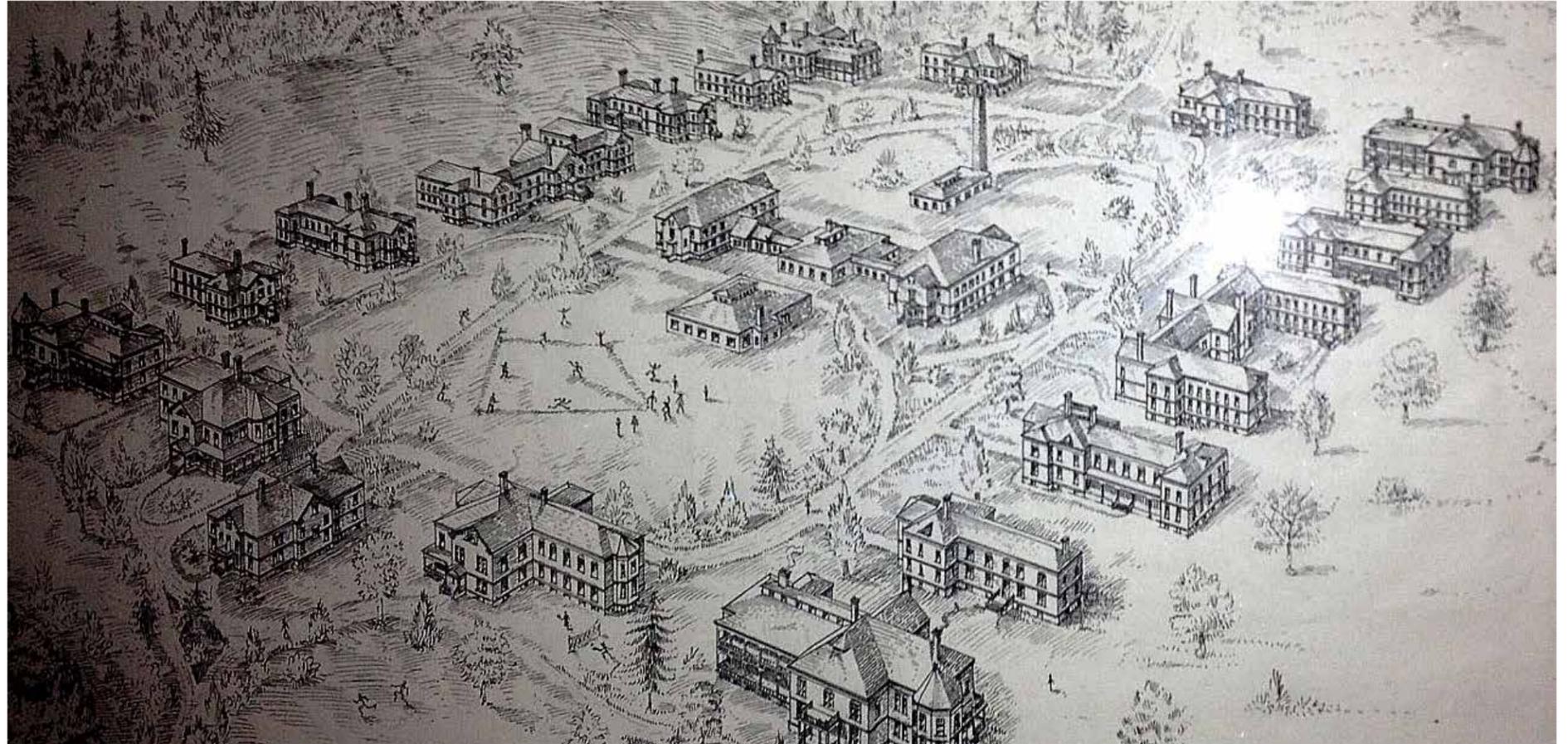


Medfield State Hospital, Medfield, Ma
Cultural Arts Facility Feasibility Study
Architectural Assessment



April 5, 2017



DBVW
ARCHITECTS

111 Chestnut Street
Providence, RI 02903
401.831.1240

Project Team

Architect

DBVW Architects

111 Chestnut Street, Providence, RI 02903

Doug Brown, AIA - Principal in Charge

Kristi Gelner, AIA - Project Manager

Melissa Wherley - Intern Architect

Table of Contents	I.	Executive Summary	5
	II.	Architectural Assessment & Existing Conditions	
		#22A Administration Building	8
		#24 Lee Hall [Chapel]	11
		#25 The Infirmary [Old research building]	14
	III.	Assessment Summary	18
	IIII.	Conceptual Plan	20
	IV.	Preliminary Estimate Of Probable Construction Cost	30

I. EXECUTIVE SUMMARY



Figure 1. Aerial view of Medfield State Hospital campus (Bing)

I. EXECUTIVE SUMMARY

This Preliminary Architectural Assessment of several historic buildings on the Medfield State Hospital (MSH) property was prepared by DBVW Architects for the Town of Medfield to study the potential adaptive re-use of these buildings as a new Town of Medfield Cultural Arts Center. This work is completed in conjunction with the "Cultural Arts Facility Feasibility Study, Medfield, MA," prepared by Louise Stevens of ArtsMarket, Bozeman, MT, October, 2016. Jean Mineo directed and coordinated the study, Medfield Town Planner Sarah Raposa provided reference materials and input throughout the process and John Thompson provided a wealth of information regarding the history and infrastructure of these buildings and of the entire MSH campus.

The focus and scope of DBVW's work involved cursory evaluation of the general condition and appropriateness for intended re-use of the targeted buildings, development of conceptual plans depicting proposed improvements and preparation of preliminary range of probable construction costs. Conceptual plans were produced by re-scaling and tracing electronic copies of original construction documents, which were then embedded within satellite imagery of the campus for illustration purpose. Evaluation of existing conditions of buildings were made during two site visits during the Fall of 2016. The objective of these visits was to generally assess the physical condition of the structures and to evaluate the suitability of the existing configurations and conditions for the intended re-use. Based on our contract scope we performed a cursory level of evaluation, which was sufficient to determine an overall assessment of overall condition and suitability.

Medfield State Hospital, originally the Medfield Insane Asylum, is a historic former psychiatric hospital complex at 45 Hospital Road in Medfield, Massachusetts comprising approximately 35 buildings on 134 Acres of land. The college-like campus was designed by William Pitt Wentworth and developed between 1896 and 1914. After an era dominated by asylums built using the Kirkbride Plan, Medfield Insane Asylum was the first asylum built using the new Cottage Plan layout. It was formally renamed "Medfield State Hospital" in 1914. The campus is currently listed on the State of Massachusetts and National Register of Historic Places and includes 33 buildings in the Town of Medfield's Hospital Farm Historic District. Renovation of buildings on the MSH campus may likely utilize State of Massachusetts and Federal Historic Tax Credits to subsidize the cost of construction.



Figure 2. Campus aerial

Since 2003, all of the buildings have been vacant, with mechanical, electrical or plumbing systems disabled.

DBVW Architects has performed a preliminary exterior and interior facilities investigation of three buildings in preparation of the conceptual design, the Lee Building (Bldg. #24-Town List MPD/MFD), Administration 'A' Building (Bldg. #22-A), the Infirmary (Bldg. #25). Upon evaluation of these buildings and consideration of their relative adjacencies, program space requirements and potential costs we recommended that Lee Hall and the Infirmary would be the most suitable to be incorporated into a new Cultural Arts Center, connected by a small, new Entry addition. Conceptual plans and Preliminary Estimate of Probable Construction Costs are included in sections IV. and V. of this report.

Though not included in the proposed facility, we have included the evaluation of Administration "A" building for future consideration as a related use development based on it's generally sound condition, prominent proximity at the front of the campus and adjacency to the proposed Cultural Arts Center.

II. ARCHITECTURAL ASSESSMENT & EXISTING CONDITIONS



Figure 3. South elevation of building #22A Administration.



Figure 4. East elevation of building #22A Administration.



Figure 5. West elevation of building #22A Administration.



Figure 6. North elevation of the Administration building

#22A ADMINISTRATION BUILDING

Date: 1896
Stories: B, 1, 2, A

The Administration Building was constructed in 1896 as a part of the original hospital historic core and stands centered at the front of the campus. It is a two and 3/4 story (plus basement) red brick bearing masonry structure with wood framed floors and heavy timber-trussed and rafter-framed hipped roof. Generally, the materials used to construct the buildings (such as framing lumber and brick) are of high quality and there have been few alterations over the life of the building, resulting in many of the original details and materials remaining intact. The handsome slate shingled, hipped-roof building features prominent attic gables on each elevation, finely detailed brick exterior, granite clad foundations and brownstone window sills and belt-coursing. Most of the original wood-framed exterior porches have been replaced on the campus, however the front porch (which requires reconstruction) remains on the Administration Building. The interior includes plaster clad masonry bearing walls and plastered wood stud non-bearing partitions. Most of the original



Figure 7. 1st floor entry door looking south



Figure 8. Typical wood panel door



Figure 9. Secondary stair first floor landing



Figure 10. Secondary stair to basement



Figure 11. 1st floor hallway - looking north



Figure 12. 1st floor hallway - looking north

varnished or painted interior trim and woodwork remains intact.

The building was constructed on a sloped section of the campus, with the main floor level approximately ten steps above grade on the South side and six steps above grade on the North side.

1.0 EXISTING CONDITIONS

The administration building appears to be generally sound structurally, but with deteriorated conditions due to suspended maintenance and accelerated by discontinued use and lack of heating. The structural framing, brick and granite foundation, and brick masonry load-bearing building envelope appear to be generally intact with an average amount of deterioration due to age.

EXTERIOR

1.1 Envelope-Walls:

The building envelope is in generally fair- good condition. The exterior brick and foundation requires re-pointing and cleaning and there are several areas where diagonal cracks exist along mortar lines below openings and between header and sill of adjacent opening, areas where flashing has been altered or removed (at porches) and one location where vines have compromised the masonry joints which require further investigation and repair.

1.2 Envelope - Roof:

The roof is clad in slate shingles, copper valley and ridge flashings, copper gutters and decorative gable cornice moldings, all of which appears to be original. Some slate shingles are missing or replaced/patched, though most are in place. Based on appearance of underside of wood sheathing, it appears that the roof substrate is in decent condition, with no evidence of major leaking. Copper gutters are generally intact, though the condition could not be determined. Copper downspouts have been removed however, resulting in accelerated mortar deterioration at areas under gutter outlets. There are no chimneys remaining above the roofline and it appears that they were partially removed at some earlier date.

1.3 Envelope- Exterior Windows & Doors:

Since most windows and doors are currently boarded up, inspection of the exteriors was limited. However, based on observation of the interior, most original windows and doors remain in place, in various levels of condition. See further commentary on treatment of historic doors and windows in Section III - Summary.

1.4 Envelope- Stairs & Entries:

The elevated main entry portico on the South facade is intact, but is in need of significant repair. The original steps and rails have been replaced by historically inappropriate cast-in-place concrete steps and steel railings, both of which are in poor condition. On the West facade, there is another set of non-original, deteriorated concrete stairs, leading to a non-original egress door that serves as an exit from the main stairway. Below this stair, there is an areaway with cast-in-place concrete egress stairs leading from the basement level. On the North facade, a third set of non-original concrete stairs exists, but the original wood portico has been removed. On the East elevation, there is a non-original steel fire escape attached to the wall, connecting between third and second story windows.

INTERIOR

1.5 Interior-Walls:

Interior walls appear to be mostly original and constructed of brick and wood stud bearing walls and wood-framed and terra cotta non-bearing partitions. All partitions except brick basement bearing walls are plastered, although due to disconnected heat, plaster and painted finishes are severely deteriorated throughout the building. Though some plaster may be repairable, there will be



Figure 13. Vault door - basement



Figure 14. Typical double-hung window



Figure 15. Third floor hallway - looking south



Figure 16. Basement hallway - looking south

many areas requiring removal and replacement, due to both deterioration and also for installation of new electrical system and devices. Interior trim is mostly original and is primarily intact and is either paint or varnish finished. Based on the age of the structure, all coatings should be tested and assumed to be lead-containing. Refinish/encapsulation will require compliance with lead abatement regulations painted are solid hardwood

1.6 Interior - Floors:

Floors appear to be framed with full-sized 2"x12" wooden joists and are generally sound and in good condition. The original wood strip finish floors are sometimes clad in composition tile (which may likely contain asbestos) and carpet in limited areas. It is possible that existing wood flooring can be retained after repair and reconditioning, however all floors would need to be evaluated for thickness loss due to previous sanding to determine potential for re-use.

1.7 Interior - Windows & Doors:

Original wood windows contain a one-lite tall fixed transom above a 6/6 or 4/4 double-hung sash. They are mostly present but failing and damaged. Interior casings and sills are solid wood and in fair-good condition. The doors are also in fair-good condition and paneled hardwood. Entry and interior doors have transoms above. Basement doors are clad in steel. There are three vaults, one on each floor and each with original steel doors, which have significant surface rust but could be restored.

1.8 Interior- Stairs:

There are two original wood staircases, both on the west side of the central hallway. The main stair runs from the basement to third floor and at some point an exit door was added at the first floor, presumably to improve code compliance. The second narrower secondary stair connects from the first to third floor and includes iron treads and risers on the lower run. Both are in fair-good condition, with original features intact. Re-use of stairs is possible, however they will require evaluation for code compliance (there is additional consideration for acceptance of continued use of existing stairs within historic structures). However, based on the positioning of the two stairways within the overall plan, it may be necessary to provide an additional, remotely located stairway for future re-use of building (this would also make possible the elimination of the existing, non-original exterior fire escape on the East elevation). This requirement will need to be evaluated based on the specific use and proposed plan.



Figure 17. South elevation of Lee Hall



Figure 18. West elevation of Lee Hall



Figure 19. East elevation of Lee Hall



Figure 20. North elevation of Lee Hall

#24 LEE HALL [THE CHAPEL]

Date 1897

Stories: B, 1, 2 (PARTIAL MEZZANMINES)

The Lee Building, also known as Lee Hall and Lee Chapel was constructed in 1897 and is the centerpiece of the MSH campus core. It is a two-story structure (one main story, with mezzanines on North and South) and additionally it has a full, though limited height basement. It is constructed with brick bearing masonry walls (of varying thickness, up to several feet in the clock tower) with wood-framed floors and roof. The brick elevations are finely detailed with segmental arched window and door openings, decorative belt-coursing, eaves and corbelled rakes, brownstone sills and water-table and a granite-faced brick and stone foundation. The dormered main roof, tower, spire and secondary roofs are all slate-shingled with copper ridges and flashing. The building has a cruciform plan with flanking main entries at the Southeast corner and at the Southwest corner, at the base of the prominent clock tower, featuring clock faces on each side. Recessed secondary entries exist at the East and West ends of the stage transept. The main hall interior is a grand space



Figure 21. Slate roof, cupola and dormer



Figure 23. Recessed entry; settlement cracking above brick arch



Figure 24. Back of wooden clock face and movement mechanism



Figure 22. Missing and damaged masonry detailing; copper gutters



Figure 25. Bell and hammer in tower



Figure 26. Main hall looking north to stage

with cathedral ceiling and attractive structural wood trusses (with later steel structural modifications), decorative plaster arch-framed raked stage on the North end and an (altered) balcony mezzanine on the South end above a fire-placed "Founders Hall" on the main level.

2.0 EXISTING CONDITIONS

Lee Hall is currently in fair-good condition. The structure and building envelope appear to be generally intact with an average amount of deterioration due to age, suspended maintenance, lack of heating and water infiltration at limited locations, described in more detail below.

EXTERIOR

2.1 Exterior - Walls: The building envelope is in fair -good condition. The brick masonry and brick and granite clad foundation requires re-pointing, isolated areas of partial disassembly and re-building (at some arches, scupper boxes, for example) and cleaning. Diagonal settlement cracks were apparent in several locations, but did not appear to be worsening. In the 1950's there was structural work completed adding steel reinforcing to wood-framed roof trusses at the main hall. Evidence of this work is apparent on the East and West elevations, where steel plates and through-wall tie bolts are spaced along

the wall, below the gutter. Presumably, this work was completed to address a concern that the wood trusses were sagging, exerting pressure on the masonry walls and pushing them out at the top. In sighting up the exterior wall faces, there is little evidence of bulging or spreading and the condition appears to be stable. The exterior slate floors at the arched covered entries are in poor-fair condition and require substantial reconstruction. A small, wooden addition to the north facade, which provides cover for a staircase to the basement, is in fair condition and requires substantial repair, as does the stairway. All window openings have been boarded up with plywood so exterior evaluation of windows was not possible.

2.2 Exterior- Roof: The roof is clad in slate shingles, copper valley and ridge flashings, copper gutters and decorative gable cornice moldings, all of which appears to be original. Additionally, there is an original vented cupola with a decorative copper finial at the North end of the roof and a weather vane atop the large clock tower on the Southwest corner. Slate shingles are missing or replaced/patched in many areas, and many others appear to be loose. Based on evidence of substantial water infiltration at the valley between the East side of the clock tower and the South Gable, the copper flashing (and possibly roof shingles) appear to be damaged at this area. Copper gutters are somewhat

intact, though the condition could not be determined. Copper downspouts have been removed in many areas however, resulting in accelerated mortar deterioration at areas under gutter outlets. Dormers, cupola and clock tower faces all require carpentry repairs.

2.3 Exterior - Windows & Doors: Most exterior openings were boarded, preventing evaluation. See descriptions under Interior -Windows and Doors

INTERIOR

2.4 Interior - Walls: Interior walls appear to be mostly original and constructed of brick bearing wood stud bearing walls and wood-framed and terra cotta non-bearing partitions. All partitions and interior of exterior walls except brick basement foundation and bearing walls are plastered, although due to disconnected heat, plaster and painted finishes are severely deteriorated throughout the building. Though some plaster may be reparable, there will be many areas requiring complete removal and replacement, due to both deterioration and also for installation of new electrical system and devices. Interior trim is mostly original and much of it is intact, including paneling at the Trustee's Room on the South end of the main floor and the former balcony mezzanine above, however there are areas that require repair or replacement.



Figure 27. Formal balcony mezzanine (south) - looking east



Figure 28. Southwest stair



Figure 29. Southwest stair



Figure 30. Stained glass window in Trustees room - 1st floor



Figure 31. Formal balcony mezzanine - looking south



Figure 32. Replacement and original windows - southeast stair



Figure 33. Higher ceiling space below stage in basement

All trim woodwork and is either paint or varnish finished. Based on the age of the structure, all coatings should be tested and assumed to be lead-containing. Refinish/encapsulation will require compliance with lead abatement regulations painted are solid hardwood
In the second floor (former balcony) mezzanine, there is substantial damage to ceiling, walls and floor evident in the Southwest corner from water infiltration caused by deteriorated valley flashing at roof.

2.5 Interior - Floors: Based on limited exposed framing, the main floor appears to be wood-framed with 2"x12" joists spanning between steel beams and large wood girder supported by brick piers. Most elements appear to be in sound condition, though full assessment would require removal of plaster ceiling at basement. The original wood strip finish floors are sometimes clad in composition tile (which may likely contain asbestos). It is possible that existing wood flooring can be retained (with spot repairs) and reconditioned, however all floors would need to be evaluated for thickness loss due to previous sanding to determine potential for re-use.
In the entry vestibules, the slate tile from the exterior continues through to the interior and with minor replacements, are in reusable condition.

2.6 Interior - Windows & Doors: Most original wood windows remain in place, but are in various levels of condition. The windows on the main floor and upper mezzanines are all 1/1 double-hung sash windows with a fixed arch transom. Basement level windows are multi-lite fixed or awnings. There are four leaded, stained - glass decorative windows on the South elevation of the Trustee's Room that are in restorable condition. Interior casings and sills are solid wood and in fair-good condition. The wood paneled doors, frames and casings are also in fair -good condition, though there are some non-original doors in certain locations

2.7 Interior - Stairs: There are two original main stairs located at the Southeast and Southwest corners of the building. The stairs are constructed of iron treads, risers and landings, with wood balustrades and are in generally sound condition. Currently, there are steel mesh security screen enclosures in place, which could be removed in a re-use scenario. At the Southwest corner, a small wood stair turns into a series of ladders that extend to the upper levels of the clock tower. (The clock, bell and all connecting mechanisms appear to be intact and restorable.) There are also two smaller sets of stairs at the North end of the building, flanking the stage and connecting the basement, main level and upper North Mezzanines. These stairs are also constructed of iron and appear to be in generally good shape, though in need of surface restoration.



Figure 34. East elevation of Infirmary



Figure 35. South elevation of Infirmary



Figure 36. North elevation of Infirmary



Figure 37. West elevation of Infirmary

#25 INFIRMARY

Date: 1904

Stories: B, 1, 2, A

The Infirmary Building, also known as The Hospital and Research Building was constructed in 1904 just to the east of Lee Hall. It is a 8311 sf, two story (plus basement) red brick bearing masonry structure with wood framed floors and roof and a shallow-pitched hipped roof that is flat in the center. The building features limestone water table, belt-coursing, main door surrounds and window sills (though some are brick) and keystones, over rectangular window openings.

3.0 EXISTING CONDITIONS

The Infirmary building is currently in fair-good condition. The structure and building envelope appear to be generally intact with an average amount of deterioration due to age, suspended maintenance, lack of heating and water infiltration at limited locations, described in more detail below. The interior finishes are in poor condition, but most will need to be removed and replaced in any re-use scenario.



Figure 38. Typical 2nd floor double hung windows



Figure 39. 3rd floor - south room



Figure 40. First floor corridor - looking west



Figure 41. 3rd floor large room



Figure 42. Basement - central hallway looking west



Figure 43. 2nd floor central hallway looking west

3.1 Exterior - Envelope: The envelope of the Infirmary building appears to be in good condition. The brick and stone masonry requires re-pointing at approximately 25% of the wall area and there is some limited masonry repair required at the sidewalls and top of the North central bay. The narrow shed roof and flashing on this bay also appears to need replacement. Vines have overgrown the facade in a few locations, requiring removal and repair to masonry joints. It appears that the original overhanging eave, which was perhaps detailed with brackets, was at some point cut back closer to the building (probably since it was easier than repairing and maintaining the decorative eave). As a result of this modification, original gutters and downspouts have been removed. The masonry is dirty and stained in many locations and would benefit from cleaning.

3.2 Exterior - Roof:

The sloped perimeter of the roof is covered in the original slate shingles. Many of the shingles have been damaged, some are missing and it appears that some areas have been patched in more recent years. Much of the valley flashing on the roof is damaged or is missing, resulting in water infiltration and damage to wood structural framing at those locations. The upper flat roof appears to be a composite built-up roof. Though there are no apparent roof

leaks from this flat section, it appears to be well beyond its expected service life and should be replaced, along with all transition flashing to sloped roof.

3.3 Exterior - Windows & Doors: Since most windows and doors are currently boarded up, inspection of the exteriors was limited. However, based on observation of the interior, many original windows and doors remain in place, in various levels of condition. See further description of windows in Interior - Windows/Doors section and in commentary on historic doors and windows in Section III - Summary.

3.4 Exterior - Stairs/Entry: There are prominent elevated main entries on both the West and East ends of the Infirmary, framed by decorative limestone. The original steps and rails leading to each of these entries have been replaced by historically inappropriate cast-in-place concrete steps and steel railings on the West side and a (non code - compliant) concrete ramp with steel rails on the East side. Below the East entry, a concrete areaway and stairs leads to a basement level egress door. All of these later alterations are in poor condition and require replacement.

INTERIOR

3.5 Interior - Walls: Interior basement level bearing walls appear to be constructed of brick masonry and at the North hallway wall, of steel columns and beam. On upper floors, bearing walls may be either wood framed or steel column and beam, similar to basement (walls were covered, so inspection was limited). Non-bearing partitions appear to be wood-framed or terra-cotta block and all walls and ceilings are metal-lathed and plastered. Most of the painted and plastered walls and ceilings are significantly deteriorated, and would require complete sheathing replacement in any re-use scenario. At the non-original East stairway and entry vestibule, the walls are clad in glazed ceramic tile.

3.6 Interior - Floors: The basement floor is a concrete slab and the upper floors appears to be 2"x12" wood framed. Most floors are covered with composition tile (likely to be asbestos-containing) in poor condition. At several locations, the floor framing (and roof above) is significantly compromised due to water intrusion, presumably attributable to missing or deteriorated roof valley flashing and neglect. The framing and sheathing at these areas will require replacement, but the affected area appears limited.



Figure 44. Wood roof framing - attic



Figure 45. East stairway (non - original)



Figure 46. East stairway (non - original)



Figure 47. West stairway



Figure 48. North room in basement



Figure 49. Water damage and deterioration from roof leak

3.7 Interior - Windows/Doors: The main East and West entry doors have been replaced by non-original aluminum and glass doors with a sidelight and transom. At the east end, a non-original set of half metal, half glass doors with metal frame separates the entry vestibule from the corridor. The west corridor has a set of original wood and glass doors with transom above and wood frame. The first floor interior doors are a mixture of non-original metal and wood, flush panel doors with no glass. The second floor doors, many of which appear to be original, are generally two-paneled (some with half glass) with two-lite transoms. There are several types of windows in the building in mostly poor-fair condition. The basement has mostly 8/8 wood double hung windows (set into window wells to maximize daylight) with some smaller units. The windows in the upper floors are primarily double hung's of various sizes, divided in several lite configurations, including 8/8 and 8/12. There are more windows on the upper floor than on the main floor, though the windows are larger on the main floor.

3.8 Interior - Stairs: There are stairways at each end of the central corridor. The wood stairway connecting all three levels on the West end appears to be original and in good condition. The steel-framed stairway at the East end appears to be a later addition and is also in good condition. This stairway only connects the first and second floors. The second means of egress from the basement at this end of the building is via an exterior areaway stair.

III. ASSESSMENT SUMMARY

ASSESSMENT SUMMARY

Based on initial evaluation, the existing condition of each of the buildings included within this study is sufficiently good to merit further consideration for rehabilitation and re-use for the purpose of creating a Cultural Arts Center for the Town of Medfield. While much of the structure and shell of these historic buildings is generally in restorable condition and the interior layouts are appropriate for the proposed use, the rehabilitation of these buildings will require a major scope of work, including but not limited to; interior demolition and hazardous material abatement, exterior masonry restoration, roof shingle, flashing and gutter/downspout repair/ replacement, carpentry repairs, window and door restoration/replacement, interior gut-replacement of all interior finishes, doors and hardware, code improvements and full replacement of all mechanical, electrical, plumbing and fire-protection systems (including new exterior services).

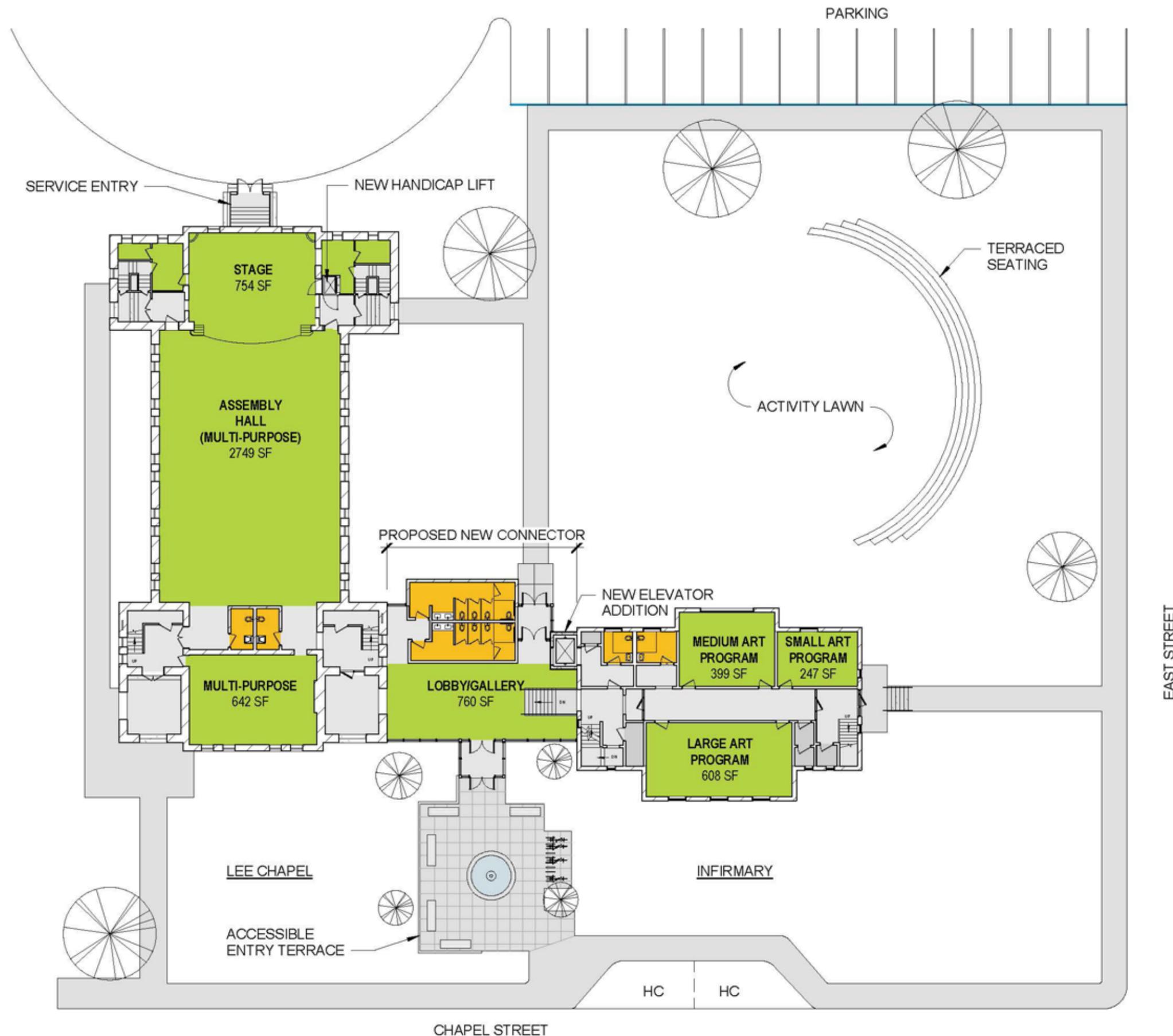
While the Town of Medfield appears to be providing a commendable level of interim maintenance of the historic structures on the MSH campus, it is very important to maintain all temporary patching of roofs and gutters and boarding all openings to prevent further water infiltration related damage. In the buildings that were reviewed in this study, both Lee Hall and the Infirmary had specific (limited) roof leaks and deterioration at certain areas that should be addressed immediately in order to prevent expansion of a currently manageable extent of damage.

III. CONCEPTUAL PLAN

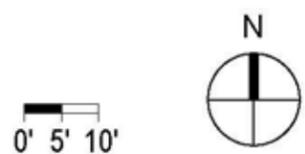
CONCEPTUAL DESIGN

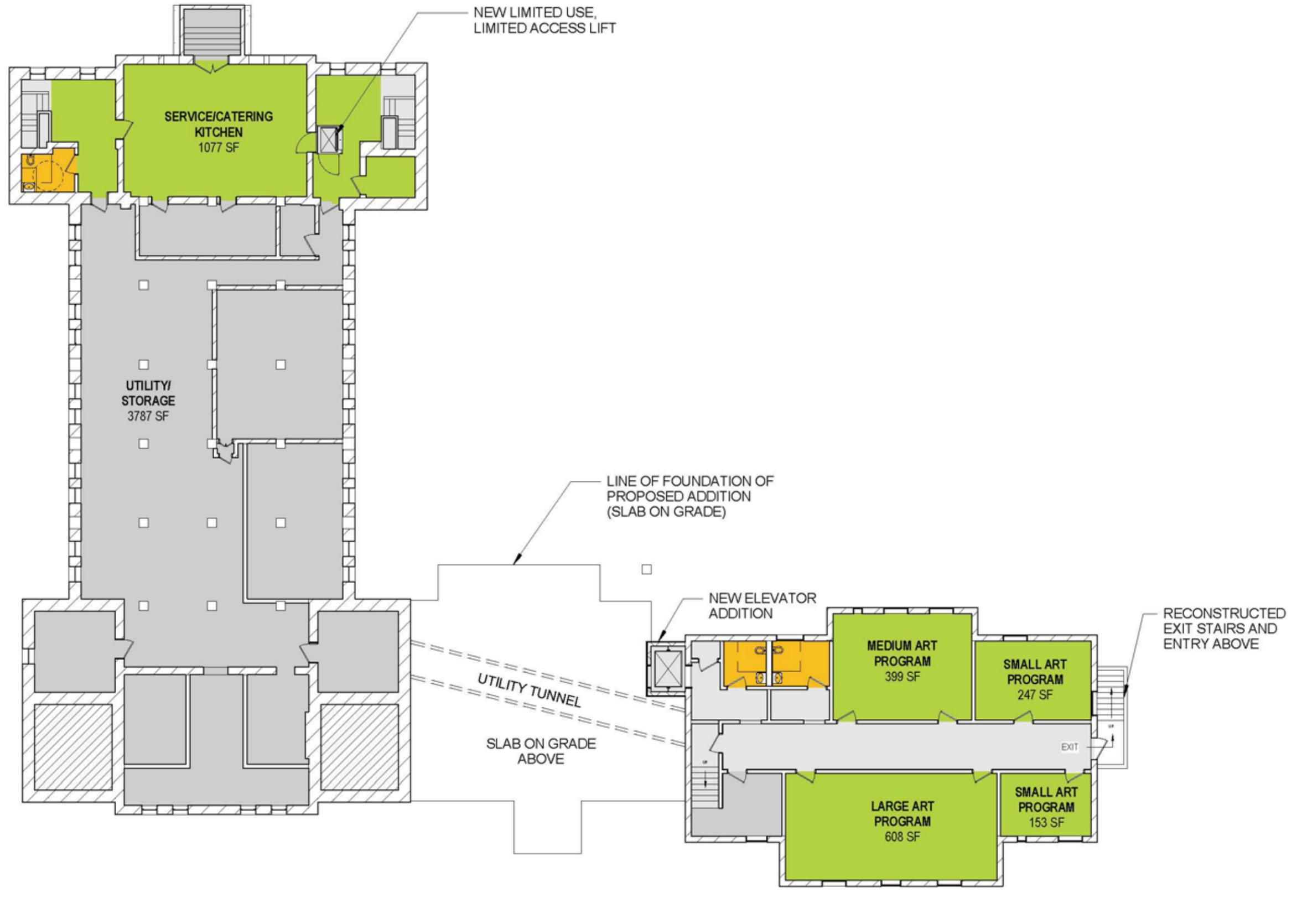
Upon evaluation of these three buildings and consideration of their relative adjacencies, program space requirements and potential costs, we have concluded that Lee Hall and the Infirmary would be the most suitable to be incorporated into a new Cultural Arts Center. While requiring significant restoration, the interior plan of each building can be re-used without significant alteration to provide a reasonable mix and size of program spaces, appropriate for a Cultural Arts Center. However, in their current configuration, they are each deficient in providing appropriately scaled entry and restroom accommodations required for a public facility of this use. Additionally, since the main floor levels are currently elevated above the existing (sloped) exterior grades and the main floors of the two buildings are at different elevations, providing accessible entry to and between the buildings presents another challenge. Therefore, the proposed solution to each of these issues is to construct a new Entry addition, connecting Lee Hall to the Infirmary. This addition could provide a prominent, accessible main entryway (including connection to entry from North parking area and outdoor program space), a public gallery/lobby and ticket booth location, space for main public restrooms and gracious connection between Lee Hall and the Infirmary, including an elevator to negotiate the level difference between buildings and the floors of Infirmary.

The attached Conceptual Plans depict a new Medfield Cultural Arts Center, combining Lee Hall, the Infirmary and a new connecting addition, with a combined net usable area of approximately 17,335 SF. The proposed site is bounded by Chapel St. on the South and East St. on the East and includes a proposed outdoor activity lawn, adjacent to the existing parking area on the Northeast side. On the West side, Lee Hall is adjacent to a large central green.

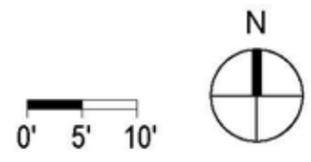


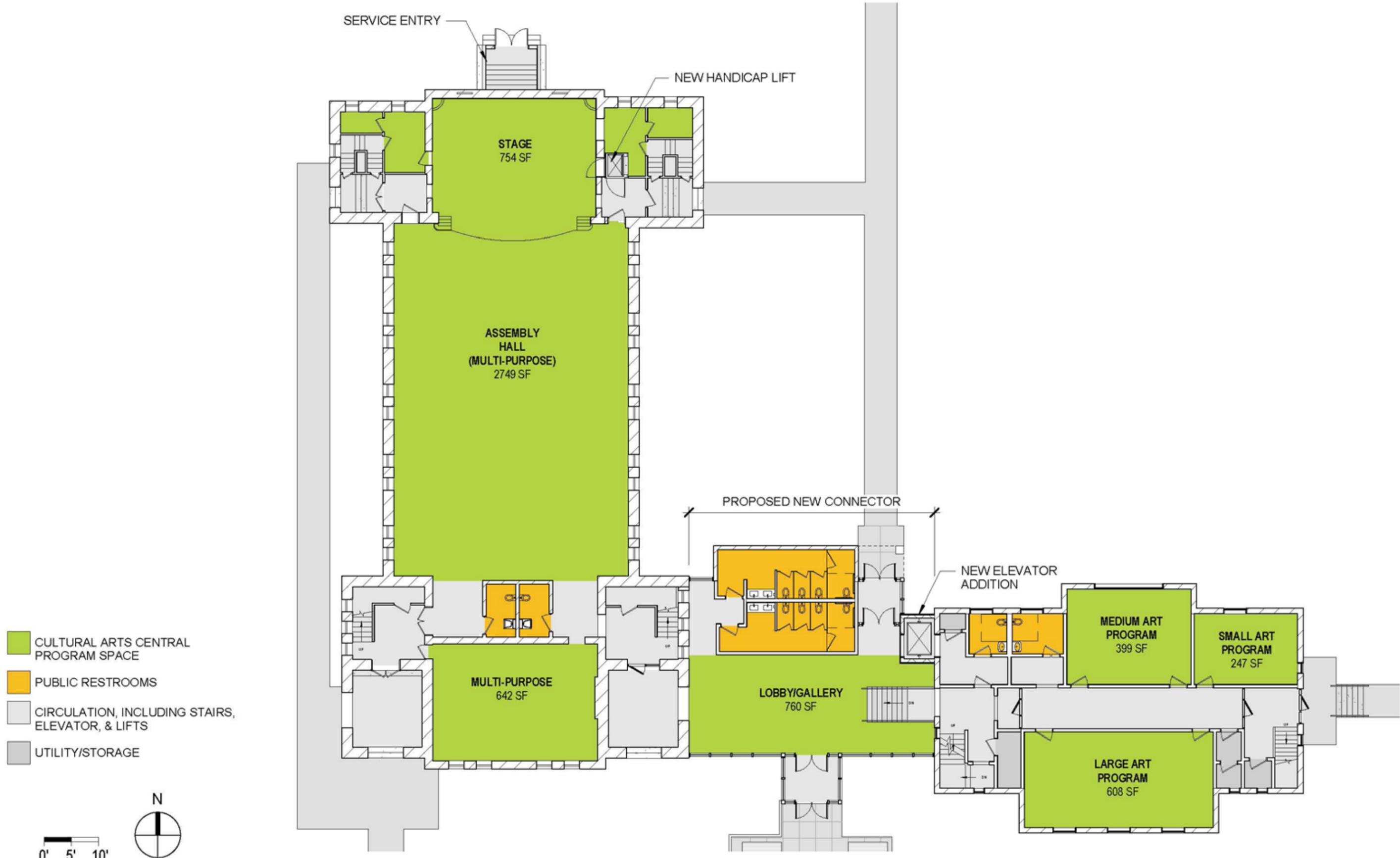
- CULTURAL ARTS CENTRAL PROGRAM SPACE
- PUBLIC RESTROOMS
- CIRCULATION, INCLUDING STAIRS, ELEVATOR, & LIFTS
- UTILITY/STORAGE

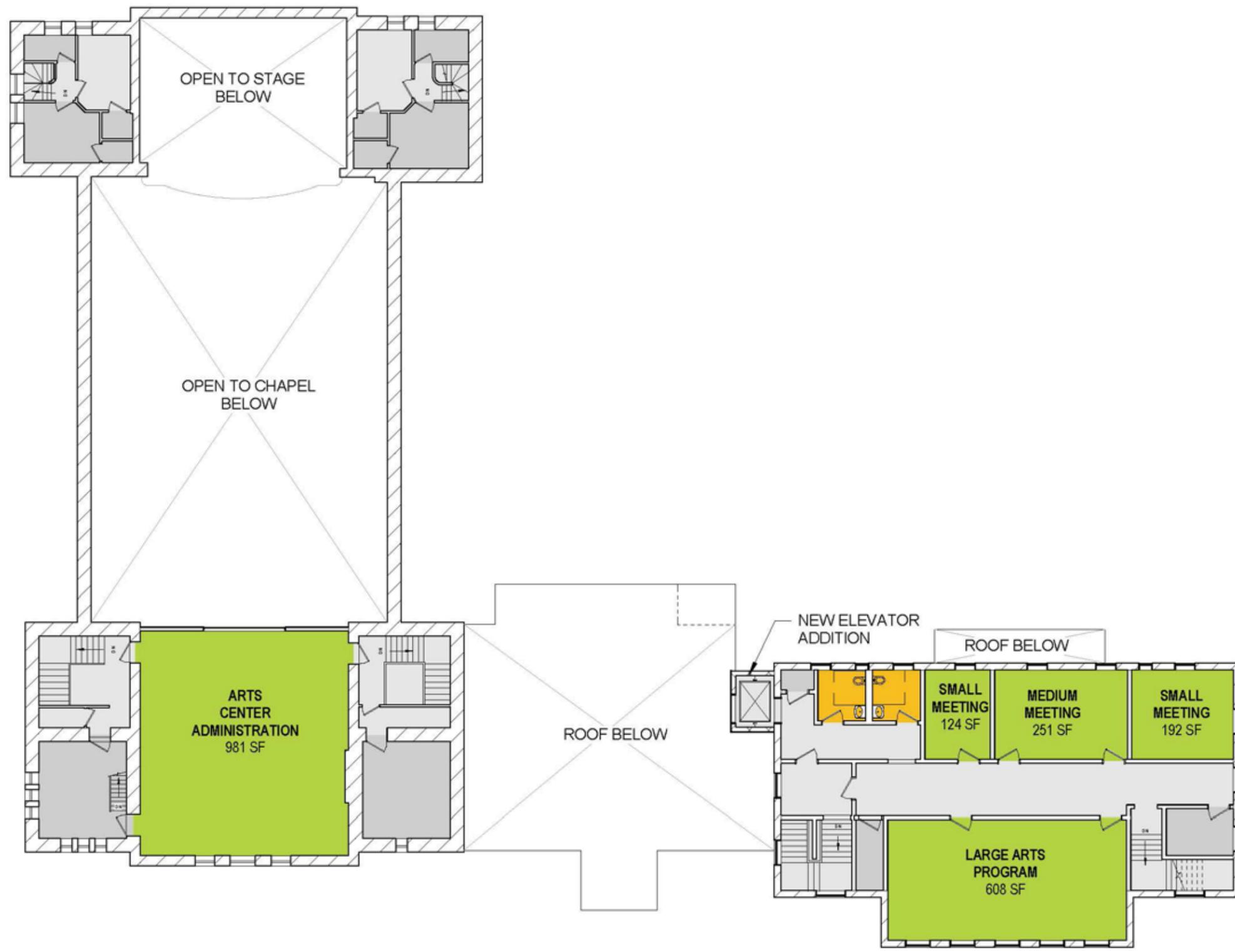




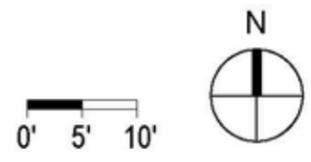
- CULTURAL ARTS CENTRAL PROGRAM SPACE
- PUBLIC RESTROOMS
- CIRCULATION, INCLUDING STAIRS, ELEVATOR, & LIFTS
- UTILITY/STORAGE
- INACCESSIBLE







- CULTURAL ARTS CENTRAL PROGRAM SPACE
- PUBLIC RESTROOMS
- CIRCULATION, INCLUDING STAIRS, ELEVATOR, & LIFTS
- UTILITY/STORAGE











IV. PRELIMINARY ESTIMATE OF PROBABLE CONSTRUCTION

PRELIMINARY ESTIMATE OF PROBABLE CONSTRUCTION

A preliminary estimate of probable construction cost for the Medfield Cultural Arts Center as depicted in the conceptual design and based on the conditions assessment provided in this report was prepared by Hank Maurer, Chief Estimator with Rubicon Builders, Mansfield, Ma. This (attached) estimate is based on a cursory evaluation of building conditions and required scope of work and should be considered only as a preliminary order of magnitude of potential cost, subject to general notes and assumptions provided. Additionally, since there was limited available information regarding condition and availability of site utilities, including sewer, water, electric and natural gas services, this estimate excludes the cost of providing those services. If it is decided to further investigate the feasibility of this project, it is recommended that a full conceptual design be completed, based on accurately surveyed existing conditions documents and additional site utility investigation, from which a more accurate Conceptual Cost Estimate can be prepared.

Utilization of State of Massachusetts and Federal Historic Tax Credits could provide a substantial subsidy to the cost of rehabilitation and re-use of these (and other) historic structures on the MSH campus. In order to qualify for these credits, all rehabilitation work needs to be completed in accordance with the Secretary of the Interior's Standards for Rehabilitation of Historic Structures. These standards provide specific requirements for repair and restoration of historic components (such as masonry), replacement of historic materials and elements (such as roofing and windows), restrictions on modifications to major building features and also guidance on approach to any proposed additions, which are required to be architecturally distinguishable from the historic structures. The credits are applied to all qualified rehabilitation expenses pertaining to the rehabilitation, including construction and "soft" costs, but the costs related to the proposed addition would not be eligible for the credits.



Date: 03/30/17
 Project: **Medfield Arts Center**
 Location: Chapel St., Medfield, MA
 Client: **DBVW Architects**
 Estimate #: 10-12-05
 Title: **Order of Magnitude - Project Conceptual Cost Forecast**

Item Description	Quantity	Unit	\$/SF	Extended Cost
Location and Group Summary				
CHAPEL				
CHAPEL - INTERIOR RENOVATIONS			\$65.49	\$815,486
CHAPEL - EXTERIOR RESTORATIONS			\$85.66	\$1,066,600
CHAPEL - SPECIAL CONDITIONS			\$24.38	\$303,632
CHAPEL - SUBTOTAL	12,452	SF	\$175.53	\$2,185,718
INFIRMARY				
INFIRMARY - INTERIOR RENO			\$70.74	\$526,320
INFIRMARY - EXT. RESTORATIONS			\$81.81	\$608,633
INFIRMARY - SPECIAL CONDITIONS			\$16.00	\$119,040
INFIRMARY - SUBTOTAL	7,440	SF	\$168.55	\$1,253,993
CONNECTOR - ADDITION				
CONNECTOR - INT. CONSTRUCTION			\$90.42	\$156,880
CONNECTOR - STRUCTURE			\$230.63	\$400,140
CONNECTOR - SPECIAL CONDITIONS			\$159.09	\$276,025
CONNECTOR - SUBTOTAL	1,735	SF	\$480.14	\$833,045
BUILDINGS - SUBTOTAL	21,627	SF	\$197.57	\$4,272,756
SITE DEVELOPMENT	21,627	SF	\$18.58	\$401,800
BUILDING and SITE DEVELOPMENT - SUBTOTAL	21,627	SF	\$216.14	\$4,674,556
GC, GR and FEES - SUBTOTAL	21,627	SF	\$40.88	\$884,075
PROJECT - TOTAL CHAPEL, INFIRMARY, CONNECTOR AND SITE DEVELOPMENT	21,627	SF	\$257.02	\$5,558,632

GENERAL NOTES

- 1 Order of Magnitude \$/Unit Forecast.
- 2 SF was arrived from DBVW Architects sketch (no date) received 3/6/2017.
- 3 OoM forecast has been based on open shop labor and wages.
- 4 Estimate assume a construction start 4th quarter of 2017.
- 5 Excludes design services or design fees; contingencies, and escalation beyond 2017.
- 6 Excludes federal, state or local usage, connection and/or user fees.
- 7 Excludes building utility service work.
- 8 Site development is limited to that shown on sketches (localized).
- 9 Masonry and roof repairs values are allowance and assumes substrata components are sound.
- 10 Amphitheater work limited to grading and stone block seating and excluded structure in earlier sketches.
- 12 See detailed estimate outline that follows.