

TOWN OF DEERFIELD
DEERFIELD COMMUNITY PRESERVATION COMMITTEE
CPA Funding Application

Applications Due: November 1, 2024

APPLICATION FORM

Title of proposal: 1821 Meeting House – Clock Tower Restoration and Re-use Engineering Report

Name and address of individual or organization submitting application

- Town of Deerfield Selectboard

Contact Person: Alexandria Galloway, Town Planner

Address: Municipal Offices 8 Conway Street

Telephone: (413) 665-1400 x117 **Email:** planner@town.deerfield.ma.us

Category (check all that apply) Open Space/ Recreation Community Housing
 Historic Preservation

CPA Funds requested \$ 136,000 *

You have submitted the Capital Improvements Committee form required when you seek more than \$10,000.

Summary of Proposal

The Town of Deerfield will submit a CPA grant application to support the rehabilitation/restoration of the 1821 Meeting House clock tower and to conduct engineering studies to increase the load-bearing capacity of the sanctuary floor to 100 pounds per square foot (a code requirement), as well as necessary utility upgrades to accommodate future uses.

The steeple requires interior structural bracing and exterior treatments that will adhere to the Secretary of Interior (SOI) standards in compliance with CPA requirements. Restoration efforts include removing existing asphalt shingles to install an ice and water shield membrane, flashing, and shingles in the same configuration. Peeling paint will be hand-scraped using HEPA-equipped tools via a boom lift within a 20-foot safety perimeter marked with lead caution signage. Caulking, glazing, sealing of imperfections, painting, and replication of missing wood trim will be completed to match existing profiles and maintain the building’s character. The weathervane will be removed, restored off-site, and replaced atop the steeple.

Additionally, the meeting house will undergo structural and systems analysis, with an engineering firm evaluating the sanctuary floor to complete a load analysis and design a scope of work to make the floor code compliant. The firm will also recommend building systems upgrades to ensure safe occupancy and compliance with current building and accessibility codes.

All proposed work outlined in this scope will be limited to the original structure of the church, with no restoration, repairs, or analysis planned for the addition, which was recently substantially renovated. This proposal is designed to preserve the Meeting House's historic integrity to SOI standards while securing its long-term durability as a locally significant historic resource, a designation formally recognized by the Deerfield Historic Commission in their September 8, 2025, meeting.

Supporting documentation (all may not apply, please list and number each attachment):

- A_ Property location, including Assessor's Map and Lot#, assessed value and current owner.
 - A_ Description of property.
 - _ Verification of clear title of property. (liens, other restrictions, etc.)
 - _ Statement by owner of willingness to convey any required restrictions or covenants.
 - _ Additional sources of committed funding with percentage and type (grant, donation, in-kind services).
 - E_ Budget (projected revenues; purchase price, construction costs).
 - _ Relevant maps.
 - _ Variances, special permits, legal agreements.
 - D_ Timeline with major milestones.
 - _ If the proposal is expected to continue beyond the current Fiscal Year, attach a phasing schedule for each year.
 - _ Statements of support from abutters, residents, or other interested parties.
 - B&C_ Endorsements from Deerfield Boards or Committees.
-

Supporting Documentation Attachments

- A. Property Information**
 - Property Map & Description
 - Assessor's Property Record Card
- B. MHC Form B (2012 & 1978) prepared by Deerfield Historical Commission**
- C. Deerfield Historical Commission – Sept. 8, 2025, Meeting Minutes – Vote**
- D. Timeline with Milestones**
- E. Budget – Summary & Table**
 - 2023 Structures North Proposal
 - 2024 Valley Restoration Estimate
 - 1821 Facilities Condition Assessment

GENERAL QUESTIONNAIRE- ALL CATEGORIES

NOTE: Respond to **ALL** questions, and expand as necessary with attached pages. **Do not delete** any questions in this Questionnaire or the Category Questionnaire. Non-applicable questions should be answered with "N/A". **Incomplete applications may result in ineligibility for consideration for the current cycle.**

1. How would your proposal realize visions and goals set out in our Master Plan and Open Space Plan?

Chapter 4 of the Master Plan regarding Historic Resources has a singular goal of "*identifying and preserving historic resources, including buildings, sites, and landscapes*". The 1821 Meeting House is recognized in Table 4-2: Significant Historic Structures and Sites within South Deerfield Village. Our current project to restore clock tower and conduct building assessments will facilitate its protection and continued use by the community.

Additionally, this project achieves not only the overarching goals identified in the Open Space and Recreation Plan Action Plan but specifically achieves Objective A4. "*Continue to support significant historic sites and work towards their conservation and preservation*" and " B13. "*Encourage municipal projects that share infrastructure (parking, heating/cooling and large meeting spaces) and green space/landscaping to reduce the duplication and expansion of systems and paved surfaces.*" With construction of 1888 underway and the library nearing completion, the municipal campus vision includes the revitalization of this historic 1821 meeting space. This effort aims to transform one of South Deerfield's oldest buildings into a functional public asset, while integrating shared parking and centralized community gathering resources across the campus.

2. How would your proposal preserve the character of Deerfield?

The 1821 Meeting House is the oldest remaining public building in South Deerfield. Its clock tower, which houses the "town clock", is a defining feature of the town's skyline. This proposal includes exterior rehabilitation/restoration of the deteriorating tower and a structural engineering assessment to estimate costs to improve floor loading capacity and building operational systems with the goal of restoring the 200-year-old meeting space for safe public use.

3. Explain what other sources of funding you are pursuing, if any, to match the CPA Funds you are requesting.

The Town is in the early stages of identifying and securing additional grant funding to support the stabilization and historic renovation of the church building. We anticipate leveraging a combination of public grants, private contributions, and local resources to ensure the comprehensive restoration and long-term sustainability of the building.

4. If your proposal requires urgent action, explain why.

The clock tower is showing signs of deterioration. Missing parts of the exterior envelope have allowed moisture to enter, which is starting to affect the interior wood framing. If left unaddressed, the damage could worsen and impact the structural integrity of the tower. Restoration efforts will include structural modifications after the engineering is completed. The next step will be to treat the exterior and include removing existing asphalt shingles to install an ice and water shield membrane, flashing, and shingles in the same configuration. Peeling paint will be hand-scraped using HEPA-equipped tools via a boom lift. Caulking, glazing, sealing of imperfections, painting, and replication of missing wood trim will be completed to match existing profiles and maintain the building's character. The weathervane will be removed, restored off-site, and then reinstalled atop the steeple.

5. If your proposal serves a currently under-served population, explain how.

The building will remain public and reuse will service all residents.

6. If your proposal preserves a threatened resource, explain how.

The restoration of the tower will safeguard its structural integrity against extreme weather and ongoing deterioration. Additionally, the structural and systems analysis will support safe occupancy and ensure compliance with current building and accessibility codes, enabling the Meetinghouse to be regularly utilized after the library relocates.

7. Does your proposal fit within the current zoning, environmental, building, and other regulations?

- Zoning: Yes, municipal facilities are allowed by right in the Center Village Zoning District.
- Environmental: Peeling paint will be hand-scraped using HEPA-equipped tools via a boom lift within a 20-foot safety perimeter marked with lead caution signage.
- Building and Other Regulations: The purpose of the engineering studies is to preserve a key architectural feature, the clock tower, while assessing the structural bracing requirements and estimating the costs to upgrade the sanctuary floor's load-bearing capacity to 100 pounds per square foot, in compliance with building code standards, including the Americans with Disabilities Act and the Architectural Barriers Act.

8. If your proposal would require ongoing support for upkeep, explain the projected means to provide maintenance once CPA funds have been spent.

The Town is responsible for maintaining the building in its current condition, with funding allocated through the Department of Public Works's general Building Maintenance budget. The purpose of these studies is to assess the building's structural compliance with current codes and to estimate the costs of upgrading the facility to meet modern standards. This project will strengthen the building's exterior and evaluate potential improvements to its mechanical, electrical, and heating systems, aiming to reduce long-term maintenance and operational costs.

9. If your proposal involves currently-owned Town assets, explain which ones.

The 1821 Meeting House is a Town owned asset on the municipal campus.

10. What community support does your proposal have?

The Town Meeting Vote in April 2017 authorized the Selectboard to accept the property. The Church has been part of the visioning for the Municipal Campus, supported by the Connecting Community Initiative. Since the Town's acceptance of the structure, support for its future reuse—through funding and feasibility analyses—has remained strong and consistent. At the CPC public hearing, the reuse of the building was identified as a community priority and several individuals placed stars indicating support for revitalization.

11. If any Town boards or committees support your proposal, provide written endorsements.

Attached is the Deerfield Historical Commission motion to accept the structure.

12. How would the proposal meet all requirements for disability accessibility?

The engineering analysis will assess necessary structural upgrades to ensure the Meeting House complies with the Americans with Disabilities Act and the Architectural Barriers Act, while also exploring alternatives that go beyond minimum code requirements by incorporating universal design principles.

13. If your proposal will reclaim abandoned or previously developed resources, please explain.

N/A

14. If there is a volunteer component to your proposal, which could offset the need for CPA funds, what volunteer activities have been completed or pledged and by whom?

N/A

15. How will this proposal conserve energy or other resources?

From this study, a large component is to evaluate building systems upgrades necessary for reuse. The existing systems are decades old and pending the cost of structural repair will likely require more energy efficient upgrades to meet code.

16. What considerations does your proposal include for vehicle and bicycle parking?

Parking is shared with other municipal campus buildings which includes current bike racks at the library and future bike racks at the 1888 renovation.

17. What considerations does it include for public transportation?

The meeting house is less than 0.5-miles from the FRTA and PVTA bus stops located by the Town Common.

Applications Due: November 1, 2024*Category: HISTORIC PRESERVATION QUESTIONNAIRE***1. Does your proposal address property that is already listed on the State Historic Register?**

No

2. Has the property been determined by the Deerfield Historical Commission (DHC) to be significant in the history, archeology, architecture or culture of the Town of Deerfield? If so, please provide verification from DHC.

Yes. Approved meeting minutes from the September 2025 DHC meeting are attached hereto. DHC also created the attached MHC Form B to include the property on the state inventory back in 2012 and 1978 (Attachment B).

3. Please explain the situation if the property is in danger of being demolished.

The building is not at risk of being demolished, the Town is actively looking toward revitalization and reuse.

4. Are there potential archaeological artifacts at the site?

N/A

5. Has the property been noted in published histories of the town or county?

Yes. Several bibliographic and/or references are included in the attached Form B. Peter Thomas, a local resident and archaeological and historical researcher, also provides additional information on his website - [Peter A. Thomas, Ph.D - Churches](#).

6. Could the property be converted for a new use while retaining its historic quality?

Using SOI standards to restore the exterior of the steeple will retain historic character and prevent further damage to the exterior and interior of the tower. The structural assessment will evaluate interior work that may be needed to support the safe reuse of the meeting room flooring as the library transitions to its new space.

7. Is the owner also interested in preserving the historic integrity of the property?

Yes. We anticipate a preservation restriction on the property.

8. What are the important historic aspects of the property?

The meeting house is the oldest public building still standing in the village center and was the first church built in South Deerfield; constructed in 1821. It was first constructed about 0.5-miles north of the current Frontier Regional School and moved to its current location in 1848. A more thorough historical narrative is attached in Form B.

9. Was a known architect of the era involved in the design of the property?

The meeting house is the oldest public building still standing in the village center and was the first church built in South Deerfield; constructed in 1821. It was first constructed about 0.5-miles north of the current Frontier Regional School and moved to its current location in 1848. A more thorough historical narrative is attached in Form B.

10. Did the property ever play a documented role in the history of the town?

With a legacy spanning over two centuries, the iconic property has played a documented and enduring role in the history of South Deerfield. As the central village's first church, the property has long served as a community gathering place, hosting a wide range of religious services and community events. The emblematic Town Clock is a defining feature in the Town's skyline. Most recently, the property has been the temporary home of the Tilton Library.

11. Is the owner willing to have a permanent restriction attached to the property? Please provide a statement of such.

Yes. The current deed to the Town includes use restrictions for municipal purposes (*...including, but not limited to open space and recreational use, senior center and community center use, and building and maintenance of affordable housing units, and the leasing of the Property or a portion of the Property for municipal use*). A permanent historic restriction could be placed on the property in addition to the use restriction.

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Attachment A - Property Information



1821 Meeting House

71 N. Main Street Deerfield, MA



1 inch = 100 Feet

www.cai-tech.com

October 29, 2025



Map 169, Lot 11 - Owned by the Town of Deerfield - Assessed Value: \$968,000

- Property Line
- Public Road
- Property TIC

Property Description:

71 North Main Street is approximately 0.55-acres sitting in the heart of Town at the municipal complex near the South Village Center. The parcel is predominantly occupied by the 6,550 sq foot building with a small front lawn and shared parking/bicycle racks with the neighboring 1888 Municipal Office Building and Tilton Library. Sidewalks connect the property to nearby Franklin Regional Transit Authority and Pioneer Valley Transit Authority bus stops near the Town Common.

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

Unofficial Property Record Card - Deerfield, MA

General Property Data

Parcel ID **169 11**
 Prior Parcel ID **--**
 Property Owner **TOWN OF DEERFIELD**
 Mailing Address **8 CONWAY STREET**
 City **S DEERFIELD**
 Mailing State **MA** Zip **01373**
 ParcelZoning **CVR**

Account Number **2291**
 Property Location **71 NORTH MAIN ST**
 Property Use **TOWN IMPROVD**
 Most Recent Sale Date **8/31/2018**
 Legal Reference **7248-71**
 Grantor **ORTHODOX SOCIETY,**
 Sale Price **1**
 Land Area **0.550 acres**

Current Property Assessment

Card 1 Value Building Value **826,100** Xtra Features Value **6,600** Land Value **135,300** Total Value **968,000**

Building Description

Building Style **CHURCH/SYN**
 # of Living Units **1**
 Year Built **1821**
 Building Grade **GOOD**
 Building Condition **Average**
 Finished Area (SF) **6556**
 Number Rooms **0**
 # of 3/4 Baths **0**

Foundation Type **MASONRY**
 Frame Type **WOOD**
 Roof Structure **GABLE**
 Roof Cover **ASPHALT**
 Siding **VINYL**
 Interior Walls **PLASTER**
 # of Bedrooms **0**
 # of 1/2 Baths **2**

Flooring Type **SOFTWOOD**
 Basement Floor **EARTH**
 Heating Type **FORCED H/A**
 Heating Fuel **OIL**
 Air Conditioning **0%**
 # of Bsmt Garages **0**
 # of Full Baths **0**
 # of Other Fixtures **1**

Legal Description

Narrative Description of Property

This property contains 0.550 acres of land mainly classified as TOWN IMPROVD with a(n) CHURCH/SYN style building, built about 1821 , having VINYL exterior and ASPHALT roof cover, with 1 unit(s), 0 room(s), 0 bedroom(s), 0 bath(s), 2 half bath(s).

Property Images



Disclaimer: This information is believed to be correct but is subject to change and is not warranted.

Attachment B - MHC Form B

FORM B - BUILDING

2026 CPA Application
 MASSACHUSETTS HISTORICAL COMMISSION
 MASSACHUSETTS ARCHIVES BUILDING
 220 MORRISSEY BOULEVARD
 BOSTON, MASSACHUSETTS 02125

Recorded by: 1821 Meeting House
Organization: Deerfield Historic Commission
Date (month / year): 09/2012

Assessor's Number USGS Quad Area(s) Form Number

| | | | |
|------|------------|---|---|
| none | Greenfield | 2 | 2 |
|------|------------|---|---|

Photograph



Town/City: Deerfield

Place: (neighborhood or village):
 South Deerfield

Address: 71 North Main Street

Historic Name: First Congregational Church of South Deerfield

Uses: Present: Church

Original: Church

Date of Construction: 1821

Source: History of the Churches...by Packard (1854)

Style/Form: Greek Revival

Architect/Builder: Not known.

Exterior Material:

Foundation: granite

Wall/Trim: Wood clapboard

Roof: asphalt

Outbuildings/Secondary Structures:

Chapel hall attached

Major Alterations (with dates):

Church building enlarged by 20' in 1855

Town clock installed in the steeple tower Aug. 1914

Addition to rear of church in 1923.

bdg improvements interior and exterior, 1968

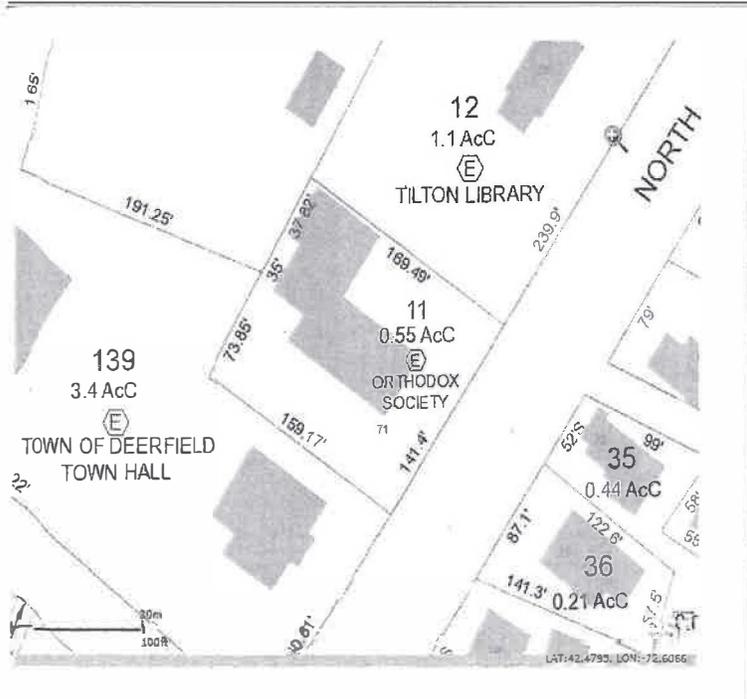
Condition: very good

Moved: no yes **Date:** 1848

Acreage: .550

Setting: Sits on scenic North Main Street, between the Tilton Memorial Library and old Center school, now the senior center

Locus Map



INVENTORY FORM B CONTINUATION SHEET

2026 CPA Application

TOWN

ADDRESS
1821 Meeting House

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125

Area(s) Form No.

| | |
|--|--|
| | |
|--|--|

Recommended for listing in the National Register of Historic Places.
If checked, you must attach a completed National Register Criteria Statement form.

Use as much space as necessary to complete the following entries, allowing text to flow onto additional continuation sheets.

ARCHITECTURAL DESCRIPTION:

Describe architectural features. Evaluate the characteristics of this building in terms of other buildings within the community.

This is a 2 story Greek Revival Church which sits on scenic North Main Street, between the Tilton Memorial Library and the old Center School which is currently the senior center. It has a pedimented portico supported by Tuscan columns, 3 double doorways, and engaged corner pilasters. It has a tower clock in the belfry with spire and a granite foundation. It sits a few doors down from the St. James Church which is currently for sale and a few doors north of the center of town.

HISTORICAL NARRATIVE

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 was the first church built in South Deerfield...Revival in 1826...Rev. Benjamin Rice was the first pastor. The Congregational church was founded in 1818 when members in the village separated from the Sunderland Congregational church. They first met at the Monument school until 1821 when a church was erected about 1/2 mile north of the current Frontier High School. It was moved to its present site in 1848 which was a 3 month venture. A group broke away at the same time and formed the Monument Church, near the Bloody Book monument. In 1865 the two churches unified and the church was enlarged by 20 feet and rededicated. In 1876 a chapel hall was built directly across the street for Sunday school and Ladies Society meetings. In 1923 a Parish House was designed by Karl Putnam, architect in Northampton and built by contractor P.M. Tuemey of Greenfield. This is a semi-detached building which consists of an auditorium, social room, kitchen, cloak rooms, bathroom and storage at the northwest corner of the church at a cost of about \$17,000. In 1924 this building was sold to the Masons for their hall and in 1996 it was sold again and is now a bookstore called Meetinghouse books. With funds from the sale, an addition was put onto the rear of the church building. In the late 1960s, improvements were made to the building which included a new heating system, roof, and interior repainting.

The building is still a church and has dinners to raise funds to maintain the church. They also have tag sales, allow the Tilton Memorial Library to use for their book sales, and host plays. Other use includes Weight Watcher meeting place.

With the St. James Church up for sale and I believe recently sold and the Senior Center (old Center School) needing serious repairs, this is a place where meetings can take place and local events can happen.

I believe the church has canned good Sundays to support our local food pantries and contributes to other missions and benefits the community as a whole. Their membership is significant and they recently acquired a new minister after having the same minister for a number of years.

BIBLIOGRAPHY and/or REFERENCES

- Deerfield Historic Commission. MHC Form B (1979) never submitted.
- Jones, Irmarie. Franklin County Churches: Church Prominent in Village, Nov. 2, 1979 article. Greenfield Gazette and Courier newspaper. Article dated August 15, 1914.
- Loesch, Robert K., Rev. History of the New England Meetinghouse. Paper. In PVMA Library: (Deerfield Town Papers, Meeting House and Church, Second Church, Box 6 folder 9.)
- Packard, Rev. Theophilus, Jr. History of the Churches and Ministers and of Franklin Association... (Boston, 1854) PVMA Library: OO-Coun 11590
- Greenfield Recorder- South Deerfield. "To Start on Parish House." October 17, 1923.

clock 1914

The Congregational Church of South Deerfield
c/o Diane Dorsey, Pastor
Main Street
South Deerfield, Massachusetts

November 7, 1979

Dear Rev. Dorsey,

At a meeting last evening of the Deerfield Historical Commission, several members commented very favorably about Irmarie Jones' news article appearing in the November 3, 1979, issue of the Greenfield Recorder which dealt with a brief history of the church and its present facilities. The community in general appreciates seeing a newly applied coat of paint to augment its attractiveness.

As a matter of information, the building was inventoried last December and its "Form B" (identified in Area 2, # 17) was forwarded for the records of the Massachusetts Historical Commission, thus a necessary step in emphasizing its importance has been completed. Since the local commission is unanimously in favor of the building's placement of the official list of the National Register of Historic Places, this letter is intended as a supporting document to any application now in process.

Very truly yours,

(for those present)

Louise Stange Bell
Regina Skalski Boron
Fred R. Bridges
George H. Melnik, Chairman
Lucy Yakim Sokoloski
Leslie L. Thomas

FORM B - BUILDING

2026 CPA Application

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

| | |
|-------------------------|-----------------------|
| In Area no. <u>2</u> | Form no. <u>17</u> |
|-------------------------|-----------------------|



South Deerfield

ss North Main St.

Cong. Church of So. Dfld.

ent use _____

ent owner _____

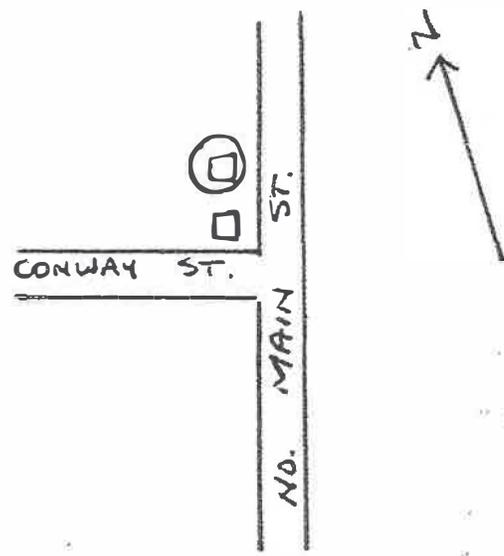
ription: _____

urce _____

2 story Greek Revival Churc

itect _____

in relation to nearest cross streets and other buildings. Indicate north.



Exterior wall fabric clapboard

Outbuildings (describe) _____

Other features pedimented portico; supported by 4 tuscan columns; 3 double doorways; engaged corner pilasters; belfry w/spire; granite foundation

Altered _____ Date _____

Moved _____ Date _____

5. Lot size:

One acre or less _____ Over one acre _____

Approximate frontage 40'

Approximate distance of building from street 20'

6. Recorded by J. Boucher

Organization Arts Council of Franklin County

Date 12/78

(over)

HISTORICAL SKETCH
by Franklin Mono (1968)

and
Leslie Thomas (1993)

Meeting House

The Town of Deerfield, of which the village of SOUTH DEERFIELD is now a part, was first settled by the English in the year 1663. It was originally granted by the General Court of Massachusetts to the Town of Dedham under the name of Pocumtuck in the year 1670.

The original grant was bounded, north by territory included in the towns of Colrain, Leyden, Bernardston & Northfield, east by the Connecticut River, south by Montague, Whately and Williamsburg, and on the west, Goshen, Ashfield, Buckland and Charlemont. Of this territory only about one fourth is within the present limits of the town, the rest being included in the adjacent towns of Greenfield, Shelburne, Conway and Whately.

On the very day that King Philip, the sachem of the Pocumtuck Tribe put his mark to the deed conveying all the above lands to the English forever, the people of Dedham, in Town Meeting assembled, imposed a tax upon these lands for the support of a Christian Ministry here, thus showing in a practical manner the estimate then placed upon the Church as a civilizing and Christianizing influence in the community. The first Congregational Church in this town was built at Deerfield about 1689, probably of logs, and the Reverend John Williams of Indian massacre fame was the first pastor, serving in that capacity, including his captivity in Canada for 43 years.

Bloody Brook, or as it is now called, South Deerfield, was first settled about 1750 and its inhabitants generally attended church services at the old street, until the settlement of Rev. Dr. Willard in 1807. Dissatisfaction with his religious views induced many to withdraw from that Church and some from this village united their fortunes with the church at Sunderland which was organized in 1718, but the difficulty of crossing the river, with some other reasons, inspired those living on this side of the river in South Deerfield to form an organization and build a church home of their own. Accordingly in the year 1817 sixty one members of the Sunderland Church requested dismission. A council was called consisting of the Church of Sunderland, represented by Rev. Rufus Wells, with one delegate from each church. Their request being granted, the Congregational Church of South Deerfield, consisting of 67 members was formed June 30, 1818. Their first services were held in a school house about 20 rods north of the monument on the west side of Bloody Brook. In 1821 a church building was erected on the ground where the house of Bernard O'Donnell now stands, about 40 rods north of the monument. It stood in that location until 1848 when it was moved to its present location on land owned by the late Artemus Williams, Esquire.

The moving of the Church, with other contributing causes, gave offense to some and a division of the church resulted. A new building was erected just east of the monument and the Second Congregational or Monument Church was organized January 25, 1848. The council organizing this church was composed of pastor and delegate from the third church in Hadley, the church in Easthampton, the church in Southampton and the pastor of the Second Congregational Church of Greenfield, Rev. L. L. Langstrath. Rev. Joseph Tyler, later a missionary in South Africa, supplied this church for the first year. On February 22, 1849 a unanimous call was given to Rev. David A. Strong. Prominent men in both churches became convinced that more could be accomplished for the cause of Christ by a union of forces than as two separate organizations. Negotiations were commenced and the union was consummated, the pastors and all the officials of both churches tendering their resignations.

The First Congregational Church building, after being removed to its present location, was rededicated in December 1848. Rev. George Lyman preached the sermon from Haggai 2:9 "The glory of this latter house shall be greater than of the former saith the Lord of Hosts and in this place will I give peace saith the Lord of Hosts."

In 1865, the date of the union, the church was enlarged by an addition of twenty feet, some changes made inside and again rededicated, Prof. Clark Seeley of Amherst College preaching the sermon from 1st. John 4:7 "Beloved, let us love one another, for love is of God, and everything that loveth is born of God." Again in 1886 the auditorium was renovated, the ladies bearing a large share of the expenses and now it compares favorably with other houses of worship in the vicinity. After the union of the churches the membership was 226.

Rev. Charles S. Brooks was installed in 1873 and dismissed in 1877. During his ministry and largely through his influence a long felt want in church work was supplied. A neat and convenient building was erected for church purposes, and as a home for the Ladies Aid Society, with a commodious hall in the second story. The Village Library was in the Church for many years.

The present Parish House was built in 1924.

Since Franklin Mono's sketch first appeared 25 years ago, many pastors have served our parish. Henry Rohrs, whose family still serves so faithfully in endless ways, lived in the parsonage until his tragic death in 1964; Evertt Robie retired here and then moved to Texas; Michael McGuire's youthful enthusiasm ended with his untimely death; Diane Dorsey engendered a wider perspective of social services before she left to pursue missionary endeavors; our present

pastor Federico Agnir has worked with James Ewen and others to revitalize our spiritual, financial, and community involvement.

Since April, 1990, parishioners have oversubscribed a three-year Capital Fund Drive. Generosity has taken many forms. Luckily this unfailing support extends into many areas of faith and service.

When the Rev. Dudley Rose joins us on June 27, 1993 as guest preacher, he will be home among loving friends and family. Dudley was baptized and confirmed in this church on December 2, 1979. Shortly after graduating from Harvard Divinity School, he was ordained here on September 18, 1983. He currently holds the position of Senior pastor of North Prospect UCC in Cambridge as well as Director of Field Education & Associate Director of Ministerial Studies at Harvard Divinity School. His personal achievements are based on the dedicated support of three generations from great grandfather Wesley, grandparents Clement and Beatrice, parents Corwin and Selma, down to his wife and children who share his gifts of service.

PASTORS

Rev. Benjamin Rice
 February 10, 1819-January 31, 1827
 Rev. Tertius S. Clarke
 October 3, 1827-September 6, 1833
 Rev. William M. Richards
 November 25, 1835-September 6, 1843
 Rev. Gideon Davis
 Supply Pastor
 Rev. William Thayer
 Supply Pastor
 Rev. Abraham Jackson
 October 22, 1845-June 7, 1847
 Mr. Lucius M. Boltwood
 Supply pastor
 Rev. George Lyman
 Supply Pastor
 Rev. Moses K. Cross
 Sept. 4, 1850-April 13, 1854
 Rev. K. Clarke
 1856, but from a "preference of his own"
 was not installed until June 27, 1859.
 Dismissed September 26, 1865
 Rev. E. O. Bartlett
 Supply 1866, Installed January 16, 1867
 Dismissed February 10, 1868
 Supply 1868-1869
 Reg. Edwin L. Jagger
 April 13, 1870-May 21, 1872
 Reg. Simeon Miller
 January 14, 1873-April 22, 1877
 Reg. Charles S. Brooks
 Supply Pastor during the year 1877
 Rev. Rufus Taylor
 July 2, 1878-December 11, 1879
 Rev. Spencer R. Bonnell
 Supply Pastor from April 1, 1880-1882
 Reg. Henry W. Eldridge
 May 3, 1883-December 23, 1884
 Rev. John C. Staples

Rev. Charles C. Bruce
 Supply Pastor Jan. 1, 1885-July 1887
 Rev. John Cowan
 Supply Pastor Jan. 1, 1888 to 1897
 Rev. Edward O.. Grisbook
 Supply Pastor from 1898-1902
 Rev. John Carruthers
 March 1, 1903-July 1, 1912
 Rev. Langley B. Sears
 October 22, 1912-December 31, 1918
 Rev. E. Jay Hanford
 May 13, 1917 to September 14, 1919
 Rev. Charles L. Stevens
 January 1, 1920-October 23, 1931
 Rev. Charles N. Lovell,
 February 7, 1932-July 1, 1941
 Rev. Frank R. Cullter
 November 16, 1941-November 27, 1949
 Rev. Ernest L. Brown
 October 1, 1950-December 21, 1952
 Rev. Henry J. Rohrs
 June 1, 1953-August 15, 1964
 Rev. Eugene Biddle
 Served as Assistant Pastor June 1,
 1953-June 23, 1957
 Rev. Everett M. Robie
 March 15, 1966-March 31, 1975
 Rev. Michael Maguire
 June 1, 1975-July 19, 1978
 Rev. James Smith
 Interim Pastor, August 10, 1978-March 25,
 1979
 Rev. Diane Dorsey
 April 1, 1979-July 31, 1986
 Rev. Charles Separk
 Interim Pastor November 2, 1986-1988
 Rev. Federico Agnir
 August 1, 1988 to the present

THE ANNIVERSARY COMMITTEE

Richard Woods, Chairman
 Rita Bennett
 Meg Kane
 Evelyn Mono
 Martha Olmstead
 Les Thomas
 Rev. Federico Agnir

The Committee invites everyone to view the anniversary exhibits in the front of the church.

A lunch, courtesy of the Committee, will be served in the Green Room for everyone after the service. A program of entertainment and commemorative activities will follow. All are invited.

Attachment C - DHC Minutes 9.8.2025

DEERFIELD HISTORICAL COMMISSION/DHC**September 8, 2025**

CALL TO ORDER: 5:29 PM

PRESENT: Ben Bensen, Chair; Geoff Brown, Bonita Conlon, Henrietta Kocot, Analee Wulfkuhle

ABSENT: Jason Clarke

GUESTS:

Candidates: Jennie McAvoy, Rocky Foley, Paul Olszewski

Town Planner: Alex Galloway

AGENDA:

1. CLERK'S REPORT –
 - a. Minutes August 11, 2025 – approved as corrected
 - b. Connecting Community Initiative/CCI report
2. BUDGET REPORT: No monies expended since last meeting
3. OLD BUSINESS:
 - a. Candidates for membership: Brief introductions by the candidates
 - b. Old Deerfield Burial Ground: Perimeter tree work has been completed; no work is happening (or planned?) on the interior
 - c. Mill Village Cemetery: repair of approx.. 30 stones
 - No response from Facebook request for information from relatives/neighbors
 - Application for Community Preservation Committee/CPC funds is being prepared (**Ben**)
 - d. Communication with Greenfield Historical Commission re: Form B's
 - **Jason** to report
 - e. Status of Tack painting

- Chris Harris is working with 350th Committee re: possible restoration and hanging

4. NEW BUSINESS:

a. Discussion with Open Space Committee re: Old Deerfield Common

- Issue: Deerfield Academy banners could give the impression that the Common is part of Deerfield Academy
- Open Space Committee would like to have identifying signage indicating that the Common is part of [unified] Deerfield (“Old” *and* “South”)
- **Ben** will attend a meeting with member(s) of the Open Space Committee and representative(s) of Deerfield Academy. **Geoff** will also attend.

b. John Nove’s memorial Service

- Sunday, October 26, 2-4PM, White Church Community Center, Old Deerfield
- Ms. Liz Sorenson, John’s partner, requests a representative from our Commission to speak at the service.
- Ben, Bonita and Henrietta will work as a subcommittee to recommend our committee involvement

c. Old Deerfield Burial Ground trees in central, most historic area

- Request that **all committee members** visit the burial ground to assist with further discussion
- Jason Kicza, Northeast Trees, is known by committee members and may be a good vendor to remove necessary trees.
- **Henrietta** will research if a cemetery sign still is available for use

d. Commission files: Commission members may review contents of the files, make copies, etc. **Ben** will give Pat Martin a list of all people entitled to look at the records.

5. CORRESPONDENCE: none

a. Communication preferences of members: updated

6. OTHER MATTERS or INFORMATION not anticipated:

- a. 1821 Congregational Church – steeple and structural analysis
 - CPA funding application is in the process of being written. The property has not been listed with MA or Federal agencies as a certified historical site. Request to DHC to state we believe it to be of historical significance
 - Motion: that the “Deerfield Historic Commission recognize the 1821 South Deerfield Congregational Church located at 71 N. Main Street as a historic resource that is locally significant in the history, archaeology, architecture, and culture of the Town and [be] eligible for Community Preservation Act Funding”
 - Passed: 4 in favor, 1 abstain
7. DATE FOR NEXT MEETING: ~~October 13~~ (holiday); October 20, 2025
 - To consider: hybrid meetings, to allow others to attend. **Ben and Alex** to explore
8. CANDIDATES FOR MEMBERSHIP: thank you & dismiss; discussion and voting (one member and two alternate(s))
 - Recommendation to the Selectboard: Jennie McAvoy as Member, Paul Olszewski and Rocky Foley as Alternates.
 - **Bonita Conlon** volunteers as Alternate Clerk if the Clerk is absent
9. VOTE TO ADJOURN: unanimous at 6:54 PM

RESPECTFULLY SUBMITTED: Analee Wulfkuhle, Clerk

Attachment D – Budget Summary & Table

The budget and request herein are primarily based off two estimates provided by Valley Restoration LLC in 2024 and Structures North in 2023.

Valley Restoration LLC inspected the property and provided an estimate that serves as the basis for the detailed Clock Tower restoration work outlined in this application and cost estimate below. Within the estimate, there is discussion of the windows and plaster repairs which are omitted in this request. Those items may need to be addressed after the flooring and structural components are secured. Since this estimate will be approximately 2 years old at the time of bidding (if funded), we have added a 20% contingency given the unknown nature of the steeple repairs needed.

In 2023, when the Town repaired the balcony, the optional scope provided by Structures North included the Tower repairs and structural framing plans (~\$13,800), first floor load rating and change of use (~\$11,500), and Solar Panels on the Sanctuary South Roof (~\$9,400) with construction documents for future bidding; totaling (\$34,700).

The meeting house structural and systems engineering is an estimate based on recent engineering and building condition studies. Additionally, the engineering line items should be sufficient to develop the construction drawings and procurement documents. As a public building project, restoration would be subject to procurement requirements under M.G.L. Ch. 149 including prevailing wage and filed sub-bids.

Clock Tower Restoration & Structural Engineering

| Description of Work | Original Cost |
|--|----------------------|
| Tower Restoration | \$39,600 |
| Spire Shingles | \$13,900 |
| Weathervane Restoration | \$5,300 |
| Tower – Estimated Engineering | \$14,000 |
| Tower – Estimated Structural Repair | \$16,000 |
| Original Estimate | \$88,300 |
| <i>20% Contingency</i> | <i>\$17,700*</i> |
| Tower Subtotal | \$106,000 |
| Meeting House Structural & Systems Engineering | \$30,000 |
| Project Total | \$136,000 |

*Actual contingency is \$17,660 (rounded in budget table)

Attachment E – Timeline with Milestones

With several large Town construction projects anticipated over the 2026 calendar year, we anticipate a 1-year window to complete the project. The engineering and structural work for the clock tower may need to be completed prior to exterior treatments.

Summer 2026 – Engineering Procurement & Contracting

- Develop and post procurement documents for structural engineering.
- Select engineering firm and complete contracting.

Fall 2026 – Kick-Off Meeting & Analysis

- Structural and building systems analysis work will include site visits, time to analyze results, and develop conceptual plans.
- Based on the clock tower structural work necessary, we may need to evaluate the sequence of structural and exterior treatments.

Winter 2026 – Construction Procurement

- Bid out the clock tower structural and exterior rehabilitation/restoration work.
- Structural & Building Systems Analysis - finalize plans and evaluate alternatives.

Spring/Summer 2027 – Construction

- Tower rehabilitation/restoration work to be completed.
- Present engineering results at a public forum.



**Valley Restoration, LLC.
Historic Plaster Solutions, LLC.**

SteepleJacks and Historic Preservation
PO Box 665, Litchfield, CT 06759
Major Contractor 0903779
DCAMM 4729
CS-108467

Prepared by:
Paul Bastiaanse
General Manager
Valley Restoration
860-818-7022



Valley Restoration, LLC. Historic Plaster Solutions, LLC.

SteepleJacks and Historic Preservation
PO Box 665, Litchfield, CT 06759
MCO0903779
DCAMM 4729
CS-108467

Proposal for Restoration Services

South Deerfield Congregational Church
71 North Main Street
South Deerfield, MA. 01373

I. Introduction

Valley Restoration, LLC appreciates the opportunity to submit a comprehensive budget proposal for the restoration and renovation project at The South Deerfield Congregational Church. Our team has conducted an on-site inspection and detailed analysis, resulting in the following proposal for your consideration.

II. Scope of Work

The proposed scope of work outlined below is subject to adjustments as required, with the expertise of Engineers and Architects guiding the project implementation:

A. Steeple Exterior

- Gain access to steeple using our boom lift.
- Owner to provide specifications and drawings if required.
- Scrape and clean entire steeple using hand tools and light sand. HEPA Vacuum attachments will be used in order to reduce the amount of dust created by scraping. A 20' perimeter will be established around the base of the church with lead caution signs.
- Application of one (1) coat of Mad Dog Primer to entire steeple. (Maddogprimer.com)
- After proper curing time; caulk, glaze and seal all imperfections.
- Set and seal all exposed nail heads.
- Quote includes replacement of minor dry or wet rot. Anything that is extensive we will notify a designated Church representative before we begin work. Carpentry will be replaced as a base time and material. Note: Missing trim that was seen through walkthrough is included in this price.

- After proper curing, application of two (2) coats of Sherwin Williams Duration or equivalent. (Merrifield Paints of Rocky Hill, CT)
- Remove existing asphalt shingle roof at the spire. Install Grace Ice and Water Shield. Install GAF Timberline HDX Shingles with hip ridge. Color chosen by owner.
- Remove weathervane and restore at our shop.
- Option to restore Church front down to ground level.
- Option to restore windows...per window.
- Steeple structural issues should have a local engineer review current condition. Estimated price for engineer and structural repairs.

Interior

This report presents the findings from the inspection of the ceiling, specifically focusing on the lug and key plaster system. The purpose of this evaluation was to assess the current condition of the ceiling, identify any immediate safety concerns, and recommend appropriate conservation measures.

Condition Assessment

During the inspection, the following observations were made:

Age of Ceiling: The plaster ceiling exhibits signs of extensive aging, which is indicative of its historical significance yet necessitates careful treatment to preserve its integrity.

Brittleness of Plaster: The plaster material has been found to be very brittle. This brittleness poses potential safety risks, as it may lead to cracking or dislodgment if not properly addressed.

Recommendations for Conservation

To ensure the safety and longevity of the ceiling, it is recommended that the Historic Plaster Conservation Service (HPCS) system be employed for consolidation and preservation efforts.

Key points include:

Consolidation Technique: The HPCS methodology focuses on techniques that will both stabilize and “save” the existing plaster, ensuring that the historical character is retained while enhancing the structural integrity.

Work Scope: All efforts will be conducted in the attic space, requiring a thorough examination and addressing of all structural members supporting the ceiling. This may include reinforcements or repairs to ensure ongoing safety.

Next Steps

Please refer to the attached information packet concerning the Historic Plaster Conservation Service for detailed guidelines and methodologies. Upon successful repair of the ceiling, further plans can be made to restore the interior aesthetic of the space.

III. Budget Breakdown

| | |
|--------------------------------|--------------------|
| 1. Steeple Restoration | \$39,600.00 |
| 2. Spire Shingles | \$13,900.00 |
| 3. Weathervane Restoration | \$5,300.00 |
| 4. Front of Sanctuary | \$16,250.00 |
| 5. Windows | \$1,250 Per Window |
| 6. Estimated Engineering | \$7,500.00 |
| 7. Estimated Structural Repair | \$15,500.00 |

IV. Terms of Payment

Payment terms are to be determined (TBD). A certificate of insurance will be supplied prior to the commencement of any work. Our operations adhere to OSHA fall arrest system and employee safety regulations, with EPA certification for Lead Renovation (R-I-91919-20-00030).

V. Company Assurance

Valley Restoration, LLC is committed to excellence and client satisfaction. We have a strong portfolio of completed projects and a wealth of references available for your review. Do not hesitate to contact us for more information on past projects in your vicinity.

VI. Contact Information

For further inquiries or clarifications, feel free to reach out to me, Paul Bastiaanse, at any time via cell at 860-818-7022.

Thank you for considering Valley Restoration, LLC for this esteemed project at The South Deerfield Congregational Church. We look forward to the opportunity of collaborating with you.

Sincerely,

Paul Bastiaanse
 Valley Restoration, LLC
 SteepleJacks and Historical Preservation
 We are an Equal Opportunity/Affirmative Action Employer









60 Washington St, Suite 401
 Salem, Massachusetts 01970-3517
 P.O. Box 01971-8560
 T 978.745.6817 | F 978.745.6067
www.structures-north.com

January 27, 2023

Town of Deerfield
 Deerfield Municipal Offices (Room 126)
 8 Conway Street
 South Deerfield, MA 01373

Attention: Christopher Nolan, Assistant Town Administrator
 Email: ata@town.deerfield.ma.us

Reference: South Deerfield Congregational Church
 Structural Analysis and Design
 71 North Main Street, South Deerfield, MA

Dear Christopher:

We are pleased to submit this proposal for the Structural Engineering Consulting services for the structural investigation, design, and construction administration for repairs and possible renovations to the South Deerfield Congregational Church.

Structures North (John Wathne) visited the site on March 31, 2022 to make an initial observation of general structural conditions, and provided a brief summary in a letter dated April 13, 2022. The scope of repairs and possible renovations is described in your (undated) letter seeking quotes for this work, which we received from you via email on January 5, 2023. We (Jeff Reese) attended the site walk-through on January 13, 2023. Our understanding is that the scope is being phased based on priorities and availability of funds, as described below.

Scope of Included Engineering Investigation, Analysis, & Design Services: The scope of included engineering investigation, analysis, & design services shall be as follows:

- **Baseline work:**
 - **Investigation:** Further investigation and documentation of existing structural conditions related to both baseline design scope and option design scope:
 - Baseline scope: Failing roof trusses, and support of the balcony level from roof trusses.
 - Option scope: Tower framing, first floor framing Sanctuary floor load rating and repairs; solar panels on south side of Sanctuary roof.
 - For all investigations noted above, Structures North will not be removing any finishes or excavating any soils to expose hidden structure. Any contractors hired to remove finishes or excavate soils for us are to be hired by the Town, and are not included in this proposal. All investigations are limited to what is readily visible.

(continued on next page)

- Analysis and Design:
 - Provide structural analysis of existing conditions related to truss repairs, and determination of whether we recommend alternative balcony support structure that removes balcony load from roof trusses. Please note that we do not yet know the scope of possible tower repairs (rot or other damage to tower framing), and are not including this in the Base Scope or fee.
 - Provide schematic level design and an email summary documenting our recommended truss repairs and re-framing, including preliminary alternative balcony support recommendations (tower framing rot or other damage excluded from this Base Scope).
 - After the Town reviews and approves schematic design, further the design to provide Construction Documents involving structural framing plans, sections and details as CAD drafted documents, plus structural general notes or specifications.
- Optional work:
 - Analysis and Design:
 - **Option 1: Tower Repairs for Rot or Other Damage**, preliminary assumptions, to be revised after investigation phase:
 - Design of repairs for rot or other damage, and provide Construction Documents involving structural framing plans, sections and details as CAD drafted documents, plus structural general notes or specifications.
 - **Option 2: First Floor Load Rating & Change of Use:**
 - Part 1: Provide structural analysis of existing first floor Sanctuary framing for possible future removal of pews (fixed seating Assembly use, live load 60psf) and use as (moveable seating Assembly use, live load 100psf). Report load rating results to Town and preliminary, schematic level recommended strengthening, if required.
 - Part 2: After Town approves our schematic strengthening design, further the design to provide Construction Documents involving structural framing plans, sections and details as CAD drafted documents, plus structural general notes or specifications.
 - **Option 3: Solar Panels on Sanctuary South Roof:**
 - Part 1: Provide structural analysis of existing Sanctuary roof framing, and other framing along the load path of the roof framing involved in supporting proposed solar panels, to determine load capacity and ability to support solar panels. If solar panel (and related hardware or support structures above the roof) weights are not provided, we will make educated guesses about weights and loads that the Town will need to verify when solar panels are designed and selected. Report load rating results to Town and preliminary, schematic level recommended strengthening, if required. We will take into consideration that the Town is interested in adding insulation in the attic, which could change roof snow loads (due to warm vs cold roof in proposed vs existing conditions). Our work will only involve from the roof sheathing down, and does not include design of any special structures above the roof that support the solar panels directly.

- Part 2: After Town approves our schematic strengthening design, further the design to provide Construction Documents involving structural framing plans, sections and details as CAD drafted documents, plus structural general notes or specifications.

Scope of Included Engineering Construction Administration (CA) Services: The quantity of hours required for Construction Administration is highly dependent on quality of work and style of management of the contractor and shop detailers. As such, if the hours noted below are exceeded, additional services will be required. The scope of included engineering Construction Administration services shall be as follows:

- **Baseline Work:**
 - Shop Drawing & Submittal review, and Contractor Requests for Information review and response, with an allowance for up to **30** hours.
 - CA Site Visits to periodically observe construction and review general conformance with structural construction documents, and documenting our observations with an allowance for **24** hours (**3** site visits by one engineer per visit). We will not have a continuous presence on site, and owner-hired testing agencies are required for many inspections.
 - Construction Meetings: Virtual (Zoom, Teams, etc.) or small, structural-focused on-site meetings, with Covid-safety precautions enforced, scheduled for days when we already have planned site visits, with an allowance for up to **3** hours. We are assuming 0 additional hours of travel is required for these meetings. Virtual meetings are strongly preferred for Covid safety.
 - Final Affidavit after the contractor has completed our structural punchlist.
- **Optional Work:**
 - **Option 1:** Tower repairs preliminary assumptions, ***to be revised after investigation phase:***
 - Shop Drawing & Submittal review, and Contractor Requests for Information review and response, with an allowance for up to **10** hours.
 - CA Site Visits to periodically observe construction and review general conformance with structural construction documents, and documenting our observations with an allowance for **16** hours (**2** site visits by one engineer per visit). We will not have a continuous presence on site, and owner-hired testing agencies are required for many inspections.
 - Construction Meetings: Virtual (Zoom, Teams, etc.) or small, structural-focused on-site meetings, with Covid-safety precautions enforced, scheduled for days when we already have planned site visits, with an allowance for up to **2** hours. We are assuming 0 additional hours of travel is required for these meetings. Virtual meetings are strongly preferred for Covid safety.
 - Final Affidavit after the contractor has completed our structural punchlist.
 - **Option 2:** First Floor Load Rating & Change of Use:
 - Shop Drawing & Submittal review, and Contractor Requests for Information review and response, with an allowance for up to **10** hours.
 - CA Site Visits to periodically observe construction and review general conformance with structural construction documents, and documenting our observations with an allowance for **8** hours (**1** site visit by one engineer per visit). We will not have a continuous presence on site, and owner-hired testing agencies are required for many inspections.

- Construction Meetings: Virtual (Zoom, Teams, etc.) or small, structural-focused on-site meetings, with Covid-safety precautions enforced, scheduled for days when we already have planned site visits, with an allowance for up to **2** hours. We are assuming 0 additional hours of travel is required for these meetings. Virtual meetings are strongly preferred for Covid safety.
- Final Affidavit after the contractor has completed our structural punchlist.
- Option 3: Solar Panels on Sanctuary South Roof:
 - Shop Drawing & Submittal review, and Contractor Requests for Information review and response, with an allowance for up to **10** hours.
 - CA Site Visits to periodically observe construction and review general conformance with structural construction documents, and documenting our observations with an allowance for **8** hours (**1** site visit by one engineer per visit). We will not have a continuous presence on site, and owner-hired testing agencies are required for many inspections.
 - Construction Meetings: Virtual (Zoom, Teams, etc.) or small, structural-focused on-site meetings, with Covid-safety precautions enforced, scheduled for days when we already have planned site visits, with an allowance for up to **2** hours. We are assuming 0 additional hours of travel is required for these meetings. Virtual meetings are strongly preferred for Covid safety.
 - Final Affidavit after the contractor has completed our structural punchlist.

Scope of Specifically Excluded Engineering Services: Specifically excluded scope of work is as follows:

- Any work not specifically listed in the various sections above.
- Contracting with the Testing Agency who does all testing and day-to-day inspections during CA phase.
- Redesign for existing conditions that had been hidden during design phase, uncovered during the course of construction.
- Investigation, evaluation, reinforcement, or modifications of structure beyond the areas that are specifically noted in the Scope of Included Engineering Services above.
- Redesign for "value engineering" or for architectural or other changes that alter the structural design shown on our Schematic Drawings.
- Design of temporary shoring, needling, and bracing, temporary structures and any other construction means and methods
- Site visits beyond the number stated in the packages noted above.
- Engineering Construction Administration Services beyond the quantity of hours stated above.
- Redesign due to contractor error.
- Structural repairs due to demolition beyond intended limits, or repairs due to damage to the structure caused by contractor's demolition activities.
- Improvements to the existing building lateral resistance for seismic or wind.
- Design of deep foundations for poor soils, and design of reinforcing or repairs to the existing foundations. Geotechnical Engineering or soils evaluation, or redesign due to geotechnical or soils information revisions. We will be assuming that conventional shallow foundations are acceptable for this site, with a soil

- bearing capacity of 3,000 pounds per square foot, to be verified by a soils testing agency/building inspector during construction (if required).
- Reinforcement or modifications of structure beyond the areas that are specifically noted in the packages above. (See provision under additional services, below). Please note that lack of comment on our part regarding structural performance of the remainder of the building not directly impacted by this work does not imply that it is in good structural condition. This includes the building's lateral load resisting system.
 - Construction cost estimates and bid services.
 - Shop drawings.
 - Design for non-structural issues such as, but not limited to: fire ratings, fire safety, egress issues, ADA compliance, insulation ratings, and other architectural, mechanical, electrical, or plumbing issues.

Professional Fees and Payment Terms: Our fees for structural engineering services with the scope of work noted above are:

Our fee is proposed to be on an hourly basis. We estimate that the fee for this work will not exceed the following (direct expenses excluded and charged separately):

- **Baseline Scope: \$29,500.** Broken down by phase results in:
 - Investigation \$3,700 of the \$29,500 total.
 - Analysis & Design: \$16,900 of the \$29,500 total.
 - Construction Administration: \$8,900 of the \$29,500 total.
- **Option 1 (tower): \$13,800 preliminary estimate, to be revised after investigation phase.** Broken down by phase results in:
 - Investigation \$0 (to be performed under Base Scope)
 - Analysis & Design: \$9,300 of the \$13,800 total
 - Construction Administration \$4,500 of the \$13,800 total
- **Option 2 (1st floor): \$11,500**
 - Investigation \$0 (to be performed under Base Scope)
 - Analysis & Design: \$8,400 of the \$11,500 total
 - Construction Administration \$3,100 of the \$11,500 total
- **Option 3 (solar panels): \$9,400**
 - Investigation \$0 (to be performed under Base Scope)
 - Analysis & Design: \$6,300 of the \$9,400 total
 - Construction Administration \$3,100 of the \$9,400 total

Any materials testing and contractor assisted work will be billed in addition to the hourly fees, and will be estimated and provided to you before the costs are incurred.

Payment terms are per the attached "Terms and Conditions."

Additional Engineering Services: Additional structural engineering work will be performed when authorized by your office in advance. Additional services are those beyond the included services noted above, and may include (but are not limited to): redesign due to unforeseen conditions or increase/reduction in building size, redesign for value engineering or architectural changes, redesign due to fabricator or contractor error, additional site visits beyond those noted above as may be required by the Building Code, owner or building official. Additional engineering services and all hourly services will be charged at the standard billing rates of \$190 per hour for Principal/Sr. Engineer,

\$140 per hour for a PE-SER, \$135 per hour for Level II Engineer, and \$95.00 per hour for CAD designer.

Terms and Conditions: The attached Structures North Consulting Engineers, Inc. – Terms and Conditions are a part of this agreement. By signing this proposal, the client hereby acknowledges and agrees to these conditions.

Limitations of Liability: For any damage or cost resulting from error, omission, or other professional negligence in the performance of our services, the liability of Structures North Consulting Engineers, and its partners, employees, and subcontractors, to all claimants with respect to this project will be limited to an aggregate sum (including attorney’s fees) not to exceed \$150,000.⁰⁰ or our fee for consulting services, whichever is greater.

Kindly acknowledge your acceptance of this proposal by signing and returning the enclosed copy to us which shall constitute your authorization for us, including the terms and conditions, in order to proceed with the engineering services described herein.

We look forward to the opportunity to assist you with this project. Please contact us if you have any questions or would like to make any adjustments in scope or fee.

Respectfully Yours,

Jefferey J. Reese, PE
Structures North Consulting Engineers, Inc.

Accepted by:
Town of South Deerfield

Name, Title

Date

Attachment: Terms & Conditions

STRUCTURES NORTH CONSULTING ENGINEERS, INC. – TERMS AND CONDITIONS

SCOPE OF SERVICES: Engineer, as representative of Client, shall perform the Basic Services described in the attached Proposal. All services are performed solely for the Client, and no third party may utilize or rely upon them. Engineer makes no warranty, either expressed or implied, to Client or any third party, as to Engineer's findings, recommendations, plans, specifications, or professional advice. Engineer will perform the services pursuant to generally accepted standards of practice in effect at the time of performance. Services provided by Engineer under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

If Engineer's Proposal includes the performance of On-Site Observation services, then: Engineer shall visit the project at appropriate intervals during construction to become generally familiar with the progress and quality of Contractors' work and to determine if the work is proceeding in general accordance with the structural drawings and specifications prepared by Engineer. However, Client has not retained Engineer to make detailed inspections or to provide exhaustive or continuous project review and observation services. As such, Engineer does not, and cannot, verify or guarantee the performance of the construction contract by Contractors. Client understands and agrees that under no circumstances shall Engineer be liable or assume responsibility for Contractors' failure to furnish or perform their work in accordance with the drawings and specifications. Further, Engineer shall not, during any visits or as a result of any observations of construction, supervise, direct or have control over Contractors' work nor shall Engineer have authority over or responsibility for the equipment, means, methods, techniques, sequences, or procedures of construction selected by Contractors or health and safety precautions and programs incident to the work of Contractors or any failure of Contractors to comply with laws, rules, regulations, ordinances, codes, or orders applicable to Contractors furnishing and performing their work.

If Engineer's Proposal includes the Review of Contractors' Submittals, then: Engineer shall review shop drawings, samples, and other data which Contractors are required to submit, but only for the limited purpose of checking for conformance with the structural design concept of the Project and compliance with the information given in the structural drawings and specifications. Such review or other actions shall not extend to accuracy or completeness of details, erection aids, quantities, dimensions, weights or gauges, fabrication processes, coordination with other trades, equipment, means, methods, techniques, sequences or procedures of manufacture (including the design of manufactured products) of construction, or to health and safety precautions and programs incident thereto. Engineer's review or other actions, as described above, shall not constitute approval of an assembly or product of which an item is a component, nor shall it relieve Contractors of (a) their obligations regarding review and approval of any such submittals; and (b) their exclusive responsibility for the equipment, means, methods, sequences, techniques and procedures of construction, including safety of construction. Engineer's review shall be conducted with reasonable promptness while allowing sufficient time in Engineer's judgment to permit adequate review. Engineer shall not be responsible for any deviations from the Contract Documents not highlighted in writing to Engineer from Contractor. Engineer shall not be required to review partial submissions, incomplete submissions, submittals that are grossly incorrect or non-responsive, submittals for which submissions of correlating items have not been received, or submittals not reviewed and approved by Contractor. If a submittal is not duly acceptable after its second submission, the client shall be responsible for all increased costs including, without limitation, for increased professional fees based on rates per our fee schedule.

HIDDEN CONDITIONS: A condition is hidden if concealed by existing finishes or it not capable of investigation by reasonable visual observation. If the Engineer has reason to believe that such a condition may exist, the Client shall authorize and pay for all costs associated with the investigation of such a condition. If (1) the Client fails to authorize such investigation after due notification, or (2) the Engineer has no reason to believe that such a condition exists, the Engineer shall not be responsible for the existing condition nor any resulting damages to persons or property.

HAZARDOUS MATERIALS: It is acknowledged by both parties that Engineer's scope of services does not include any services related to asbestos, lead, mold or other hazardous or toxic materials. In the event Engineer or any other party encounters asbestos or other hazardous or toxic materials at the jobsite, or should it become known in any way that such materials may be present at the jobsite or any adjacent areas that may affect the performance of Engineer's services, Engineer may, at his option and without liability for consequential or any other damages, suspend performance of services on the project until Client retains appropriate specialist consultant(s) or contractor(s) to identify, abate and/or remove the asbestos or hazardous or toxic materials, and warrant that the jobsite is in full compliance with applicable laws and regulations.

OWNERSHIP OF DOCUMENTS: All documents produced by Engineer under this Agreement shall remain the property of Engineer and may not be used by this Client for any other purpose without the written consent of Engineer.

DISPUTE RESOLUTION: Prior to the initiation of any legal or administrative proceedings, any claims or disputes arising from design, construction, or post-construction services between Client and Engineer shall be submitted to non-binding mediation.

FEES: Where the fee arrangement is to be on an hourly basis, the rates shall be those that prevail at the time services are rendered. Engineer's standard rate sheets are available upon request.

REIMBURSABLE EXPENSES: Reimbursable expenses shall be billed at one-point-one (1.1) times Engineer's actual expense. Reimbursable expenses include but are not limited to: reproduction; shipping; photographs; parking; tolls; mileage; hotel; travel; and meals.

CHANGES OR DELAYS: Unless the accompanying Proposal provides otherwise, the proposed fees constitute Engineer's estimate to perform the services required to complete the Project. Required services often are not fully definable in the initial planning; accordingly, developments may dictate a change in the scope of services to be performed. Where this occurs, changes in the Agreement shall be negotiated and an equitable adjustment shall be made. An Additional Services Contract will be submitted to Client. No additional services will be performed by Engineer without written authorization from Client.

Costs and schedule commitments shall be subject to renegotiation for unreasonable delays caused by Client's failure to provide specified facilities, direction, or information, or if Engineer's failure to perform is due to any act of God, labor trouble, fire, inclement weather, act of governmental authority, failure of transportation, accident, power failure, or interruption or any other cause beyond the reasonable control of Engineer. Temporary work stoppage caused by any of the above may result in additional cost beyond that outline in the accompanying Proposal.

BILLINGS/PAYMENTS: Invoices for Engineer's services shall be submitted at Engineer's option, either upon completion of such services or on a periodic basis. Invoices are due upon receipt, and with a maximum of 30 calendar days. If the invoice is not paid within sixty (60) days, Engineer may, without waiving any claim or right against Client, and without liability whatsoever to Client, terminate or suspend the performance of the service. In the event any portion or all of an account remains unpaid 90 days after billing, Client shall pay all costs of collection, including reasonable attorney's fees.

LATE PAYMENTS: Accounts unpaid sixty (60) days after the invoice date may be subject to a monthly service charge of 1.5 percent on the then unpaid balance (18.0 percent true annual rate), at the sole election of Engineer. In the event any portion or all of an account remains unpaid ninety (90) days after billing, Client shall pay all costs of collection, including all reasonable attorney fees.

MUTUAL INDEMNIFICATION: Engineer agrees, to the fullest extent permitted by law, to indemnify and hold harmless Client, its officers, directors, and employees (collectively, Client) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs to the extent caused by Engineer's negligent performance of professional services under this Agreement and that of its subconsultants or anyone for whom Engineer is legally liable.

Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless Engineer, its officers, directors, employees, and subconsultants (collectively, Engineer) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by Client's negligent acts in connection with the Project and the acts of its contractors, subcontractors, or consultants or anyone for whom Client is legally liable.

Neither Client nor Engineer shall be obligated to indemnify the other party in any manner whatsoever for the other party's negligence.

CERTIFICATIONS: Engineer shall not be required to execute any document that would result in its certifying, guaranteeing, or warranting the existence of conditions whose existence the Engineer cannot ascertain. Should Engineer be required by Client to execute any certification or verification regarding any Contractors performance, including, but not limited to, shop drawings, payment applications, or construction control affidavits, notwithstanding the language of such certification or verification, it shall not create any obligation or liability contrary to or inconsistent with the Scope of Services as set forth above.

TERMINATION OF SERVICES: Either Client or Engineer may terminate this Agreement at any time with or without cause upon giving the other party seven (7) calendar days prior written notice. Client shall within thirty (30) calendar days of termination pay Engineer for all services rendered and all costs incurred up to the date of termination, in accordance with the compensation provisions of this Agreement.

APPLICABLE LAWS: This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Massachusetts. Any litigation arising in any way from this Agreement shall be brought in the courts of that State.

LIMITATION OF LIABILITY: To the fullest extent permitted by law, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of Engineer and Engineer's officers, directors, partners, employees, agents and subconsultants, and any of them, to Client and anyone claiming by, through or under Client, for any and all claims, losses, costs, or damages of any nature whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract or warranty, express or implied, of Engineer or Engineer's officers, directors, employees, agents or subconsultants, or any of them, shall not exceed the total compensation received by Engineer under this Agreement, or another amount agreed upon when indicated under Special Conditions or in the body of the proposal letter.

TOWN OF DEERFIELD
FACILITIES CONDITION ASSESSMENT
OF
TOWN BUILDINGS

Congregational
Church

G | R | L | A

Gorman Richardson Lewis Architects

239 South Street
Hopkinton, MA 01748
(508) 544-2600

grlarchitects.com



Facilities Condition Assessment

Congregational Church

Table of Contents

1. **Executive Summary**
 - a. **Total Estimated Costs**
2. **Building Summary / Narratives**
 - a. **Gorman Richardson Lewis Architects (GRLA)**
 - i. **Architecture - Interior**
 - ii. **Building Envelope - Exterior**
 - b. **Garcia, Galuska & DeSousa (GGD) - MEP/FP**
 - c. **RRC Engineering (RRC) - Structural**
3. **Cost Matrices Summary**
 - a. **Gorman Richardson Lewis Architects (GRLA)**
 - i. **Architecture - Interior**
 - ii. **Building Envelope & Site - Exterior**
 - b. **Garcia, Galuska & DeSousa (GGD) - MEP/FP**
 - c. **RRC Engineering (RRC) - Structural**
 - d. **Site**
4. **Representative Existing Conditions Photographs**
 - a. **Gorman Richardson Lewis Architects (GRLA)**
 - i. **Architecture - Interior**
 - ii. **Building Envelope - Exterior**
 - b. **Garcia, Galuska & DeSousa (GGD) - MEP/FP**

Appendix A: Floor Plans

Appendix B: EagleView Reports

Executive Summary

The following Executive Summary provides a high-level commentary regarding the **South Deerfield Congregational Church** addressing the physical condition and functional adequacy of the existing building (based upon the detailed findings in the report) and recommendations for action. A general summary of the overall description of the assessment content, contributing engineers and consultants, list of buildings studies, methodology and organization follows thereafter.

Commentary

Observations of the existing building, building systems (structural, MEP/FP) and adjacent site, revealed that the **South Deerfield Congregational Church** has major physical and functional deficiencies.

Physical deficiencies include:

- deterioration of interior floor, wall and ceiling finishes;
- aged condition of kitchen equipment and furnishings now beyond the end of service life;
- severely deficient condition of basement areas which are currently unoccupiable and exposed to moisture rising from earthen floor;
- severe deterioration of exterior building envelope components...roof, walls, foundation, windows, doors, site (*see Building Envelope portion of this report for further information*);
- significant structural deficiencies regarding the steeple and exterior columns (*see Structural portion of this report for further information*);
- significant mechanical (HVAC) , electrical, plumbing and fire protection deficiencies (*see MEP/FP portion of this report for further information*).

Functional deficiencies include:

- non-conformance to accessibility requirements per ADA and 521 CMR throughout the building;
- non-conformance to requirements of the Massachusetts Building Code, in particular regarding guards at openings and balcony edges;
- change in level between the Sanctuary area and the Kitchen/ Office area;
- constricted layout of the Kitchen/ Office area;
- lack of walkways from rear entrance to public way;
- limitations in re-purposing existing interior spaces for something other than assembly space.

Town of Deerfield

Town Building Assessments

Congregational Church

As noted in the report, any renovation costing more than \$247,500 would require full compliance with the Massachusetts Accessibility Code (521 CMR) and any “major” renovation would trigger the need for a full building sprinkler system.

The following is a summary of the **2 approaches** to addressing the deficiencies as noted in the Commentary section of the Architectural (Interior) report, including the benefits and limitations of each approach and a final recommendation.

| Option | Description | Benefits | Limitations | Recommendation |
|--------|--|--|---|--|
| 1 | Renovations to the existing building to accommodate a change of use | <ul style="list-style-type: none"> Maintains the original building and its historic value. | <ul style="list-style-type: none"> The overriding limitation is the extensive renovation required to mitigate the many physical architectural, building envelope, structural and mechanical/electrical/plumbing/ fire protection deficiencies as well as code deficiencies detailed in the following report. A change of use will trigger conformance with Chapter 10 of the Massachusetts Existing Building Code; Renovations of the extent required will trigger the need for a full building sprinkler system and full building compliance with the Mass. Architectural Access Board Regulations (521 CMR); | <p>Not Recommended :</p> <ul style="list-style-type: none"> The cost for renovation will likely exceed the cost to replace the existing building with a new building designed for the targeted occupancy use. Repurposing of the existing building, in addition to the cost, will limit the needs of any use determined for the property. |
| 2 | Demolish existing building providing a clear site to make the open site available for development by the Town. | In addition to other needs yet to be identified, such an approach would provide the opportunity to relocate departments currently located in the other nearby municipal buildings, | <ul style="list-style-type: none"> Loss of the original building and its historic and sentimental value. | <p>Recommended:</p> <ul style="list-style-type: none"> Most cost-effective approach to dealing with a vacant town-owned building prominently located within the municipal campus. |

Town of Deerfield

Town Building Assessments

Congregational Church

| Option | Description | Benefits | Limitations | Recommendation |
|--------|-------------|---|-------------|---|
| | | allowing renovation/ re-purposing of those buildings as noted in the reports for the other three buildings on the campus. | | <ul style="list-style-type: none"> Provides an open site for development of a municipal use as part of the overall municipal campus. |

General Summary

Gorman Richardson Lewis Architects and our consultants were retained by the Town of Deerfield to provide a comprehensive study of 5 Town-owned buildings with the goal to provide key information for each building outlining the condition of:

- Site and Landscape Elements
- Architectural Elements / Building Envelope Elements
- Structural Components
- Mechanical, Plumbing, Electrical and Fire Protection Systems
- Hazardous Materials
- Accessibility/ Code Compliance

This Final Report will include summaries of each building for the disciplines noted above, prioritization of the recommended repairs or replacement of any element or system and estimated costs for each characterized by level of timeliness of the improvement(s): immediate (0 to 12 months), short term (1 to 3 years), medium term (4 to 10 years), and long term (11 to 20+ years) as a basis to assist the town in its planning for capital improvements.

The architectural/ engineering team consists of:

- Gorman Richardson Lewis Architects – Architecture and Building Envelope, Site, Landscape, Hazmat, Cost Estimating
- RRC Engineering – Structural
- Garcia/Galuska/DeSousa Consulting Engineers – Mechanical, Plumbing, Electrical, Fire Protection Systems

Town of Deerfield

Town Building Assessments

Congregational Church

The Town-owned buildings addressed in the Report include:

| | Building | Location | Bldg Sq Footage | Year Built | Year Renovated | Additions |
|---|---------------------------------------|-----------------|-----------------|------------|----------------|--------------------------|
| 1 | Municipal Office Building – Town Hall | 8 Conway Street | 12,046 SF | 1950 | 1993 | 1996 Police Dept |
| 2 | Municipal Office Building – Police | 8 Conway Street | 4,375 SF | 1950 | - | 1996 Police Dept |
| 3 | Old Grammar School Building – Senior | 67 North Main | 8,990 SF | 1888 | 1960s – 1970s | - |
| 4 | Public Works Garage | 9 Merrigan Way | 13,392 SF | 2014 | - | - |
| 5 | Congregational Church | 71 North Main | 13,065 SF | 1821 | 1990 & | 1960 Kitchen and Meeting |
| | | | | | | |

Methodology

During the months of February and March, 2020, GRLA and our consultants visited the **Congregational Church** on multiple occasions and made visual observations of the condition of the interior architecture of the building, including walls, ceilings, flooring, doors, windows/glazing, casework/furnishings, miscellaneous equipment, mechanical-electrical-plumbing finish components and fixtures, as well as code issues regarding building code and accessibility code and to assess the presence of suspected hazardous materials. In addition, a visual structural survey was undertaken to identify any significant structural issues or deficiencies.

Information gathering, field notes, and photography for this section of the Conditions Assessment Report were accomplished using Microsoft Teams to access floor plans on site, Microsoft Excel for recording field notes, PDF Viewer for annotating floor plans, and iPhone camera and Samsung Gear 360 for photos.

Condition Assessment Matrix

The objective of the Condition Assessment Matrix included in each section of the Report, is to provide a detailed summary of each condition/deficiency observed regarding the aforementioned disciplines for each building, a level of priority as to when the condition should be addressed, a

Town of Deerfield

Town Building Assessments

Congregational Church

time-range relating to the remaining service life of the item, a commentary describing action (if any) to be taken, an approximate quantity and an estimate of cost to implement the recommended action:

- **Issue #:** Each observed condition is assigned an issue number relating to the floor level where it is located (*eg: 1F-17 = First Floor – Item 17*)
- **Discipline:** one of the 5 primary areas of concentration:
 - Site/ Civil
 - Architecture
 - Building Envelope
 - Structural
 - Mechanical-Electrical-Plumbing-Fire Protection (MEP/FP)
- **Room Name:** Specific room or area where the item is located in the building floor plan
- **System/ Component:** one of the 22 categories describing the type of building component being addressed (wall, ceiling, flooring, etc.)
- **Existing Description:** detailed description of each observation
- **Photo #:** address of photo pertaining to the specific issue
- **Commentary/ Proposed Work:** Recommended action to be taken (if any)
- **Quantity:** quantity of the component/ system to be addressed and acted upon (*eg: 7,500 sf, 1 LS (Lump Sum), etc.*), used as a basis for the cost estimate
- **Unit:** unit of quantity (each, square feet, etc.)
- **Repair/ Replace Priority: 0-11 months/ 1-5 yrs/ 5-10 yrs/ 11-20 yrs:** level of priority for addressing each condition with estimate of anticipated construction cost to implement the recommended action within the timeframe relating to the level of priority (including Contractors' General Conditions, fees, etc. and escalation factors relative to 2020 dollars).

GRLA and our consultants want to thank Kayce Warren, Kevin Scarborough, and the Town of Deerfield for the opportunity to work with you on this Town Building Assessment. After having reviewed the information and findings herein, please contact us with any questions or follow-up information required.

Town of Deerfield

Town Building Assessments

Congregational Church

Sincerely,

GORMAN RICHARDSON LEWIS ARCHITECTS, INC.



Scott Richardson, AIA, LEED AP

Principal

Church - Total Estimated Costs

| Discipline | Cost Estimate | | | |
|---|------------------|--------------------|------------------|------------------|
| | 1 yr | 5 yr | 10 yr | 20 yr |
| Architecture | \$0 | \$1,150,000 | \$0 | \$0 |
| Building Envelope | \$0 | \$81,500 | \$2,500 | \$142,500 |
| MEP/FP/Hazmat | \$73,000 | \$219,500 | \$126,000 | \$0 |
| Structural | \$40,000 | \$2,500 | \$0 | \$0 |
| Site & Landscape | \$0 | \$20,500 | \$10,000 | \$0 |
| Totals | \$113,000 | \$1,474,000 | \$138,500 | \$142,500 |
| OPTION 2: Demolish Existing Building | | | | |
| | | \$100,000 | | |

Building Summary / Narratives

Facilities Condition Assessment Narrative

Architecture (GRLA)

Building Summary

South Deerfield Congregational Church

Address: 71 North Main Street, South Deerfield, MA 01373
Constructed: 1821
Renovations:
2020 Assessed Value: \$825,000
(Building Only)

Building Characteristics

Gross Floor Area:
Basement Level: 6,556 gsf
First Floor: 6,556 gsf
Second Floor: 1,736 gsf
Total Building Area: 14,848 gsf

780 CMR Mass. Building Code:

Use Group Classification: A-3 (Assembly/ Place of Religious Worship)
Construction Type: V-B

Building Envelope: *(see Building Envelope Section for more detailed information)*
Exterior Wall Assembly: Wood / Vinyl Siding ;
Windows: Vinyl Double Hung Insulating (operable);
Roofing: Asphalt Shingles;

HVAC: *(see MEP/FP Section for more detailed information)*
Heating Fuel: Forced H/A

Fire Protection: Unsprinklered; no fire alarm system.



Architecture – Interior

OVERVIEW:

In this section of the Facilities Condition Assessment Report, Gorman Richardson Lewis Architects (GRLA) presents a summary of observations regarding the condition of the interior architecture of the **South Deerfield Congregational Church** including commentary and recommendations for action to be taken. These observations of the interior architecture are organized according to the following “categories” in order to address the various components, systems and issues comprising the existing condition of the **South Deerfield Congregational Church** Interior:

1. General
2. Floors
3. Walls
4. Doors
5. Windows
6. Casework/ Furnishings
7. Ceilings
8. Equipment
9. Electrical/ Lighting Fixtures
10. Mechanical Fixtures
11. Plumbing Fixtures
12. Code Issues
13. Hazardous Materials

Built in 1821, the **South Deerfield Congregational Church** was originally located up North Main Street in the town of Deerfield. The Church was relocated in 1848 to its current location at 71 North Main Street in South Deerfield next to the Senior Center (former grammar school). The building held its last service on Sunday, January 8th, 2017 and the building has been vacant since. The Town’s DPW Director, Kevin Scarborough, noted that the building has been “winterized” to allow shutting down of the heating system without freezing pipe damage. Comprised of three levels—Lower (Basement) Level (currently uninhabitable), First Floor (housing the primary functions of the Congregational Church), and a Second Floor (only above the Sanctuary/seating), the Church has a record of being renovated three times: the kitchen and meeting room addition (1960); kitchen renovation (1990); and roof assembly over the rear entry ramp (2003).

The building is Type V-B construction with load-bearing exterior wood framed walls, interior wood frame construction, gable pitched wood-frame roof assembly with asphalt shingles and a stone/ cast-in-place foundation.

There are three main entries each with an associated porch, which face North Main Street. Each entrance leads to separate interior spaces including the Narthex 100, Entry Corridor 111, and the Auditorium 113. There are also three rear entrances, which include an entrance off the rear of the sanctuary (Rear Entry 104) with a wheelchair ramp, an entrance off the rear of the Hall (Rear Entry 115) and an entrance into the Stage 114 (Rear Entry 117). Rear Entry 115 and Rear Entry 117 are only accessible by walking through the landscaped portion of the property as there is no walkway linking the entrances to the parking area.

OBSERVATIONS:

Basement Level (see floor plan included in the Appendix of this report):

- The Basement Level consists of three areas corresponding to the 3 main portions of the church complex:
 - (1) Sanctuary
 - (2) Kitchen/ Office
 - (3) Auditorium.
- The basement areas under the Sanctuary and Kitchen/Office are unfinished spaces, separated by an enclosed interior staircase leading back up to the main level. The basement under the Auditorium was inaccessible but assumed to be a crawl space in similar condition to the other Kitchen/ Office Basement area.
- Basement (1) under Sanctuary:
 - Partially excavated with a full-height area extending the length of the Basement.
 - Floor is earthen with random rocks strewn about;
 - Exterior walls are primarily stone rubble with a “cap” of granite blocks extending above grade and visible from the exterior.
 - Mechanical equipment, including a furnace and ductwork servicing the Sanctuary and Kitchen/ Office wings above as well as bellows equipment servicing the pipe organ above are located at the west end of the basement. These units are currently out of service.
 - Two rows of brick piers with additional lally columns support the wood framed first floor assembly above.
 - The overall condition of the Basement is poor and not suitable for occupancy. The exposed earth floor allows moisture from ground water to migrate into the space and framing above.
- Basement (2) under Kitchen/ Office:
 - Fully excavated with packed earth floor;
 - Exterior walls are cast-in-place concrete up to floor assembly;
 - (3) oil tanks and hot water heater are located at the south side of the basement near the brick chimney foundation;

- Two rows of lally columns on raised concrete footings support the wood framed floor assembly above.
- The overall condition of this basement is serviceable for utility space but not for occupancy. The exposed packed earth allows moisture to migrate up from ground water into the space and framing above.
- Basement (3) under Auditorium:
 - Though inaccessible at the time, the foundation walls are of cast-in-place concrete.
 - The basement area is assumed to be in similar condition as Basement Area (2).

First Floor (see floor plan included in the Appendix of this report):

- The First Floor is approximately 3 feet above finish grade with access via stairs at the North Main Street entrances and rear entrance with a ramp providing accessible access to the Rear Entry 104 from the parking area.
- The First Floor consists of Narthex 100 accessed from the North Street side (front) of the building; the Sanctuary 101 on the east side of the building; the Lectern 102 and Organ Loft 103 which are associated inside the Sanctuary and adjacent to the Rear Entry 104, which is along a portion of the rear (east) side of the building with the accessible ramp for entry. Opposite of the Rear Entry is Corridor 105 which is adjacent to the interior stairs leading to the basement. Branching from the Corridor 105 is Office 106 and Restroom 107. Continuing Corridor 105 is Corridor 110 which branches into Study 108, Kitchen 109, Entry Corridor 111, Office 112, and Auditorium 113. Entry Corridor 111 provides a second means of entry and egress to the central spaces of the Church and the passageway faces the North Main Street side. At the rear of Auditorium 113 is Stage 114 which includes stage storage along the rear wall, Rear Entry 115, Restroom 116, and Rear Entry 117. Rear Entry 115 and Rear Entry 117 both do not have walkway paths leading to their entries.
- Although the condition of the First Floor is functional for its original purpose as a place of worship and community space, there are significant physical and functional deficiencies. Any major renovation or change of use would trigger substantial upgrades including full conformance with Mass. Architectural Access Board regulations (521 CMR) and the requirement of a full sprinkler system per M.G.L 148 sec. 26G, which requires that any existing building over 7,500 square feet that undergoes major alterations or building addition must be sprinklered. The finishes, furnishings and equipment are older and limited in service life. Access to the upper portion of the Sanctuary will need to be upgraded with proper handrails, handrail extensions, and landings.
- Specific conditions are noted in the Conditions Summary Matrix included in this report, but a general summary can be described as follows:
 - **Narthex [100]** is the primary entrance to the Congregational Church's worship space providing direct access to the Sanctuary.

- The Narthex lacks proper ADA accessible door(s) for entry into the church and into the Sanctuary. The current broadloom carpet is in good condition;
 - Walls are painted plaster or gypsum wallboard with wainscoting in which the current paint is chipping away.
 - The ceiling is a painted plaster ceiling which is chipping throughout.
 - The three (3) exterior double wood doors (4'-0" x 8'-9") have non-accessible knob-type hardware. These exterior doors have surpassed their serviceable life and do not meet current ADA standards. In order for these double doors to be ADA compliant they need to have a minimum of a 3' door leaf – in the case of these exterior doors the largest door leaf is only 2 feet in width.
 - There are three (3) interior doors that lead from the Narthex into the Sanctuary, one door in the center and one on each side. The center interior door is a double wide wood door (3'-9" x 8'-9") with leather door handles, deteriorated leather finish, and inoperable door arms and is in poor condition.
 - The two interior side doors are double wide wood doors (3'-2" x 7'-2") with the same hardware as the centered double door, also in poor condition.
 - The East (N. Main Street) side wall has two windows which have surpassed their serviceable life and replacement is recommended. These two windows are located partially beneath the two staircases that lead up to the second floor space of the Sanctuary. These windows are not equipped with tempered glass and there is no railing on that side of the staircase to keep occupants from falling towards these windows.
 - The two staircases leading up to the 2nd floor of the Sanctuary space are 2'-9" in width. Currently the handrails are 30" high, less than the required 34" – 38" high. These staircases are not enclosed which become problematic in the event of a fire near or around these staircases. Furthermore, these staircases both lead into the Narthex space therefore occupants will have no way to escape in the event of a fire in the Narthex.
- **Sanctuary [101]** is the primary gathering space for the Congregational Church. The broadloom carpet flooring is in good condition. The painted plaster/ gypsum wallboard walls with wainscoting are in fair condition with chipped paint observed in some places. The underside of the upper sanctuary (balconies) has cracking which is likely due to the age of the paint on the underside and movement of the balcony structure. The 11 windows located in the Sanctuary are vinyl double hung 4 lite obscure glass (3'-9" x 6'-8") which are in good condition. The 11 rows of pews are clean and in good condition. There is only one ADA accessible exit/entry in the Sanctuary which is at the Rear Entry 104. The Sanctuary space is adequate for the use that it is intended.

- **Rear Entry [104]** provides egress from Sanctuary 101, as well as some space for storage. Flooring is 12 x 12 vinyl composite tile (VCT) in good condition. Walls are painted plaster showing peeling/chipped paint. Exterior egress door is a wood door (3'-0") with push bar and inoperable door arm. This exterior door provides the main egress for handicap occupants and should be upgraded to provide ease of access. The interior door from the Sanctuary is a wood panel (3'-0") door in good condition. Conventional painted ceiling is beginning to chip and should be repainted. The clear distance between the outdoor and inner door is less than the 7'-0" required for accessibility.
- **Corridor [105]** provides access to the staircase to the basement, and the connection between the Sanctuary and the Kitchen/ Office areas, including Office 106 and Restroom 107. Flooring is broadloom carpet which is aged and in fair condition. Walls are painted plaster/ gypsum wallboard in good condition. The ceiling is a conventional plaster/ wallboard painted ceiling in good condition. Located opposite to Restroom 107 is a 3'-7" wide shelving unit located inside the wall with sliding doors which are currently inoperable. Heading towards Corridor 110 is a 6' long ramp which rises 7" to provide access from the Sanctuary level to the Kitchen/ Office level. With current ADA standards requiring a 1:12 slope, the ramp should be 7' long to meet the existing 7" height difference. Located off the side of the ramp is the entrance to Restroom 107, which interferes with the threshold of the Restroom. Relocating the door to Corridor 110 will be able to provide those who need it ample space and a smooth surface into the restroom. There are currently two openings at each end of the ramp which are 2'-8" wide and should be fully opened to the extent of the hallway to allow the most efficient circulation throughout Corridor 105. The staircase down to the basement of the Congregational Church is separated by a 3'-6" high gate which opens towards the staircase. This configuration is inadequate for proper access to the stairs and does not provide adequate separation between the 1st floor and the Basement level below.
- **Office [106]** is an office space accessed directly from Corridor 105 and Entry Corridor 111. Flooring is broadloom carpet which is aged and in fair condition. Walls are painted gypsum wallboard in good condition. Doors from both Corridor 105 and Entry Corridor 111 are wood doors with mail deposit slots, although they are aged they are in good condition. There is one 12 lite vinyl double hung window (1'-9" x 3'-8") in good condition. Ceiling is 12 x 12 seamed ceiling tiles which are in good condition. The room appears to be able to serve as an office for one occupant.
- **Restroom [107]** is single fixture unisex restroom located directly off of Corridor 105. As noted above the entry to Restroom 107 is inadequate as it is located along the ramp which requires the patron to step up from the ramp's sloped surface. Furthermore, the flooring is 9 x 9 resilient tile (suspected ACM) in fair condition. Walls are painted gypsum wallboard in good condition. The door is a wood door (2'-6") with appropriate locking mechanism in fair condition. Ceiling is a conventional painted ceiling in good condition. Plumbing fixtures include (1) floor mounted water closet with grab bars and one wall mounted sink and faucet assembly with mirror. Currently the width of the restroom is 4' which makes this restroom unsuitable for those who use wheelchairs. Currently, moving the located door will provide better access to the restroom, it will not make this bathroom compliant with ADA standards. Any renovation project greater than \$100,000 in value would require at the installation of at least one accessible restroom.

- **Study [108]** is located off of Corridor 110 and provides occupants a place for study and meetings. Flooring is 24 x 24 carpet tiles in fair condition. Painted plaster walls are in good condition with similar painted plaster walls located inside the storage closets but in poor condition due to cracking and water staining. Ceilings are conventional painted plaster/ wallboard ceiling with some cracking visible near lighting fixtures. The entry door is a double French door (4' wide opening) with (2) 10-lite leaves each being 2' wide in good-fair condition. There are (5) 3'-3" wide windows which are vinyl, 4 lite double hung in good condition. Located along the wall between the kitchen and study is a 7'-8" wide chimney jogging into the room which hosts a fireplace with a white mantle encompassing the fireplace, all in good condition.
- **Kitchen [109]** is located off of Corridor 110; a serving counter opens into the adjacent Auditorium 113. Flooring is epoxy in fair condition. Painted plaster walls are in fair condition with some chipping observed. Ceiling is 1'-6" ceiling tiles in poor condition, with missing tiles above the stove hood. The door from Corridor 110 is a wood panel door (2'-8") in fair condition. The door opening into Rear Entry 115 is a wood panel door (2'-8") in fair condition. There are 4 (2'-7" x 5') windows which are vinyl 4 lite double hung in good condition. Located along the walls are wood base cabinets with plastic laminate countertops in fair condition. These countertops include a 11'-6" countertop, 12'-6" countertop, and a 13' countertop. Located centrally in the kitchen is an island (4'-6" x 10'-6") with open storage underneath the stainless steel sinks; the countertop is plastic laminate. Kitchen equipment includes a six burner gas stove oven range, a two door convection oven, a stainless steel double basin kitchen sink assembly, a stainless steel single kitchen sink assembly, and a stainless steel single dishwashing sink; The large ventilating hood is above the stove and oven and is currently in need of repair to the connection holding it to the ceiling. There is no fire suppression installed in the hood. The kitchen equipment is old and at the end of its service life.
- **Corridor [110]** gives access to various spaces including: Study 108, Kitchen 109, Entry Corridor 111, Office 112, and Auditorium 113. Since Corridor 110 is a continuation of Corridor 105 they share the same finishes and condition. Flooring is broadloom carpet which is aged and in fair condition. Walls are painted plaster/ gypsum wallboard in good condition. The ceiling is a conventional painted plaster in good condition.
- **Entry Corridor [111]** is a central entrance that gives access to Office 106 and Office 112. Flooring is broadloom carpet which is aged and in fair condition. Walls are painted plaster/ gypsum wallboard in good condition. The ceiling is a conventional painted plaster in good condition. There is a wood double door (4' opening) with proper locking mechanism and door arm in fair condition. Near the exterior entry doors are 3 steps to the floor level of the Kitchen/ Office area.
- **Office [112]** is accessed directly from Entry Corridor 111 and Corridor 110. Office 112 features the same finishes as Office 106. Flooring is broadloom carpet which is aged and in fair condition. Walls are painted gypsum wallboard in good condition. Doors from both Entry Corridor 111 and Corridor 110 are wood doors with mail deposit slots, although aged they are in good condition. There is one 12 lite vinyl double hung window (1'-9" x 3'-8") in good condition. Ceiling is 12 x 12 concealed spline ceiling tiles which are in good condition. The room appears to be able to serve as an office for one occupant.

- **Auditorium [113]** is the main function space for hosting events outside of the Sanctuary space. The Auditorium provides its own entry on the North Main Street side of the Church, but additional means of circulation are provided from Corridor 110, Rear Entry 115, and Rear Entry 117. The flooring of the Auditorium is hardwood flooring with typical scratches and scuffs from years of usage. The walls are painted plastered walls with cracking observed above the windows. The exterior door is a wood panel double door (4') which is aged but in fair condition. There are (2) 24 lite vinyl double hung (3'-3" x 6'-4") windows located along the East (N. Main Street) side elevation, as well as three (3) 4 lite vinyl double hung (3'-3" x 7'-9") windows in good condition. The ceiling is a painted conventional plaster ceiling which is chipped and has some water staining. Although serviceable for its original use, the Auditorium is inaccessible for handicap access and beyond its service life.
- **Stage [114]** located at the west (rear) end of Auditorium 113 provides the raised platform for performances, speeches, etc. The flooring is a mix of hardwood flooring and stained plywood which may have been due to replacement for previously damaged hardwood. The existing hardwood which remains is noticeably scratched and scuffed as expected with stage flooring. The painted plaster/ gypsum wallboard walls are in good condition with chipped paint seen in a few locations. The ceiling consists of a painted conventional plaster in good condition. There are two small doors (2') which provide access up to the stage from Rear Entry 115 and Rear Entry 117. These doors are located on an angled wall which requires some maneuvering to access ,the stage. There are 3 steps up on both sides that lead to the doorway which are only 2'-7" wide. Located at the back of the stage is a storage space which is just an additional wall to provide a cove for storage. The stage is currently not accessible and would require access as part of a significant renovation.
- **Rear Entry [115]** is an entry space that also serves as custodial space. The flooring is a continuation of the epoxy from the kitchen in fair condition. The walls are painted gypsum wall / plaster with cracking and water damage between the kitchen, exterior wall, and vestibule. The exterior door is a wood door (3') with a single vision panel; aged but in fair condition. The door leading into Auditorium 113 is a wood door (3') which is also aged but in fair condition. There is one double hung 4 lite vinyl window (3'-6" x 4'-8") which is in good condition. Ceiling is a painted conventional ceiling with some cracking around the lighting fixture and at the water stained location noted above. For custodial purposes the rear entry has a typical mop sink in fair condition as well as needed shelving for supplies and storage.
- **Restroom [116]** is accessible directly off of Rear Entry 115. It is a small restroom only being 2'-8" in depth and 6'-8" in width. The flooring features hardwood flooring which is aged and worn. Walls are painted plaster with a small crack observed but otherwise in good condition. The door is a wood panel door (2'-6") with a typical locking mechanism and door knob in fair condition. There is one double hung 4 lite vinyl window (2'-0" x 3'-3") in good condition. Ceiling is painted conventional plaster with water damage and in fair-poor condition. There is an aged wall mounted sink in fair condition as well as a water closet which is in fair condition. The restroom is currently not accessible for handicap use.
- **Rear Entry [117]** is located off the backside of the stage and provides performers an access to the stage without requiring them to go through the Auditorium. The flooring consists of hardwood flooring similar to that of Restroom 116. The hardwood flooring is in poor condition due to

the flooring being met by exterior conditions initially upon an occupant's entry. The painted plastered walls are in fair condition requiring some cleaning and potentially a new coat of paint. The ceiling is a painted conventional ceiling with a large opening above the exterior door, likely due to deterioration of the plaster and potentially water infiltration. A double hung 4 lite vinyl (3'-6" x 4'-8") window is located at the bottom of the three steps headed down from the stage and is in good condition. Considering that this window is within 5' of the stairs the glass of this window should be tempered glass. The exterior door is a wood panel door (3') in fair condition. Access to grade is by a wooden set of stairs. The interior doorway leading up to the stage features a 6'-8" door cut down to 5' high and a 3 step staircase in front of the door to allow access to this portion the stage. Overall Rear Entry 117 is very restricted and not accessible for handicap egress.

Second Floor (see floor plan included in the Appendix of this report):

- The Second Floor is primarily balcony seating around 3 sides of the Sanctuary below to allow those who are seating above to be able to take part in the events taking place below. Access from the First Floor is by the 2 interior stairs: both from the narthex and at opposite ends. The configuration and finishes appear to be relatively unchanged from the time the building was constructed in 1821 aside from the windows which were replaced with vinyl double hung. The 2nd floor consists of the secondary sanctuary seating, the two staircases, and a corridor providing access up to the attic and bell tower. The second floor is currently not accessible.
- Specific conditions are noted in the Conditions Summary Matrix included in this report, but a general summary can be described as follows:
 - **Upper Sanctuary [201]** occupies the space above Sanctuary 101, providing additional balcony seating. Currently the flooring consists of original wide wood planks with some that are cracked, bowed, or have holes. The walls are a continuation of what is in the Sanctuary below which is painted plaster/ gypsum wallboard walls with wainscoting which has typically cracked paint. There are 12 windows throughout the Upper Sanctuary, 6 on each side. These windows are double hung 4 lite vinyl (3'-9" x 6'-8") windows with obscure glass, which are all in serviceable condition. The ceiling is a painted conventional plaster with some cracking and water staining throughout. The pews throughout the Upper Sanctuary match the standard of the Sanctuary pews below, with the exception of the cushions. These pews are in good condition but they are a difficult to access. When accessing the front row of pews patrons have to go down one step, the handrail which is provided is part of the pew and although they are aesthetically pleasing, they are only 1'-9" high and have a curve to them which makes them potentially unsafe as a guard if someone were to miss the step down. Furthermore, the step down is small and difficult to see, there is enough space to provide the proper step size needed to meet current building code standards. The current railing / knee wall between the second floor sanctuary and the sanctuary below is only 2' high. This is problematic for those who need the assistance of a railing to get to their seat and for those who potentially trip towards the railing. The Upper Sanctuary has hazards throughout the space and to ensure the safety of the occupants.

- **Corridor [202]**, located directly above the Narthex, provides the main access to the attic space and the bell tower above. Access to the attic is through a wall-mounted wooden ladder located next to the staircase. Flooring is unfinished 1-ft wide floor planks with some cracked, have holes, or are bowed. Walls are painted plaster up to the Upper Sanctuary's door height, the rest of the wall is unfinished. On the wall between Upper Sanctuary 201 and the corridor is an unfinished curved plaster wall with dates and significant events in which the bell was rung – dating back to the 1800's. The writing was done with a variety of writing utensils. The door leading into the corridor from Upper Sanctuary 201 is a wood panel door (3') with door knob and inoperable locking mechanisms. Currently the door can only open to 45 degrees because there is a loose floor board that is protruding and stopping the door from opening all the way. There are 7 windows facing North Main Street which are vinyl double hung (3'-9" x 9'-8"), non operable which have surpassed their serviceable life. The ceiling is a plastered ceiling which shows age throughout as well as cracking and water staining in areas around the bell tower above. Currently the staircase is open and the existing wood guardrail that separates the staircase from the corridor is only 1'-6" high posing a hazard. There are various raised platforms in the corridor which pose hazards to the already hazardous corridor.
- **Stair [01 and 02]** are the two means of access and egress to Upper Sanctuary 201 from the Narthex below. These staircases pose the same finishes and issues as each other so they are being discussed together. The flooring for the staircases are painted white wooden risers and black treads. Walls are painted plaster up to the Upper Sanctuary's door height, the rest of the wall is unfinished. There is a door at the top of each staircase which is a paneled wood door (3') with knob handle mechanism and an inoperable locking mechanism. There is a window at the top of each staircase which are double hung 4 lite vinyl (3'-9" x 6'-8") windows with obscure glass and in good condition. Currently these staircases are not up to current building code. The risers are 8 ½" high and 9 ½" in depth. The handrails provided are only on one side of the staircases and are only 33" high. As noted in Narthex 100, there is a window on the lower half of the staircase in which there is no handrail to keep patrons from falling into the window. The second floor is currently only accessible through the two staircases in the Narthex. Currently neither of these staircases are enclosed by a fire rated wall and would be problematic in the event of a fire being in the Narthex.

Attic/ Bell Tower:

- The Attic/ Bell Tower level is unoccupied with the attic space above the Sanctuary unfinished. Access to the Bell Tower is by a permanent ladder leading to the bell.
- The attic is unfinished, with the sloped roof making up the extents of the space. The underside of the roof structure is exposed and aged batt insulation at the floor. There are planks to walk upon throughout the attic space. There is a small window which provides the only lighting source during the day to this attic space. Along with absent of lighting this portion of the church is not heated.

- The enclosed bell tower features walls similar to that of Corridor 203's curved wall – with dates and significant events written on the unfinished wall.
- The bell tower / steeple is currently tilting towards the church, it is recommended that a study further into the condition and repairs necessary is to be done (*see Structure Assessment section of this report*).

Code Issues:

- Accessibility:
 - Non-compliance with Massachusetts Architectural Access Regulations (521 CMR) includes, but are not limited to, the following:
 - Exterior Ramp assembly at Rear Entry 104;
 - Interior doors clear width and hardware;
 - Sanctuary seating ;
 - Raised Lectern and Organ Loft;
 - Ramp at Corridor 105;
 - Restrooms 107 and 116
 - All entry doors;
 - 2nd Floor access and seating
 - Stage area
 - Life-Safety:
 - Railings at 2nd floor balconies are not required height for guards
 - Insufficient fire detection and alarm system;
 - No fire suppression system at commercial kitchen stove hood.

Hazardous Materials:

- Asbestos:
 - Visual inspection of interior materials indicated the presence of suspect asbestos containing building materials.
 - Prior to any demolition or renovation work, sampling and testing of suspected ACM is required to determine abatement requirements.
- Lead in paint:
 - Visual inspection of selected interior and exterior materials indicated the presence of suspect lead in paint or coatings on wood, brick, concrete, cement, gypsum board, plaster, and/or metal.
 - OSHA 29 CFR 1926.62 Subpart D, Lead, applies to all renovation/demolition where an employee may be occupationally exposed to lead.
- PCBs:
 - Visual inspection indicated the suspected presence of PCBs in glazing and frame window caulk, door frame caulk, and vent/louvre caulk, as well as an oil-based paints and floor.
 - Prior to any demolition or renovation work, sampling and testing of suspected PCB's may be required to determine abatement requirements.
- Mercury:
 - Presence of wall thermostats/temperature controls within the building. It is unknown what thermostats or other suspect mercury-containing equipment may be or may have been in the building since its construction. A more thorough survey of the entire temperature control system is necessary to evaluate the presence or absence of mercury, prior to decommissioning this system. Based on its known or suspected historical or current use, mercury may typically have been found in areas and materials within the building or brought into the building during its history.
- Radon:
 - Radon is a radioactive gas that has been found in homes and other structures all across the United States.
 - Testing of radon levels within the Church is required to determine indoor radon levels and measures required to mitigate radon levels down to <2 pCi/L.
- Mold:
 - Since mold requires water to grow, it is important to prevent moisture problems in buildings.
 - Measures should be taken to mitigate raised moisture levels within the basement due to exposed earthen floor of all basement areas.

COMMENTARY:

Although serviceable as a worship space since closing on January 8th, 2017, the building has both significant physical and functional deficiencies which would need to be addressed if it were to be reopened as a place of worship. If reoccupying the building would involve a change of occupancy, to something other than a place of worship, the provisions of the Massachusetts Existing Building Code, Chapter 10, would apply. In addition to repairs and other upgrades, renewed occupancy would likely require a full building sprinkler system and full accessibility per the Massachusetts Architectural Access Board Regulations (521 CMR).

Physical deficiencies include:

- deterioration of interior floor, wall and ceiling finishes;
- aged condition of kitchen equipment and furnishings now beyond the end of service life;
- severely deficient condition of basement areas which are currently unoccupiable and exposed to moisture rising from earthen floor;
- severe deterioration of exterior building envelope components...roof, walls, foundation, windows, doors, site (*see Building Envelope portion of this report for further information*);
- significant structural deficiencies regarding the steeple and exterior columns (*see Structural portion of this report for further information*);
- significant mechanical (HVAC) , electrical, plumbing and fire protection deficiencies (*see MEP/FP portion of this report for further information*).

Functional deficiencies include:

- non-conformance to accessibility requirements per ADA and 521 CMR throughout the building;
- non-conformance to requirements of the Massachusetts Building Code, in particular regarding guards at openings and balcony edges;
- change in level between the Sanctuary area and the Kitchen/ Office area;
- constricted layout of the Kitchen/ Office area;
- lack of walkways from rear entrance to public way;
- limitations in re-purposing existing interior spaces for something other than assembly space.

RECOMMENDATIONS:

Due to the significant physical and functional deficiencies of the existing building as noted above and the limitations of the existing layout to accommodate any new occupancy, costs for renovations required to both repair the building, provide code-compliance and accommodate an alternative occupancy would likely be off-set by the cost to demolish the existing building and construct a new building with an appropriate occupancy, either for the Town or for a private developer if the Town sold the property.

Since the building has been unoccupied since early 2017 without any future use identified, the recommendation is to demolish the existing building in its entirety to make the open site available for development by the Town. In addition to other needs yet to be identified, such an approach would provide the opportunity to relocate departments currently located in the other nearby municipal buildings, allowing renovation/ re-purposing of those buildings as noted in the reports for the other three buildings on the campus.

The issues addressed in each Narrative category above are further itemized in the attached Condition Assessment Matrix with priority level (0-11 months/ 1- 4 year/ 5- 10 years/ 11- 20 years) and associated costs for repair or replacement included for each issue. At the bottom of each matrix is a summary of the costs-- by building-- for each of the priority levels, providing a summary of anticipated costs—by building—for capital planning purposes for the next 20 fiscal years: 2020 through 2040.

Architecture – Exterior Building Envelope

OVERVIEW:

In this section of the Facilities Condition Assessment Report, Gorman Richardson Lewis Architects (GRLA) presents a summary of observations regarding the condition of the exterior building envelope of the **Congregational Church** including commentary and recommendations for action to be taken. These observations of the exterior envelope are organized according to the following “categories” in order to address the various components, systems and issues comprising the existing condition of the **Congregational Church** exterior:

1. General
2. Foundation
3. Cladding
4. Doors (exterior)
5. Windows (exterior)
6. Sealant
7. Flashing
8. Roof
9. Penetrations
10. Walkways/stairs/ramps
11. Code Issues
12. Site

OBSERVATIONS

Foundation

The foundation of the main church structure is granite stone with mortar joints. Overall, the condition of the foundation is in fair to poor condition with a few isolated areas in the front of the main church structure where a number of stones have become dislodged. This area of the foundation should be addressed in the next year to prevent further damage to the structure.

The adjacent building wings (Kitchen/ Office and Auditorium) have cast-in-place concrete foundations that are in acceptable condition with no major signs of deterioration. There are 11 locations where the foundation has openings that have been boarded up with plywood or have a window unit that is at the end of its service life. These locations are not providing a proper barrier to the weather and should be repaired with masonry to prevent future damage.

Cladding

The primary cladding system on the main church structure and adjacent buildings is vinyl clapboard with areas of painted flush wood boards and stucco as noted below. Overall, the condition of the vinyl clapboard siding is fair condition. However, in multiple locations there are cracks, holes, broken panels, and missing sections of the clapboard siding system. All of these locations should be addressed as soon as possible. They are allowing bulk water and other weather-related elements into the wall assembly where damage can be done. Further investigation at these locations should be done to determine if the wall assembly has been compromised. About 50% of the vinyl clapboard siding has a significant buildup of staining and organic debris, which is unsightly and is detrimental to the siding material.

On the front of the main church structure as well as the front of the Kitchen/ Office wing , the façade is clad with painted wood boards in a shiplap pattern. The boards are in fair condition which will require routine maintenance of the wood and paint to increase the life span of the façade.

The front of the Auditorium wing is clad with a stucco finish in fair condition.

The main four columns at the front façade of the Sanctuary are engaged into the façade. The columns are painted wood stave construction in fair condition. The wood base assemblies are severely deteriorated, and the shafts of each column are in need of scraping and repainting. As noted in the structural section of this report, the base of the far right column has lifted from its concrete base, indicating either the concrete stoop has settled low or the corner of the building has lifted.

The steeple of the Sanctuary building appears from the ground to be substantially intact but in need to scraping and repainting. However, as noted in the structural section of this report, the steeple is tilting toward the rear due, apparently, to a deteriorated structural elements at the northwest corner of the steeple structure. This is a serious condition which requires immediate attention.

Doors

The doors on the front of both the main church structure and the adjacent buildings are painted wood in deteriorated condition. The painted finish is peeling and the exterior surfaces are weathered and checking due to heavy exposure. The doors should be scraped, and the wood surfaces should be repaired prior to priming and painting. Continued maintenance will increase the life span of the doors. The door hardware for these doors is also deteriorated. Both the doors and hardware are beyond their service life and should be replaced.

Windows

Windows are primarily original wood double hung, single-glazed with wood muntins and fitted with aluminum storm/ screen units on the exterior. The primary wood windows are old and beyond their service life. The aluminum storm/ screen units are in fair condition.

Sealant

The sealant around the perimeter of the windows was in acceptable condition. About 25% of the sealant should be replaced in the next year as it has separated from one or both of the adjacent materials. In general, sealant should be inspected every few years as it generally has a life span of about 5 years. Old sealant should be removed and surfaces should be cleaned before applying new sealant to assure a longer life span.

Penetrations

Former pipe penetrations through the vinyl siding and currently filled with sealant should be properly covered with cellular PVC trim and flashing.

Roof penetrations were observed from the ground level only. Observations did not observe significant failure of the penetrations. A closer inspection to inspect sealants, metal flashings, rubberized boot covers, etc. should be done in the next few years as the roof assembly appears to be in fair condition.

Roof

The roof is traditional 3-tab asphalt shingles. On the back of the building, built up organic debris and organic growth can be observed from the ground. This should be removed from the roof immediately as this deteriorates the roofing system faster by not allowing it to properly dry out. The general field of the asphalt shingle roof appears to be in fair condition. A closer inspection of the flashings, penetrations, roof transitions, underlayments, shingle quality should be performed within the next 2-3 years. Interior visual inspection of the church found location where there is moisture staining. These locations should be investigated further to ascertain the source of the moisture.

Walkways/Stairs/Ramps

The concrete steps and stoop leading to the main entry doors of the Narthex are in fair condition with cracking and weathering of the finish. Risers exceed the 7-inch maximum height per Mass. Building Code (2015 IBC). The 2 wrought iron railings at the steps are not in compliance with the Massachusetts Architectural Access Regulations (521 CMR), lacking extensions at the top and bottom risers and not having a compliance cross-section at the handrail. The concrete walkway/ landing at grade and at the south side of the entry stoop is uneven with sections of concrete walk settling with vegetation coming up through the joints.

The wood step and deck assembly at the entrance to the Kitchen/ Office wing are also deteriorated and need repair and refinishing. The single handrail appears to be compliant with 521 CMR. A second handrail should be installed within 5 feet of the existing railing.

The wood steps and landing at the entrance to the Auditorium wing are severely deteriorated, treads are cracked and nosings do not comply with 52 CMR. Because the landing is more than 30 inches above grade, the guard at each side of the landing requires infill such as balusters spaced as required by code. Based on this condition, the entire stair, landing and railing assembly should be replaced with new composite decking on pressure-treated framing with a new painted metal railing/ guard assembly.

The wood stairs and ramps at the side and rear entries are heavily deteriorated and in need of repair. The ramp/ stair assembly at the rear of the church should be replaced as it does not fully meet the ADA requirements for accessibility, including open risers at the stair assembly. The wood stairs and landing with the canopy roof at Entry 115 does not meeting ADA code requirements.

There are no paved walkways from the rear entries at the Auditorium and Kitchen/ Office wings to a public way, which becomes of greater concern during wet months when the area becomes wet and muddy.

There is a concrete walkway/ apron along the south side of the Sanctuary building adjacent to the paved parking area. The walkway is tight to the building and receives rain run-off from the roof as there are no gutters and downspouts to control the runoff. This creates an inconvenience if not a hazard to anyone walking along this walkway.

Site

The site around the Church buildings is comprised of:

- Two concrete ways from the sidewalk along N. Main Street, one leading up to the Main Sanctuary building and the other a straight run from the sidewalk to the Auditorium entrance with a branch leading up to the entrance at the Kitchen/Office wing. The walkways are in serviceable condition but sufficiently worn to warrant replacement. The remaining front yard is planted with lawn and a large tree.
- The paved bituminous driveway and parking area runs the length of the south side of the building with “head-in” parking against the building and driveway access to the rear of the Senior Center next door as well as to the rear of the Police Station beyond. The pavement is in fair condition. However, there is no striping designating parking spaces, including accessible parking spaces.
- The portions of the site to the north (right side) and west (rear) are planted up to the building with lawn. As noted above, there are no paved walkways at the rear of the building.

Overall, the site is in good condition but in need of maintenance and additional landscaping.

There is no exterior site signage for wayfinding and parking designations.

Exterior lighting consists of wall mounted perimeter lighting which lights the entrances and walkways. A few fixtures are pendant mounted at the side entrances. There are some ground mounted light fixtures at the walkway.

Facilities Condition Assessment Narrative

Overview:

In this section of the Facilities Condition Assessment Report, the MEP/FP Consultant presents a summary of observations regarding the condition of Congregational Church site, including commentary and recommendations for action to be taken. The observations are organized according to the following “categories” in order to address the various components comprising the existing condition of the Congregational Church site:

1. Electrical
2. HVAC
3. Plumbing
4. Fire Protection

Facilities Condition Assessment Narrative

Electrical

1. Observations:

- a. The electrical service for this facility consists of two (2) meters with one (1) 100amp, 120/240V, 1 phase, 3 wire service for the building and a second 15amp/1pole enclosed circuit breaker for the bell clock. Service comes from a pole mounted transformer. The service feeder runs overhead from the utility pole to meter sockets on the exterior of the building.
- b. The electrical distribution system consists of a 100amp, 120/240V, 1phase, 3wire panel located in the basement. There is a 15amp, 1pole circuit breaker that feeds the bell clock. The panel is original and is in poor condition.
- c. Branch Circuits: The sanctuary, offices, auditorium, corridors, and kitchen have outlets throughout the rooms. Quantity of receptacles appears to be inadequate for current needs. Most are recessed with a few surface mounted kitchen outlets above the counter and are GFI type as required. There are some non-grounding outlets in the sanctuary. There is mostly romex wiring with some knob and tube in the basement that appears to be active.
- d. Lighting in auditorium is pendant and wall mounted incandescent fixtures. Sanctuary has pendant and wall mounted incandescent fixtures. The kitchen and corridors consist of surface wraparound fluorescent fixtures. Basement has porcelain sockets with incandescent lamps.
- e. Emergency Lighting System: There are emergency battery units throughout the building for the emergency lighting. Exit signs are provided at exits throughout the building.
- f. The exterior lighting consists of wall mounted perimeter lighting which lights the entrances and walkways. A few fixtures are pendant mounted at the side entrances. There are some ground mounted light fixtures at the walkway.
- g. No automatic fire alarm system was present in the building. One local battery operated smoke detector was located at the bottom of the stairway.

Facilities Condition Assessment Narrative

2. Commentary/Recommendation:

- a. Electric services are in good condition but may need to be upgraded for more capacity for any renovations.
- b. Original panels are in poor condition and should be replaced.
- c. All knob and tube wiring needs to be removed. Additional outlets should be provided to accommodate current needs. All non-grounding outlets are to be replaced.
- d. All existing incandescent lighting should be replaced with new energy saving LED type fixtures.
- e. All non-LED light fixtures should be replaced with new energy efficient LED type with time clock control.
- f. A fully addressable automatic fire alarm system should be installed in the building with complete coverage. Devices are to include smoke detectors, pull stations, heat detectors, and audio/visual devices as required.

Facilities Condition Assessment Narrative

HVAC

1. Observations:

- a. The heating system for the building is comprised of two (2) oil fired, furnaces. The furnaces are very old and likely not operating at much more than 50-60% efficient at best conditions. Temperature sensor are mounted in the crawlspace return air ductwork. The oil furnaces are supplied with #2 heating oil from 3 oil tanks installed in the crawlspace.
- b. Ventilation is provided naturally to the building through operable windows. Exhaust fans were not observed serving toilet rooms. The kitchen hood does not meet code standards for capturing exhaust from the cooking surfaces below. The exhaust fan installed in the kitchen hood is not intended for its current application, the fan has no filtration for smoke or grease capture and will be under powered in its current application.
- c. No Air Conditioning was observed in the building.

2. Commentary:

- a. Heating Equipment:
 - Furnaces: The existing oil fired furnaces are very old and should be considered in need of immediate replacement. The furnaces have ducted supply air to floor grilles in the church.
 - The two (2) oil fired furnaces are supplied with #2 heating oil as fuel. There are 3 tanks which are combined to a single fuel source to each furnace. The tanks should be considered to be replaced in the near future.

Facilities Condition Assessment Narrative

b. Ventilation:

- Exhaust fan serving the Kitchen exhaust cooking hood should be an upblast type accessible for servicing and cleaning the grease latent ductwork on a regular basis. The existing fan restricts access.
- While the existing hood does appear to be the correct physical size of the equipment under it being served, the height of the edges of the hood appear short there is no filtration before the exhaust air enters the fan and leaves the building. There is also no fire suppression system at the hood or make up air.
- Toilet rooms were observed that did not have an exhaust fan. In some spaces where exhaust systems were observed they appeared very antiquated and in need of replacement. ductwork and exhaust outlets should be tested in addition to insure they are fit for reuse.

c. Controls:

- All controls are stand alone.

3. Recommendations:

- a. The entire heating system should be upgraded to a new system that would be more energy efficient than the existing oil fired furnaces. Potential options would be a natural gas fired central boiler plant for heating and terminal heaters throughout the building, or a heat pump system that could either provide air conditioning and heating based on temperature space needs. This system could either be simultaneous heating and cooling or a changeover type that would allow heating or cooling on a first request temperature basis.
- b. Exhaust systems should be upgraded to serve the needs of required locations such as the kitchen exhaust hood and toilet rooms.

Facilities Condition Assessment Narrative

- c. Remote monitoring or temperature control systems should be considered to be provided for temperature adjustment, equipment alarm notifications and improved energy efficiency.

Plumbing

1. Observations:

- a. Domestic Water Service: The building is served by one domestic water service.
- b. Existing domestic water piping is copper with sweat fittings. Domestic water piping is not insulated. Shut-off valves are antiquated.
- c. Domestic Hot Water Service: Domestic Hot Water is generated by LP gas fired tank type water heater located in Basement. Water heater has an input of 40,000 BTUH and 50 gallon storage. Water heater is standard efficiency. There is no expansion tank and no thermostatic mixing valve installed. Hot water is not recirculated.
- d. Building is served with LP gas. There is a 120 gallon exterior aboveground storage tank adjacent to Basement bulkhead. LP-gas is supplied to kitchen stove and domestic water heater.
- e. The existing sanitary, waste and vent system is made up of cast iron pipe with hub and spigot fittings.
- f. Fixtures:
 - i. Floor mounted tank type water closets.
 - ii. Wall hung lavatories with manual faucets.
 - iii. Floor mounted mop receptor with wall mounted faucet.
 - iv. Kitchen area has counter mounted stainless steel sinks with gooseneck faucets. There is an undercounter commercial type dishwasher. Pre-rinse sink includes a hand spray and garbage disposal. There is no grease interceptor.
 - v. No drinking fountain provided.

2. Commentary:

- a. Plumbing fixtures are in poor condition. There are no accessible fixtures.
- b. Domestic water system shut-off valves are in poor condition.
- c. The hot water heater is near the end of its useful life.

3. Recommendations:

- a. In general fixtures should be replaced with high efficiency plumbing fixtures.

Facilities Condition Assessment Narrative

- b. If commercial dishwasher remains, add grease interceptor and backflow preventer on water supply.
- c. Upgrade water heater with high-efficiency heater.
- d. Replace all domestic water shut-off valves.
- e. Insult existing domestic water piping.
- f. Convert building to natural gas.

Fire Protection

1. Observations:

- a. The building does not contain an automatic sprinkler system.

2. Commentary:

- a. MA General Law M.G.L. c.148, s.26G requires that any existing building over 7,500 square feet that undergoes major alterations or building addition must be sprinklered.
- b. Examples of major alterations are demolition or reconstruction of existing ceilings or installation of suspended ceilings; removal of sub flooring; demolition and/or reconstruction of walls, doors, or stairways; or removal or relocation of a significant portion of the building's mechanical or electrical systems. Alterations are considered major when such work affects 33% or more of the building area or when total work (excluding sprinkler installation) is equal to 33% or more of the assessed value of the building.
- c. If the proposed project scope exceeds these thresholds then the existing building, and its additions, will require installation of an automatic sprinkler system.

3. Recommendations:

- a. Perform hydrant flow test to confirm Municipal water supply capacity to supply system.

Facilities Condition

Assessment Structural (RRC Engineering)

In this section of the Facilities Condition Assessment Report, RRC Engineering presents a summary of observations regarding the condition of Deerfield Congregational Church building, including summary description of structural systems and recommendations for action to be taken.

OVERVIEW PHOTOGRAPH



STRUCTURAL SYSTEMS SUMMARY

| Component | Description | |
|-----------------------|--|--|
| Foundation/Floor Slab | Stacked stone and rubble foundation walls around perimeter with timber posts and brick piers throughout interior of main hall. Poured concrete walls support the rear additions. No basement slabs. | |
| Upper Floors | Timber floors with a mix of dressed lumber and hand hewn/peeled logs with timber plank within main hall. Dimension lumber joist framing in rear additions. Balcony framing is suspended from roof trusses with steel rods. | |
| Roof | Timber roof trusses spanning width of main hall with timber purlins, rafters and plank roof deck. Timber rafters and plank deck in rear addition. | |

| | | |
|----------------|---|--|
| Exterior Walls | Wood stud framed exterior walls throughout. | |
| Other | Tall steeple and belfry at the front center of main hall. | |

DEFICIENCIES

Unless specifically identified below, no major deficiencies were observed.

| Component | Deficiency | Description | Photograph |
|-----------------------|---|---|---|
| Foundation/Floor Slab | <input checked="" type="checkbox"/> Deterioration <input type="checkbox"/> Weakness <input checked="" type="checkbox"/> Settlement Other | <ul style="list-style-type: none"> • Accessible portions of basement appear relatively dry considering there is not poured concrete slab or vapor retarder throughout. • Dirt is mounded on either side of the center aisle of the main hall and is within 1'-6" of the underside of timber framing. Timbers appeared sound with no signs of rot observed. • Several brick piers supporting the main hall floor are deteriorated with disintegrating mortar and spalling brick. • Front exterior stairs supporting pediment columns appears to be settling leaving a gap of about 1" below the northern column. |  <p style="text-align: center;">S1</p>  <p style="text-align: center;">S2</p> |

| | | | |
|-----------------------|--|--|---|
| <p>Upper Floors</p> | <p><input type="checkbox"/> Deterioration <input type="checkbox"/> Weakness <input checked="" type="checkbox"/> Settlement <input type="checkbox"/> Other</p> | <ul style="list-style-type: none"> • There is a noticeable settlement of 2"-4" towards the center aisle of the main hall. • The balcony floor is very uneven with many boards heavily worn. |  <p>S3</p> |
| <p>Roof</p> | <p><input type="checkbox"/> Deterioration <input type="checkbox"/> Weakness <input type="checkbox"/> Settlement <input checked="" type="checkbox"/> Other</p> | <ul style="list-style-type: none"> • Due to the limited access and lighting within the main hall roof structure, it was difficult to observe the majority of the framing. In areas that could be accessed, there are signs of slight moisture staining on framing, minor settlement, checking of timbers, etc. typical of wood framed structures of this era. • The attic of the rear addition was not accessed during this visit. |  <p>S4</p> |
| <p>Exterior Walls</p> | <p><input type="checkbox"/> Deterioration <input type="checkbox"/> Weakness <input type="checkbox"/> Settlement <input type="checkbox"/> Other</p> | <ul style="list-style-type: none"> • No deficiencies noted. See below. | |

| | | | |
|--------------|--|---|--|
| <p>Other</p> | <p><input checked="" type="checkbox"/> Deterioration <input checked="" type="checkbox"/> Weakness <input checked="" type="checkbox"/> Settlement <input type="checkbox"/> Other</p> | <ul style="list-style-type: none"> • When viewing the church from the south, the steeple noticeably leans away from the street. • Upon further review of the steeple support timbers, the northwest post (1 of 2) is severely rotted at its base and no longer in contact with the diagonal timber transfer beam. In each corner there are two timber posts resting atop a diagonal timber transfer beam. The top of this beam is also exhibiting signs of rot from either insects or moisture. This is likely the cause for the steeple out-of-plumbness. • Much of the timber planks, stairs and catwalks within the belfry are severely rotted and is not safe to access for a thorough review of the steeple structure. It is our recommendation that the town make repairs to shore up this area and prioritize a more comprehensive structural evaluation of the steeple to identify structural deficiencies and evaluate whether it can be repaired in place or must be removed before conditions worsen. | |
|--------------|--|---|--|

Matrices

Condition Assessment Matrix

| | | | |
|---------------|--|-------------------|----------|
| Building Name | | Church | |
| Discipline | | Building Envelope | Exterior |
| | | | |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Unit | Repair/ Replace Priority by | | | |
|---------|--------------------------------------|-------------------|--|------------|--|----------|------|-----------------------------|---------------|----------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 1 | Sanctuary Wing | Foundation | Granite stones dislodged in places and mortar deteriorated | B1 B2 | Re-set dislodged stones; repoint entire exposed (above-grade) stone foundation above grade | 312 | SF | \$ | 5,000 | | |
| 2 | Kitchen/ Office Wing | Foundation | Cast-in-place concrete is stained and dirty | B19 | Clean and parge exposed face of concrete foundation | 126 | SF | \$ | 2,000 | | |
| 3 | Auditorium Wing | Foundation | Cast-in-place concrete is stained and dirty | B19 B23 | Clean and parge exposed face of concrete foundation | 278 | SF | \$ | 3,000 | | |
| 4 | General | Cladding | In general the vinyl clapboard siding is in fair condition. The front facades of the Sanctuary, Kitchen/ Office and Auditorium wings are painted wood. | B7, B8 | repair Vinyl siding as needed | Allow | | \$ | 10,000 | | |
| 5 | Front façade of Sanctuary Building | Cladding | Paint is showing signs of deterioration with peeling, chipping and chalking | B3 | Repaint façade, trim and 4 column/pilasters | 1,500 | SF | \$ | 7,500 | | |
| 6 | Steeple | Cladding | Visual inspection from ground level finishes appear to be painted wood. Paint is peeling from façade | B4 | Repaint all wood components | 380 | SF | \$ | 1,500 | | |
| 7 | Front façade of Kitchen/ Office wing | Cladding | Paint is showing signs of deterioration with peeling, chipping and chalking | B5 | Repaint façade, trim and arches | 1,100 | SF | \$ | 5,500 | | |
| 8 | Sanctuary Front Doors | Doors | (3) 8' tall and 46" wide double-leaf wood green painted wood doors with ornamental hardware. Doors have significant peeling paint to the point that the wood behind is showing signs of weather checking and do not provide accessible clear width opening | B9 | Scrape, restore weather checked wood and repaint doors | 196 | SF | \$ | 2,500 | | |
| 9 | Accessible Sanctuary Entry Door | Doors | Entry to Narthex is not accessible | | Create new accessible entry at right side of Narthex | 1 | EA | \$ | 2,500 | | |
| 10 | Entry Door to Kitchen/ Office wing | Doors | Existing double leaf door does not provide accessible width and is in deteriorated condition | | Replace existing double door with new wider single leaf door/frame assembly | 1 | EA | \$ | 2,500 | | |

Condition Assessment Matrix

| | | | |
|---------------|--|-------------------|----------|
| Building Name | | Church | |
| Discipline | | Building Envelope | Exterior |
| | | | |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Unit | Repair/ Replace Priority by | | | |
|---------|--|-----------------------------|--|---------|---|----------|------|-----------------------------|---------------|----------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 11 | Entry Door to Auditorium | Doors | Existing double leaf door does not provide accessible width and is in deteriorated condition | | Replace existing double door with new wider single leaf door/frame assembly | 1 | EA | \$ | 2,500 | | |
| 12 | Rear Doors | Doors | Rear Entry Doors at Entry 104, 115 and 117 are wood doors in poor condition | B10 | Replace door and frame assembly with new wood frame and fiberglass door with new hardware | 3 | EA | \$ | 7,500 | | |
| 13 | New ramp assembly to access new accessible Narthex Entry | Walkways/ Stairs | Narthex Entry doors are not accessible; an accessible entry to this main entry when full building accessibility is triggered | B12 | Construct a new ramp / landing assembly | 1 | LS | | See Arch | | |
| 14 | Entry to Kitchen/ Office Wing | Walkways/ Stairs | Existing steps and deck do not provide accessibility to this entrance which will be required in full compliance with 521 CMR is required. | B13 | Replace deck and step assembly with new ramp/ deck assembly to provide accessibility to this entrance | 1 | LS | | See Arch | | |
| 15 | Ramp, Stairs and Landing at Rear Entry 104 | Walkways/ Stairs | Ramp surface is not code compliant. Ramp handrails are not code compliant. Bottom landing has lip that is tripping hazard and not code compliant. Brush and other organic growth should be remove. Stairs and handrails are not code compliant | B18 | replace ramp, stairs, top landing and 180° ramp landing with code compliant egress | 1 | EA | | See Arch | | |
| 16 | Entry portico to Kitchen/ Office wing | General/ Other | Portico arches are made from flat stock wood boards that are painted. Paint is peeling. Base of the 4 arches has minor weather checking | B13 | Repair base of 4 posts and paint arches | 100 | SF | \$ | 1,000 | | |
| 17 | Sanctuary Entry Porch Pilasters | General/ Other | Existing wood bases of 4 pilasters are heavily deteriorated | | Replace wood bases with new cast aluminum bases | 4 | EA | \$ | 1,000 | | |
| 18 | Sanctuary | Windows/ Glazing (exterior) | Existing Sanctuary windows are double hung vinyl windows in serviceable condition | B14 | Replace in 10-15 years | 26 | EA | | | \$ | 65,000 |
| 19 | 2nd Floor above Narthex | Windows/ Glazing (exterior) | Existing windows are original wood 12/12 windows with aluminum storm/ screen windows outside | | Replace in 10-15 years | 9 | EA | | | \$ | 22,500 |
| 20 | Kitchen/ Office Wing | Windows/ Glazing (exterior) | Existing windows are vinyl windows in serviceable condition | | Replace in 10-15 years | 11 | EA | | | \$ | 27,500 |

Condition Assessment Matrix

| | | | |
|---------------|--|-------------------|----------|
| Building Name | | Church | |
| Discipline | | Building Envelope | Exterior |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Unit | Repair/ Replace Priority by | | | |
|---------------------------------------|----------------------|-----------------------------|---|---------|--|----------|-------|-----------------------------|---------------|----------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 21 | Auditorium Wing | Windows/ Glazing (exterior) | Existing windows are double vinyl widnows in serviceable condition | | Replace in 10-15 years | 10 | EA | | | | 25,000 |
| 22 | Basement Area | Windows/ Glazing (exterior) | 11 former basement sash windows now blocked off openings in foundation with plywood, depriving the basement areas of natural light | B15 | Remove plywood infill, prep openings and install new fiberglass or aluminum basementr sash windows | 11 | EA | | 15,000.00 | | |
| 23 | General | Roof | Asphalt shingle roof observed from ground level appears to be in fair condition overall with some organic growth that should be removed | | Implement maintenance program every 5 years to extend service life. | 9,000 | SF | | \$ 2,500 | \$ 2,500 | \$ 2,500 |
| 24 | Chimneys | General/ Other | (2) brick masonry chimneys in acceptable condition with visual inspection from ground level | B17 | Repoint Chimneys and provide new stainless steel chimney caps | 2 | Allow | | \$ 10,000 | | |
| BUILDING EXTERIOR SCOPE TOTALS | | | | | | | | \$ - | \$ 81,500 | \$ 2,500 | \$ 142,500 |
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |

Condition Assessment Matrix

| | | | |
|---------------|--|--------|----------|
| Building Name | | Church | |
| Discipline | | MEP-FP | Interior |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Units | air/ Replace Priority by | | | |
|---------|-------------------|-------------------|--|---------|--|----------|-------|--------------------------|---------------|----------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 1 | | Life Safety | The building does not contain an automatic sprinkler system. | | MA General Law M.G.L. c. 148, s.26G requires that any existing building over 7,500 square feet that undergoes <i>major</i> alterations or building addition must be sprinklered. Examples of major alterations are demolition or reconstruction of existing ceilings or installation of suspended ceilings; removal of sub flooring; demolition and/or reconstruction of walls, doors, or stairways; or removal or relocation of a significant portion of the building's mechanical or electrical systems. Alterations are considered major when such work affects 33% or more of the building area or when total work (excluding sprinkler installation) is equal to 33% or more of the assessed value of the building. If the proposed project scope exceeds these thresholds then the existing building, and its additions, will require installation of an automatic sprinkler system. | 14,848 | | | \$ 65,000 | | |
| 2 | | Plumbing Fixtures | Existing building is served by municipal water and municipal sewer services. | | Services appear to be in good condition. Confirm services are sized adequately for future renovation scope. | | | | | | |
| 3 | | Plumbing Fixtures | Existing domestic water piping is copper with sweat fittings. Domestic water piping is not insulated. Shut off valves are antiquated. | MEP 1 | Due to age, replace shutoff valves with new ball valves. Insulate all domestic water piping. | | | \$ 20,000 | | | |
| 4 | | Plumbing Fixtures | The existing sanitary, waste and vent system is made up of cast iron pipe with hub and spigot fittings. | MEP 2 | Existing piping can be reused in a renovation provided piping is sized adequately for new use. | | | | | | |
| 5 | | Plumbing Fixtures | Domestic Hot Water is generated by LP gas fired tank type water heater located in Basement. Water heater has an input of 40,000 BTUH and 50 gallon storage. Water heater is standard efficiency. There is no expansion tank and no thermostatic mixing valve installed. Hot water is not recirculated. | MEP 3 | Water heater is near the end of its useful life. Water heater should be replaced with gas fired high efficiency unit. System should include expansion tank, mixing valve, and recirculation pump. | | | \$ 4,500 | | | |

Condition Assessment Matrix

| | | | |
|---------------|--|--------|----------|
| Building Name | | Church | |
| Discipline | | MEP-FP | Interior |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Units | air/ Replace Priority by | | | |
|---------|-------------------|---------------------|--|-------------|--|----------|-------|--------------------------|---------------|----------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 6 | | Plumbing Fixtures | Existing Plumbing Fixtures include: floor mounted tank type water closets, wall hung lavatories, floor mounted mop receptor with wall mounted faucet. Kitchen area has counter mounted stainless steel sinks with gooseneck faucets. There is an undercounter commercial type dishwasher. Pre-rinse sink includes a hand spray and garbage disposal. There is no grease interceptor. | MEP 4 - 8 | Plumbing fixtures are in poor condition. There are no accessible fixtures. In general fixtures should be replaced with high efficiency plumbing fixtures. If commercial dishwasher remains, add grease interceptor and backflow preventer on water supply. | | | | \$ 25,000 | | |
| 7 | | Plumbing Fixtures | Building is served with LP gas. There is a 120 gallon exterior aboveground storage tank adjacent to Basement bulkhead. Natural gas is supplied to kitchen stove and domestic water heater. | MEP 9 & 10 | Natural gas is available in the Town right-of-way. Adjacent buildings are fed with natural gas. As part of renovation natural gas should be provided to the building and equipment converted. | | | | | | |
| 8 | | Mechanical Fixtures | Heating Furnaces | MEP 11 | Fair Condition | | 2 | | | \$ 36,000 | |
| 9 | | Mechanical Fixtures | Oil Tanks | MEP 12 | Not required if switch to natural gas | | 4 | | | | |
| 10 | | Mechanical Fixtures | Ductwork | MEP 13 | Poor Condition, uninsulated | | LS | | | \$ 80,000 | |
| 11 | | Mechanical Fixtures | Kitchen Exhaust | MEP 14 | Replace Undersized Fan | | 1 | | \$ 7,500 | | |
| 12 | | Mechanical Fixtures | General Exhaust | MEP 15 | Replacement Recommended | | 3 | | \$ 4,500 | | |
| 13 | | General/ Other | The electrical service for this facility consists of two (2) meters with one (1) 100amp, 120/240V, 1 phase, 3 wire service for the building and a second 15amp/1pole enclosed circuit breaker for the bell clock. Service comes from a pole mounted transformer. The serve feeder runs overhead from the utility pole to meter sockets on the exterior of the building. | MEP 16 - 18 | Electric services are in good condition but may need to be upgraded for more capacity for any renovations. | 14848 | | | | \$ 10,000 | |

Condition Assessment Matrix

| | | | |
|---------------|--|--------|----------|
| Building Name | | Church | |
| Discipline | | MEP-FP | Interior |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Units | Fair/ Replace Priority by | | | |
|---------|-------------------|-------------------------------|--|-------------|---|----------|-------|---------------------------|---------------|----------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 14 | | Equipment | The electrical distribution system consists of a 100amp, 120/240V, 1phase, 3wire panel located in the basement. There is a 15amp, 1pole circuit breaker that feeds the bell clock. The panel is original and is in poor condition. | MEP 19 - 21 | Original panels are in poor condition and should be replaced. | 2 | | | \$ 6,000 | | |
| 15 | | Equipment | Branch Circuits: The sanctuary, offices, auditorium, corridors, and kitchen have outlets throughout the rooms. Quantity of receptacles appears to be inadequate for current needs. Most are recessed with a few surface mounted kitchen outlets above the counter and are GFI type as required. There are some non-grounding outlets in the sanctuary. There is mostly romex wiring with some knob and tube in the basement that appears to be active. | MEP 22 - 25 | All knob and tube wiring needs to be removed. Additional outlets should be provided to accommodate current needs. All non-grounding outlets are to be replaced. | 14848 | | | \$ 23,000 | | |
| 16 | | Electrical/ Lighting Fixtures | Lighting in auditorium is pendant and wall mounted incandescent fixtures. Sanctuary has pendant and wall mounted incandescent fixtures. The kitchen and corridors consist of surface wraparound fluorescent fixtures. Basement has porcelain sockets with incandescent lamps. | MEP 26 - 28 | All existing incandescent lighting should be replaced with new energy saving LED type fixtures. | 14848 | | | \$ 50,000 | | |
| 17 | | Life Safety | Emergency Lighting System: There are emergency battery units throughout the building for the emergency lighting. Exit signs are provided at exits throughout the building. | MEP 29 & 30 | | | | | | | |

Condition Assessment Matrix

| | | | |
|---------------|--|--------|----------|
| Building Name | | Church | |
| Discipline | | MEP-FP | Interior |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Units | air/ Replace Priority by | | | |
|----------------------------|-------------------|-------------------------------|---|-------------|--|----------|-------|--------------------------|-------------------|-------------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 18 | | Electrical/ Lighting Fixtures | The exterior lighting consists of wall mounted perimeter lighting which lights the entrances and walkways. A few fixtures are pendant mounted at the side entrances. There are some ground mounted light fixtures at the walkway. | MEP 31 - 34 | All non-LED light fixtures should be replaced with new energy efficient LED type with time clock control. | 7 | | \$ 14,000 | | | |
| 19 | | Life Safety | No automatic fire alarm system was present in the building. One local battery operated smoke detector was located at the bottom of the stairway. | MEP 35 | A fully addressable automatic fire alarm system should be installed in the building with complete coverage. Devices are to include smoke detectors, pull stations, heat detectors, and audio/visual devices as required. | 14848 | | \$ 73,000 | | | |
| MEP/FP SCOPE TOTALS | | | | | | | | \$ 73,000 | \$ 219,500 | \$ 126,000 | \$ - |
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |

Condition Assessment Matrix

| | | |
|---------------|--|------------|
| Building Name | | Church |
| Discipline | | Structural |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Units | Repair/ Replace Priority by | | | | | |
|---------|-------------------|-------------------|---|---------|--|----------|--------|-----------------------------|---------------|----------------|-----------------|--|--|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs | | |
| 1 | Basement | General/ Other | Several brick piers supporting the main hall floor are deteriorated with disintegrating mortar and spalling brick. | S1 | Deteriorated bricks should be selectively removed and replaced with similar brick masonry. | LS | Allow. | \$ | 2,500 | | | | |
| 2 | Exterior Stairs | General/ Other | The northern pediment column at the front stair is not completely bearing on the concrete base leaving a gap of about 1". This may be due to settlement of the stair system or resulting from the steeple structure leaning towards the west. | S2 | Depending on the outcome of a future steeple and belfry comprehensive structural evaluation, remediation may involve straightening of the structure above which may correct the hanging column. If the concrete stair system is found to be significantly out of level, then jacking and/or structural underpinning may be needed to re-level. | 1 | Allow. | \$ | 10,000 | | | | |
| 3 | First Floor | Floor | There is a noticeable settlement of 2"-4" towards the center aisle of the main hall. | S3 | Evaluate floor structure as part of full building renovation to arrest further settlement or restructure floor | 6,556 | Allow. | \$ | 10,000 | | | | |
| 4 | Balcony | Floor | The balcony floor is very uneven with many boards heavily worn. | S4 | Evaluate balcony floor structure as part of full building renovation to determine if floor boards can be repaired or should be replaced | 1,736 | Allow. | \$ | 10,000 | | | | |

Condition Assessment Matrix

| | |
|---------------|------------|
| Building Name | Church |
| Discipline | Structural |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Units | Repair/ Replace Priority by | | | |
|--------------------------------|-------------------|-------------------|---|---------|--|----------|--------|-----------------------------|-----------------|----------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 5 | Steeple | General/ Other | <p>When viewing the church from the south, the steeple noticeably leans away from the street.</p> <p>Upon further review of the steeple support timbers, the northwest post (1 of 2) is severely rotted at its base and no longer in contact with the diagonal timber transfer beam. In each corner there are two timber posts resting atop a diagonal timber transfer beam. The top of this beam is also exhibiting signs of rot from either insects or moisture. This is likely the cause for the steeple out-of-plumbness.</p> | | It is our recommendation that the town make repairs to shore up this area and prioritize a more comprehensive structural evaluation of the steeple to identify structural deficiencies and evaluate whether it can be repaired in place or must be removed before conditions worsen. | 1 | Allow. | \$ 10,000 | | | |
| 6 | Belfry | General/ Other | Much of the timber planks, stairs and catwalks within the belfry are severely rotted and is not safe to access for a thorough review of the steeple structure. | | It is our recommendation that the town make repairs to shore up this area and prioritize a more comprehensive structural evaluation of the steeple to identify structural deficiencies and evaluate whether it can be repaired in place or must be removed before conditions worsen. | 1 | Allow. | see above | | | |
| STRUCTURAL SCOPE TOTALS | | | | | | | | \$ 40,000 | \$ 2,500 | \$ - | \$ - |
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |

Condition Assessment Matrix

| | | | |
|-------------------|--|-------------------|--|
| Building Name | | Church | |
| Discipline | | Building Envelope | |
| Floor / Elevation | | Site | |

| Issue # | Room Name / Elev. | System/ Component | Existing Description | Photo # | Commentary/ Proposed Work | Quantity | Unit | Repair/ Replace Priority by | | | |
|--------------------------|-------------------|-------------------|--|---------|---|----------|-------|-----------------------------|---------------|----------------|-----------------|
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |
| 25 | site east front | Site | Concrete walkways leading up to 3 entrances are in serviceable condition but nearing end of their service life | | Replace concrete walks with new concrete walks | 900 | Allow | | | \$ 10,000 | |
| 26 | site south side | Site | Paved parking area in good condition; striping for parking needed | | Install striping for parkings | 1 | LS | | \$ 10,000 | | |
| 27 | site west rear | Site | Landing at ramp at rear of church needs to be replaced as it is a tripping hazard | | 5'x5' concrete pad. Coordinate site parking so that pavement connects with ramp landing | 1 | EA | | \$ 2,500 | | |
| 28 | site west rear | Site | 2 rear entrance doors do not have paved sidewalk that connects them to parking area | B19 | Install new sidewalk to both rear entrances | 564 | SF | | \$ 8,000 | | |
| SITE SCOPE TOTALS | | | | | | | | \$ - | \$ 20,500 | \$ 10,000 | \$ - |
| | | | | | | | | 0-11 mths Costs | 1-5 yrs Costs | 5-10 yrs Costs | 11-20 yrs Costs |

**Representative Existing
Conditions Photographs**

Congregational Church

Representative Existing Conditions Photographs



A-1



A-2



A-3

Congregational Church

Representative Existing Conditions Photographs



A-4



A-5



A-6

Congregational Church

Representative Existing Conditions Photographs



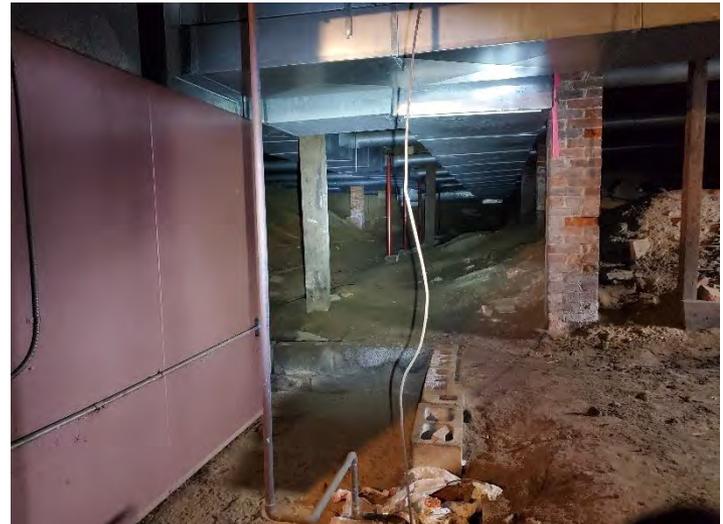
A-7



A-8



A-9



A-10

Congregational Church

Representative Existing Conditions Photographs



A-11



A-12



A-13



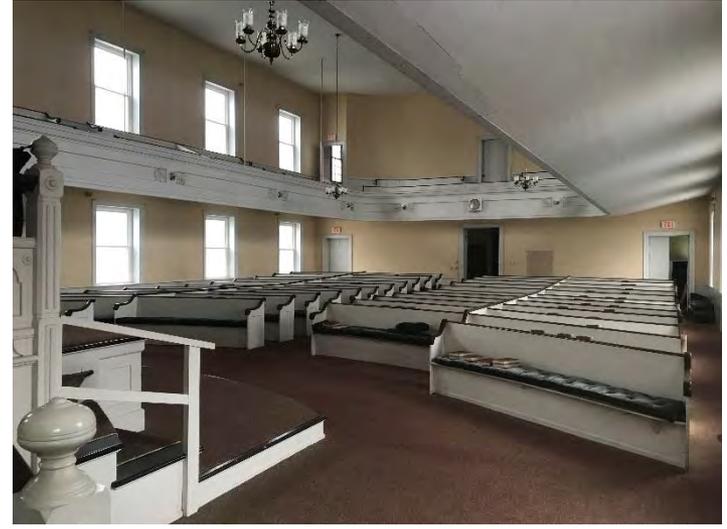
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Congregational Church

Representative Existing Conditions Photographs



A-15



A-16



A-17



A-18

Congregational Church

Representative Existing Conditions Photographs



A-19



A-20



A-21



A-22

Congregational Church

Representative Existing Conditions Photographs



A-23



A-24



A-25



A-26

Congregational Church

Representative Existing Conditions Photographs



A-27



A-28



A-29



A-30

Congregational Church

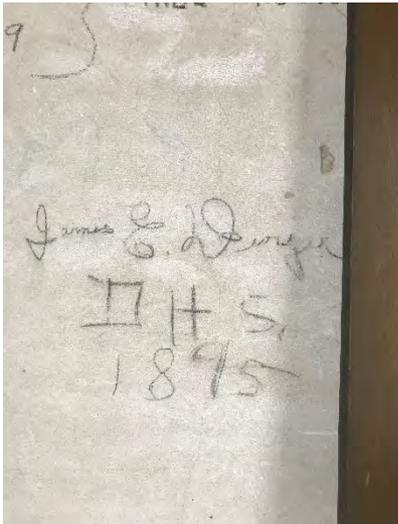
Representative Existing Conditions Photographs



A-31



A-32



A-33



A-34

Congregational Church

Representative Existing Conditions Photographs



A-35



A-36



A-37



A-38

Congregational Church

Representative Existing Conditions Photographs



A-39



A-40



A-41



A-42

Congregational Church

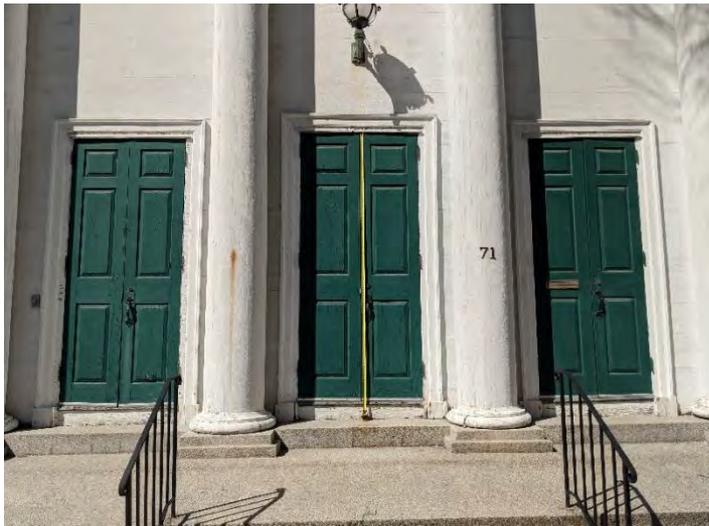
Representative Existing Conditions Photographs



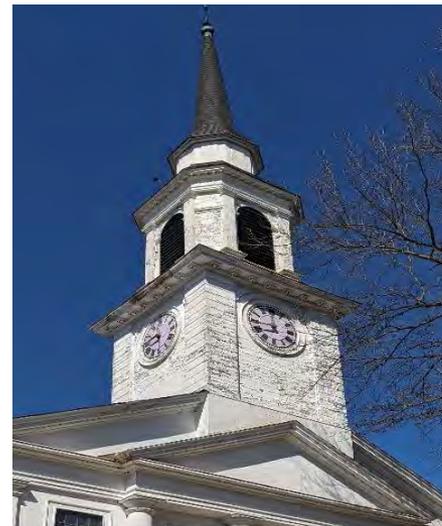
B1



B2



B3



B4

Congregational Church

Representative Existing Conditions Photographs



B5



B6



B7



B8

Congregational Church

Representative Existing Conditions Photographs



B9



B10



B11



B12

Congregational Church

Representative Existing Conditions Photographs



B13



B14



B15



B16

Congregational Church

Representative Existing Conditions Photographs



B17



B18



B19



B20

Congregational Church

Representative Existing Conditions Photographs



B21



B22



B23



B24

Congregational Church – MEP/FP

Representative Existing Conditions Photographs



MEP 1



MEP 2



MEP 3



MEP 4

Congregational Church – MEP/FP Representative Existing Conditions Photographs



MEP 5



MEP 6



MEP 7



MEP 8

Congregational Church – MEP/FP

Representative Existing Conditions Photographs



MEP 9



MEP 10



MEP 11



MEP 12

Congregational Church – MEP/FP Representative Existing Conditions Photographs



MEP 13



MEP 14



MEP 15



MEP 16

Congregational Church – MEP/FP

Representative Existing Conditions Photographs



MEP 17



MEP 18



MEP 19



MEP 20

Congregational Church – MEP/FP Representative Existing Conditions Photographs



MEP 21



MEP 22



MEP 23



MEP 24

Congregational Church – MEP/FP Representative Existing Conditions Photographs



MEP 25



MEP 26



MEP 27



MEP 28

Congregational Church – MEP/FP

Representative Existing Conditions Photographs



MEP 29



MEP 30



MEP 31



MEP 32

Congregational Church – MEP/FP

Representative Existing Conditions Photographs



MEP 33



MEP 34



MEP 35

Appendix A: Floor Plans

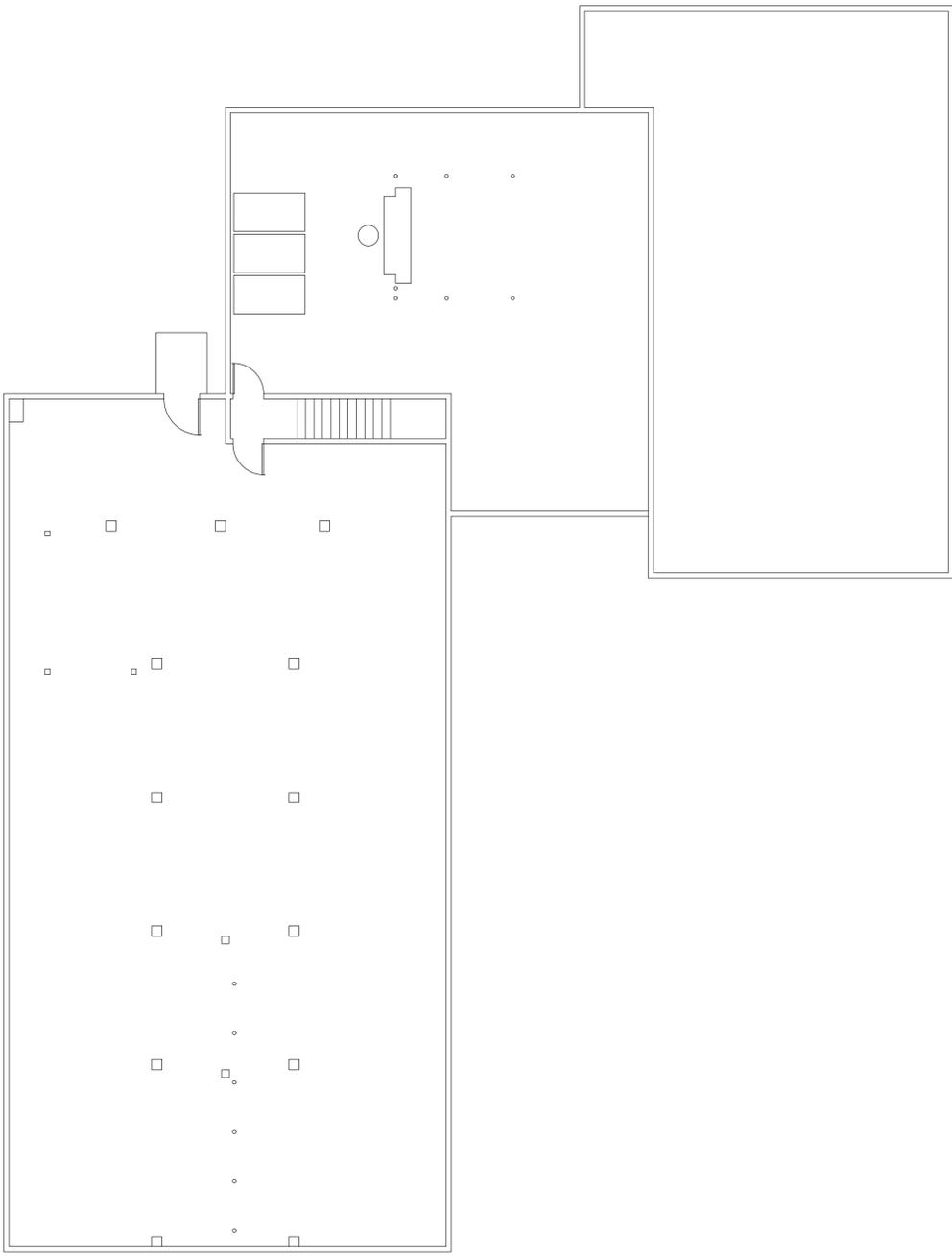
DEERFIELD CONGREGATIONAL CHURCH BUILDING STUDY

71 NORTH MAIN STREET
SOUTH DEERFIELD, MA 01373

8 CONWAY STREET
SOUTH DEERFIELD, MA 01373

G | R | L | A

Gorman Richardson Lewis Architects
239 South Street Hopkinton, MA 01748
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KEY PLAN

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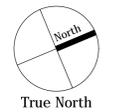
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 Proj. No.: 2019051.01
 Scale: 1/4"=1'-0"
 Drawn By: BAG
 Checked By: GEO
 File Name: EX1-0.dwg

EXISTING BASEMENT PLAN

EX1.0

2019051.01 - TOWN OF DEERFIELD BUILDINGS STUDY - DEERFIELD CONGREGATIONAL CHURCH - MARCH, 2020

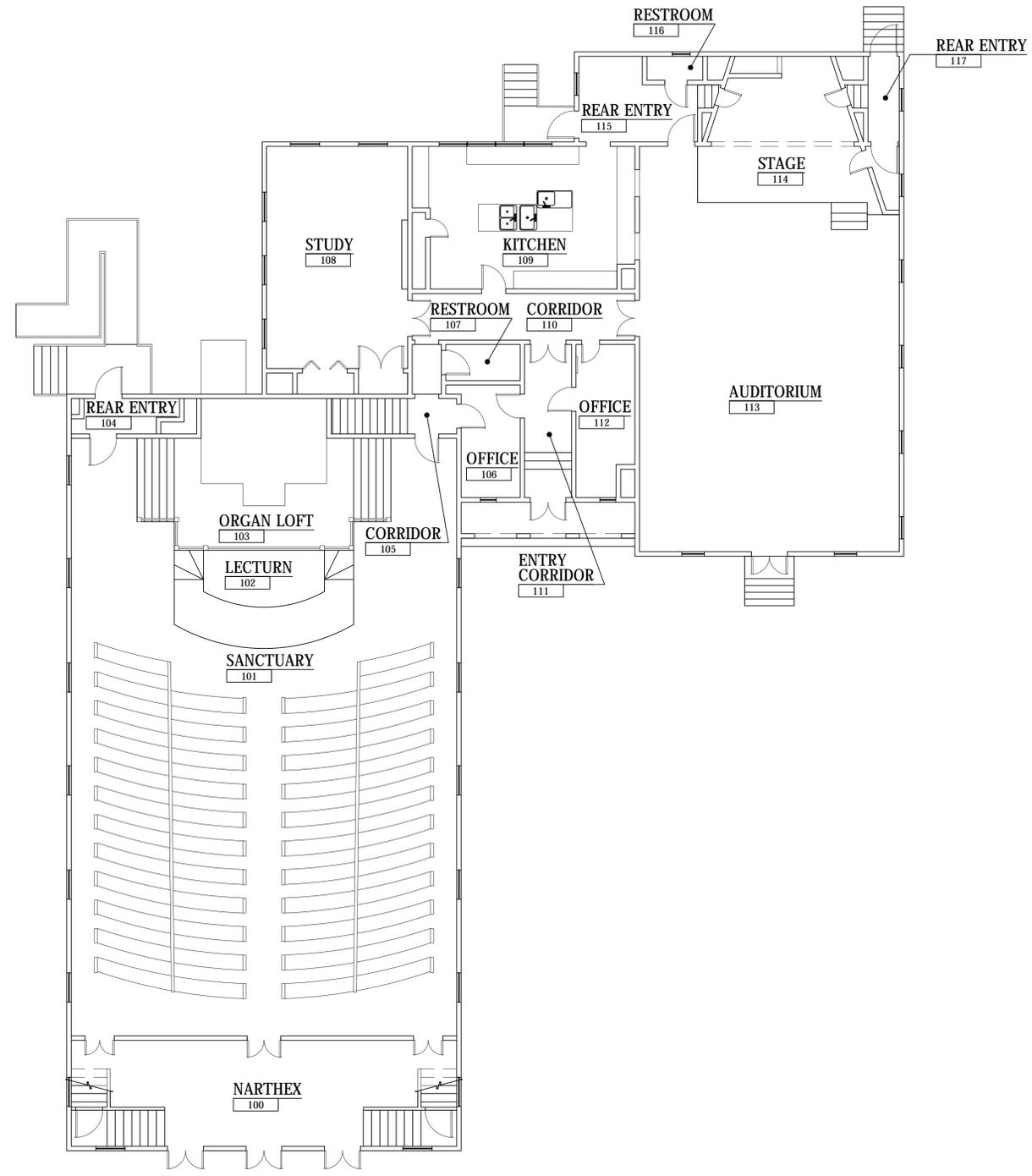
DEERFIELD CONGREGATIONAL CHURCH BUILDING STUDY

71 NORTH MAIN STREET
SOUTH DEERFIELD, MA 01373

8 CONWAY STREET
SOUTH DEERFIELD, MA 01373

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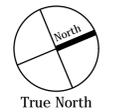


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 Proj. No.: 2019051.01
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 File Name: EX1-1.dwg

EXISTING FIRST FLOOR PLAN

EX1.1

2019051.01 - TOWN OF DEERFIELD BUILDINGS STUDY - DEERFIELD CONGREGATIONAL CHURCH - MARCH, 2020

T:\PROJ\2019\2019051-TownofDeerfield\01_Existing_Conditions\Drawings\Congregational Church\EX1-1.dwg, 5/14/2020 11:39:22 AM, jgaulin

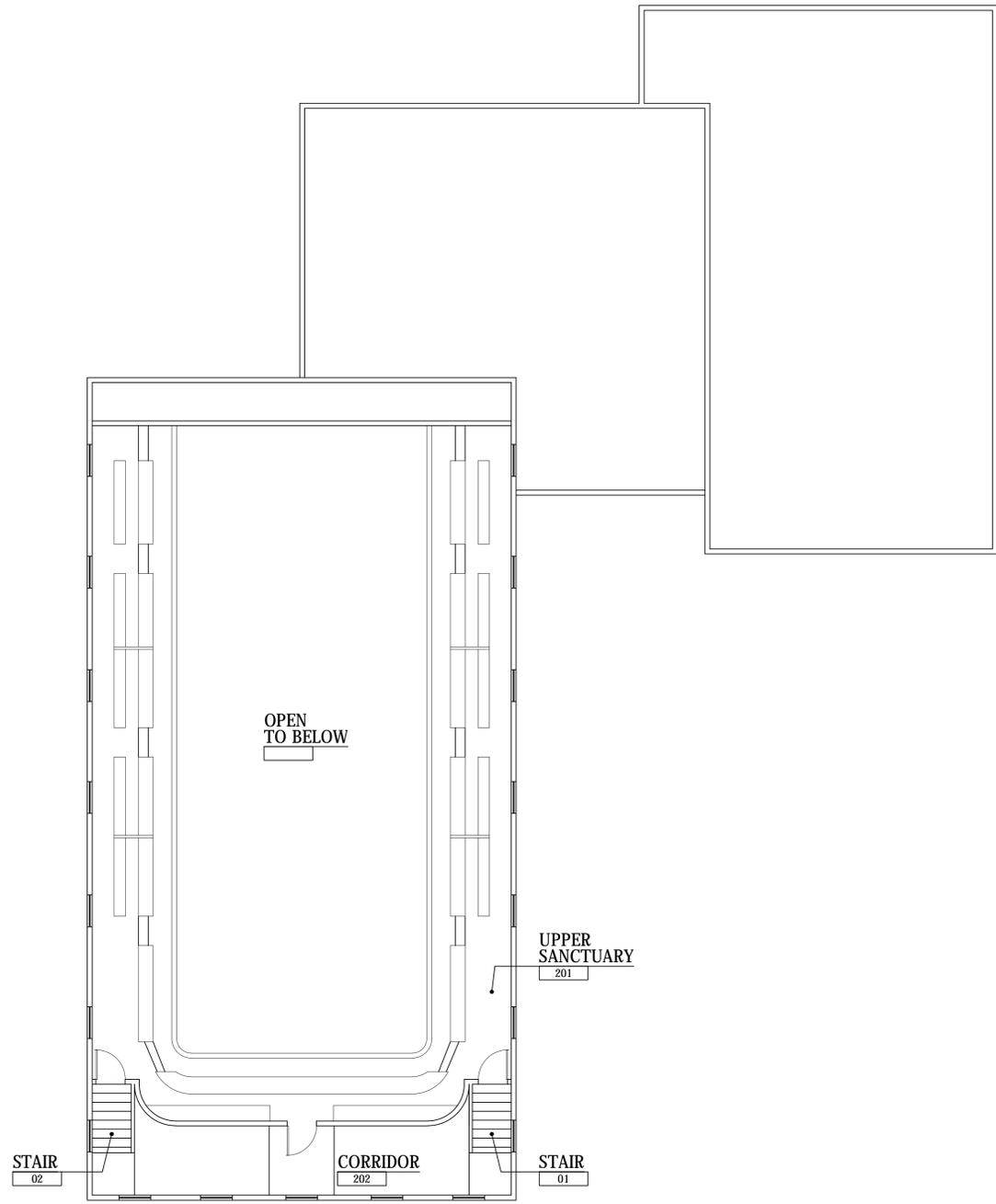
1821 Meeting House
**DEERFIELD
CONGREGATIONAL
CHURCH BUILDING STUDY**

71 NORTH MAIN STREET
SOUTH DEERFIELD, MA 01373

8 CONWAY STREET
SOUTH DEERFIELD, MA 01373

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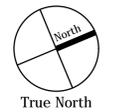
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Date: MARCH, 2020
 Proj. No.: 2019051.01
 Scale: 1/8"=1'-0"
 Drawn By: BAG
 Checked By: GEO
 File Name: EX1-2.dwg

**EXISTING
SECOND FLOOR
PLAN**

EX1.2

2019051.01 - TOWN OF DEERFIELD BUILDINGS STUDY - DEERFIELD CONGREGATIONAL CHURCH - MARCH, 2020

Appendix B: EagleView

Precise Aerial Measurement Report

Prepared by Gorman Richardson Lewis Architects



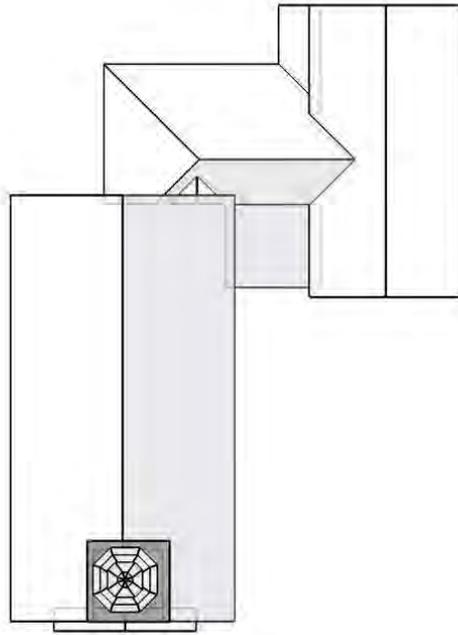
71 N Main St, South Deerfield, MA 01373-1012



Gorman Richardson Lewis Architects
239 South St
Hopkinton, MA 01748-2249

Chris Paszko
tel. 508-544-2600
email: rgutmann@grlarchitects.com
www.grlarchitects.com

71 N Main St, South Deerfield, MA 01373-1012



In this 3D model, facets appear as semi-transparent to reveal overhangs.

Report Details

Report: 32484243

Roof Details

Total Roof Area = 8,961 sq ft
 Total Roof Facets = 46
 Predominant Pitch = 6/12
 Number of Stories >1
 Total Ridges/Hips = 495 ft
 Total Valleys = 59 ft
 Total Rakes = 201 ft
 Total Eaves = 514 ft
 Total Penetrations = 4
 Total Penetrations Perimeter = 36 ft
 Total Penetrations Area = 25 sq ft

Report Contents

Images2
 Length Diagram.....5
 Pitch Diagram6
 Area Diagram7
 Notes Diagram8
 Penetrations Diagram9
 Report Summary10

Contact: Chris Paszko
 Company: Gorman Richardson Lewis Architects
 Address: 239 South St
 Hopkinton MA 01748-2249
 Phone: 508-544-2600

Measurements provided by www.eagleview.com



Certified Accurate

www.eagleview.com/Guarantee.aspx

Images

The following aerial images show different angles of this structure for your reference.



North Side



South Side



East Side

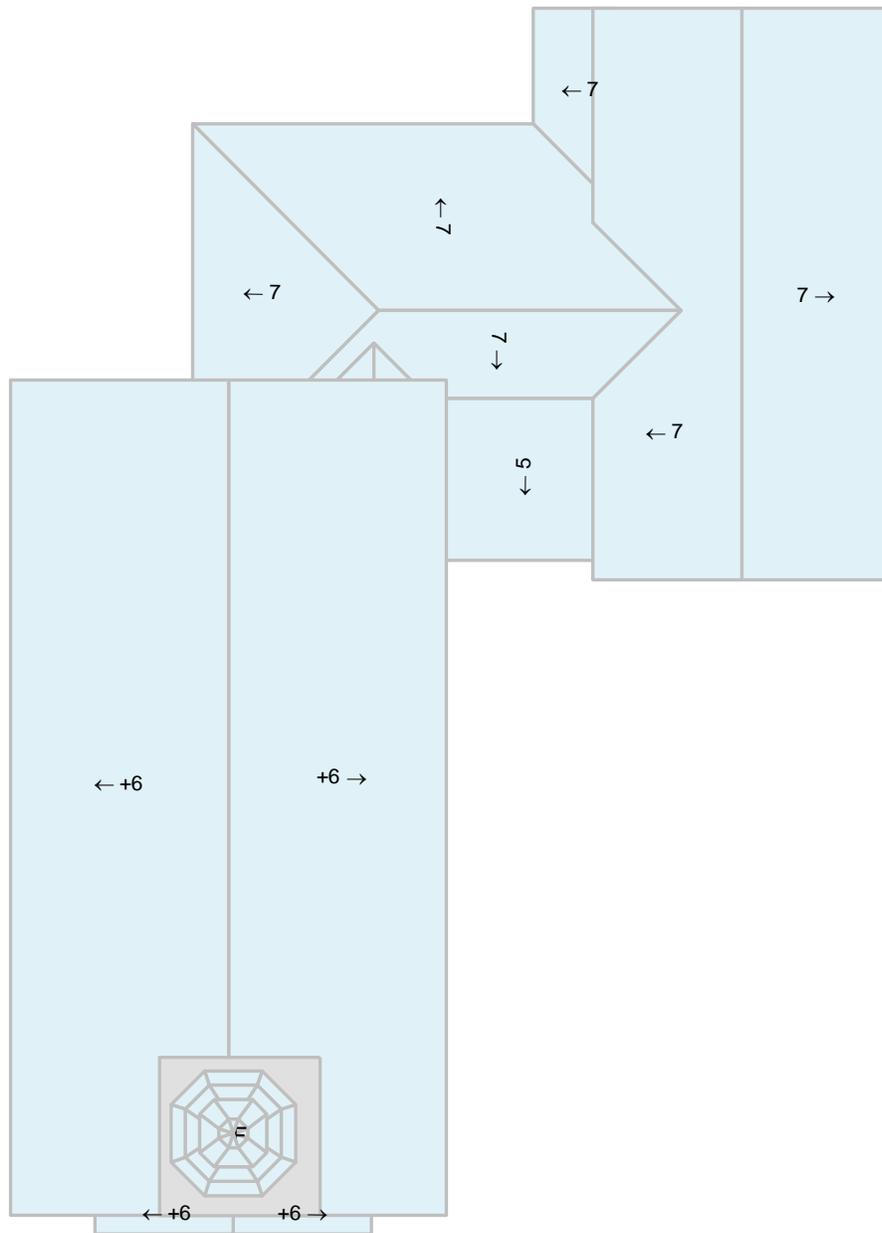


West Side



Pitch Diagram

Pitch values are shown in inches per foot, and arrows indicate slope direction. The predominant pitch on this roof is 6/12.



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Note: This diagram contains labeled pitches for facet areas larger than 20 square feet. In some cases, pitch labels have been removed for readability. Plus signs preface some numbers to avoid confusion when rotated (e.g. +6 and +9). Blue shading indicates a pitch of 3/12 and greater. Gray shading indicates flat, 1/12 or 2/12 pitches. If present, a value of "F" indicates a flat facet (no pitch).

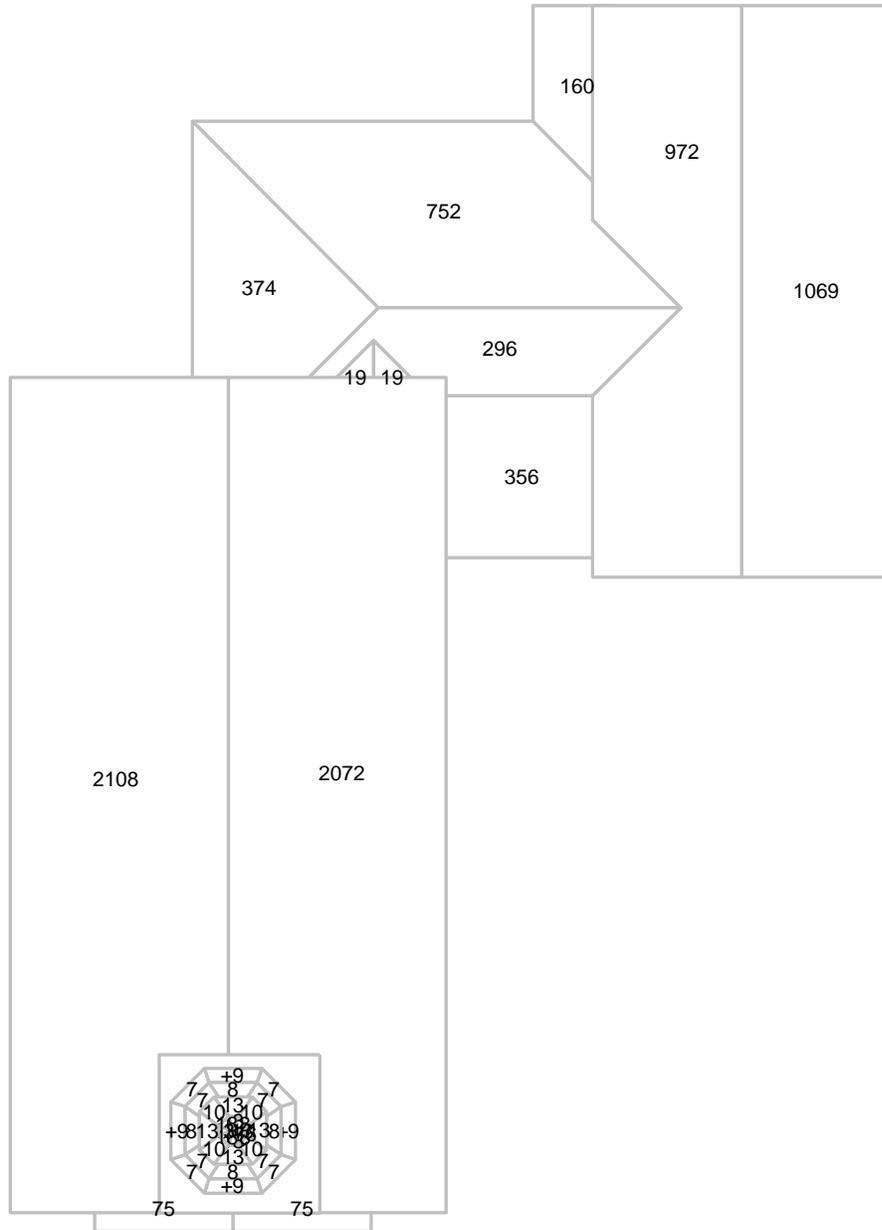


Report: 32484243

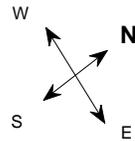
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Area Diagram

Total Area = 8,961 sq ft, with 46 facets.



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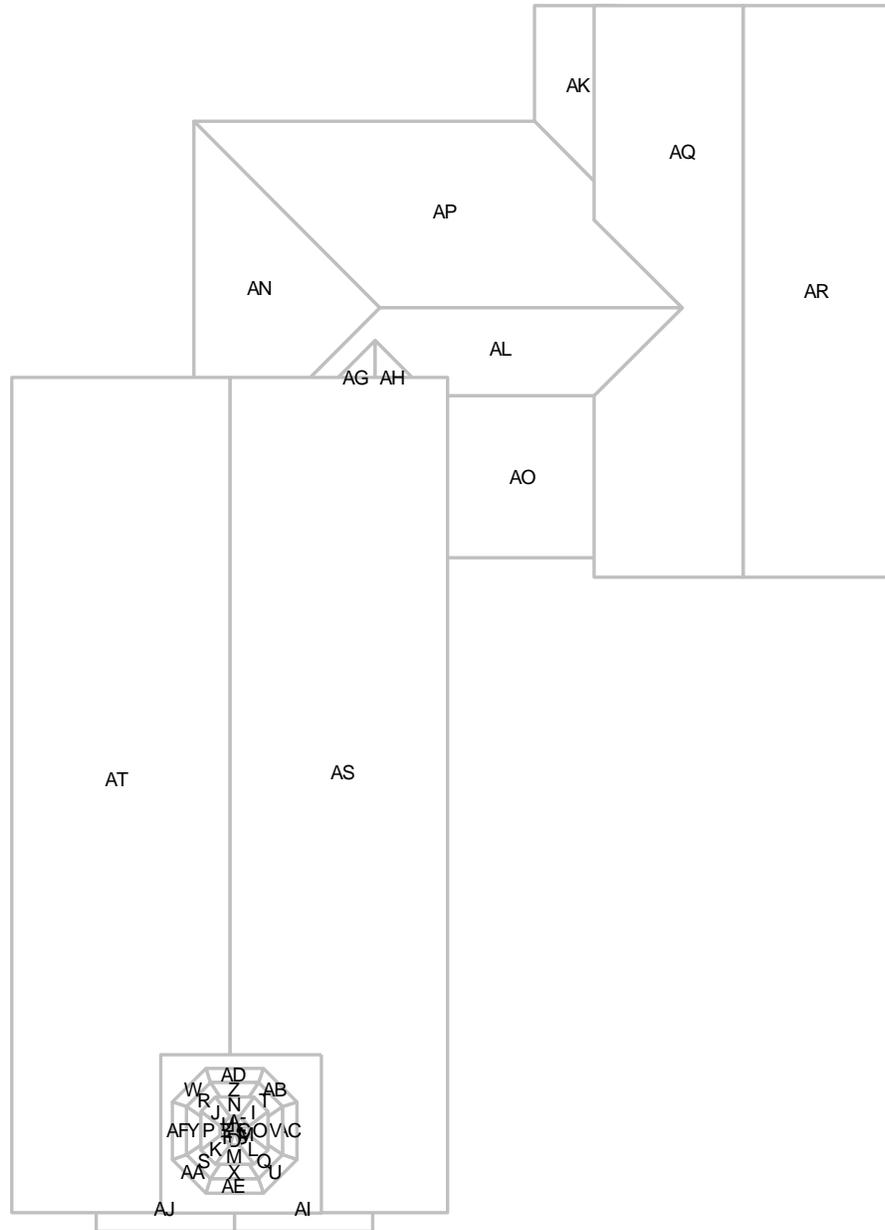


Note: This diagram shows the square feet of each roof facet (rounded to the nearest foot). The total area in square feet, at the top of this page, is based on the non-rounded values of each roof facet (rounded to the nearest square foot after being totaled).

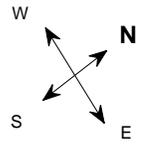


Notes Diagram

Roof facets are labeled from smallest to largest (A to Z) for easy reference.



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Penetrations Notes Diagram

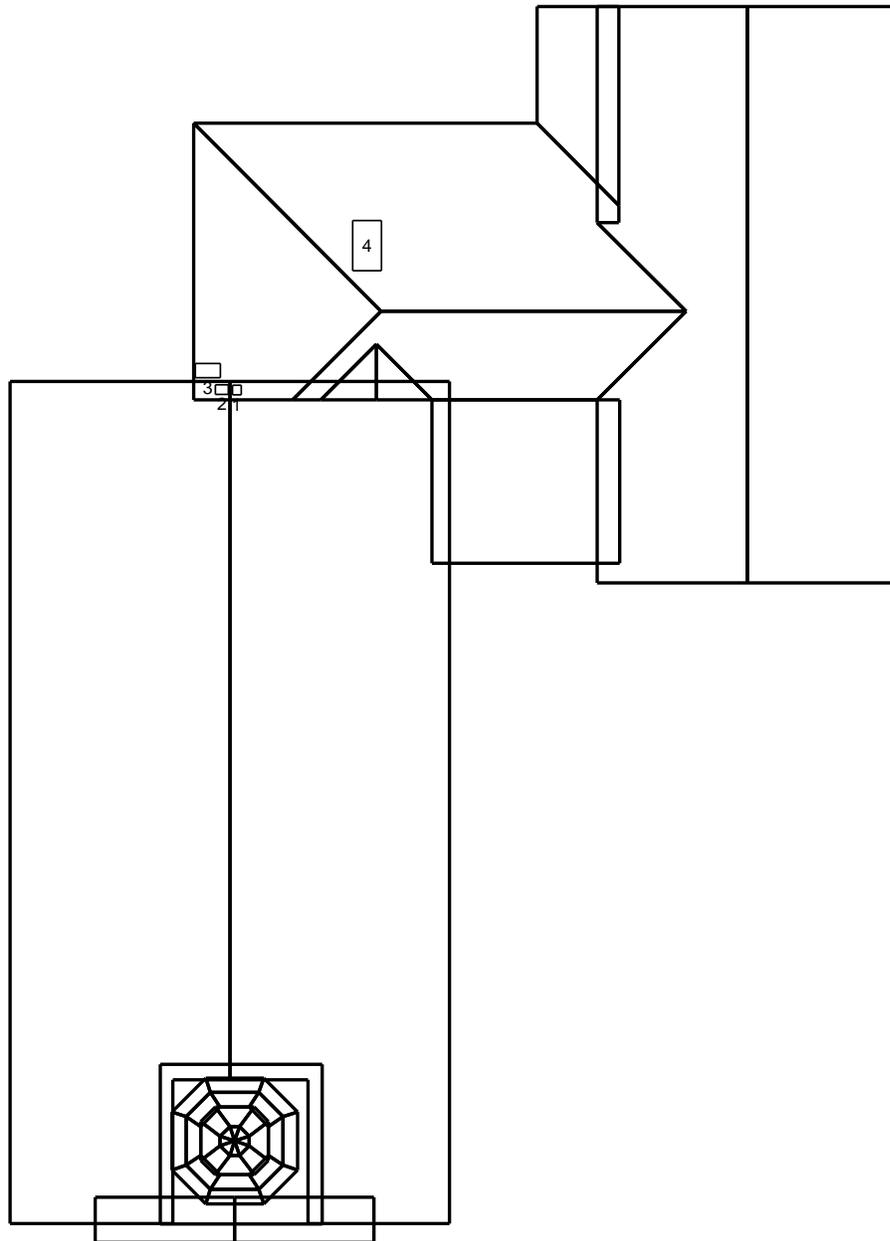
Penetrations are labeled from smallest to largest for easy reference.

Total Penetrations = 4

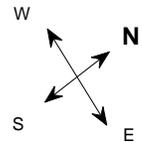
Total Penetrations Area = 25 sq ft

Total Penetrations Perimeter = 36 ft

Total Roof Area Less Penetrations = 8,936 sq ft



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Report Summary

Below is a measurement summary using the values presented in this report.

All Structures

| Areas per Pitch | | | | | | | | | | |
|-----------------|-------|-------|--------|--------|------|-------|-------|-------|--------|--------|
| Roof Pitches | 0/12 | 5/12 | 6/12 | 7/12 | 9/12 | 11/12 | 24/12 | 30/12 | 200/12 | 212/12 |
| Area (sq ft) | 275.7 | 355.7 | 4367.0 | 3688.0 | 28.0 | 32.0 | 39.6 | 54.0 | 50.0 | 70.8 |
| % of Roof | 3.1% | 4% | 48.7% | 41.2% | 0.3% | 0.4% | 0.4% | 0.6% | 0.6% | 0.8% |

The table above lists each pitch on this roof and the total area and percent (both rounded) of the roof with that pitch.

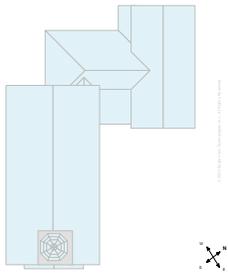
| Waste Calculation Table | | | |
|-------------------------|-------|-------|--------|
| Waste % | 0% | 10% | 15% |
| Area (sq ft) | 8,961 | 9,857 | 10,305 |
| Squares | 89.6 | 98.6 | 103.1 |

This table shows the total roof area and squares (rounded up to the nearest decimal) based upon different waste percentages. The waste factor is subject to the complexity of the roof, individual roofing techniques and your experience. Please consider this when calculating appropriate waste percentages. Note that only roof area is included in these waste calculations. Additional materials needed for ridge, hip, valley, and starter lengths are not included.

| Penetrations | 1 | 2 | 3 | 4 | | | | | |
|----------------|---|-----|-----|----|--|--|--|--|--|
| Area (sq ft) | 1 | 1.5 | 4.5 | 18 | | | | | |
| Perimeter (ft) | 4 | 5 | 9 | 18 | | | | | |

Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.

All Structures Totals



Total Roof Facets = 46
Total Penetrations = 4

Lengths, Areas and Pitches

Ridges = 174 ft (5 Ridges)
Hips = 321 ft (34 Hips).
Valleys = 59 ft (5 Valleys)
Rakes † = 201 ft (11 Rakes)
Eaves/Starter ‡ = 514 ft (31 Eaves)
Drip Edge (Eaves + Rakes) = 715 ft (42 Lengths)
Parapet Walls = 0 (0 Lengths).
Flashing = 81 ft (14 Lengths)
Step flashing = 112 ft (10 Lengths)
Total Penetrations Area = 25 sq ft
Total Roof Area Less Penetrations = 8,936 sq ft
Total Penetrations Perimeter = 36 ft
Predominant Pitch = 6/12
Total Area (All Pitches) = 8,961 sq ft

Property Location

Longitude = -72.6071788
Latitude = 42.4791139

Notes

This was ordered as a commercial property. There were no changes to the structure in the past four years.

† Rakes are defined as roof edges that are sloped (not level).
‡ Eaves are defined as roof edges that are not sloped and level.



Online Maps

Online map of property

http://maps.google.com/maps?f=q&source=s_q&hl=en&geocode=&q=71+N+Main+St,South+Deerfield,MA,01373-1012

Directions from Gorman Richardson Lewis Architects to this property

http://maps.google.com/maps?f=d&source=s_d&saddr=239+South+St,Hopkinton,MA,01748-2249&daddr=71+N+Main+St,South+Deerfield,MA,01373-1012



Report: 32484243

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