

First National Bank Greenfield, Massachusetts Final Study Report

18 June 2019

#### Preface and Acknowledgments

Many individuals and groups have contributed to this study since its launch in March, 2019, including: William Martin, City of Greenfield Mayor MJ Adams, City of Greenfield Community and Economic Development (CED) Robin Fordham, CED Charlene Golonka, Greenfield Redevelopment Authority (GRA) Nancy Hawkins, GRA Bill Mason, GRA Adam Provost, GRA Jean Wall, GRA Nancy Hazard, Greenfield Planning and Construction Committee (GPCC) John Andrews, GPCC Susan Hollins, Friends of the First National Bank (FOFNB) John Lunt, FOFNB Linda McInerney, FOFNB Chris Sykes, FOFNB Beth Murphy, Mass Development The design team includes these firms and individuals: Architectural design and project coordination Taylor & Burns Architects **Carol Burns** Conrad Chudzicki, Mechanical, Electrical, Plumbing Fire Protection (MEP/FP) engineering design **Hesnor Engineering Associates** Mike Trzcinski Structural engineering design Spaulding Associates Wes Spaulding Code review **RW Sullivan** Donald E. Contois

Cost estimation PM&C

Joe Roach

## **First National Bank**

## Greenfield, Massachusetts

## **Final Study Report**

18 June 2019

### **Table of Contents**

Preface and Acknowledgments

1.	Introduction	Pg 1
2.	Photographic Documentation of Existing and Historical Conditions	Pg 5
3.	Preferred Design Solution	Pg 27
4.	Systems Narratives	Pg 49
	Code review, RW Sullivan	Pg 50
	Architectural Narrative, Taylor & Burns Architects	Pg 66
	MEP/FP Narrative, Hesnor Engineering Associates	Pg 68
	Structural Narrative, Spaulding Associates	Pg 81
5.	Cost Estimate	Pg 85
Appendices		Pg 137

#### 1. Introduction

The fundamental purpose of the project is to study the cost implications for reuse of the First National Bank in Greenfield, MA, as a community-use facility for visual and performing arts. Located at 11-14 Bank Row, the building, following sustained vacancy, was acquired in 2017 by the City of Greenfield Community Development Corporation. In 2018 MassDevelopment hired Taylor & Burns Architects to lead a design team in preparing a study for reuse of the building in conjunction with community stakeholders and including code review, MEP and structural assessment and design, and cost estimating. The proposed change of occupancy necessitates compliance with contemporary building codes. The project process has been informed and directed in a monthly sequence of meetings since the project inception in March, 2019 (meetings notes are included in the Appendices).

#### **Building History**

According to the historic listing with Massachusetts Cultural Resource Information System (MCRIS) dated 2/16/1979, the First National Bank and Trust building was designed in an Art Deco style by Denison & Hirons of New York City and constructed by H.W. Mellor from 1929 to 1930. Original building drawings are not currently available.

#### **Existing Conditions**

The building is constructed of masonry and steel, non-combustible materials. It includes about 6600 square feet on each of the ground floor and basement levels, plus a mezzanine of about 670 square feet. Functionally abandoned since the 1970s, the building has undergone severe deterioration.

**MEP/FP:** No functional MEP/FP systems currently exist in the building. The electrical system is corroded, non-operational, and unsafe; a temporary electrical service panel has been installed, with temporary surface-mounted wiring to feed the illuminated exit signs/emergency lighting for the second exit. The plumbing system in not operational. See Appendix A, a report by Hesnor Engineering Associates, for a fuller description of existing conditions as well as narratives regarding proposed systems.

**Structure:** The exposed roof structure, a visually striking element of the existing space, includes two trusses spanning from front-to-back supporting a system of steel beams and girders that, in turn, support light-weight joists supporting the roof deck, reported to be concrete. Wall structure includes masonry exterior facing (granite stone slabs at the front façade and brick around the remaining three sides) backed by terra cotta tiles. See Appendix B, a report by Spaulding & Associates, for a description of existing conditions as well as narratives regarding proposed systems.

**Exterior Envelope:** The building appears to have no insulation. The main EPDM roof was replaced in 2004, according to GRA. Exterior walls are constructed of granite and brick. See Appendix C for a fuller description of the exterior envelope provided by Simpson Gumpertz & Heger in a report dated 6/12/2017. (*Note*: None of the immediate repairs outlined in section 4 of that report have been undertaken. A disconnected interior downleader at the southwest corner of the building continues to allow water to leak into the building.) The existing building has limited fenestration: two exit doors on the ground floor, and seven large windows at the mezzanine level that provide daylighting to the central interior space. The center window of the front façade shows evidence of repair work, possibly completed by the prior owner, Franklin County CDC. Other window frames and glass panes have deteriorated, and several panes and frames are damaged.

*Interior Finishes:* The main space has as interior finish of painted plaster extended to the height of the former ceiling and, though paint is peeling and mottled, the plaster is generally intact. Interior wall finishes in other locations have various levels of deterioration, including some that have lost bonding capacity and are falling onto the floor; these non-loadbearing interior walls are slated for demolition in the proposed design. See Section 3 for drawings of existing conditions, demolition plans, and preferred design solution.

**Hazardous Materials**: A Phase 1 environmental site assessment completed since 2017 did not identify any Recognized Environmental Conditions (REC) on the property. However, it notes that buried demolition debris may exist on the property, due to other structures having previously occupied the site.

Below Grade infrastructure: No information is available.

#### **Proposed Reuse and Its Implications**

The proposed use for the main space is a multi-functional community space that can serve purposes including performing arts and flexible theatre use accommodating 100-150 people, a winter farmers market, a drop-in "we-work" type space in the daytime, and other uses to be identified by the community.

#### **Code and Other Controls**

The proposed change in occupancy from business to assembly necessitates bringing the building into full compliance with contemporary building codes.

**Historic Protection**: Located within the Main Street Historic District and historically-listed as a structure, the building is described in the MCRIS file as "Historic in that the structure is a typical bank hall built during the 1920s and the fact that it stands in the historic town common section." The file also mentions that "the banking room has a 35 foot ceiling with walls constructed of imitation limestone and the ceiling ornamented in plastic." (*Note:* These walls and ceiling finishes are no longer extant.)

Given its historic status, the main exterior façade will be historically preserved, with all still-extant elements including decorative cornice blocks of the west façade (removed for safety reasons and currently stored elsewhere in Greenfield) restored in their original configuration.

Other extant character-defining elements to be preserved and reused as possible include: vault structures including doors and hardware, the check-writing kiosk (bank check writing table), exterior gates to main entrance (stored inside the building), interior metalwork screen (near the vault), clock over the entry vestibule, and granite slabs of the knee walls in the main space. Also, reuse as possible all terra cotta tile materials currently used for interior partitions on ground floor and basements levels.

**Energy Code:** The Massachusetts Existing Building Code has provisions that can provide exceptions so that existing building need not comply with contemporary energy codes. The Design Intent statement below is predicated on such exception. However, the cost estimate also includes an alternate to this approach that conveys the cost of insulating the building to bring it up to energy code requirements.

*Structural Seismic Code*: The structural system of the building will be required to conform to current seismic requirements relevant to the seismic zone established in current building codes for New England. This will require insertion of steel members to provide lateral stability to protect the brick walls against the side-to-side movement associated with earthquakes, along with structural modifications to spanning members that support the roof.

These structural interventions will also serve to support a theatrical grid with a catwalk and system for hanging theatrical devices including lighting and a projection screen.

#### **Design Intent**

The project is conceived as an economic catalyst to revitalize Greenfield, a means to preserve a beautiful and historically-significant structure and to create a new laboratory for community use including visual and performing art. The primary conceptual and physical design challenge is how to convert the architectural remains of the First National Bank to support a contemporary cultural use, while simultaneously preserving its historic fabric and encouraging future possibilities. The material, spatial, functional, and economic aspects should be addressed from a pragmatist point of departure based on particular specifics of the place; contemporary engineered systems and art will be overlaid on a palimpsest of accumulated surfaces, structures, and toils.

Interior vertical and horizontal surfaces, including surfaces affected by non-structural demolition required for this project, will be left in place as much as possible, with walls and floors sealed as necessary to preserve current visual conditions that convey the history of the structure. Elements of building fabric that require repair due to structural or envelop performance will, generally, be detailed so that patch-and-repair work is a visible element that contributes to the legibility of the building's history. Similarly, new work and adaptive interventions, including engineered systems, will be exposed as visual markers of the building's ongoing evolution.

Mechanical systems will include exposed ductwork and electrical and plumbing conduits and piping, for cost savings as well as for design intent. Structural interventions include four new tub steel trusses, two spanning front to back beneath the existing pair of trusses and two at the same height spanning side to side to support the roof as well as the theatrical grid. New walls will be sheetrock over studs. Floors will be existing-to-remain and will be sealed.

#### Limitations

Completed in four months with the fundamental purpose of gaining first round construction cost estimating, this study has limitations including:

**Building Survey Dimensions:** Architectural drawings completed to date are based on limited survey information. Following completion of the study phase, should to project go forward toward realization in construction, an accurate building survey should be completed.

**Building Envelope:** Building envelope assessment and recommendations completed to date are based on limited field information. Following completion of the study phase, should to project go forward toward realization in construction, a more comprehensive investigation and analysis, perhaps including exploratory demotion, should be completed to inform a comprehensive scope of repairs.

**Building Structure:** Structural design completed to date is based on limited information. Following completion of the study phase, should to project go forward toward realization in construction, more comprehensive investigation, including survey measurements and possible exploratory demotion, should be completed, including:

- Structural capacity of the mezzanine floor and the mezzanine railing system
- Size and condition of intermediate bar joists, located above existing steel beams and trusses supporting the roof deck

#### **Recommendations for Immediate Repairs**

These repairs should be undertaken as soon as possible:

- Repair and/or reconnect the main roof drain and internal downleader at the southwest building corner. Water intrusion to the interior of the building from the disconnected downleader is displacing the granite blocks, as is visible on the exterior of the building.
- Going forward, clean roof drains to allow ponded water to drain by periodically monitoring the roof for ponded water and clearing drains as needed.

2. Photographic Documentation of Existing and Historical Conditions

<u>architects</u>

## **BUILDING EXTERIOR**









RESTORE CORNICE BLOCKS (CURRENTLY IN STORAGE)



























architects

## FRONT ENTRANCE











<u>architects</u>

## **REAR ENTRANCE**











architects

## ASSEMBLY SPACE



























architects

# EXPOSED ROOF STRUCTURE



14

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## MEZZANINE







architects

## STAIRS & RAMPS





















<u>architects</u>

# INTERIOR DETERIORIZATION









<u>architects</u>

# HISTORICAL ITEMS TO PRESERVE



















architects

# HISTORIC IMAGES











































3. Preferred Design Solution










































#### <u>LEGEND</u>

----- ETR STRUCTURE NOTE: STRUCTURAL DRAWING CONVENTIONS

DIFFER FROM ARCHITECTURAL DRAWINGS

SPAULDING ASSOCIATES CONSULTING ENGINEERS 130 WESTBOROUGH STREET MILLBURY, MA 01527 TEL. (508)-754-1177

## **FIRST NATIONAL BANK**

9 BANK ROW GREENFIELD, MA 06/04/2019

## **STRUCTURAL SECTION**

S-2

#### 4. System Narratives

Code review, RW Sullivan Architectural Narrative, Taylor & Burns Architects MEP/FP Narrative, Hesnor Engineering Associates

Structural Narrative, Spaulding Associates

# RWS

### Code

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## HVAC

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### Electrical

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## Plumbing

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## Fire Protection

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## Commissioning

## **Theater Conversion** First National Bank & Trust Building Greenfield, Massachusetts

## Existing Building Code Report

## May 7, 2019

Prepared By: Donald E. Contois, P.E.

Sullivan Code Group R.W. Sullivan Engineering 617.523.8227 www.rwsullivan.com

#### Table of Contents

Intr	oduc	tion1				
Inte	ernati	onal Existing Building Code1				
	1.	Work Area and Classification of Work:1				
	2.	Occupancy Classification:1				
	3.	Construction Type:2				
	4.	Height and Area Limitations:2				
	5.	Fire Resistance Ratings:2				
	6.	Stages4				
	7.	Exterior Wall Openings & Fire Resistance Rating:5				
	8.	Vertical Floor Openings5				
	9.	Finishes:5				
	10.	Means of Egress:6				
	11.	Required Fire Protection Systems:				
	12.	Energy Code Provisions8				
	13.	Plumbing Fixtures:				
	14.	Accessibility for Persons with Disabilities9				
AP	APPENDIX A: Egress Plans11					

#### Introduction

The project includes the conversion of the First National Bank and Trust Company building in Greenfield, MA into a multipurpose arts building for exhibitions and theater. This code summary is based on the existing condition architectural drawings and photos received April 1, 2019. The following is a list of applicable codes:

Code Type	Applicable Code (Model Code Basis)			
Building	780 CMR: Massachusetts State Building Code, 9 <sup>th</sup> Edition (Amended 2015 International Building Code (IBC)) (Amended 2015 International Existing Building Code (IEBC))			
Fire Prevention	527 CMR: Massachusetts Fire Prevention Regulations (2015 NFPA 1) M.G.L. Chapter 148 Section 26G – Sprinkler Protection			
Accessibility	521 CMR: Massachusetts Architectural Access Board Regulations			
Electrical	527 CMR 12.00: Massachusetts Electrical Code (2017 National Electrical Code)			
Elevators	524 CMR: Massachusetts Elevator Code (2013 ASME A17.1)			
Mechanical	2015 International Mechanical Code (IMC)			
Plumbing	248 CMR: Massachusetts Plumbing Code			
Energy Conservation	2015 International Energy Conservation Code <sup>A</sup>			

Massachusetts is expected to adopt 2018 IECC in early 2019 with a concurrency period to late 2019 where either code can be utilized at the discretion of the design team.

#### International Existing Building Code

The 2015 International Existing Building Code with Massachusetts amendments allows for 3 separate compliance methods, the Prescriptive Method (in general, altered areas must comply with the code for new construction), Work Area Method (level of compliance is based on the classification of work), and Performance Compliance Method (numerical method that allows tradeoffs for deficiencies). This report is based on the Work Area Method.

#### 1. Work Area and Classification of Work:

The proposed work involves converting the former bank building into an arts building. Since the work area exceeds 50% of the aggregate area of the building, the level of work is classified as Alteration Level 3. Alteration Level 3 includes the reconfiguration of spaces, the addition or elimination of doors and windows, the reconfiguration or extension of systems, and/or the installation of additional equipment in more than 50% of the aggregate area of the building. The work must comply with IEBC Chapters 7, 8, 9, and 10 (IEBC 505.2 & 506.2).

#### 2. Occupancy Classification:

Previous use:

- Use Group B (Bank)
- Use Group S-1 (Storage)

7WS



Proposed non-separated mixed uses:

- Use Group A-1 (Theaters)
- Use Group A-3 (Multipurpose Exhibition Space)
- Use Group B (Office Areas)
- Use Group S-1 (Storage)

#### 3. Construction Type:

Based on the photographs, the building construction most closely resembles Type IIB construction (noncombustible, no structural fire rating).

#### 4. Height and Area Limitations:

Since the change of use is to a higher relative hazard, the building must comply with the height and area limitations of 780 CMR (IEBC 1012.5.1). The following table summarizes the height and area limitations for the most restrictive use (Use Group A-1) based on Type IIB construction.

Codo Poferenco	Type IIB – Use Group A-1		
	Height	Area	
780 CMR Tables 504.3, 504.4 & 506.2:	2 St (75 ft)	22,500 ft <sup>2</sup>	
Tabular Value	3 St. (75 ft)		
780 CMR Section 506.3		Not Noodod	
Frontage Increase	-	Not needed	
Height and Area Allowed	3 St. (75 ft)	22,500 ft <sup>2</sup>	
Existing Height and Area	1 St. + Mezz. <sup>1</sup>	~7,000 ft <sup>2</sup>	

1. Since the area of the upper level is 1/3 of the room below, it qualifies as a mezzanine and can be considered part of the floor below (780 CMR 505.2 & 505.2.1).

As shown in the previous table, the existing building construction is adequate for the proposed use.

#### 5. Fire Resistance Ratings:

The following fire resistance ratings are required in accordance with 780 CMR Table 601 and various sections of the code.

Building Element	Fire Resistance Rating (Hrs)
Primary Structural Frame <sup>A</sup>	0 <sup>B</sup>
Exterior Bearing Walls	0
Interior Bearing Walls	0 <sup>B</sup>
Exterior Non-Bearing Walls	Existing Deemed Acceptable
Interior Non-Bearing Walls	0
Floor Construction	0 <sup>B</sup>
Roof Construction	0

- <sup>A.</sup> Includes beams, trusses, floor members, etc. having a direct connection to the columns (780 CMR 202).
- <sup>B.</sup> Not less than the rating supported (780 CMR 707.5.1, 708.4. and 711.2.3).

	Building Element	Fire Resistance Rating (Hrs)	Opening Protectives (Hrs)		
Exit Access Co	rridors (780 CMR Ta	ble 1020.1)	0	0	
Exit Stair Shaf (780 CMR 1023	ts connecting less t 3.2) <sup>A</sup>	han 4 stories	1 1		
Other Shafts, c CMR 713.4)	onnecting less than 4	4 stories (780	1 <sup>B</sup>	1	
Elevator Machi	ne Room (780 CMR	3005.4)	1	1	
Fire Pump Roo	m, if needed (780 Cl	MR 913.2.1)	1 <sup>C</sup>	3⁄4	
Emergency Electrical Room (527 CMR 12.00 700-10(D)(2))			2 <sup>D</sup>	1½	
Electrical	With Sprinklers		0		
Rooms	Without Sprinklers	(NFPA 13)	2		
Diesel Generat	or Fuel Storage	<1,320 gal.	1	3⁄4	
(NFPA 37 Sect	ion 6.3.5 & 6.3.6)	>1,320 gal	3	3	
Furnace room over 400,000 B	where any piece of tu per hour input	Smoke Resistant			
Rooms with be equipment is or	oilers where the larg ver 15 psi and 10 ho	Smoke Resistant			
Paint shops			1 hour and automatic sprinkler system		
Laundry rooms	over 100 square fee	et	Smoke	Resistant	

<sup>A.</sup> If exterior walls expose the stair at an angle of less than 180 degrees either the stair wall or adjacent wall must be 1 hour rated with 3/4 hour opening protectives for a distance of 10 feet from the stair wall (780 CMR Section 1023.7)

- <sup>B.</sup> In lieu of rated shaft enclosure, duct that connects two stories must have the annular space protected by approved noncombustible material that resists the passage of flames and smoke (780 CMR 717.6.3).
- <sup>c.</sup> Location and access to the fire pump room shall be pre-planned with the fire department. The room must have direct access to the exterior or through a passageway the same rating of the room (NFPA 20 Section 4.12.2.1).
- D. No rating is required for the room when fully sprinklered, however a 2-hr rating is still required for the emergency feeder-circuit wiring and rooms containing an emergency generator (NFPA 110 Section 7.2.1.1).

Fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions, or any other wall required to have protected openings or penetrations must be identified with signs or stenciling within accessible concealed spaces (i.e. floorceiling, attic spaces) at 30 ft intervals with at least 3" letters stating: "FIRE AND/OR SMOKE BARRIER – PROTECT ALL OPENINGS" or similar wording (780 CMR 703.7).

#### 6. Stages

If provided, stages must comply with 780 CMR 410 including the following major requirements:

- Stages must be constructed of materials as required for floors for the type of construction of the building (noncombustible) (780 CMR 410.3.1). Nominal 2" wood deck is permitted and the finished floor can be constructed of wood as long as openings through stage floors are equipped with tight-fitting, solid wood trap doors with approved safety locks (780 CMR 410.3.1 Exceptions 1 & 3).
- Galleries, gridirons, and catwalks shall be constructed of approved materials consistent with the requirements of the type of construction of the building (780 CMR 410.3.2).
- Stages that are greater than 50 feet in height shall have a proscenium wall, with a fire resistance rating not less than 2 hours, separating the stage from the seating area (780 CMR 410.3.4).
  - Where a proscenium wall is required a 1 hour fire resistance rated curtain complying with NFPA 80 or approved water curtain complying with 780 CMR 903.3.1.1, or a smoke control system complying with 90 (780 CMR 410.3.5).
- Combustible materials used for sets and scenery shall meet NFPA 701 fire propagation performance criteria (780 CMR 410.3.6).
- Emergency ventilation shall be provided for stages that are greater than 1,000 sqft or greater than 50 ft in height and follow one of the below (780 CMR 410.3.7).
  - Two or more heat activated roof vents with aggregate opening of not less than 5% of stage area.
  - Smoke control system that maintains a smoke layer interface not less than 6 feet above the highest level of the assembly seating.
- Stage shall be separated from other parts of the building including dressing rooms and scene docks by 1 hour-rated construction (2 hour for stages greater than 50 feet) (780 CMR 410.5.1).
- Appurtenant rooms to the stage, such as dressing rooms, scene shop, and storerooms, must be separated by 1 hour-rated construction for each other (780 CMR 410.5.2).
- Means of egress must be provided on each side of the stage if the area exceeds 750 ft<sup>2</sup> (780 CMR 410.6.1).

#### 7. Exterior Wall Openings & Fire Resistance Rating:

Since the change of use is to the same relative hazard category, the existing exterior walls including openings can be deemed acceptable (IEBC 1012.6.2). Therefore, only new exterior walls and openings need to comply with the fire resistance rating and opening limitations of 780 CMR.

The exterior wall rating requirements and opening limitations are based on the fire separation distance for each wall. The fire separation distance is measured perpendicular to the exterior wall to the centerline of a public street, an interior lot line, or an imaginary lot line between two buildings on the same lot (780 CMR 202.0). Where the fire separation distance is more than 10 ft., the wall is not required to be rated and the allowable area of openings is not limited (780 CMR Table 602 and Section 705.8 Exc. 2). Note that openings are not permitted where the fire separation distance is less than 3 ft. Also, where the fire separation distance is less than 3 ft. Also, where the fire separation distance is less than 3 ft. Also, where the fire separation distance is (780 CMR 705.5).

#### 8. Vertical Floor Openings

Since the change of use is to a higher relative hazard in IEBC Table 1012.4, vertical openings within the building must comply with 780 CMR 712 (IEBC 1012.7.2 & 1012.7.3).

Since the stairs only connect 2 stories and a mezzanine, the stairs are not required to be enclosed and can be used for egress per 780 CMR 1019.3(1) (780 CMR 712.1.11 & 712.1.12).

#### 9. Finishes:

#### **Interior Finish**

Due to the change of use, the interior finish of walls and ceilings must comply with the following table (IEBC 1012.3):

Building Component	Use Group A-1 / A-3	Use Group B	Use Group S-1
Exit Enclosures and Passageways	Class B	Class B	Class C
Corridors	Class B	Class C	Class C
Rooms & Enclosed Spaces	Class C	Class C	Class C

#### Walls & Ceilings (IBC Table 803.11)

Note that where exit access corridors and stairs serve all use groups, the most restrictive interior finish is required.

#### Floor Finishes

Since the building will be equipped with an automatic sprinkler system, traditional floor coverings such as wood, vinyl and other resilient floor coverings as well as carpeting passing the DOC FF-1 pill test are allowed throughout the building, including all exits, exit passageways and exit access corridors (780 CMR Section 804.4.2).



#### **New Exterior Finish**

New exterior wall finishes must fully comply with the requirements of 780 CMR 14. Combustible materials are permitted to be used as an exterior wall finish for this building in accordance with 780 CMR Section 1406; however, all exterior wall finishes and architectural trim located greater than 40 feet above grade plane must be constructed of approved noncombustible materials and must be secured to the wall with metal or other approved noncombustible brackets (780 CMR Section 1406.2.1). Additionally, combustible exterior wall finish is limited to 10% of the exterior wall surface area where the fire separation distance is 5 ft or less.

The use of plastic materials as part of the exterior wall assembly (i.e. foam plastic insulation, exterior coatings and facings) must comply with 780 CMR 26 (780 CMR 1404.8). The wall assembly must be tested in accordance with NFPA 285 (780 CMR 2603.5.5). Note that this test standard is a full scale assembly test. We recommend confirming with the manufacturer that the foam plastic insulation is part of an approved NFPA 285 assembly or complies with one of the alternative standards listed in 780 CMR Section 2604.1. The current MA amendments to the IBC include an exception stating that buildings providing sprinkler protection in accordance with NFPA 13 do not have to comply with NFPA 285 if a fire flow analysis is performed (without sprinkler decrease allowance) and it shows adequate water is available.

#### 10. Means of Egress:

Due to the change of use, the means of egress must comply with the code for new construction (IEBC 1012.4.1). Existing stairs including guards are permitted to remain subject to the approval of the building official (IEBC 1012.4.1 Exc. 2).

The calculated occupant load for the proposed floor plans, the corresponding required number of exits, the provided number of exits, and the provided egress capacity are summarized below (780 CMR Table 1004.1.2, Table 1006.3.1, and Section 1005.3). See Appendix A of this report for detailed egress calculations.

Eleer	Calculated	Number	of Exits	Exit Capacity	
FIOOF	Occupant Load	Required	Provided	(persons)	
В	110	2	2	420	
1 & Mezz.	497	2	2	850	
Mezz.	49	1	1	160	

#### Means of Egress

General Egress Requirements:

• The required maximum exit travel distances for a building with sprinkler protection throughout are listed in the following table (780 CMR Table 1017.2, Table 1006.2.1, and 1020.4).

RWS

Occupancy	Exit Travel Distance	Common Path of Travel	Dead-End
A-1 / A-3	250 ft.	75 ft.	20 ft.
В	300 ft.	100 ft.	50 ft.

- Maximum dead-end corridor length cannot exceed the value above or 2.5 times the least width of space (780 CMR 1020.4).
- All rooms or spaces with an occupant load greater than 49 people or a travel distance greater than the value in the table above must be provided with two egress doors swinging in the direction of egress and illuminated exit signs at each exit (780 CMR Table 1006.2.1 & Sections 1010.1.2.1 & 1013.1).
- Boiler and furnace rooms require two means of egress if the room is greater than 500 sqft. and includes individual fuel-fired equipment greater than 400,000 Btuh input capacity. Also one of the two required exit access doorways is permitted to be a fixed ladder or alternating tread device (780 CMR Section 1006.2.2.1).
- Doors serving assembly rooms with more than 49 people and doors along the path of egress travel from such rooms must be provided with panic hardware (780 CMR 1010.1.10).
- Main electrical rooms must have two means of egress via doors swing in the direction of egress with panic hardware where required by the Electrical Code (NFPA 70).
- Means of egress are not permitted to pass through kitchens (780 CMR 1016.2(5)).
- All means of egress lighting and exit signs throughout the building must be provided with an emergency power supply to assure continued illumination for not less than 1.5 hours in case of primary power loss (780 CMR 1008.2 & 1008.3.4).
- Remote means of egress must be separated by ½ of the diagonal dimension of the room or space they serve (780 CMR 1007.1.1). The distance between exits must be measured in a straight line between exit doors.
- Although not required, enclosed exit stairs where provided must discharge to the exterior of the building except that a maximum of 50% of the number and capacity of the exit enclosures are allowed to exit through areas on the level of discharge if the exit enclosures discharge to a free and unobstructed path of travel to an exterior exit that is readily visible from the discharge of the exit enclosure; the entire area of the level of exit discharge is separated from areas below by construction consistent with the rating of the exit enclosure; and the egress path and all areas open to the egress path on the level of exit discharge must be fully sprinklered (780 CMR 1028.1).



#### **11. Required Fire Protection Systems:**

- NFPA 13 sprinkler system (780 CMR Table 903.2 & M.G.L. c148 s26G)
- Fire alarm system (780 CMR 907.2.1.1)
- Standpipe system at stage if provided and greater than 1,000 ft<sup>2</sup> (780 CMR 905.3.4)
- Fire extinguishers (527 CMR 1.00 Table 13.6.2(a) & 780 CMR 906.1).

#### 12. Energy Code Provisions

The project is subject to the provisions of the 2015 International Energy Conservation Code or ANSI/ASHRAE/IESNA 90.1 with Massachusetts Amendments (Massachusetts Energy Code).

#### 13. Plumbing Fixtures:

248 CMR: The Massachusetts State Plumbing Code

The Massachusetts Plumbing Code (248 CMR) regulates the number of plumbing fixtures required throughout buildings. The minimum number of plumbing fixtures is established by 248 CMR 10.10(18) Table 1 based on the building use and the expected population as determined by the local Plumbing Inspector per 248 CMR 10.10 (18)(2).

The Plumbing Inspector must approve the building population, however, the building population can generally be based on the designer's determination of the actual number of people expected within the building. The Plumbing Code expects that the building population will be divided evenly between male and female for the purpose of determining fixture counts. Any distribution other than 50/50 must be justified to the Plumbing Inspector.

The following analysis was completed using the maximum population of the building able to be served by the proposed fixtures.

Classification			Water Closets		Male	Lavatories	Drinking	Service
Female	Male	Total	Female	Male	<b>Urinals</b> <sup>A</sup>	(Per Sex)	Fountains	Sink
Theater			1 nor 20	1 nor 60	E09/	1 por 100	1 per	1 per
180	180	360	i per 30	i per su li per su		i per 100	1,000	floor
Required fixtures			6		3	2	1	1 per floor
Provided Fixtures			6		6	2	None Shown	None Shown

A. Urinals may be substituted for toilets up to the percentage shown of the required number of water closets.

rws



#### 14. Accessibility for Persons with Disabilities

#### **Massachusetts Architectural Access Board Regulations**

Alterations to the building must comply with the requirements of the Massachusetts Architectural Access Board Regulations (521 CMR). For existing building alterations the requirements of 521 CMR are based on the cost of the proposed work:

- A. If the cost of the proposed work is **less than \$100,000**, only the new work must comply.
- B. If the cost of the proposed work is greater than \$100,000 then all new work must comply and the existing building must include an accessible public entrance, toilet room, telephone and drinking fountain (if public phones and drinking fountains are provided) (521 CMR Section 3.3.1(b)). Exempt work when calculating the cost of work includes roof repair or replacement, window repair or replacement, and repointing and masonry repair work unless the exempt work exceeds \$500,000.
- C. If the cost of the proposed work is **greater than 30% of the full and fair cash value** of the existing building, the entire building is required to comply with 521 CMR (521 CMR Section 3.3.2). There is no exempt work, i.e. the entire project costs apply to determining the 30% criteria.

The cost of all work performed on a building in any 36 month period must be added together in determining the applicability of 521 CMR (521 CMR Section 3.5). The full and fair cash value of the existing building is determined by using the 100% equalized assessed value of the building on record with the city assessor's office. If no assessed value exists or if the assessment is more than 3 years old, an appraised value may be substituted. The certified appraised value must be submitted to the Massachusetts Architectural Access Board for approval.

The work to be performed is major in scope. It is anticipated the cost of the project will exceed 30% of the full and fair cash value of the building. Therefore, all portions of the building open to the general public (students, visitors, etc) must be upgraded to comply in full with the current requirements of 521 CMR. Any employee-only areas such as staff lounges, staff bathrooms, and staff work areas are not required to comply with 521 CMR, as long as general public access is not permitted.

#### Americans with Disabilities Act Guidelines

The ADA Guidelines are not enforced by the Commonwealth of Massachusetts, they can only be enforced through a civil lawsuit or complaint filed with the U.S. Department of Justice. Compliance with the ADA Guidelines is triggered by renovations to the existing building. All renovations to the building must be made to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities (28 CFR Part 36 Section 36.402(a)). Alterations made to provide an accessible path of travel to altered areas and accessible facilities (i.e. provide accessible toilet facilities) are not required if the cost exceeds 20%

Theater Conversion First National Bank & Trust Building May 7, 2019 Page 10

of the total cost of the alteration (28 CFR Part 36 Section 36.403(f)). However, if the cost to meet these accessibility requirements does exceed 20%, alterations are still required to the maximum extent that the area can be made accessible without exceeding the 20% criteria (28 CFR Part 36 Section 36.403(g)). The ADA also contains less stringent dimensional requirements for some building elements in an existing building where it is infeasible to meet the requirements for new construction (ADA Section 4.1.6).

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Theater Conversion First National Bank & Trust Building May 7, 2019 Page 11

**APPENDIX A: Egress Plans** 







#### First National Bank, Greenfield Architectural Narrative

#### **Outline Specifications**

1 General Conditions: Conventional

#### 2 Sitework

- 02050 Demolition: See demolition drawings.
- 3 Concrete

#### 4 Masonry

04500 Masonry Restoration and Cleaning: Refer to Appendix C and provide cost estimates for work described in item 4. Immediate Repair Recommendations. In addition, provide allowance for exterior masonry repair, repointing, and cleaning of ten percent of exterior brick walls on three sides.

#### 5 Metals

- 05100 Structural Framing: Refer to structural information, not limited to Appendix B.
- 05515 Metal Ladders: Provide two ladders from the mezzanine level to the theatrical grid at 30' AFF.

#### 6 Wood and Plastics

06010 Lumber: Provide wood or metal-frame walls with sheetrock for proposed new walls.

#### 7 Thermal & Moisture Protection

07100 Insulation, Water and Dampproofing: As an identifiable cost alternative, provide information for costs associated with insulating the building to comply with current energy code standards. This approach would include steel studs for seismic bracing (not steel tubes as described in the drawings) with sprayed insulation using the studs as furring and finished walls of sheetrock.

#### 8 Doors & Windows

08100 Metal Doors and Frames, Metal Windows: Existing main entry doors and all windows will be repaired and restored, with new glazing. Provide new steel exterior doors at rear of building, with security hardware. Provide new glazed doors at entry vestibule. Other interior doors will be metal, five including lockset hardware.

#### 9 Finishes

- 09250 Gypsum board: Provide wood or metal-frame walls with sheetrock for proposed new walls.
- 9900 Paint: Paint all new sheetrock partitions

#### 10 Specialties

- 10155 Toilet Compartments and Accessories: as shown on drawings and described in Appendix A
- 10200 Louvers and Vents: as required for MEP/FP and elevator

#### Equipment

- 11060 Theater and Stage Equipment: Refer to drawing Theatrical Grid Catwalk System.
- 11132 Projection Screens: Provide cost estimate for one 20'x20' motor-driven projection screen to be mounted from the theatrical grid.
- 11400 Food Service Equipment: See Base Kitchen Plan for cost estimation of a basic kitchen with domestic fixtures and Alternate Kitchen Plan for a catering kitchen with code-required fixtures

#### 11 Furnishings

12500 Window Treatment: Provide power-operated Mecco shades with 90% opacity at seven windows

12690 Floor Mats and Frames: Walk-off Mat as entry vestibule floor finish

#### 12 Special Construction

- 13 Conveying Systems
- 14200 Elevators: Lula-type elevator in location shown in plans.

14 Mechanical Systems, 16 Electrical Systems: See Appendix A

#### **Notes for Cost Estimation**

1. Provide Isolated Identifiable costs for the following items.

#### **Individual Elements**

Theatrical Grid – Catwalk System Projection Screen Window Treatment

#### Alternates: price these items in two ways

Entry vestibule (see drawing A-2 Ground Floor Plan) Kitchen (see drawing A-2 Ground Floor Plan) Insulation (see outline specification 07100 Insulation)

#### Notes:

- Regarding finishes: provide cost information expressed as isolated numbers
  - Wood floor for the Assembly Space, Vault (1st floor), Gallery, and Mezzanine
  - Ceramic tile for bathrooms
  - Walk off mat in Vestibule
  - Rubber/resilient for Lobby/Coat, Kitchen. Flex/backstage, Office, Ticket, Flex (basement) Flex/Rehearsal (basement), and Vault (basement)
  - VCT for Tenant-Lease, Storage
  - No upgrade for Mech Room, Janitor/Storage, W+FP Equip Room, Elec Room, and Elev. Mach. Room (only sealed concrete)
  - For acoustic requirements: pyrok ceiling over 50% of the Assembly Space
- For audio-video and security be provided by owner: provide isolated numbers

**2.** *Project phasing* may be an option for the project to be realized. All code-mandated building systems will be upgraded with the initial phase. Following, interiors can be finished in phases.

Please provide cost information for a three-phase project, with the ground level floor as phase one, and the two other floors as later phases.

#### 3. Equipment Costs from Hesnor Engineers

Information about the all-electric HVAC equipment:

Rooftop Unit serving ground level: \$99,500 budget

Air Handling Unit serving basement: \$33,800 budget

Budgets are for equipment only, installation not included.

# MEP/FP Report - First National Bank Building -Greenfield, Massachusetts



Hesnor Engineering Associates, PLLC 2A River Street Adams, MA

May 10, 2019

#### TABLE OF CONTENTS

#### Plumbing

Existing Conditions	Page 1
Proposed Systems	Pages 1-3
HVAC	
Existing Conditions	Page 3
Proposed Systems	Pages 3-6
Fire Protection	
Existing Conditions	Page 7
Proposed Systems	Page 7
Electrical	
Existing Conditions	Page 8
Proposed Systems	Pages 8-11


## PLUMBING

## **EXISTING CONDITIONS**

Existing plumbing systems include domestic water, natural gas, sanitary drainage, and storm water. A 2<sup>""</sup> domestic water service is cut/abandoned at the foundation wall located at the front (Bank Row side) of the building. A 4-inch natural gas enters the basement at the front of the building in the area below the sidewalk and is connected to a meter installed circa 2005. There is no gas piping downstream of the existing meter. It appears that interior storm water piping has been recently replaced with new cast-iron piping, which is visually in good condition. With the exception of the natural gas service and select storm piping, all existing plumbing systems will be removed in their entirety.

## PROPOSED SYSTEMS

The proposed plumbing systems will include potable/domestic hot and cold water, natural gas, waste, soil, vent, and storm water. The building will continue to be serviced by municipal sewer, storm and water.

## DOMESTIC WATER, D.W.V. AND STORM:

A new 2-inch domestic water service will enter the southwest corner of the basement. A dedicated utility space will be provided to house the water service entrance and sprinkler equipment. The domestic water service entrance equipment will include valves, pressure regulator, meter and backflow preventer. Domestic water systems will consist of copper piping with either soldered joints or press type fittings. Insulation will be installed on all domestic cold and hot water piping.



Interior drainage, waste and vent (D.W.V.) piping will consist of cast-iron, no-hub type or wrought copper with soldered joints for above-slab locations. Below slab piping will be cast-iron hub-and-spigot type. A new 4-inch sewer lateral will exit the west side of the building and connect to the municipal sewer below Bank Row. Roof drains will be replaced and connected to new and existing storm conductors, where applicable. Horizontal storm water piping will be insulated.

## SERVICE WATER HEATING:

Domestic hot water will be provided from a high efficiency, condensing boiler coupled to an indirect water heater/storage tank. The boiler will also provide hot water for space heating purposes. A thermostatic mixing valve will be provided to limit the delivery water temperature to avoid scalding. Hot water return (recirculation) will be incorporated into the distribution system and include controls to monitor the return water temperature and enable/disable the associated circulator. A 140°F hot water feed will be provided to the kitchen for applicable fixtures.

Based on preliminary load calculations, the domestic hot water plant should be sized to include approximately 100 gallons of storage with a recovery rate capable of satisfying a probable maximum demand of 195 gallons per hour. *Note: Should it be determined that natural gas is not available at the site, an electric storage tank type water heater will be provided (refer to natural gas section of this report).* 

## FIXTURES:

All fixtures will be code-compliant, water conserving type. Additionally, full compliance with the *Massachusetts Architectural Access Board Regulations* will be required. New fixtures will generally be constructed of vitreous china and be floor or wall mounted as applicable. Faucets and flush valves will be the low-flow type and equipped with battery powered electronic sensors. Dual-flush water closets and low-flow (0.125 GPM) urinals will also be provided. The ground floor level will require three (3) female water closets, (2) male water closets, (1) urinal, (2) female lavatories and (2) male lavatories. A drinking fountain will also be required on the



ground level. Floor mounted, stainless steel mop sinks will be provided for custodial purposes on the ground floor and basement levels. Hose bibs and floor drains with trap primers will be provided in restrooms in accordance with the *Massachusetts Plumbing Code*.

The Kitchen area will include 3-bay pot sinks, hand washing stations, floor sinks and pre-rinse sprayers. A grease trap will be provided to receive waste from applicable kitchen fixtures (3-bay sink, floor sinks, floor sinks, etc.). The grease trap will be installed recessed in the kitchen floor.

## NATURAL GAS:

As of the date of this report, the gas company (*Berkshire Gas*) has an indefinite moratorium on new gas services. *Berkshire Gas* is currently investigating the feasibility of reactivating the existing gas service at the site. The description of natural gas work below assumes that gas will be available at the site.

Natural gas service will be extended from the existing service lateral to applicable kitchen appliances, boilers and air handling units. Gas piping will consist of schedule 40 steel piping with a combination of welded (piping 2-1/2" and larger) and threaded fittings. Natural gas loads should be reviewed with the utility to ensure adequate pressure and volume is available to support the proposed building project.

## **HVAC**

## **EXISTING CONDITIONS**

The ground floor and mezzanine areas are void of any existing HVAC systems. The basement is equipped with two (2) dehumidifiers and a utility set type exhaust fan. The exhaust fan inlet is ducted to several spaces in the basement. The outlet of the fan is ducted through the exterior wall at the rear of the building. The fan and dehumidifiers are presumably used to reduce moisture/humidity levels in the basement. All existing HVAC systems will be demolished to suit the proposed renovation.



## PROPOSED SYSTEMS

## HEATING & AIR CONDITIONING:

An indoor air handling unit (AHU) will be provided to heat, cool, dehumidify and ventilate the basement. The AHU will be equipped with DDC controls, filters, a supply fan, return fan, variable speed drives, DX cooling coil and a hot water heating coil. An air-cooled condensing unit with digital scroll compressors will be located on the roof above the kitchen area. Refrigerant piping will be extended from the condenser to the AHU's cooling coil in the basement. Preliminary load calculations require an AHU equipped with 12.5 tons of cooling and 150,000 BTUH heating.

Outside air ductwork will be extended from the AHU up to an intake hood located on the low roof. Supply and return air ductwork will be extended from the AHU to the basement areas and installed concealed above the finish ceiling. Ceiling mounted supply air diffusers and return grilles will be provided. Zoning will be accomplished by utilizing variable air volume (VAV) terminal boxes equipped with hot water coils. At this time, six (6) VAV boxes are anticipated for the basement area.

A packaged rooftop unit (RTU) will be installed on the roof area above the kitchen and will provide heating, cooling and ventilation for the ground floor and mezzanine. Preliminary load calculations require an RTU equipped with 50 tons of cooling and 615,000 BTUH heating. The RTU will be equipped with DDC controls, filters, a supply fan, return/exhaust fan, variable speed drives, DX cooling with digital scroll compressors, gas-fired heating section and an energy recovery wheel. Supply and return air ductwork would be extended into the building above the mezzanine level and include exposed spiral ductwork installed around the perimeter of the space. Supply air diffusers would be affixed to the ductwork and sized to "throw" air to the far areas of the theater.

The AHU and RTU will be selected with an economizer function for "free cooling" when outside conditions allow. As an additional energy savings measure, carbon dioxide (CO2) sensors will be provided to sense low occupancies and reduce the amount of outdoor air introduced (demand-



Page **4** of 11

controlled ventilation). The entire system will be controlled from the DDC system to optimize performance and allow for night setback, scheduling, etc.

## HEATING PLANT:

A high-efficiency boiler equipped with a fully-modulating burner will be provided. The boiler will provide high temperature water for space heating purposes as well as for generating domestic hot water via an indirect storage tank. Boiler controls will include boiler supply water reset based on outdoor air temperatures, allowing the supply temperature to be reduced as outdoor temperatures rise. Based on preliminary load calculations, the heating plant should be sized with an output capacity of approximately 500 MBH. *Note: The boiler will be eliminated if natural gas is not available at the site. Refer to "Alternate HVAC System" section of this report for additional information.* 

A primary-secondary pumping scheme is recommended. The boiler will be equipped with an individual circulator pump sized to match the boiler capacity. Two system pumps will be provided for redundancy purposes and include controls for automatic rotation of the lead pump. The system pumps will be equipped with variable frequency drives (VFDs) to reduce motor speeds as load requirements decrease.

To offset transmission heat loss through the perimeter, fin-tube radiation or radiant panels will be installed along the buildings' exterior walls at the ground floor and mezzanine levels. The more architecturally-pleasing, panel-type radiation (similar to *Runtal*) will be provided in areas open to the public. An air curtain equipped with a hydronic heating coil will be provided at the vestibule. High temperature water will be extended to the radiation, which will be equipped with two-way control valves to allow for individual zone control.

Hydronic piping will consist of copper and steel piping with 2-way modulating control valves. Joints will be threaded, soldered, mechanical or press-fitting type. All high temperature water piping will be insulated.



## EXHAUST:

An exhaust fan mounted on the low roof, will be provided to serve the ground floor and basement restrooms. A Type II hood will be provided in the kitchen for heat removal at ovens/warming appliances. The hood will be ducted to a roof mounted exhaust fan. Grilles, volume dampers and controls will be incorporated into the exhaust air systems. Fractional horsepower exhaust fans will be direct drive type with adjustable speed controllers and equipped with motorized dampers.

Spaces that require general exhaust will be connected to the proposed RTU to allow the waste heat from the exhaust air stream to be transferred to the incoming outdoor air through the energy recovery wheel.

If the stage is greater than 1,000 SF, two or more heat activated roof vents with an aggregate opening of not less than 5-percent of the stage area will be required.

## TEMPERATURE CONTROL SYSTEM:

The building's HVAC equipment will utilize direct digital controls (DDC) will be utilized exclusively. Individual spaces will be provided with thermostats equipped with user-interface to permit local set-point adjustments. The system controller will include time-of-day schedules that define unoccupied/occupied schedules, optimal start algorithms and setback temperature features for unoccupied periods and holidays.

## ALTERNATE HVAC SYSTEM:

If natural gas is not available at the site, the AHU and RTU described previously in this report should be modified to eliminate the hot water and natural gas heating equipment, respectively. The HVAC units will be equipped with heat pump functions and supplemental electric heat instead. The heat pump function will handle heating loads in the spring/fall shoulder seasons. During colder weather, heating will be provided by electric heating coils integral to the AHU/RTU.

Hydronic heating elements described previously will be replaced with electric heating units. First National Bank - Greenfield Page **6** of 11



## **FIRE PROTECTION**

## **EXISTING CONDITIONS**

The building is not currently equipped with a fire suppression system.

## PROPOSED SYSTEMS

An automatic wet-type sprinkler system will be installed to provide full protection of the building. The required sprinkler system design will primarily be based on light hazard, as defined by NFPA 13. The stage area design will be based on Ordinary hazard, Group 2.

The sprinkler control and service entrance equipment will be located in the basement utility room where the new water service lateral enters the building. Service entrance equipment will include, but not be limited to: riser check valve, flow alarm, valve/tamper supervisory switches, etc. The service lateral size will need to be confirmed via a hydrant flow test at the site.

Exterior *Storz* type hose connections will be provided at the exterior of the building to permit fire department connections to the sprinkler system. All fire protection system controls, alarms, switches, etc., will be connected to the fire alarm system.

Sprinkler piping will consist of black iron piping with threaded fittings or bolted couplings, similar to Victaulic. Sprinkler types will vary throughout the building based on the use/occupancy of the respective space as well as the architectural features (ceiling finishes and type). Concealed type heads will be provided wherever acoustical ceiling tiles are installed. Wire cages will be provided on heads in utility type spaces, such as mechanical rooms, janitor closets, storage rooms, etc. A standpipe system with hose cabinets will be required if the stage area is greater than 1,000 SF. In addition, if the stage is elevated and constructed of combustible materials, sprinklers will be required in the concealed space below the stage.



## ELECTRICAL

## **EXISTING CONDITIONS**

The existing electrical service is located at the southwest corner of the building. A single meter is installed on the front façade and is fed with an underground service lateral. A single panelboard has been installed on the ground level for temporary power and is connected to a limited number of devices. The existing electrical service is 120/240 volts, 100-amps and will need to be upgraded to suit the renovation. All existing electrical systems will be demolished to suit the proposed renovation.

## PROPOSED SYSTEMS

## **POWER SYSTEMS:**

Two (2) 4-inch electrical conduits have been installed through the foundation wall in the southwest corner of the basement. These conduits were presumably installed in anticipation of a future electrical service upgrade. Based on the proposed floor plans and *National Electrical Code (NEC)* load calculations, the new electrical service should be 120/208 volts, 3-phase, 600 amps.

A 600 amp main distribution panel (MDP) will be located in the basement electrical room. The MDP will feed HVAC equipment and sub-panels. A total of three (3), 200 amp, 42 pole sub-panels are anticipated. Two of the panels will be located in the basement electrical room while the 3<sup>rd</sup> panel should be located on the ground floor near the kitchen to feed appliances.

The general intent for power distribution is to conceal all wiring within new wall/ceiling assemblies. Where wiring cannot be concealed in wall cavities, a system of surface raceways is recommended for finished spaces. The surface raceway will be the divided type to include 120V wiring for general power and convenience outlets as well as cabling for data outlets. Poke-thru type floor mounted outlets will be provided in the stage areas.



A minimum of one general convenience duplex receptacle will be provided in each space, including storage, utility, closets and other similar areas that are not regularly occupied. General purpose receptacles will be provided at a maximum of 50-feet on center in corridors and within 25-feet of each end of the respective corridor. Weather proof, GFI receptacles equipped with in-use covers will be provided within 25-feet of all exterior HVAC equipment.

## LIGHTING:

All new high efficiency LED lighting systems with sensors and controls will be provided. The design lighting power density goal for general use areas in the building will range between 0.8 and 1.0 watts per square foot. The proposed lighting system would utilize both natural lighting and electrical lighting to meet the space's required luminance. The electric lights, through the use of daylighting sensors, would be automatically dimmed or turned off when natural lighting is sufficient.

The theater area should be equipped with at least two independent lighting systems; a general lighting system to provide uniform illumination and a dimmable lighting system to support performances. Controls should be provided to vary lighting levels to suit the specific needs of the space. The project estimator should carry an allowance for theatrical lighting systems and controls.

Occupancy sensors will be provided where required by the *International Energy Conservation Code (IECC)* to control the lighting system during off-hours. Occupancy sensors should be manual ON/Automatic OFF type. Dual-mode occupancy sensors that combine passive infrared (PIR) and ultrasonic PIR technologies are recommended.

## EGRESS LIGHTING & EXIT SIGNAGE:

Emergency lighting will be provided in egress pathways, toilet rooms, assembly areas and outside each egress door. Illuminated Exit signage will be provided in corridors, assembly areas and at all egress doors. Emergency and exit lighting units will be equipped with integral batteries to provide a minimum of 90-minutes of emergency lighting.



## FIRE ALARM SYSTEM:

The design and layout of fire alarm devices will be based on engineering criteria as defined by NFPA 72 and the Massachusetts State Building Code 780 CMR. The proposed fire alarm system (FAS) will be an addressable type and include audible and visual signaling devices in accordance with NFPA and ADA guidelines to provide full coverage of the area. All visual devices will be synchronized.

The proposed fire suppression system will require addressable monitor modules to monitor tamper and flow switches and will include activation of notification appliances on sprinkler system flow. A single manual pull station, located adjacent to the fire alarm control panel (FACP), will be required for fire alarm testing purposes.

Duct-type smoke detectors for air handling equipment and supervision of sprinkler flow and tamper switches will be incorporated into the FAS in accordance with NFPA 90A and NFPA 13 requirements. Audiovisual notification appliances will be located in all egress corridors, public and common areas. A single smoke detector is required at the fire alarm panel though we would recommend additional coverage for early notification of a fire event. The LULA elevator will require a smoke or heat detector on each level along with monitoring modules. Magnetic door hold opens, if applicable, will be interlocked with the fire alarm system.

## ACCESS CONTROL:

Access control will be limited to a key fob system connected to an electric door strike at the main entrance/vestibule.

## **TELECOMMUNICATION AND DATA SYSTEMS:**

New telecommunication/ethernet services will be extended to the basement electrical room. Distribution will include horizontal cables, telecommunications outlet/connectors, mechanical terminations, and patch cords or jumpers. The design and implementation of the cabling system will be in accordance with the TIA/EIA-568 standard.



Each office will include 4 data ports (voice port, data port and 2 spare ports). Additionally, ceiling mounted data ports will be provided for wireless access points throughout the facility. Voice and data cabling will be Category 6 from each port/jack to the data/telecommunication service entrance located in the basement electrical room.

\*\*\*



## Appendix B Structural Design

#### **Existing Structural Conditions**

#### Steel Framing of Volumes

*Horizontal Roof Spans:* The exposed roof structure includes two trusses spanning from front-to-back supporting a system of steel beams and girders that, in turn, support light-weight joists underneath the roof, which has been reported to be concrete.

#### **Vertical Components**

*Ground Floor:* The double-height walls of the main square space include steel columns within masonry walls. Each of the four walls consists of thee structural bays—with a column at each of the four corners and two intermediate columns each.

One-story volumes to the north and the east side of the main volume are similarly supported by steel columns and beams directly connected to the main frame.

(See drawing E-10 Ground Floor Plan Structural Diagram)

#### Internal Framing

**Basement Level Framing** includes ground-floor spans of cast-in-place concrete slabs supported on concrete beams bearing on masonry columns faced in brick. The main central space (beneath the former banking hall and used as an employee cafeteria) has four freestanding columns that give the space a distinctive character as a hypostyle hall.

(See drawing E-9 Basement Plan Structural Diagram)

- *Vault:* The basement level and the ground level both include a cast-in-place concrete vault that provides structural support at the northeast corner of the building.
- *Mezzanine:* The mezzanine structure has a dimensional depth related to the configuration of the vault, upon which it bears.

*Exterior Walls:* Wall structure includes masonry exterior facing (granite stone slabs at the front façade and brick around the remaining three sides) backed by terra cotta tiles.

*Exterior Envelope*: Exterior walls are constructed of granite and brick; a fuller description is provided in Appendix C. a report by Simpson Gumpertz & Heger dated 6/12/2017.

### Code and Controls

The proposed change in occupancy from business to assembly necessitates bringing the building into full compliance with contemporary building codes.

*Structural Seismic Code*: The structural system of the building will be required to conform to current seismic requirements, providing lateral bracing for side-to-side movement as relevant to the seismic zone established in current building codes for New England.

#### Structural Design

### **Built-Up Steel Frame**

*Horizontal Roof Spans:* Structural interventions will include maintaining the two existing trusses in place and adding four new tube steel trusses in a space grid configuration, two spanning front to back underneath the existing pair of trusses and two at the same height spanning side to side and tied

## Appendix B Structural Design

together with a perimeter beam on all four sides of the double-height volume at 30 feet above the finished floor (AFF). (See drawings S-1 and S-2.) The new trusses will also support a theatrical grid at 30 AFF with a catwalk system and capacity for hanging theatrical devices including lighting, a projection screen, and other elements to be determined for specific theatrical performance and productions.

*Vertical:* Loads from the new truss spans will be carried by new columns added in a built-up configuration to the two midspan columns on the four faces of the main cubic volume (8 locations).

*Exterior Walls*: A system of 2x6" steel tube members at 18" on center will be installed to function as a diaphragm in order to provide lateral stability to protect the brick walls against the side-to-side movement associated with earthquakes. Within the double-height cubic volume, this diaphragm system will extend from the floor up to the perimeter beam at 30' AFF.

Walls of the one-story volumes to the north and the east side of the main volume are similarly braced laterally by 2/6" steel tube members at 18" on center, extending from the floor to the top of the wall.

### **Limitations**

**Building Structure:** Structural design completed to date is based on limited information. Following completion of the study phase, should to project go forward toward realization in construction, more comprehensive investigation, including survey measurements and possible exploratory demotion, should be completed, including:

- Structural capacity of the mezzanine floor and the mezzanine railing system
- Dimensions and structural capacity of the intermediate open web steel bar joists, located above existing steel beams and trusses supporting the roof deck
- Construction and structural capacity of the Roof deck

## 5. Cost Estimate

#### Initial Construction Cost Estimate and Subsequent Reworking

PM&C completed an initial cost estimate dated 20 May 2019.

Following discussion and directives at a conference call in late May, two variations were created from that estimate. Both focus on a certificate of occupancy for the ground floor only and with a very limited level of interior finishes consistent with the statement of design intent. One variation includes costs for an elevator and the other shows the same project with no elevator. (*Note:* All three versions of the construction cost estimate appear on the following pages.)

Additional cost details requested following the final project meeting on 4 June 2019 are provided by design team members aand described here:

Alternate #1 – Entry vestibule option with partition Joe Roach, PM&C: Given the overall scope of the project, this seems to be a minor add and mostly material-driven. \$1,500 add

**Alternate #2** – Hybrid kitchen option (less counter and more partition) plus a shower *Joe Roach, PM&C:* With the space being on the ground floor and restroom nearby, this seems to be fairly simple, and with basic finishes. \$7,500 to \$10,000 add

Alternate #3 – Elevator with two stops only, to ground floor and mezzanine levels Joe Roach, PM&C: Assuming the use of a LULA elevator and the elevator machine room at the basement level, this would save an elevator pit/ladder/waterproofing, the shaft on one level, and cost of one stop compared to a 3-stop elevator design. A 2-stop LULA would be in the \$100,000 to \$120,000 range; a 3-stop LULA would be at least \$100,000 more.

Alternate #4 – Outdoor terrace on rooftop over first-floor wing at the rear of the building *Joe Roach, PM&C:* The roof deck space—approximately 1,400sf of deck on a pedestal system and 125If of railing—would be roughly \$100,000. To access the roof deck with a stair and modifying a window could be \$50,000 to \$75,000. With mark-ups this scope would be in the \$200,000 range or more without any FF&E or MEP services for bar/fireplace/fire pit/audio/video.

**Alternate #5** – Roof-mounted photovoltaic array for grants, rebates, and reduced operating costs: *Mike Trzcinski, Hesnor Associates:* Figuring about 4,800 SF of useable roof area for PV modules would result in a 35kW system. At \$0.15/ kWh, the system would produce around \$7,800 worth of electricity annually. The SMART program would provide a solar incentive payment of another \$7,800, for a total return of almost \$16,000 annually. Purchasing the PV system rather than leasing it will be far more profitable. A rough budget for a 35kW system (installed) is \$105,000.

### **Construction Costs compared to Total Project Costs: Findings**

A construction cost estimate includes only costs of construction. In contrast, the total project cost includes other "soft costs" such as permits, legal and design fees, surveys, etc. Soft costs can vary widely across projects. However, in order to convey a possible range of total project costs, a range of 12 to 20 percent yields total project costs for the two variations presented on 20 May and included in the following pages.

A phased project for occupying the ground floor only, including a three-stop elevator Building + Site Costs = \$ 3 M; Total All Construction Costs = \$ 3.8 M Total Project Cost (at 12% to 20% above Construction Costs) = \$4.3 to \$4.6 M

A phased project for occupying the ground floor only, with no elevator Building + Site Costs = \$ 2.9 M; Total All Construction Costs = \$ 3.67 M Total Project Cost (at 12% to 20% above Construction Costs) = \$4.1 to \$4.4 M

## Beyond this Study: Realization as a Project for Construction

At the time of moving forward toward realizing this as a construction project, many decisions will need to be made that will affect the construction cost estimate.

- For example, the amount to be set aside for construction contingency, as was discussed at the final meeting, will be an important project management decision; projects involving renovation or historically-protected structures typically benefit from contingencies greater than ten percent.
- As another example, an elevator will be required to provide access to all public-use areas, defined as "interior or exterior rooms or spaces that are made available to the general public" and, as discussed in this section, need not be required (but with impact to the potential use of spaces) or could be either a two-stop or three-stop elevator, each with significantly different cost implications.
- Also, decisions about engineered systems for HVAC and electricity will interact with decisions about insulating vertical and horizontal surfaces in the building.

Though many other examples could be cited, the conclusion is that any construction cost estimate depends on many interrelated variables, and changing the variables can have a substantial effect on final total project costs. Estimates in this study for construction costs and total project costs will be continuously changed, updated, and refined should the project go forward toward realization in construction.

## 5. Cost Estimate

#### Initial Construction Cost Estimate and Subsequent Reworking

PM&C completed an initial cost estimate dated 20 May 2019.

Following discussion and directives at a conference call in late May, two variations were created from that estimate. Both focus on a certificate of occupancy for the ground floor only and with a very limited level of interior finishes consistent with the statement of design intent. One variation includes costs for an elevator and the other shows the same project with no elevator. (*Note:* All three versions of the construction cost estimate appear on the following pages.)

Additional cost details requested following the final project meeting on 4 June 2019 are provided by design team members aand described here:

Alternate #1 – Entry vestibule option with partition Joe Roach, PM&C: Given the overall scope of the project, this seems to be a minor add and mostly material-driven. \$1,500 add

**Alternate #2** – Hybrid kitchen option (less counter and more partition) plus a shower *Joe Roach, PM&C:* With the space being on the ground floor and restroom nearby, this seems to be fairly simple, and with basic finishes. \$7,500 to \$10,000 add

Alternate #3 – Elevator with two stops only, to ground floor and mezzanine levels Joe Roach, PM&C: Assuming the use of a LULA elevator and the elevator machine room at the basement level, this would save an elevator pit/ladder/waterproofing, the shaft on one level, and cost of one stop compared to a 3-stop elevator design. A 2-stop LULA would be in the \$100,000 to \$120,000 range; a 3-stop LULA would be at least \$100,000 more.

Alternate #4 – Outdoor terrace on rooftop over first-floor wing at the rear of the building *Joe Roach, PM&C:* The roof deck space—approximately 1,400sf of deck on a pedestal system and 125If of railing—would be roughly \$100,000. To access the roof deck with a stair and modifying a window could be \$50,000 to \$75,000. With mark-ups this scope would be in the \$200,000 range or more without any FF&E or MEP services for bar/fireplace/fire pit/audio/video.

**Alternate #5** – Roof-mounted photovoltaic array for grants, rebates, and reduced operating costs: *Mike Trzcinski, Hesnor Associates:* Figuring about 4,800 SF of useable roof area for PV modules would result in a 35kW system. At \$0.15/ kWh, the system would produce around \$7,800 worth of electricity annually. The SMART program would provide a solar incentive payment of another \$7,800, for a total return of almost \$16,000 annually. Purchasing the PV system rather than leasing it will be far more profitable. A rough budget for a 35kW system (installed) is \$105,000.

### **Construction Costs compared to Total Project Costs: Findings**

A construction cost estimate includes only costs of construction. In contrast, the total project cost includes other "soft costs" such as permits, legal and design fees, surveys, etc. Soft costs can vary widely across projects. However, in order to convey a possible range of total project costs, a range of 12 to 20 percent yields total project costs for the two variations presented on 20 May and included in the following pages.

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## Beyond this Study: Realization as a Project for Construction

At the time of moving forward toward realizing this as a construction project, many decisions will need to be made that will affect the construction cost estimate.

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## PM&C LLC

20 Downer Ave, Suite 5 Hingham, MA 02043 (T) 781-740-8007 (F) 781-740-1012 Schematic Design Estimate

## First National Bank and Trust Building 11-14 Bank Row

Greenfield, MA

Prepared for:

**Taylor & Burns Architects** 

May 20, 2019



#### **Schematic Design Estimate**

	GSF	Cost/GSF	Estimated Construction Cost
<b>BUILDING RENOVATION</b>			
BUILDING	14,725	\$308.27	\$4,539,308
SITEWORK			\$138,500
HAZMAT			N/A
SUB-TOTAL	14,725	\$317.68	\$4,677,808
ESCALATION - Based on a late 2019 start	2.5%		\$116,945
DESIGN AND PRICING CONTINGENCY	10.0%		\$467,781
SUB-TOTAL			\$5,262,534
GENERAL CONDITIONS	6%		\$315,752
GENERAL/PROJECT REQUIREMENTS	1.00%		Included
INSURANCE (GL only)	1.25%		\$55,783 \$70,426
PERMIT			WAIVED
OVERHEAD AND FEE	3.0%		\$171,135
TOTAL OF ALL CONSTRUCTION	14,725	\$399.02	\$5,875,630

## MAIN CONSTRUCTION COST SUMMARY

### **Options/Alternates (includes mark-ups):**

1	Entry vestibule alternate layout	DEDUCT	(\$41,993)
2	Kitchen alternate layout	ADD	\$52,301
3	Insulation	ADD	\$252,958
4	MEP systems if gas is not available	DEDUCT	(\$156,628)
5	Project completed in 3 phases	ADD	\$302,386

20-May-19



#### **Schematic Design Estimate**

This Schematic Level Documents cost estimate was produced from the Cost Estimation Package by Taylor & Burns Architects dated May 10, 2019. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractors overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

#### ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

All professional fees and insurance Land acquisition, feasibility, and financing costs All Furnishings, Fixtures and Equipment Items identified in the design as Not In Contract (NIC) Items identified in the design as by others Owner supplied and/or installed items (e.g. draperies, furniture and equipment) Utility company back charges, including work required off-site Work to City streets and sidewalks, (except as noted in this estimate)

Schematic Design Estimate

	CON	STRUCTION CO	ST SUMMAR	Y IN CSI FO	<b>DRMAT</b> WORK	TOTAL PL	ROJECT
		Subtotal	Total	Subtotal	Total	Subtotal	Total
BUILDING REI	NOVATION						
DIV. 2 EXIS	STING CONDITIONS		\$267,113				\$267,113
022820 A	Abatement	Summary				Summary	
024100 I	Demolition	\$267,113				\$267,113	
DIV. 3 CON	CRETE		\$78,501				\$78,501
033000 (	Cast-in-Place Concrete	\$78,501				\$78,501	
DIV. 4 MAS	SONRY		\$595,533				\$595,533
042000	Unit Masonry & Restoration	\$425,183				\$425,183	
044000	Exterior Stone & Restoration	\$170,350				\$170,350	
DIV. 5 MET	ALS		\$926,758				\$926,758
051200 S	Structural Steel Framing	\$462,389				\$462,389	
055000 l	Metal Fabrications	\$187,619				\$187,619	
055100 N	Aiscellaneous Metals	\$189,500				\$189,500	
059000 I	Metal Restoration & Cleaning	\$87,250				\$87,250	
DIV.6 WOO	ODS & PLASTICS		\$64,583				\$64,583
061000 H	Rough Carpentry	\$47,775				\$47,775	
064000	Finish Carpentry	\$16,808				\$16,808	
DIV.7 THE	RMAL & MOISTURE PROTECTION		\$104,333				\$104,333
071300 W	Vaterproofing / Dampproofing	\$3,938				\$3,938	
072100 T	hermal Insulation						
074600 N	Ietal Panels / Siding						
075400 T	hermoplastic Membrane Roofing	\$78,950				\$78,950	
076200 S	heet Metal Flashing and Trim	\$13,079				\$13,079	
078440 F	ire-Resistive Joint Systems	\$5,000				\$5,000	
079200 Jo	pint Sealants	\$3,366				\$3,366	
DIV. 8 DOC	DRS & WINDOWS		\$374,550				\$374,550
081113 l	Hollow Metal Doors and Frames	\$25,350				\$25,350	
083100 A	Access Doors	\$3,000				\$3,000	
083310 (	Overhead Coiling Doors						
084110 A Storefronts	Aluminum-Framed Entrances and	\$245,250				\$245,250	
087100 I	Door Hardware	\$24,200				\$24,200	
088000	Glazing	\$73,250				\$73,250	
089000	Louvers and Vents	\$3,500				\$3,500	
DIV. 9 FINI	ISHES		\$436,298				\$436,298
092110 G	ypsum Board Assemblies	\$180,729				\$180,729	
093000	File & Interior Stone	\$43,330				\$43,330	
095100 S	Suspended Ceilings	\$36,160				\$36,160	
096510 F	Resilient Flooring	\$42,470				\$42,470	
098400	Acoustic Treatment	\$45,000				\$45,000	
099000	Painting & Coating	\$88,609				\$88,609	
DIV 10 SPE	CIALTIES		\$38,892				\$38,892
101400 S	ignage	\$5,000				\$5,000	
							90

20-May-19

Schematic Design Estimate

		DST SUMMAR	Y IN CSI FO	<b>RMAT</b>	TOTAL	PROJECT
	Subtotal	Total	Subtotal	Total	Subtotal	Total
BUILDING RENOVATION						
102100 Toilet Compartments	\$10,622				\$10,622	
102600 Wall and Door Protection	\$2,500				\$2,500	
102800 Toilet & Bath Accessories	\$13,700				\$13,700	
104300 AED Defibrillator Cabinets	\$4,500				\$4,500	
104400 Fire Protection Specialties	\$1,520				\$1,520	
105113 Lockers	\$1,050				\$1,050	
DIV 11 EQUIPMENT		\$32,500				\$32,500
114000 Projection Screens	\$7,500				\$7,500	
114500 Appliances	\$25,000				\$25,000	
DIV 12 FURNISHINGS		\$45,075				\$45,075
122400 Shades	\$8,400				\$8,400	
123000 Cabinetry & Countertops	\$28,350				\$28,350	
124810 Entrance & Walk-off Mats	\$8,325				\$8,325	
DIV. 14 CONVEYING SYSTEMS		\$80,000				\$80,000
142100 Elevators & Handicap Lifts	\$80,000				\$80,000	
DIV. 21 FIRE SUPPRESSION		\$76,993				\$76,993
210000 Fire Protection	\$76,993				\$76,993	
DIV. 22 PLUMBING		\$252,340				\$252,340
220000 Plumbing	\$252,340				\$252,340	
DIV. 23 HVAC		\$630,488				\$630,488
230000 HVAC	\$630,488				\$630,488	
DIV. 26 ELECTRICAL		\$513,486				\$513,486
260000 Electrical	\$513,486				\$513,486	
DIV. 31 EARTHWORK		\$21,865				\$21,865
310000 Earthwork	\$21,865				\$21,865	
DIV. 32 EXTERIOR IMPROVEMENTS				\$10,000		\$10,000
320000 Paving			\$10,000		\$10,000	
323000 Site Improvements						
DIV. 33 UTILITIES				\$128,500		\$128,500
330000 Civil Utilities			\$72,500		\$72,500	
334000 Electrical Utilities			\$56,000		\$56,000	
SUBTOTAL DIRECT (TRADE) COST		\$4,539,308		\$138.500		\$4,677.808
		TTO 210 5		+-0-,0-0		+ + + - / / , 000

20-May-19

Schematic Design Estimate

sı				UNIT	EST'D	SUB	TOTAL
	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
SUILDI	NG RENOVATION						
G	ROSS FLOOR AREA CALCULATION						
<u></u>							
	Descent out I avail				= 0.40		
	Eirst Floor				7,040		
	Mezzanine				760		
	hellulli				,00		
	TOTAL GROSS FLOOR AREA (GFA	1)			14,725		
	AND EVICTING CONDITIONS						
C	20000 Demolition						
	Exterior Remove exterior feede elemente	15 505	wof	1.00	15 505		
	Remove exterior raçade elements	15,525	vsi cf	1.00	15,525		
	Remove temporary roof	6 000	of	5.00	34,500		
	Interior	0,900	51	3.00	20,/00		
	Demo existing walls/flooring/finishes	14,725	sf	7.50	110,438		
	Sawcut/Remove basement slab for new foo	ings 8	ea	1,000.00	8,000		
	Sawcut/Remove basement slab for new elev	vator 1	ls	2,500.00	2,500		
	Sawcut/Remove basement slab for UG ME	1	ls	6,000.00	6,000		
	Misc. demo/MEP removals	14,725	sf	2.00	29,450		
	<u>Miscellaneous</u>		1	40.000.00	10.000		
	SUBTOTAL	1	18	40,000.00	40,000	267 113	
	Jobronia.					20/,113	
Т	OTAL, DIVISION 2-EXISTING CONDITIONS						\$267
	03 CONCRETE						
c	33000 Cast-In-Place Concrete						
	Miscellaneous						
	Repair/Prep existing basement slab	7,040	sf	3.00	21,120		
	Prep existing 1st floor/mezzanine slab	7.685	sf	1.00	7.685		
	Concrete to stairs - infill pans	2	flt	2,250.00	4,500		
	Footings for new columns	8	ea	2,524.50	20,196		
	LULA pit/recessed slab - complete	1	ls	15,000.00	15,000		
	Ramp - complete	1	ls	6,000.00	6,000		
	CIP stairs - complete	1	ls	4,000.00	4,000		
	SUBTOTAL					78,501	
T	OTAL, DIVISION 3 - CONCRETE						\$78,
L							
Γ	04 MASONRY						
C	42000 Unit Masonry & Restoration						
	Interior Partitions New CMU walls - elevator	1.055	sf	28 00	20 540		
	Minor repairs to interior masonry walls - 20	1,055	sf	19 50	-y,540 61 262		
	Replace liptels and throughwall flashing		lf	250.00	17 500		
	Replace top 5 courses of brickwork	245	lf	2/0.00	82 800		
	Repair/Point brick facade: 100%	040 7.215	sf	\$2.00	234.080		
	SUBTOTAL			32.00	-57,000	425.183	
		•					
C	44000 Exterior Stone & Restoration						
	Repair/Point stone façade; including re-sec	uring displaced 4,345	sf	30.00	130,350		
	granne						
	Restore/Reinstall cornice blocks & clock	1	ls	40,000.00	40,000		
	SUBTOTAL					170,350	

Schematic Design Estimate

					UNIT	EST'D	SUB	TOTAL
DE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
JILD	DING REN	NOVATION						
l	TOTAL,	DIVISION 4 - MASONRY						\$595,
ſ	05	METALS						
L	Ū							
	051200	Structural Metals						
		Floor/Roof Structure						
		Beams/Columns - new structure at existing roof	14.85	tns	7,000.00	103,950		
		Rafters - new structure at existing roof	16.50	tns	7,000.00	115,500		
		Metal deck - repair/replace existing roof - 50%	2,625	sf	8.00	21,000		
		2x6 structural tube seismic walls	8,475	vsf	17.50	148,313		
		Structural modification/repairs - building	14,725	sf	2.50	36,813		
		Roof Screen/Dunnage				•		
						assumed not req	uired	
		<u>Miscellaneous</u>						
		Fire watch	14,725	st	2.50	36,813		
		SUDIUIAL					462,389	
	055000	Metal Fabrications						
		Catwalk	2,490	sf	65.00	161,850		
		Misc. metals - plates/angles/clips	14,725	sf	1.75	25,769		
		SUBTOTAL	<i>m</i> =0	-		0,7 - 9	187.610	
		-					,,019	
	055100	Metal Stairs and Railings						
		Egress staircase; Steel pan	3	flt	25,000.00	75,000		
		Cane detection rail at basement level stairs	2	ea	1,500.00	3,000		
		Catwalk access ladder	2	ea	4,000.00	8,000		
		Metal railings at stairs	3	ea	3,500.00	10,500		
		Metal railings at catwalk	930	lf	100.00	93,000	_	
		SUBIOTAL					189,500	
	055800	Interior Metal Wall Paneling						
	.00	No work in this section						
		SUBTOTAL					-	
	059000	Metal Restoration & Cleaning						
		Restore existing exterior entry metal work	375	sf	90.00	33,750		
		Restore existing interior entry metal work	1	ls	20,000.00	20,000		
		Metal railings at mezzanine - restoration	80	lf	150.00	12,000		
		Restore/Modify existing vault doors	2	ea	10,000.00	20,000		
		RESIDE CIOCK - IIILEFIOF	1	ea	1,500.00	1,500	95 050	
		SUBIOIAL					87,250	
[	TOTAL,	DIVISION 5 - METALS						\$926
L								
[	06	WOOD & PLASTICS						
	061000	Rough Carpentry						
		Exterior facade blocking - windows/doors	8	ea	450.00	3.600		
		Interior miscellaneous carpentry & repairs	14,725	sf	3.00	44,175		
		SUBTOTAL			0.00	-70	47.775	
		-					т///Ј	
	064000	Finish Carpentry						
		Finish carpentry/running trim - basement	7,040	sf	0.75	5,280		
		Finish carpentry/running trim - 1st & mezzanine	7,685	sf	1.50	11,528		
		SUBTOTAL					16,808	
Г	TOTAL,	DIVISION 6 - WOOD & PLASTICS						\$64

20-May-19



SI					UNIT	EST'D	SUB	TOTAL
ODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
UILI	DING REI	NOVATION						
	071300	Waterproofing/Dampproofing						
		Waterproofing at elevator and sum pit	315	sf	12.50	3,938		
		SUBTOTAL					3,938	
	050100	Thormal Inculation						
	0/2100		6 100	of	6.00	coo altormator		
		Insulation - walls at bacement perimeter	0,100	si	0.00	see alternates		
		Insulation - walls at exterior	4,750	si	3.00	see alternates		
		SUBTOTAL	11,000	51	5.00	see unernates	_	
		0001011						
	072700	Air Barriers						
		No work in this section						
		SUBTOTAL					-	
		Matel Devide (Cilling						
	074600	Metal Panels/Siding						
		No work in this section						
		SUDIVIAL					-	
	074690	Wood Panels/Siding						
		No work in this section						
		SUBTOTAL					-	
	075400	Membrane Roofing						
		<u>Flat Roof - lower/upper roofs</u>						
		EPDM roofing - Patch / Repair	6,925	sf	10.00	69,250		
		Reset/Replace roof drains	8	ea	900.00	7,200		
		Elevator vent	1	ea	2,500.00	2,500		
		SUBTOTAL					78,950	
	076200	Sheet Metal Flashing and Trim						
	0/0200	Miscellaneous flashing /cheatmatal	14 595	cf	0.05	F 1F 4		
		Parapat cap	14,725	51	0.35	5,154	uirod	
		Elashing at roof transitions	100	1£	0= 0-	assumed not req	lanca	
		Flashing at root transitions	130	11	25.00	3,250		
		Flashing at new Windows	350	II IC	12.50	4,375		
		Flashing at doors	24	lf	12.50	300		
		SUBTOTAL					13,079	
	076210	Gutters and Downspouts						
	-/0310	No work in this section						
		SUBTOTAL					-	
	077250	Roof Pavers						
		No work in this section						
		SUBTOTAL					-	
	C.							
	078440	Fire-Kesistive Joint Systems		,				
		Fire stopping - per floor	1	ls	5,000.00	5,000		
		SUBTOTAL					5,000	
	070200	Joint Sealants						
	2, 9200	Backer rod and sealant at windows	950	lf	0.00	2 150		
		Backer rod and sealant at doors	335 24	lf	9.00	216		
		SUBTOTAL	-4		,		3,366	
							0,0**	
	079500	Expansion control						
		No work in this section						
		SUBTOTAL					-	
	TOTAL	DRUGION - THEDRALLAND MOTORING BROWS	ON					<b>A</b> · · ·
		ULVISION 7 - THERMAL AND MOISTURE PROTECTI	U/N					\$104.



	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILDI	NG REN	IOVATION						
185		081113	HM Doors and Frames						
186			Frames, single	19	ea	250.00	4,750		
187			Frames, single - exterior	1	ea	400.00	400		
188			Frames, double - exterior	1	ea	600.00	600		
189			Interior doors; single	10	ea	850.00	16.150		
190			Flush metal door: single - exterior	-,	еа	950.00	950		
191			Flush metal door: double - exterior		ea	1 000 00	1 000		
192			Premium for rated doors	1	60 60	1,900.00	1,900		
193			Promium for secure doors ticket/office	4	ea on	100.00	400		
104			SUPTOTAL	2	ea	100.00	200	05 050	
195			SUBIUTAL					25,350	
196	C	83100	Access Doors						
197		-	Access doors - building	2	levels	1,500.00	3,000		
198			SUBTOTAL			,0	0,	3,000	
199								5,000	
200	c	083310	Overhead Coiling Doors						
201			No work in this section						
202			SUBTOTAL					-	
203									
204	C	084110	Aluminum-Framed Entrances and Storefronts						
205			Restore existing entry assembly	375	sf	150.00	56,250		
206			Restore existing windows	1,050	sf	180.00	189,000		
207			SUBTOTAL					245,250	
208		_							
209	C	087100	Door Hardware						
210			Hardware sets - interior doors	19	ea	800.00	15,200		
211			Hardware sets - exterior doors	3	ea	1,500.00	4,500		
212			Hardware sets - premium for specialty hardware	6	ea	750.00	4,500		
213			SUBTOTAL					24,200	
214	_	00							
215	0	88000	Interior Glazing						
210			Interior glazed storefront door including frame and hardware: double	2	$\mathbf{pr}$	10,000.00	20,000		
217			Restore/Modify existing metal framed interior storefront -	915	sf	150.00	47.250		
			vestibule	3-3	51	130.00	4/,=30		
218			Transaction counter/window - tickets	1	ls	3,500.00	3,500		
219			Glass borrow lites/openings	1	ls	2,500.00	2,500		
220			SUBTOTAL			,0	,0	73,250	
221								,0, 0,	
222	0	89000	Louvers and Vents						
223			Metal louvers - exterior	1	ls	3,500.00	3,500		
224			SUBTOTAL					3,500	
225									+
226	Т	OTAL, I	DIVISION 8 - DOORS AND WINDOWS						\$374,550
/	_			1					
228		09	FINISHES						
230	(	002110	GWB Assemblies						
231		//	Ceilings						
232			GWB ceilings - based on 10% of floor area	1 479	sf	10.00	14 720		
233			Interior Partitions	-,,-,3	51	10.00	14,/30		
234			Interior partitions	6.007	sf	13.10	78.692		
235			Furred partitions - non-tube steel masonry walls	8.111	sf	8.80	71.377		
236			Shaft walls	1,062	sf	15.00	15,930		
237			SUBTOTAL	-		-		180,729	
238	-	00000	Tile and Interior Stone						
-39	0	93000	Comminia file floore		e.				
-40			Ceranne the - hoors	731	SI	20.00	14,620		
241			Ceramic tile base	227	lf	12.00	2,724		
242			Ceramic tile - walls - 40% wall receive wainscot	363	sf	22.00	7,986		
243			Thresholds	4	ea	750.00	3,000		

	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILT	DING REI	NOVATION						
244	Denn		Salvage/Clean/Restore check writing desk	1	ls	5 000 00	5 000		
945			Calance (Class (Bastone stars and language)		15	5,000.00	3,000		
-45			Salvage/Clean/Restore stone wan panels	1	15	10,000.00	10,000		
246 247			SUBTOTAL					43,330	
248		095100	Suspended Ceilings						
249		,,,	ACT	7,232	sf	5.00	36 160		
250			SURTOTAL	/,-0-		5.00	0-,	26 160	
251			SUBTOTAL					30,100	
252		096510	Carpet & Resilient Flooring						
253			Carpet	3,061	sf	7.00	21,427		
254			VCT	2,854	sf	4.50	12,843		
255			Rubber flooring	,	sf	13 50	assumed not requ	ired	
256			Page	0.050	1£	100	0 000	licu	
			Base	2,050	11	4.00	8,200		
25/			SUBTOTAL					42,470	
258 259		008400	Acoustic Treatment						
-57		098400	Acoustic rreatment					· · · · · ·	
200			Acoustic wall panels				assumed not requ	irea	
261			Acoustic ceiling panels				assumed not requ	ired	
262			Acoustic plaster - 50% of assembly space	1,500	sf	30.00	45,000		
263			SUBTOTAL					45,000	
264									
265		099000	Painting and Coating						
266			Paint walls/doors/frames/trim	14,725	sf	2.50	36,813		
267			Paint exposed deck - gathering spaces	4,985	sf	3.00	14,955		
268			Paint ceilings - GWB	1,473	sf	1.50	2,210		
269			Paint exposed deck - non-public spaces	1.035	sf	0	assumed not requ	ired	
270			Point stoirs / rollings	-,000	flte	1 500 00	4 500	licu	
071			Paint stars/rannings	3	ins	1,500.00	4,500	• • •	
2/1			Paint railings/cap				carried in restorat	ion	
2/2			Sealed concrete - basement	1,032	st	1.50	1,548		
273			Sealed concrete - first floor / mezzanine	5,722	sf	1.50	8,583		
274			Staging	1	ls	20,000.00	20,000		
275			SUBTOTAL					88,609	
276 277	1	TOTAL	DIVISION & EINICHES						¢ 406 009
278		IUIAL,	DIVISION 9 - FINISHES						\$430,298
279	1	10	SPECIALTIES						
280									
281		101400	Signage						
282			Building & room signage	1	ls	3,500.00	3,500		
283			Plaques - dedication	1	ls	1,500.00	1,500		
284			SUBTOTAL					5,000	
285									
280		102100	1 oner Compartments						
287			ADA	4	ea	1,323.00	5,292		
200 280			Statuard Uripal sereens	6	ea	823.00	4,938		
200				1	ea	392.00	392	10 600	
291			SUBIUTAL					10,022	
292		102600	Wall and Door Protection						
293			Corner guards/FRP		le	2 500 00	2 500		
294			SURTOTAL	1	15	2,500.00	2,500	2 500	
295								2,500	
296		102800	Toilet Accessories						
297			Toilet accessories	А	rms	2,500.00	10.000		
298			Premium for hand dryers	- -	63	800.00	2 200		
200			Initars alosat accessories	4	00	500.00	5,200		
-77				1	ea	500.00	500		
300			SUDIUIAL					13,700	
302		104300	Defibrillator Cabinets						
303			AED	3	ea	1.500.00	4.500		
304			SUBTOTAL	3		_,,;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		4 500	
305			SUBTOTAL					4,500	



CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
BUILI	DING REN	NOVATION			•	· •		
	104400	Fire Protection Specialties						
		Surface mounted fire extinguisher cabinets	8	ea	190.00	1,520		
		SUBTOTAL			-		1.520	
							-,0-*	
	105113	Lockers						
		Staff lockers in kitchen	3	ea	350.00	1,050		
		SUBTOTAL					1,050	
1	TOTAL.	DIVISION 10 - SPECIALTIES						\$38.80
	1011111,1		-					<i>4</i> <b>3</b> 0,09
	11	EQUIPMENT						
	111300	Loading Dock Equipment						
						assumed not requ	ired	
		SUBTOTAL				1	-	
	114000	Projection Screens						
		Projection screen	1	ls	7,500.00	7,500		
		SUBTOTAL					7,500	
		···· 1 ··· · · / A ···						
	114500	Kitchen Equipment / Appliances						
		Kitchen equipment	1	ls	25,000.00	25,000		
		SUBTOTAL					25,000	
	118000	Waste Compactors						
	110220	masic compactors				occurred - at -	inad	
		r tovide waste compactors				assumed not requ	nea	
		SUBTOTAL					-	
	TOTAL,	DIVISION 11 - EQUIPMENT						\$32,50
								-
	12	FURNISHINGS	1					
			J					
	122400	Shades						
		Window treatments	1,050	sf	8.00	8,400		
		SUBTOTAL					8,400	
	100000	Cabinate						
	123000	Capiticies					inad	
		Datiroon vanities				assumed not requ	ired	
		Storage shelving				NIC		
		Lobby coat racks				NIC		
		Kitchen cabinetry/countertops	20	lf	750.00	15,000		
		Ticket counter cabinetry/countertops	9	lf	650.00	5,850		
		Misc. cabinetry/architectural millwork	1	ls	7,500.00	7,500		
		SUBTOTAL					28,350	
	_	n					,00	
	124810	Entrance Floor Mats and Frames						
		Walkoff mats and main entries	185	sf	45.00	8,325	-	
		SUBTOTAL					8,325	
I	TOTAL	DIVISION 11 - EOUIPMENT						\$45.05
								φ <b>4</b> 0,07
	TOTAL,	DIVISION 14						
j	14	CONVEYING SYSTEMS	1					
	14	CONTENING DIDIEMD	1					
	142100	LULA						
		LULA; 24ft travel	1	ls	80,000.00	80,000		
		SUBTOTAL					80,000	
j	TOTAL	DIVISION 14						\$80.00
	IOIAL,	DIVISION 14						900,00
			_					
	21	FIRE PROTECTION						
	210000	FIRE PROTECTION GENERALLY						
	210000	Double about volve accombine			6 00	<i>(</i>		
		Double check valve assembly	1	ea	0,000.00	6,000		



CSI				UNIT	EST'D	SUB	TOTAL
COD	<b>DESCRIPTION</b>	QTY	UNIT	COST	COST	TOTAL	COST
BUI	LDING RENOVATION						
373	Wet alarm valve	1	ea	5,000.00	5,000		
374	Wet sprinkler heads	107	ea	75.00	8,025		
375	Fire department valve, 2-1/2"	2	ea	1,000.00	2,000		
376	Zone control valve assembly	2	ea	2,500.00	5,000		
377	Fire department connection	1	ea	1,200.00	1,200		
378	Electric bell	1	ea	420.00	420		
379	Branch pipe with fittings & hangers wet system	853	lf	20.00	17,060		
380	Main pipe with fittings & hangers wet system	428	lf	26.00	11,128		
381	Standpipe with fittings & hangers wet system	130	lf	32.00	4,160		
382	Miscellaneous						
383	Coordination, BIM	1	ls	2,000.00	2,000		
384	Hydraulic calculations / Shop dwgs	1	ls	8,000.00	8,000		
385	Coring, sleeves	2	levels	3,000.00	6,000		
386	Fees & permits	1	ls	1,000.00	1,000		
387	SUBTOTAL					76,993	
388							

TOTAL, DIVISION 21

\$76,993

#### 22 PLUMBING

Equipment				
Gas fired domestic water heater condensing type	1	ea	25,000.00	25,0
Water meter assembly	1	ea	4,500.00	4,5
Mixing valve assembly	1	ea	5,000.00	5,0
Pressure reducing station, service entrance	1	ea	2,400.00	2,4
Rough-in & connection to kitchen equipment	1	ls	12,000.00	12,0
Misc. plumbing equipment	13,870	sf	1.00	13,8
Plumbing Fixtures & Specialties				
Toilets	10	ea	1,200.00	12,0
Urinal	1	ea	1,400.00	1,4
Lavatories	4	ea	1,000.00	4,0
Drinking fountain	1	ea	3,000.00	3,0
Janitors sink	2	ea	1,100.00	2,2
Kitchen sinks	1	ea	1,000.00	1,0
Misc. plumbing fixtures	13,870	sf	0.25	3,4
Domestic Water Pipe				
Copper pipe type L with fittings & hangers	13,870	sf	2.50	34,6
Valves & accessories	13,870	sf	1.50	20,8
Domestic Water Pipe Insulation				
Pipe insulation	13,870	sf	1.50	20,8
Sanitary Waste And Vent Pipe				
Hubless cast iron pipe with fittings & hangers	13,870	sf	2.25	31,2
Storm Drainage Pipe				
Hubless cast iron pipe with fittings & hangers	13,870	sf	1.25	17,3
Gas Pipe				
Black steel pipe with fittings & hangers	13,870	sf	0.75	10,4
Roof Drain Pipe Insulation (Horizontal)				
Pipe insulation	13,870	sf	0.25	3,4
Miscellaneous				
Coordination, BIM	1	ls	7,300.00	7,3
Coring, sleeves	2	levels	4,000.00	8,0
System testing and flushing	1	ls	6,000.00	6,0
Fees & permits	1	ls	2,500.00	2,5
SUBTOTAL				,0

252,340

Schematic Design Estimate

CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
BUILI	DING RE	NOVATION						
	23	HVAC						
	230000	) HVAC, GENERALLY						
		HVAC Equipment						
		Gas fired condensing boiler 500 MBH	1	ea	18,000.00	18,000		
		Domestic hot water circ pump with VFD	2	ea	2,500.00	5,000		
		AHU 12.5 ton with HW & DX cooling <b>(Budget cost from</b> Hesnor Engineers	1	ea	33,800.00	33,800		
		Labor to install AHU	1	ls	6,800.00	6,800		
		RTU 50 tons with gas fired heating & DX cooling <b>(Budget</b> cost from Hesnor Engineers	1	ea	99,500.00	99,500		
		Labor to install AHU	1	ls	8,500.00	8,500		
		VAV unit with HW coil (Allowance)	12	ea	1,200.00	14,400		
		Exhaust fans	2	ea	3,000.00	6,000		
		Kitchen exhaust fan	1	ea	4,000.00	4,000		
		Miscellaneous HVAC equipment	13,870	sf	4.00	55,480		
		Sheet metal & Accessories						
		Galvanized ductwork with fittings & hangers	10,000	lbs	10.50	105,000		
		Duct insulation	6,400	sf	2.00	12,800		
		Boiler and water heater flue stack	1	ls	10,000.00	10,000		
		Registers, grilles & diffusers	36	ea	175.00	6,300		
		Miscellaneous sheet metal accessories	1	ls	12,000.00	12,000		
		Piping						
		Hot Water Piping						
		Hot water piping with fittings & hangers	13,870	sf	3.50	48,545		
		Valves & accessories	1	ls	12,000.00	12,000		
		Condensate Drain Piping						
		Condensate drain piping with fittings & hangers	13,870	sf	0.50	6,935		
		Piping Insulation	0, ,		0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		Piping insulation	13.870	sf	2.00	27,740		
		Temperature Controls	0)- / -			7771-		
		Automatic temperature control DDC	13.870	sf	5.00	69.350		
		Balancing	0,-,0	-	0.50	- 2100-2		
		System testing & balancing	13.870	sf	1.25	17.338		
		Miscellaneous	0,-,0	-	0	-7,00-9		
		Coordination, BIM	1	ls	17.000.00	17.000		
		Coring, sleeves	2	levels	5.000.00	10.000		
		Equipment start-up and inspection	1	ls	2,000.00	2 000		
		Rigging & equipment rental	1	ls	12,000.00	12,000		
		Vibration & seismic restraints	1	ls	10.000.00	10 000		
		SUBTOTAL	1	10	10,000.00	10,000	620 488	
		Jobionii.					030,400	
	TOTAL,	DIVISION 23						\$630,4
	26	ELECTRICAL						
	20							
		SERVICE & DISTRIBUTION						
		Gear & Distribution						

Gear & Distribution				
Normal Power				
Meter	1	ea	350.00	350
600A 208/120V distribution panelboard	1	ea	25,000.00	25,000
200A panelboard (allow)	3	ea	2,500.00	7,500
200A feed	200	lf	48.00	9,600
Grounding	1	ls	5,000.00	5,000
Emergency power				
Emergency power				NIC
Equipment Wiring				
Elevator and cab power feed and connection	1S 1	ls	5,500.00	5,500
RTU feed and connection	1	ea	4,500.00	4,500

480 481

482

483

484

485



Schematic Design Estimate

	CSI				UNIT	EST'D	SUB	TOTAL
	CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILDING R	ENOVATION						
491		AHU feed and connection	1	ea	4,500.00	4,500		
492		Boiler feed and connection	1	ea	1,500.00	1,500		
493		Pump feed and connection	2	ea	1,500.00	3,000		
494		KEF feed and connection	1	ea	950.00	950		
495		EF feed and connection	1	ea	950.00	950		
496		Misc. equipment feed and connections	13,870	sf	1.00	13,870		
497		Kitchen feed and connections	1	ls	750.00	750		
498		SUBTOTAL					82,970	
499	_							
500	D502	o LIGHTING & POWER						
501		Lighting & Branch Power						
502		Lighting & Branch Power						
503		LED lighting	10,644	sf	5.00	53,220		
504		Exit and emergency lighting	13,870	sf	0.50	6,935		
505		Exterior building lighting	1	ls	5,000.00	5,000		
506		Lighting controls						
507		Lighting controls, local, and sensing	13,870	sf	1.15	15,951		
508		Branch devices						
509		Branch devices	13,870	sf	0.65	9,016		
510		Lighting and branch circuitry						
511		Lighting and branch circuitry	13,870	sf	4.25	58,948		
512		SUBTOTAL					149,070	
513								
514	D503	6 COMMUNICATION & SECURITY SYSTEMS						
515		Fire Alarm						
516		Control panel, programming and testing	1	ea	7,500.00	7,500		
517		LCD annunciator	1	ea	1,500.00	1,500		
518		Beacon	1	ea	225.00	225		
519		Knox box	1	ea	600.00	600		
520		Master box	1	ea	3,850.00	3,850		
521		Devices and cabling	13,870	sf	2.00	27,740		
522		Bi-Directional Amplification System						
523		BDA system	1	ls	5,000.00	5,000		
524		Theatre/Assembly Space (3) Wall Stages						
525		Stage lighting, dimming and controls	3	loc	20,000.00	60,000		
526		Stage lighting, dimming and controls, Rough-in	3	loc	5,000.00	15,000		
527		Sound system	3	loc	6,500.00	19,500		
528		House lighting	3,226	sf	8.00	25,808		
529		Telecommunications						
530		Rough-in	13,870	sf	0.50	6,935		
531		MDF closet Fit-out	1	ls	5,000.00	5,000		
532		Devices and cabling	13,870	sf	1.00	13,870		
533		Audio/Visual (Rough-in only)						
534		Audio/Video (Rough-in)	3,226	sf	0.50	1,613		
535		Audio/Video system	1	ls	25,000.00	25,000		
536		Security System						
537		Head end	1	ls	10,000.00	10,000		
538		Access control	13,870	sf	1.50	20,805		
539		SUBTOTAL					249,946	
540								
541	D504	0 OTHER ELECTRICAL SYSTEMS						
542		Lightning Protection				NIC		
543		Fire stopping	1	ls	2,500.00	2,500		
544		Temp power and lights	1	ls	9,000.00	9,000		
545		Coordination, BIM & Shop drawings	1	ls	11,000.00	11,000		
546		Fees & Permits	1	ls	9,000.00	9,000		
547		SUBTOTAL					31,500	
548	TOT							<b>A</b>
549	TOTA	L, DIVISION 26						\$513,486
550								

	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILI	DING REN	NOVATION						
551									
552		31	EARTHWORK						
553									
554		310000	EARTHWORK						
555			Spread Footings						
556			Excavation for new footings	8	ea	1,500.00	12,000		
557			Elevator Pit						
558			Excavation for elevator pit	1	ls	5,000.00	5,000		
559			Haul excess material offsite; RC1	139	cy	35.00	4,865		
560			SUBTOTAL					21,865	
561									
562		316600	Piles						
563			Mico/Helical piles for new foundations				assumed not req	uired	
564			SUBTOTAL					-	
565									
566									
567			TOTAL - EARTHWORK						21,865



20-May-19

CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
SITEV	VORK							
1			-					
2	G	SITEWORK						
3	911000	σίτε αρέρλρατιών						
5	311000	FARTHWORK						
6		No work in this section						
7		No work in this section						
8		<u>GROUND IMPROVEMENTS</u>						
9		No work in this section						
10 11		EROSION CONTROL						
12		No work in this section						
13		SUBTOTAL					-	
14								
15	312000	SITE PAVING						
16	0-2000	Repair sidewalks/paving	1	ls	10,000.00	10,000		
17		SUBTOTAL					10,000	
18								
19	323000	SITE IMPROVEMENTS						
20		No work in this section						
21		SUBTOTAL					-	
22	330000	CIVIL UTILITIES						
24	00	Water						
25		New domestic water supply	1	ls	15,000.00	15,000		
26		New water fire service supply	1	ls	15,000.00	15,000		
27		Gas						
28		Gas service - assumed available	1	ls	7,500.00	7,500		
29		Sanitary sewer						
30		Sanitary system	1	ls	20,000.00	20,000		
32		<u>Storm Sewer</u> Roof drain connections / leaders	1	ls	10.000.00	10.000		
33		Connect to existing line	1	loc	5,000.00	5,000		
34		Recharge system						
35		No work in this section						
36 27		SUBTOTAL					72,500	
38	334000	ELECTRICAL WORK						
39	001	Power						
40		Primary ductbank 2-4" empty, conduits only (allow)	100	lf	250.00	25,000		
41		Padmount transformer		ea		Utility Co.		
42		Transformer pad	1	ea		See Civil		
43		<u>Communications</u>		10				
		relecond ductbank 4-4 empty, conduits only (allow)	100	II	200.00	20,000		
45		Site Security		1				
40		Site Lighting	1	18	3,500.00	3,500		
 48		one Lighting Ste Lighting (allow)	4	le	5 000 00	E 000		
49		Site Demolition	1	13	5,000.00	5,000		
50		Site demolition and make safe	1	ls	2,500.00	2,500		
51		SUBTOTAL			<i>,</i> <u></u> , <u>,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	56,000	
52								
53		TOTAL - SITE DEVELOPMENT						\$138.500
								·-0°,0°0



20-May-19

DESCRIPTION         OPY         UNIT         COST         COST         TOTAL         COST           ostibule alternate layout					UNIT	EST'D	SUB	TOTA
o6         WOOD & PLASTICS           o6         Bodgh Carpentry Rogh Bodching SUBTOTAL         1         Is         (350.00)         (350)           TOTAL_DIVISION 6 - WOOD & PLASTICS         (350)         (350)         (350)           TOTAL_DIVISION 6 - WOOD & PLASTICS         (350)         (350)         (350)           OS         DOORS & WINDOWS         .         .         .           O8         DOORS & WINDOWS         .         .         .           08113         HI Doors and Frames         .         .         .           No work in this section         .         .         .         .           088000         Interior Glazing         .         .         .         .           Interior glaced dorefront door including frame and Interior glaced dorefront door including frame and Interior watchuble         .         .         .           SUBTOTAL         (320) of 100,000         (10,000)         .         .         .           087100         Door Hardware Hardware sets - interior doors         (2) en         800.00         (1,600)         .           097100         GWTAL         .         .         .         .         .           097101         GWTAL         .         . <th></th> <th>DESCRIPTION</th> <th>QTY</th> <th>UNIT</th> <th>COST</th> <th>COST</th> <th>TOTAL</th> <th>cos</th>		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	cos
of         WOOD & PLASTICS           o6iooo         Rough Carpentry NUMPTOTAL         (350)           TOTAL, DIVISION 6 - WOOD & PLASTICS         (350)           o8         DOORS & WINDOWS         (350)           o8         DOORS and Frames Now the in this section SUBFOTAL         -           o88000         Interior Glazing Interior glazed storefront door including frame and Marchaner, double         (1) pr         10,000,00         (10,000)           Restore/Modify existing metal framed interior storefront - vestibule         (150) sf         150,000         (22,500)           087100         Door Hardware double         (32,500)         (32,500)         (32,500)           087000         Door Hardware double         (150) sf         150,000         (16,000)           087100         Door Hardware double         (1,600)         (1,600)         (1,600)           for the formation frames SUBTOTAL         (1,200)         (1,600)         (1,703)           for the formation frames SUBTOTAL         (1,300)         sf         13,10         (1,703)           090000         ACT Nowork in this section SUBTOTAL         .         .         .         .           090000         ACT Nowork in this section SUBTOTAL         .         .         .         .	estibule al	ternate layout						
06         WOOD & PLASTICS           061000         Rough Carpentry Rough blocking SUBTOTAL         1         Is         (350)         (350)           10714. DIVISION 6 - WOOD & PLASTICS         (350)         (350)         (350)         (350)           10714. DIVISION 6 - WOOD & PLASTICS         (350)         (350)         (350)         (350)           10714. DIVISION 6 - WOOD & PLASTICS         (350)         (350)         (350)         (350)           10714. DIVISION 6 - WOOD & PLASTICS         (350)         (350)         (350)         (350)           08113         HM Doors and Frames No work in this section SUBTOTAL         .         .         .           08000         Interior Glazing Interior glazed storefront door including frame and Interior glazed storefront 4.         (1) pr         10,000.00         (10,000)           087100         Door Hardware double         (32,500)         (32,500)         (32,500)           087100         Door Hardware efs - interior doors         (2) en         800.00         (1,600)           10711. DIVISION 8 - DOORS AND WINDOWS         (2) en         800.00         (1,600)         (1,600)           10711. DIVISION 8 - DOORS AND WINDOWS         (320)         rf         13.10         (1,703)           090003         ACT No work in thi								
06       WOUNT PLASTICS         061000       Rough blocking SUBTOTAL       1       Is       (350)       (350)         107AL, DIVISION 6 - WOOD & PLASTICS       (350)       (350)       (350)         107AL, DIVISION 6 - WOOD & PLASTICS       (350)       (350)       (350)         107AL, DIVISION 6 - WOOD & PLASTICS       (350)       (350)       (350)         108000       Interior glazed storefront door including frame and Interior glazed storefront door including frame and Interior glazed storefront door including frame and SUBTOTAL       (1) pr       (0.000.00       (10.000)         08100       Door Hardware SuBTOTAL       (32,500)       (32,500)       (32,500)         087100       Door Hardware SuBTOTAL       (32,500)       (32,500)       (32,500)         087100       Door Hardware SuBTOTAL       (32,500)       (32,500)       (32,500)         087100       Door Hardware Hardware dos - interior doors       (2) ea       800.00       (1,600)         10774L, DIVISION 8 - DOORS AND WINDOWS       (32)       (4)       (1,703)       (1,703)         092110       CWB Interior Partitions       (130)       sf       13,10       (1,703)         090007       Painting and Coating Paint to Gow Painse       (2)       ea       150.00       (300)		WOOD & DI ASTROS	7					
o61000       Rough Carpentry Rough blocking SUBTOTAL       1       Is       (350.00)       (350)         707AL, DIVISION 6 - WOOD & PLASTICS       (350)       (350)       (350)         707AL, DIVISION 6 - WOOD & PLASTICS       (350)       (350)         707AL, DIVISION 6 - WOOD & PLASTICS       (350)       (350)         708       DOORS & WINDOWS       .       .         08113       HM Doors and Frames No work in this section SUBTOTAL       .       .         088000       Interior Glazing Interior glazed storefront door including frame and hardware; double SUBTOTAL       (150) of       150.00       (22,500)         087100       Door Hardware SUBTOTAL       (32,500)       (32,500)       (32,500)         087100       Door Hardware SUBTOTAL       (32,500)       (32,500)       (32,500)         087100       Door Hardware Hardware sets - interior doors       (2)       ea       800.00       (1,600)         107AL, DIVISION 8 - DOORS AND WINDOWS       (2)       ea       800.00       (1,600)       (1,600)         092110       GWB       Interior partitions Interior partitions       (130)       of       13.10       (1,703)         090007       Painting and Coating Paint to GWB walls       (130)       of       1.50       (195)	00	wood & Plasmes						
Rough blocking       1       is       (350)         TOTAL, DIVISION 6 - WOOD & PLASTICS       (350)         08       DOORS & WINDOWS       (10)         08       Interior glazed storefond door including frame and (1) pr 10,000.00 (10,000)       (10,000)         hardware; double       (150) of 150.00 (22,500)       (22,500)         087100       DOOR Hardware       (32,500)         087000       DOOR Hardware       (10)         Hardware sets - interior doors       (2) ea 800.00 (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (8)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,600)       (1,703)         Ogeno GWB       Interior Paritions       (130) ef 13.10 (1,703)         SUBTOTAL       (130) ef 1.50 (195)       (1,703)         Ogeno 7       Painting and Coating       (2) ea 150.00 (300)         Paint to doors/frames       (2) ea 150.00 (300)       (495)         TOTAL, DIVISION 9 - FINISHES	061000	Rough Carpentry						
SUPTOTAL     (350)       TOTAL, DIVISION 6 - WOOD & PLASTICS		Rough blocking	1	ls	(350.00)	(350)		
TOTAL, DIVISION 6 - WOOD & PLASTICS         08       DOORS & WINDOWS         081113       HM Doors and Frames No work in this section SUETOTAL       -         088000       Interior Glazing Interior Glazing Restore/Modify existing metal framed interior storefront - vestibule       (1) pr       10,000,00       (10,000)         Restore/Modify existing metal framed interior storefront - vestibule       (150)       sf       150.00       (22,500)         087100       Door Hardware Hardware sets - interior doors       (2)       ea       800.00       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (8)       (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (8)       (1,600)         O92110       GWB       (1,600)       (1,703)         Interior Partitions SUBTOTAL       (130)       sf       13.10       (1,703)         090003       ACT No work in this section SUBTOTAL       -       -       0         090007       Painting and Coating Paint to GWB walls       (130)       sf       1.50       (195)         Paint to GWB walls       (130)       sf       1.50       (195)       (495)         TOTAL, DIVISION 9 - FINISHES       (0       (1495)       (1495)       (1495)		SUBTOTAL					(350)	
o8       DOORS & WINDOWS         o81113       HM Doors and Frames         No work in this section       SUBTOTAL         o88000       Interior Glazing         Interior Glazing       Interior glazed storefront door including frame and         Restore/Modify esting metal framed interior storefront-       (150)         subtro Door Hardware       (150)         Hardware sets - interior doors       (2)         subtro Door Hardware       (1,600)         Hardware sets - interior doors       (2)         subtro Door Hardware       (1,600)         Hardware sets - interior doors       (2)         og FINISHES       (1,600)         Ogeno GWB       (1,600)         Interior Partitions       (130)         Interior Partitions       (130)         SUBTOTAL       (1,703)         ogooog ACT       -         No work in this section       (130)       sf         SUBTOTAL       (1,703)       -         ogooog ACT       -       -         No work in this section       (130)       sf       1,50       (195)         Paint to GWB walls       (130)       sf       1,50       (195)       -         Ogooog ACT       (2)       <	TOTAL,	DIVISION 6 - WOOD & PLASTICS						
08       DOORS & WINDOWS         081113       HM Doors and Frames         No work in this section       -         SUBTOTAL       -         088000       Interior Glazed storefront door including frame and hardware; double       (1) pr       10,000.00         Restore/Modify existing metal framed interior storefront - vestibule       (150) sf       150.00       (22,500)         087100       Door Hardware       (32,500)       (32,500)       (32,500)         087100       Door Hardware       (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (2) ea       800.00       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (8)       (130) sf       13.10       (1,703)         092110       GWB       Interior partitions       (130) sf       13.10       (1,703)         092110       GWB       Interior partitions       -       -       090003 ACT       -         No work in this section								
081113       HM Doors and Frames         No work in this section       SUBTOTAL         sUBTOTAL       -         088000       Interior Glazing         Interior glazed storefront door including frame and       (1) pr       10,000.00       (10,000)         Mardware; double       (150)       sf       150.00       (22,500)         vestibule       (32,500)       (32,500)       (32,500)       (32,500)         087,000       Door Hardware       (1600)       (1600)         BUFTOTAL       (32,500)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,600)       (1,600)         Og FINISHES       (130) sf       13.10       (1,703)         090003       ACT            No work in this section             090007       Paint to GWB walls       (130) sf       1.50       (195)         Paint to GWB walls       (2) ea       150.00       (300)       (495)	08	DOORS & WINDOWS	]					
No work in this section SUBTOTAL	081113	HM Doors and Frames						
088000       Interior Glazing         Interior glazed storefront door including frame and hardware; double       (1) pr 10,000.00 (10,000)         New stibule       (150) sf 150.00 (22,500)         SUBTOTAL       (32,500)         087100       Door Hardware         Hardware sets - interior doors       (2) ea         SUBTOTAL       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (8)         09       FINISHES         092110       GWB         Interior partitions       (130) sf 13.10 (1,703)         Interior partitions       (1,703)         SUBTOTAL       -         090000       ACT         No work in this section       (130) sf 1.50 (195)         Paint to GWB walls       (130) sf 1.50 (195)         Paint to Goos/frames       (2) ea 150.00 (300)         SUBTOTAL       -         090007       Paint to GWB walls       (130) sf 1.50 (195)         Paint to GONS/frames       (2) ea 150.00 (300)       (495)         TOTAL, DIVISION 9 - FINISHES       (100)		No work in this section SUBTOTAL					-	
Interior glazed storefront door including frame and (1) pr 10,000.00 (10,000) hardware; double SUBTOTAL (150) sf 150.00 (22,500) vestibule SUBTOTAL (32,500) 087100 Door Hardware Hardware sets - interior doors (2) ea 800.00 (1,600) SUBTOTAL (1,600) TOTAL, DIVISION 8 - DOORS AND WINDOWS (5) 09 FINISHES 092110 GWB Interior Partitions SUBTOTAL (1,703) 090003 ACT No work in this section SUBTOTAL (1,703) 090007 Painting and Coating Paint to GWB walls (130) sf 1.50 (195) Paint to doors/frames (2) ea 150.00 (300) SUBTOTAL (495)	088000	Interior Glazing						
Restore/Modify existing metal framed interior storefront - vestibule       (150) sf       150.00       (22,500)         SUBTOTAL       (32,500)         087100       Door Hardware       (32,500)         Hardware sets - interior doors       (2) ea       800.00       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (2) ea       800.00       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (8)       (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,000)       (1,000)       (1,000)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,000)       (1,000)       (1,000)         Oge       FINISHES       (1,000)       (1,000)       (1,000)         Oge       FINISHES       (1,000)       (1,703)       (1,703)         OgeOOO7       Paint In this section SUBTOTAL       (1,300) sf       1,50       (1,95)         Paint to doors/frames       (2) ea       150.00       (300)       (495)         TOTAL, DIVISION 9 - FINISHES       (1       (1       (1       (1		Interior glazed storefront door including frame and hardware; double	(1)	pr	10,000.00	(10,000)		
SUBTOTAL       (32,500)         087100       Door Hardware         Hardware sets - interior doors       (2) ea       800.00       (1,600)         SUBTOTAL       (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (8)         09       FINISHES       (8)         092110       GWB       (1,703)         Interior Partitions       (130)       sf       13.10       (1,703)         090003       ACT       (1,703)       (1,703)       (1,703)         090003       ACT       -       -       -         090007       Paint to SUBTOTAL       -       -       -         090007       Paint to GWB walls       (130)       sf       1.50       (195)         Paint to Gors/frames       (2)       ea       150.00       (300)       (495)         TOTAL, DIVISION 9 - FINISHES       (130)       sf       1.50       (195)       (195)		Restore/Modify existing metal framed interior storefront - vestibule	(150)	sf	150.00	(22,500)		
o87100       Door Hardware         Hardware sets - interior doors       (2) ea       800.00       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,600)       (1,600)         TOTAL, DIVISION 8 - DOORS AND WINDOWS       (1,600)       (1,600)         09       FINISHES       (1,600)       (1,600)         09       FINISHES       (1,600)       (1,600)         090001       GWB       Interior Partitions       (1,703)         1       Interior partitions       (1,703)       (1,703)         090003       ACT       (1,703)       (1,703)         090007       Painting and Coating       -       -         Paint to GWB walls       (130)       sf       1.50       (195)         Paint to GWB walls       (130)       sf       1.50       (195)         Paint to doors/frames       (2)       ea       150.00       (300)         SUBTOTAL       (495)       (495)       (495)		SUBTOTAL					(32,500)	
Hardware sets - interior doors SUBTOTAL (1,600) (1,600) (1,600) (1,600) (1,600) (1,600) (1,600) (1,600) (1,703) (1,70	087100	Door Hardware						
SUBTOTAL     (1,60)       TOTAL, DIVISION 8 - DOORS AND WINDOWS     (\$       09     FINISHES       092110     GWB       Interior Partitions     (130) sf       Interior partitions     (1,703)       SUBTOTAL     (1,703)       090003     ACT       No work in this section     .       SUBTOTAL     .       090007     Painting and Coating       Paint to GWB walls     (130) sf       Paint to doors/frames     (2) ea       SUBTOTAL     .		Hardware sets - interior doors	(2)	ea	800.00	(1,600)		
TOTAL, DIVISION 8 - DOORS AND WINDOWS       (\$;         09       FINISHES         092110       GWB         Interior Partitions       (130) sf         Interior partitions       (130) sf         SUBTOTAL       (1,703)         090003       ACT         No work in this section       -         090007       Painting and Coating         Paint to GWB walls       (130) sf       1.50         Paint to doors/frames       (2) ea       150.00       (300)         SUBTOTAL       (495)       (100)       (100)		SUBTOTAL					(1,600)	
09       FINISHES         092110       GWB         Interior Partitions       (130) sf         Interior partitions       (130) sf         SUBTOTAL       (1,703)         090003       ACT         No work in this section       -         SUBTOTAL       -         090007       Painting and Coating         Paint to GWB walls       (130) sf       1.50       (195)         Paint to doors/frames       (2) ea       150.00       (300)         SUBTOTAL       (495)       (495)	TOTAL,	DIVISION 8 - DOORS AND WINDOWS						(\$3
09       FINISHES         092110       GWB         Interior Partitions       (130) sf         Interior partitions       (130) sf         SUBTOTAL       (1,703)         090003       ACT         No work in this section       (1,703)         SUBTOTAL       -         090007       Painting and Coating         Paint to GWB walls       (130) sf       1.50         Paint to GWB walls       (130) sf       1.50.00         SUBTOTAL       -       (495)								
og2110       GWB         Interior Partitions       (130)       sf       13.10       (1,703)         Interior partitions       (130)       sf       13.10       (1,703)         og0003       ACT       (1,703)       (1,703)       (1,703)         og0007       Paint in this section       -       -       -         og0007       Painting and Coating       -       -       -         Paint to GWB walls       (130)       sf       1.50       (195)         Paint to doors/frames       (2)       ea       150.00       (300)         SUBTOTAL       (495)       (495)       -	09	FINISHES						
Interior Partitions       (130) sf       13.10       (1,703)         SUBTOTAL       (1,703)       (1,703)         090003       ACT       (1,703)         No work in this section       -         SUBTOTAL       -         090007       Painting and Coating         Paint to GWB walls       (130) sf       1.50         Paint to dows/frames       (2) ea       150.00         SUBTOTAL       (495)	002110	GWB						
Interior partitions (130) sf 13.10 (1,703) SUBTOTAL (1,703) 090003 ACT No work in this section SUBTOTAL - 090007 Painting and Coating Paint to GWB walls (130) sf 1.50 (195) Paint to doors/frames (2) ea 150.00 (300) SUBTOTAL (495) TOTAL, DIVISION 9 - FINISHES (9)	092110	Interior Partitions						
Intrins partitions       (1,03)         SUBTOTAL       (1,703)         090003 ACT       (1,703)         No work in this section       -         090007 Painting and Coating       -         Paint to GWB walls       (130) sf       1,50         Paint to GWB walls       (130) sf       1,50         SUBTOTAL       (130) sf       1,50         Paint to doors/frames       (2) ea       150.00         SUBTOTAL       (495)       (495)		Interior partitions	(120)	ef	12 10	(1 702)		
ogooog ACT No work in this section SUBTOTAL - ogooo7 Painting and Coating Paint to GWB walls (130) sf 1.50 (195) Paint to doors/frames (2) ea 150.00 (300) SUBTOTAL (495) TOTAL, DIVISION 9 - FINISHES (495)		SUBTOTAL	(130)	51	13.10	(1,703)	(1,703)	
ogooo3 ACT       No work in this section         SUBTOTAL       -         ogooo7 Painting and Coating       -         Paint to GWB walls       (130) sf       1.50       (195)         Paint to doors/frames       (2) ea       150.00       (300)         SUBTOTAL       (495)       (495)								
No work in this section SUBTOTAL - 090007 Painting and Coating Paint to GWB walls (130) sf 1.50 (195) Paint to doors/frames (2) ea 150.00 (300) SUBTOTAL (495) TOTAL, DIVISION 9 - FINISHES (495)	090003	ACT						
090007       Painting and Coating         Paint to GWB walls       (130) sf       1.50       (195)         Paint to doors/frames       (2) ea       150.00       (300)         SUBTOTAL       (495)       (495)		No work in this section SUBTOTAL					-	
Paint to GWB walls         (130) sf         1.50         (195)           Paint to doors/frames         (2) ea         150.00         (300)           SUBTOTAL         (495)         (495)	090007	Painting and Coating						
Paint to doors/frames (2) ea 150.00 (300) SUBTOTAL (495)		Paint to GWB walls	(130)	$\mathbf{sf}$	1.50	(195)		
SUBTOTAL (495) TOTAL, DIVISION 9 - FINISHES (495)		Paint to doors/frames	(2)	ea	150.00	(300)		
TOTAL, DIVISION 9 - FINISHES		SUBTOTAL					(495)	
	TOTAL,	DIVISION 9 - FINISHES						(\$
	mont							()



20-May-19

				UNIT	FST'D	SUB	TOTAT
	DESCRIPTION	ΟΤΥ	UNIT	COST	COST	TOTAL	COST
nen alterna	te layout	***					0001
	-						
06	WOOD & PLASTICS						
00	Wood a Habitos						
061000	Rough Carpentry						
	Rough blocking	1	ls	350.00	350		
	SUBTOTAL					350	
TOTAL,	DIVISION 6 - WOOD & PLASTICS						\$
08	DOORS & WINDOWS						
081113	HM Doors and Frames						
	Frames, double	1	ea	450.00	450		
	Kitchen doors; double	1	$\mathbf{pr}$	2,500.00	2,500		
	SUBTOTAL					2,950	
087100	Door Hardware						
	Hardware sets - interior doors	2	ea	800.00	1,600		
	SUBTOTAL	_			_,	1,600	
						_,	
TOTAL,	DIVISION 8 - DOORS AND WINDOWS						\$4
09	FINISHES						
092110	GWB						
	Interior Partitions						
	Interior partitions	390	sf	13.10	5,109		
	SUBTOTAL					5,109	
090003	ACT						
	No work in this section					_	
	Sobional						
090007	Painting and Coating						
	Paint to GWB walls	390	sf	1.50	585		
	Paint to doors/frames	2	ea	150.00	300		
	SUBTOTAL					885	
TOTAL	Πημείον ο είνιεμες						φ-
101AL, 1	UIVISION 9 - FINISNES						¥5,
11	EQUIPMENT						
114500	Kitchen Equipment / Appliances						
	Kitchen equipment	1	ls	25,000.00	25,000		
	SUBTOTAL				0, -	25.000	
						_0,0	
TOTAL,	DIVISION 11 - EQUIPMENT						\$25,



Schematic Design Estimate

				UNIT	EST'D	SUB	TOTAL
	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
en altern	ate layout						
22	PLUMBING	]					
22000	D PLUMBING, GENERALLY	_					
	Plumbing Fixtures & Specialties						
	Kitchen sinks	4	ea	2,250.00	9,000		
	SUBTOTAL					9,000	
IUIAL,	DIVISION 22						φ9,000
26	ELECTRICAL	1					φ9,000
26 D5030	ELECTRICAL COMMUNICATION & SECURITY SYSTEMS Equipment Wining	]					φ9,000
26 D5030	ELECTRICAL  COMMUNICATION & SECURITY SYSTEMS Equipment Wiring Kitchen feed and connections	]	ls	750.00	750		<i><b>49,000</b></i>
26 D5030	ELECTRICAL  COMMUNICATION & SECURITY SYSTEMS Equipment Wiring Kitchen feed and connections SUBTOTAL	]	ls	750.00	750	750	÷9,000
26 D5030	ELECTRICAL  COMMUNICATION & SECURITY SYSTEMS Equipment Wiring Kitchen feed and connections SUBTOTAL DIVISION 26	]1	ls	750.00	750	750	\$750
26 D5030	ELECTRICAL COMMUNICATION & SECURITY SYSTEMS Equipment Wiring Kitchen feed and connections SUBTOTAL DIVISION 26	1	ls	750.00	750	750	\$750


				UNIT	EST'D	SUB	TOTAL
	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
stems if	f gas is not available						
		-					
22	PLUMBING						
220000	PLUMBING, GENERALLY						
	Equipment						
	Electric domestic water heater with storage	1	ls	18,000.00	18,000		
	SUBTOTAL			-,	- ,	18,000	
	Gas Pipe				-		
	Black steel pipe with fittings & hangers	(1)	ls	10.403.00	(10,403)		
	SUBTOTAL	(1)	15	10,403.00	(10,403)	(10,402)	
						(10,403)	
23	HVAC	7					
230000	Gas fired condensing boiler 500 MBH	വ	ea	18,000,00	(18,000)		
	AHII & RTII eliminate hot water and natural gas heating	(1)	le	25,000,00	(25,000)		
	equipment. Units to have heat pump functions with electric	(1)	15	35,000.00	(33,000)		
	heat						
	Hot Water Piping		,	2			
	Hot water piping with fittings & hangers	(1)	ls	48,545.00	(48,545)		
	Valves & accessories	(1)	ls	12,000.00	(12,000)		
	Piping Insulation						
	Piping insulation	(1)	ls	27,740.00	(27,740)		
	SUBTOTAL					(141,285)	
D50	ELECTRICAL						
	HVAC feeds and connections	1	ls	4 500 00	4 500		
	SUBTOTAL	1	10	4,300.00	4,000	4,500	
						-,000	
D50	SITEWORK						
220000							
ავიიიი	Gas						
	Gas service - assumed available	(1)	ls	7,500.00	(7.500)		
		(1)	10	/,000.00	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	SUBTOTAL					(7,500)	



## Schematic Design Estimate

## **MAIN CONSTRUCTION COST SUMMARY** PHASED PROJECT, GROUND FLOOR ONLY; WITH ELEVATOR

	GSF	Cost/GSF	Estimated Construction Cost
BUILDING RENOVATION			
UILDING	14,725	\$198.21	\$2,918,648
ITEWORK			\$125,000
IAZMAT			N/A
SUB-TOTAL	14,725	\$206.70	\$3,043,648
ESCALATION - Based on a late 2019 start	2.5%		\$76,091
DESIGN AND PRICING CONTINGENCY	10.0%		\$304,365
SUB-TOTAL			\$3,424,104
GENERAL CONDITIONS	6%		\$205,446
GENERAL/PROJECT REQUIREMENTS BONDS	1.00%		Included
INSURANCE (GL only)	1.25%		\$45,823
PERMIT			WAIVED
OVERHEAD AND FEE	3.0%		\$111,350
OTAL OF ALL CONSTRUCTION	14,725	\$259.63	\$3,823,019
options/Alternates (includes mark-ups):	14,/23	Ψ~{}9,03	₩3,82

1	Entry vestibule alternate layout	DEDUCT	(\$41,994)
2	Kitchen alternate layout	ADD	\$52,302
3	Insulation	ADD	\$o
4	MEP systems if gas is not available	DEDUCT	(\$156,628)
5	Project completed in 3 phases	ADD	\$208,759

20-May-19



## **Schematic Design Estimate**

This Schematic Level Documents cost estimate was produced from the Cost Estimation Package by Taylor & Burns Architects dated May 10, 2019. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractors overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

## ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

All professional fees and insurance Land acquisition, feasibility, and financing costs All Furnishings, Fixtures and Equipment Items identified in the design as Not In Contract (NIC) Items identified in the design as by others Owner supplied and/or installed items (e.g. draperies, furniture and equipment) Utility company back charges, including work required off-site Work to City streets and sidewalks, (except as noted in this estimate) 20-May-19

CONST	KUCIION CO	SI SUMMAR	Y IN CSI FOI	<b>KIVLAT</b> VORK	TOTAL PH	OJECT
	Subtotal	Total	Subtotal	Total	Subtotal	Total
BUILDING RENOVATION		An				¢2 +2 -00
DIV. 2 EXISTING CONDITIONS	Cummons	\$249,088			Cummony	\$249,088
022020 ADMEENEN	summary				Summary	
024100 Demontion	\$249,088				\$249,088	
DIV. 3 CONCRETE		\$56,316				\$56,316
033000 Cast-in-Place Concrete	\$56,316				\$56,316	
DIV. 4 MASONRY		\$49,972				\$49,972
042000 Unit Masonry & Restoration	\$49,972				\$49,972	
044000 Exterior Stone & Restoration						
DIV. 5 METALS		\$724,507				\$724,507
051200 Structural Steel Framing	\$462,389				\$462,389	., .,,
055000 Metal Fabrications	\$187,619				\$187,619	
055100 Miscellaneous Metals	\$54,500				\$54,500	
059000 Metal Restoration & Cleaning	\$20,000				\$20,000	
DIV. 6 WOODS & PLASTICS		\$24,375				\$24,375
061000 Rough Carpentry	\$24,375				\$24,375	. 1,0,0
064000 Finish Carpentry	=					
DIV 7 THERMAL & MOISTURE PROTECTION		\$87 424				\$87 424
071300 Waterproofing / Dampproofing		φ <b>0</b> /, <b>4</b> 24				ψ <b>0</b> /, <b>42</b> 4
072100 Thermal Insulation						
074600 Metal Panels / Siding						
075400 Thermoplastic Membrane Roofing	\$76,450				\$76,450	
076200 Sheet Metal Flashing and Trim	\$5,974				\$5,974	
078440 Fire-Resistive Joint Systems	\$5,000				\$5,000	
079200 Joint Sealants						
DIV. 8 DOORS & WINDOWS		\$35.650				\$35.650
081113 Hollow Metal Doors and Frames	\$14,400	+00,-0-			\$14,400	+00,-0-
083100 Access Doors	\$3,000				\$3,000	
083310 Overhead Coiling Doors						
084110 Aluminum-Framed Entrances and Storefronts						
087100 Door Hardware	\$14,750				\$14,750	
o88000 Glazing						
089000 Louvers and Vents	\$3,500				\$3,500	
DIV. 9 FINISHES		\$167.790				\$167.790
092110 Gypsum Board Assemblies	\$117,843	/ // 2 -			\$117,843	/ // 2 -
093000 Tile & Interior Stone	\$3,000				\$3,000	
095100 Suspended Ceilings	/					
096510 Resilient Flooring						
098400 Acoustic Treatment						
099000 Painting & Coating	\$46,947				\$46,947	
DIV 10 SPECIALTIES		\$28.642				\$28.642
101400 Signage	\$1,500	, _~, ~ <b>,</b> ~			\$1,500	, _~,~ <b>~</b> ~
						1



Schematic Design Estimate

C	ONSTRUCTION CO	DST SUMMARY	Y IN CSI FO	RMAT		BDO IECT
	BUIL. Subtotal	DING Total	SITEW Subtotal	Total	TOTAL Subtotal	Total
BUILDING RENOVATION						
102100 Toilet Compartments	\$10,622				\$10,622	
102600 Wall and Door Protection						
102800 Toilet & Bath Accessories	\$10,500				\$10,500	
104300 AED Defibrillator Cabinets	\$4,500				\$4,500	
104400 Fire Protection Specialties	\$1,520				\$1,520	
105113 Lockers						
DIV 11 EQUIPMENT		\$25,000				\$25,000
114000 Projection Screens						
114500 Appliances	\$25,000				\$25,000	
DIV 12 FURNISHINGS		\$34,175				\$34,175
122400 Shades						
123000 Cabinetry & Countertops	\$25,850				\$25,850	
124810 Entrance & Walk-off Mats	\$8,325				\$8,325	
DIV. 14 CONVEYING SYSTEMS		\$80,000				\$80,000
142100 Elevators & Handicap Lifts	\$80,000				\$80,000	
DIV. 21 FIRE SUPPRESSION		\$72,833				\$72,833
210000 Fire Protection	\$72,833				\$72,833	
DIV. 22 PLUMBING		\$252,340				\$252,340
220000 Plumbing	\$252,340				\$252,340	
DIV. 23 HVAC		\$630,488				\$630,488
230000 HVAC	\$630,488				\$630,488	
DIV. 26 ELECTRICAL		\$383,181				\$383,181
260000 Electrical	\$383,181				\$383,181	
DIV. 31 EARTHWORK		\$16,865				\$16,865
310000 Earthwork	\$16,865				\$16,865	
DIV. 32 EXTERIOR IMPROVEMENTS				\$10,000		\$10,000
320000 Paving			\$10,000		\$10,000	
323000 Site Improvements						
DIV. 33 UTILITIES				\$125,000		\$125,000
330000 Civil Utilities			\$72,500		\$72,500	
334000 Electrical Utilities			\$52,500		\$52,500	
SUBTOTAL DIRECT (TRADE) COST		\$2,918,648		\$135,000		\$3,053,645
		· · · · ·				

20-May-19

Schematic Design Estimate

CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
BUILD	ING REN	NOVATION						
Г	GROSS I	FLOOR AREA CALCULATION						
L	5R055 I							
		Basement Level				7,040		
		First Floor				6,925		
		Mezzanine				760		
Γ		TOTAL GROSS FLOOR AREA (GFA)				14,725		
ſ	02	EXISTING CONDITIONS						
	020000	Demolition						
		Exterior						
		Remove exterior façade elements		vsf	1.00			
		Remove existing roof & structure for new work	6,900	sf	5.00	34,500		
		Remove temporary roof	6,900	sf	3.00	20,700		
		Interior	1		-			
		Demo existing walls/flooring/finishes	14,725	sf	7.50	110,438		
		Sawcut/Remove basement slab for new footings	8	ea	1,000.00	8,000		
		Sawcut/Remove basement slab for new elevator		ls	2,500.00			
		Sawcut/Remove basement slab for UG MEP	1	ls	6,000.00	6,000		
		Misc. demo/MEP removals	14,725	sf	2.00	29,450		
		<u>Miscellaneous</u>						
		Snoring/Bracing - structure/exterior walls	1	ls	40,000.00	40,000	040.000	
		SUDIVIAL					249,088	
Γ	TOTAL,	DIVISION 2-EXISTING CONDITIONS						\$249.
L	,							,,
[	03	CONCRETE						
	033000	Cast-In-Place Concrete						
	033000							
		Miscellaneous						
		Repair/Prep existing basement slab	7,040	sf	3.00	21,120		
		Prep existing 1st floor/mezzanine slab		sf	1.00			
		Concrete to stairs - infill pans		flt	2,250.00			
		Footings for new columns	8	ea	2,524.50	20,196		
		LULA pit/recessed slab - complete	1	ls	15,000.00	15,000		
		Ramp - complete		ls	6,000.00			
		CIP stairs - complete		ls	4,000.00			
		SUBTOTAL					56,316	
Γ	TOTAL,	DIVISION 3 - CONCRETE						\$56
-								
	04	MASONRY						
	042000	Unit Masonry & Restoration						
	24-000	Interior Partitions						
		New CMU walls - elevator	1,055	sf	28.00	29,540		
		Minor repairs to interior masonry walls - 10%	1,634	sf	12.50	20,432		
		Replace lintels and throughwall flashing	,	lf	250.00	,		
		Replace top 5 courses of brickwork		lf	240.00			
		Repair/Point brick facade: 100%		sf	32.00			
		SUBTOTAL		~*	5.00		40.072	
			-				77,7/4	
	044000	Exterior Stone & Restoration						
		Repair/Point stone façade; including re-securing displaced		sf	30.00			
		granite						
		Restore/Reinstall cornice blocks & clock		ls	40,000.00			
		SUBTOTAL					-	
			-					

Schematic Design Estimate

					UNIT	EST'D	SUB	TOTAL
DE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
ILI	DING REN	NOVATION					·	
	TOTAL,	DIVISION 4 - MASONRY						\$49,
	1							
	05	METALS						
	051200	Structural Metals						
	031200	Floor/Roof Structure						
		Pooms/Columns_ new structure at ovisting roof	14.9-	tra	<b>5</b> 000.00	100.050		
		Beams/Columns - new structure at existing root	14.85	ths	7,000.00	103,950		
		Rafters - new structure at existing roof	16.50	tns	7,000.00	115,500		
		Metal deck - repair/replace existing roof - 50%	2,625	sf	8.00	21,000		
		2x6 structural tube seismic walls	8,475	vsf	17.50	148,313		
		Structural modification/repairs - building	14,725	sf	2.50	36,813		
		Roof Screen/Dunnage						
						assumed not rec	luired	
		Miscellaneous						
		Fire watch	14,725	sf	2.50	36,813		
		SUBTOTAL					462,389	
		Madel Palaciantiana						
	055000	Metal rabrications		<i>c</i>				
		Catwalk	2,490	sf	65.00	161,850		
		Misc. metals - plates/angles/clips	14,725	sf	1.75	25,769		
		SUBTOTAL					187,619	
		Mat 10th instant De litera						
	055100	Metal Stairs and Kallings		<b>C</b> :				
		Egress staircase; Steel pan		flt	25,000.00			
		Cane detection rail at basement level stairs		ea	1,500.00	0		
		Catwalk access ladder	2	ea	4,000.00	8,000		
		Metal railings at stairs		ea	3,500.00			
		Metal railings at catwalk	465	If	100.00	46,500		
		SUBIOTAL					54,500	
	055800	Interior Metal Wall Paneling						
	00	No work in this section						
		SUBTOTAL					-	
	059000	Metal Restoration & Cleaning						
		Restore existing exterior entry metal work		$\mathbf{sf}$	90.00			
		Restore existing interior entry metal work	1	ls	20,000.00	20,000		
		Metal railings at mezzanine - restoration		lf	150.00			
		Restore/Modify existing vault doors		ea	10,000.00			
		Restore clock - interior		ea	1,500.00			
		SUBTOTAL					20,000	
	TOTAL,	DIVISION 5 - METALS						\$724,
	06	WOOD & PLASTICS						
	061000	Rough Carpentry						
	201000	Exterior facade blocking - windows/doors	Q	69	450.00	2 600		
		Interior miscellaneous carpentry & repairs	6 025	ca cf	450.00	3,000		
		SURTOTAI	0,925	51	3.00	20,7/5	04.055	
		SUDIOIAL					24,375	
	064000	Finish Carpentry						
		Finish carpentry/running trim - basement		sf	0.75			
		Finish carpentry/running trim - 1st & mezzanine		sf	1.50			
		SUBTOTAL			1.00		-	
	TOTAT	UNVISION 6 - WORDS PLASTICS						\$24

20-May-19



Schematic Design Estimate

I					UNIT	EST'D	SUB	TOTAL
DE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
UILE	DING REN	NOVATION						
	071300	Waterproofing/Dampproofing						
		Waterproofing at elevator and sum pit		sf	12.50			
		SUBTOTAL					-	
	0.50100	Thermal Inculation						
	0/2100	Inculation roof		of	6.00	coo altomator		
		Insulation - 1001		si	0.00	see alternates		
		Insulation - walls at exterior		sf	3.00	see alternates		
		SUBTOTAL		01	9.00	500 unternates	_	
	072700	Air Barriers						
		No work in this section						
		SUBTOTAL					-	
	074600	Metal Panels/Siding						
		No work in this section						
		SUDIOIAL					-	
	074690	Wood Panels/Siding						
		No work in this section						
		SUBTOTAL					-	
	075400	Membrane Roofing						
		Flat Roof - lower/upper roofs						
		EPDM roofing - Patch / Repair	6,925	sf	10.00	69,250		
		Reset/Replace roof drains	8	ea	900.00	7,200		
		Elevator vent		ea	2,500.00			
		SUBTOTAL					76,450	
	076200	Sheet Metal Flashing and Trim						
	5/0200	Miscellaneous flashing/sheetmetal	6 097	cf	0.95	9 49 4		
		Paranat can	0,925	51	0.35	2,424	mired	
		r araper cap	100	1£	05.00	assumed not req	uncu	
		Flashing at now wir down	130	11 1.c	25.00	3,250		
		Fiashing at new windows		11	12.50			
		Flashing at doors	24	If	12.50	300		
		SUBIOTAL					5,974	
	076210	Gutters and Downspouts						
	5/5310	No work in this section						
		SUBTOTAL					-	
	077250	Roof Pavers						
		No work in this section						
		SUBTOTAL					-	
	078440	Fire-Resistive Joint Systems		,				
		Fire stopping - per floor	1	ls	5,000.00	5,000		
		SUBIOTAL					5,000	
	079200	Joint Sealants						
	-,,=00	Backer rod and sealant at windows		lf	0.00			
		Backer rod and sealant at doors		lf	9.00			
		SUBTOTAL		-	,		-	
	079500	Expansion control						
		No work in this section						
		SUBTOTAL					-	
	TOTA	DIVICION - THEBRIST AND MOVEMENTS	TEOTION					**
		DIVISION 7 - THERMAL AND MOISTURE PRO	TECTION					\$87



Schematic Design Estimate

	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILD	DING REI	NOVATION	•	•				
185		081113	HM Doors and Frames						
186			Frames, single - first floor only	10	ea	250.00	2,500		
187			Frames single - exterior	1	ea	400.00	400		
188			Frames double - exterior	-	69	600.00	600		
180			Interior deeres single first fleer only	1	ca	850.00	000		
109			Interior doors; single - first floor only	10	ea	850.00	8,500		
190			Flush metal door; single - exterior (delete this door)		ea	950.00			
191			Flush metal door; double - exterior	1	ea	1,900.00	1,900		
192			Premium for rated doors	4	ea	100.00	400		
193			Premium for secure doors - ticket/office	1	ea	100.00	100		
194			SUBTOTAL					14,400	
195		0.00100	A server Do one						
190		083100	Access Doors						
19/			Access doors - building	2	levels	1,500.00	3,000		
198			SUBTOTAL					3,000	
200		082210	Overhead Coiling Doors						
201		003310	No work in this section						
202			SUBTOTAL					-	
203			bobionie						
204		084110	Aluminum-Framed Entrances and Storefronts						
205			Restore existing entry assembly		sf	150.00			
206			Restore existing windows		sf	180.00			
207			SUBTOTAL					_	
208			bobionie						
209		087100	Door Hardware						
210			Hardware sets - interior doors	10	ea	800.00	8,000		
211			Hardware sets - exterior doors	2	ea	1,500.00	3,000		
212			Hardware sets - premium for specialty hardware	5	ea	750.00	3,750		
213			SUBTOTAL					14 750	
214								1,750	
215		088000	Interior Glazing						
216			Interior glazed storefront door including frame and hardware: double		$\mathbf{pr}$	10,000.00			
217			Restore/Modify existing metal framed interior storefront -		ef	150.00			
,			vestibule		51	150.00			
218			Transaction counter/window - tickets		ls	3,500.00			
219			Glass borrow lites/openings		ls	2,500.00			
220			SUBTOTAL					-	
221		_							
222		089000	Louvers and Vents						
223			Metal louvers - exterior	1	ls	3,500.00	3,500		
224			SUBTOTAL					3,500	
226	ſ	TOTAL	DIVISION 8 - DOORS AND WINDOWS						\$25,650
227	L	101112,							¢ <b>JJ</b> ,0 <b>J</b> 0
228	Ι	09	FINISHES	1					
229	L	- )		1					
230		092110	GWB Assemblies						
231			Ceilings						
232			GWB ceilings - based on 10% of floor area	693	sf	10.00	6,930		
233			Interior Partitions						
234			Interior partitions (30% on ground floor)	1,802	sf	13.10	23,606		
235			Furred partitions - non-tube steel masonry walls	8,111	sf	8.80	71,377		
236			Shaft walls	1,062	sf	15.00	15,930		
237 238			SUBTOTAL					117,843	
-30 239		093000	Tile and Interior Stone						
240			Ceramic tile - floors	-	sf	20.00			
241			Ceramic tile base		)f	10.00			
240			Commission walls 40% well receive without		11 f	12.00			
242			ceramic die - walls - 40% wall receive walnscot	-	st	22.00			
243			Thresholds	4	ea	750.00	3,000		

PMC - Project Management Cost

Schematic Design Estimate

	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILD	DING REI	NOVATION						
244			Salvage/Clean/Restore check writing desk	-	ls	5,000.00			
245			Salvage/Cloan/Pactore stone wall panels	_	le	10,000,00			
0.46			Salvage/Clean/Restore stone wan panels	-	15	10,000.00			
240			SUBIOTAL					3,000	
248		095100	Suspended Ceilings						
249			ACT		sf	5.00			
250			SURTOTAL			0		_	
251			SUBIOINE						
252		096510	Carpet & Resilient Flooring						
253			Carpet		sf	7.00			
254			VCT		sf	4.50			
255			Rubber flooring		sf	13 50	assumed not requ	uired	
256			Base		1f	-0.00			
0.57			Dase		11	4.00			
25/			SUBIOTAL					-	
258 259		008400	Acoustic Treatmont						
05		098400	Acoustic reaction						
200			Acoustic wall panels				assumed not req		
261			Acoustic ceiling panels				assumed not requ	ured	
262			Acoustic plaster - 50% of assembly space (later phase)		sf	30.00			
263			SUBTOTAL					-	
264									
265		099000	Painting and Coating						
266			Paint walls/doors/frames/trim (first floor only)	7,363	sf	2.50	18,408		
267			Paint exposed deck - gathering spaces		sf	3.00			
268			Paint ceilings - GWB	603	sf	1.50	1.040		
269			Paint exposed deck - non-public spaces	- 70	ef		assumed not rea	ired	
270			Print stains (willings		51		assumed not req	uneu	
2/0			Paint stairs/railings		nts	1,500.00			
271			Paint railings/cap				carried in restora	tion	
272			Sealed concrete - basement		sf	1.50			
273			Sealed concrete - first floor only (not mezzanine)	5,000	sf	1.50	7,500		
274			Staging	1	ls	20,000.00	20,000		
275			SUBTOTAL					46.947	
276								100010	
277		TOTAL,	DIVISION 9 - FINISHES						\$167,790
270									
2/9 280	I	10	SPECIALITIES						
281		101400	Signage						
282			Building & room signage	1	ls	1,500.00	1,500		
283			Plaques - dedication		ls	1.500.00			
284			SUBTOTAL		10	1,500100		1 500	
285			SOBIOTINE .					1,500	
286		102100	Toilet Compartments						
287			ADA	4	ea	1,323.00	5.292		
288			Standard	6	ea	823.00	4,938		
289			Urinal screens	1	ea	392.00	392		
290			SUBTOTAL					10,622	
291									
292		102600	Wall and Door Protection						
293			Corner guards/FRP		ls	2,500.00			
294			SUBTOTAL					-	
295									
296		102800	Toilet Accessories						
297			Toilet accessories	4	rms	2,500.00	10,000		
298			Premium for hand dryers		ea	800.00			
299			Janitors closet accessories	1	еа	500.00	500		
300			SUBTOTAL			300.00	500	10 500	
301			objoint.					10,500	
302		104300	Defibrillator Cabinets						
303			AED	3	ea	1,500.00	4,500		
304			SUBTOTAL	3				4 500	
305								4,500	

20-May-19



20-May-19

Schematic Design Estimate

SI			Ι		UNIT	EST'D	SUB	TOTAL
ODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
UILD	ING REN	NOVATION						
	104400	FIFE FFORECTION Specialities	Q	69	100.00	1 520		
		SUBTOTAL	0	ca	190.00	1,040	1 520	
							1,520	
	105113	Lockers						
				ea	350.00			
_		SUBIOIAL					-	
	TOTAL,	DIVISION 10 - SPECIALTIES						\$28,
Γ	11	EQUIPMENT	]					
	111300	Loading Dock Equipment						
						assumed not requir	ed	
		SUBTOTAL					-	
	114000	Projection Screens						
	114000	Projection screen		اد	7 500 00			
		SUBTOTAL		10	/,,000.00		-	
	114500	Kitchen Equipment / Appliances						
		Kitchen equipment	1	ls	25,000.00	25,000		
		SUBTOTAL					25,000	
	118220	Waste Compactors						
		Provide waste compactors				assumed not requir	ed	
		SUBTOTAL					-	
Г	TOTAL.	DIVISION 11 - EOUIPMENT						\$25.0
L								- <b>-</b> J,
Γ	12	FURNISHINGS	]					
-	199400	Shades	-					
		Window treatments		sf	8.00			
		SUBTOTAL		~-	0.00		-	
	122000	Cabinets						
		Bathroom vanities				assumed not requir	ed	
		Storage shelving				NIC		
		Lobby coat racks				NIC		
		Kitchen cabinetry/countertops	20	lf	750.00	15,000		
		Ticket counter cabinetry/countertops	9	lf	650.00	5,850		
		Misc. cabinetry/architectural millwork	1	ls	5,000.00	5,000		
		SUBTOTAL					25,850	
	12/810	Entrance Floor Mats and Frames						
	1-4010	Walkoff mats and main entries	185	sf	45.00	8.325		
		SUBTOTAL	100	-/-	-1J-00	0,0=0	8,325	
F	TOTAL							* .
L	IUIAL,	DIVISION 11 - EQUIPMENT						\$34
F	TOTAL							
	IUIAL,	DIVISION 14						
[	14	CONVEYING SYSTEMS	]					
	142100	LULA						
	.4_100	LULA; 24ft travel	1	ls	80,000.00	80.000		
		SUBTOTAL	-	~		,	80,000	
Г	TOTAL	DIVISION 14						\$80.4
L	. UIAL, 1	DIVIDION 14						φ <b>0</b> 0,0
г	01	EIDE DDATECTIAN	7					
L	21	FIKE FRUIECHUN	L					
	210000	FIRE PROTECTION, GENERALLY						
		Double check valve assembly	1	ea	6,000.00	6,000		

PMC - Project Management Cost



	CSI				UNIT	EST'D	SUB	TOTAL
	CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILD	DING RENOVATION						
373		Wet alarm valve	1	ea	5,000.00	5,000		
374		Wet sprinkler heads	107	ea	75.00	8,025		
375		Fire department valve, 2-1/2"	2	ea	1,000.00	2,000		
376		Zone control valve assembly	2	ea	2,500.00	5,000		
377		Fire department connection	1	ea	1,200.00	1,200		
378		Electric bell	1	ea	420.00	420		
379		Branch pipe with fittings & hangers wet system	853	lf	20.00	17,060		
380		Main pipe with fittings & hangers wet system	428	lf	26.00	11,128		
381		Standpipe with fittings & hangers wet system (but no "real"		lf	32.00			
382		Miscellaneous						
383		Coordination, BIM	1	ls	2,000.00	2,000		
384		Hydraulic calculations / Shop dwgs	1	ls	8,000.00	8,000		
385		Coring, sleeves	2	levels	3,000.00	6,000		
386		Fees & permits	1	ls	1,000.00	1,000		
387		SUBTOTAL					72,833	
388								

TOTAL, DIVISION 21

\$72,833

## PLUMBING

220000 PLUMBING, GENERALLY					
Equipment					
Gas fired domestic water heate	r condensing type	1	ea	25,000.00	25,00
Water meter assembly		1	ea	4,500.00	4,50
Mixing valve assembly		1	ea	5,000.00	5,00
Pressure reducing station, serv	ice entrance	1	ea	2,400.00	2,40
Rough-in & connection to kitch	nen equipment	1	ls	12,000.00	12,00
Misc. plumbing equipment		13,870	sf	1.00	13,87
Plumbing Fixtures & Specialtie	<u>28</u>				
Toilets		10	ea	1,200.00	12,00
Urinal		1	ea	1,400.00	1,40
Lavatories		4	ea	1,000.00	4,00
Drinking fountain		1	ea	3,000.00	3,00
Janitors sink		2	ea	1,100.00	2,20
Kitchen sinks		1	ea	1,000.00	1,00
Misc. plumbing fixtures		13,870	sf	0.25	3,46
Domestic Water Pipe					
Copper pipe type L with fitting	s & hangers	13,870	sf	2.50	34,6
Valves & accessories		13,870	sf	1.50	20,80
Domestic Water Pipe Insulatio	<u>n</u>				
Pipe insulation		13,870	sf	1.50	20,80
Sanitary Waste And Vent Pipe					
Hubless cast iron pipe with fitt	ings & hangers	13,870	sf	2.25	31,20
Storm Drainage Pipe					
Hubless cast iron pipe with fitt	ings & hangers	13,870	sf	1.25	17,33
<u>Gas Pipe</u>					
Black steel pipe with fittings &	hangers	13,870	sf	0.75	10,40
Roof Drain Pipe Insulation (He	orizontal)				
Pipe insulation		13,870	sf	0.25	3,46
Miscellaneous					
Coordination, BIM		1	ls	7,300.00	7,30
Coring, sleeves		2	levels	4,000.00	8,00
System testing and flushing		1	ls	6,000.00	6,00
Fees & permits		1	ls	2,500.00	2,50
SUBTOTAL					/0

\$252,340

252,340

Schematic Design Estimate

	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILD	DING REI	NOVATION						
433		23	HVAC						
434									
435		230000	HVAC, GENERALLY						
436			HVAC Equipment				0		
437			Gas fired condensing boiler 500 MBH	1	ea	18,000.00	18,000		
438			Domestic hot water circ pump with VFD	2	ea	2,500.00	5,000		
439			AHU 12.5 ton with HW & DX cooling (Budget cost from Hesnor Engineers	1	ea	33,800.00	33,800		
440			Labor to install AHU	1	ls	6,800.00	6,800		
441			RTU 50 tons with gas fired heating & DX cooling <b>(Budget cost from Hesnor Engineers</b>	1	ea	99,500.00	99,500		
442			Labor to install AHU	1	ls	8,500.00	8,500		
443			VAV unit with HW coil (Allowance)	12	ea	1,200.00	14,400		
444			Exhaust fans	2	ea	3,000.00	6,000		
445			Kitchen exhaust fan	1	ea	4,000.00	4,000		
446			Miscellaneous HVAC equipment	13,870	sf	4.00	55,480		
447			Sheet metal & Accessories						
448			Galvanized ductwork with fittings & hangers	10,000	lbs	10.50	105,000		
449			Duct insulation	6,400	sf	2.00	12,800		
450			Boiler and water heater flue stack	1	ls	10,000.00	10,000		
451			Registers, grilles & diffusers	36	ea	175.00	6,300		
452			Miscellaneous sheet metal accessories	1	ls	12,000.00	12,000		
453			Piping						
454			Hot Water Piping						
455			Hot water piping with fittings & hangers	13,870	sf	3.50	48,545		
456			Valves & accessories	1	ls	12,000.00	12,000		
457			Condensate Drain Piping						
458			Condensate drain piping with fittings & hangers	13,870	sf	0.50	6,935		
459			Piping Insulation						
460			Piping insulation	13,870	sf	2.00	27,740		
461			Temperature Controls						
462			Automatic temperature control DDC	13,870	sf	5.00	69,350		
463			Balancing						
464			System testing & balancing	13,870	sf	1.25	17,338		
465			Miscellaneous						
466			Coordination, BIM	1	ls	17,000.00	17,000		
467			Coring, sleeves	2	levels	5,000.00	10,000		
468			Equipment start-up and inspection	1	ls	2,000.00	2,000		
469			Rigging & equipment rental	1	ls	12,000.00	12,000		
470			Vibration & seismic restraints	1	ls	10,000.00	10,000		
471			SUBTOTAL					630,488	
472									
473		TOTAL,	DIVISION 23						\$630,488
474		L							
475 476		26	ELECTRICAL						
477		20							
478			SERVICE & DISTRIBUTION						
479			Gear & Distribution						

blittled a biblinge from				
Gear & Distribution				
Normal Power				
Meter	1	ea	350.00	350
600A 208/120V distribution panelboard	1	ea	25,000.00	25,000
200A panelboard (allow)	3	ea	2,500.00	7,500
200A feed	200	lf	48.00	9,600
Grounding	1	ls	5,000.00	5,000
Emergency power				
Emergency power				NIC
Equipment Wiring				
Elevator and cab power feed and connections	1	ls	5,500.00	5,500
RTU feed and connection	1	ea	4,500.00	4,500

480 481

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Schematic Design Estimate

	CSI				UNIT	EST'D	SUB	TOTAL
	CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILDING RE	NOVATION						
491		AHU feed and connection	1	ea	4,500.00	4,500		
492		Boiler feed and connection	1	ea	1,500.00	1,500		
493		Pump feed and connection	2	ea	1,500.00	3,000		
494		KEF feed and connection	1	ea	950.00	950		
495		EF feed and connection	1	ea	950.00	950		
496		Misc. equipment feed and connections	13.870	sf	1.00	13.870		
497		Kitchen feed and connections	1	ls	750.00	750		
498		SUBTOTAL			,0	70-	82.970	
499							,,,,	
500	D5020	LIGHTING & POWER						
501		Lighting & Branch Power						
502		Lighting & Branch Power						
503		LED lighting	10,644	sf	5.00	53,220		
504		Exit and emergency lighting	13,870	sf	0.50	6,935		
505		Exterior building lighting	1	ls	5.000.00	5,000		
506		Lighting controls			0,00000	3,000		
507		Lighting controls local and sensing	12 870	sf	1 15	15 051		
508		Branch devices	13,070	51	1.15	13,931		
509		Branch devices	10 850	cf	0.65	0.016		
510		Lighting and branch singuitre	13,870	51	0.05	9,010		
511		Lighting and branch circuitry		- 6		-0 - 0		
511		Lighting and branch circuitry	13,870	st	4.25	58,948		
512		SUBTOTAL					149,070	
513 514	Drogo	COMMUNICATION & SECURITY SYSTEMS						
515	D2030	Eine Alama						
516		<u>File Alalin</u>						
510		Control panel, programming and testing	1	ea	7,500.00	7,500		
517		LCD annunciator	1	ea	1,500.00	1,500		
518		Beacon	1	ea	225.00	225		
519		Knox box	1	ea	600.00	600		
520		Master box	1	ea	3,850.00	3,850		
521		Devices and cabling	13,870	sf	2.00	27,740		
522		Bi-Directional Amplification System						
523		BDA system (perhaps not needed, depending on AHJ)		ls	5,000.00			
524		Theatre/Assembly Space (3) Wall Stages						
525		Stage lighting, dimming and controls		loc	20,000.00			
526		Stage lighting, dimming and controls, Rough-in	3	loc	5,000.00	15,000		
527		Sound system		loc	6,500.00			
528		House lighting	3,226	sf	8.00	25,808		
529		Telecommunications						
530		Rough-in	13,870	sf	0.50	6,935		
531		MDF closet Fit-out	1	ls	5,000.00	5,000		
532		Devices and cabling	13,870	sf	1.00	13,870		
533		Audio/Visual (Rough-in only)						
534		Audio/Video (Rough-in)	3.226	sf	0.50	1.613		
535		Audio/Video system	5, -	ls	25,000.00	,- <b>o</b>		
536		Security System (needs only fob system at main entrance)			0,,			
537		Head end	1	ls	10,000,00	10 000		
538		Access Control		ef	10,000.00	10,000		
539		SUBTOTAL		51	1.50		110 6 41	
540		SUBIOIAL					119,041	
540	D5040	OTHER ELECTRICAL SYSTEMS						
542	23040	Lightning Protection				NIC		
543		Fire stonning		le	3 500 00	9 500		
544		Temp power and lights	1	15 1c	2,500.00	2,500		
5.45		Coordination PIM & Shan drawing	1	15	9,000.00	9,000		
546		Coordination, Driv & Shop drawings	1	15	11,000.00	11,000		
540			1	18	9,000.00	9,000		
54/		SUBIOTAL					31,500	
548 549	TOTAL	DIVISION 26						\$282 181
	1011L,							¥303,101

e	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
1	BUILI	DING REN	NOVATION						
551									
552		31	EARTHWORK						
553									
554		310000	EARTHWORK						
555			Spread Footings						
556			Excavation for new footings	8	ea	1,500.00	12,000		
557			Elevator Pit						
558			Excavation for elevator pit		ls	5,000.00			
559			Haul excess material offsite; RC1	139	cy	35.00	4,865		
560			SUBTOTAL					16,865	
561									
562		316600	Piles						
563			Mico/Helical piles for new foundations				assumed not req	uired	
564			SUBTOTAL					-	
565									
566									
567			TOTAL - EARTHWORK						16,865



20-May-19

Schematic Design Estimate

CSI	1				UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
SITEV	VORK							
1	· or lit							
2	G	SITEWORK						
3								
4	311000	SITE PREPARATION						
5		EARTHWORK						
6		No work in this section						
7								
		<u>GROUND IMPROVEMENTS</u>						
9		No work in this section						
10		EROSION CONTROL						
12		No work in this section						
13		SUBTOTAL					-	
14								
15	312000	SITE PAVING						
16	00	Repair sidewalks/paving	1	ls				
17		SUBTOTAL					-	
18								
19	323000	SITE IMPROVEMENTS						
20		No work in this section						
21		SUBTOTAL					-	
22 23	220000							
24	330000	Water						
25		New domestic water supply	1	ls	15 000 00	15 000		
26		Now water fire service supply	1	le	15,000.00	15,000		
27		Con	1	15	15,000.00	15,000		
28		Gas service - assumed available	1	ls	7 500 00	7 500		
29		Sanitary sewer	1	10	7,500.00	/,,500		
30		Sanitary system	1	ls	20,000.00	20,000		
31		Storm Sewer			,	,		
32		Roof drain connections / leaders	1	ls	10,000.00	10,000		
33		Connect to existing line	1	loc	5,000.00	5,000		
35		<u>Recharge system</u>						
36		SUBTOTAL					72 500	
37		SUBIOTAL					/2,500	
38	334000	ELECTRICAL WORK						
39		Power						
40		Primary ductbank 2-4" empty, conduits only (allow)	100	lf	250.00	25,000		
41		Padmount transformer		ea		Utility Co.		
42		Transformer pad	1	ea		See Civil		
43		<u>Communications</u>		14				
		relecom ductbank 4-4 empty, conduits only (allow)	100	II	200.00	20,000		
45		Site Security		,				
40		Site Security (allow)	1	18	2,500.00	2,500		
48		Ste Lighting (allow)		10	0 =00			
49		Site Domolition	1	15	2,500.00	2,500		
50		Site demolition and make safe		le	2 500 00	9 500		
- 51		SURTOTAL	1	15	2,500.00	2,500	E2 E00	
52		Sobionit.					52,500	
53		TOTAL - SITE DEVELOBMENT						Ø10- 00-
		I OTAL - SITE DEVELOPMENT						\$125,000



## Schematic Design Estimate

## MAIN CONSTRUCTION COST SUMMARY PHASED PROJECT, GROUND FLOOR ONLY; WITHOUT ELEVATOR

	GSF	Cost/GSF	Estimated Construction Cost
<b>BUILDING RENOVATION</b>			
BUILDING	14,725	\$189.38	\$2,788,608
SITEWORK			\$125,000
HAZMAT			N/A
SUB-TOTAL	14,725	\$197.87	\$2,913,608
ESCALATION - Based on a late 2019 start	2.5%		\$72,840
DESIGN AND PRICING CONTINGENCY	10.0%		\$291,361
SUB-TOTAL			\$3,277,809
GENERAL CONDITIONS	6%		\$196,669
GENERAL/PROJECT REQUIREMENTS BONDS	1.00%		1ncluded \$34.745
INSURANCE (GL only)	1.25%		\$43,865
PERMIT			WAIVED
OVERHEAD AND FEE	3.0%		\$106,593
TOTAL OF ALL CONSTRUCTION	14,725	\$248.54	\$3,659,681
<b>Options/Alternates (includes mark-ups):</b>			

1	Entry vestibule alternate layout	DEDUCT	(\$41,994)
2	Kitchen alternate layout	ADD	\$52,302
3	Insulation	ADD	\$o
4	MEP systems if gas is not available	DEDUCT	(\$156,628)
5	Project completed in 3 phases	ADD	\$201,308

20-May-19



## **Schematic Design Estimate**

This Schematic Level Documents cost estimate was produced from the Cost Estimation Package by Taylor & Burns Architects dated May 10, 2019. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractors overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

## ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

All professional fees and insurance Land acquisition, feasibility, and financing costs All Furnishings, Fixtures and Equipment Items identified in the design as Not In Contract (NIC) Items identified in the design as by others Owner supplied and/or installed items (e.g. draperies, furniture and equipment) Utility company back charges, including work required off-site Work to City streets and sidewalks, (except as noted in this estimate)

Schematic Design Estimate

CONST	RUCTION CO	ST SUMMARY	Y IN CSI FOR SITEWO	E <b>MAT</b> DRK	TOTAL PR	ROJECT
	Subtotal	Total	Subtotal	Total	Subtotal	Total
BUILDING RENOVATION						<b>.</b> - ·
DIV. 2 EXISTING CONDITIONS	0	\$249,088			0	\$249,088
022820 Abatement	Summary				Summary	
024100 Demolition	\$249,088				\$249,088	
DIV. 3 CONCRETE		\$41,316				\$41,316
033000 Cast-in-Place Concrete	\$41,316				\$41,316	
DIV. 4 MASONRY		\$20,432				\$20,432
042000 Unit Masonry & Restoration	\$20,432				\$20,432	
044000 Exterior Stone & Restoration						
DIV. 5 METALS		\$724,507				\$724,507
051200 Structural Steel Framing	\$462,389				\$462,389	
055000 Metal Fabrications	\$187,619				\$187,619	
055100 Miscellaneous Metals	\$54,500				\$54,500	
059000 Metal Restoration & Cleaning	\$20,000				\$20,000	
DIV. 6 WOODS & PLASTICS		\$24,375				\$24,375
061000 Rough Carpentry	\$24,375				\$24,375	
064000 Finish Carpentry						
DIV. 7 THERMAL & MOISTURE PROTECTION		\$87.424				\$87.424
071300 Waterproofing / Dampproofing		~~/ <b>)-</b>				+ <b>·</b> /, <b></b> +
072100 Thermal Insulation						
074600 Metal Panels / Siding						
075400 Thermoplastic Membrane Roofing	\$76.450				\$76.450	
076200 Sheet Metal Flashing and Trim	\$5.974				\$5.974	
078440 Fire-Resistive Joint Systems	\$5.000				\$5,000	
079200 Joint Sealants	+0,				+0,	
DIV. 8 DOORS & WINDOWS		\$35.650				\$35.650
081113 Hollow Metal Doors and Frames	\$14.400				\$14.400	
083100 Access Doors	\$3,000				\$3.000	
083310 Overhead Coiling Doors	10/				10,000	
084110 Aluminum-Framed Entrances and Storefronts						
087100 Door Hardware	\$14,750				\$14,750	
o88000 Glazing	1.0				1 1/10	
089000 Louvers and Vents	\$3,500				\$3,500	
DIV. 9 FINISHES		\$167.790				\$167.790
092110 Gypsum Board Assemblies	\$117.843				\$117.843	/,/,00
093000 Tile & Interior Stone	\$3.000				\$3.000	
095100 Suspended Ceilings	+0,- 50				-0,000	
096510 Resilient Flooring						
098400 Acoustic Treatment						
099000 Painting & Coating	\$46,947				\$46,947	
DIV 10 SPECIALTIES		\$28.642				\$28.642
101400 Signage	\$1.500	·			\$1.500	,,- <b>-</b> -
						_
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20-May-19

Schematic Design Estimate

	CONSTRUCTION CO	OST SUMMARY	Y IN CSI FO	RMAT		
	BUII. Subtotal	DING Total	SITEW Subtotal	VORK Total	TOTAL Subtotal	PROJECT Total
BUILDING RENOVATION						
102100 Toilet Compartments	\$10,622				\$10,622	
102600 Wall and Door Protection						
102800 Toilet & Bath Accessories	\$10,500				\$10,500	
104300 AED Defibrillator Cabinets	\$4,500				\$4,500	
104400 Fire Protection Specialties	\$1,520				\$1,520	
105113 Lockers						
DIV 11 EQUIPMENT		\$25,000				\$25,000
114000 Projection Screens						
114500 Appliances	\$25,000				\$25,000	
DIV 12 FURNISHINGS		\$34,175				\$34,175
122400 Shades						
123000 Cabinetry & Countertops	\$25,850				\$25,850	
124810 Entrance & Walk-off Mats	\$8,325				\$8,325	
DIV. 14 CONVEYING SYSTEMS						
142100 Elevators & Handicap Lifts						
DIV. 21 FIRE SUPPRESSION		\$72,833				\$72,833
210000 Fire Protection	\$72,833				\$72,833	
DIV. 22 PLUMBING		\$252,340				\$252,340
220000 Plumbing	\$252,340				\$252,340	
DIV. 23 HVAC		\$630,488				\$630,488
230000 HVAC	\$630,488				\$630,488	
DIV. 26 ELECTRICAL		\$377,681				\$377,681
260000 Electrical	\$377,681				\$377,681	
DIV. 31 EARTHWORK		\$16,865				\$16,865
310000 Earthwork	\$16,865				\$16,865	
DIV. 32 EXTERIOR IMPROVEMENTS				\$10,000		\$10,000
320000 Paving			\$10,000		\$10,000	
323000 Site Improvements						
DIV. 33 UTILITIES				\$125,000		\$125,000
330000 Civil Utilities			\$72,500		\$72,500	
334000 Electrical Utilities			\$52,500		\$52,500	
SUBTOTAL DIRECT (TRADE) COST		\$2,788,608		\$135,000		\$2,923,605
				,		

20-May-19

Schematic Design Estimate

CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
BUII	DING REI	NOVATION						
1	GROSS	FLOOR AREA CALCULATION						
2	010001							
3		Pasamont I aval				7.040		
5		First Floor				6,925		
6		Mezzanine				760		
7								
8		TOTAL GROSS FLOOR AREA (GFA)				14,725		
10	02	EXISTING CONDITIONS						
11 12	020000	Demolition						
13		Exterior						
14		Remove exterior façade elements		vsf	1.00			
15		Remove existing roof & structure for new work	6,900	sf	5.00	34,500		
16		Remove temporary roof	6,900	sf	3.00	20,700		
17		Interior		<b>c</b>				
19		Sawcut/Remove basement slab for new footings	14,725 8	st ea	7.50	110,438 8 000		
20		Sawcut/Remove basement slab for new elevator	3	ls	2,500.00	0,000		
21		Sawcut/Remove basement slab for UG MEP	1	ls	6,000.00	6.000		
22		Misc. demo/MEP removals	14,725	sf	2.00	29,450		
23		Miscellaneous						
24		Shoring/Bracing - structure/exterior walls	1	ls	40,000.00	40,000	00	
25 26		SUBIOIAL					249,088	
27	TOTAL,	DIVISION 2-EXISTING CONDITIONS						\$249,088
28								
29 30	03	CONCRETE						
31	033000	Cast-In-Place Concrete						
32 33		Miscellaneous						
34		Repair/Prep existing basement slab	7,040	sf	3.00	21,120		
35		Prep existing 1st floor/mezzanine slab		sf	1.00			
36		Concrete to stairs - infill pans		flt	2,250.00			
37		Footings for new columns	8	ea	2,524.50	20,196		
38		LULA pit/recessed slab - complete		ls	15,000.00			
39		Ramp - complete		ls	6,000.00			
40		CIP stairs - complete		ls	4,000.00			
41 42		SUBTOTAL					41,316	
43								
44	TOTAL,	DIVISION 3 - CONCRETE						\$41,316
46	04	MASONRY						
47	04	MASONAI						
48	042000	Unit Masonry & Restoration						
49		Interior Partitions		~	~			
50		New CMU walls - elevator		sf	28.00			
52		Millior repairs to interior masonry walls - 10%	1,634	st 1f	12.50	20,432		
53		Replace ton 5 courses of brickwork		lf	250.00			
54		Repair/Point brick facade: 100%		sf	240.00			
55		SUBTOTAL			32.00		20.432	
56								
57	044000	Exterior Stone & Restoration		_				
58		Repair/Point stone façade; including re-securing displaced granite		sf	30.00			
		0						
59		Restore/Reinstall cornice blocks & clock		ls	40,000.00			
61		SUDIUIAL	•				-	

					UNIT	EST'D	SUB	TOTA
DE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COS
ILDIN	G REN	NOVATION DIVISION 4 - MASONRY						¢a
10	/IAL, I	DIVISION 4 - MASONKI						<b>7</b> 2
	05	METALS						
		Characterized Materia						
05	51200	Structural Metals						
		Floor/Roof Structure						
		Beams/Columns - new structure at existing roof	14.85	tns	7,000.00	103,950		
		Rafters - new structure at existing roof	16.50	tns	7,000.00	115,500		
		Metal deck - repair/replace existing roof - 50%	2,625	sf	8.00	21,000		
		2x6 structural tube seismic walls	8,475	vsf	17.50	148,313		
		Structural modification/repairs - building	14,725	st	2.50	36,813		
		Roof Screen/Dunnage						
		Miscellaneous				assumed not rec	luirea	
		Fire watch	14 595	cf	2.50	06 810		
		SUBTOTAL	14,/25	51	2.50	30,813	462 280	
		Je J					402,309	
05	55000	Metal Fabrications						
		Catwalk	2,490	sf	65.00	161,850		
		Misc. metals - plates/angles/clips	14,725	sf	1.75	25,769		
		SUBTOTAL					187,619	
05	55100	Metal Stairs and Railings						
		Egress staircase; Steel pan		flt	25,000.00			
		Cane detection rail at basement level stairs		ea	1,500.00			
		Catwalk access ladder	2	ea	4,000.00	8,000		
		Metal railings at stairs		ea	3,500.00			
			465	Iİ	100.00	46,500		
		SUDIVIAL					54,500	
05	55800	Interior Metal Wall Paneling						
-		No work in this section						
		SUBTOTAL					-	
05	59000	Metal Restoration & Cleaning						
		Restore existing exterior entry metal work		sf	90.00			
		Restore existing interior entry metal work	1	ls	20,000.00	20,000		
		Metal railings at mezzanine - restoration		If	150.00			
		Restore/Modify existing valit doors		ea	10,000.00			
		SUBTOTAL		ea	1,500.00		00.000	
		SUDIVIAL					20,000	
то	DTAL, I	DIVISION 5 - METALS						\$72
L								
	06	WOOD & PLASTICS						
of	61000	Rough Carpentry						
50		Exterior facade blocking - windows/doors	8	ея	450.00	3 600		
		Interior miscellaneous carpentry & repairs	6.025	sf	3 UU	20.775		
		SUBTOTAL	0,920	51	3.00	20,//5	94 975	
							-4,3/3	
06	64000	Finish Carpentry						
		Finish carpentry/running trim - basement		sf	0.75			
		Finish carpentry/running trim - 1st & mezzanine		sf	1.50			
		SUBTOTAL					-	
то	DTAL, I	DIVISION 6 - WOOD & PLASTICS						\$2



Schematic Design Estimate

SI					UNIT	EST'D	SUB	TOTAL
ODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
UILI	DING REI	NOVATION						
	071300	Waterproofing/Dampproofing						
		Waterproofing at elevator and sum pit		sf	12.50			
		SUBTOTAL					-	
	079100	Thermal Insulation						
	0/2100			of	6.00	and altomator		
		Insulation - walls at bacement perimeter		of	0.00	see alternates		
		Insulation - walls at exterior		sf	3.00	see alternates		
		SUBTOTAL		01	5,00	bee unternated	_	
	072700	Air Barriers						
		No work in this section						
		SUBTOTAL					-	
	074600	Metal Panels/Siding						
		No work in this section						
		SUDIUIAL					-	
	074690	Wood Panels/Siding						
		No work in this section						
		SUBTOTAL					-	
	075400	Membrane Roofing						
		Flat Roof - lower/upper roofs						
		EPDM roofing - Patch / Repair	6,925	sf	10.00	69,250		
		Reset/Replace roof drains	8	ea	900.00	7,200		
		Elevator vent		ea	2,500.00			
		SUBTOTAL					76,450	
	076200	Sheet Metal Flashing and Twim						
	070200	Miscollancous flashing (chootmate)	6 00-	et.	0.07	0.464		
		Parapat app	0,925	SI	0.35	2,424	minod	
		Parapet cap		16		assumed not req	'un.eq	
		Flashing at root transitions	130	lt	25.00	3,250		
		Flashing at new windows		lf	12.50			
		Flashing at doors	24	lf	12.50	300		
		SUBTOTAL					5,974	
	076010	Gutters and Downspouts						
	0/0310	No work in this section						
		SUBTOTAL					_	
		56DIGINE					-	
	077250	Roof Pavers						
		No work in this section						
		SUBTOTAL					-	
	078440	Fire-Resistive Joint Systems						
		Fire stopping - per floor	1	ls	5,000.00	5,000		
		SUBTOTAL					5,000	
	070000	Loint Sealants						
	0/9200	Poston red and coolert at wir down		1£				
		Backer rod and sealant at doors		11 ]f	9.00			
		SUBTOTAL		11	9.00		_	
		5521511H					-	
	079500	Expansion control						
		No work in this section						
		SUBTOTAL					-	
								¢9=



Schematic Design Estimate

	CSI				UNIT	EST'D	SUB	TOTAL
	CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILDING	RENOVATION						
185	0811	13 HM Doors and Frames						
186	001	Frames single - first floor only	10	63	250.00	2 500		
187		Frames, single - instation	10	ca	230.00	2,500		
107		Frames, single - exterior	1	ea	400.00	400		
188		Frames, double - exterior	1	ea	600.00	600		
189		Interior doors; single - first floor only	10	ea	850.00	8,500		
190		Flush metal door; single - exterior (delete this door)		ea	950.00			
191		Flush metal door; double - exterior	1	ea	1,900.00	1,900		
192		Premium for rated doors	4	ea	100.00	400		
193		Premium for secure doors - ticket/office	1	ea	100.00	100		
194		SUBTOTAL					14,400	
195								
196	0831	00 Access Doors						
197		Access doors - building	2	levels	1,500.00	3,000		
198		SUBTOTAL					3,000	
199								
200	0833	10 Overhead Coiling Doors						
201		No work in this section						
202		SUBTOTAL					-	
203	_							
204	0841	10 Aluminum-Framed Entrances and Storefronts						
205		Restore existing entry assembly		sf	150.00			
206		Restore existing windows		sf	180.00			
207		SUBTOTAL					-	
208								
209	0871	00 Door Hardware						
210		Hardware sets - interior doors	10	ea	800.00	8,000		
211		Hardware sets - exterior doors	2	ea	1,500.00	3,000		
212		Hardware sets - premium for specialty hardware	5	ea	750.00	3,750		
213		SUBTOTAL					14,750	
214								
215	0880	oo Interior Glazing						
216		Interior glazed storefront door including frame and hardware; double		$\mathbf{pr}$	10,000.00			
217		Restore/Modify existing metal framed interior storefront - vestibule		sf	150.00			
218		Transaction counter/window - tickets		ls	3,500.00			
219		Glass borrow lites/openings		ls	2,500.00			
220		SUBTOTAL			,0		-	
221		Jobronin .						
222	0890	00 Louvers and Vents						
223		Metal louvers - exterior	1	ls	3,500.00	3,500		
224		SUBTOTAL					3,500	
225								
226	TOTA	L, DIVISION 8 - DOORS AND WINDOWS						\$35,650
227								
228	09	FINISHES						
229		O CM/D Assembling						
230	0921	IO GWB Assemblies						
201		<u>Cellings</u>	(	- 6		(		
232		GWB cellings - based on 10% of floor area	693	SI	10.00	6,930		
-33		Interior Partitions (200% on group d floor)	1 9 0 -	<i></i> £				
204		Enterior partitions (30% on ground floor)	1,802	SI	13.10	23,606		
-35 236		rurred partitions - non-tube steel masonry wans	<b>8,111</b>	si	8.80	71,377		
237		SHAR WAIIS	1,002	81	15.00	15,930	117 840	
238		SOBIOTAL					11/,043	
239	0930	00 Tile and Interior Stone						
240		Ceramic tile - floors	-	sf	20.00			
241		Ceramic tile base		lf	12.00			
242		Ceramic tile - walls - 40% wall receive wainscot	-	sf	22.00			
243		Thresholds	Д	ea	750.00	3.000		
			r			57		

	CSI					UNIT	EST'D	SUB	TOTAL
	CODE	<u> </u>	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILI	DING REN	NOVATION						
244			Salvage/Clean/Restore check writing desk	-	ls	5,000.00			
245			Salvage/Clean/Restore stone wall panels	-	ls	10,000.00			
246			SUBTOTAL					3 000	
247								3,000	
248		095100	Suspended Ceilings						
249			ACT		sf	5.00			
250			SUBTOTAL					-	
251		001-	Comment & Deciliant Electric						
452		096510	Carpet & Resulent Flooring		<i>•</i>				
253			Carpet		sf	7.00			
254			VCT		sf	4.50			
255			Rubber flooring		sf	13.50	assumed not requ	iired	
256			Base		lf	4.00			
257			SUBTOTAL					-	
258									
259		098400	Acoustic Treatment						
260			Acoustic wall panels				assumed not requ	uired	
261			Acoustic ceiling panels				assumed not requ	iired	
262			Acoustic plaster - 50% of assembly space (later phase)		sf	30.00	-		
263			SUBTOTAL			<u> </u>		-	
264									
265		099000	Painting and Coating						
266			Paint walls/doors/frames/trim (first floor only)	7.363	sf	2.50	18,408		
267			Paint exposed deck - gathering spaces	//3-0	sf	5 UU 00	- ,		
268			Paint callings - CWR	600	ef	3.00	1.040		
260			Paint confligs - Gwb	093	51 e	1.50	1,040	ind	
209			ramit exposed deck - non-public spaces		st		assumed not requ	nrea	
270			Paint stairs/railings		flts	1,500.00			
271			Paint railings/cap				carried in restora	tion	
272			Sealed concrete - basement		sf	1.50			
273			Sealed concrete - first floor only (not mezzanine)	5,000	sf	1.50	7,500		
274			Staging	1	ls	20,000.00	20,000		
275			SUBTOTAL					46,947	
276	1	mor : -							±
277 278		IOTAL,	DIVISION 9 - FINISHES						\$167,790
279	ĺ	10	SPECIALTIES						
280		10	5 LAALIIE5						
281		101400	Signage						
282			Building & room signage	1	ls	1,500.00	1,500		
283			Plaques - dedication		ls	1,500.00			
284			SUBTOTAL					1,500	
285									
286		102100	Toilet Compartments						
287			ADA	4	ea	1,323.00	5,292		
288			Standard	6	ea	823.00	4,938		
289			Urinal screens	1	ea	392.00	392		
290			SUBIOTAL					10,622	
291		109600	Wall and Door Protection						
202		102000	Comparation (EDD		1-				
293			Corner guards/FKP		IS	2,500.00			
-94			SUDIVIAL					-	
296		102800	Toilet Accessories						
207		102000	Toilet accessories		11000	0.500.00	10.000		
208			Promium for hand dryons	4	11115	∠,500.00	10,000		
-90			r tennum för nänd dryers		ea	800.00			
299			Janitors closet accessories	1	ea	500.00	500		
300			SUBTOTAL					10,500	
301 302		104200	Defibrillator Cabinets						
303		10-10-00	AED	9	69	1 500 00	4 500		
304				3	ca	1,300.00	4,500		
305			SUDIVIAL					4,500	

20-May-19

C	SI					UNIT	EST'D	SUB	TOTAL
C	ODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
В	BUILE	DING REN	NOVATION						
06		104400	Fire Protection Specialties						
07			Surface mounted fire extinguisher cabinets	8	ea	190.00	1,520		
08 09			SUBTOTAL					1,520	
10		105113	Lockers						
11			Staff lockers in kitchen		ea	350.00			
12 13			SUBTOTAL					-	
14	l	TOTAL,	DIVISION 10 - SPECIALTIES						\$28,642
15 16	1	11	EOUIPMENT						
17									
18		111300	Loading Dock Equipment					. 1	
20			SUBTOTAL				assumed not requir	red	
21			SUBIOIAL					-	
22		114000	Projection Screens						
23			Projection screen		ls	7,500.00			
24			SUBTOTAL					-	
25 26		11/500	Kitchen Fauinment / Annliances						
27		114500	Kitchen equipment	1	le	25 000 00	35.000		
28			SUBTOTAL	1	15	25,000.00	25,000	25,000	
29			SUBIOIAL					25,000	
30		118220	Waste Compactors						
31			Provide waste compactors				assumed not requir	red	
32			SUBTOTAL					-	
33 34	ĺ	TOTAL,	DIVISION 11 - EQUIPMENT						\$25,000
35	1		-						
36		12	FURNISHINGS						
37									
38		122400	Shades						
39			Window treatments		sf	8.00			
40 41			SUBTOTAL					-	
12		123000	Cabinets						
13			Bathroom vanities				assumed not requir	red	
14			Storage shelving				NIC		
45			Lobby coat racks				NIC		
ļ6			Kitchen cabinetry/countertops	20	lf	750.00	15,000		
17			Ticket counter cabinetry/countertops	9	lf	650.00	5,850		
8			Misc. cabinetry/architectural millwork	1	ls	5,000.00	5,000		
19			SUBTOTAL					25,850	
50 51		194810	Entrance Floor Mate and Frames						
2		124010	Walkoff mate and main entries	185	ef	45.00	8 225		
53			SUBTOTAL	105	31	45.00	0,325	8,325	
54								-70 0	
55		TOTAL,	DIVISION 11 - EQUIPMENT						\$34,175
50 57									
58		TOTAL,	DIVISION 14						
59 60		14	CONVEVING SYSTEMS						
51	l	14	CAN ETHING STSTEMS						
52		142100	LULA						
53			LULA; 24ft travel	1	ls		-		
64 65			SUBTOTAL					-	
6		TOTAL,	DIVISION 14						
7									
ов 59	I	21	FIRE PROTECTION						
0									
1		210000	FIRE PROTECTION, GENERALLY						
72			Double check valve assembly	1	ea	6,000.00	6,000		



	CSI				UNIT	EST'D	SUB	TOTAL
	CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILD	DING RENOVATION						
373		Wet alarm valve	1	ea	5,000.00	5,000		
374		Wet sprinkler heads	107	ea	75.00	8,025		
375		Fire department valve, 2-1/2"	2	ea	1,000.00	2,000		
376		Zone control valve assembly	2	ea	2,500.00	5,000		
377		Fire department connection	1	ea	1,200.00	1,200		
378		Electric bell	1	ea	420.00	420		
379		Branch pipe with fittings & hangers wet system	853	lf	20.00	17,060		
380		Main pipe with fittings & hangers wet system	428	lf	26.00	11,128		
381		Standpipe with fittings & hangers wet system (but no "real"		lf	32.00			
382		Miscellaneous						
383		Coordination, BIM	1	ls	2,000.00	2,000		
384		Hydraulic calculations / Shop dwgs	1	ls	8,000.00	8,000		
385		Coring, sleeves	2	levels	3,000.00	6,000		
386		Fees & permits	1	ls	1,000.00	1,000		
387		SUBTOTAL					72,833	
388								

TOTAL, DIVISION 21

\$72,833

### PLUMBING

220000	PLUMBING, GENERALLY				
	Equipment				
	Gas fired domestic water heater condensing type	1	ea	25,000.00	25,00
	Water meter assembly	1	ea	4,500.00	4,50
	Mixing valve assembly	1	ea	5,000.00	5,00
	Pressure reducing station, service entrance	1	ea	2,400.00	2,40
	Rough-in & connection to kitchen equipment	1	ls	12,000.00	12,00
	Misc. plumbing equipment	13,870	sf	1.00	13,8
	Plumbing Fixtures & Specialties				
	Toilets	10	ea	1,200.00	12,00
	Urinal	1	ea	1,400.00	1,40
	Lavatories	4	ea	1,000.00	4,00
	Drinking fountain	1	ea	3,000.00	3,00
	Janitors sink	2	ea	1,100.00	2,20
	Kitchen sinks	1	ea	1,000.00	1,00
	Misc. plumbing fixtures	13,870	sf	0.25	3,4
	Domestic Water Pipe				
	Copper pipe type L with fittings & hangers	13,870	sf	2.50	34,6
	Valves & accessories	13,870	sf	1.50	20,8
	Domestic Water Pipe Insulation				
	Pipe insulation	13,870	sf	1.50	20,8
	Sanitary Waste And Vent Pipe				
	Hubless cast iron pipe with fittings & hangers	13,870	sf	2.25	31,20
	Storm Drainage Pipe				
	Hubless cast iron pipe with fittings & hangers	13,870	sf	1.25	17,3
	Gas Pipe				
	Black steel pipe with fittings & hangers	13,870	sf	0.75	10,4
	Roof Drain Pipe Insulation (Horizontal)				
	Pipe insulation	13,870	sf	0.25	3,4
	Miscellaneous				
	Coordination, BIM	1	ls	7,300.00	7,30
	Coring, sleeves	2	levels	4,000.00	8,00
	System testing and flushing	1	ls	6,000.00	6,00
	Fees & permits	1	ls	2,500.00	2,5
	SUBTOTAL				

\$252,340

252,340

Schematic Design Estimate

C	SI				1	UNIT	EST'D	SUB	TOTAL
c	ODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
F	BUILD	ING REI	NOVATION					<b>.</b>	
433	[	23	HVAC						
434									
435		230000	HVAC, GENERALLY						
436			HVAC Equipment						
437			Gas fired condensing boiler 500 MBH	1	ea	18,000.00	18,000		
438			Domestic hot water circ pump with VFD	2	ea	2,500.00	5,000		
439			AHU 12.5 ton with HW & DX cooling (Budget cost from Hesnor Engineers	1	ea	33,800.00	33,800		
440			Labor to install AHU	1	ls	6,800.00	6,800		
441			RTU 50 tons with gas fired heating & DX cooling <b>(Budget</b> cost from Hesnor Engineers	1	ea	99,500.00	99,500		
442			Labor to install AHU	1	ls	8,500.00	8,500		
443			VAV unit with HW coil (Allowance)	12	ea	1,200.00	14,400		
444			Exhaust fans	2	ea	3,000.00	6,000		
445			Kitchen exhaust fan	1	ea	4,000.00	4,000		
446			Miscellaneous HVAC equipment	13,870	sf	4.00	55,480		
447			Sheet metal & Accessories						
448			Galvanized ductwork with fittings & hangers	10,000	lbs	10.50	105,000		
449			Duct insulation	6,400	sf	2.00	12,800		
450			Boiler and water heater flue stack	1	ls	10,000.00	10,000		
451			Registers, grilles & diffusers	36	ea	175.00	6,300		
452			Miscellaneous sheet metal accessories	1	ls	12,000.00	12,000		
453			Piping						
454			Hot Water Piping						
455			Hot water piping with fittings & hangers	13,870	sf	3.50	48,545		
456			Valves & accessories	1	ls	12,000.00	12,000		
457			Condensate Drain Piping						
458			Condensate drain piping with fittings & hangers	13,870	sf	0.50	6,935		
459			Piping Insulation						
460			Piping insulation	13,870	sf	2.00	27,740		
461			Temperature Controls						
462			Automatic temperature control DDC	13,870	sf	5.00	69,350		
463			Balancing						
464			System testing & balancing	13,870	sf	1.25	17,338		
465			Miscellaneous						
466			Coordination, BIM	1	ls	17,000.00	17,000		
407			Coring, sleeves	2	levels	5,000.00	10,000		
408			Equipment start-up and inspection	1	ls	2,000.00	2,000		
409			Rigging & equipment rental	1	ls	12,000.00	12,000		
470			VIDTATION & SEISMIC RESTRAINTS	1	IS	10,000.00	10,000	6 00	
4/1			SUDIUIAL					030,488	
473	Г	TOTAL	DIVISION 23						\$630.488
474	L		v						,
475									
476	[	26	ELECTRICAL						
477 478			SERVICE & DISTRIBUTION						
479			Gear & Distribution						
480			Normal Power						
481			Meter	1	63	250.00	250		
482			600A 208/120V distribution panelboard	1	ea	25,000.00	25 000		
483			200A panelboard (allow)	3	ea	2,500.00	7,500		

20-May-19

484

485

486

487

488

489

490

200A feed

Grounding

Emergency power

Emergency power

Equipment Wiring

RTU feed and connection

Elevator and cab power feed and connections

lf

ls

ls

48.00

NIC

5,000.00

5,500.00

4,500.00

9,600

5,000

4,500

200

1

1 ea

Schematic Design Estimate

	CSI				UNIT	EST'D	SUB	TOTAL
	CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILDING REI	NOVATION						
491		AHU feed and connection	1	ea	4,500.00	4,500		
492		Boiler feed and connection	1	ea	1,500.00	1,500		
493		Pump feed and connection	2	ea	1,500.00	3,000		
494		KEF feed and connection	1	ea	950.00	950		
495		EF feed and connection	1	ea	950.00	950		
496		Misc. equipment feed and connections	13,870	sf	1.00	13,870		
497		Kitchen feed and connections	1	ls	750.00	750		
498		SUBTOTAL					77,470	
499	_							
500	D5020	LIGHTING & POWER						
501		Lighting & Branch Power						
502		Lighting & Branch Power						
503		LED lighting	10,644	sf	5.00	53,220		
504		Exit and emergency lighting	13,870	sf	0.50	6,935		
505		Exterior building lighting	1	ls	5,000.00	5,000		
506		Lighting controls						
507		Lighting controls, local, and sensing	13,870	sf	1.15	15,951		
508		Branch devices						
509		Branch devices	13,870	sf	0.65	9,016		
510		Lighting and branch circuitry						
511		Lighting and branch circuitry	13,870	sf	4.25	58,948		
512		SUBTOTAL					149,070	
513								
514	D5030	COMMUNICATION & SECURITY SYSTEMS						
515		<u>Fire Alarm</u>						
516		Control panel, programming and testing	1	ea	7,500.00	7,500		
517		LCD annunciator	1	ea	1,500.00	1,500		
518		Beacon	1	ea	225.00	225		
519		Knox box	1	ea	600.00	600		
520		Master box	1	ea	3,850.00	3,850		
521		Devices and cabling	13,870	sf	2.00	27,740		
522		Bi-Directional Amplification System						
523		BDA system (perhaps not needed, depending on AHJ)		ls	5,000.00			
524		Theatre/Assembly Space (3) Wall Stages						
525		Stage lighting, dimming and controls		loc	20,000.00			
526		Stage lighting, dimming and controls, Rough-in	3	loc	5,000.00	15,000		
527		Sound system		loc	6,500.00			
528		House lighting	3,226	sf	8.00	25,808		
529		Telecommunications						
530		Rough-in	13,870	sf	0.50	6,935		
531		MDF closet Fit-out	1	ls	5.000.00	5,000		
532		Devices and cabling	13.870	sf	1.00	13.870		
533		Audio/Visual (Rough-in only)	0,0,0	-		3,-, 5		
534		Audio/Video (Rough-in)	3.226	sf	0.50	1.612		
535		Audio/Video system	0,	ls	25,000.00	-,3		
536		Security System (needs only fob system at main entrance)		10	-3,000100			
537		Head end	1	ls	10,000,00	10 000		
538		Access Control	1	ef	1 50	10,000		
539		SUBTOTAL		51	1.50		110 641	
540		Sobronill					119,041	
541	D5040	OTHER ELECTRICAL SYSTEMS						
542	• •	Lightning Protection				NIC		
543		Fire stopping	1	ls	2,500.00	2.500		
544		Temp power and lights	1	ls	9,000.00	9.000		
545		Coordination, BIM & Shop drawings	1	ls	11.000.00	11 000		
546		Fees & Permits	1	ls	0,000,00	0,000		
547		SUBTOTAL	1	10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	9,000	31 500	
548		Sobronill					51,500	
549	TOTAL,	DIVISION 26						\$377,681
550	L							

PMC - Project Management Cost

e	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
1	BUILI	DING REN	NOVATION						
551									
552		31	EARTHWORK						
553									
554		310000	EARTHWORK						
555			Spread Footings						
556			Excavation for new footings	8	ea	1,500.00	12,000		
557			Elevator Pit						
558			Excavation for elevator pit		ls	5,000.00			
559			Haul excess material offsite; RC1	139	cy	35.00	4,865		
560			SUBTOTAL					16,865	
561									
562		316600	Piles						
563			Mico/Helical piles for new foundations				assumed not req	uired	
564			SUBTOTAL					-	
565									
566									
567			TOTAL - EARTHWORK						16,865



20-May-19

1	CSI					UNIT	EST'D	SUB	TOTAL
	CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
ļ	SITEW	ORK					<u> </u>		
1	511211	onn							
2	Ī	G	SITEWORK						
3	L								
4		311000	SITE PREPARATION						
5			<u>EARTHWORK</u>						
6			No work in this section						
7									
0			<u>GROUND IMPROVEMENTS</u>						
9			No work in this section						
10			EROSION CONTROL						
12			No work in this section						
13			SUBTOTAL					-	
14									
15		312000	SITE PAVING						
16		J000	Repair sidewalks/paving	1	ls				
17			SUBTOTAL					-	
18									
19		323000	SITE IMPROVEMENTS						
20			No work in this section						
21			SUBTOTAL					-	
22									
23		330000	CIVIL UTILITIES						
24			<u>water</u>		la	15 000 00	15 000		
-0			New domestic water supply	1	15	15,000.00	15,000		
20			New water fire service supply	1	IS	15,000.00	15,000		
27			Gas		la		= =00		
29			Sanitary sewer	1	18	7,500.00	7,500		
30			Sanitary system	1	ls	20,000,00	20.000		
31			Storm Sewer	-	10	20,000.00	20,000		
32			Roof drain connections / leaders	1	ls	10,000.00	10,000		
33			Connect to existing line	1	loc	5,000.00	5,000		
34			Recharge system						
35			No work in this section						
30 37			SUBTOTAL					72,500	
38		334000	ELECTRICAL WORK						
39		50	Power						
40			Primary ductbank 2-4" empty, conduits only (allow)	100	lf	250.00	25,000		
41			Padmount transformer		ea		Utility Co.		
42			Transformer pad	1	ea		See Civil		
43			Communications						
44			Telecom ductbank 4-4" empty, conduits only (allow)	100	lf	200.00	20,000		
45			Site Security						
46			Site Security (allow)	1	ls	2,500.00	2,500		
47			Site Lighting						
48			Ste Lighting (allow)	1	ls	2,500.00	2,500		
49			Site Demolition						
50			Site demolition and make safe	1	ls	2,500.00	2,500		
51			SUBTOTAL					52,500	
52	-								
53			TOTAL - SITE DEVELOPMENT						\$125,000

# Appendices

Meeting Minutes

Historic Structure Listing, Massachusetts Cultural Resource Information System

**FNB** Preservation Restriction

Structural and Building Envelope Assessment, Simpson Gumpertz & Heger dated 12 June 2017

# ninutes

## TAYLOR & BURNS

<u>architects</u>

date	11 March 2019		
project name	First National Bank Greenfield Study	time	10:30 am
meeting date	5 March 2019	location	324 Main St.
			Greenfield, MA 01301
recorded by	Conrad Chudzicki, Carol Burns		
distribution	Beth Murphy		
purpose	Project Kick Off		

## ATTENDEES:

MJ Adams, City of Greenfield Community and Economic Development (CED) Robin Fordham, City of Greenfield Community and Economic Development (CED) John Lunt, Friends of First National Bank (FOFNB) Linda McInerney, FOFNB Chris Sykes, FOFNB Beth Murphy, Mass Development Wes Spaulding, Spaulding Associates, Structural Engineer Carol Burns, Taylor & Burns Architects Conrad Chudzicki, Taylor & Burns Architects

## NOTES:

**Program Overview** – The main program for the main space is a multi-functional community space that can serve purposes including a theatre to accommodate 100-150 people, and a winters farmers market, and perhaps a drop-in 'we-work" type space in the daytime. Historically significant and character-defining elements should be maintained and transformed (for example, the bank vault can become a bar).

**Timeframes and Deadlines** – This study should be completed with Mass Development before the end of this fiscal year (June 30). Also, a separate project to stabilize the main west-facing façade (West) can be funded with Community Development Block Grant funding this calendar year (December 2019).

**Funding Sources for Future Building Improvements** could include: historic tax credits; property-assessed clean energy (PACE) financing, a program for energy efficiency through the City and attached to the property rather than an individual; potential support for its location in a "Slum and Blight District;" potential grants for sustainability of designed systems; and potential individual donations.

## Since Completion of Two Prior Reports in 2018:

**Improvements** have not been undertaken inside the building or at the southwest corner. A new sidewalk grate and paving have been installed over the elevator room.

Hazardous Materials – A Phase 1 environmental site assessment has been completed. As a follow-on, that survey did not identify any Recognized Environmental Conditions (REC) on the property. However, it did note that, due to other structures having previously occupied the site, there is potential that buried demolition debris may exist on the property.

Below Grade infrastructure – No information is available.

End of notes. For any corrections, please contact the authors.

## TAYLOR & BURNS

architects.

date	11 March 2019		
project name	First National Bank Greenfield Study	time	4:00 pm
meeting date	5 March 2019	location	324 Main St.
			Greenfield, MA 01301
recorded by	Conrad Chudzicki, Carol Burns		
distribution	Beth Murphy		
purpose	Presentation and Discussion		

## ATTENDEES:

William Martin, City of Greenfield Mayor	Susan Hollins, FOFNB
MJ Adams, Greenfield CED	John Lunt, FOFNB
Robin Fordham, Greenfield CED	Linda McInerney, FOFNB
Adam Provost, GRA	Beth Murphy, Mass Development
Jean Wall, GRA	Carol Burns, Taylor & Burns Architects
Nancy Hawkins, GRA	Conrad Chudzicki, Taylor & Burns Architect

## NOTES:

Program of Uses on Three Levels – In response to two design options created by Utile Main Level

- Big room as a flexible multipurpose space to accommodate a variety of uses
  - Theatrical use for live performance, dance, or film
- modate a variety of uses
- Winter farmers market
- Lounge area

- Wedding venue
- Temporary exhibitions
- Box office
- Bar and back bar (main level or basement)
- Catering kitchen (main level or basement)
- Light and sound controls
- Exhibition gallery (possibly for Greenfield historical artifacts)
- Donor / VIP space
- Storage for furniture, theatrical equipment, possibly Greenfield archive storage with sufficient temperature contol (main level or basement)

## Mezzanine

- Flexible space (loose seating for theatre use or tables and chairs for café use)
- Possible location for light and sound controls

## **Basement Level**

- Rehearsal space (no need for raised stage or backstage)
- Offices: theatre use requires an office workspace for executive director and technical director, possibly combined with box office near main entry; rental office space for income can be considered
- Mechanical, electrical, elevator machine rooms

## Historic elements worthy of preservation

- Kiosk (bank check writing table)
- Gates to main entrance (stored inside the building)

- Metalwork screen (near the vault)
- Decorative elements of west façade (removed for safety reasons and currently stored elsewhere in Greenfield)
- The height of the main space is mentioned in the historic preservation report

## Issues discussed for consideration in the study

- The proposed change in occupancy from business to assembly will require that the building comply with current code requirements.
- The structural system of the building will be required to conform to current seismic requirements relevant to the seismic zone established in current building codes for New England. This will require insertion of steel framing to provide lateral stability to protect against the side-to-side movement associated with earthquakes. One concept to brace the walls from side-to-side could involve structural cross-bracing in some configuration that also could serve to support a theatrical grid with a catwalk system to hang lighting and other elements to be identified. Such a catwalk system could be designed to allow the historic bank ceiling to be visible. The conflicting requirements of structural upgrade and historic preservation would typically be resolved in such a case with the structural conformance of the building deemed as a more important priority than maintaining the ceiling intact.
- Providing the correct amount of storage for multi-purpose uses can be calculated and will be important.
- An archive of photographs illustrating the building at different historical times can be collected to inform future design efforts and for consideration as exhibition display materials.
- Project phasing is an option to consider, depending on cost estimates and current funding and financing potential. In any approach, all building systems will be upgraded with the initial phase. However, interior finished could be limited to the main floor and possibly mezzanine in order to minimize initial costs, with other level(s) to be finished in a following phase.
- Servicing the building at its location on Bank Row is an issue. The front door provides service
  access and service outlet, as the alley is too narrow for both incoming deliveries and outdoor
  storage of trash/recycling. A possible project to make Court Square a mainly-pedestrian way
  could allow servicing the building from Court Square using handcarts.
- The on-grade walkway at the back of the building provides the required second means of egress from 9 Bank Row, connects rear egress routes from several adjacent buildings, and slopes down to Olive Street. A concept for a future project could study the possibility of extending the walkway at its higher level as a bridge across Olive Street to connect to an upper level of the new parking structure across the street.
- Mention was made of a substance that, applied to brick, can provide structural stability. As a
  follow-up, liquid products on the market exist that can delay or retard the spalling or
  deterioration of the surface of brick walls or that seal a surface in a spray-applied plastic that
  hardens. Should a construction project be undertaken, the first such product might be
  considered if needed to address deteriorated brickwork. In general, the brick masonry wall
  construction consists of brickwork backed on the interior with a single wythe of clay tile with
  direct-applied plaster finishes. Because exterior brick walls mediate interior and exterior
  temperature and humidity levels, it would not be advisable to seal a brick wall in exterior-applied
  spray plastic, as that could lead to interior moisture in the wall assembly, a typical cause of mold.
- The roof over the rear portion of the building has potential as a rooftop patio connected to the mezzanine. The cost control mandate of this study suggests that discretionary items like this would more likely be relevant at a future date after project funding has become more robust.
- Mayor Martin closed the meeting with the statement that the ideal project budget would be targeted at \$3.5M.

End of notes. For any corrections, please contact the authors.

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## TAYLOR & BURNS

## architects.

date project name meeting date	16 April 2019 First National Bank Greenfield Study 16 April 2019	time location	4:00 pm teleconference.
recorded by distribution purpose	Carol Burns Beth Murphy Discussion of Three Design Alternatives		

## ATTENDEES:

William Martin, City of Greenfield Mayor	John Lunt, FOFNB
MJ Adams, Greenfield CED	Linda McInerney, FOFNB
Robin Fordham, Greenfield CED	Chris Sykes, FOFNB
Jean Wall, GRA	Beth Murphy, Mass Development
Charlene Golonka, GRA	Carol Burns, Taylor & Burns Architects
Nancy Hawkins, GRA	

## NOTES:

Survey - MJ has solicited questions for an ALTA survey, with a decision to be made in a week or so.

**Three Design Alternatives** – Carol presented three design options in detail including questions about LULA (limited use limited access) elevators which are cost-effective elevators and will be allowed by code for this building. It was observed that the outdoor terrace shown in Scheme C might be possible, depending on resolution of the property boundaries, but would be better with the elevator located at the front of the building.

Decisions about the design options included

- **Basement-level rehearsal space** can create income, and there is potential for a current market demand for a space of 1500 sf, as in Scheme B.
- The entry vestibule should be a more generous size, as in Scheme B or C (not Scheme A)
- The check-writing kiosk could be redeployed as a movable element, not fixed in one place.

**Cost Estimating** – will include an overall cost estimate as well as some "additional items" that will be itemized individually, so that the estimating effort can be utilized across different design options or scenarios.

End of notes. For any corrections, please contact the author.
# TAYLOR & BURNS

#### architects.

date21 May 2019project nameFirst National Bank Greenfield Studytimmeeting date21 May 2019local

time location

4:00 pm teleconference.

recorded by Carol Burns distribution Beth Murphy purpose Discussion of Cost Estimate

#### ATTENDEES:

MJ Adams, Greenfield CED Robin Fordham, Greenfield CED John Lunt, FOFNB Linda McInerney, FOFNB Susan Hollins, FOFNB Jean Wall, GRA Charlene Golonka, GRA Nancy Hawkins, GRA Nancy Hazard, Greenfield Planning and Construction Committee (GPCC) John Andrews, GPCC Josh Solomon, *Greenfield Recorder* Beth Murphy, Mass Development Carol Burns, Taylor & Burns Architects

#### NOTES:

**Cost Estimate**: Carol reviewed the cost estimate in detail, noting that it includes many discretionary items but that it is a *construction cost estimate* ("sticks and bricks" only) not a *project budget* (which would also include all soft costs such as professional fees for legal, design, survey, etc.)

#### Discussion

**Energy and sustainability:** Given the current moratorium on gas, this project should include renewable energy sources. A green community grant could support roof-mounted solar panels; a "green building" would require insulation. Greenfield is a stretch energy community.

**Theatrical Elements**: The catwalk is considered an important part of an initial phase of work, but it should be reduced in cost if possible. To conform to requirements of the Actors' Equity Association, the design should include a shower.

**Project Funding and Costs:** Tax credits may be available in the amount of about \$750,000. The Franklin County CDC conveyed information about this when the building was transferred. John offered to review this information. Noting the importance of cash flow to support any project, it was agreed that the cost estimate will be revised to reflect work required to occupy the ground floor only and holding down initial costs with care.

Following Up: Anyone with questions or comments is invited to convey them to Carol by the end of May.

#### FOLLOWING:

Nancy Hazard sent a message on 5/27/2019 regarding energy-related issues, insulation, and materials. MJ Adams offered on 5/27/2019 to locate information about the main roof, including insulation and R values as available, which was replaced approximately eight years ago by the Franklin County CDC. Robin Fordham sent a message on 5/29/2019 regarding seismic bracing and historic preservation.

End of notes. For any corrections, please contact the author.

# TAYLOR & BURNS

architects.

date project name meeting date	6 June 2019 First National Bank Greenfield Study 4 June 2019	time location	3:30 pm 324 Main St.
			Greenfield, MA 01301
recorded by	Carol Burns		
distribution	Beth Murphy		
purpose	Preservation Restriction Agreement		

#### ATTENDEES:

MJ Adams, Greenfield CED Beth Murphy, Mass Development Carol Burns, Taylor & Burns Architects

#### NOTES:

A Preservation Restriction Agreement—dated 5/25/2003 was signed by John Waite of the Franklin County Community Development Corporation, notarized on 6/25/2003, and approved by Cara Metz, Executive Director and Clerk of the Massachusetts Historical Commission on 5/22/2003—states the following:

- "These preservation restrictions are set forth so as to ensure the preservation of those characteristics which contribute to the architectural, archeological and historical integrity of the Premises which have been listed on the National and/or State Registers of Historic Places..." (p. 2)
- The terms of the Preservation Restriction are as follows:
  - Alterations: The Grantor agrees that no alterations shall be made to the Premises, including the alteration of any interior, unless ((a) clearly minor in nature..., or (b) the Commission has previously determined that it will not impair such characteristics after reviewing plans and specification..., or (c) required by casualty or other emergency promptly reported to the Commission." (p. 2)
- The burden of these restrictions enumerated in paragraphs 1 through 8, inclusive, shall run with the land and is biding upon future owners of an interest therein." (p. 3)

#### Discussion

Beth and Carol relay that this is important information and new to them. Several points merit clarification;

- What motivated FCCDC to enter into this Restriction?
- Given the year of signing, when the building had been unoccupied for perhaps thirty years, does the Restriction apply only to the surviving character-defining features? (If so, it would apply to the exterior western façade.)
- However, given that logic, why does the Restriction section 1. Alterations, include language that no alterations shall be made to any interior? (That language, extreme in itself, would seem to preserve the building in a functionally-abandoned state.)
- Beth advises that legal counsel be consulted to understand the basis for this Restriction
- Following, Carol inquires whether the apparently out-of-sequence signatures might be a legal issue.

(A file of material about the Restriction includes mention of Greg Farmer, historic preservationist, in Amherst, who has apparently been involved with the building around that time.)

Beth will look into this Restriction.

End of notes. For any corrections, please contact the author.

# TAYLOR & BURNS

#### architects.

date	6 June 2019		
project name	First National Bank Greenfield Study	time	4:00 pm
meeting date	4 June 2019	location	324 Main St.
			Greenfield, MA 01301.

recorded by distribution purpose

d by Carol Burns <sup>tion</sup> Beth Murphy Final Presentation

#### ATTENDEES:

Bill Martin, City of Greenfield Mayor MJ Adams, Greenfield CED Robin Fordham, Greenfield CED John Lunt, FOFNB Linda McInerney, FOFNB Chris Sikes, FOFNB Bill Mason, GRA Adam Provost, GRA Jean Wall, GRA Beth Murphy, Mass Development Carol Burns, Taylor & Burns Architects

#### NOTES:

#### Study Synopsis:

Carol reviewed the study process including

- Major developments from four milestone meeting dates
- The full set of drawings completed to date, including design intent statement as well as a perspective collage showing the design intent
- Three versions of construction costs estimates for the project
  - The initial "maximum information" estimate provided by PM&C
  - A phased project for occupying the ground floor only, including a three-stop elevator (Building + Site Costs = \$ 3 M; Total All Construction Costs = \$ 3.8 M
  - A phased project for occupying the ground floor only with no elevator (Building + Site Costs = \$ 2.9 M; Total All Construction Costs = \$ 3.67 M

#### Discussion

*Elevator:* An elevator will be required to provide access to all floors that include provision of public services and activities.

**Funding:** Beth states that the next important step is to identify sources of funding. Linda volunteers that she will have a personal meeting in mid-June with a grants professional. Several attendees agree on the need to restart a conversation on bond funding. Mayor Martin mentions preservation grants through the office of Secretary of State Galvin, earmark funding that needs another step or two, and potential funding from investors in the Opportunity Zone. Chris outlines the process for obtaining Historic Tax Credit funding and states that New Market funding seems expensive. John and others agree that clarity is needed around the status of Historic Tax Credits available to this building.

**Follow Up:** The cost estimator, PM&C, will submit a revised cost estimate including items that have arisen since the original estimate dated 5/20/2019. Following, Carol will submit the final study report. **Going Forward**: Beth relays an application for technical financial assistance will be determined by end-June.

End of notes. For any corrections, please contact the author.

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# Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	GRE.87	
Historic Name:	First National Bank and Trust of Greenfield	and and the second
Common Name:		
Address:	9 Bank Row	510
City/Town:	Greenfield	
Village/Neighborhood:		
Local No:	105B, 20, 51-12-0	
Year Constructed:	1929	
Architect(s):	Dennison and Hirons; Mellor, H. W.; Otis Elevator Company	
Architectural Style(s):	Art Deco	
Use(s):	Abandoned or Vacant; Bank; Business Office; Other Governmental or Civic	
Significance:	Architecture; Art; Commerce; Economics	
Area(s):	GRE.A: Main Street Historic District	
Designation(s):	Nat'l Register District (10/13/1988); Preservation Restriction (06/25/2003)	
Building Materials(s):	Roof: Asphalt Shingle Wall: Brick; Bronze; Granite; Wrought Iron; Stone, Cut; Stone, Veneer Foundation: Concrete Unspecified	

The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

The MACRIS database and scanned files are highly dynamic; new information is added daily and both database records and related scanned files may be updated as new information is incorporated into MHC files. Users should note that there may be a considerable lag time between the receipt of new or updated records by MHC and the appearance of related information in MACRIS. Users should also note that not all source materials for the MACRIS database are made available as scanned images. Users may consult the records, files and maps available in MHC's public research area at its offices at the State Archives Building, 220 Morrissey Boulevard, Boston, open M-F, 9-5.

Users of this digital material acknowledge that they have read and understood the MACRIS Information and Disclaimer (<u>http://mhc-macris.net/macrisdisclaimer.htm</u>)

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Commonwealth of Massachusetts Massachusetts Historical Commission 220 Morrissey Boulevard, Boston, Massachusetts 02125 www.sec.state.ma.us/mhc



#### **Sketch Map**

N

Draw a map showing the building's location in relation to the nearest cross streets and/or major natural features. Show all buildings between inventoried building and nearest intersection or natural feature. Label streets including route numbers, if any. Circle and number the inventoried building. Indicate north.

Row

BANK

GRE.87 51-12-0 Greenfield

Town Greenfield Place (neighborhood or village) Court Square/ Bank Row NROIS 1250

Address 11-13 Bank Row

Historic Name First National Bank & Trust Company

Uses: Present being rehabilitated

**Original** bank

Date of Construction 1929-30

Source Severance, History of Greenfield vol. 4 p.1681

Style/Form Moderne

Architect/Builder Dennison & Hirons & H.W.Mellor

Exterior Material: brick, granite block facade

Foundation concrete

Wall/Trim wrought iron

Roof concrete

**Outbuildings/Secondary Structures none** 

Major Alterations (with dates) none

Condition steel frame and brick walls sound, roof and façade under rehab/conservation

Moved no x ves Date

Acreage -1 acre

Setting Town Square, 19th century brick and frame commercial buildings, Town Hall, Gothic church, Asher Benjamin designed house

MA

**Recorded by Peter Miller and Marcia Starkey** 

**Organization** Greenfield Historical Commission

Date (month / year) November 2003

MAIN ST.

S.S

Follow Massachusetts Historical Commission Survey Manual instructions for completing this form.

2 2004

#### **BUILDING FORM**

#### **ARCHITECTURAL DESCRIPTION**

see continuation sheet

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community. This is Greenfield's finest Art Deco building and the largest financial building built for that purpose in the county. The steel frame structure, with brick curtain walls on all four sides is primarily visible on the front side. Exterior ornamentation is restricted to a façade of large granite blocks bolted to the brick wall, providing a smooth Moderne surface surmounted by a central bronze clock with seven foot bronze dial flanked by carved scrolls, all approximately 55 feet above the street. Polished Rockport dark sea green granite sets off the entrance and foundation, and the remainder of the façade is of Swenson Pink granite from Concord N.H. A lighter-hued frieze below the clock is carved with the name, "First National Bank & Trust Company 1929" and below that is the 30x14 foot center entrance. Two wrought iron grilles extend the height of the entrance and accompany two relief-carved eagle heads facing doors equipped with decorative iron sliding gates. Large divided-light windows fill spaces above and to the sides of the entrance. Six foot iron lanterns, now missing, originally illuminated the entrance way. The bank interior includes a spacious vestibule with marble walls and Italian travertine floor. The 28foot wide banking room is walled in imitation limestone. Its 38foot ceiling features a large center panel with ornamental bands and cornice. Various offices spaces are located on the main and lower levels, as are two stacked vaults.

#### HISTORICAL NARRATIVE

see continuation sheet

Discuss the history of the building. Explain its associations with local (or state) history. Include uses of the building, and the role(s) the owners/occupants played within the community.

This building is sited directly across from the Town Common within Court Square, an area that has long been the business center of Greenfield and the center of government since 1813. The First National Bank was founded in 1822, and in 1922 has 26 employees. Between 1871 and 1921 the bank's deposits increased from \$165,000 to \$2,458,333. Its capital had been increased to \$300,000. This expansion included the creation of new departments, Commercial, Savings, Safe Deposit, Trust, Investment and Foreign Exchange. At the beginning of 1929 the President, John W. Smead, stated that, "Our increasing business has so taxed our facilities it is evident that larger quarters will be needed in the near future, and with this in mind, we have already purchased the adjoining property"- the Fiske and Strecker block. On October 1st the institution's name was changed to that appearing on this building which began construction In April 1929 after plans by Dennison & Hirons of New York City. The building was opened on May 3, 1930 at a public open house. The Great Depression was then only weeks old. By December 1930, assets had shrunk by more than one guarter million dollars to \$5,115,089.35 from the 1929 high. In November 1934 First National absorbed the four year old Northfield National Bank, and in January 1935 it merged with the Crocker National Bank of Turners Falls. First National, like other commercial banks, was promotionally minded, quietly working behind the scenes to establish sound new business locally. It was instrumental in the consolidation of Greenfield Tap & Die, creating the largest manufacturer of these products in the world. The Millers Falls Company, leading tool maker, and the John Russell Cutlery Company, the nation's first cutlery maker located on the Green River, were successful largely due to this bank's financial backing. In 1951 it conducted a "Salute to Industry" show in the banking rooms where displays from 30 area industries were on view. The bank moved to another building in 1971. In December 1979 several state offices were temporarily housed in the building, its last active use.

x see continuation sheet

#### **BIBLIOGRAPHY and/or REFERENCES**

Kellogg, Lucy Cutler; <u>History of Greenfield</u> vol. III published by the town 1931 p.1681 Severance, Charles Sydney, <u>History of Greenfield</u> 1930-1953, published by the town 1954 Jenkins, Paul <u>The Conservative Rebel</u>; <u>A Social History of Greenfield</u>, published by the town 1982 "The Greenfield Daily Recorder" September 21, 1928, April 5, 1929, May 2, 1930, May 3, 1930 Form B Massachusetts Historical Commission 2/16/1979 from the first survey list <u>A Pictorial History of Greenfield</u>, Massachusetts, Greenfield Historical Society, 1953 National Register Registration Form for the Main Street National Register Historic District

147

GRE. 87

Town GREENFIELD Property Address 11-13 BANK ROW Area(s) Form No.

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MASSACHUSETTS HISTORICAL COMMISSION MASSACHUSETTS ARCHIVES BUILDING 220 Morrissey Boulevard Boston, Massachusetts 02125

Dennison & Hirons Architects (1910-1929)

Ethan Allen Dennison (1881-1954) Frederic Charles Hirons (1883-1942)

Ethan Allen Dennison, born in New Jersey, studied architecture at the Godfrey Architectural Preparatory School and the Ecole des Beaux Arts in Paris. He began his career in the office of Trowbridge & Livingston in New York in 1905, joining with Frederic Hirons to form the partnership of Dennison & Hirons in 1910. The firm continued until 1929. Dennison won the Medal of Honor of the Society of Diploma Architects of France and was a member of the Beaux Arts Society of New York, as well as the American Society of the French Legion of Honor. After the dissolution of the firm of Dennison & Hirons, Dennison continued to practice architecture in New York as the head of Ethan A. Dennison & Associates.

Frederic Charles Hirons was born in Birmingham, England 1882, but moved as a child to Massachusetts with his family. He worked as a draftsman in the Boston office of Herbert Hale from 1898 until 1901, graduated from MIT 1903. In 1904 he won the Rotch traveling scholarship, and went to Paris to study at the Ecole des Beaux Arts. He won the Paris Prize in1906, enabling him to continue studies and travel in Europe through 1909. Hiron was always interested in drawing and the education of young students. He led his own atelier for several years after his return from Europe, taught architecture at Yale and Columbia Universities, was a founder of the Beaux Arts Institute of Design, and served as president of the Beaux Arts Society of Architects 1937-39. He was named a Chevalier of the French Legion of Honor in recognition of his services for architectural education. In 1929 Hirons formed a partnership with F. W. Mellor from Philadelphia for two years, and then practiced under his own name until 1940. He designed the war memorials in Worcester Massachusetts and Vincennes Indiana

Dennison & Hirons executed Childs Restaurant in Coney Island; the Federal Trust Company Building, Newark NJ; the Delaware Title & Insurance Company, Wilmington, DE; the City National Bank, Bridgeport CT; the Home Savings Bank, Albany NY; the State Bank & Trust Company, New York NY; (43<sup>rd</sup> St. and 8<sup>th</sup> Ave.); Beaux Arts Institute of Design, New York, NY(304 East 44<sup>th</sup> St. and 8<sup>th</sup> Ave.)a NYC Landmark; and the Suffolk Title and Guarantee Company Building, Queens, NY (90-04 161<sup>st</sup> St.) a NYC Landmark. They used terra cotta ornament with Art Deco motifs on most of these buildings. The Atlantic Terra Cotta Company published an explanation of the architect's method for producing the colored terra cotta panels:

This firm in the study of their Polychrome Terra Cotta, have ¼ full size models made and then colored exactly like the ceramic glazes they propose to use. The models are then placed ¼ their actual height on the finished building and with the exact exposure. As it has been found that the same colors will produce different effects with northern or southern exposures, a practical test under actual conditions is of value.

After these models were finalized, the terra cotta company's glaze department would create glazes to achieve the desired shades. In this way Dennison & Hirons were able to produce colorful ornament which has continued to remain visually stunning.

(exerpts from the Landmarks Preservation Commission's Designation Report (3/6/2001) on the <u>Suffolk Title and Guarantee</u> <u>Company Building</u> by Virginia Kurshan)

Walter Mellor (1880-1940) born in Philadelphia, B.S. Architecture from University of Pennsylvania 1904, 1906 established the partnership of Mellor & Meigs, designers of familial and social organizational buildings, including Haverford College. After 1928 the firm apparently confined its activities to country houses.

Sources: Library of Congress HABS/HAER Home Page American Architects' Biographies www.preserve www.philadelphia buildings

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148

#### FORM B - BUILDING

#### MASSACHUSETTS HISTORICAL COMMISSION Office of the Secretary, State House, Boston

4/25/03

1 1



4. Map. Draw sketch of building location in relation to nearest cross streets and other buildings. Indicate north.

> ERA ED

NORTH



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	, 313 6 GRE. 81 105(6)			
	In Area no. Form no.			
	P G.T.C. A 20 87			
, 1.	Town Greenfield 9(7-11) MSF			
in an an t-sa a I	Address 11 T3 Bank Row			
4	Name First National Bank & Trust Co.			
1	Present use Vacant			
olaria Gree	k. olatorre aral Level muchterio a			
	Present owner Sebastian Ruggeri			
3.	Description:			
1010 C 14	Date1929			
1	Source Hist. of Greenfield			
1	StyleArt Deco			
	Architect Dennison & Hiron, New York City			
	Exterior wall fabric Granite & Brick			
anda i anda	Outbuildings (describe) None			
	Other features Top Center Clock, Recessed Bank Name at top of Building, Hug center entrance with smaller actual			
three s,whic	doord with double siding gate.			

Altered	N/A	Date
Moved_	N/A	Date
5. Lot size	dt mi stine te Stad form suitor	
One acr	e or less <u>x</u>	Over one acre
Approxi	mate frontage_	75 *
Approxi	mate distance o	of building from street
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Construction of the second		

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Organization Greenfield Historical Comm. Date Feb. 16, 1979

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7. Original owner (if known) First National Bank & Trust Company

(	Original use	Commerio	cal Bank	50		
S	Subsequent uses (if any)	and dates_				
8. 7	Themes (check as many	as applical	ole)			
	Aboriginal Agricultural Architectural The Arts Commerce Communication Community development	 	Conservation Education Exploration/ settlement Industry Military Political	Recreation Religion Science/ invention Social/ humanitarian Transportation	}	

#### 9. Historical significance (include explanation of themes checked above)

This bank replaced two older buildings that stood on the same site. The first was the third store of the Allen Corner Block built in 1827 and contained Fiske & Strecker Drug Store. The second building was actually two buildings joined together. The northern part was the bank orginial building which also once housed the Franklin Savings Inst. upstairs and the southern part built in 1852 which at one time housed Lamb's Music Store. Later in 1904 the bank rebuilt the two buildings into one building.

The building is historic in that the structure is a typical bank building built during the 1920s and the fact that is stands in the historic town common section.

The front of the building was made of Swenson pink granite from Concord, N.H. The base and trimmings around the windows and the main entrance are of Rockwood Sea Green granite. There are three large windows across the front with ornamental frames of iron with plate glass. At the main entrance is a large ornamental iron gate of special hand wrought material. At the top of the front of the building is a large bronze clock, 6 feet in diameter, with bronze hands and an illuminated glass dial (above the entrance). The words The First National Bank and Trust Company 1929 are craved into the granite across the top of the building. There are marble floors and walls in the building in the vestibule. The banking room itself is most commodius and has a 35 foot ceiling with walls constructed of imitation limestone and the ceiling ornamented in plastic. The building is fireproof. There are two yaults - one above the other.

> The bank opened in May of 1930 and the newer bank opened March 20, 1971. Some state offices there tempory Dec. 1979-

- 10. Bibliography and/or references (such as local histories, deeds, assessor's records, early maps, etc.)
  - 1. Greenfield Recorder, Sept. 21, 1928 & April 5, 1929
  - 2. History of Greenfield, Vols. 1-4
  - 3. Pictorial History of Greenfield, 1953

Massachusetts Historical Commission Massachusetts Archives Building 220 Morrissey Boulevard Boston, Massachusetts 02125

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Town	Property Address		
Greefield	11-Blank St.		
	Area(s)	Form No.	
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DEPARTMENT OF PUBLIC SAFE DIVISION OF INSPECTION	ŦŦ
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CITY OR TOWN GREENFIELD STREET	CLASS
OWNER FIRST NATIONAL DANK + LIWA ARCHITECT OTIS ELEVATOR Co.	efer <sup>red</sup>
DATE INSPECTOR TRACH	

Town GREENFIELD Property Address 11-13 BANK ROW Area(s) Form No.

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MASSACHUSETTS HISTORICAL COMMISSION MASSACHUSETTS ARCHIVES BUILDING 220 MORRISSEY BOULEVARD BOSTON, MASSACHUSETTS 02125

Dennison & Hirons Architects (1910-1929)

Ethan Allen Dennison (1881-1954) Frederic Charles Hirons (1883-1942)

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(exerpts from the Landmarks Preservation Commission's Designation Report (3/6/2001) on the <u>Suffolk Title and Guarantee</u> <u>Company Building</u> by Virginia Kurshan)

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Sources: Library of Congress HABS/HAER Home Page American Architects' Biographies <u>www.preserve</u> <u>www.philadelphia</u> buildings

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TownProperty AddressMASSACHUSETTS HISTORICAL COMMISSIONGREENFIELD9 BANK ROWMASSACHUSETTS ARCHIVES BUILDING220 MORRISSEY BOULEVARDAREA(S)FORM NUMBERBOSTON, MASSACHUSETTS 02125NR Distriet, PR20 & 99AEEE

MHC #84

First National Bank & Trust of Greenfield 1929

Owned by the Franklin County CDC, the building is being rehabilitated under an MHC approved plan, in 2008 focusing on the main entrance and the first floor banking room.



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PRESERVATION RESTRICTION AGREEMENT between the COMMONWEALTH OF MASSACHUSETTS by and through the MASSACHUSETTS HISTORICAL COMMISSION and the Franklin County Community Development Corporation

The parties to this Agreement are the Commonwealth of Massachusetts, by and through the Massachusetts Historical Commission located at the Massachusetts Archives Building, 220 Morrissey Boulevard, Boston, Massachusetts 02125, hereinafter referred to as the Commission, and the Franklin County Community Development Corporation, 324 Wells Street, Greenfield, MA 01301 hereinafter referred to as the Grantor.

WHEREAS, the Grantor is the owner in fee simple of certain real property with improvements known as First National Bank Building, thereon as described in a deed dated Detober 31, 2002, from Superficien Russien

to <u>Franklin County</u>  $(2) \geq 10^{-1}$ , recorded with the Franklin County Registry of Deeds, Book <u>4128</u>, Page <u>279</u>, and which is located at 9 Bank Row, Greenfield, MA 01301hereinafter referred to as the Premises.

WHEREAS, the Grantor wishes to impose certain restrictions, obligations and duties upon it as the owner of the Premises and on the successors to its right, title and interest therein, with respect to maintenance, protection, and preservation of the Premises in order to protect the architectural, archaeological and historical integrity thereof; and

WHEREAS, the Premises is listed in the State Register of Historic Places as a contributing property to the Greenfield Main Street National Register Historic District; and

WHEREAS, the preservation of the Premises is important to the public for the enjoyment and appreciation of its architectural, archaeological and historical heritage and will serve the public interest in a manner consistent with the purposes of M.G.L. chapter 184, section 32, hereinafter referred to as the Act; and

WHEREAS, the Commission is a government body organized under the laws of the Commonwealth of Massachusetts and is authorized to accept these preservation restrictions under the Act;

NOW, THEREFORE, for good and valuable consideration, the Grantor conveys to the Commission the following preservation restrictions, which shall apply in Perpetuity to the Premises.

These preservation restrictions are set forth so as to ensure the preservation of those characteristics which contribute to the architectural, archaeological and historical integrity of the Premises which have been listed on the National and/or State Registers of Historic Places, under applicable state and federal legislation.

Characteristics which contribute to the architectural, archaeological and historical integrity of the Premises include, but are not limited to, the artifacts, features, materials, appearance, and workmanship of the Premises, including those characteristics which originally qualified the Premises for listing in the National and/or State Registers of Historic Places.

The terms of the Preservation Restriction are as follows:

- <u>Maintenance of Premises</u>: The Grantor agrees to assume the total cost of continued maintenance, repair and administration of the Premises so as to preserve the characteristics which contribute to the architectural, archaeological and historical integrity of the Premises in a manner satisfactory to the Commission according to the Secretary of the Interior's "Standards for the Treatment of Historic Properties." The Grantor may seek financial assistance from any source available to it. The Commission does not assume any obligation for maintaining, repairing or administering the Premises.
- 2. <u>Inspection</u>: The Grantor agrees that the Commission may inspect the Premises from time to time upon reasonable notice to determine whether the Grantor is in compliance with the terms of this Agreement.
- 3. <u>Alterations</u>: The Grantor agrees that no alterations shall be made to the Premises, including the alteration of any interior, unless (a) clearly of minor nature and not affecting the characteristics which contribute to the architectural, archaeological or historical integrity of the Premises, or (b) the Commission has previously determined that it will not impair such characteristics after reviewing plans and specifications submitted by the Grantor, or (c) required by casualty or other emergency promptly reported to the Commission. Ordinary maintenance and repair of the Premises may be made without the written permission of the

Commission. For purposes of this section, interpretation of what constitutes alterations of a minor nature and ordinary maintenance and repair is governed by the Restriction Guidelines which are attached to this Agreement and hereby incorporated by reference.

- 4. Notice and Approval. Whenever approval by the Commission is required under this restriction, Grantor shall request specific approval by the Commission not less than (30) days prior to the date Grantor intends to undertake the activity in question. A request for such approval by the grantor shall be reasonably sufficient as a basis for the Commission to approve or disapprove the request. The notice shall describe the nature, scope, design, location, timetable and any other material aspect of the proposed activity in sufficient detail to permit the Commission to make an informed judgment as to its consistency with the purposes of this Preservation Restriction. Within (30) days of receipt of Grantor's reasonably sufficient request for said approval, the Commission shall, in writing, grant or withhold its approval, or request additional information relevant to the request and necessary to provide a basis for its decision. However, should the Commission determine that additional time is necessary in order to make its decision the Commission shall notify the Grantor. The Commission's approval shall not be unreasonably withheld, and shall be granted upon a reasonable showing that the proposed activity shall not materially impair the purpose of this Preservation Restriction. Failure of the Commission to make a decision within sixty (60) days from the date on which the request is accepted by the Commission or notice of a time extension is received by the Grantor shall be deemed to constitute approval of the request as submitted, so long as the request sets forth the provisions of this section relating to deemed approval after the passage of time.
- 5. <u>Assignment</u>: The Commission may assign this Agreement to another governmental body or to any charitable corporation or trust among the purposes of which is the maintenance and preservation of historic properties only in the event that the Commission should cease to function in its present capacity.
- 6. <u>Validity and Severability</u>: The invalidity of M.G.L. c. 184 or any part thereof shall not affect the validity and enforceability of this Agreement according to its terms. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.
- 7. <u>Recording</u>: The Grantor agrees to record this Agreement with the appropriate Registry of Deeds and file a copy of such recorded instrument with the Commission.
- 8. <u>Other Provisions</u>: None applicable.

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The burden of these restrictions enumerated in paragraphs 1 through 8, inclusive, shall run with the land and is binding upon future owners of an interest therein.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 25 day of

2003.

#### COMMONWEALTH OF MASSACHUSETTS

FRANKLIN .ss.

JUNE 25,2003

Then personally appeared the above named <u>JOHN WAITE</u> and acknowledged the foregoing instrument to be the free act and deed of <u>The FRANKLIN COUNTY</u> CDC before me,

Notary Public My Commission Expires

#### APPROVAL BY THE MASSACHUSETTS HISTORICAL COMMISSION

The undersigned hereby certifies that the foregoing preservation restrictions have been approved pursuant to Massachusetts General Laws, Chapter 184, section 32.

MASSACHUSETTS HISTORICAL COMMISSION

afa H. Metz

Executive Director and Clerk Massachusetts Historical Commission

#### COMMONWEALTH OF MASSACHUSETTS

Suffolk, ss.

. .

May 22, 2003

Then personally appeared the above named Cara H. Metz and acknowledged the foregoing instrument to be the free act and deed of the Massachusetts Historical Commission, before

Notary Public My Commission Expires Marcanber 19, 2004

#### **RESTRICTION GUIDELINES**

The purpose of the Restriction Guidelines is to clarify paragraph three of the terms of the preservation restriction, which deals with alterations to the premises. Under this section permission from the Massachusetts Historical Commission is required for any major alteration. Alterations of a minor nature, which are part of ordinary maintenance and repair, do not require MHC review.

In an effort to explain what constitutes a minor alteration and what constitutes a major change, which must be reviewed by the MHC, the following list has been developed. By no means is this list comprehensive: it is only a sampling of some of the more common alterations, which may be contemplated by building owners.

#### PAINT

<u>Minor</u> - Exterior or interior hand scraping and repainting of non-decorative and non-significant surfaces as part of periodic maintenance.

<u>Major</u> - Painting or fully stripping decorative surfaces or distinctive stylistic features including murals, stenciling, wallpaper, ornamental woodwork, stone, decorative or significant original plaster.

#### WINDOWS AND DOORS

<u>Minor</u> - Regular maintenance including caulking, painting and necessary reglazing. Repair or in-kind replacement of existing individual decayed window parts.

<u>Major</u> - Wholesale replacement of units; change in fenestration or materials; alteration of profile or setback of windows. The addition of storm windows is also considered a major change; however, with notification it is commonly acceptable.

#### **EXTERIOR**

<u>Minor</u> - Spot repair of existing cladding and roofing including in-kind replacement of clapboards, shingles, slates, etc.

<u>Major</u> - Large-scale repair or replacement of cladding or roofing. Change involving inappropriate removal or addition of materials or building elements (i.e. removal of chimneys or cornice detailing; installation of architectural detail which does not have a historical basis); altering or demolishing building additions; spot repointing of masonry. Structural stabilization of the property is also considered a major alteration.

#### LANDSCAPE/OUTBUILDINGS

Minor - Routine maintenance of outbuildings and landscape including lawn mowing, pruning, planting, painting, and repair.

<u>Major</u> - Moving or subdividing buildings or property; altering of property; altering or removing significant landscape features such as gardens, vistas, walks, plantings; ground disturbance affecting archaeological resources.

#### WALLS/PARTITIONS

<u>Minor</u> - Making fully reversible changes (i.e. sealing off doors in situ, leaving doors and door openings fully exposed) to the spatial arrangement of a non-significant portion of the building.

<u>Major</u> - Creating new openings in walls or permanently sealing off existing openings; adding permanent partitions which obscure significant original room arrangement; demolishing existing walls; removing or altering stylistic features; altering primary staircases.

#### HEATING/AIR CONDITIONING/ELECTRICAL/PLUMBING SYSTEMS Minor - Repair of existing systems.

<u>Major</u> - Installing or upgrading systems which will result in major appearance changes (i.e. dropped ceilings, disfigured walls or floors, exposed wiring, ducts, and piping); the removal of substantial quantities of original plaster or other materials in the course of construction.

Changes classified as major alterations are not necessarily unacceptable. Under the preservation restriction such changes must be reviewed by the MHC and their impact on the historic integrity of the premise assessed.

It is the responsibility of the property owner to notify the MHC in writing when any major alterations are contemplated. Substantial alterations may necessitate review of plans and specifications.

The intent of the preservation restriction is to enable the Commission to review proposed alterations and assess their impact on the integrity of the structure, not to preclude future change. MHC staff will attempt to work with property owners to develop mutually satisfactory solutions, which are in the best interests of the property.

ATTEST: FRANKLIN COUNTY, MASS. H. Peter Wood, Register

SIMPSON GUMPERTZ & HEGER

and Building Enclosures

12 June 2017

Mr. Craig DeJong Sr. Project Architect Dietz & Company Architects, Inc. 17 Hampden Street Springfield, MA 01103

Project 170810 – Structural and Building Envelope Assessment, First National Bank Building, 9 Bank Row, Greenfield, MA

Dear Mr. DeJong:

Casey Williams of Simpson Gumpertz & Heger Inc. (SGH) completed a one-day field assessment of the First National Bank Building (FNB) to opine on the structural soundness of the building envelope and structural frame. Our one-day site visit included a visual survey of accessible interior and exterior construction; no exploratory work or special access was included in this initial assessment. The following letter summarizes our observations and opinion as to the structural soundness of the building envelope and structural frame based on this preliminary visit.

As noted in our proposal, not all structural conditions and connections were visible during our survey, and so our observations are limited. The assessment is preliminary; hidden conditions may be found during follow-up assessments that impact our initial conclusions.

#### 1. BUILDING DESCRIPTION AND BACKGROUND

According to the Greenfield Redevelopment Agency (GRA), FNB was constructed between 1925 and 1927 and functionally abandoned in the 1970s. Original building drawings are not currently available. GRA indicated that the main EPDM roof was replaced in 2004; GRA does not know the date of other repairs, including roofs and replacement windows.

The main building is a three-story masonry building constructed with a steel frame embedded in the exterior masonry walls (Photos 1 and 2). The main (west elevation) is clad with granite; all other elevations have red brick on their exterior (Photo 1 and 3). A small portion of the north elevation is a party wall with the adjacent building. A single wythe of clay tile with direct-applied plaster finishes is typically inboard of the exterior masonry walls, and most interior partition walls are also constructed with clay tile (Photos 2, 4 and 5). The plaster is missing in some areas. The interior is a multi-story atrium space with a mezzanine level along the north wall (Photos 2 and 5). The mezzanine is supported by steel columns aligning with the clay tile partition walls. A decorative metal railing is installed along the edge of the mezzanine. The atrium and mezzanine floors have concrete slabs with draped wire reinforcement and concrete-encased steel beams (Photo 6). The atrium roof is framed with steel trusses and beams with intermediate bar joists, which support the roof deck (Photos 7 and 8); we could not inspect the roof closely to confirm the deck construction, but it appears to be metal lath with a concrete topping. The main building roof is EPDM; we did not have access to inspect. The building has metal-framed windows and

#### SIMPSON GUMPERTZ & HEGER INC.

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Mr. Craig DeJong - Project 170810

entrances (Photos 9 and 10); the window over the entrance has been replaced with a newer aluminum window system.

At the back (east elevation), the building is a single-story load-bearing brick masonry structure (Photo 11). The roof slab is concrete with concrete-encased beams, similar to the first-floor and mezzanine structure (Photo 12). The low roof is a modified bitumen roof system (Photo 13).

Below the entire building (main building and single-story section) is a basement level. At this level, masonry walls and steel columns are supported by concrete foundation walls (Photo 14). The atrium floor also has intermediate brick pier supports (Photo 15).

#### 2. OBSERVATIONS

#### 2.1 Building Enclosure

#### **Granite Facade**

We observed the following at the west elevation granite facade:

- The granite facade is generally intact, with some mortar loss. Mortar deterioration is heaviest at the top of the wall. Based on the limited wall openings, the typical wall is constructed with an exterior wythe of granite and three to four courses of brick (thinner wall at setbacks on exterior).
- At isolated locations, the granite cladding is displaced (Photo 16), with the most significant displacement at the southwest corner, where stones are displaced approximately 1/4 in. This location corresponds with an interior downleader that is disconnected and allows water to leak into the building and wet the wall (Photo 17). The brick interior in this area was wet at the time of our visit. Other areas of observed displacement include the pier north of the door and the northwest corner.
- The granite is stained, with areas of efflorescence. The staining is most severe below the bank sign and at window head returns (Photo 18).
- Granite panels have limited, small cracks or spalls (Photos 19).
- The decorative metal door surround has surface corrosion (Photos 10 and 20).

#### Brick Masonry Facades

We reviewed the east elevation and rear extension only due to limited accessibility. We observed the following:

- Mortar joints are generally intact, with isolated locations of missing or deteriorated mortar (Photo 21). Isolated bricks are spalled.
- The top four to five brick courses appear to be a different type of brick from the remainder of the wall; these courses are typically deteriorated (Photo 22).

#### Mr. Craig DeJong – Project 170810

- The tops of the masonry piers at embedded columns are deteriorated (Photo 22).
- Embedded steel elements, such as lintels or security grating over windows, are corroded. At isolated locations, the brick is displaced at lintels, likely due to corrosion of the embedded steel (Photo 23). We typically did not observe similar movement at the embedded columns.

#### Roofs

The main building roof was not accessible; the limited EPDM on the building mansard that we could view from grade appeared in good condition. The southwest corner drain is not functioning, as discussed above (Photo 17); other main building roof drains appear to be functioning.

The modified bitumen low roof is visible from an adjacent building fire escape; we could not access the roof to inspect areas up-close, but generally the roof membrane appears intact. Water ponds on the roof near the drain location and water was leaking into the building below this area. At the roof edge, the membrane extends over the top of the parapet and a metal coping flashing is installed in sections; portions of the coping appear to have been removed (Photo 24).

#### 2.2 Structure

Portions of the building structure that were readily visible during our walkthough appear to be in sound condition. We did not note any major signs of deterioration, settlement, distress, or excessive deflection that suggest otherwise. We were not able to confirm if areas of the roof systems are deteriorated due to limited access.

#### 3. CONCLUSION

Generally, the masonry building has isolated areas of deterioration typical for a building of this age that has been unoccupied for a significant period of time. Further investigation is required to understand the extent of damage and the most appropriate repairs. The scope of required repairs appears isolated, though, and based on this preliminary survey, the building facade and structure are mostly intact and functioning.

#### 4. IMMEDIATE REPAIR RECOMMENDATIONS

Ongoing water infiltration can result in damage or deterioration to the building structure and envelope. To limit water leakage and further deterioration, we recommend addressing the following areas immediately:

- Repair and/or reconnect the main roof drain and internal downleader at the southwest building corner. Remove and replace surrounding wet roofing materials.
- Clean the low roof drain to allow ponded water to drain and periodically monitor the low roof for ponded water and clear the drain as required.

Additional repairs are required, including general masonry, roof, and window/door repairs. The full scope of these repairs will be developed as part of the larger condition assessment report

#### Mr. Craig DeJong – Project 170810

following the conclusion of the recommended further investigation. Generally, we anticipate that the following scope of work will be required:

- Granite Facade
  - Point and clean the granite facade. Multiple iterations of cleaning are likely required at areas of heavy staining.
  - Rout and point cracks and repair spalled stone with a dutchman or repair mortar.
  - Resecure displaced granite stones. Option A includes removing displaced granite cladding panels, rebuilding and/or pointing existing backup masonry and reinstalling granite cladding with masonry anchors. Option B includes securing existing granite panels with masonry anchors through the face of the panels. Which option is most appropriate is to be determined after further investigation (see below).
- Brick Masonry Facades
  - Point brick masonry.
  - Remove and replace isolated cracked or spalled bricks.
  - Rebuild the top five courses of brick masonry.
  - Remove brick masonry at embedded steel lintels; scrape and paint metal lintels or replace lintels with significant section loss. Rebuild masonry at lintels.
  - Rebuild tops of deteriorated brick masonry piers (east elevation).
- Refurbish or replace existing metal windows. Replace doors. Refurbish decorative metal door surround. Replace all perimeter seals.
- Repair drains and surrounding roofs at main roof and low roof, as noted above.
- Provide miscellaneous flashing at copings and cornices to improve water management, such as at the tops of brick masonry piers.
- Inspect the existing roofs and repair isolated areas of deterioration.

#### 5. FURTHER INVESTIGATION AND ANALYSIS

We recommend completing the full condition assessment, as outlined in our 3 March 2017 proposal. The recommended scope of work further investigation and analysis is as follows:

- Complete an additional site visit and perform the following tasks:
  - Complete a hands-on survey of the granite facade to document panel displacement and hammer sound granite cladding. Our original proposal assumed accessing only lower wall areas with a ladder; we recommend also providing an aerial lift to allow for a survey of upper wall areas.
  - Access the main roof to complete a visual survey. We assume that access is possible from the exterior east elevation ladder; we will require your assistance in arranging for keys to access this area.

#### Mr. Craig DeJong - Project 170810

- Make limited exploratory openings to expose hidden conditions. We recommend exploratory openings at the following locations:
  - Remove a granite facade panel at the southwest corner and/or brick masonry backup behind.
  - Remove brick masonry at several piers to expose and assess the embedded structural steel framing.
  - Remove brick masonry at one lintel to assess the condition of the embedded steel.
  - Make and repair roof openings to determine system construction and the condition of the roof deck. We recommend one opening in the main and low roofs.
  - Remove plywood at existing windows to expose and assess the existing window frame condition.

Contractor assistance is required to make and repair the openings.

- Perform a building analysis in accordance with the Massachusetts Building Code (MSBC), Chapter 34 as it pertains to the building structure and enclosure. The analysis should comment on possible required seismic upgrades based on change in occupancy or increased load triggers; this is not a full seismic analysis.
- Perform an analysis of the mezzanine handrail for MSBC required loads.

Sincerely yours,

Kel- Kun

CCWith.

Casey C. Williams Senior Staff II – Building Technology

Susan L. Knack-Brown, P.E.CaseSenior PrincipalSeniorMA License 45468I:\BOS\Projects\2017\170810.00-BANK\WP\001SLKnackBrown-L-170810.00.sco.docx

Encl.



Front elevation (west elevation) with granite cladding.

An EPDM mansard roof extends above the coping.





Photo 2

Steel columns embedded into the masonry walls.

Photo 3

Rear elevation has red brick on the exterior.





Interior clay tile wythe. At this location, direct-applied plaster finishes are missing.



#### Photo 5

Mezzanine along the atrium's north wall.



#### Photo 6

Underside of the mezzanine floor slab. The floor is constructed with concrete-encased steel beams (red arrows) and a concrete slab with draped reinforcement (yellow box).



Photo 7

Main building roof structure.



# Photo 8

Bar joists span between roof beams and support roof deck (construction unconfirmed).



#### Photo 9

West elevation metal-framed window; photo from interior.



Photo 10

Metal-framed entrance with decorative metal surround.



Photo 11

Single-story brick masonry structure at rear of building.



Low roof concrete slab and concrete-encased steel beams.



# Photo 13

Low roof modified bitumen roof system.



Photo 14

Basement concrete foundation wall (red arrow).



Brick piers at basement support the first-floor slab.



# Photo 16

Displaced granite cladding at southwest corner.



Interior brick at southwest corner is wet. Roof drain internal downleader is detached at roof and daylight is visible (yellow arrow).



## Photo 18

Staining and efflorescence at the upper facade, including at the window head return.