



BATH HIGH SCHOOL RE-USE STUDY

Town of Bath, NC
April 10, 2007

CONTENTS

1. EXECUTIVE SUMMARY
2. INTRODUCTION
 - A. STUDY PURPOSE AND SCOPE
 - B. PROJECT BACKGROUND
3. PROJECT PROFILE
 - A. SITE / UTILITIES
 - B. BUILDING CONDITION
 - C. FUTURE USES
4. PROBABLE REHABILITATION COSTS
5. NEXT STEPS
6. APPENDIX





This report was prepared for the Town of Bath, NC, under a grant from the NC Rural Center to explore the feasibility of renovating the main buildings of the former Bath High School to serve new uses. It is a preliminary analysis of rehabilitation concepts for possible future uses of the property, rather than a specific development proposal or design.

The former Bath High School consists of three separately constructed, two-story masonry buildings and a connector built for general education classes over four years around 1920. With the addition of a one-story kitchen addition in the mid-1960s, the school has more than 30,000 square feet under roof, making it both large and prominent given its location on Highway 92 in the Historic Bath State Historic District.

The school has been closed since 1989, and the shuttered buildings are deteriorating due to weather, lack of maintenance and vandalism. The Beaufort County School system prepared to demolish the buildings but instead returned the property to the Town of Bath. Over the past two years, the town has permitted a group of interested citizens to contribute money and labor to clean up debris, patch roof leaks, and repair doors. A structural engineer familiar with building preservation assessed the buildings in 2006 and found the structures fundamentally sound and generally capable of adaptation to serve new uses and meet new building codes.

The school buildings will require significant work to weatherproof the envelopes, provide modern mechanical systems, and update to current structural, life safety and accessibility codes. At the same time, re-use will save the cost of razing the structures and the expense and environmental impact of disposing of debris.

Re-use of the high school property will generate wastewater that, at least for a time, exceeds the capacity of the town's municipal waste treatment facility. Uses less intense than a public school and cafeteria probably can be served by an on-site septic tank and disposal field, installed for the school sometime after 1960 and used until the town built its pumped sewage system some 20 years later. Field investigation is needed to verify the adequacy and condition of the septic system.

Bath's small size and rural environs do not readily support a single enterprise of 25,000-30,000 square feet. Fortunately, the Bath High School property is well suited to a mixed-use development. The main buildings, just as they were constructed separately and independently, can offer both discrete spaces and shared circulation and bathrooms. Phasing is also possible, with the most needed or readily funded uses accommodated first, provided that steps are taken to halt deterioration in all the buildings in the meantime.

Among possible uses, four seem likely candidates for inclusion in the project:

- An expanded Visitor's Center with museum-quality exhibit galleries.
- Larger quarters for the Bath branch of the Beaufort Hyde Martin Regional Library.
- A conference center and flexible auditorium known as the Bath Assembly.
- Gallery space for exhibiting work by local and visiting artists.

Conceptual plans showing the spaces for each use as well as shared areas and site development are included in the study. After removal of some second-floor areas to create double-height galleries and lobbies, and demolishing the kitchen, the total project includes approximately 26,000 square feet.

Considering the costs of major system upgrades, allowance rates for interior upfits, fees, and other "soft costs," the study proposes a probable project budget of \$3.98 million, which includes a 12% contingency fund. The costs for the four uses and common areas average \$153 per square foot.

If the Town of Bath elects to proceed with efforts to rehabilitate the school, an appointed taskforce could seek indications of interest from potential users and continue maintenance/stabilization of the buildings. The Town should establish a financial and ownership framework for the project, and set out desired uses and goals in writing as part of a Request for Proposals from qualified developers.

A. STUDY PURPOSE AND SCOPE

This report for the Town of Bath, NC, summarizes results of a study exploring the feasibility of renovating the main buildings of the former Bath High School to serve new uses. Principal funding came from the NC Rural Center's Building Re-Use Pre-Development Grant Program. The Town of Bath and the Historic Bath Foundation provided the supporting local contributions.

The study is a pre-development analysis, intended to offer rehabilitation concepts for the former high school buildings and to assist the Town, which owns the property, in evaluating possibilities. It takes into account the present context and possible future uses of the property. It does not constitute a specific development proposal or design, but rather is preliminary in nature, a conceptual analysis. Community needs that might be served are included in the study, but no solicitations of or interviews with prospective development partners were conducted for this preliminary study.

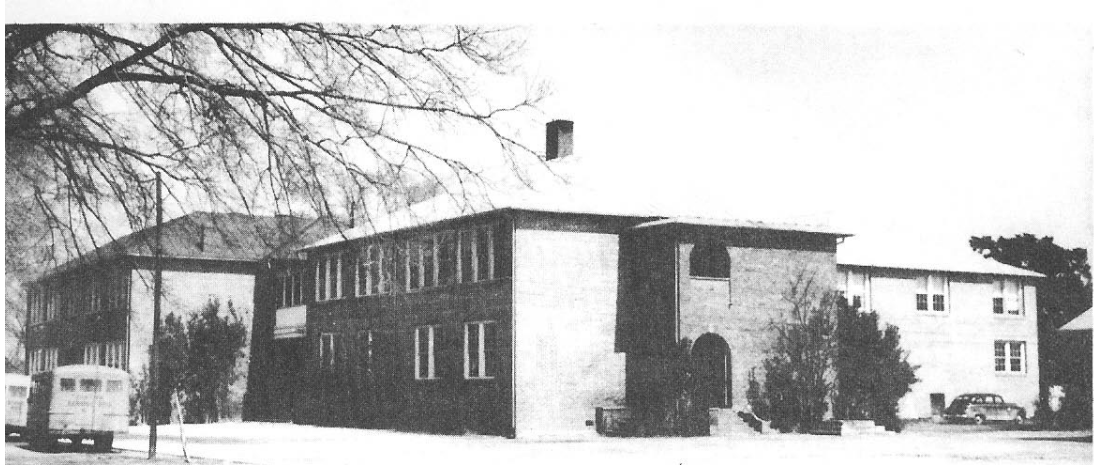
B. PROJECT BACKGROUND

The former high school at Bath sits on approximately two acres with frontage on NC Highway 92 (Carteret Street), the principal route through North Carolina's oldest incorporated town. At two stories and with 31,300 square feet under roof, the school complex is the largest and most prominent structure along what has become Bath's main business strip. It also is adjacent to the Visitor's Center for North Carolina's Bath State Historic Site, located immediately across Harding Street to the west. The town's historic Main Street and Bath Creek are in the next block west. The school complex is one of two early Twentieth Century masonry buildings in the largely colonial-era National Register Bath Historic District. Thus the school buildings are highly visible and significantly connected to both the historic and the commercial aspects of Bath.



(1) Visitors' Center (2) Palmer-Marsh House
(3) Swindell Cash Store (4) Bath Creek Dock

The three main buildings of the school were constructed consecutively over several years around 1920, and put into service as each was completed. The construction consists of masonry exterior load-bearing walls with large openings for double-hung wood sash windows. Shallow-sloped hipped roof trusses have exposed rafter tails. Metal cladding has replaced the original shingles. Wood floor and interior wall framing is typical throughout.



Historic view of the Bath High School complex from Harding Street

The Bath school educated children of all ages during the course of its life. Since the last senior class graduated in 1989, and particularly recently as the gradual deterioration of the vacant buildings became more visible, a number of groups and individuals have suggested various activities and programs that might put the property back into service.

Concern over the liability associated with owning unoccupied property, along with speculation about the alternative course of action – demolition, which was and still is a possibility – has added intensity to the discussion.

Much uncertainty revolves around several pivotal questions that inevitably arise concerning the adaptive re-use of aging buildings: namely, whether the structures can be made safe and suitable, what the cost of adapting them would be, and how re-development of the complex might proceed.

A. SITE / UTILITIES

The former Bath High School complex consists of three two-story buildings, joined by a two-story connector, built consecutively over a four-year period around 1920. A one-story flat-roofed kitchen addition dates from the 1960s. These buildings, unoccupied since 1989, share the approximately two-acre site with a one-story freestanding building that was constructed around 1939. This building originally housed the gymnasium, home economics and vocational arts programs. It has continued to be occupied for education uses – serving the elementary school across the street -- since the high school closed. All school-related use is scheduled to end in 2007, and town officials have discussed possibly adapting the building for various civic functions. Consequently, the 1939 structure is not included in this pre-development study.

Much of the rest of the high school property is open and unoccupied. The site's significant use has been for the nitrification field for the sanitary waste disposal system. The field and septic tank are shown in construction drawings dated in 1960, indicating the installation occurred sometime soon thereafter. The on-site system has not been regularly used since the school sewer was connected to the Town of Bath's municipal pumped sewage disposal system in the 1980s, some years before the school closed.

For the past several years, the town's wastewater system has been operating at or near capacity, and at this date there exist no approved or scheduled improvements to provide additional capacity. As a result, re-use of the existing high school buildings may have to rely, at least initially, on the on-site treatment and disposal system.

The 1960 drainage field construction drawings show a 3,000-gallon tank and 1,800 linear feet of 6" drain lines. A field investigation is needed to establish if that is, indeed, what was installed, and also to determine the present-day condition of the components. It is known that the system was serving a population of 1,000 or more students and teachers when it was last in continuous use, and that it had served that population for 20 years or more. Inquiries to the Beaufort County School system and the Beaufort County Health Department produced no reported incidents or failures of the system before the school switched over to the pumped municipal system in the 1980s.

With respect to putting the septic system back into service, any re-use would involve inspection of the existing installation by the Health Department and approvals based on the system's capacity to serve the proposed uses. Generally, the Health Department advises that low-intensity uses would be most readily permitted, and/or require less extensive repairs, if repairs were needed. Water uses involving regular food preparation or 24-hour domestic consumption would place the most demands on the septic system. Retail, office, and other activities that do not involve cafeterias or showers would be more likely to be accommodated than restaurants or residences.

Regarding other utilities, electric, telephone and cable service are provided to the Bath area by Washington Electric Utilities, Embarq and Red's Cable, respectively.

B. BUILDING DESCRIPTION AND CONDITION

The three main buildings of the high school are of similar construction and age, with load-bearing exterior walls of brick masonry, wood floors supported on brick piers over a shallow crawl space, wood stud walls or steel pipe columns for interior bearing, and built-up wood roof trusses. An engineer familiar with historic structures assessed the buildings in 2006 and found them generally sound and with minimal structural deficiencies, despite deterioration from numerous roof leaks over the years since closing. The report by DCF Engineering Inc., Cary, NC, is available from Bath High School Preservation.



Bath High School buildings

Plumbing, electrical and heating/cooling systems all require replacement, and the buildings would require updating in light of life safety and accessibility codes that have come into being since the initial construction.

In December, 2006, a team of architects and interns spent two days in Bath and documented the high school buildings in photographs and measured drawings. In the brief descriptions that follow, the structures are referred to by their positions on the site or their function: the South, North and East buildings, the Connector, all from the 1918-22 period, and the newer Kitchen, from the 1960s.

1. South Building

The South Building, whose west elevation faces Harding Street, provided the first classrooms in the Bath school and may have been occupied as early as 1918. It was later used as the kitchen and cafeteria and ultimately, with all the interior partitions replaced with steel columns, solely as the cafeteria. With a footprint of 2,825 square feet (64.25 x 44 feet), the South Building provides 5,650 gross square feet of space. Ceiling heights are 12 feet on both levels.



2. North Building

The North Building was the second to be constructed and became the main point of entry for the Bath school. It housed the principal's office and classrooms, and had a footprint of approximately 4,000 square feet (74 x 54 feet). It provides a total of 8,070 gross square feet. Ceiling heights are 11'-9" on the ground floor and 12 feet



on the upper floor. Like the South Building, it also faces west, to Harding Street.

3. *East Building*

The East Building, which houses the school auditorium and stage on the ground floor and additional classrooms above, was built third. It is the largest of the school's main buildings, with a footprint of 5,440 square feet (103 × 52.8 feet), or 10,880 gross square feet. Steel pipe columns support the upper floor. The lower floor slopes slightly for auditorium seating, which reduces ceiling height from 12'-6" at the front to 11'-10" at the last row of seats. Upper level ceilings are 11 feet above the floor. Unlike the other two buildings, the East Building's entry is on the shorter end, facing north. A wide porch and two sets of double doors front on Carteret Street. A gabled portico once sheltered the auditorium entry, but it was deteriorating and has been demolished.



4. *Connector*

A two-story, east/west connector built along with the East Building linked all three buildings with a generous 15-foot-wide corridor. It provided circulation, student lockers and lunchroom, and was stepped to meet the different finish floor levels in the buildings it connects. The connector has about 1,800 square feet on the main floor and nearly 1,700 square feet on the upper level, a total of nearly 3,500 gross square feet. Over the years, various rooms and closets have been partitioned in the space, narrowing the passage.



5. *Kitchen*

The newest addition to the school complex, the Kitchen is a one-story, flat-roofed concrete masonry building with brick veneer, which was attached across the front of the South Building sometime during or after 1966, according to construction drawings. The addition contributes about 1,770 gross square feet (44 × 40 feet) to the school complex. Its detail and massing are not sympathetic to any of the original buildings, and it covers much of the original front façade of the South Building. Also, leaks in the flat roof system have deteriorated into several significant failures.



Additions and Alterations

Over the years, necessity or convenience have brought a variety of changes to the original structures. Narrow oak strip flooring was installed over original pine board floors in many areas. Heating improvements included the installation of a boiler, first coal-fired and later fueled by oil -- in a basement under the Connector. Some stairwells were added or enclosed. A 1950s electrical upgrade modernized room lighting. Installation of the septic system allowed for various bathroom additions and plumbing upgrades.

Hazardous Materials

The age of the structures and survival of many original painted plaster and wood surfaces suggest that lead-based paint may be present. A lead paint assessment should be conducted and appropriate abatement steps taken as part of rehabilitation.

The presence or condition of fuel storage, if any still exists, for the boiler is unknown and should be determined.

The Beaufort County School System reported that the building was tested for asbestos as part of the preliminary demolition plan. Two sources of asbestos were identified – insulation around boiler piping, and flooring material in the cafeteria. The school system had both sources removed in anticipation of building demolition, which was subsequently delayed.

Conclusions

Based on recent visual inspection and on review of the earlier assessment in 2006 by a structural engineer, the original buildings of the Bath High School appear to be fundamentally sound and good candidates for rehabilitation and reuse. The one-story Kitchen addition, which blocks a significant elevation on the South Building, detracts from the original configuration and should be demolished.

Re-using the original buildings will involve significant expenditures to weatherproof the building envelope, provide modern mechanical systems, and update buildings to current structural, life safety and accessibility codes. At the same time, re-use will save the cost of razing the structures and disposing of debris, savings which can be applied to the expense of rehabilitation. The majority of demolition bids received by the Beaufort County Schools were above \$200,000. The only significantly lower bid, for under \$70,000, was withdrawn after other bids were opened.

Bath High School: Existing Building Area

**A. Building area
(net of unheated stairs, porches)**

	<i>floor</i>	<i>area</i>	<i>bldg. tot.</i>
1. South Building	1	2,825	
	2	2,825	5,650
2. North Building	1	3,962	
	2	4,108	8,070
3. East Building	1	5,440	
	2	5,440	10,880
4. Connector	1	1,808	
	2	1,690	3,498
5. Kitchen	1	1,772	1,772
SUBTOTAL		29,870	29,870

B. Unheated area	1	873
	2	577

TOTAL AREA UNDER ROOF	31,320
------------------------------	---------------

C. FUTURE USES

The Bath High School property is best suited for adaptive re-use serving more than one activity rather than a single occupancy. Four considerations support this mixed-use approach to development:

- Bath's small size (pop. 275) and rural environs do not easily support large-scale operations.
- The configuration and massing of the three buildings allow for independent uses while permitting some shared facilities, such as toilets and meeting rooms.
- Combining smaller, multiple uses offers the most flexibility in dealing with the limitations of the currently available wastewater systems.
- Once the building envelope is secure, occupancy could be phased so that the most needed or readily funded uses could be completed first.

A variety of uses including business, retail, residential, education, arts, tourism and healthcare have been suggested for the buildings of Bath High School. The question becomes finding a compatible combination that is appropriate and suitable given the context and character of the buildings. As a former school, the buildings feature large rooms with high ceilings and ample daylight provided by the frequent, large window openings. Those are the strengths, the "good bones," of the project.

Among the long-discussed space needs and wants in Town of Bath, several in particular seem well-suited for inclusion in the rehabilitation of the high school buildings:

I. Visitors' Center and Museum

The Historic Bath Commission and the Historic Bath Foundation are interested in gaining museum-quality display space, a desire triggered, but not limited, by the ongoing recovery of artifacts from the wreck of the pirate Blackbeard's flagship, *Queen Anne's Revenge*. Some have advocated a building that would associate the new gallery space with an expanded visitor center for the Bath State Historic Site. Several years ago, the Foundation commissioned plans for a free-standing building of approximately 5,000 square feet combining the two functions on a site adjacent to the existing visitors' center.



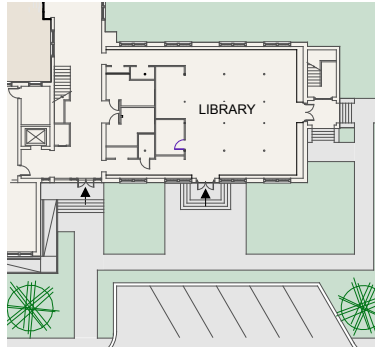
The North Building, with its entrance most visible to eastbound traffic on Highway 92, could support a combined visitors' center and museum space, including one-story, double-height and outdoor exhibition areas. Additional office and meeting space could be provided on the upper floor of the South Building. The total programmed area would be 6,830 sf. Gross area would be 9,220 sf. The new and expanded programs would support 3-4 additional employees.

2. Bath Community Library

The Bath branch of the three-county Beaufort Hyde Martin Regional library is seeking larger quarters. The branch currently occupies a rented frame building with less than 800 square feet at

3. PROJECT PROFILE (CONT.)

the intersection of North Main Street and Highway 92. An expansion program provided by library staff calls for 2,500-3,000 square feet of space, which would provide stack area for 15,000-17,000 volumes and spaces for staff, children's activities and reading and meeting areas. Typically local governments provide the physical facilities for library branches, but Bath, before gaining ownership of the old school buildings, has not had space to commit to that use. A group of citizen supporters provides funds to rent the current space.

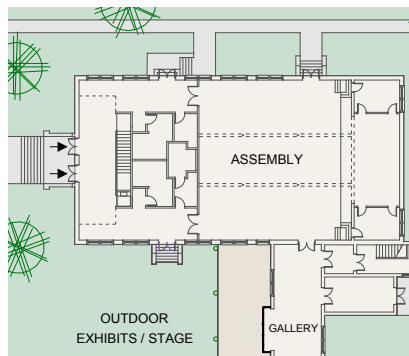


The lower level of the South Building, with its own entrance on Harding Street, could provide 2,090 net sf of program area for the library, or about 2,820 sf of gross area, which would include shared bathrooms. Additional structure could be provided under the floor in the stack area to support the increased load for a library. Whether enlargement of the Bath branch library would involve additional paid employment is not known at this time.

3. Bath Assembly

With the former school assembly auditorium as its centerpiece, an office/conference/meeting center and performance place would offer a variety of meeting, working and assembly spaces on a rental basis. Bath is chronically short of group meeting space, evidenced by the common practice of holding weekday/weeknight public gatherings in various church buildings. Recent talk by town officials about renovating the high school gymnasium building as a town meeting center suggests that the need for civic meeting space may be alleviated. Other groups and organizations, however, will continue to need space. Office space for professionals and services needed to support Bath's growing retirement population also is in short supply.

The auditorium includes a proscenium stage, which has attracted the notice of performing arts advocates. While the present auditorium, with more than 500 seats and long, poor sight lines, is not ideally configured for stage presentations, it could well serve that purpose with a reduced audience area.



The East building could be adapted to serve as a conference center and meeting/performance place, with a double-height entry lobby, vending and lounge areas, an open-plan hall with flexible seating for meetings, performances and meals, and a number of individual meeting rooms. Programmed area would be 7,700 sf, or 10,395 gross area including public bathrooms. Managing and operating the conference center would support at least two new employees.

4. Other Uses

Supporting all the functions listed above would be a 3,500 gross SF Connecting Gallery, providing vertical and horizontal circulation and gallery space that could be used to hang local artists' work.

Together the new uses would fully occupy the nearly 26,000 gross square feet available after the kitchen is demolished and parts of the upper floor in the North and East buildings are removed to create double-height galleries for the Visitor's Center and Museum and the lobby for the Conference Center / Performance Place.

Conceptual floor plans and a site plan are included with this report to show the size and relationship of proposed spaces as they might be accommodated in the school buildings. Further development would be necessary if the project proceeded with full-fledged programming and design work.

Rehabilitating the Bath High School buildings and adapting them to the proposed new uses will entail extensive modification and improvement. The approach suggested in this study is to make the structures more modern, more efficient, and more capable of serving their new uses in new times. The adaptive re-use approach is an alternative to a historic rehabilitation, which typically has greater focus on preserving original finishes and surfaces. At the same time, even with floor areas removed, openings modified, and interior walls furred out to provide an insulating layer, for example, the high school will retain its familiar massing, proportion, and presence.

Space Summary

Bath High School: Adaptive Reuse

Project Area Available

Existing building area under roof	31,320 ^{sf}
Less unheated area	-1,450
Less Kitchen demolition	-1,772
<u>Less 2nd floor area to be removed</u>	<u>-2,150</u>

TOTAL AREA AVAILABLE 25,948

Proposed Uses

<i>name</i>	<i>program sf</i>
1 Visitors' Center & Museum	6,830
2 Community Library	2,090
3 Bath Assembly	7,700
4 <u>Gallery</u>	<u>2,600</u>

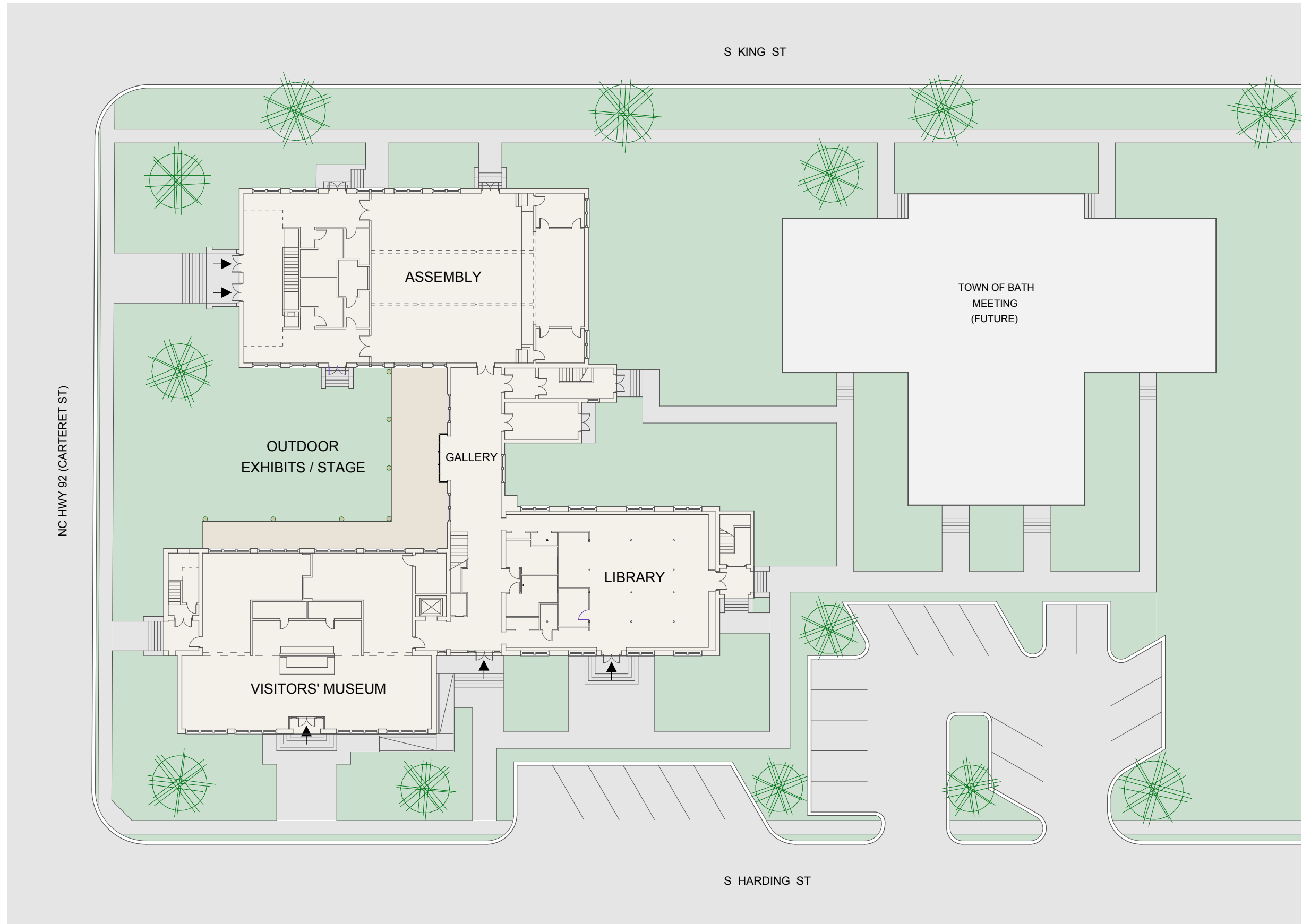
19,220

grossing factor 1.35

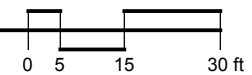
TOTAL AREA USED 25,947

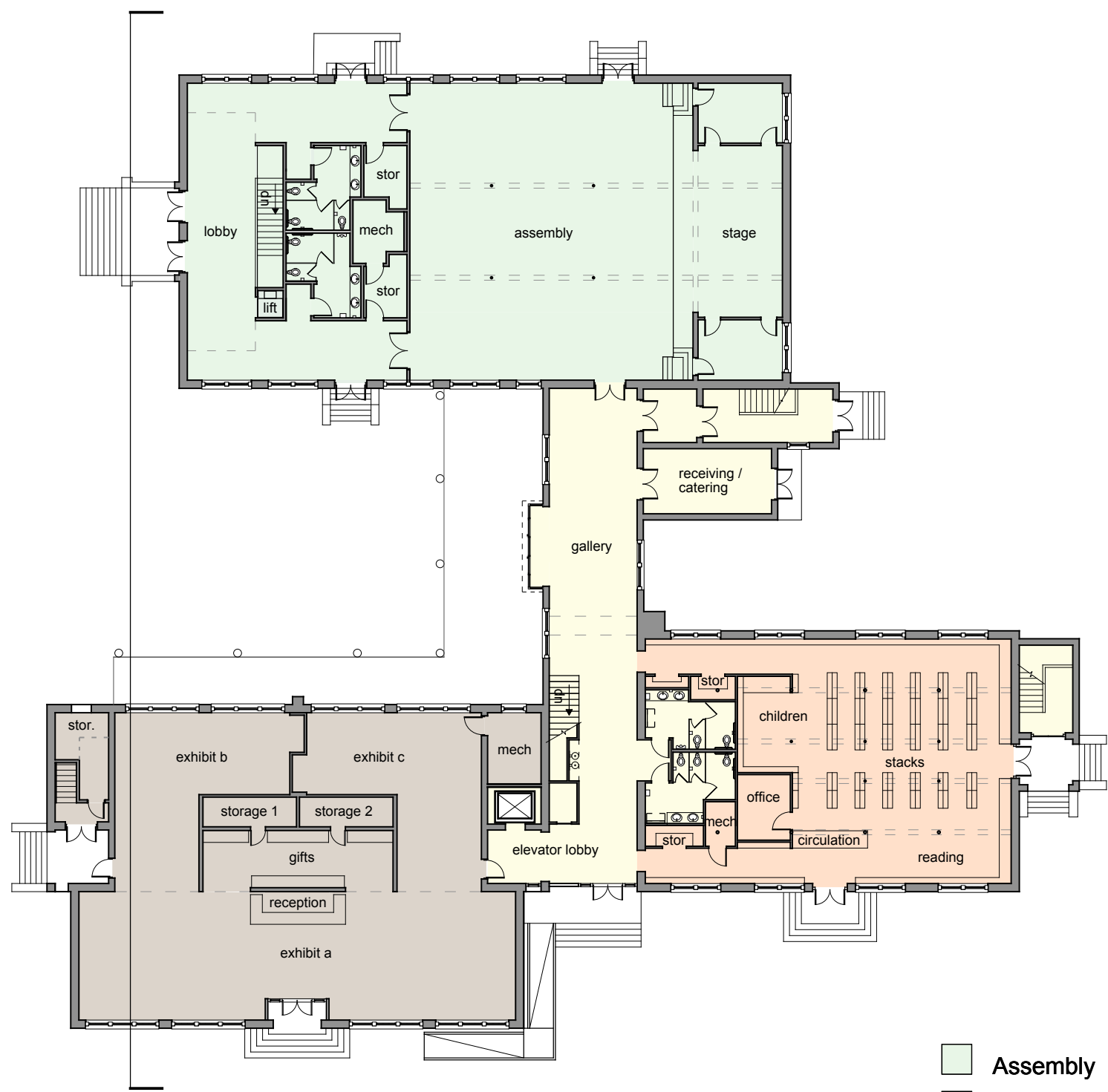
Notes

- 1 North Building, Levels 1&2
- 2 South Building, Level 1
- 3 East Building, Levels 1&2
- 4 Connector, Levels 1&2



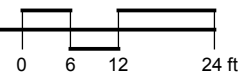
site plan

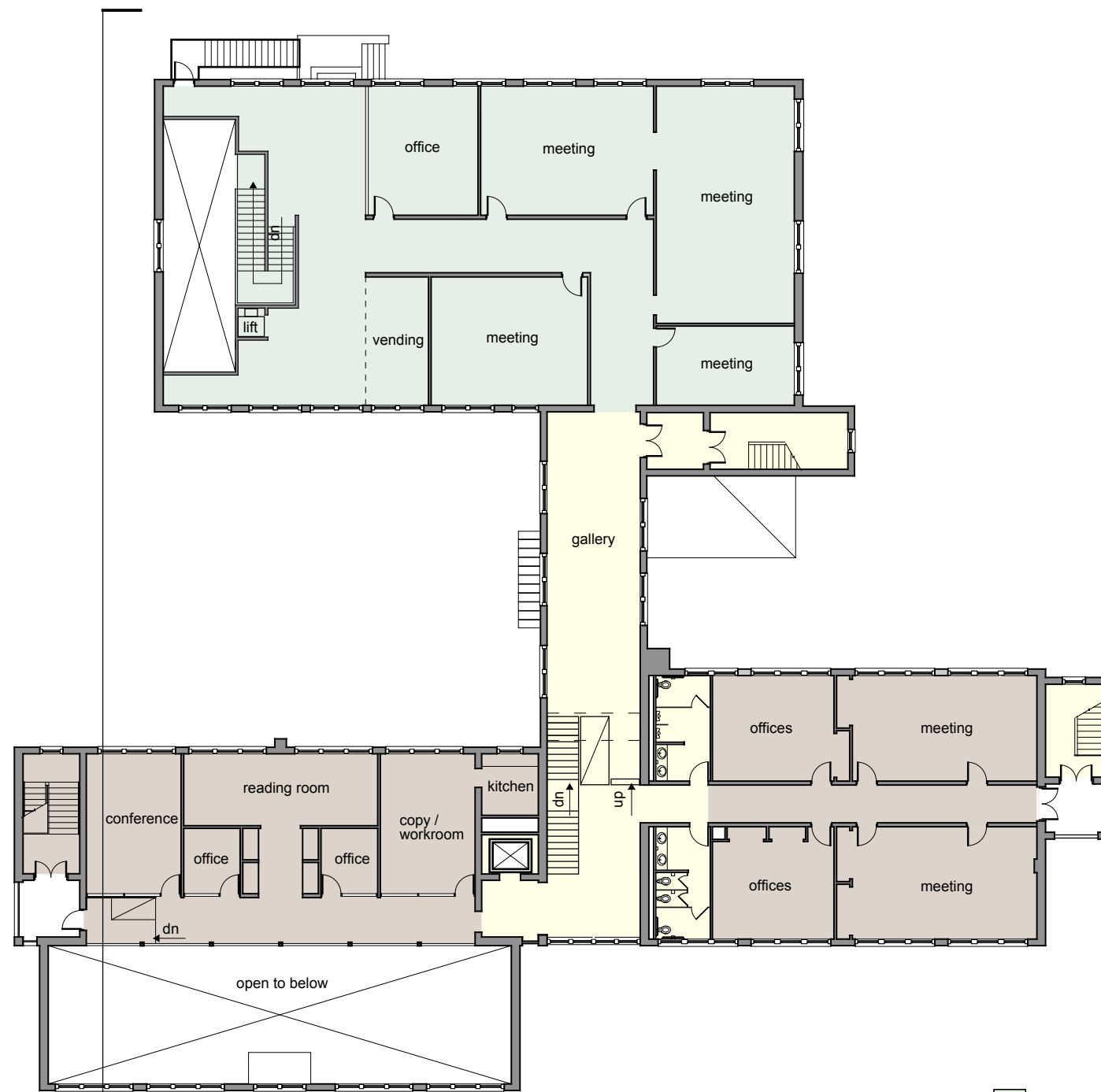




- Assembly
- Connector
- Library
- Museum

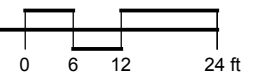
ground floor

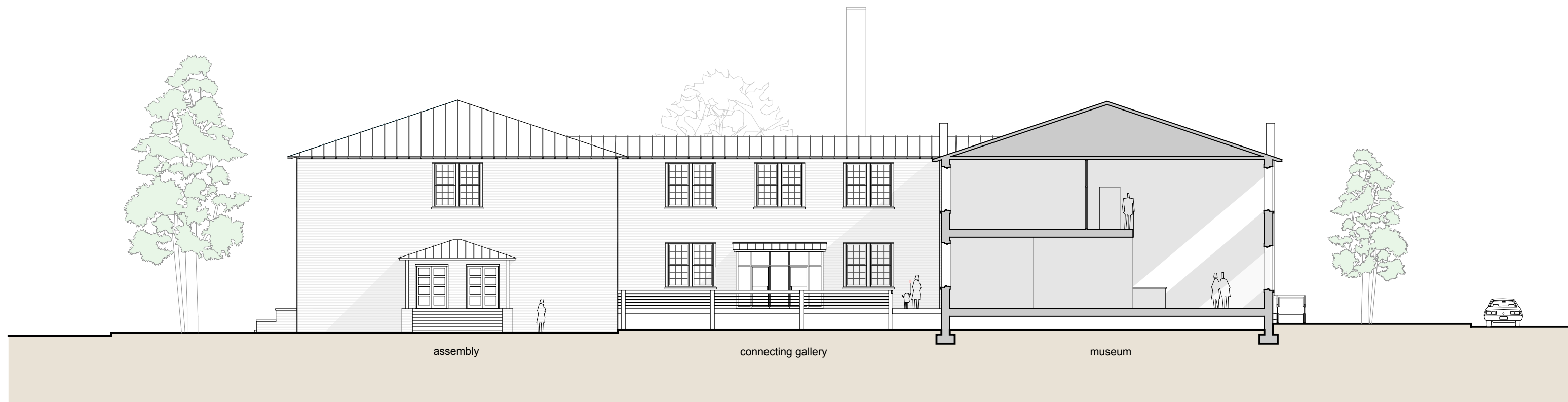




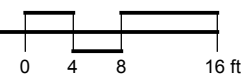
- Assembly
- Connector
- Library
- Museum

upper floor





building section



4. PROBABLE REHABILITATION COSTS

Analysis of project costs for the pre-development study considered 1) specific expenses for updating the building shell and systems, and 2) reasonable allowances for completing interior upfits for the various proposed uses. Each use's upfit expense was then added to a pro-rated share of the shell expense -- based on the percentage of the project given to each use -- to calculate probable costs by use.

Sources consulted for cost estimating included Spring, Stoops McCullen Engineering PA of Durham, NC, for major mechanical system improvements, and Sweet's Unit Cost Guide, (McGraw Hill, 2007), for other costs and allowances.

Among noteworthy project improvements anticipated in this analysis:

- Structural and life safety improvements include anchoring and bracing for seismic and wind loads.
- A fire sprinkler system is recommended to protect the new investment in the building as well as its contents and occupants.
- An elevator and a chair lift are provided to make the upper floors accessible.
- Building shell improvements include replacing existing windows with energy-efficient, low-maintenance, double-glazed units.
- System upgrades include new plumbing and electrical services and fixtures, and a commercial-grade chiller-boiler for heating and cooling.
- Site improvements include parking, sidewalks and landscaping.

At the conceptual design level of this study, interior upfit costs were based on square footage allowances reflecting different levels of finish, lighting, etc. for the various uses. Interior allowances ranged from \$40 per square foot for the circulation gallery to \$75 per square foot for museum space. This approach anticipates further refinement to distinguish different levels of finish within each use once firm programs are established during the design of the spaces.

The analysis identifies \$3.09 million in hard construction costs, allows 15% for fees and other soft costs (\$463,245) and 12% as a contingency reserve (\$426,185), for a total probable project budget of \$3,977,730. The complete analysis is included in the Appendix. The breakdown by use is as follows:

use	\$/sq.ft.	cost	% of budget	% of area
Visitor's Center and Museum	\$157	\$1,444,506	36	35
Community Library	\$147	\$ 415,330	11	11
Bath Assembly	\$152	\$1,585,292	40	40
Connecting Gallery	\$153	\$ 532,602	13	14
TOTAL		\$3,977,730	100	100

The mixed-use rehabilitation of Bath High School is an involved undertaking, requiring shared commitment and cooperation among numerous groups and organizations with particular interests and responsibilities. The list of participants includes:

- Town of Bath
- North Carolina Dept. of Cultural Resources
- Historic Bath State Historic Site
- Historic Bath Commission
- Historic Bath Foundation
- Beaufort Hyde Martin Regional Library
- Friends of Bath Library
- Pamlico Playhouse
- Bath High School Preservation
- Preservation North Carolina
- North Carolina Rural Center

After review of this pre-development study, a logical first step is for the Town of Bath, as owner of the property, to consider whether to pursue the rehabilitation and re-use of the Bath High School. If the decision is to proceed, two means of advancing the project are possible. The first relies primarily on local officials to create momentum and to oversee the rehabilitation; the second engages a developer/agent working for a fee based on the project budget. A combination of the two approaches also is possible, as follows:

1. Create an implementation task force composed of officials and interested citizens and charge them with seeking statements of interest from potential users and funders.
2. Seek funds from public and private sources to continue efforts that have been made to date to stabilize the buildings and reduce damaging moisture and humidity levels.
3. Based on indications of interest from potential users and their requirements, describe a desired legal and financial structure for owning, operating and maintaining the buildings.
4. Determine the compensation or other considerations the Town seeks for any parts of the project that are to be owned by or leased to others (e.g., State of North Carolina, BHM Regional Library, Assembly agent/manager, or a private developer who takes the entire property).
5. Request proposals from qualified developers to undertake the project, subject to the goals and requirements contained in the RFP.

A1. TOPOGRAPHICAL MAP OF BATH

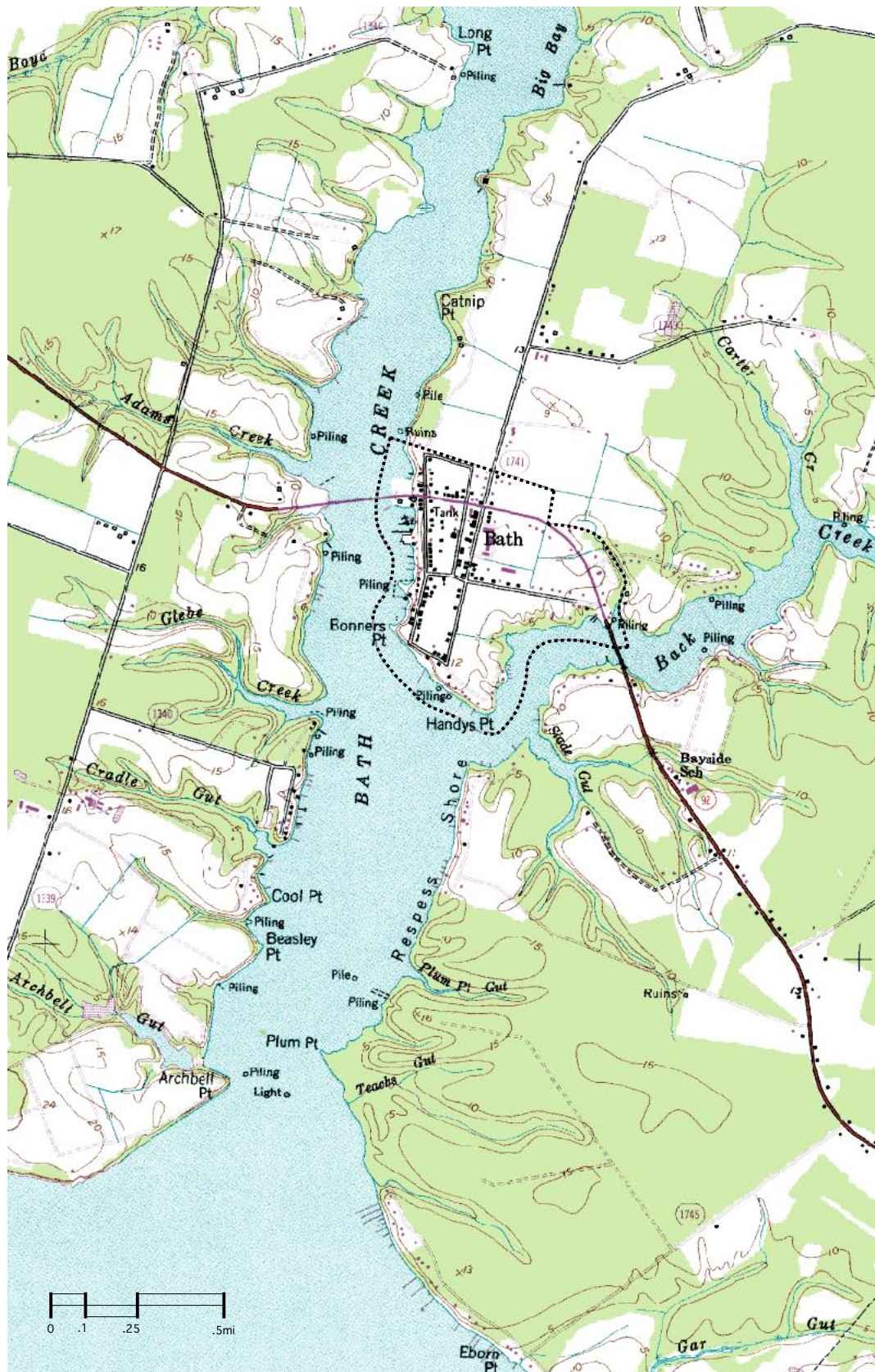
A2. REHABILITATION BUDGET

A3. REHABILITATION COSTS BY USE

A4. AS-BUILT DRAWINGS

A5. SEWAGE DISPOSAL INSTALLATION

APPENDIX: TOPOGRAPHICAL MAP OF BATH



APPENDIX: REHABILITATION BUDGET

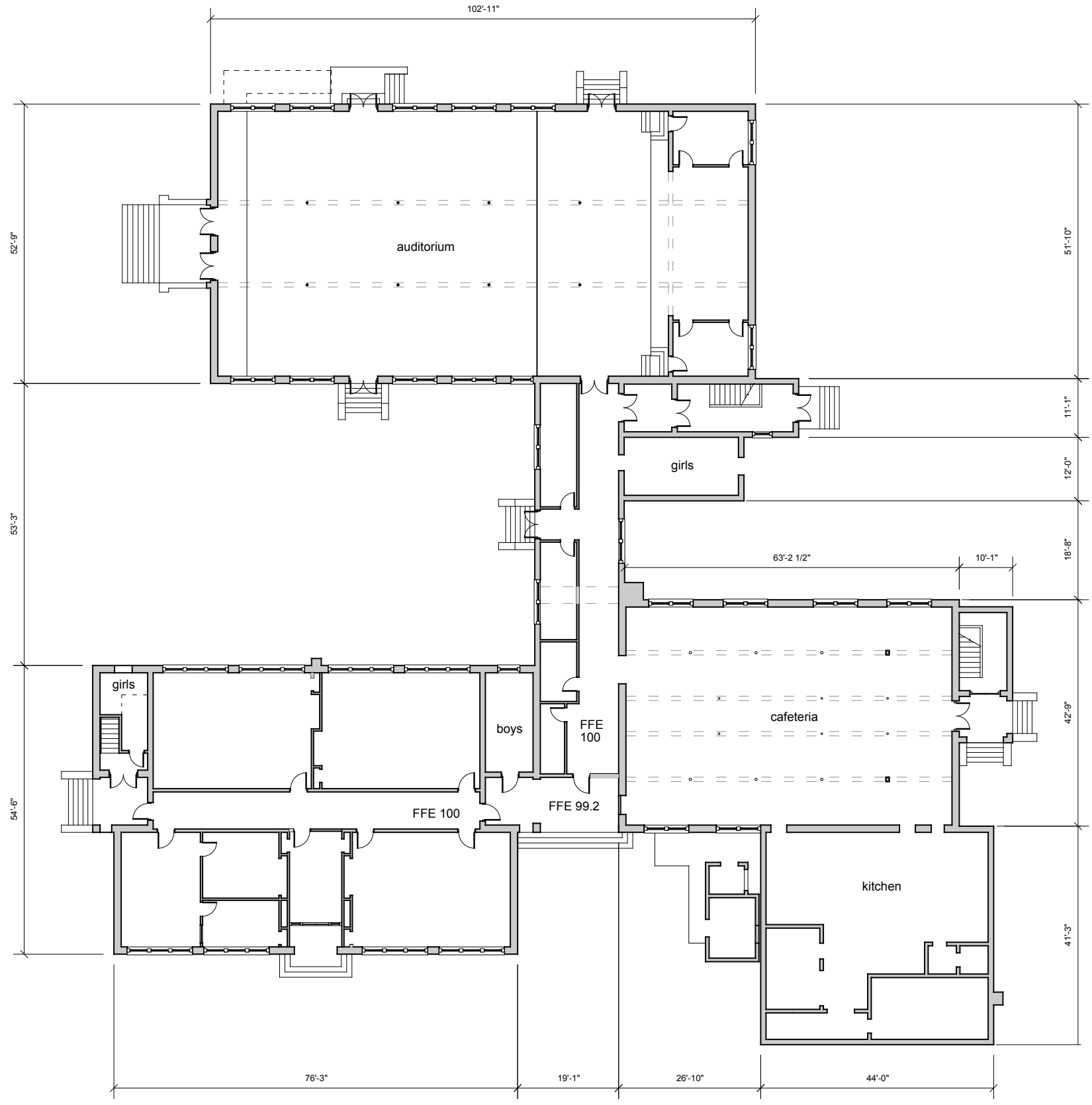
item	unit	quantity	unit cost	total
BUILDING SHELL				
Demolition				
Kitchen	cf	21,000	0.50	10,500
Selective	sf	26,000	1.50	39,000
Site				
Sidewalks	sf	3,000	3.00	9,000
Parking	spaces	22	2,000.00	44,000
Trees/plants	allow	1	15,000.00	15,000
Decks	sf	3,000	4.00	12,000
Building Shell				
Roof	sf	14,500	2.50	36,250
Seismic/wind upgrades	allow	100,000	1.00	100,000
Windows	unit	170	1,000.00	170,000
Framing repair/upgrades	allow	1	25,000.00	25,000
Masonry - clean/point	sf	23,700	3.00	71,100
Insulation - floor/ceiling	sf	28,000	1.25	35,000
Insulation - walls	sf	21,000	0.75	15,750
Conveying Systems				
Elevator	unit	1	100,000.00	100,000
Chair lift	unit	1	25,000.00	25,000
Mechanical				
Plumbing incl. fixtures	sf	26,000	6.00	156,000
Fire sprinkler (incl attic)	sf	41,000	3.70	151,700
HVAC	sf	26,000	20.00	520,000
Electrical				
Service & fixtures	sf	26,000	12.00	312,000
Telecom	sf	26,000	0.50	13,000
Fire Alarm	sf	26,000	1.00	26,000
SUBTOTAL SHELL				1,886,300
INTERIOR UPFIT				
Visitors' Center and Museum				
North Building	sf	5,500	70.00	385,000
South Building	sf	2,200	40.00	88,000
Community Library	sf	2,200	50.00	110,000
Conference Center/Performance Plac	sf	9,500	50.00	475,000
Shared Circulation Gallery	sf	3,000	40.00	120,000
Shared Toilets (South Bldg)	sf	600	40.00	24,000
SUBTOTAL INTERIOR				1,202,000
Total Hard Costs				3,088,300
Soft Costs (Design, Permits, Fees)	15%			463,245
PROJECT COST				3,551,545
Contingency	12%			426,185
PROJECT BUDGET				3,977,730

APPENDIX: REHABILITATION COSTS BY USE

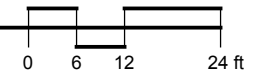
COST CATEGORY

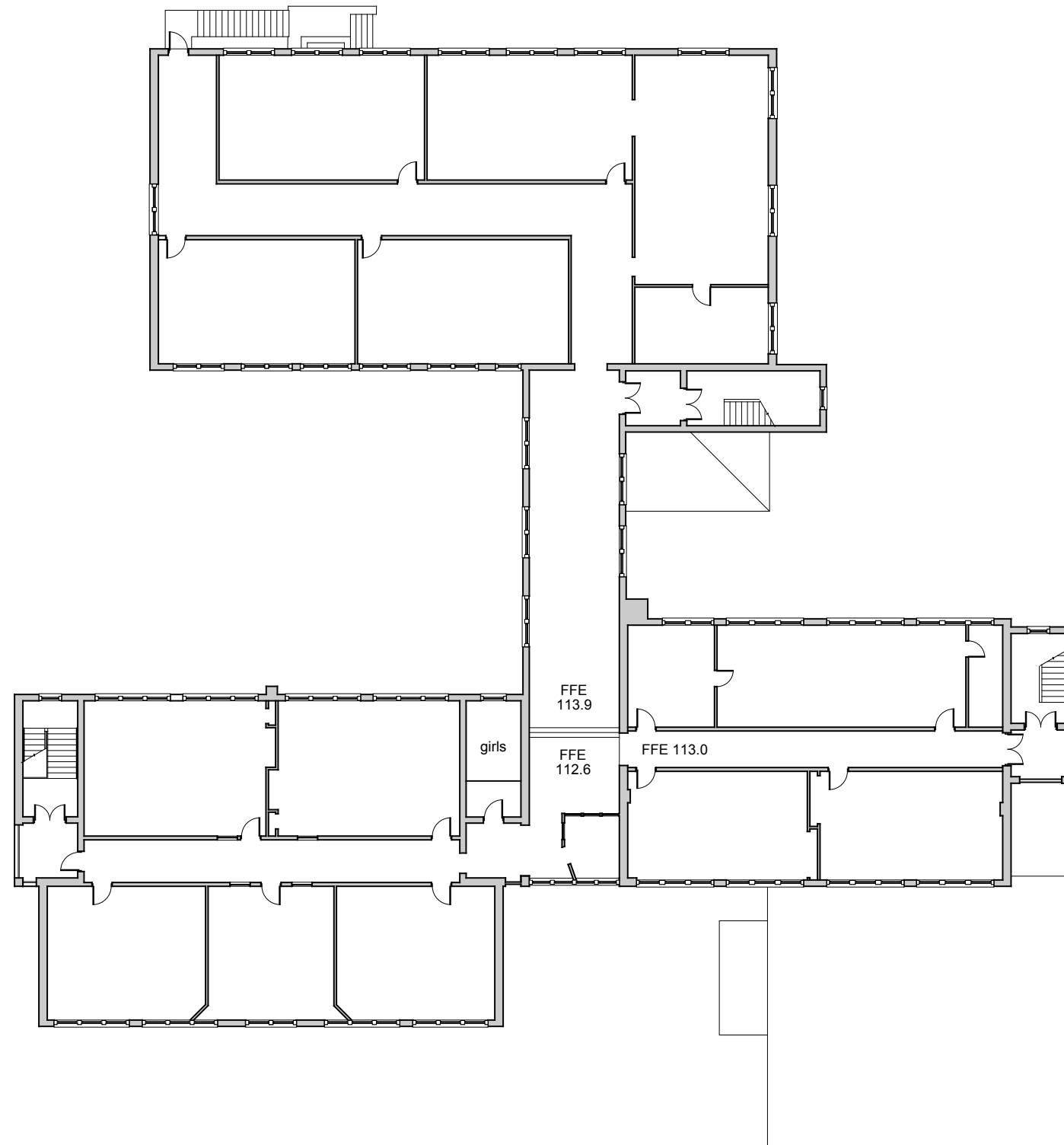
Building shell costs	\$1,886,300
Soft costs/contingency	\$889,430
Upfit costs	\$1,202,000
Total	\$3,977,730

<u>COST BY USE</u>	<u>gross sf</u>	<u>% of project</u>	<u>\$ shell cost</u>	<u>\$ soft cost+ contingency</u>	<u>\$ upfit</u>	<u>total \$ by use</u>	<u>\$/sf</u>
Visitors' Center & Museum	9,220	35%	660,205	311,301	473,000	1,444,506	\$157
Library	2,822	11%	207,493	97,837	110,000	415,330	\$147
Conference / Performance	10,395	40%	754,520	355,772	475,000	1,585,292	\$153
Shared Gallery / Toilets	3,510	14%	264,082	124,520	144,000	532,602	\$152
Subtotals	25,947	100%	1,886,300	889,430	1,202,000	3,977,730	\$153

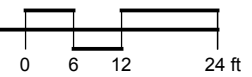


ground floor - existing



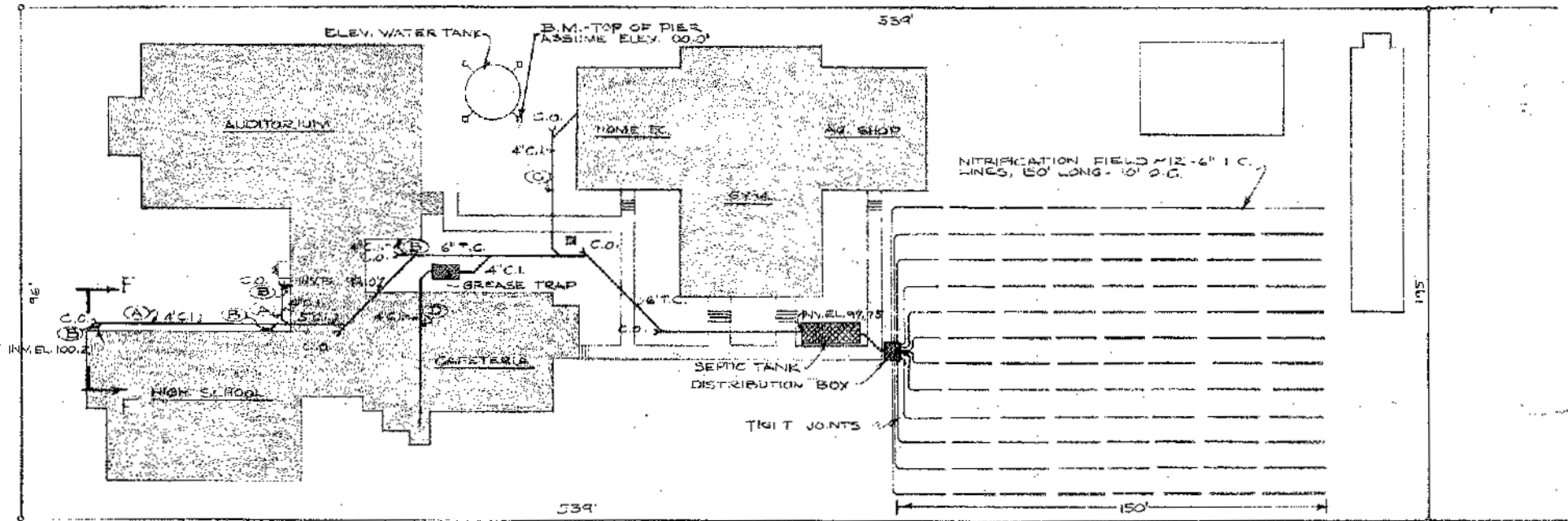


upper floor - existing



KING ST.

BRIDGE ST.

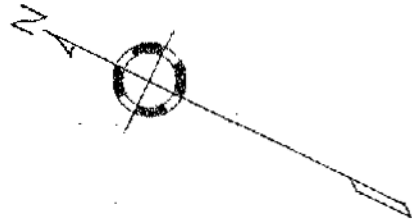


HARDING ST.

Plot Plan - Scale - 1" = 30'

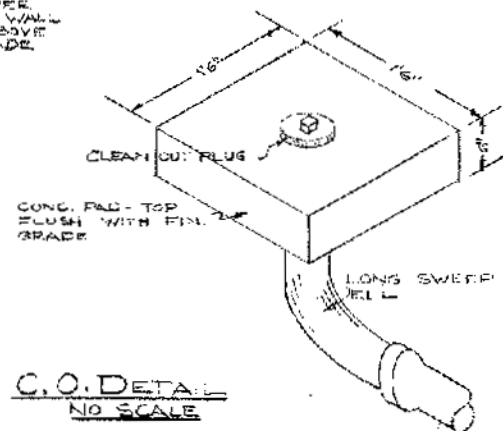
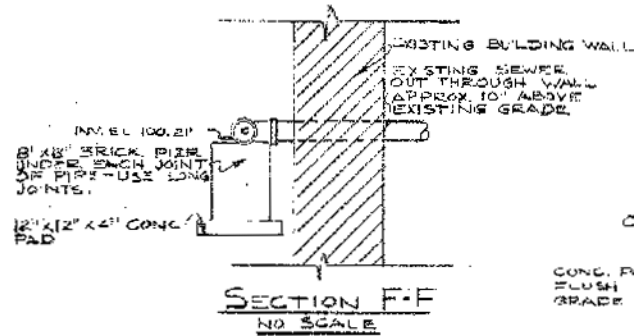
NOTES:

- NOTE A - INSTALL NEW SPWER LINE & GRADE OPPOSITE DIRECTION FROM EXISTING GRADE.
- NOTE B - CONNECT EXISTING SEWER TO NEW SEWER MAIN.
- NOTE C - INSTALL NEW SEWER LINE & CONNECT TO NEW MAIN.
- NOTE D - RELOCATE & RECONNECT EXISTING SEWER.



LEGEND

- STWER LINE
- - - NITRIFICATION LINE
- BRICK IN SECTION
- CONCRETE IN SECTION
- WOOD IN SECTION
- C.O. 4" CLEAN OUT



PROJECT		SHEET NO.	
SEWAGE DISPOSAL INSTALLATION		1	
BATH HIGH SCHOOL BATH, N.C.		OF TOTAL	
H. L. BUFFALOE		DRAWN BY	1
CONSULTING ENGINEER		CHECKED BY	1
RALEIGH, NORTH CAROLINA		JOB NO.	2
		DATE	
		NOV. 1, 1980	

