Cape Elizabeth Historical Preservation Society (CEHPS)

Spurwink School Reuse Project
The Town of Cape Elizabeth, Maine

Timeline

1849: Structure built as one-room school house on Bowery Beach Road

1917: After several moves the schoolhouse is moved back to its original site

1919 Dedicated as Thomas Memorial Libray

1944: Original schoolhouse placed on foundation

1958: Addition to original school house constructed

THOMAS
MEMORIAL LIBRARY

Existing Entry is Bad

EXIT
STEP DOWN
STEP DOWN
CAUTION!
STEP DOWN
CAUTION
Step down
Read with Curious George

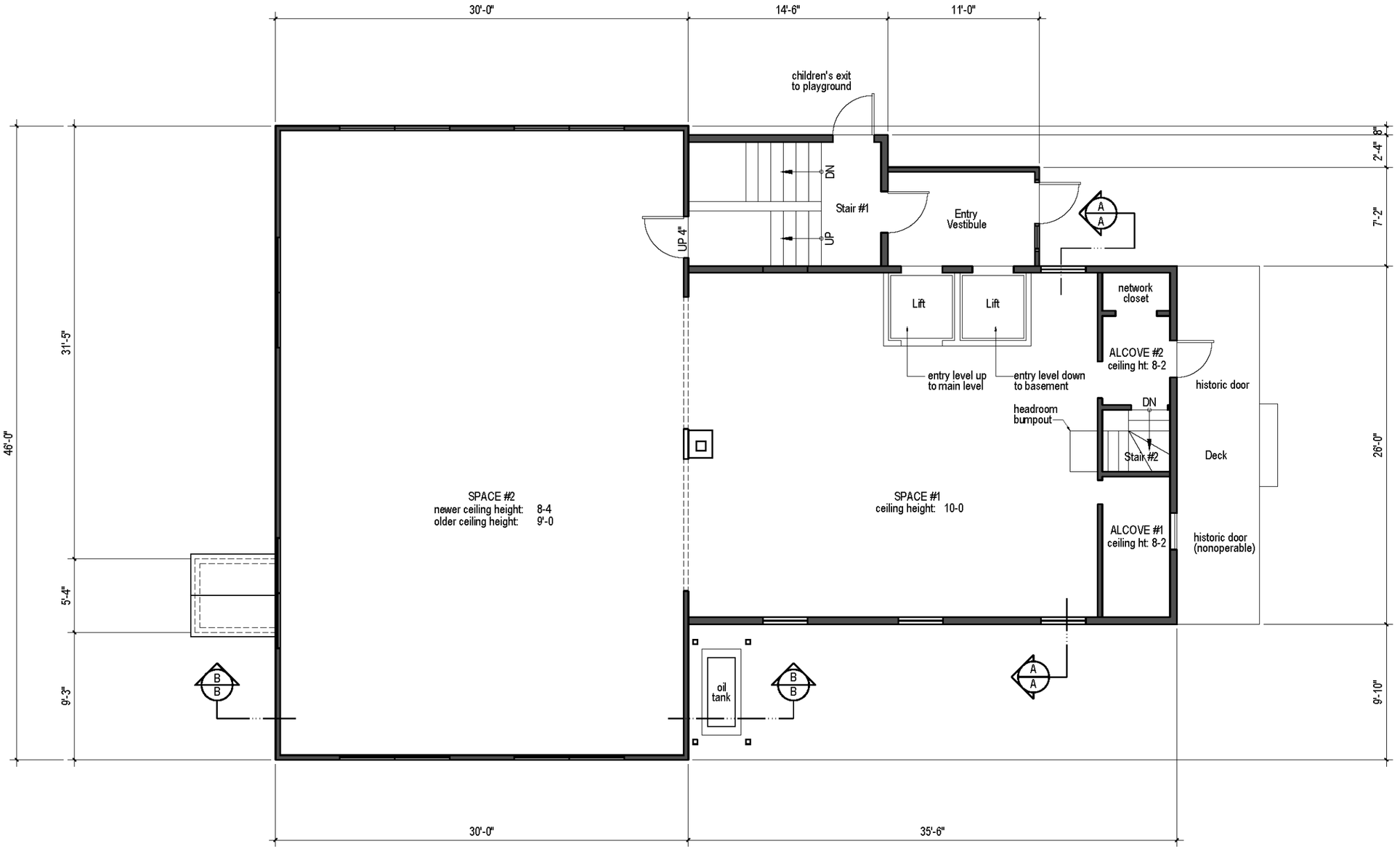
CAUTION!
STEP DOWN
CAUTION
Step down
STEP DOWN
READ!
LISTEN!

EXIT
EXIT
EXIT
EXIT
Scribble!
Repetition is Key!
Sing!
Read!
Talk!
Cuddle!
Play!
SHARP

Repetition is Key!
Talk!
SHARP

THE BUILDING'S ISSUES

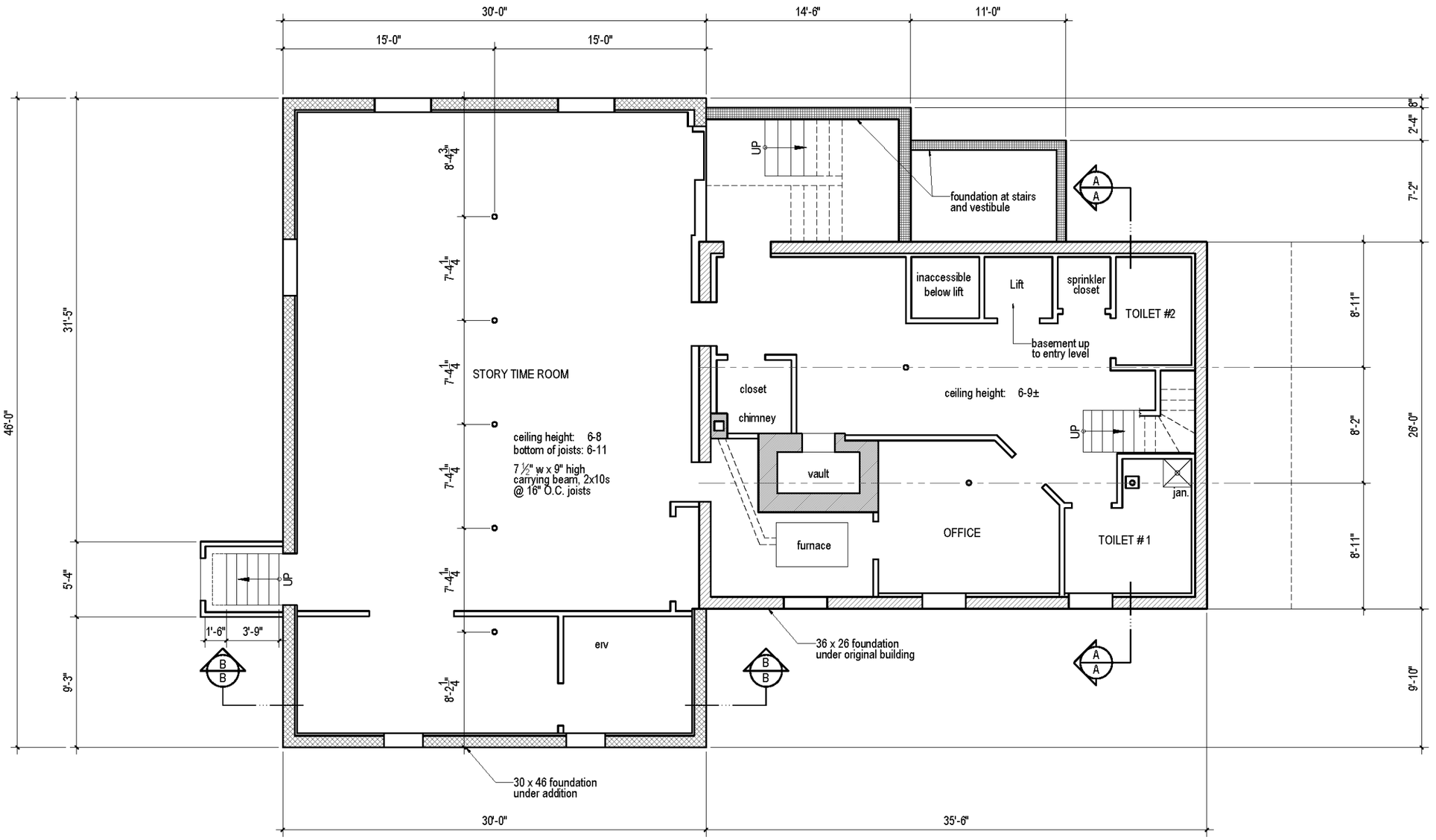
1. **The existing entry into the building is bad**
2. **The floor framing needs to be reinforced**
3. **Additional insulation needs to be provided**
4. **A new HVAC system will need to be put in place**
5. **Almost all interior finishes need to be replaced**
6. **The main stair connecting the basement to the main level needs to be rebuilt**
7. **New lighting is needed**
8. **Either a freight lift or book lift needed to move items to the basement**
9. **ADA requirements should be met in a meaningful manner**
10. **Basement ceiling is low. Per code officer would be employee only**



First Floor Existing Floor Plan

1/8" = 1'-0" (2,520 gross square feet)

Existing First Floor Plan



Basement Existing Floor Plan
1/8"= 1'-0" (2,550 gross square feet (footprint))

Existing Basement Plan

Three Guiding Ideas:

1. Create a building for the town of Cape Elizabeth that is useful and durable for the foreseeable future

2. Create a space for the Cape Elizabeth Historical Preservation Society that supports their mission and activities for the foreseeable future

3. Design a new entry that provides a clear sense of entry, provides covered exterior space at the entry door, and is accessible

Proposed Entry Design

1st Scheme

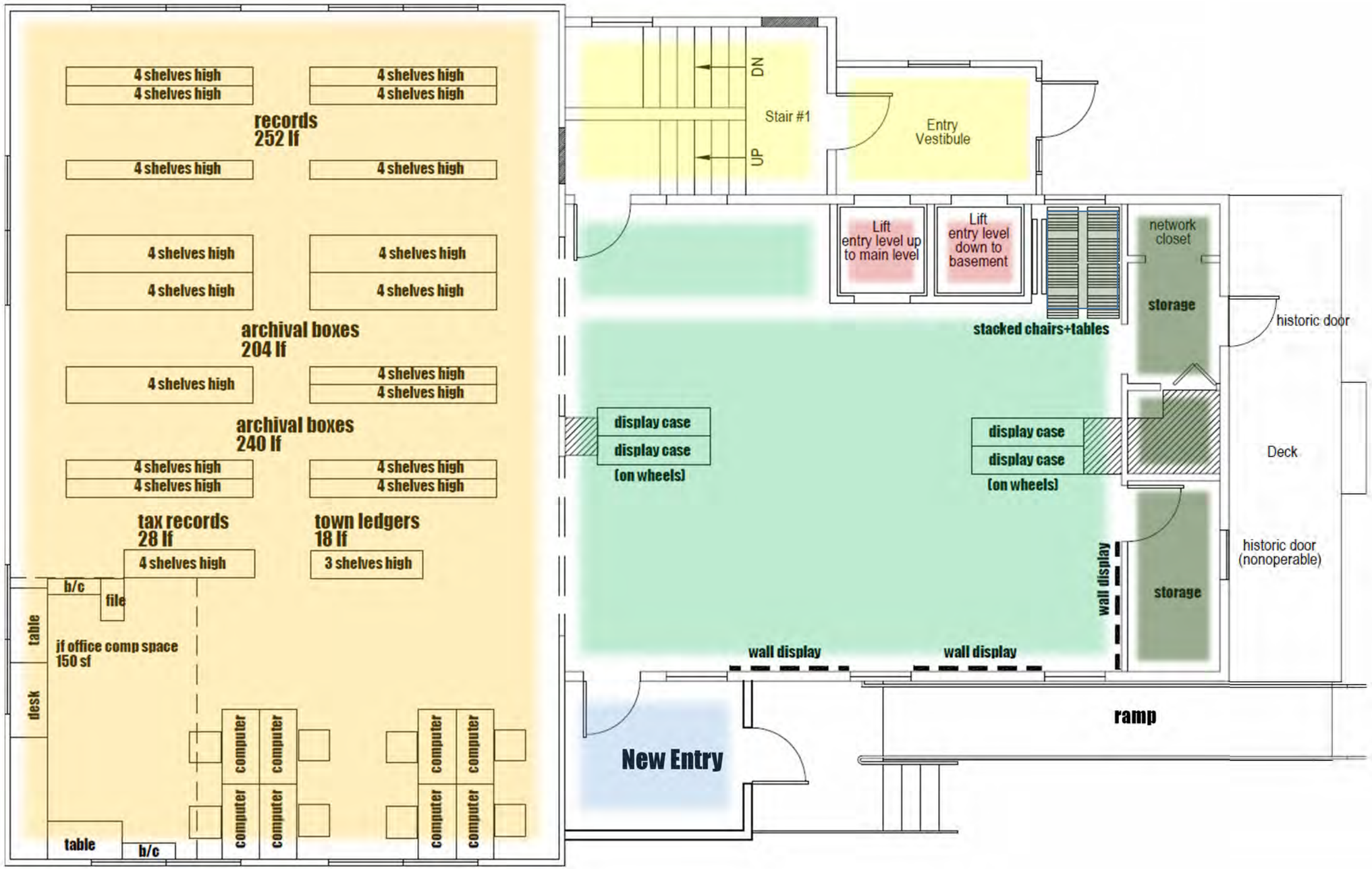
1. Use Original School House for
    1. Display and exhibition
    2. Member Meetings
    3. Education programs
2. Use 1958 Addition for office space
    1. Include accessible toilet room and kitchenette
3. Use basement for Archival Storage
4. Retain existing lifts

Program Requirements

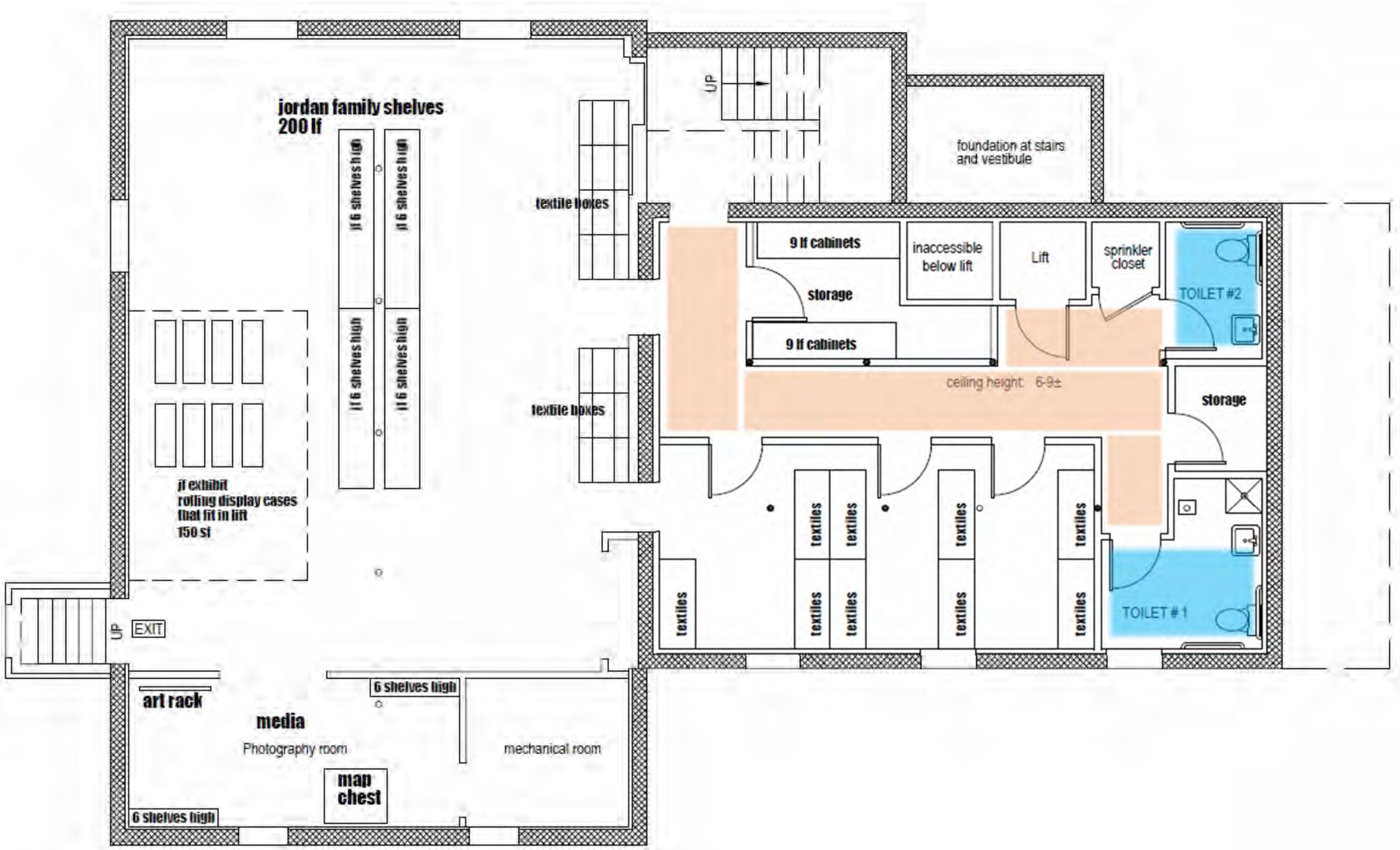
Item	Size	Qty	Notes	Proposed Location
Stacking Chairs	20” x 20”	49	Light weight; stacking; on wheels	Upper Level
Computer Desks	24” x 48”	8		Upper Level
Supply Cabinet	18” x 36”	1		Basement
Archives (archival boxes)	Requires 12” depth	240 LF		Upper Level
Archives (archival boxes)	Requires 14” to 24” depth	204 LF		Upper Level
Media - storage		55 LF	Shelving	Basement/Media Rm
Media - Art Rack	48” x 2” x 72” high	1		Basement/Media Rm
Media - Map Chest	42” x 36” x 24” high	1		Basement/Media Rm
Records	Requires 12” depth	252 LF	Shelving	Upper Level
Records - Town Ledgers	72” wide x 18” deep	18 LF	Shelving	Upper Level
Records - Tax Records	84” wide x 18” deep x 21” high	7 LF	Shelving	Upper Level
Cabinets	24” deep lower; 12” deep upper	16 LF	Wall and base cabinets	Basement Storage
Display Case	72” w x 18” d x 40” h	1		Upper Level
Textiles	24” x 4.5” x 60”	8 boxes		Basement
Textiles	24” x 3” x 30”	15 boxes		Basement
JF Desk	24” x 48”	1		Upper Level
JF Desk	24” x 78”	1		Upper Level
JF file cabinet	15” x 27”	1		Upper Level
JF folding tables	24” x 48”	2		Upper Level
JF bookcase	10” x 34” x 43” h	2		Upper level
JF Exhibit Cases		150 SF		Basement (rotate up as needed)
JF Wall Display		400 SF		Upper Level
JF Shelves		200 LF		Basement
JF Office Comp Space		150 SF	JF office items included in this area	Upper Level

Upper Level as Gathering Space

Upper Level as Museum Viewing Space



Basement Level



Display Concepts

Mobility is key for the display cases - so space can be multi-purpose. Simple and clean design for wall displays will pull people into wanting to read about Cape Elizabeth's rich history.

Furniture Concepts

Mobility is also key for the furniture - so the space can be easily reconfigured by volunteers to serve as a gathering space or as a museum viewing space.

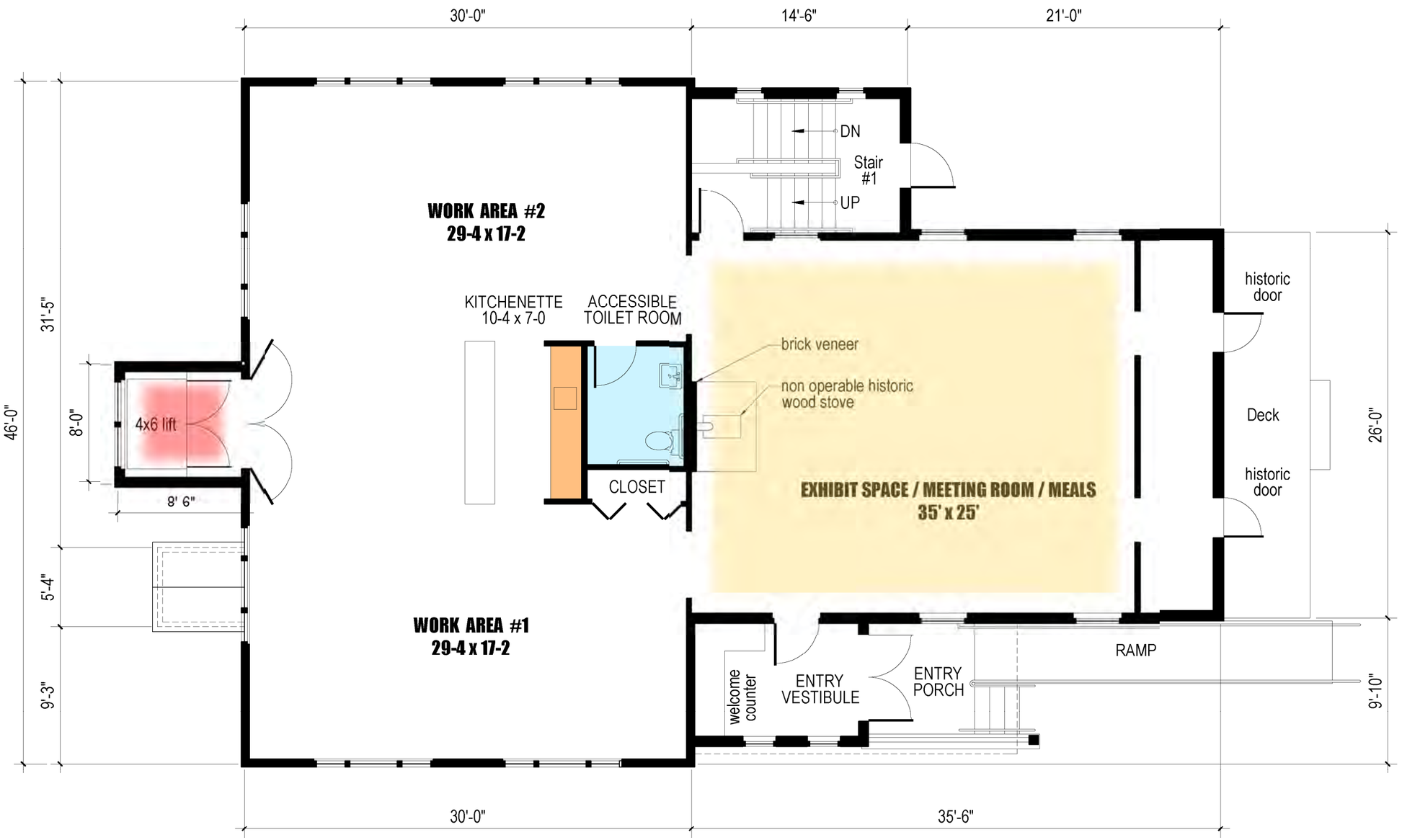
Ideally, storage shelves are 4 shelves high (instead of 6), so the upper level feels more bright and open. Consider wheels for these units, too, to allow maximum flexibility.

1st Scheme

1. Meeting with members revealed that the lifts and associated entry structure had to go
2. The members embraced the idea of the new entry

2nd Scheme

1. Use Original School House for
    1. Display and exhibition
    2. Member Meetings
    3. Education programs
2. Use 1958 Addition for office space
    1. Include accessible toilet room and kitchenette
3. Use basement for Archival Storage
4. Delete lifts and provide freight lift or elevator, and provide toilet room at first floor



First Floor Plan

¼" 1'-0" (2,520 gross square foot footprint)

Basement Plan

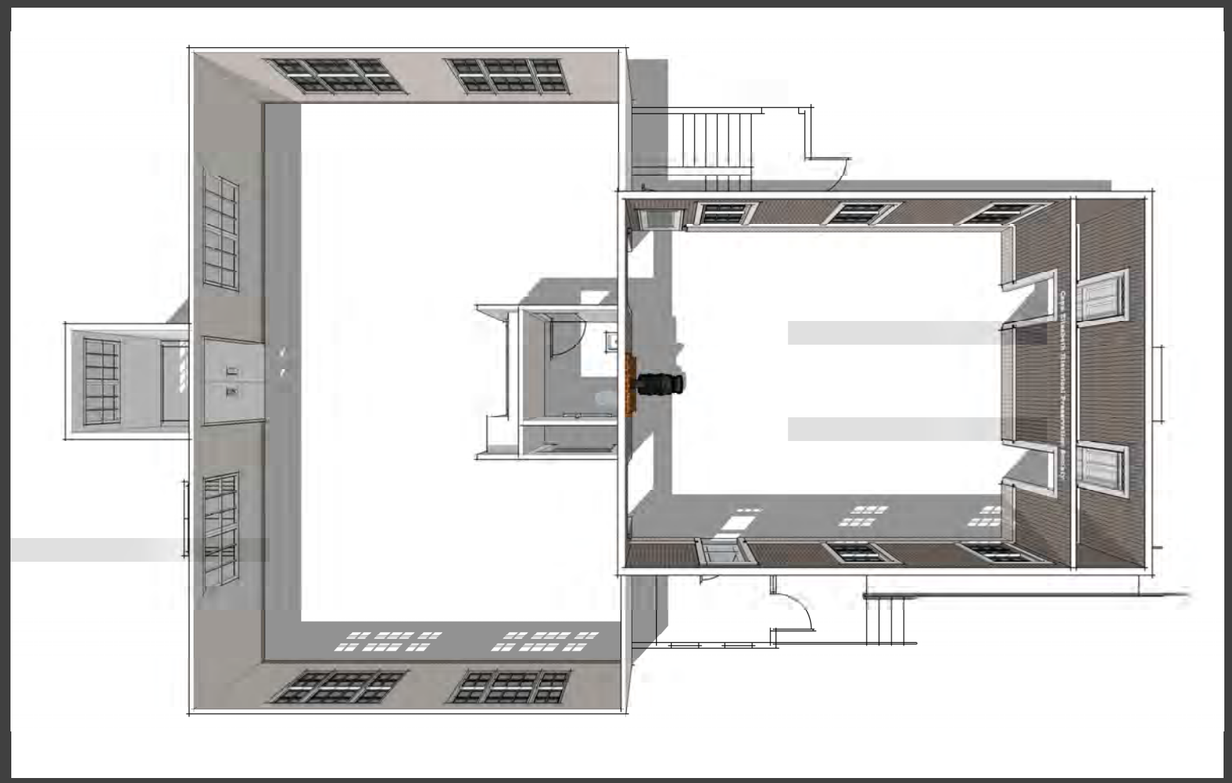
1/4"= 1'-0" (2,550 gross square foot footprint)

Cape Elizabeth Historical Preservation Society
CEHPS

CEHPS

Artifact Display

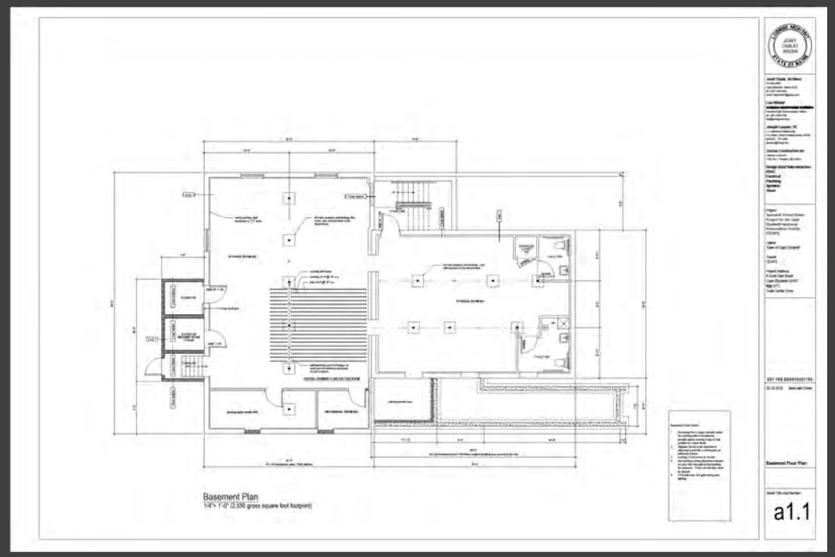
Educational Programs and Meetings

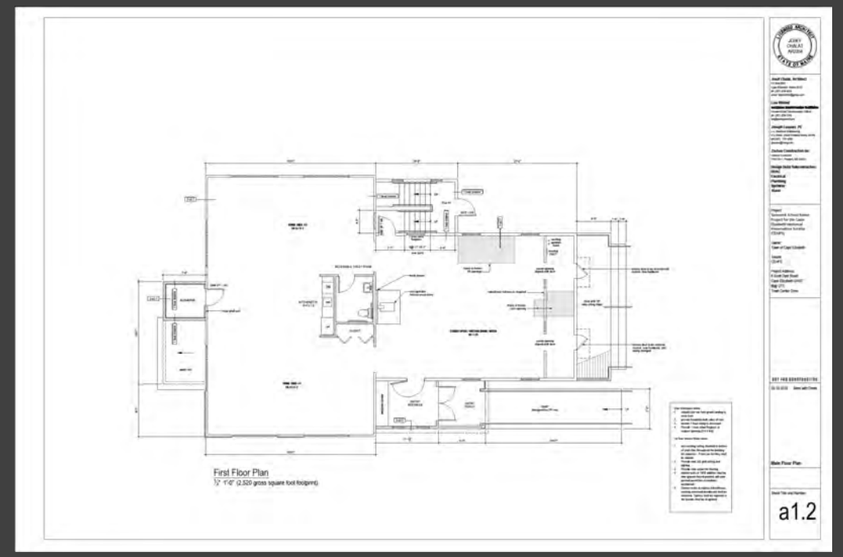


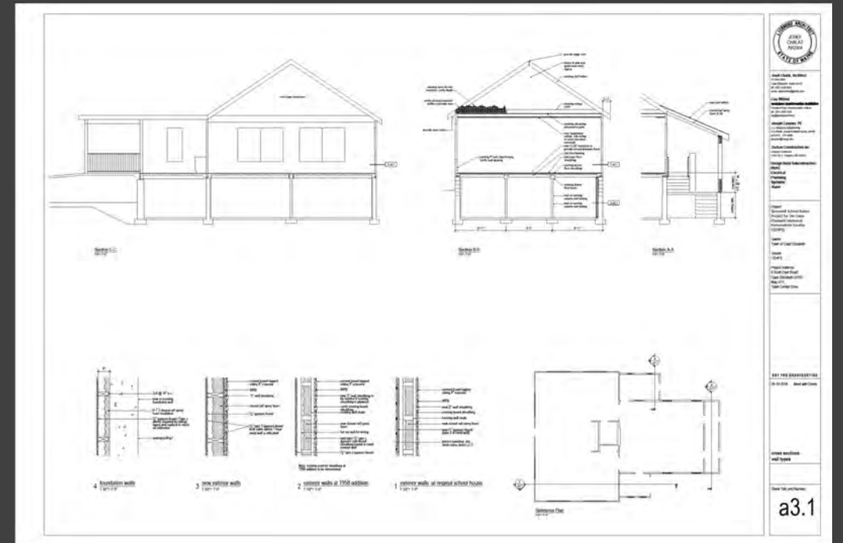
Pot Luck Meals

Multiuse space

Cost Estimate







schematic construction drawings

ZACHAU ESTIMATE DETAIL

JOB NAME:	**CEHPS Spurwink School - Preliminary Estimate**	**Legend:**	**RED = ALLOWANCE**
BID DATE:	**10/10/2019**		**BLUE = BY OWNER OR EXCLUDED**
PROJECT DURATION:	**5 Months (22 Weeks)**		**BLACK = ESTIMATED NUMBER**
PROJECT SIZE (SF):	**4,881 SF**		

CODE	DESCRIPTION	SUB / SUPPLIER	MEMO	TOTAL
1-020	**Performance and Payment Bonds**	Excluded	Excluded	$0
1-021	**Builders Risk Insurance**	Excluded	By Owner	$0
1-023	**Permits - Building**	Excluded	By Owner	$0
1-030	**Job Sign**	Zachau	Budget	$750
1-041	**Office Trailer**	Zachau	5 months @ $650 per month	$3,250
1-042	**Storage Trailer**	Zachau	5 months @ $150 per month	$750
1-050	**Telephone / Internet**	Zachau	5 months @ $200 per month	$1,000
1-051	**Temporary Enclosures**	Zachau	Budget	$1,000
1-052	**Portable Toilets**	Zachau	5 months @ $200 per month	$1,000
1-053	**Temporary Electric**	Excluded	Assume to use owner's existing service	$0
1-055	**Temporary Water**	Excluded	Assume to use owner's existing service	$0
1-056	**Temporary Heat**	Excluded	Assume none needed	$0
1-057	**Snow Removal**	Excluded	Assume none needed	$0
1-058	**Utility Fees - Power**	Excluded	By Owner	$0
1-059	**Utility Fees - Water/Sewer**	Excluded	By Owner	$0
1-061	**Engineering**	Excluded	By Owner	$0
1-062	**Testing**	Excluded	By Owner	$0
1-063	**Surveying/Layout**	Zachau	Budget	$750
1-064	**Safety**	Zachau	5 months @ $200 per month	$1,000
1-065	**Temporary Fire Protection**	Zachau	Budget	$500
1-069	**Project Manager**	Zachau	22 weeks @ $1,700 per week	$37,400
1-070	**Supervision**	Zachau	Carried in Div. 6 below	$0
1-078	**Daily Cleaning**	Zachau	Carried in Div. 6 below	$0
1-080	**Final Cleaning / Window Cleaning**	Zachau	4,881 SF @ $0.40 per SF	$1,952
1-081	**Rubbish Removal**	Zachau	4 dumpsters @ $750 per dumpster	$3,000
1-082	**Temporary Protection**	Zachau	Budget	$500
1-084	**Temporary Fencing / Barricades**	Zachau	Budget	$2,000
1-094	**As Built Drawings / O&M Manuals**	Zachau	Carried with PM/Super costs	$0
1-096	**Document Reproduction**	Zachau	Included	$500
2-050	**Demolition**	TBD	Budget	$18,700
2-051	**Cutting Concrete Slabs / Trenching**	TBD	Budget (with demolition above)	$0
2-100	**Hazardous Materials Abatement**	Excluded	By Owner, if any	$0
3-100	**Concrete Foundations**	TBD	Budget	$20,000
3-300	**Concrete Flatwork**	TBD	Sidewalks, ramps and basement footings	$10,000
5-100	**Structural Metal Framing**	TBD	New columns in basement; 12 @ $350 each	$4,200
5-500	**Metal Fabrications**	TBD	New stair	$4,500
6-050	**Fasteners and Adhesives**	TBD	Budget	$2,500
6-100	**Rough Carpentry**	TBD	Budget	$25,000
6-200	**Exterior Finish Carpentry**	TBD	New deck, new trim, etc.	$15,000
6-250	**Interior Finish Carpentry**	TBD	Budget	$10,000
6-400	**Architectural Woodwork**	Excluded	By Owner, if any; cabinets and counters in Div. 12 below	$0
6-990	**Consumables**	Zachau	Budget	$3,750
6-991	**GC Labor**	Zachau	Budget; includes supervision labor	$103,400
7-100	**Waterproofing / Dampproofing**	TBD	Budget	$4,500
7-195	**Air Barriers**	TBD	Budget; at new areas only	$1,000
7-200	**Insulation**	TBD	Budget	$25,000
7-300	**Shingle Roofing**	TBD	Budget; assume new areas only; existing to remain as-is	$7,500
7-450	**Siding**	Allowance	Repair existing siding + new siding at additions	$10,000
7-900	**Joint Sealers**	TBD	Budget	$1,500
8-100	**Doors / Frames / Hardware**	TBD	Budget	$15,000
8-400	**Entrances, Storefronts and Curtain Walls**	Excluded	Assume none needed	$0
8-500	**Windows**	Marvin / ZCI	Budget	$20,499
8-800	**Glass and Glazing**	TBD	Budget	$1,500
9-200	**Gypsum Board / Metal Framing**	TBD	Budget	$45,000

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9-500	**Acoustical Ceilings**	TBD	2,437 SF @ $4.25 per SF (no basement ceilings)	$10,357
9-600	**Flooring**	TBD	2,891 SF @ $6.00 per SF (basement = bathrooms o	$17,346
9-690	**Concrete Flooring**	Allowance	Concrete repair at basement?	$3,500
9-695	**Floor Prep**	TBD	Budget	$1,000
9-900	**Interior Painting**	TBD	Budget	$10,000
9-910	**Exterior Painting**	TBD	Budget	$7,500
10-345	**Knox Box**	TBD	Budget	$750
10-400	**Interior Signage**	Excluded	By Owner	$0
10-410	**Exterior Signage**	Excluded	By Owner	$0
10-520	**Fire Extinguishers and Cabinets**	TBD	Budget	$500
10-810	**Toilet and Bath Accessories**	TBD	Budget	$500
11-300	**Appliances**	Excluded	By Owner, if any	$0
12-200	**Window Treatments**	Excluded	By Owner	$0
12-300	**Manufactured Casework**	TBD	New kitchenette	$10,000
12-500	**Furniture and Accessories**	Excluded	By Owner	$0
14-200	**Elevators**	TBD	Budget	$85,000
21-100	**Fire Protection**	TBD	4,881 SF @ $4.00 per SF	$19,524
22-100	**Plumbing**	Nason	Budget; assume basement bathrooms to remain as-is	$11,500
23-100	**HVAC**	Nason	Budget; if we need to add a boiler, add $40K	$160,000
26-100	**Electrical**	TBD	4,881 SF @ $22.00 per SF	$107,382
28-100	**Security / Surveillance**	Excluded	By Owner, if any	$0
28-200	**Fire Alarm**	TBD	Carried with electrical above	$0
31-100	**Ledge Removal**	Excluded	Assume none needed	$0
31-200	**Earthwork**	TBD	Budget	$125,000
31-700	**Radon Mitigation**	Excluded	Assume none needed	$0
32-100	**Paving and Surfacing**	TBD	Carried with earthwork above	$0
32-110	**Pavement Striping**	TBD	Carried with earthwork above	$0
32-910	**Landscape - Plantings**	TBD	Carried with earthwork above	$0
33-200	**Propane Tanks**	Excluded	By Owner	$0
99-000	**Estimating Contingency**	Zachau	~ 2.5% of project cost	$24,345
	SALES TAX	0.00%	Exempt	Exempt
	SUB TOTALS			$998,106
	GENERAL LIABILITY INSURANCE	0.50%		$4,991
	PROFIT AND OVERHEAD	5.50%		$54,896
	GRAND TOTAL			**$1,057,993**

ZACHAU ESTIMATE SUMMARY

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DIVISION	DESCRIPTION	COST	COST/SF
DIVISION 1	GENERAL REQUIREMENTS	$55,352	$11.34
DIVISION 2	EXISTING CONDITIONS	$18,700	$3.83
DIVISION 3	CONCRETE	$30,000	$6.15
DIVISION 4	MASONRY	$0	$0.00
DIVISION 5	METALS	$8,700	$1.78
DIVISION 6	CARPENTRY	$159,650	$32.71
DIVISION 7	THERMAL AND MOISTURE PROTECTION	$49,500	$10.14
DIVISION 8	DOORS AND WINDOWS	$36,999	$7.58
DIVISION 9	FINISHES	$94,703	$19.40
DIVISION 10	SPECIALTIES	$1,750	$0.36
DIVISION 11	EQUIPMENT	$0	$0.00
DIVISION 12	FURNISHINGS	$10,000	$2.05
DIVISION 13	SPECIAL CONSTRUCTION	$0	$0.00
DIVISION 14	CONVEYING EQUIPMENT	$85,000	$17.41
DIVISION 21	FIRE PROTECTION	$19,524	$4.00
DIVISION 22/23	PLUMBING / HVAC	$171,500	$35.14
DIVISION 26/27/28	ELECTRICAL/COMMUNICATIONS/SECURITY	$107,382	$22.00
DIVISION 31/32/33	EARTHWORK / IMPROVEMENTS / UTILITIES	$125,000	$25.61
ESTIMATING CONTINGENCY		$24,345	$4.99
SALES TAX	0.00% Exempt	Exempt	Exempt
SUBTOTALS		$998,106	$204.49
GL INSURANCE	0.50%	$4,991	$1.02
FEE	5.50%	$54,896	$11.25
TOTAL		**$1,057,993**	**$216.76**

DRAFT

Construction
Zachau's Estimate: 1,057,993
Architect's site estimate 125,000

Total: $1.2 million

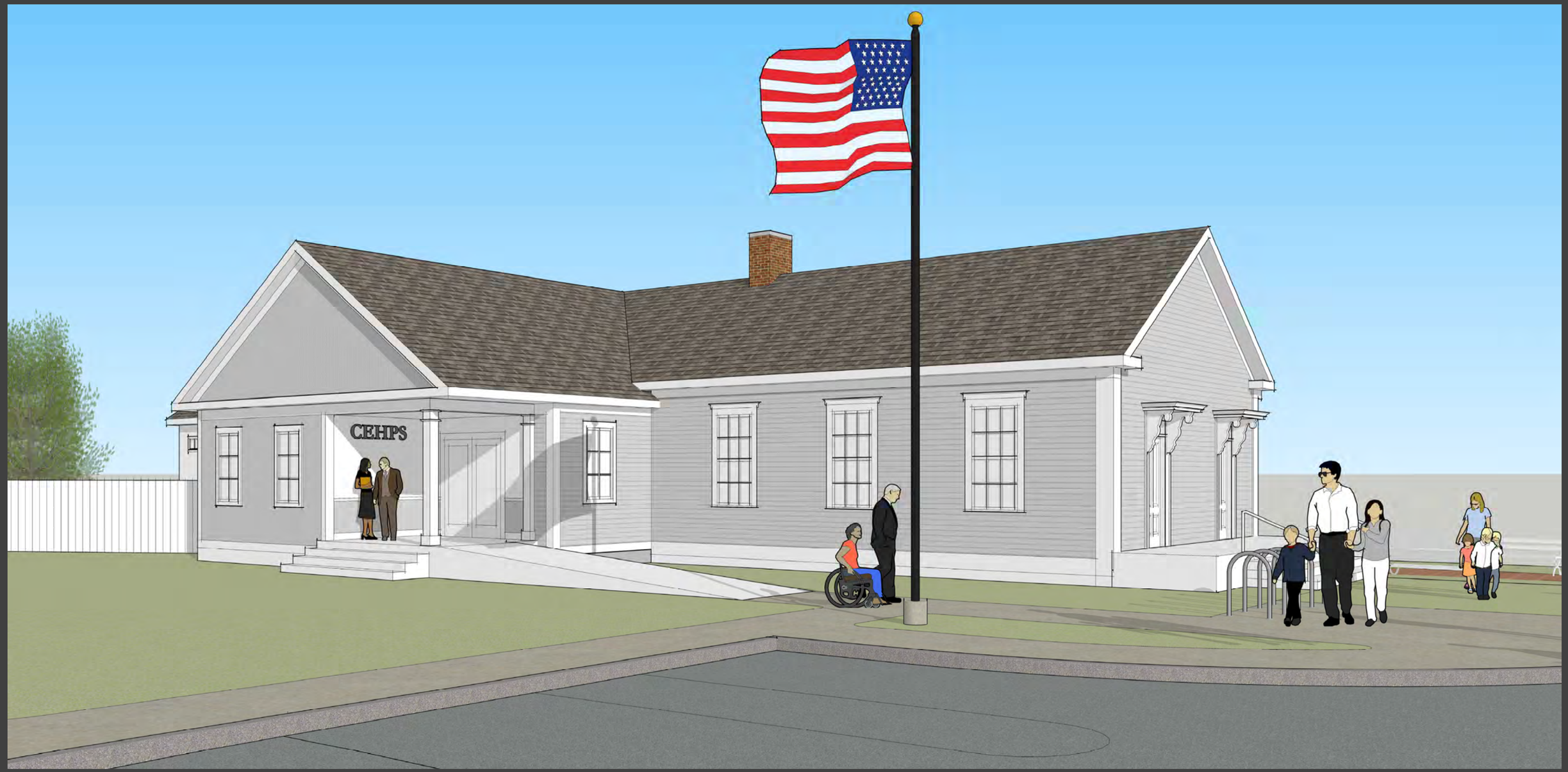
Design Fees: $144,000
12% of construction

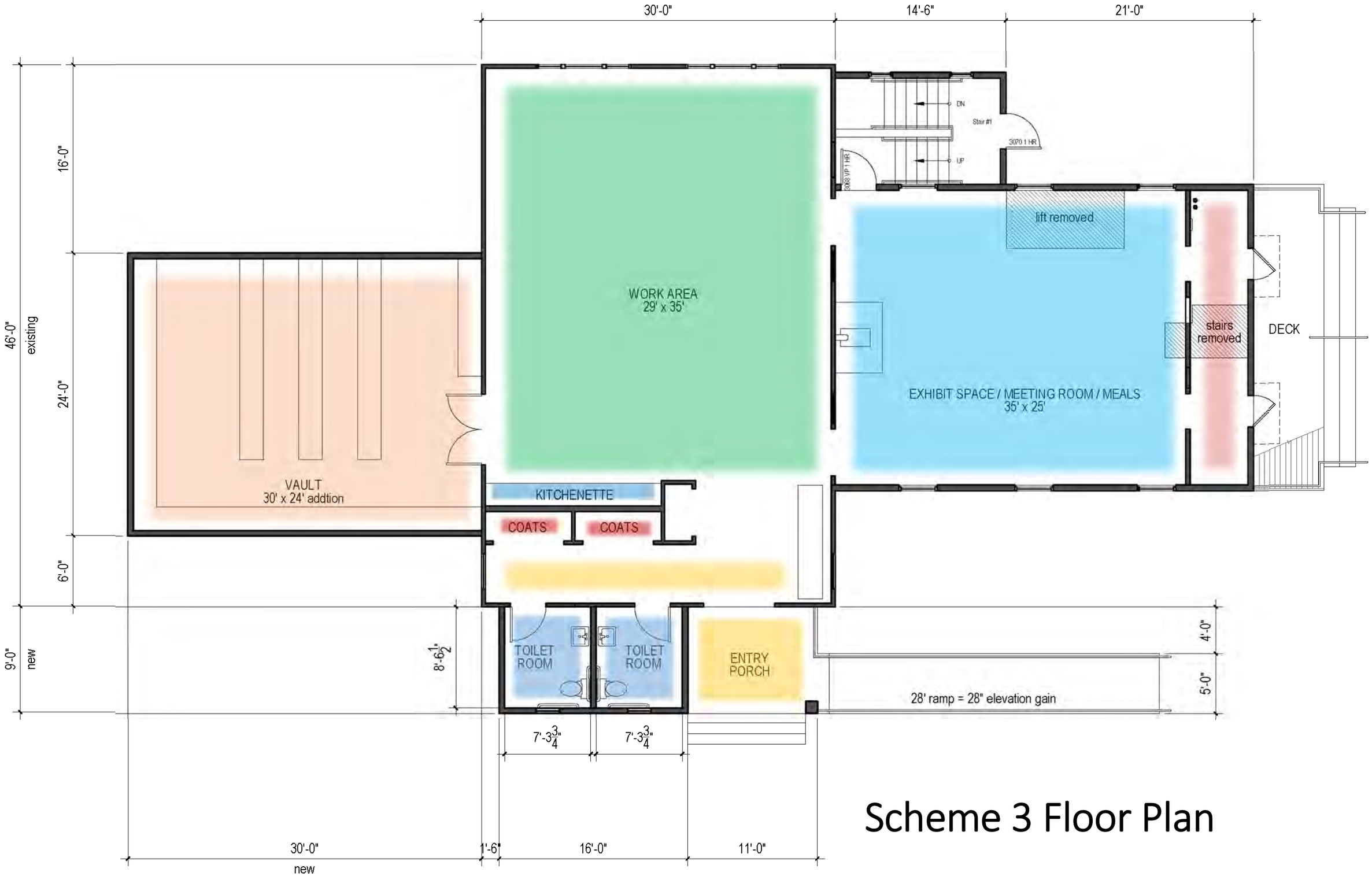
2nd Scheme

1. Elevator and storage in basement problematic
2. Spending $250/sf to create space in basement with low ceiling and difficulties managing temperature and humidity
3. Ellen Van Fleet suggested that we build an addition (the vault)

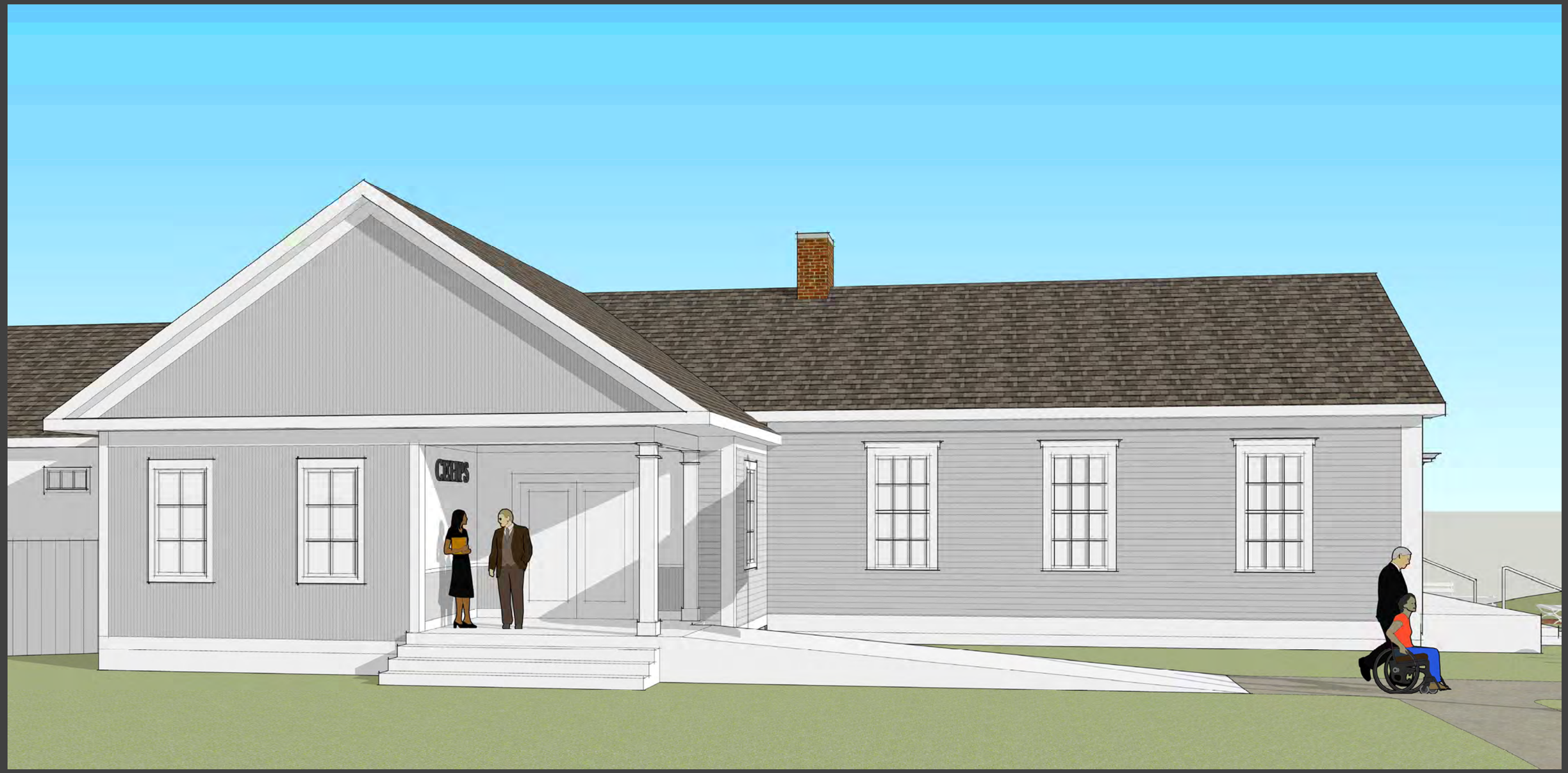
3rd Scheme

1. Build addition on south wall of 1958 addition. The Vault will provide temperature and humidity controlled archival storage and a work space that requires highly controlled conditions
2. The entry is moved to the east face of the 1958 addition and provides (2) accessible toile rooms.
3. The exterior west wall of the addition becomes a display for kids in the playground
4. The south wall of the addition becomes a significant element in the play area

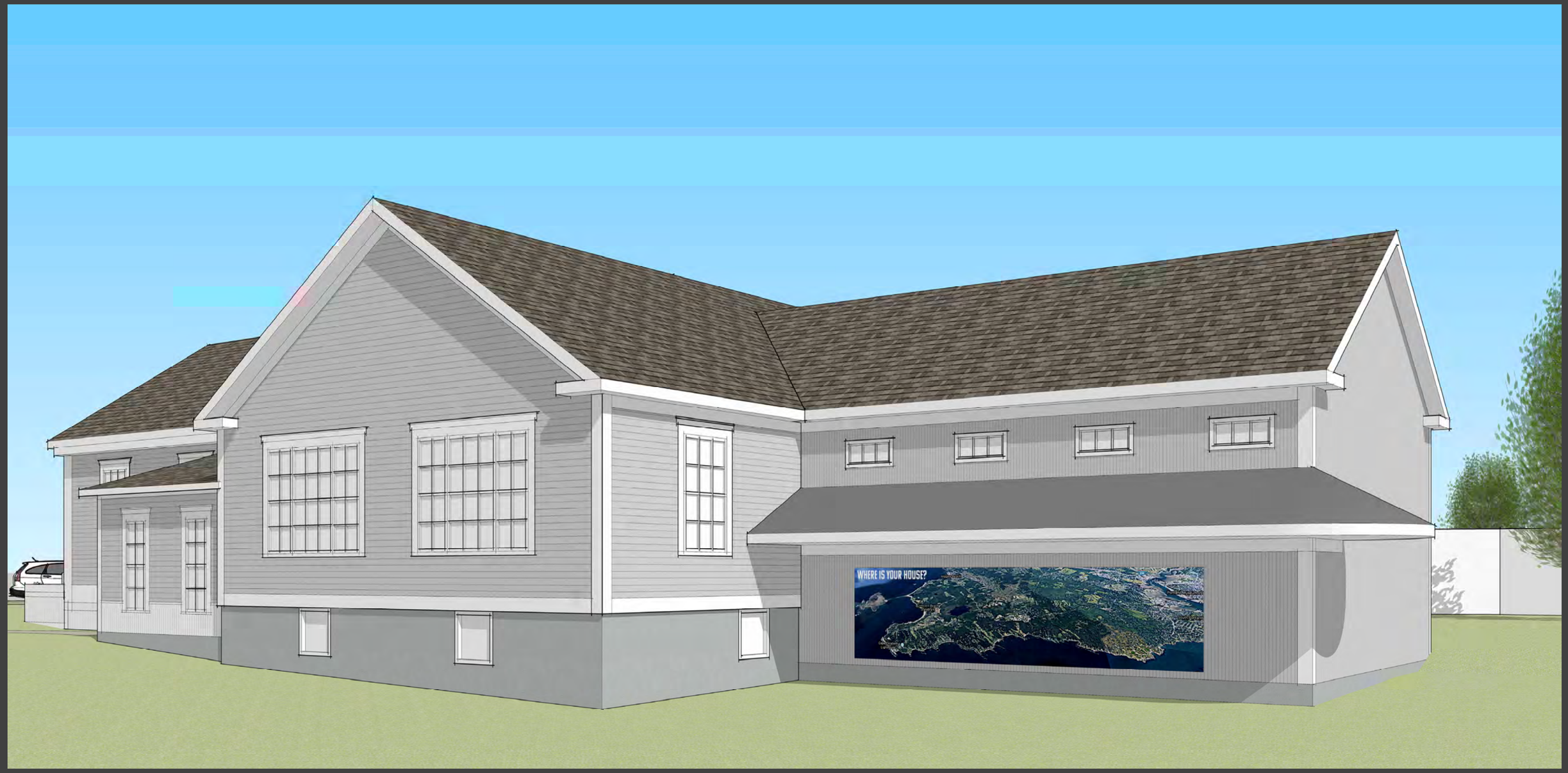

CEHPS



Scheme 3 Floor Plan


CHIPS

CEHPS



Covered display area in playground

3rd Scheme

1. Will cost more than scheme with basement but in my opinion it’s better in the long run

Scott Dyer Road

Route 77

Site Plan

Conclusions

1. We can renovate the existing building and provide a great home for the Cape Elizabeth Historical Preservation Society
2. We can renovate the building and provide a valuable and durable asset for the town of Cape Elizabeth
3. The probable cost of construction will be at least $1.2 million and could range up to $1.6 million depending on which scheme is chosen
4. I’m hesitant to recommend less expensive alternatives to this project

CEHPS