay is less than 20' wide and thus could be framed in the same way as the other two bays, which are also less than 20' wide. The east half presented more of a challenge to the builders, because the spans were too great for the methods they used in the rest of the building. They solved this problem largely by installing intermediate stud bearing walls extending from floor to floor. Unfortunately, many of these walls do not line up from floor to floor. Their load is supported on the floor joists, which transfer it to the bearing walls below. Below the first floor, there are intermediate 8" brick bearing walls, as well as several lines of beams and columns, extending from basement to first floor. The walls are made of inferior quality brick which are badly deteriorated due to moisture in the basement. There are 10"x11 1/2" solid wood beams in two locations, one about 25' long and the other about 16' long, supported by columns and bearing walls. Floor joists frame to the beams, where they are notched and bear on 2x3 ledgers which are nailed to the large beams. The nails have failed, allowing the ledgers to rotate outwards, which in turn allows the ends of the joist to drop down.

Except as noted above, the first floor framing in the areas which could be observed is in good condition.

Second Floor

Floor construction throughout appears to be 7/8" finish flooring on 1" tongue and groove subfloor, on 1 3/4" x 1 1/2" joists at 12" on center. In the south bay, there is 1" to 1 1/2" mortar or plaster beneath the subfloor, supported on 1" tongue and groove boards on 1x2 ledgers attached to the sides of the joists. This feature is common in 19th century buildings; its purpose was to provide soundproofing and/or fireproofing between the floors. It does however add 5 to 10 pounds per square foot (psf) of dead load and therefore reduces the allowable live load by that amount.

Near the southeast corner of the south bay, a stairs runs from second to third floor. The wall of the stair supports the third floor framing, thereby reducing the allowable live load on those second floor joists which support the added load.

In the center of the center bay there is an approximately 10'x15' area where both the flooring and the joists are rotted, no doubt by water coming in through a leaky roof. The bottom of the wainscoting on one of the walls that crosses this area is rotted, implying that the bases of the studs in the wall are also rotted.

There is an approximately 8' x 15' area of rotted flooring near the southeast corner of the north bay. The joists below this area appear to be sound.

There is an approximately 5' x 5' area of rotted flooring near the northwest corner of the north bay. The joists below this area also appear to be sound.

For the reasons discussed above in connection with the first floor, in the east half of the north bay second floor, some of the stud walls are bearing walls which support the third floor, the third floor ceiling, and the roof.

Except as noted above, the second floor framing in the areas which could be observed is in good condition.

The enclosed sheet S-1 shows some of the features discussed above.

Third Floor

Floor construction throughout appears to be 7/8" finish flooring on 7/8" tongue and groove subfloor, on 1 3/4" x 1 1/2" spacers on another layer of 7/8" subfloor, on 1 3/4" x 1 1/2" joists at 12" on center. The space between the spacers is filled with 1" to 1 1/2" mortar or plaster soundproofing/fireproofing. As in the case of the somewhat similar construction of the south bay second floor framing, the mortar/plaster adds 5 to 10 pounds per square foot (psf) of dead load and therefore reduces the allowable live load by that amount.

Both flooring and joists are rotted in an approximately 4'x12' area in the center of the south bay. East of this, there is a roughly 2'x20' area where the finish flooring is buckled.

In the center of the center bay there is an approximately 11'x18' area where the flooring is either buckled or rotted, and where the tops of the joists are rotted. An approximately 11' long section of floor next to a former wood stud wall has sagged, probably because the finish floor and subfloor above the mortar/plaster space has rotted and failed.

Each side of this deteriorated area, there are approximately 8' long openings in the two intermediate brick bearing walls below, starting at second floor level. Although details are hidden by finishes, there are probably wood beams at or just below third floor level which span these openings and support the third floor joists. It is very likely that both these beams are rotted.

Just southwest of this area, spanning the south and center bays, is an approximately 7' x 12' area, the floor of two former bathrooms, where the flooring and joists are rotted, probably caused by leaking bathroom fixtures.

Near the southeast corner of the north bay there is an area of about 3'x6' with rotted flooring. It was not possible to determine whether the joists in this area were also rotted.

East of this area, spanning the center and the north bays, is an approximately 14' x 14' area of rotted flooring and joists. This is the area where the roof leaked onto the floor for many years. During the morning while I was at the site it was raining, and the new roof drain pipe, installed in 2007, was leaking and dripping onto this area.

Most of the walls on the third floor, which were removed sometime after 2007, were 8' high partitions which subdivided the space into apartments and offices. They were probably added in the 1920's or 30's. There was a wood framed ceiling on top of the partitions, which supported blown in insulation.

The walls around and near the stairs in the northeast corner of the north bay, as well as the walls around the stairs in the southeast corner of the south bay, extend up to the original 15' high ceiling, and support the third floor ceiling and roof.

The walls around the northeast stair also support a mezzanine whose floor, about 7'-9" above third floor, is framed with 1 3/4 x 5 3/4 joists at 16" on center. One must climb up on the mezzanine in order to reach the ladder to the ceiling access hatch. The east ends of several of the joists are unsupported because the window opening in the east wall was unblocked at the time of the 2007 repairs.

Except as noted above, the third floor framing in the areas which could be observed is in good condition.

The enclosed sheet S-2 shows some of the features discussed above.

Third Floor Ceiling and Roof

The third floor ceiling and roof framing plan is shown on the enclosed sheet S-3; roof framing details are shown on the enclosed sheet S-4.

There are two levels of framing, one of nominal 2x8's (actual 1 3/4" x 7 5/8") at 16" on center which supports the ceiling and is level, and the other of nominal 2x8's at 20" on center which supports the roof surface and slopes. The clear distance between the top of the ceiling joists and the bottom of the roof joists or rafters varies from about 5'-0" at the north and west walls to 0" at the 37' long low point of the slope at the east wall. Near the northeast corner, there is a ceiling hatch through which one can access the attic-like space between the ceiling and roof. Around the hatch was debris left over from reroofing operations. Plank walkways have been laid down on top of the ceiling joists so that one can more easily move around in the space. There is a roof hatch approximately above the ceiling hatch.

The bottoms of the 7'-6" deep steel trusses are at approximately the same elevation as the bottoms of the ceiling joists. The tops of the trusses project above the roof and are boxed out with wood which is covered with roofing. The trusses appeared to be in good condition. As best I could tell, there was no evidence of rusting, even in the top chord which would have been most vulnerable to moisture-related damage during the period when the roof was leaking.

Intermediate supports to carry the loads of the rafters and ceiling joists to the trusses are either beams built up of 3 nominal 2x10's (actual 1 3/4" x 9 5/8") or trussed beams. The latter consist of a member built up of one or more 2x8's or 2x10's at or just below roof level and another member built up of similar sizes at or just above ceiling level, interconnected with diagonal and vertical 1x8's or 1x10's nailed to the sides of the horizontal members. Some of the latter members are not adequately braced and have buckled. The roof and ceiling surfaces appear to have sagged in directions parallel to the trussed beams.

There is evidence that a fire destroyed at least the west half of the ceiling and roof framing, probably before about 1920 or 1930, because repairs were made with the nominal sizes and types of dimension lumber common up to those dates. The inside faces of the brick of the west third of the north and south walls, and of the entire west wall, are blackened. The original rafters cantilevered about 2' beyond the outside faces of the north and west walls in order to form the top of the cornice. The original rafters were cut off, leaving charred tails projecting several feet inside the walls. The new rafters were lap spliced to the tails of the old ones. There is a continuous dimension lumber plate on top of the brick, forming the bearing surface for the rafters, along the perimeter of the north and west walls. The edge of the plate is charred in the areas where the walls are blackened. As best I could tell, the fire did not seem to affect the structural qualities of the material that came through the fire and was left in place, namely, the brick walls and the steel trusses.

In 2007, the rafters and ceiling joists in the approximately 14'x52' area adjacent to the low point of the roof slope at the east wall were observed to be very rotted, because water had collected here over a period of many years due to the plugged roof drain. Around 1950 some of the original framing in this area was removed and replaced with new wood framing. During the east wall repairs in 2007, most of the rafters and ceiling joists in this area were removed, and new ones were installed. However, the following work was not done in 2007: as noted on the

enclosed drawing S-3, one beam built up of 3-2x10's, on the same line as the north truss, is missing. Also as noted on the drawing, the end of the adjacent built up beam which bears on the east wall is very rotted.

Except as noted above, the third floor ceiling and roof framing in the areas which could be observed is in good condition.

Walls

It was not possible to observe whether there are positive connections between the floor joists and the walls, because most of these areas are concealed by floor and ceiling finishes. Based on observations at the east wall, it is unlikely that there are any positive connections such as steel straps or anchor bolts.

Near the east end of the north wall, there is an outward bulge at approximately second floor level. Also at this end of the north wall, there is an approximately vertical crack up to 2" wide, extending from third floor ceiling to roof level. The crack is open to the outside in places.

A door opening was cut into the north intermediate wall above second floor level, centered about 14' west of the east wall, probably about 1920. Around 2000, the opening was blocked up with concrete masonry. It is fortunate that the opening was filled in, because immediately above is the built up steel column, with a load of 35,000 pounds, that supports the east end of the north truss. As best I could tell, there was no lintel above the opening.

The 2007 east wall repairs appear to have been built generally in accordance with the requirements of the contract documents, except as otherwise noted.

Structural Analysis

It was conservatively assumed that the wood, which appears to be old-growth pine or fir, is similar to Number 2 Hem-Fir. Steel was assumed to have a yield strength of 30,000 pounds per square inch (psi).

The following dead loads were calculated:

Floors: 1" finish flooring – 3 pounds per square foot (psf); 1" subfloor – 3 psf; joists – 6 psf; wood lath and plaster ceiling – 5 psf; mechanical and electrical allowance – 3 psf, for a total of 20 psf.

First floor where there is no ceiling: total - 15 psf.

Floors with 1" to 1 1/2" of mortar or plaster: total - 30 psf.

Third floor ceiling: joists - 3 psf; wood lath and plaster ceiling – 5 psf; mechanical, electrical, and insulation allowance – 7 psf, for a total of 15 psf.

Roof: built up roofing – 3 psf; sheathing – 3 psf; framing – 2 psf; miscellaneous – 2 psf, for a total of 10 psf.

Mr. Bogin asked that we consider whether the roof structure can support an array of photovoltaic solar panels. A dense array of solar panels plus ballast can weigh about 5 psf. The total dead load in that case is then 15 psf.

The PRES Design-Build *Mechanical-Electrical-Plumbing Project Overview*, dated 4-18-08, which Mr. Bogin sent me, recommends two pieces of equipment which would be supported on the roof: an evaporative cooling tower and a ventilation air system with energy recovery capabilities. The report did not give a weight for either of these items.

Each 56' truss was calculated to weigh 3400 pounds, or 60 pounds per foot.

The 2010 *Building Code of New York State* specifies a design snow load for flat and low-slope roofs in the Geneva area of 28 psf. The total load on the roof is thus 28 psf snow plus 10 psf dead, or 38 psf. For a dead load of 15 psf, which allows for solar panels, the total load is 43 psf.

Following are the results of the structural analysis:

First Floor

At the south bay with alternating 2" and 2 ½" x 11 ¾" joists at 12" on center and 19.5' span, the allowable live load is about 64 psf. The allowable live load is somewhat greater where the span is cut down by the added beam, but the added beam itself is inadequate.

At the center bay with a 16' span the allowable live load is around 77 psf.

At the north bay, the allowable live load varies depending on span, support conditions, and load applied by bearing walls. In the west half, where the span is 20' or less, the allowable live load is probably at least 44 psf.

Second Floor

The allowable live load in the south bay, with the mortar/plaster layer and a 19.5' span, is of the order of magnitude of 37 psf.

At the center bay, without the mortar/plaster layer, the allowable live load is about 67 psf.

The allowable live load in the north bay varies depending on span, load applied by bearing walls, and whether there is a mortar/plaster layer, but is probably at least 37 psf.

Third Floor

Because of the mortar/plaster layer, the allowable live load in the south bay is about 32 psf, and in the center bay about 62 psf. The allowable live load in the north bay varies depending on span, support conditions, and load applied by bearing walls, but is probably at least 32 psf.

Third Floor Ceiling and Roof

The steel trusses and their supporting columns are adequate to safely support the roof and ceiling loads.

The 2x8 at 20" on center rafters can safely span up to about 15' with the 38 psf total load, or up to about 14' with the 43 psf total load. Their actual span between beams is 14' or less.

The 2x8 at 16" on center ceiling joists can safely span the 19.5' between the south wall and the south truss. Their actual span between beams is around 20' or less. However, where their span is greater than 17' they will deflect excessively and cause plaster cracking.

The intermediate supports – the built up beams and trussed beams – are the weak links in the chain of the roof/ceiling structural system. Theoretically, they are overstressed and inadequate no matter which model of analysis is used. Practically, of course, they are part of a complete structural system that has performed its required function and supported snow load for a century and a quarter of winters. As noted, there are some signs of distress such as the sagging roof and ceiling, and the buckled diagonal members.

Recommendations

Each of the recommendations below is followed by either “**essential**” or “**optional**”. “**Essential**” means that, in my opinion, the work must be done for the life safety of people in or near the building, or to preserve the basic integrity of the building. “**Optional**” means that, in my opinion, the component or components being described, although substandard, not up to modern codes, or theoretically inadequate, have performed their functions adequately for many years, so that the work being recommended gives an upgraded level of performance or an increase in the safety factor.

Opinions of probable construction cost are given only for that work labeled “**essential**”. The work labeled “**optional**” could be done in many ways, and correspondingly, its probable construction costs could vary over a wide range. The determination of which of the optional work items to do, how to do them, and their probable construction costs, is really a task for the owner/architect/consultant team which prepares the construction documents for the renovation of building, if the owner should decide to proceed to that stage.

Basement and Foundation Walls

Remove rotted wood floors and debris. **Essential - \$4000.**

Consider installing a concrete slab on grade on a properly drained crushed stone subbase. **Optional.**

Remove and replace deteriorated brick in foundation walls. Point all walls as necessary. **Optional.**

First Floor

The 2010 *Building Code of New York State* specifies a minimum design live load of 100 psf for retail establishments and other spaces open to the public. The allowable live load on the first floor is 77 psf or less. If it is intended to use the first floor spaces as retail establishments such as stores or restaurants, then the first floor structure should be reinforced to support a live load of at least 100 psf. The most straightforward way of reinforcing is to install lines of beams and columns below the floor at approximately midspan of the joists, assuming that this would not interfere with the probable use of the basement for storage and mechanical equipment. If the first floor is reinforced in this way, then previously added reinforcing such as the line of beams and piers in the south bay could be removed. **Optional.**

If it is intended to use the first floor spaces for apartments, for which the *Building Code* specifies a minimum design live load of 40 psf, then no reinforcing is necessary.

The stair opening at the west end of the south bay should be reinforced with beams and columns designed to support not only the first floor but also the bearing wall above which supports the second floor. Damaged wood members should be removed and replaced. **Essential - \$3000.**

The framing of the south bay between the east wall to 12' west of the east wall should be removed and replaced with at least 2x12 joists at 6" on center; the flooring should be removed and replaced. **Essential - \$3000.**

The 4' width of deteriorated framing at the east end of the center bay should also be removed and replaced, with 2x12 joists at 12" on center. **Essential - \$1000.**

At the two 10" x 11 1/2" beams in the north bay, the existing 2x3 ledgers should be removed. The joists should be attached to the beams with appropriately sized joist hangers. **Essential - \$1000.**

The first floor in the east half of the north bay should be reinforced to support the bearing walls. The deteriorated 8" brick walls should be removed and replaced with either new walls or lines of beams and columns. **Optional.**

Second Floor

Parts of the second floor have a sufficiently large allowable live load to support residential usage at 40 psf or office usage at 50 psf. The south bay and parts of the north bay would have to be reinforced to obtain this level of live load. Alternatively, if the mortar/plaster were removed from the second floor of the south bay, its allowable live load would be at least 42 psf and it would therefore be adequate for residential usage. **Optional.**

The southeast corner of the south bay should be reinforced in order to support the bearing wall around the stairs above. **Optional.**

Rotted flooring and joists should be removed and replaced. **Essential - \$4000.**

The second floor in the east half of the north bay should be reinforced to support the bearing walls. **Optional.**

Third Floor

See the first paragraph under Second Floor above for a discussion of achieving residential or office usage live loads, which is equally applicable to the third floor. **Optional.**

If it is desired to use the third floor as a place of public assembly, for which the 2010 *Building Code of New York State* specifies a minimum design live load of 100 psf, then all areas of the floor will have to be reinforced. The reinforcement will be more difficult than that for the first floor, because the existing clear spans will have to be maintained. One way to do the reinforcing would be to install additional joists. Given the extensive area of rotted flooring and joists on the third floor, it might make sense to remove all of the third floor framing, and install all new joists and subfloor. **Optional.**

Rotted flooring and joists should be removed and replaced. **Essential - \$7000.**

The beams spanning the second floor wall openings, described under Observations, should be removed and replaced. **Essential - \$2000.**

The third floor in the east half of the north bay should be reinforced to support the bearing walls. **Optional.**

Third Floor Ceiling and Roof

A conservative approach to the problem of the intermediate supports would be to reinforce them with four or five lines of steel or laminated veneer lumber (LVL) beams running north-south, from the north exterior wall, to the north truss, to the south truss, and then to the south exterior wall. Ceiling joists with spans greater than about 17' would also be supported by the added beams in order to prevent excessive ceiling deflection. This approach is especially highly recommended if it is desired to install a dense array of solar panels on the roof. **Optional.**

Debris should be removed from the space above the ceiling. **Essential - \$2000.**

In the east end of the north bay, a beam should be installed in the location where one is now missing. The beam with the rotted end should be removed and replaced with a properly sized one. **Essential - \$2000.**

Walls

The cracking near the east corner of the north wall above the third floor ceiling should be repaired by installing steel strap ties across the crack. **Essential - \$1000.**

In order to comply with floor diaphragm anchorage requirements of paragraph 5.8.3.2 of ACI (American Concrete Institute) 530-05, *Building Code Requirements for Masonry Structures*, the second and third floor joists should be positively anchored to the walls with metal strap anchors at not more than 6' on center. **Essential - \$9000.**

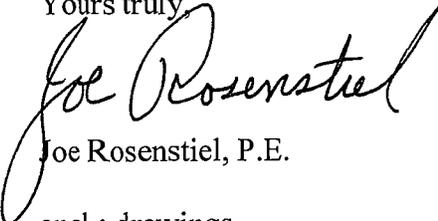
In order to resist the uplift of wind on the edges of the roof, and in order to comply with roof diaphragm anchorage requirements of paragraphs 5.8.3.1 and 5.8.3.4 of ACI 530-05, the roof framing should be positively anchored to the walls with grouted or epoxied steel anchors at not more than 6' on center, which engage a mass of masonry sufficient to safely resist the uplift at the roof edges. **Essential - \$5000.**

Exterior walls should be pointed with historically accurate mortar which matches the composition, color, and texture of the existing mortar. **Optional.**

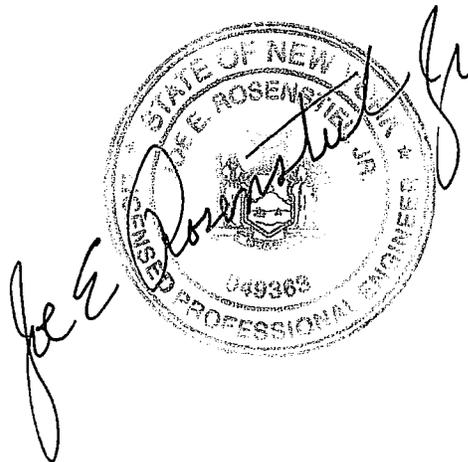
Total of Opinion of Probable Construction Costs for **Essential** Items: **\$44,000.**

Please do not hesitate to call if you have any questions about this matter.

Yours truly,


Joe Rosenstiel, P.E.

encl.: drawings



Report of Site Visit

March 29, 2017

From: Steve Jordan
185 David Avenue
Rochester, NY 14620
(585) 235-8828
painintheglass@frontiernet.net

To: John Page
Bero Architecture
32 Winthrop Street
Rochester, NY 14607

The following comments are in regard to conditions observed on the afternoon of Tuesday, March 28th, 2017. Interior observations were made at an arm's length; exterior observations were through binoculars. Recommendations, reflections, or suggestions are made with the *Secretary of the Interior's Standards for Rehabilitation* in mind.

Third Floor Windows

The ballroom at the third floor originally had tall double-hung, four-over-four (4/4), round topped, sash windows. On warm summer days or evenings and when in working condition, the upper sashes would have been pulled part-way down to relieve the hot air accumulated at the ceiling. At some time in the past, the lower sashes were removed and the entire space bisected with a ceiling at the bottom of the upper sash. The lower openings were then filled with new, single-light double hung windows. Most of the remaining upper sashes are in poor repair and the original muntins have been removed to install large panes of glass. Nearly all of the lower jambs, exterior sills, and interior stools need extensive repairs.

Since repair versus replacement decisions are usually based on cost comparisons, it is my opinion that there is not enough remaining original material to warrant restoration of the upper sashes and replication the missing lower sashes. Restoration and replication would be very expensive and if the area were to become a living space, the openings would require storm sashes that are also expensive and problematic on exceptionally large, round head openings. Simulated divided light (SDL) replacement windows with similar muntin divisions and proportions are the best option for replacement because they require no separate storm sashes. I do not know how the local ordinances view clad wood windows but at this height, they may be a good idea due to their low maintenance design.

It is my opinion that the work associated with removal of the existing units, repairs, and replacement windows installed will cost in the \$4000 - \$5000 range per opening. Exterior painting of the window casings may cost about \$500 per opening. This does not include painting or other work to the interior beyond the window sashes themselves.

Second Floor Windows

The second floor windows are 4/4, elliptical head, double-hung windows in varying states of repair. Although heavily encrusted with lead paint and other carpentry defects, these windows are in restorable condition. In restored condition, both sashes may operate as originally designed or the upper sash could be set in a fixed position with only the lower sash in working order. These would require either interior or exterior storm sashes to meet the energy code and provide interior comfort. Interior storm sashes are very efficient but require removal and storage seasonally. Exterior storm sashes are less efficient but protect the prime sashes from undue maintenance and the screen and storm sashes are self storing within the frame. Note that ordering an aluminum storm sash to match the elliptical window head may double the cost of each unit.

My guess is that restoration would range between \$1500 - \$2000 each opening. Painting of the second floor casings may cost in the range of \$300 - \$350 per opening.

Brick Masonry (west and north sides only)

The building is constructed of soft red/orange brick with limestone window sills and keystones (voussoirs). The brick has not been painted but is mottled with a dark accumulation of soot and grime. Most of the brick is in good condition except over or below some of the limestone appointments that have shifted or failed. My field notes indicate about ten locations where diagonal cracking has occurred over keystones or around window sills.

These areas must be repointed to prevent further deterioration and more serious/expensive repairs. The repointing mortar should be softer than the surrounding masonry units. I recommend a mortar softer than an ASTM Type N – something between a Type N and O. The new mortar should match the original mortar color, a match that may seem wrong considering the contrast with the dirty masonry. If, however, the brick is cleaned in the future, the new bright mortar will eventually blend in.

My estimate of costs to repoint the areas of most concern is about \$8500 which will include the cost of a lift for one week.

The limestone sills are in poor condition and some have cracked completely apart and been repaired; at least six need complete replacement. I estimate that these will cost about \$1800 each to remove the existing and replace with new stone sills.

Note also that the old step at the chamfered wall between the north and west sides must be replaced. I recommend a piece of limestone.

DOVE BLOCK MECHANICAL. ELECTRICAL REPORT

This report is based on observations at the building and discussions with John Page, Bero Architecture PLLC about rehabilitation plans and options, March through May, 2017.

EXISTING CONDITIONS

HVAC

The only existing HVAC in the building serves the former bar area on the first floor.

There appear to be two direct vent gas fired furnaces above the ceiling serving the former bar area. There is an existing kitchen hood.

PLUMBING

The existing water service is a ¾" service on the front of the building (west from Exchange St.) in the basement. There is no backflow preventer.

There are two 4" sanitary building drains out the back (east) side of the building. A 4" about 12" above the basement floor serving the north side. A 4" into the basement floor near the northeast corner of the south section.

There are two 4" roof drains along the east side of the roof. They drain to a 6" building drain down and out the northeast corner of the building.

The building natural gas service is in the basement at the west end of the south section.

ELECTRICAL

The building electrical service is a 208 volt, 3 phase in the southeast corner of the basement.

The service is over head at the southeast corner of the building connected to pole mounted transformers to the east of the building (one small block away).

The actual size of the service entrance cables is not known but appears to be 500kcmil (at least to the meter).

The main distribution panelboard is 225A and has two main disconnects (circuit breakers). One services the bar. The other services a panelboard on the second floor on the south wall.

There is existing distribution, and lighting for the bar. Otherwise there is little existing electric in the building.

The former bar has a fire alarm system.

DISCUSSION

HVAC

The existing HVAC in the first floor bar area is likely not sufficient for a renovated similar space. The existing kitchen hood is old and should not be reused.

So, essentially there is no existing HVAC that can be reused.

PLUMBING

The existing ¾" water service is insufficient for most purposes. If the occupancies only required a couple of toilet rooms per floor it is possible the service may suffice. However for any higher use occupancies such as residential and a restaurant, a larger domestic water service would be required.

Any fire protection sprinkler system would require a larger service. In this case the service can be combined.

A new service (or even the existing service) would require a backflow preventer on both the domestic service and the fire protection service.

The natural gas service would likely remain in the same location. Separate meters would be installed for each occupancy. The utility would determine the capacity of the service and make any adjustments if required.

The sanitary drain should be sufficient for any combination of occupancies.

ELECTRICAL

The existing electric service will not be sufficient for projected use. The existing service size may be sufficient for all low power use occupancies such as mercantile, office, and gallery space and if no elevator is installed. However to provide any flexibility for a variety of occupancies such as residential, restaurant, and an elevator, a larger service will be required.

The service equipment would have to be replaced in any event. Any mixture of tenants (or a condominium set up) would require new service equipment.

As the change of service is limited to the service conductors up the side of the building, an increase in size of the service will be relatively cost effective.

ADDITIONAL REQUIREMENTS

If specialized occupancies such as a tanning salon and a laundromat were considered, they may require added service capacities.

REHABILITATION OPTIONS CONSIDERED

WATER SERVICE

If a fire protection sprinkler system is required, the new service would be a combined (most likely) 4". The sprinkler service may require detector type RPZ backflow preventer. The domestic service would be connected and would require a RPZ backflow preventer. If no sprinkler system is required, a new domestic service would be required for any flexibility in use of the building.

Domestic Water Size Estimate – 2" based on an estimated demand of 50 GPM

Basis: 1 North - Bar with Kitchen
1 South – Retail
2 – three apartments
3 – two toilet rooms

The building would have one domestic service meter and one fire protection service meter (small by-pass type). Any desired sub-meter would be done in the building and would not be billed through the water department.

The water main is on the far side of Exchange Street. A new service may be connected to the main in Castle Street.

ELECTRIC SERVICE

The service would be revised to provide a meter stack arrangement.

The electric service size would be increased to 600 amps (based on 208V, 3 phase).

Basis: 1 North - Bar with Kitchen:	67KVA
1 South – Retail:	21KVA
2 – three apartments:	56KVA
3 – office or museum:	40KVA
Elevator	22KVA
Total	260KVA (572 amp)

HVAC

Split systems with furnaces can be used throughout. The condensing units would likely be located on the roof (or perhaps mounted off the rear wall for the first floor).

A rooftop unit would be a better solution for the third floor.

Any equipment on the roof will require permanent access to the roof. This could include rooftop units, condensing units, and fans.

Estimated Loads:	Cooling	Heating
First Floor North Restaurant	6.6 tons	109 MBH
First Floor South Retail	3.7 tons	46 MBH
Second Floor Apartments (total)	4 tons	49 MBH
Third Floor Museum or Office	6.3 tons	99 MBH

For a “warm dark” vanilla box, temporary furnaces can be installed on each floor. However a permanent HVAC system should be based on a solid projected use for the space.

A standard HVAC system with rooftop units (including heating, cooling, and ventilation) would be sufficient for most gallery type exhibition spaces. A system that provides more stringent control of temperature and/or humidity could be installed with a significant increase in cost depending on the level of control desired.

FIRE ALARM

A central fire alarm system may be required. This central alarm system would be common for the building.

Minimally the following will be required (as applicable):

Monitor sprinkler system.

Smoke detection for elevator recall.

Any additional fire alarm functions would dependant on the specific occupancies.