



# M+S<sup>a</sup>

Mills + Schnoering Architects, LLC

## REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE CLBA 312325 SCHEMATIC DESIGN APPENDICES

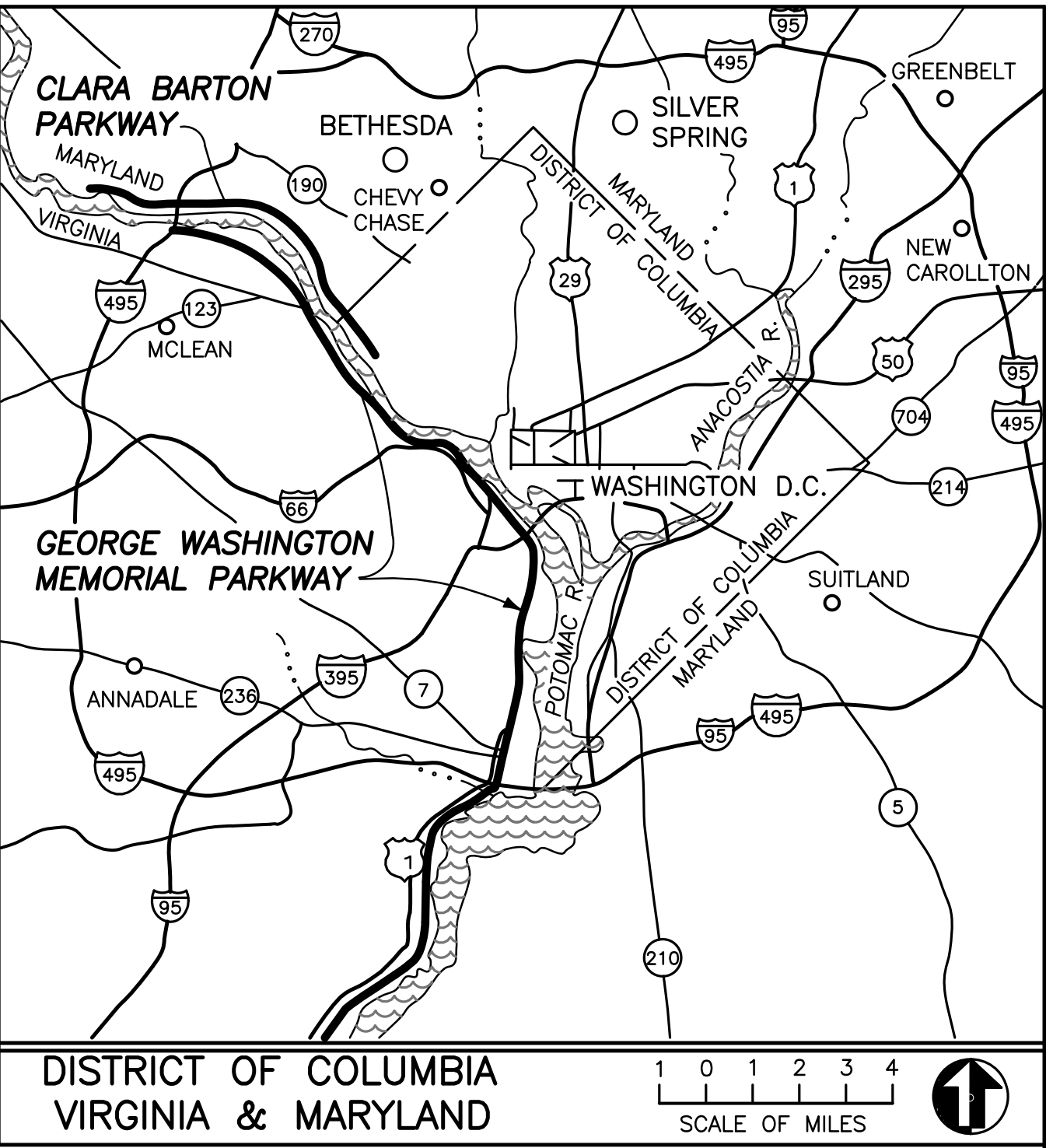
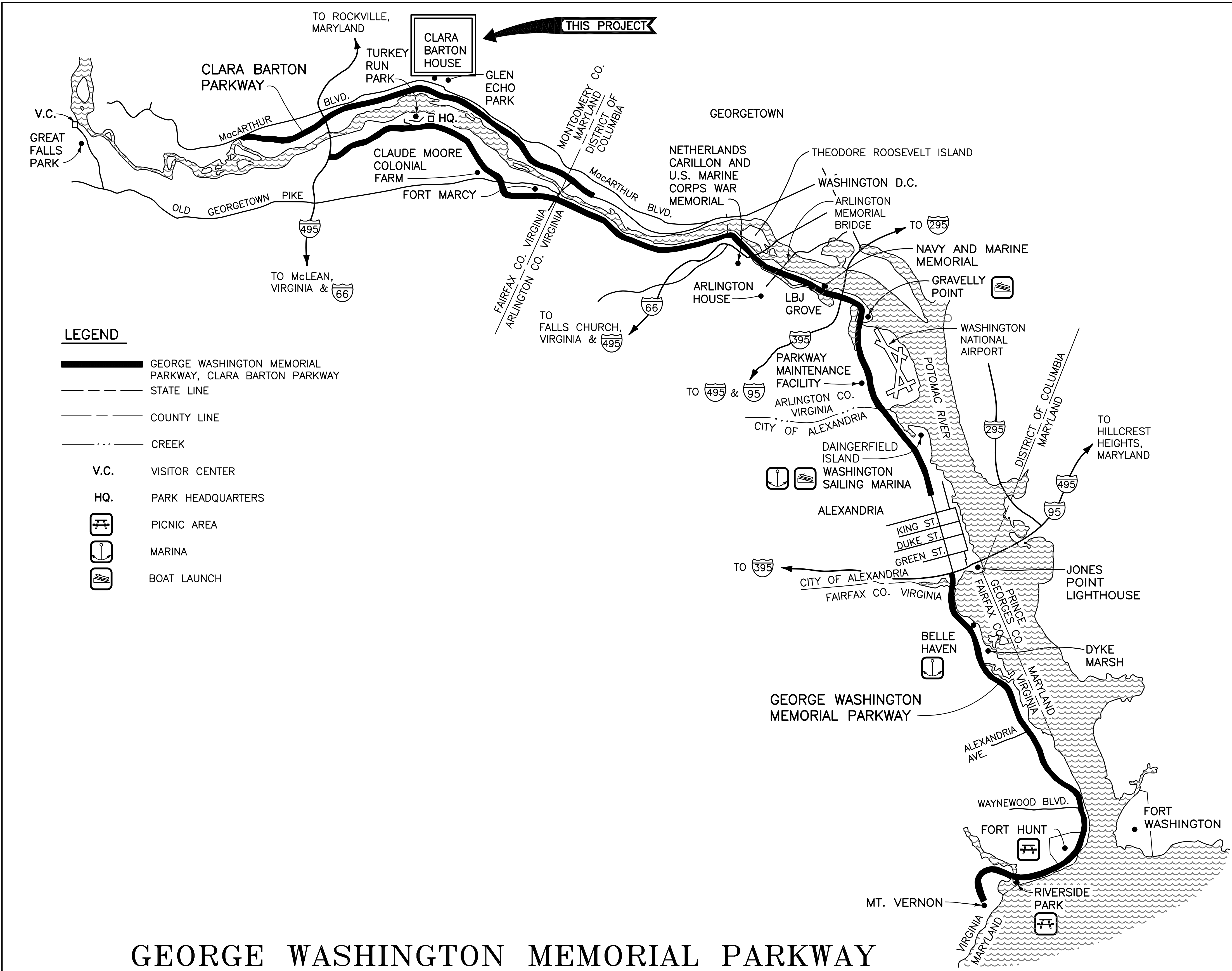
December 8, 2023

Prepared by:  
Mills + Schnoering Architects, LLC  
200 Forrestal Rd., Suite 3A  
Princeton, New Jersey 08540

Prepared for:  
National Park Service  
Denver Service Center  
12795 W. Alameda Parkway  
Lakewood, CO 80228

**Appendix:**  
**Schematic Design Drawings**

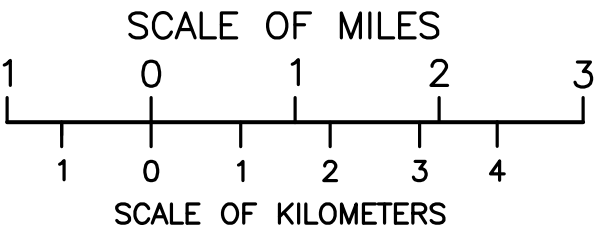


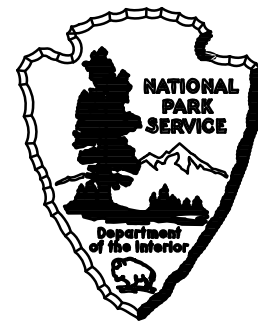


GEORGE WASHINGTON MEMORIAL PARKWAY

REHABILITATE CLARA BARTON  
NATIONAL HISTORIC SITE  
CLBA 312325

SCHEMATIC FINAL SUBMISSION  
DECEMBER 8TH, 2023



			TITLE OF DRAWING COVER SHEET		DRAWING NO. 895	
			LOCATION WITHIN PARK CLARA BARTON HOUSE		179603	
	UNITED STATES DEPARTMENT OF THE INTERIOR		NAME OF PARK GEORGE WASHINGTON MEMORIAL PARKWAY		PKG. NO.	SHEET
	NATIONAL PARK SERVICE DENVER SERVICE CENTER		REGION NAT'L CAPITAL		_____	<div>1</div>
			COUNTY GLEN ECHO, MD		_____	OF 85

GENERAL PROJECT NOTES

1.

CLARA BARTON NATIONAL HISTORIC SITE IS A NATIONAL HISTORIC LANDMARK AND LISTED ON THE NATIONAL AND STATE REGISTER OF HISTORIC PLACES. ALL WORK MUST BE IN ACCORDANCE WITH THE SECRETARY OF INTERIOR'S STANDARDS FOR TREATMENT OF HISTORIC PROPERTIES (CODIFIED IN 1995 AND UPDATED IN 2017).
2.

THIS PROJECT INVOLVES STRATEGIC REHABILITATION OF CLARA BARTON NATIONAL HISTORIC SITE FOR ITS CONTINUED USE AND VISITATION. THE INTENT OF THIS PROJECT IS TO:

A. REHABILITATE THE EXISTING CLARA BARTON NATIONAL HISTORIC SITE, CONSERVING HISTORIC FABRIC TO THE GREATEST EXTENT POSSIBLE. THE BUILDING IS A NATIONAL HISTORIC LANDMARK. ALL MATERIAL IS GOVERNMENT PROPERTY, AND ANY THEFT IS PUNISHABLE BY LAW.
3.

IT IS IMPERATIVE THAT WORKMANSHIP OF THE HIGHEST QUALITY BE UTILIZED IN THIS HISTORIC STRUCTURE. PRECAUTIONS MUST BE TAKEN AT ALL TIMES TO ENSURE SAFETY AND PRESERVATION OF THE STRUCTURE. NPS SHALL HAVE FULL DISCRETION TO SUSPEND WORK ON THE PART OF THE CONTRACTOR OR SUBCONTRACTOR WHICH, IN HIS/HER OPINION, IS LIKELY TO RESULT IN DAMAGE TO THE STRUCTURE.
4.

WORK SHALL BE ORGANIZED AND SCHEDULED FOR THE ENTIRE PROJECT TO FACILITATE THE WORK WITHOUT JEOPARDIZING THE PRESERVATION OF HISTORIC ARTIFACTS ON THE SITE. PROTECTION AND PRESERVATION ARE THE RESPONSIBILITY OF THE CONTRACTOR.
5.

PROBES WERE PERFORMED, BUT MOST OBSERVATIONS MADE REPRESENT PHYSICAL EXAMINATION ONLY. GC TO PERFORM VISUAL INSPECTION OF THE SCOPE OF WORK AND ADVISE ARCHITECT IF SIGNIFICANT VARIATIONS ARE FOUND. DOCUMENTS ARE BASED ON FIELD OBSERVATIONS OF EXISTING CONDITIONS MADE IN SUMMER 2022.
6.

CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD AND TO REPORT ALL DISCREPANCIES IN THESE DRAWINGS AND RELATED SPECIFICATIONS TO ARCHITECT FOR RESOLUTION PRIOR TO START OF CONSTRUCTION. FAILURE TO VERIFY ALL CONDITIONS AFFECTING THE WORK AND FAILURE TO REPORT DISCREPANCIES WILL NOT RELIEVE THE CONTRACTOR FROM COMPLETE COORDINATION OF ALL ASPECTS OF THE WORK.
7.

WORK NOT INDICATED AS PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING LOCATIONS SHALL BE PROVIDED.
8.

IN ANY CASE OF CONFLICT BETWEEN THE DRAWINGS, SPECIFICATIONS, NOTES, AND DETAILS, THE MOST RIGID REQUIREMENTS SHALL GOVERN.
9.

CONTRACTOR SHALL MAKE NO DEVIATION FROM DESIGN DRAWINGS WITHOUT APPROVAL OF ARCHITECT/ENGINEER.
10.

CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS PRIOR TO ORDERING AND/OR FABRICATING MATERIALS/ELEMENTS. ALL ARCHITECTURAL DIMENSIONS ARE TO THE FINISH FACE OF CONSTRUCTION UNLESS NOTED OTHERWISE.
11.

CONTRACTOR IS REQUIRED TO EXAMINE THE DRAWINGS CAREFULLY AND VISIT THE PROJECT SITE. FAMILIARIZE THEMSELVES WITH ALL EXISTING CONDITIONS AND LIMITATIONS PRIOR TO SUBMITTING THEIR PROPOSAL. FAILURE TO VISIT THE SITE AND NOT BEING FAMILIAR WITH THE EXISTING CONDITIONS AND LIMITATIONS SHALL IN NO WAY RELIEVE THE SUCCESSFUL BIDDER FROM FURNISHING MATERIALS, OR PERFORMING ANY WORK THAT MAY BE REQUIRED TO COMPLETE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, AND WITHOUT ANY ADDITIONAL COST TO NPS.
12.

CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SUPPORT. CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR THE SAFETY OF THE EXISTING STRUCTURE DURING CONSTRUCTION/ALTERATION OF THE EXISTING STRUCTURE AND SHALL TAKE PRECAUTIONS TO PREVENT DAMAGE TO THE EXISTING STRUCTURAL AND ARCHITECTURAL ELEMENTS. IF ANY DAMAGE TO SAME ELEMENTS OCCURS, IT SHALL BE RECTIFIED TO THE ENTIRE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
13.

CONTRACTOR SHALL PERFORM ALL WORK (INCLUDING DEMOLITION AND ERECTION) WITH DUE REGARD TO LIFE AND PROPERTY IN THE VICINITY OF THE WORK AREA. CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR PROTECTION OF SAME FROM ANY HARM OR DAMAGE DURING THE ENTIRE CONSTRUCTION AND/OR ALTERATION. ANY HARM OR DAMAGE DONE SHALL BE RECTIFIED TO THE ENTIRE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
14.

CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL CONSTRUCTION DEBRIS IN VICINITY OF THE WORK. MUST PROVIDE ADEQUATE SHORING AND/OR TEMPORARY SUPPORT WHEREVER REQUIRED DURING THE ENTIRE CONSTRUCTION PERIOD.
15.

CONTRACTOR IS RESPONSIBLE FOR PROTECTING WALKS, DRIVEWAYS AND ENTRANCES TO THE BUILDING TO MAINTAIN SAFE ACCESS AS REQUIRED. WALKS, DRIVES, AND EXISTING SITE FEATURES ARE TO REMAIN, UNLESS NOTED OTHERWISE. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL EXISTING MATERIAL TO REMAIN DURING CONSTRUCTION, INCLUDING GUTTERS, DOWNSPOUTS, WOOD TRIM, LANDSCAPING AND HARDSCAPING. CONTRACTOR IS RESPONSIBLE TO REPAIR ANY DAMAGE TO SAME, INCLUDING REPAIR TO WALKS/DRIVES, REPLACEMENT LANDSCAPING, HARDSCAPING AND LAWN RESTORATION AS REQUIRED. LAYDOWN AREA SHALL BE LOCATED ON EXISTING GROUND AREA ONLY.
16.

CONTRACTOR SHALL ASSUME THAT EXISTING PAINTED SURFACES MAY BE LEAD CONTAINING. PERFORM ALL WORK THAT DISTURBS LEAD CONTAINING PAINT (LCP) IN COMPLIANCE WITH APPLICABLE OSHA REGULATIONS AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL CODES FOR REMOVAL, HANDLING, CONTAINERIZATION, TRANSPORTATION AND DISPOSAL OF LEAD CONTAINING PAINT. DISPOSE OF LEAD CONTAINING PAINT CHIPS AND OTHER RESIDUE AS HAZARDOUS WASTE IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
17.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING THOROUGH AND COMPLETE RECORD DRAWINGS OF ALL WORK PERFORMED.
18.

NO OPEN FLAMES ARE PERMITTED ANYWHERE ON THE JOB SITE
19.

LEAD PAINT & ASBESTOS ADVISORY STATEMENT. CONTRACTOR SHALL BE CERTIFIED IN HAZMAT MITIGATION AND SHALL PROVIDE A SAFE WORK SITE.
20.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY PROTECTION AT HISTORIC ELEMENTS DURING CONSTRUCTION.

ABBREVIATIONS

AFF	ABOVE FINISH FLOOR	IN	INCH
AP	ACCESS PANEL	INSUL	INSULATE(D), (ING)
ACT	ACOUSTICAL CEILING TILE	INT	INTERIOR
A/C	AIR CONDITIONING		
ALT	ALTERNATE	JAN	JANITOR
ALUM	ALUMINUM	JT	JOINT
AB	ANCHOR BOLT	JST	JOIST
ARCH	ARCHITECT(URAL)		
ASPH	ASPHALT	LAV	LAVATORY
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	LT	LIGHT
AUX	AUXILARY		
		MFR	MANUFACTURE(R)
		MO	MASONRY OPENING
BRG	BEARING	MAX	MAXIMUM
BD	BOARD	MECH	MECHANIC(AL)
BOT	BOTTOM	MTL	METAL
BLDG	BUILDING	MIN	MINIMUM
		MISC	MISCELLANEOUS
CAB	CABINET	NOM	NOMINAL
CARP	CARPET	N	NORTH
CLG	CEILING	N/A	NOT APPLICABLE
CTR	CENTER CENTERLINE	NIC	NOT IN CONTRACT
CT	CERAMIC TILE	NTS	NOT TO SCALE
CLR	CLEAR(ANCE)	NO	NUMBER
CL	CLOSET		
COL	COLUMN	OFF	OFFICE
CONC	CONCRETE	OC	ON CENTER(S)
CONST	CONSTRUCTION	OPG	OPENING
CONT	CONTINUE/CONTINUOUS	OPP	OPPOSITE
CJ	CONTROL JOINT		
COORD	COORDINATE	PTD	PAINTED
CORR	CORRIDOR	PVG	PAVE(D), (ING)
DEMO	DEMOLISH, DEMOLITION	PVMT	PAVEMENT
DTL	DETAIL	PLAM	PLASTIC LAMINATE
DIAG	DIAGONAL	PLYWD	PLYWOOD
DIA	DIAMETER	PSI	POUNDS PER SQUARE INCH
DIM	DIMENSION	PSF	POUNDS PER SQUARE FOOT
DN	DOWN		
DWR	DRAWER	QTY	QUANTITY
DWG	DRAWING		
D	DRAIN	RAD	RADIUS
		REF	REFERENCE
EA	EACH	REFR	REFRIGERATOR
E	EAST	REINF	REINFORCING
ELEC	ELECTRIC(AL)	REQ	REQUIRE(D)
EWC	ELECTRIC WATER COOLER	REV	REVISION(S), REVISED
EMER	EMERGENCY	R	RISER
ENCL	ENCLOSE (URE)	RD	ROOF DRAIN
EQ	EQUAL	RM	ROOM
EQUIP	EQUIPMENT	RO	ROUGH OPENING
EXIST	EXISTING		
EJ	EXPANSION JOINT	SEC	SECTION
EXP	EXPOSED	SHT	SHEET
EXT	EXTERIOR	SIM	SIMILAR
		S	SOUTH
FIN	FINISH(ED)	SPEC	SPECIFICATION(S)
FFL	FINISH FLOOR LEVEL	SQ	SQUARE
FE	FIRE EXTINGUISHER	SF	SQUARE FEET
FEC	FIRE EXTINGUISHER CABINET	STD	STANDARD
FLR	FLOOR(ING)	STL	STEEL
FD	FLOOR DRAIN	STOR	STORAGE
FT	FEET	STR	STRUCTURAL
FTG	FOOTING		
FR	FRAME(ED), (ING)	TB	TACKBOARD
FBO	FURNISHED BY OTHERS	THK	THICK(NESS)
FURR	FURRED (ING)	T&G	TONGUE AND GROOVE
		TOS	TOP OF SLAB
GA	GAGE, GAUGE	TOW	TOP OF WALL
GALV	GALVANIZED	TYP	TYPICAL
GC	GENERAL CONTRACTOR		
GL	GLASS, GLAZING	UON	UNLESS OTHERWISE NOTED
GWB	GYPSUM WALLBOARD		
HC	HANDICAPPED	VERT	VERTICAL
HDR	HEADER	VIF	VERIFY IN FIELD
HVAC	HEATING/VENTILATION/AIR CONDITIONING	VCT	VINYL COMPOSITE TILE
HT	HEIGHT		
HM	HOLLOW METAL	WC	WATER CLOSET
HORIZ	HORIZONTAL	W	WEST
		W	WIDTH, WIDE
		W/	WITH
		W/O	WITHOUT
		WD	WOOD

DRAWING INDEX

G-0.0	COVER SHEET
G-0.1	INDEX OF DRAWINGS, SYMBOLS & ABBREVIATIONS
G-0.2	CODE REVIEW
G-0.3	ACCESSIBILITY
G-0.4	OCCUPANCY
G-0.5	WORK AREAS
G-1.0	GENERAL NOTES
C-1.0	DEMOLITION PLAN
C-2.0	SITE PLAN
C-3.0	GRADING AND DRAINAGE
C-5.0	UTILITY PLAN
L-1.0	LANDSCAPE PLAN
D-1.0	DEMOLITION BASEMENT PLAN
D-1.1	DEMOLITION FIRST FLOOR PLAN
D-1.2	DEMOLITION SECOND FLOOR PLAN
D-1.3	DEMOLITION THIRD FLOOR PLAN
A-1.0	PROPOSED BASEMENT PLAN
A-1.1	PROPOSED FIRST FLOOR PLAN
A-1.2	PROPOSED SECOND FLOOR PLAN
A-1.3	PROPOSED THIRD FLOOR PLAN
A-1.4	PROPOSED ROOF PLAN
A-2.0	PROPOSED BASEMENT REFLECTED CEILING PLAN
A-2.1	PROPOSED FIRST FLOOR REFLECTED CEILING PLAN
A-2.2	PROPOSED SECOND FLOOR REFLECTED CEILING PLAN
A-2.3	PROPOSED THIRD FLOOR REFLECTED CEILING PLAN
A-3.0	PROPOSED ELEVATIONS
A-3.1	PROPOSED ELEVATIONS
A-3.2	REPAIR WORK ELEVATIONS
A-3.3	REPAIR WORK ELEVATIONS
A-4.0	PROPOSED SECTIONS
A-5.0	FRONT PORCH PLAN AND ELEVATION
A-6.0	DOOR SCHEDULE
A-6.1	WINDOW SCHEDULE
S-2.B	PROPOSED BASEMENT & FOUNDATION PLAN
S-2.1	PROPOSED FIRST FLOOR FRAMING PLAN
S-2.1A	PROPOSED FIRST FLOOR LIVE LOADS
S-2.2	PROPOSED SECOND FLOOR FRAMING PLAN
S-2.2A	PROPOSED SECOND FLOOR LIVE LOADS & OCCUPANCY
S-2.R	PROPOSED ROOF FRAMING PLAN
M-0.1	MECHANICAL COVER SHEET
M-1.0	BASEMENT – DUCTWORK – NEW WORK
M-1.1	FIRST FLOOR – DUCTWORK – NEW WORK
M-1.2	SECOND FLOOR – DUCTWORK – NEW WORK
M-1.3	THIRD FLOOR – DUCTWORK – NEW WORK
P-0.1	PLUMBING COVER SHEET
P-1.0	BASEMENT – PLUMBING – NEW WORK
P-1.1	FIRST FLOOR – PLUMBING – NEW WORK
P-1.2	SECOND FLOOR – PLUMBING – NEW WORK
P-1.3	THIRD FLOOR – PLUMBING – NEW WORK
E-0.1	ELECTRICAL COVER SHEET
E-0.2	ELECTRICAL NOTES
E-0.3	ELECTRICAL SITE PLAN – DEMOLITION
E-0.4	ELECTRICAL SITE PLAN – NEW WORK
ED-1.0	BASEMENT ELECTRICAL DEMOLITION
ED-1.1	FIRST FLOOR ELECTRICAL DEMOLITION
ED-1.2	SECOND FLOOR ELECTRICAL DEMOLITION
ED-1.3	THIRD FLOOR ELECTRICAL DEMOLITION
E-1.0	BASEMENT POWER AND COMMUNICATIONS
E-1.1	FIRST FLOOR POWER AND COMMUNICATIONS
E-1.2	SECOND FLOOR POWER AND COMMUNICATIONS
E-1.3	THIRD FLOOR POWER AND COMMUNICATIONS
E-1.4	ROOF LIGHTNING PROTECTION
E-2.0	BASEMENT LIGHTING
E-2.1	FIRST FLOOR LIGHTING
E-2.2	SECOND FLOOR LIGHTING
E-2.3	THIRD FLOOR LIGHTING
E-3.0	BASEMENT SECURITY

E-3.1	FIRST FLOOR SECURITY
E-3.2	SECOND FLOOR SECURITY
E-3.3	THIRD FLOOR SECURITY
E-4.1	ELECTRICAL ENLARGED PLANS
E-5.1	ELECTRICAL DETAILS
E-5.2	ELECTRICAL DETAILS
E-6.1	ELECTRICAL – ONE LINE DIAGRAM – DEMOLITION
E-6.2	ELECTRICAL – ONE LINE DIAGRAM – NEW WORK
FP-0.1	FIRE PROTECTION COVER SHEET
FD-1.0	BASEMENT – FIRE PROTECTION – DEMOLITION
FD-1.1	FIRST FLOOR – FIRE PROTECTION – DEMOLITION
FD-1.2	SECOND FLOOR – FIRE PROTECTION – DEMOLITION
FD-1.3	THIRD FLOOR – FIRE PROTECTION – DEMOLITION
FA-0.1	FIRE ALARM COVER SHEET
FA-1.0	BASEMENT – FIRE ALARM
FA-1.1	FIRST FLOOR – FIRE ALARM
FA-1.2	SECOND FLOOR – FIRE ALARM
FA-1.3	THIRD FLOOR – FIRE ALARM

DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO. <div>G-0.1</div>	TITLE OF SHEET INDEX OF DRAWINGS, SYMBOLS & ABBREVIATIONS REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. 895 179603 PMIS/PKG NO. 312325 SHEET OF X
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<b>1. NPS BUILDING CODES &amp; INDUSTRY STANDARDS</b>	
<b>LOCATION:</b>	5801 Oxford Road, Glen Echo, Maryland 20812
<b>BUILDING CODES:</b>	This project is being designed in accordance with the requirements of the building and fire safety standards listed below and will require approval by the NPS Authority Having Jurisdiction
<b>HISTORIC BUILDING:</b>	The Clara Barton National Historic Site is a qualified historic building under the 2021 IEBC.
<b>Building Code</b>	2021 International Building Code (IBC) 2018 NFPA 101 Life Safety Code (LSC) – use when IBC is silent
<b>Existing Building Code</b>	2021 International Existing Building Code (IEBC)
<b>Plumbing Code</b>	2021 International Plumbing Code (IPC)
<b>Electrical</b>	2020 National Electrical Code (NFPA 70) (NEC)
<b>Energy Code</b>	2018 International Energy Conservation Code (IECC)
<b>Mechanical Code</b>	2021 International Mechanical Code (IMC)
<b>Fuel Gas Code</b>	2021 International Fuel Gas Code (IFGC)
<b>Fire Code</b>	2018 NFPA 101 Life Safety Code (LSC)
<b>Barrier Free Code</b>	2015 ABAAS (Architectural Barriers Act Accessibility Standards (ABA)
<b>Signage</b>	2021 IBC, Section 3108 and Appendix H and 2021 IBC Sections 1110.1 and 1110.2
<b>Fire Extinguishers</b>	2021 IBC, Section 906 and (F)Table 906.3(1)

2. EXISTING BUILDING CODE SUMMARY	Applicable Chapters
Classification of Work (Chapter 5)	✓
Repairs (Chapter 6)	✓
Alterations Level 1 (Chapter 7)	✓
Alterations Level 2 (Chapter 8) Work must also comply with Chapter 7	✓
Alterations Level 3 (Chapter 9) Work must also comply with Chapters 7 and 8	Not applicable
Change of Occupancy (Chapter 10)	✓
Additions (Chapter 11) Work must also comply with IBC 2018	Not applicable
Historic Buildings (Chapter 12)	✓

**REPAIRS.** The restoration to good or sound condition of any part of an existing building for the purpose of its maintenance.

**ALTERATIONS – LEVEL 1.** Include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose.

**ALTERATIONS – LEVEL 2.** Include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

**CHANGE OF OCCUPANCY.** Any of the following shall be considered as a change of occupancy where the IBC requires a greater degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure

- Any change in the occupancy classification of a building or structure
- Any change in the purpose of, or a change in the level activity within, a building or structure.
- A change of use

**ADDITIONS.** An extension or increase in floor area, number of stories, or height of a building or structure

**HISTORIC BUILDING.** Any building or structure that is one or more of the following:

- Listed, or certified as eligible for listing, by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places.
- Designated as historic under an applicable state or local law.
- Certified as a contributing resource within a National Register, state designated or locally designated historic district.

<b>3. OCCUPANCY SUMMARY</b>	
<b>Occupancy Classification and Use</b> <u>Existing.</u> Nonseparated mixed uses. <b>A-3, S-1</b> <u>Proposed.</u> Nonseparated mixed use. <b>A-3, B, S-1</b> <u>Most Restrictive Occupancy:</u> <b>A-3.</b> <ol style="list-style-type: none"><li>Group <b>A-3</b> (Assembly). Museums. 303.4<ul style="list-style-type: none"><li>A room or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy. 303.1.2</li></ul></li><li>Group <b>B</b> (Business).</li><li>Group <b>S-1</b> (Moderate-Hazard Storage).<ul style="list-style-type: none"><li><u>Accessory Storage Spaces.</u> A room or space that is accessory to another occupancy shall be <u>classified as part of that occupancy.</u> 311.1.1</li></ul></li></ol>	Chapter 3, IBC

4. OCCUPANCY CALCULATIONS			Table 1004.1.2 IBC	
	Occupancy Factor (sf per occupant)	Floor Area (sf)	Occupants	Totals
<b>Basement</b>				<b>12</b>
B-3, B-4, B-5, B-6 (Storage)	300 gross sf	1188	4	
B-1, B-2 (Mechanical))	300 gross sf	2853	8	
<b>First Floor</b>				<b>91</b>
103 Bookstore	15 net sf	190	12	
108 Classroom	15 net sf	336	22	
109 TBD	30 net sf	100	3	
111 Historic Kitchen	30 net sf	183	6	
112 Dining Room	30 net sf	226	2	
113 Red Cross Office	30 net sf	326	11	
114 Red Cross Office	30 net sf	340	11	
116 NPS Space	150 gross sf	116	1	
117 Break Room	150 gross sf	55	1	
118, 119 Parlors	30 net sf	474	17	
<b>Second Floor</b>				<b>77</b>
201 Classroom	15 net sf	510	12 (Limited)	
206 Distance Learn. Studio	15 net sf	146	5 (Limited)	
207 Interactive Child. Exhibit	15 net sf	186	6 (Limited)	
208 TBD	15 net sf	118	4 (Limited)	
209 Historic Bathroom	30 net sf	83	2 (Limited)	
211 Dr. Hubbell’s Bedroom	30 net sf	249	6 (Limited)	
212 Miss Barton’s Sitting Rm	30 net sf	388	10 (Limited)	
213 Barton Bed Chamber	30 net sf	365	10 (Limited)	
215 Curatorial Workroom	15 net sf	170	7 (Limited)	
216 Classroom	15 net sf	152	2 (Limited)	
218 Temporary Exhibits	15 net sf	310	10 (Limited)	
<b>Third Floor</b>				<b>0</b>
Entire Floor Area			0 (Limited)	
<b>Total Building Occupant Load</b>				<b>180</b>


<b>5. WORK AREA SUMMARY</b>				Chapter 2 def IEBC
<b>Area, Work.</b> That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. <u>Work area</u> excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.				
	<b>Existing</b>	<b>Work Area</b>	<b>% Work Area to Floor Area</b>	
<b>Basement</b>	3,846 sf	300 sf	<b>7.8%</b>	
<b>First Floor</b>	4,437 sf	813 sf	<b>18.3%</b>	
<b>Second Floor</b>	4,085 sf	456 sf	<b>11.2%</b>	
<b>Third Floor</b>	1,363 sf	0 sf	<b>0%</b>	
<b>Total Building Areas</b>	13,731 sf	1,569 sf		
<b>% Work Area to Bldg Area</b>	<b>11.4%</b> (less than 50%, Alteration Level 2)			

<b>6. BUILDING AREA SUMMARY</b>				Chapter 2 def IBC
<b>Area, Building.</b> The area included within the surrounding exterior walls, or exterior walls and fire walls, exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above.				
	<b>Existing</b>	<b>Proposed Add</b>	<b>Subtotals</b>	
<b>Basement</b>	3,846 sf	0 sf	3,846 sf	
<b>First Floor</b>	4,437 sf	0 sf	4,437 sf	
<b>Second Floor</b>	4,085 sf	0 sf	4,085 sf	
<b>Third Floor</b>	1,363 sf	0 sf	1,363 sf	
<b>Totals Building Area</b>			<b>13,731 sf</b>	

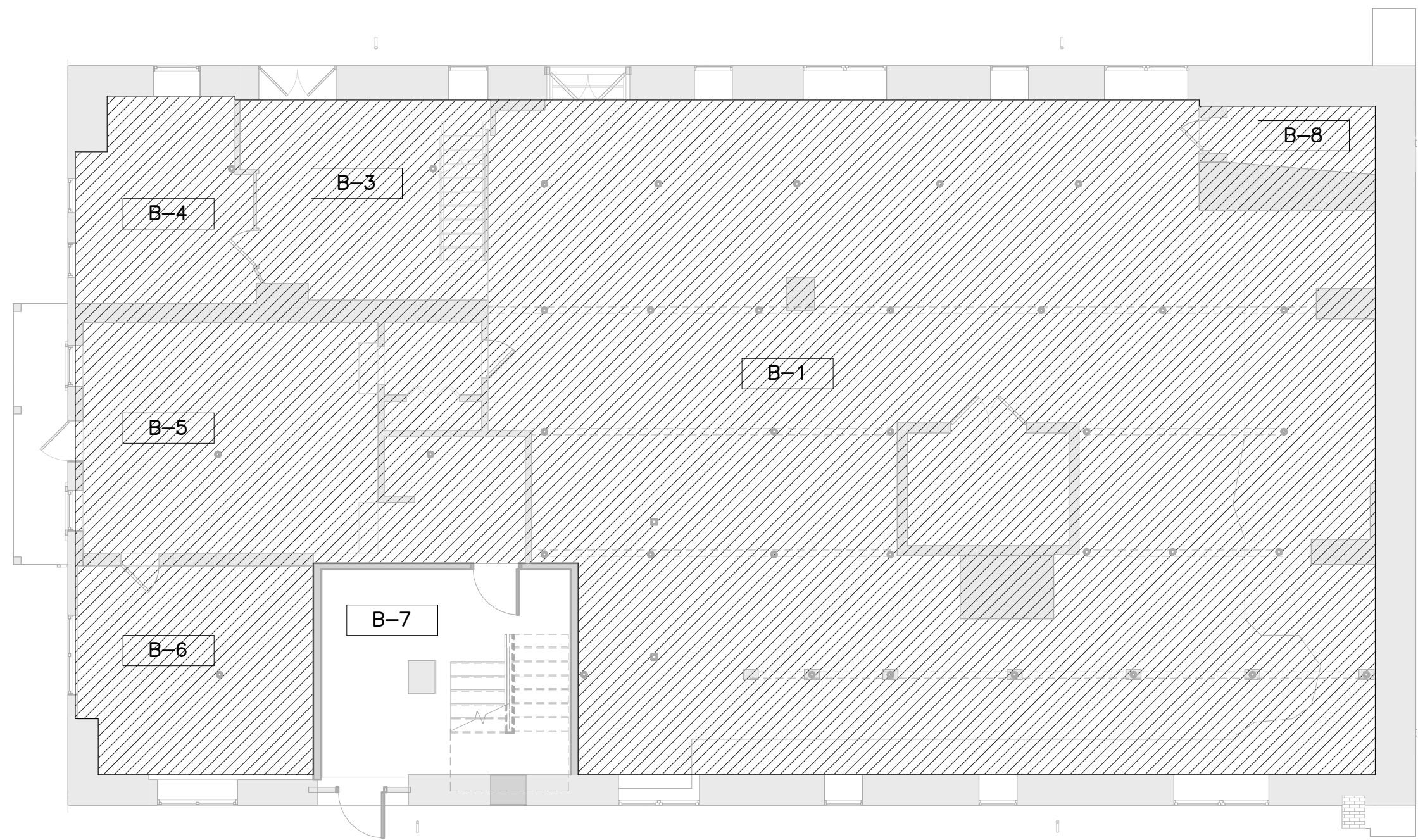
<b>7. CONSTRUCTION TYPE SUMMARY – TYPE V-B</b>	
<b>Type V-B.</b> Construction in which structural elements, exterior walls and interior walls are of any materials permitted by this code.	602.5
<b>Construction Classification</b> <u>Existing.</u> <b>Type V-B.</b> <u>Proposed.</u> <b>No change.</b>	

8. BUILDING HEIGHT, NUMBER OF STORIES AND AREAS			
Unseparated Mixed Occupancy – <b>A-3</b> most restrictive, Type <b>V-B</b>			
	<b>Existing</b>	<b>Allowable</b>	<b>Proposed</b>
<b>Automatic Sprinkler System (Group A-3)</b>	Existing Building is fully sprinklered		
			[F] 903.2.1.1, NFPA 13
<b>Allowable Building Ht. *</b>	37 feet	60 feet	No change. Complies.
<b>Allowable No. of Stories **</b> (above grade plane)	3 stories	2 stories	Existing building does not comply.
<b>Allowable Area</b> (maximum per floor)	4,326 sf largest floor area	18,000 sf	No change. Complies.
* HEIGHT, BUILDING. The vertical distance from grade plane to the average height of the highest roof surface. (IBC Chapter 2 def.) **Grade plane is 5.19' (138.54) below First Floor (143.73). First Floor is >6'-0 above grade plane. Basement is a story, <u>but not a story above the Grade Plane.</u> <ol style="list-style-type: none"><li><b>Basement.</b> A story that is not a story above grade plane.</li><li><b>Story Above Grade Plane.</b> Any story having its finished floor surface entirely above grade plane, or in which the finished surface of the fir next above is<ul style="list-style-type: none"><li>More than 6 feet above grade plane; or</li><li>More than 12 feet above the finished ground level at any point.</li></ul></li></ol>			

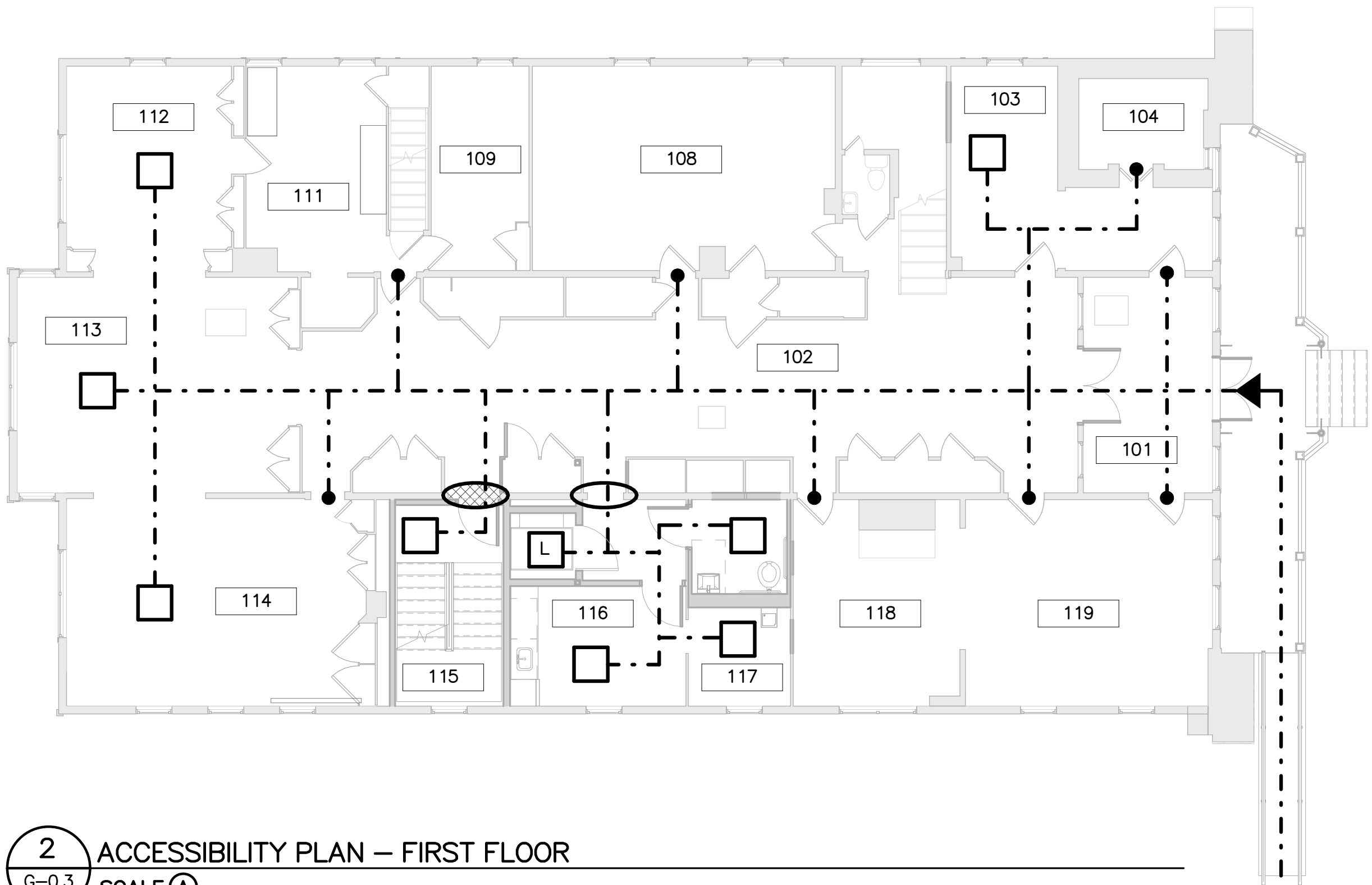
9. CONSTRUCTION CLASSIFICATION AND FIRE-RESISTANT RATING FOR BUILDING ELEMENTS			Table 601 IBC
<b>Fire-Resistance Rating Requirements for Building Elements – TYPE V-B</b> Unseparated Mixed Use – <b>A-3</b> (Most Restrictive)			
	<b>Existing</b>	<b>Required</b>	
<b>a. Primary Structural frame - Columns, Girders<sup>1</sup></b>			
	0 hrs	0 hrs	
<b>b. Bearing walls</b>			
Exterior rating	0 hrs	0 hrs	
Interior bearing walls	0 hrs	0 hrs	
<b>c. Nonbearing walls and partitions Exterior (Table 705.5)</b>			
>30'	0 hrs	0 hrs	
<b>d. Nonbearing walls and partitions Interior</b>			
	0 hrs	0 hrs	
<b>e. Floor Construction and Secondary Members</b>			
	0 hrs	0 hrs	
<b>f. Roof Construction and Secondary Members</b>			
	0 hrs	0 hrs	

DESIGNED: JA  SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  <b>G-0.2</b>	TITLE OF SHEET <b>CODE REVIEW</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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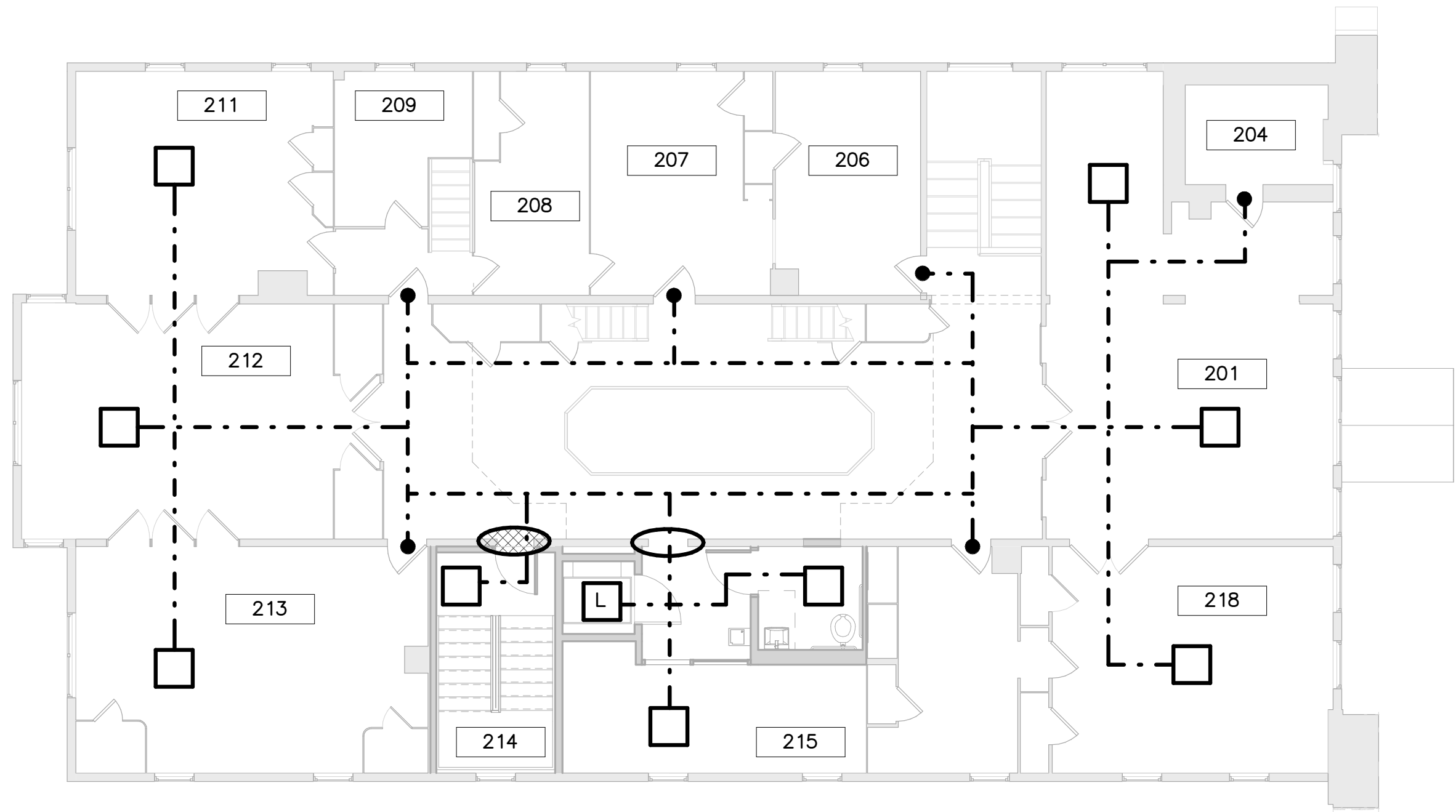
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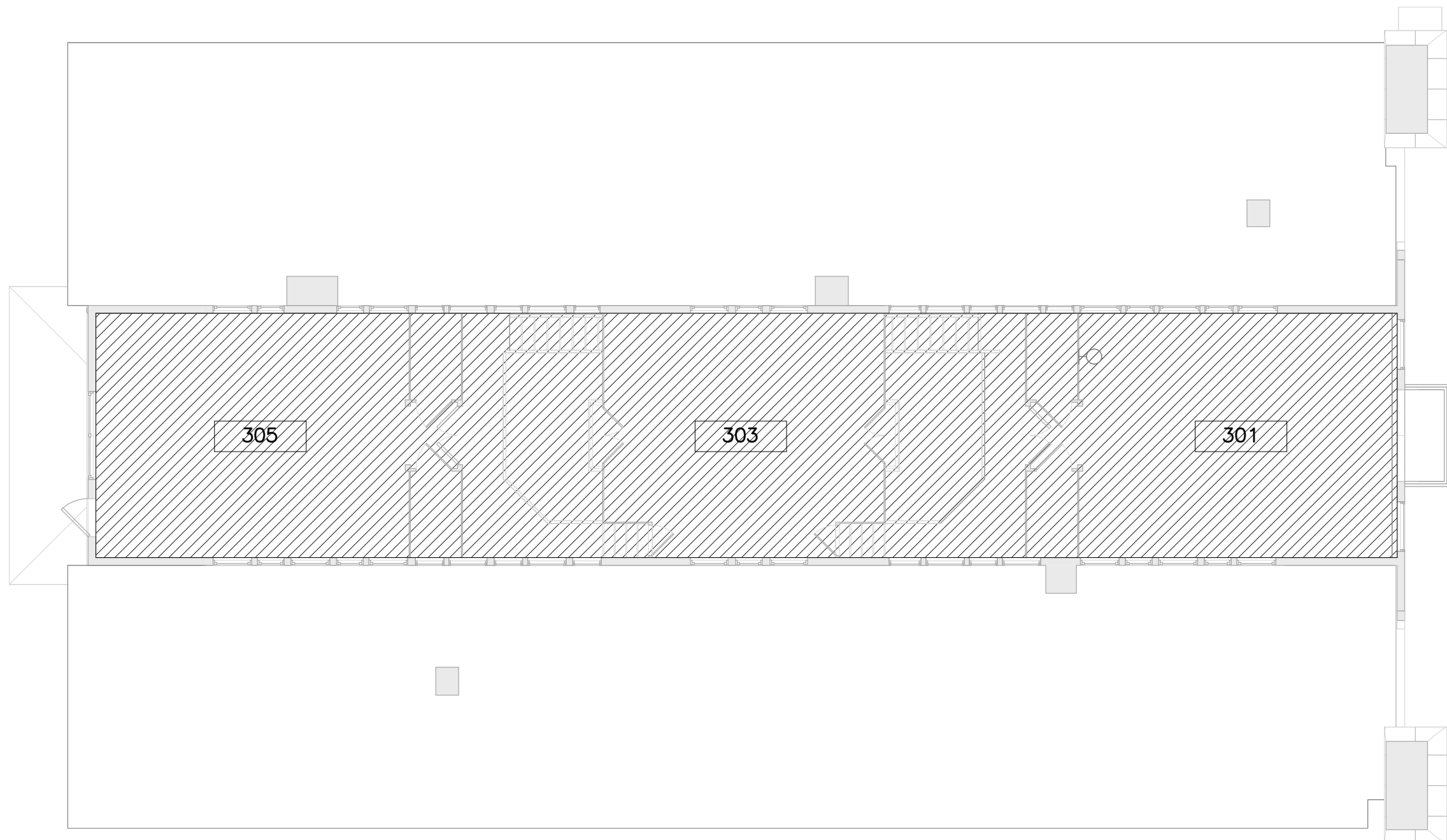
1 ACCESSIBILITY PLAN – BASEMENT  
G-0.3 SCALE (A)



2 ACCESSIBILITY PLAN – FIRST FLOOR  
G-0.3 SCALE (A)



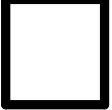
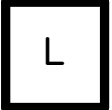
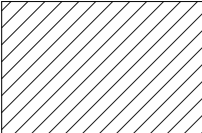
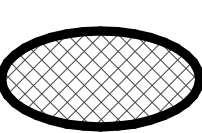




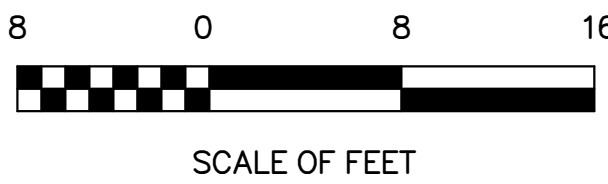
3 ACCESSIBILITY PLAN – SECOND FLOOR  
G-0.3 SCALE (A)



4 ACCESSIBILITY PLAN – THIRD FLOOR  
G-0.3 SCALE (A)

ACCESSIBILITY LEGEND

-  ACCESSIBLE ENTRANCE
-  ACCESSIBLE ROUTE, 36" MIN, w/ 32" CLEAR AT DOOR
-  ACCESSIBLE SPACE
-  VERTICAL PLATFORM LIFT
-  NON-ACCESSIBLE SPACE
-  NEW DOOR AND FRAME. REFER TO DOOR SCHEDULE.
-  REMOVE AND SALVAGE EXISTING DOOR AND STOPS. REFER TO DOOR SCHEDULE.
-  EXISTING DOOR TO REMAIN. CODE OFFICIAL TO DETERMINE IF THERE IS SUFFICIENT WIDTH FOR A PERSON TO PASS THROUGH THE OPENING. REFER TO DOOR SCHEDULE.



SCALE OF FEET

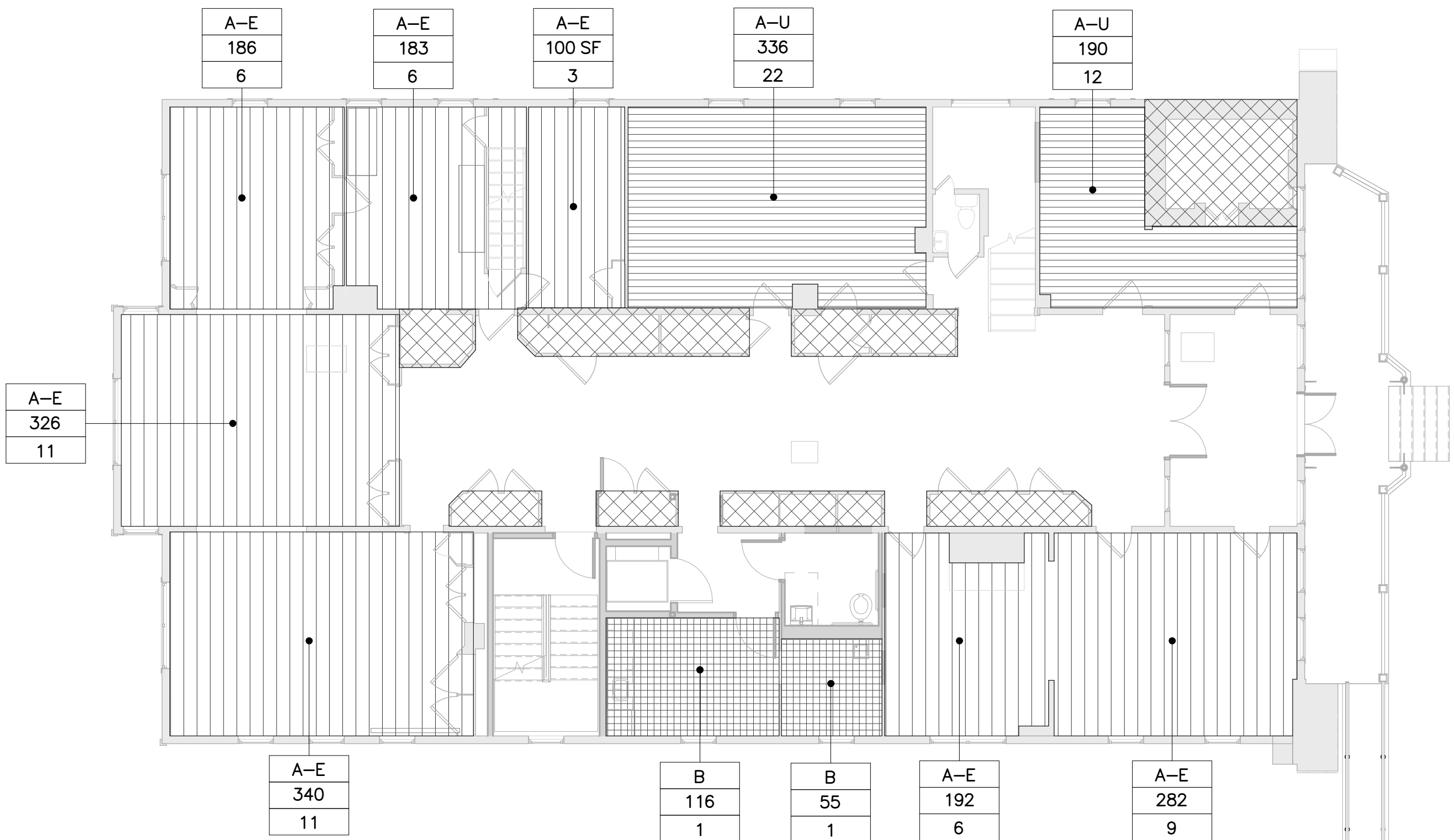
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TECH. REVIEW: MJM, MS			
DATE: 12/8/2023			



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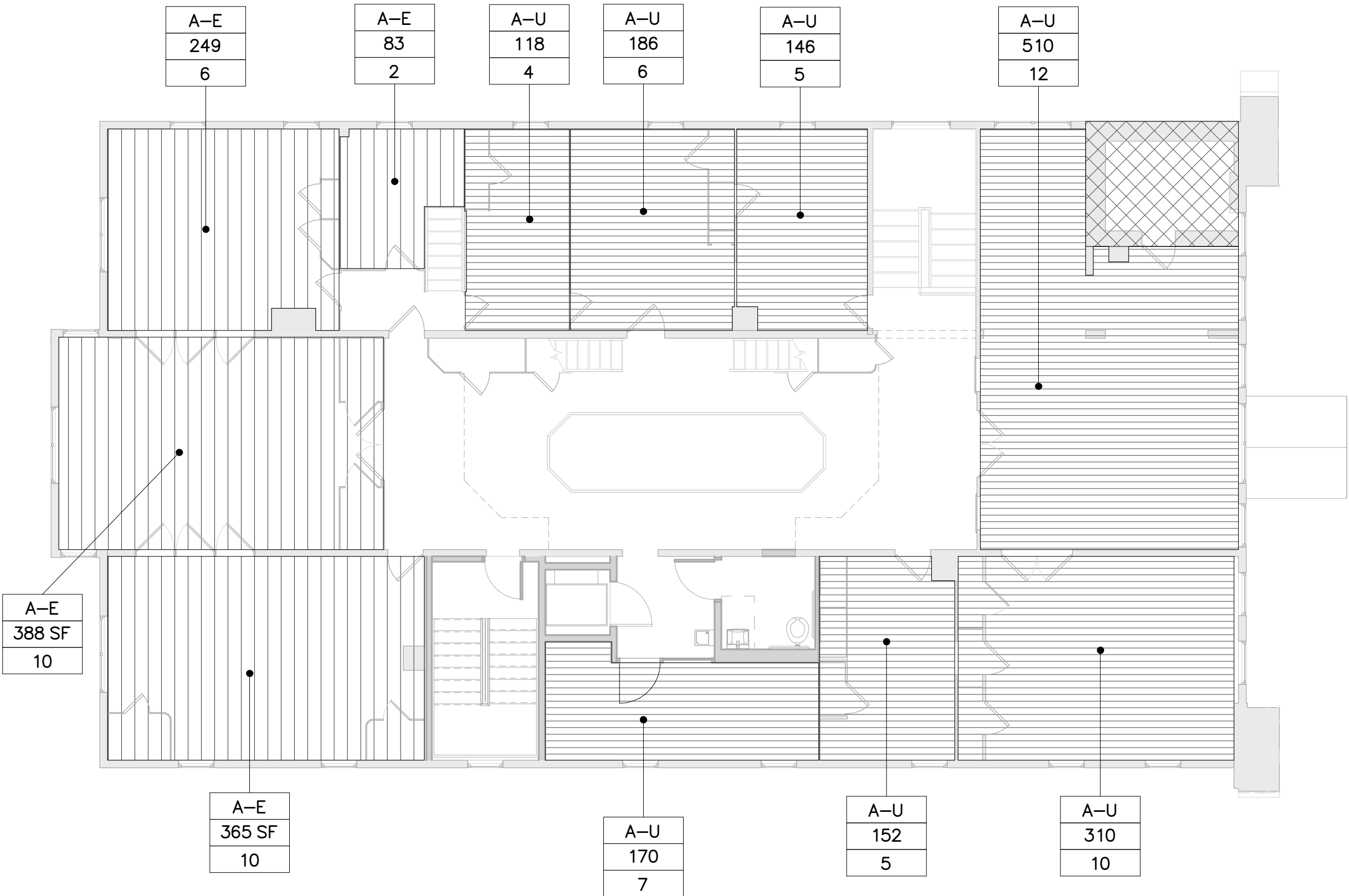


1 OCCUPANCY PLAN – BASEMENT  
G-0.4 SCALE (A)



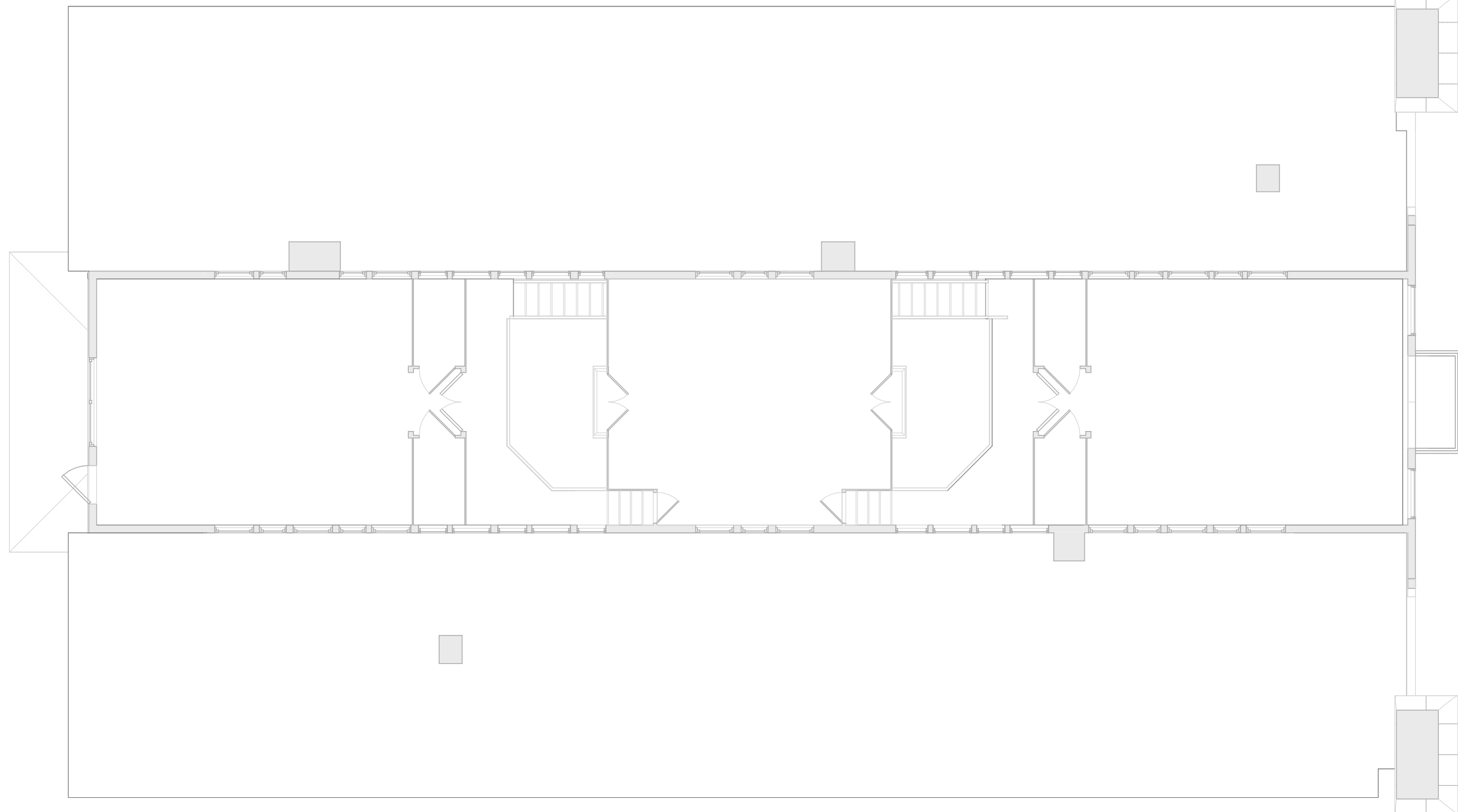
2 OCCUPANCY PLAN – FIRST FLOOR  
G-0.4 SCALE (A)

FLOOR	OCCUPANTS
BASEMENT	12
FIRST FLOOR	91
SECOND FLOOR	77
THIRD FLOOR	0
BUILDING TOTAL	180



ALL SECOND FLOOR SPACES HAVE LIMITED OCCUPANCY DUE TO STRUCTURAL LOADING CAPACITY

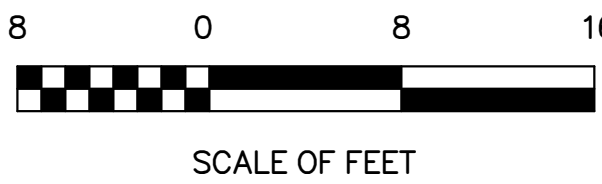
3 OCCUPANCY PLAN – SECOND FLOOR  
G-0.4 SCALE (A)



4 OCCUPANCY PLAN – THIRD FLOOR  
G-0.4 SCALE (A)

#### OCCUPANCY PLAN LEGEND

- ASSEMBLY – EXHIBIT (A-E)  
30 NET SF/OCCUPANT
- ASSEMBLY – UNCONCENTRATED (A-U), 15 NET SF/OCCUPANT
- BUSINESS (B)  
150 GROSS SF/OCCUPANT
- MECHANICAL (M)  
300 GROSS SF/OCCUPANT
- STORAGE (S)  
300 GROSS SF/OCCUPANT
- USE  
OCCUPANCY AREA (SF)  
###  
# OF OCCUPANTS



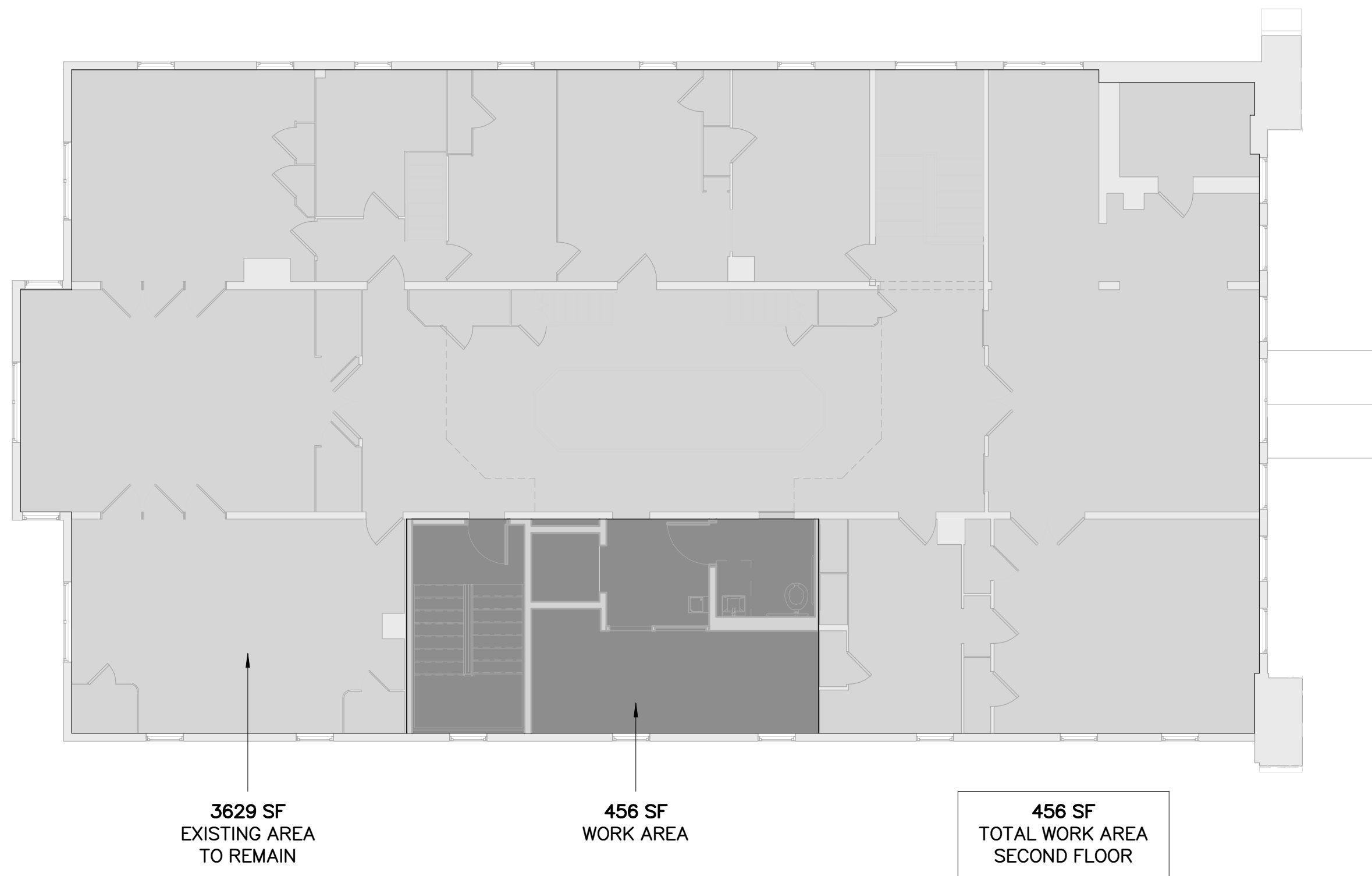
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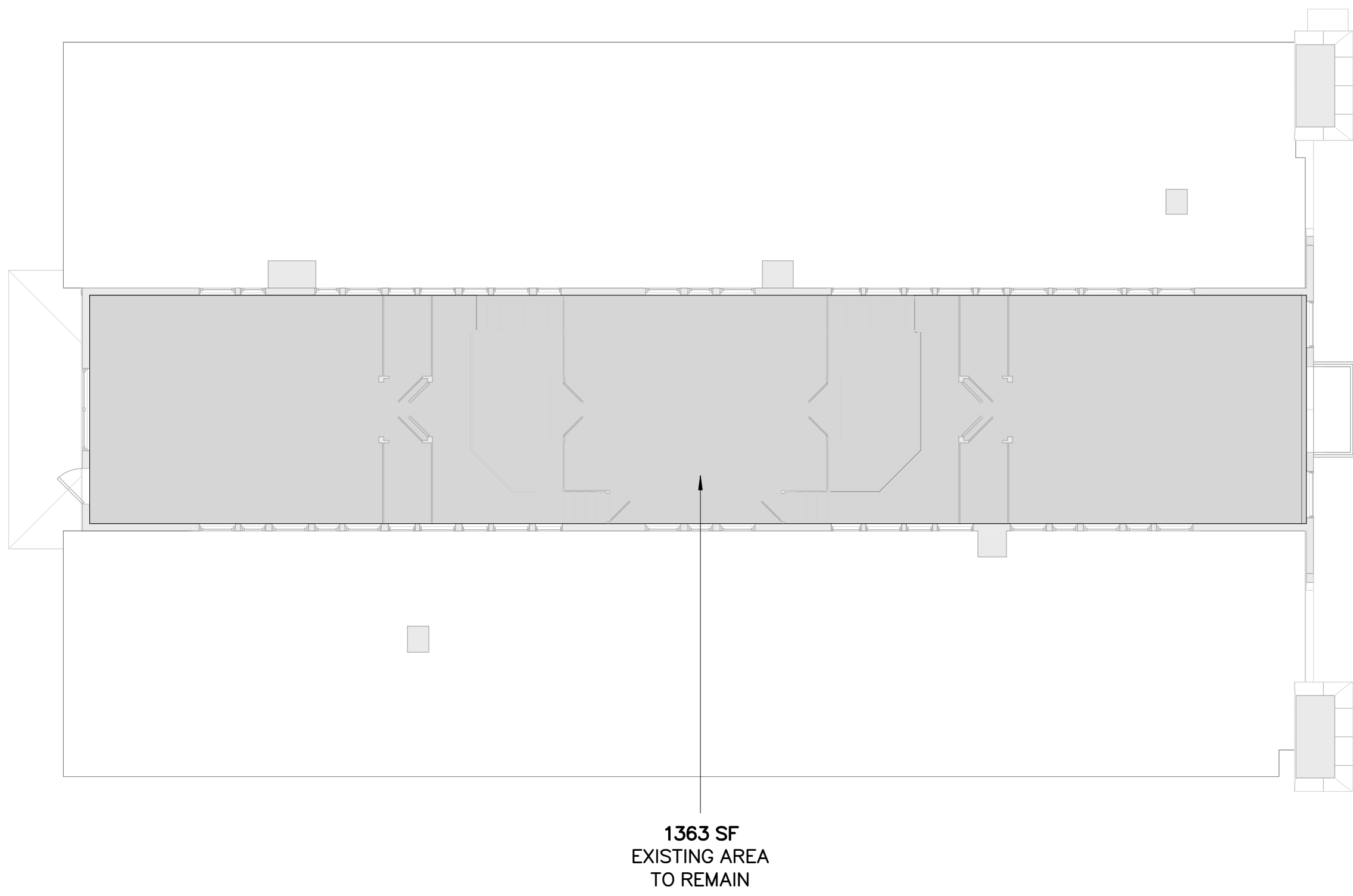
1 WORK AREA – BASEMENT  
G-0.5 SCALE (A)



2 WORK AREA – FIRST FLOOR  
G-0.5 SCALE (A)



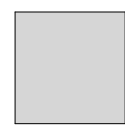

3 WORK AREA – SECOND FLOOR  
G-0.5 SCALE (A)

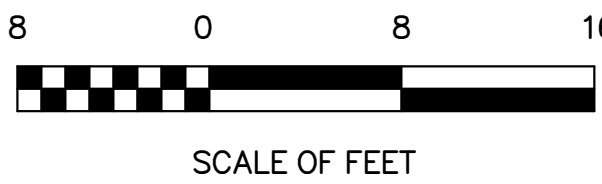


4 WORK AREA – THIRD FLOOR  
G-0.5 SCALE (A)

FLOOR	WORK AREA
BASEMENT	300 SF
FIRST FLOOR	813 SF
SECOND FLOOR	456 SF
THIRD FLOOR	0
TOTAL WORK AREA	1569 SF

WORK AREA LEGEND

	EXISTING AREA TO REMAIN
	WORK AREA



SCALE OF FEET

DESIGNED: JA GADD SS	SUB SHEET NO.  G-0.5	TITLE OF SHEET <b>WORK AREAS</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
TECH. REVIEW: MJM, MS			
DATE: 12/8/2023			



Filename: c:\bns\langan-pw-01\0227203\270128401-0501-G101-0102\_1.dwg Date: 12/6/2023 Time: 20:13 User: jcanchan Layout: G1 GENERAL NOTES

GENERAL SITE NOTES:

1. EXISTING TOPOGRAPHY IS BASED ON A PLAN TITLED "CLARA BARTON – BOUNDARY, TOPO, AND TREE SURVEY" PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, DATED 08/04/2022.
2. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE CO IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
3. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE CO MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL: MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS; CORRELATE CONDITIONS WITH THE DRAWINGS; AND, RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE CO PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE CO. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE CO PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE CO.
4. THE CONTRACTOR SHALL, WHEN HE/SHE DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE CO AND/OR CO'S DESIGNATED REPRESENTATIVE, PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO CO AND/OR CO'S DESIGNATED REPRESENTATIVE, AND SHALL ALLOW FOR A MINIMUM OF THREE WORK DAYS FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
5. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CO IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.
6. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
7. CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.

DEMOLITION NOTES:

1. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON FIELD MEASUREMENTS AND VARIOUS RECORDS.
2. THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD-VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES. CONTRACTORS USING THESE PLANS FOR DEMOLITION OR CONSTRUCTION SHALL CONFIRM ALL UTILITIES IN THE FIELD TO ESTABLISH LOCATIONS, SIZES, MATERIALS AND ELEVATIONS.
3. THE CONTRACTOR SHALL CONSTRUCT ALL TEMPORARY FACILITIES AND SERVICES NECESSARY TO SATISFY MARYLAND REQUIREMENTS AND DEPARTMENTS, INCLUDING BUT NOT LIMITED TO, PAVEMENT REPAIR, FENCING, PEDESTRIAN AND VEHICLE ACCESS, ETC.
4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONARY AND PROTECTIVE MEASURES, INCLUDING BUT NOT LIMITED TO SIGNS, LIGHTS, FENCES, BARRIERS, AND PEDESTRIAN AND TRAFFIC CONTROL MEASURES DURING DEMOLITION.
5. THE CONTRACTOR SHALL REMOVE AND PROPERLY BACKFILL ALL UNDERGROUND UTILITIES AND STORM DRAINS INDICATED TO BE DEMOLISHED ON THE PLAN. THE CONTRACTOR SHALL VERIFY THE UTILITY OR STORM DRAIN TO BE DEMOLISHED IS NO LONGER IN USE PRIOR TO DEMOLITION.
6. EXISTING FOUNDATIONS AND FOOTINGS ASSOCIATED WITH STRUCTURES AND SITE ELEMENTS TO BE DEMOLISHED, SUCH AS BUILDINGS, GATES AND FENCING, SHALL BE COMPLETELY REMOVED.
7. RECYCLED CONCRETE OR ASPHALT MAY NOT BE USED FOR FILL.
8. REMOVED UTILITIES, PIPES, SIDEWALKS, CURBS, AND ALL OTHER DEMOLITION DEBRIS THAT ARE TO BE REMOVED (NOT RELOCATED) SHALL BE DISPOSED OF OFF SITE IN ACCORDANCE WITH LOCAL REGULATIONS.

EROSION AND SEDIMENT CONTROL GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY MDE AT (410) 537-3510 SEVEN (7) DAYS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY MDE, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES AND A REPRESENTATIVE OF MDE.
2. THE CONTRACTOR SHALL NOTIFY MDE IN WRITING AND BY TELEPHONE AT THE FOLLOWING POINTS:

A. THE REQUIRED PRE-CONSTRUCTION MEETING.

B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.

C. DURING THE INSTALLATION OF SEDIMENT BASINS (TO BE CONVERTED INTO PERMANENT STORMWATER MANAGEMENT STRUCTURES) AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION OF EACH STEP IS MANDATORY.

D. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).

E. PRIOR TO REMOVAL OF ALL SEDIMENT CONTROL DEVICES.

F. PRIOR TO FINAL ACCEPTANCE.
3. THE PLAN APPROVAL LETTER, APPROVED EROSION AND SEDIMENT CONTROL PLANS, DAILY LOG BOOKS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MDE AND THE AGENCY RESPONSIBLE FOR THE PROJECT.
4. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE AND SHALL HAVE THEM INSPECTED AND APPROVED BY THE MDE INSPECTOR PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENTS MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE MDE INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE

- WITHOUT PRIOR PERMISSION FROM MDE INSPECTOR. THE CONTRACTOR SHALL OBTAIN PRIOR AGENCY AND MDE APPROVAL FOR MODIFICATIONS TO THE EROSION AND SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION.
5. THE MDE INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SAFETY OR SEDIMENT CONTROL MEASURES, IF DEEMED NECESSARY.
6. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.
7. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE MDE INSPECTOR.
8. EROSION AND SEDIMENT CONTROL FOR UTILITY CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH APPROVED PLANS. UTILITY CONSTRUCTION SHALL ONLY BE FOR AREAS WITHIN THE DELINEATED LIMIT OF DISTURBANCE. CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK. WHEN SAME DAY STABILIZATION IS APPROVED:

A. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.

B. TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED, AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY.
9. ALL WATER REMOVED FROM EXCAVATED AREAS SHALL BE PASSED THROUGH AN MDE APPROVED DEWATERING PRACTICE OR PUMPED TO A SEDIMENT TRAP OR BASIN PRIOR TO DISCHARGE TO A FUNCTIONAL STORM DRAIN SYSTEM OR TO STABLE GROUND SURFACE.
10. CONCRETE WASHOUT STRUCTURES SHALL BE USED WHEN CONCRETE TRUCKS, DRUMS, PUMPS, CHUTES, OR OTHER EQUIPMENT IS RINSED OR CLEANED ON-SITE.
11. CONSTRUCTION ACTIVITIES PRODUCING DUST SHALL IMPLEMENT CONTROL MEASURES TO AVOID THE SUSPENSION OF DUST PARTICLES AND/OR PREVENT DUST FROM BLOWING OFF-SITE OR TO AREAS WITHOUT TREATMENT.
12. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND

B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
13. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING, AND GROUND COVERS.
14. WHEN SEEDING, ALL DISTURBED AREAS WITH SLOPES FLATTER THAN 2:1 SHALL BE STABILIZED WITH 4 INCHES OF TOPSOIL, SEED, AND MULCH. ALL DISTURBED AREAS WITH SLOPES 2:1 OR STEEPER SHALL BE STABILIZED WITH MATTING OVER 2 INCHES OF TOPSOIL AND SEED.
15. ALL SEDIMENT BASINS, TRAP EMBANKMENTS AND SLOPES, PERIMETER DIKES, SWALES AND ALL DISTURBED SLOPES STEEPER OR EQUAL TO 3:1 SHALL BE STABILIZED WITH SEED AND ANCHORED STRAW MULCH, SOD, OR OTHER APPROVED STABILIZATION MEASURES, AS SOON AS POSSIBLE BUT NO LATER THAN THREE (3) CALENDAR DAYS AFTER ESTABLISHMENT. ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM SHALL BE MINIMIZED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.
16. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITH SEED AND AN APPROVED EROSION CONTROL MATTING, SOD, RIP-RAP, OR OTHER APPROVED STABILIZATION MEASURES.
17. FOR STOCKPILE SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), THE CONTRACTOR SHALL APPLY SEED AND ANCHORED STRAW MULCH, SOD, OR OTHER APPROVED STABILIZATION MEASURES TO THE FACE OF THE STOCKPILE WITHIN THREE (3) CALENDAR DAYS OF ACTIVITY HAVING CEASED ON THE RESPECTIVE FACE. FOR SLOPES 3:1 OR FLATTER, THE CONTRACTOR SHALL APPLY STABILIZATION MEASURES TO THE FACE OF THE STOCKPILE WITHIN SEVEN (7) CALENDAR DAYS OF ACTIVITY HAVING CEASED ON THE RESPECTIVE FACE. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.
18. FOR FINISHED GRADING, THE CONTRACTOR SHALL PROVIDE ADEQUATE GRADIENTS TO PREVENT WATER FROM PONDING FOR MORE THAN TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINFALL EVENT. DRAINAGE COURSES AND SWALE FLOW AREAS MAY TAKE AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL EVENT TO DRAIN. AREAS DESIGNED TO HAVE STANDING WATER SHALL NOT BE REQUIRED TO MEET THIS REQUIREMENT.
19. WHERE DEEMED APPROPRIATE BY THE ENGINEER OR INSPECTOR, SEDIMENT BASINS AND TRAPS MAY NEED TO BE SURROUNDED WITH AN APPROVED SAFETY FENCE. THE FENCE MUST CONFORM TO LOCAL ORDINANCES AND REGULATIONS. THE DEVELOPER OR OWNER SHALL CHECK WITH LOCAL BUILDING OFFICIALS ON APPLICABLE SAFETY REQUIREMENTS. WHERE SAFETY FENCE IS DEEMED APPROPRIATE AND LOCAL ORDINANCES DO NOT SPECIFY FENCING SIZES AND TYPES, THE FOLLOWING SHALL BE USED AS A MINIMUM STANDARD: THE SAFETY FENCE SHALL BE MADE OF WELDED WIRE AND AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN 2 INCHES IN WIDTH AND 4 INCHES IN HEIGHT WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE SHALL BE MAINTAINED AND IN GOOD CONDITION AT ALL TIMES.
20. ALL SEDIMENT TRAP DEPTH DIMENSIONS ARE RELATIVE TO THE OUTLET ELEVATION. ALL TRAPS SHALL HAVE A STABLE OUTFALL. ALL TRAPS AND BASINS SHALL HAVE STABLE INFLOW POINTS.
21. SEDIMENT SHALL BE REMOVED AND THE TRAP OR BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE QUARTER OF THE TOTAL DEPTH OF THE TRAP OR BASIN. TOTAL DEPTH SHALL BE MEASURED FROM THE TRAP OR BASIN BOTTOM TO THE CREST OF THE OUTLET.
22. SEDIMENT REMOVED FROM TRAPS (AND BASINS) SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND OR TREE-SAVE AREA, WHEN PUMPING SEDIMENT LADEN WATER, THE DISCHARGE SHALL BE DIRECTED TO AN MDE APPROVED SEDIMENT TRAPPING DEVICE PRIOR TO RELEASE FROM THE SITE. A SUMP PIT MAY BE USED IF SEDIMENT TRAPS THEMSELVES ARE BEING PUMPED OUT.
23. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE CONTRACTOR SHALL STABILIZE AND HAVE ESTABLISHED PERMANENT STABILIZATION FOR ALL CONTRIBUTORY DISTURBED AREAS USING SOD OR AN APPROVED PERMANENT SEED MIXTURE WITH REQUIRED SOIL AMENDMENTS AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHERE THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED AS SOON AS POSSIBLE, BUT NOT LATER THAN THREE (3) CALENDAR DAYS AFTER ESTABLISHMENT FOR SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN (7) CALENDAR DAYS FOR FLATTER SLOPES. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED STRAW MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE

APPLIED BY MARCH 15 OR EARLIER IF GROUND AND WEATHER CONDITIONS ALLOW.

24. TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE REMOVED WITH PERMISSION OF THE MDE INSPECTOR WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. UPON REMOVAL OF SEDIMENT CONTROL DEVICES, THE AREA DISTURBED BY REMOVAL SHALL BE STABILIZED WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED, WITHIN 24 HOURS OF SAID REMOVAL. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.
25. OFF-SITE SPOIL OR BORROW AREAS ON STATE OR FEDERAL PROPERTY SHALL HAVE PRIOR APPROVAL BY MDE AND OTHER APPLICABLE STATE, FEDERAL, AND LOCAL AGENCIES; OTHERWISE APPROVAL SHALL BE GRANTED BY THE LOCAL AUTHORITIES. ALL WASTE AND BORROW AREAS OFF-SITE SHALL BE PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED.
26. SITE INFORMATION:

A. AREA DISTURBED 0.17 ACRES

B. TOTAL CUT 37 CUBIC YARDS

C. TOTAL FILL 18 CUBIC YARDS

D. OFF-SITE WASTE / BORROW AREA LOCATION \_\_\_\_\_

GRADING AND DRAINAGE NOTES:

1. ONCE EXISTING UTILITIES TO REMAIN ARE LOCATED, ANY POTENTIAL CONFLICTS WITH OTHER UTILITIES, RELOCATED UTILITY POLES, ETC. SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL ALL THE APPROPRIATE UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAYS AT LEAST 72 HOURS BEFORE ANY EXCAVATION OR GRADING TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS, DEPTHS AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THESE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF LANGAN ENGINEERING. CALL BEFORE YOU DIG- 1-800-272-1000.
3. ADJUST ALL EXISTING AND PROPOSED UTILITY FRAMES, GRATES, MANHOLE COVERS, VALVE BOXES, ETC. TO BE FLUSH WITH THE PROPOSED SURFACE ELEVATIONS WITHIN THE LIMITS OF CONSTRUCTION.
4. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
5. ALL STORM DRAINAGE PIPES ARE TO BE AS SPECIFIED ON THE PLANS:

– HIGH-DENSITY POLYETHYLENE PIPE (HDPE): AASHTO M294 TYPE S FOR PIPE AND FITTINGS. MATERIAL SHALL MEET ASTM D1298 TYPE III, CATEGORY 4, GRADE P33, CLASS C, OR ASTM D3350, CELL CLASSIFICATION 324420C. PIPE SHALL BE SURE-LOK 10.8 PIPE MANUFACTURED BY HANCOR, INC. WITH WATERTIGHT JOINTS ACCORDING TO THE REQUIREMENTS OF ASTM D3212 OR APPROVED EQUIVALENT. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321.
6. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES WITHIN DRIVEWAY AREAS SHALL MEET HEAVY DUTY TRAFFIC (HS20) LOADING AND BE INSTALLED ACCORDINGLY.
7. SITE FILL SHALL CONSIST OF MATERIAL FROM APPROVED ONSITE SOURCES OR APPROVED OFFSITE MATERIAL. THE GEOTECHNICAL ENGINEER WILL REVIEW AND APPROVE ALL MATERIALS.
8. PROOF ROLL ALL CUT AREAS. PLACE AND COMPACT APPROVED FILL MATERIALS IN 12-INCH MAXIMUM LOOSE LIFTS USING AT LEAST 6 PASSES WITH, AT MINIMUM, A 5 TON STATIC DRUM WEIGHT VIBRATORY ROLLER. COMPACT TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
9. PIPE BEDDING MATERIAL SHALL BE AASHTO NO. 67 PROCESSED SAND AND GRAVEL FREE FROM DEBRIS, CLAY LUMPS, ORGANIC, OR OTHER DELETERIOUS MATERIALS, AND COMPLYING WITH THE FOLLOWING GRADATION REQUIREMENTS:
10. NO TOPSOIL SHALL BE REMOVED FROM THE SITE OR USED AS SPOIL. REMOVED TOPSOIL MUST BE REDISTRIBUTED THROUGHOUT THE SITE AND UTILIZED AS SUCH.
11. ANY STORMWATER FACILITIES SHOWN TO REMAIN SHOULD BE INSPECTED, REPAIRED AND CLEANED AS NECESSARY.
12. ALL INLETS SHALL BE TYPE 'B' EXCEPT AS OTHERWISE INDICATED.
13. BACKFILLING SHALL BE DONE IN ONE FOOT THICK MAXIMUM LOOSE LIFTS. EACH LIFT SHALL BE COMPACTED USING A MINIMUM OF 6 PASSES WITH A 5 TON STATIC DRUMWEIGHT VIBRATORY ROLLER TO OBTAIN A MINIMUM OF 95% OF THE SOIL'S MAXIMUM DENSITY AS DETERMINED BY ASTM D1557, MODIFIED PROCTOR METHOD.
14. OFF SITE FILL MATERIAL SHOULD CONSIST OF WELL GRADED SAND AND/OR GRAVEL HAVING NOT MORE THAN 15% BY DRY WEIGHT PASSING THE NO. 200 SIEVE. ALL IMPORTED FILL SHOULD BE FREE OF ORGANICS AND OTHER DELETERIOUS MATERIALS, AND SHOULD HAVE A MAXIMUM PARTICLE SIZE OF NO GREATER THAN 3 INCHES. ANY IMPORTED FILL PROPOSED FOR USE AT THE SITE SHOULD BE FREE OF ALL HAZARDOUS SUBSTANCES AS LISTED BY THE NJDEP IN NJAC TITLE 7(CHAPTER 1E, APPENDIX A) AND SHOULD NOT CONTAIN SUBSTANCES IN LEVELS WHICH EXCEED THE MOST RECENT NJDEP SOIL CLEANUP CRITERIA. THE CONTRACTOR SHOULD PROVIDE DOCUMENTATION OF COMPLIANCE PRIOR TO DELIVERY OF ANY FILL TO THE SITE. GRAIN-SIZE DISTRIBUTION, MAXIMUM DRY DENSITY AND THE OPTIMUM MOISTURE CONTENT DETERMINATIONS SHOULD BE MADE ON RESPECTIVE SAMPLES OF THE BACKFILL MATERIALS PROPOSED BY THE CONTRACTOR.
15. ALL STORM DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE STORMWATER STANDARDS AND SPECIFICATIONS OF PRINCE GEORGE'S COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES, UNLESS OTHERWISE NOTED.
16. FOR TYPES OF STRUCTURES REFER TO THE LATEST STORMWATER MANAGEMENT STANDARD DETAILS, DER (SWMSD), UNLESS OTHERWISE NOTED.

17. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATIONS AND ELEVATIONS OF THE UTILITIES BY DIGGING TEST PITS AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED, CONTACT THE ENGINEER, AND THE OWNER OF OTHER INVOLVED UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.
18. ALL STORM DRAIN PIPES MUST HAVE A MINIMUM OF 1 FOOT COVER.
19. ALL INLET TOP SLAB FRONT FACES SHALL BE PAINTED WITH THE FOLLOWING CHESAPEAKE BAY DRAINAGE, "DON'T DUMP"(STANDARD 82.0).
20. ALL GRADING, DRAINAGE, AND UTILITY INSTALLATION AND/OR CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS OR LOCAL REQUIREMENTS. SHOULD A DIFFERENCE IN REQUIREMENTS OCCUR, THE STRICTER OF THE TWO REGULATIONS WILL APPLY.
21. SITE GRADING SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
22. EXISTING GRADES ARE TO REMAIN THE SAME IN AREAS WHERE NO PROPOSED GRADING IS SHOWN.

DAMAGE TO EXISTING STRUCTURES:

THE CONTRACTOR SHALL IDENTIFY, PROTECT, PRESERVE, ALL EXISTING STRUCTURES, AND OTHER ITEMS TO REMAIN. THE CONTRACTOR IS RESPONSIBLE FOR ANY OR ALL DAMAGES TO THE STRUCTURES, UTILITIES, AND OTHER ITEMS DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR DAMAGED ITEMS TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.

MISS UTILITY NOTES:

FOR LOCATION OF UTILITIES, CALL "MISS UTILITY" AT 1-800-257-7777. OR LOG ON TO WWW.MISSUTILITY.NET/ITIC 48 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL JURISDICTIONAL REQUIREMENTS.

UTILITIES:

PRIOR TO START OF CONSTRUCTION, CONTRACTOR MUST NOTIFY "MISS UTILITY" 48 HOURS IN ADVANCE FOR THE EXACT LOCATION OF UTILITIES LOCATED ON THE SITE.

ALL EXISTING UTILITIES ON THE SITE, IF AFFECTED BY THE CONSTRUCTION, MUST BE PROTECTED AND TEMPORARILY SUPPORTED DURING CONSTRUCTION, ANY DAMAGE INCURRED TO THE UTILITIES MUST BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, UTILITY RELOCATION IF NECESSARY, SHALL BE COORDINATED WITH THE AGENCIES INVOLVED.

TOTAL LIMIT OF DISTURBANCE:

	EXEMPT	NON-EXEMPT
NEW SITE WORK (TREE REMOVAL, PARKING AREA, GRAVEL INSTALLATION, CONCRETE PADS)		4,400 SF (0.100 AC)
CONCRETE SIDEWALK MAINTENANCE	2,850 SF (0.065 AC)	
PORCH MAINTENANCE	500 SF (0.011 AC)	
UNDERGROUND UTILITY MAINTENANCE (SANITARY AND ELECTRIC/TELECOM)	600 SF (0.013 AC)	
TOTAL	3,950 SF (0.090 AC)	4,400 SF (0.100 AC)

APPLICABLE CODES AND STANDARDS

- NPS ACCESSIBLE ROUTE DESIGN STANDARDS
- ABAAS DESIGN STANDARDS (LATEST EDITION)
- 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUMENS I & II
- 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

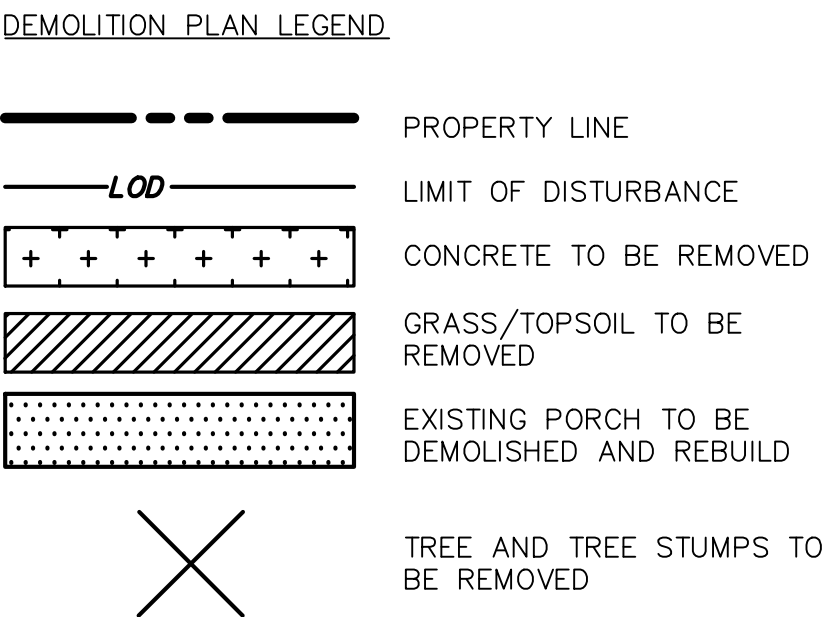
SIDEWALKS AND RAMPS:

NPS RECOMMDS USING THE ACI STANDARDS FOR SIDEWALKS AND RAMPS. HOWEVER TO REMAIN BELOW THE 5,000SF THRESHOLD AND AVOID TRIGGERING SWM REQUIREMENTS, A COMBINATION OF ACI AND ABAAS STANDARDS HAS BEEN USED IN THIS PROJECT. THE TABLE BELOW SUMMARIZES THE PARAMETERS FOR BOTH STANDARDS:

DSC DESIGN SLOPE / CROSS-SLOPE REQUIREMENTS		
	ABAAS Construction Maximums ± 0 Construction Tolerance	DSC Design Requirements ACI Recommendations
Ramps	1:12 = 8.33%	1:13.3 = 7.5% MAX
Walking Surfaces	1:20 = 5.00%	1:25 = 4.0% MAX
Parking	1:48 = 2.00%	1:66.6 = 1.5% MAX
'Level Areas' e.g. landings, parking access aisles, turning spaces, etc.	1:48 = 2.00%	1:66.6 = 1.5% MAX
Cross-Slope	1:48 = 2.00%	1:66.6 = 1.5% MAX

	DESIGNED: J. CANCHAN	SUB SHEET NO.	TITLE OF SHEET <b>GENERAL NOTES</b>	DRAWING NO. <b>895</b> <b>179603</b>
	CHAD J. CANCHAN			
	TECH. REVIEW: J. OSORIO			
	DATE: 12/08/2023		CLARA BARTON NATIONAL HISTORIC SITE CLBA	SHEET OF





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SCALE OF FEET



C-1.0

TITLE OF SHEET  
DEMOLITION PLAN

CLARA BARTON  
NATIONAL HISTORIC SITE  
CLBA

DRAWING NO.  
895  
179603

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PMIS/PKG NO  
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SHEET

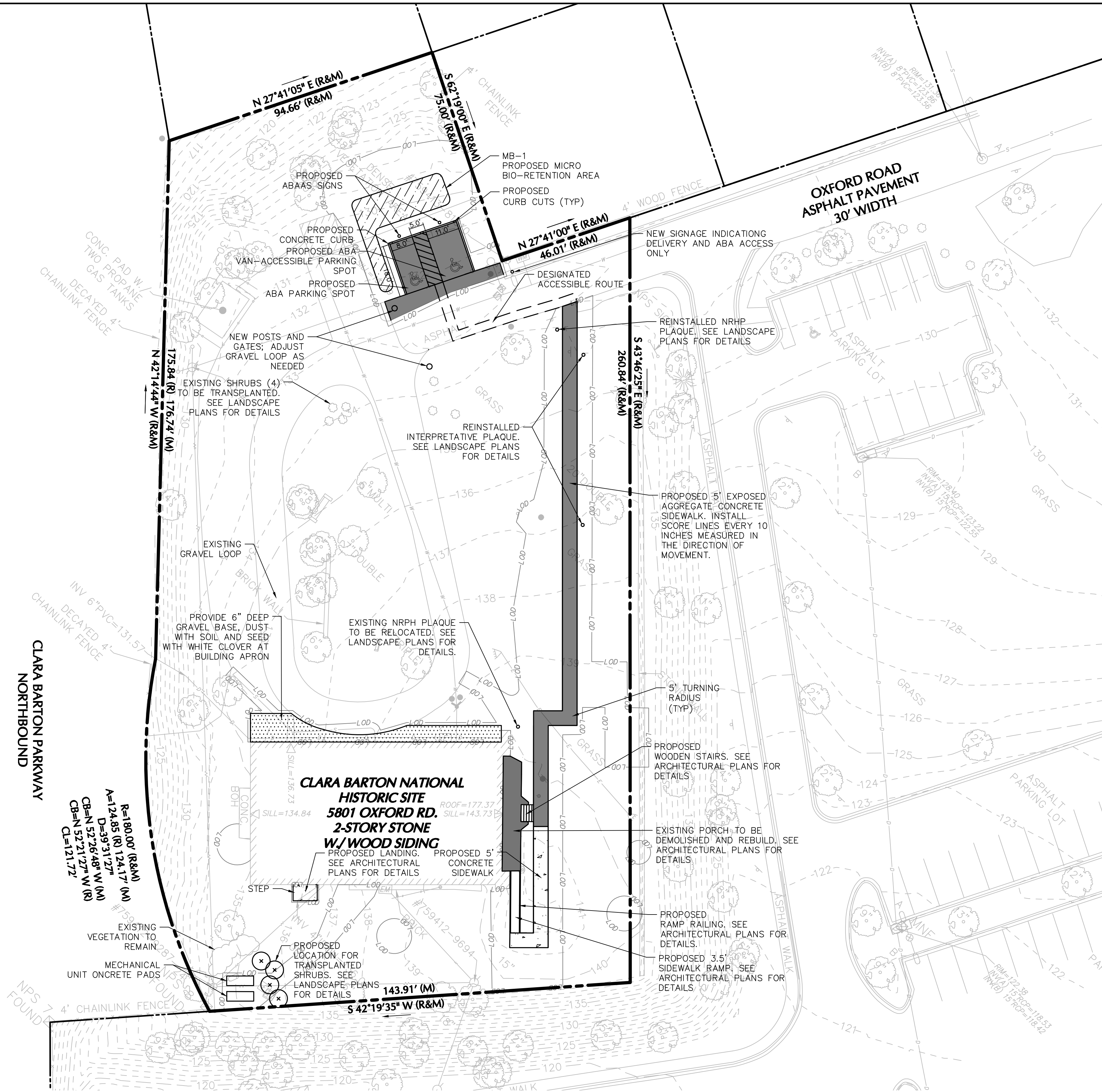
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SCALE (A)



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1 SITE PLAN  
SCALE (A)



SITE PLAN LEGEND

	PROPERTY LINE
	PROPOSED CONCRETE SIDEWALK
	PROPOSED EXPOSED AGGREGATE CONCRETE SIDEWALK
	PROPOSED GRAVEL BASE
	PROPOSED MICRO BIO-RETENTION

LIMIT OF DISTURBANCE NOTE

A TOTAL OF 4,400 SQUARE FEET ARE ANTICIPATED TO BE DISTURBED AS PART OF THESE PLANS.

	EXEMPT	NON-EXEMPT
NEW SITE WORK (TREE REMOVAL, PARKING AREA, GRAVEL INSTALLATION, CONCRETE PADS)		4,400 SF (0.100 AC)
CONCRETE SIDEWALK MAINTENANCE	2,850 SF (0.065 AC)	
PORCH MAINTENANCE	500 SF (0.011 AC)	
UNDERGROUND UTILITY MAINTENANCE (SANITARY AND ELECTRIC/TELECOM)	600 SF (0.013 AC)	
TOTAL	3,950 SF (0.090 AC)	4,400 SF (0.100 AC)

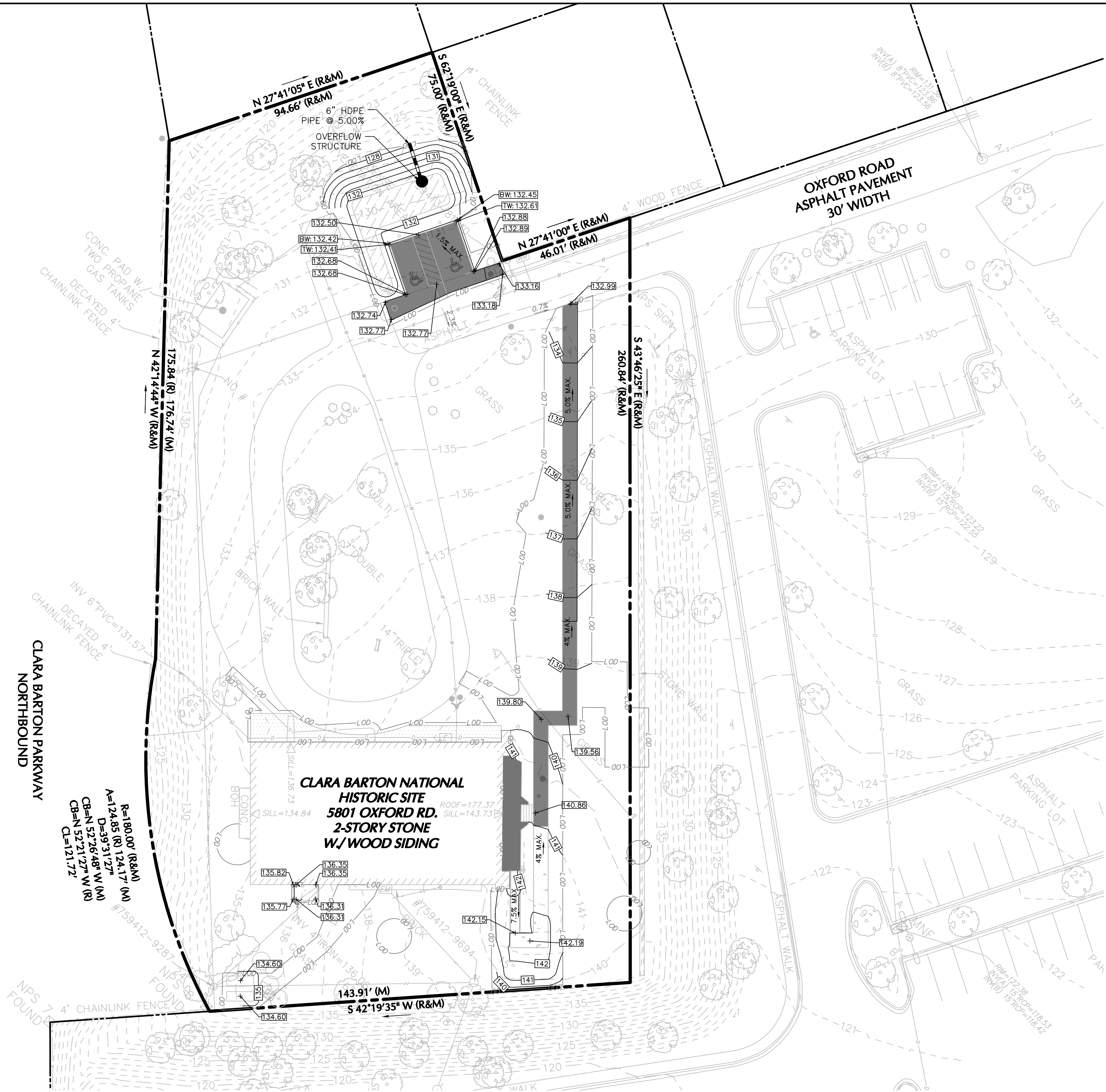
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J. CANCHAN  
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J. CANCHAN  
TECH. REVIEW:  
J. OSORIO  
DATE:  
12/08/2023

SUB SHEET NO.  
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TITLE OF SHEET  
SITE PLAN  
CLARA BARTON  
NATIONAL HISTORIC SITE  
CLBA

DRAWING NO.  
895  
179603  
PMIS/PKG NO.  
312325  
SHEET  
OF

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GRADING AND DRAINAGE LEGEND

- PROPERTY LINE
- 130 --- EXISTING CONTOUR
- 125.5 ✕ EXISTING ELEVATION
- 142.50 ✎ PROPOSED SPOT ELEVATION
- 4.5% MAX. PROPOSED MAX SLOPE
- 1.2% EXISTING SLOPE
- PROPOSED DISCHARGE PIPE

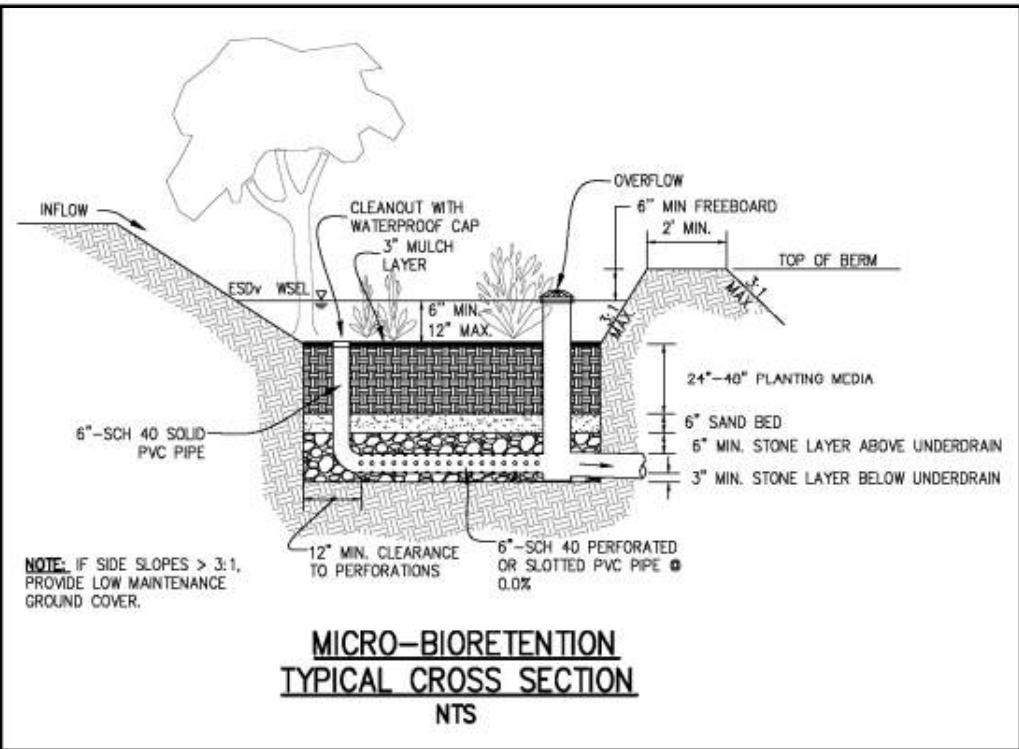
GRADING NOTES:

1. SIDEWALK SLOPES NOT TO EXCEED 4%.
2. SIDEWALK CROSS-SLOPE NOT TO EXCEED 1.5%

LIMIT OF DISTURBANCE NOTE

A TOTAL OF 4,400 SQUARE FEET ARE ANTICIPATED TO BE DISTURBED AS PART OF THESE PLANS.

	EXEMPT	NON-EXEMPT
NEW SITE WORK (TREE REMOVAL, PARKING AREA, GRAVEL INSTALLATION, CONCRETE PADS)		4,400 SF (0.100 AC)
CONCRETE SIDEWALK MAINTENANCE	2,850 SF (0.065 AC)	
PORCH MAINTENANCE	500 SF (0.011 AC)	
UNDERGROUND UTILITY MAINTENANCE (SANITARY AND ELECTRIC/TELECOM)	600 SF (0.013 AC)	
TOTAL	3,950 SF (0.090 AC)	4,400 SF (0.100 AC)



SCALE (A) 20 0 20 40  
SCALE OF FEET

1 GRADING AND DRAINAGE PLAN  
SCALE (A)

DESIGNED:  
J. CANCHAN  
J. CANCHAN  
TECH. REVIEW:  
J. OSORIO  
DATE:  
12/08/2023

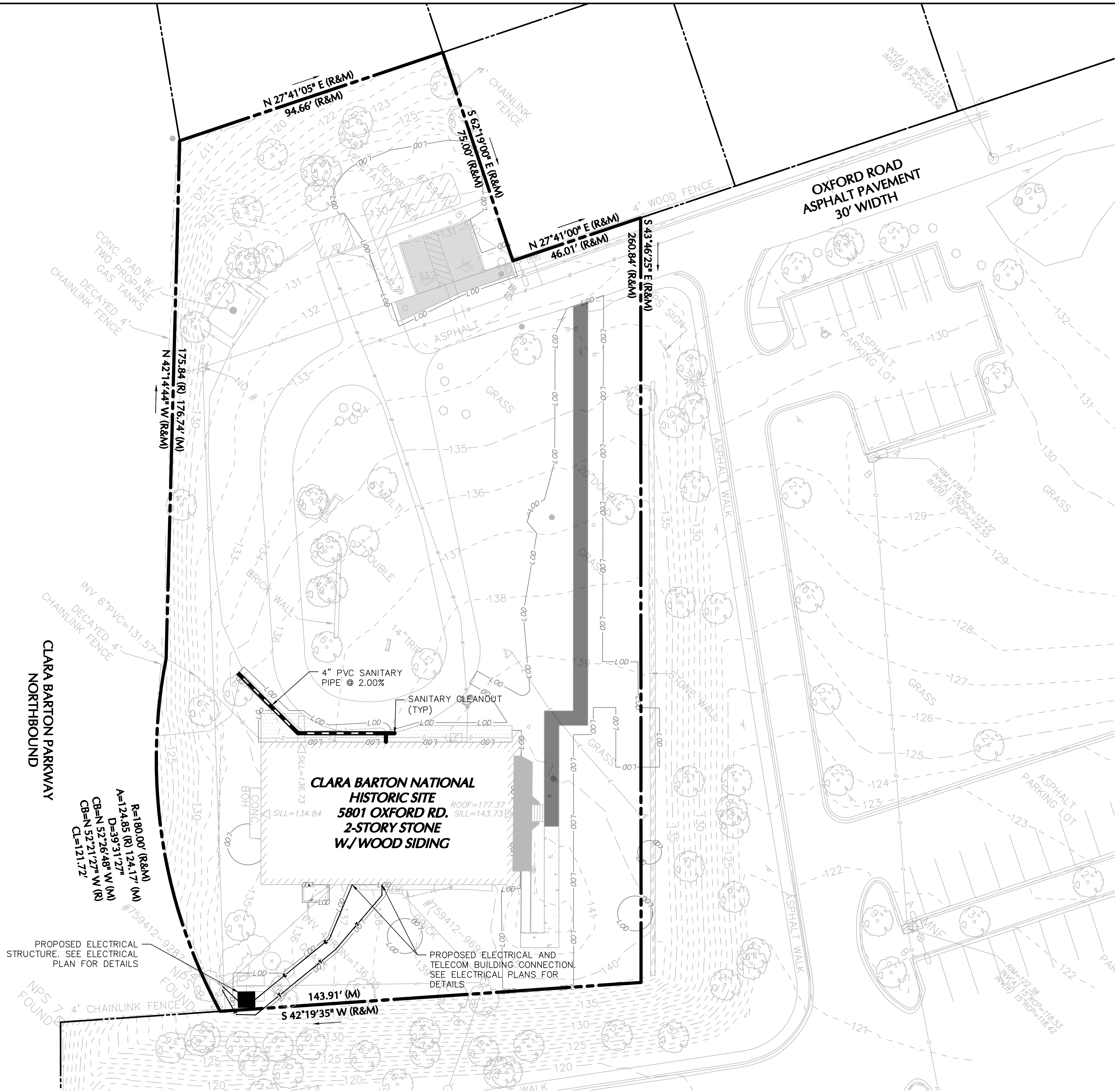
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C-3.0

TITLE OF SHEET  
GRADING AND DRAINAGE  
PLAN  
CLARA BARTON  
NATIONAL HISTORIC SITE  
CLBA

DRAWING NO.  
895  
179603  
PMIS/PKG NO.  
312325  
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OF



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UTILITY LEGEND

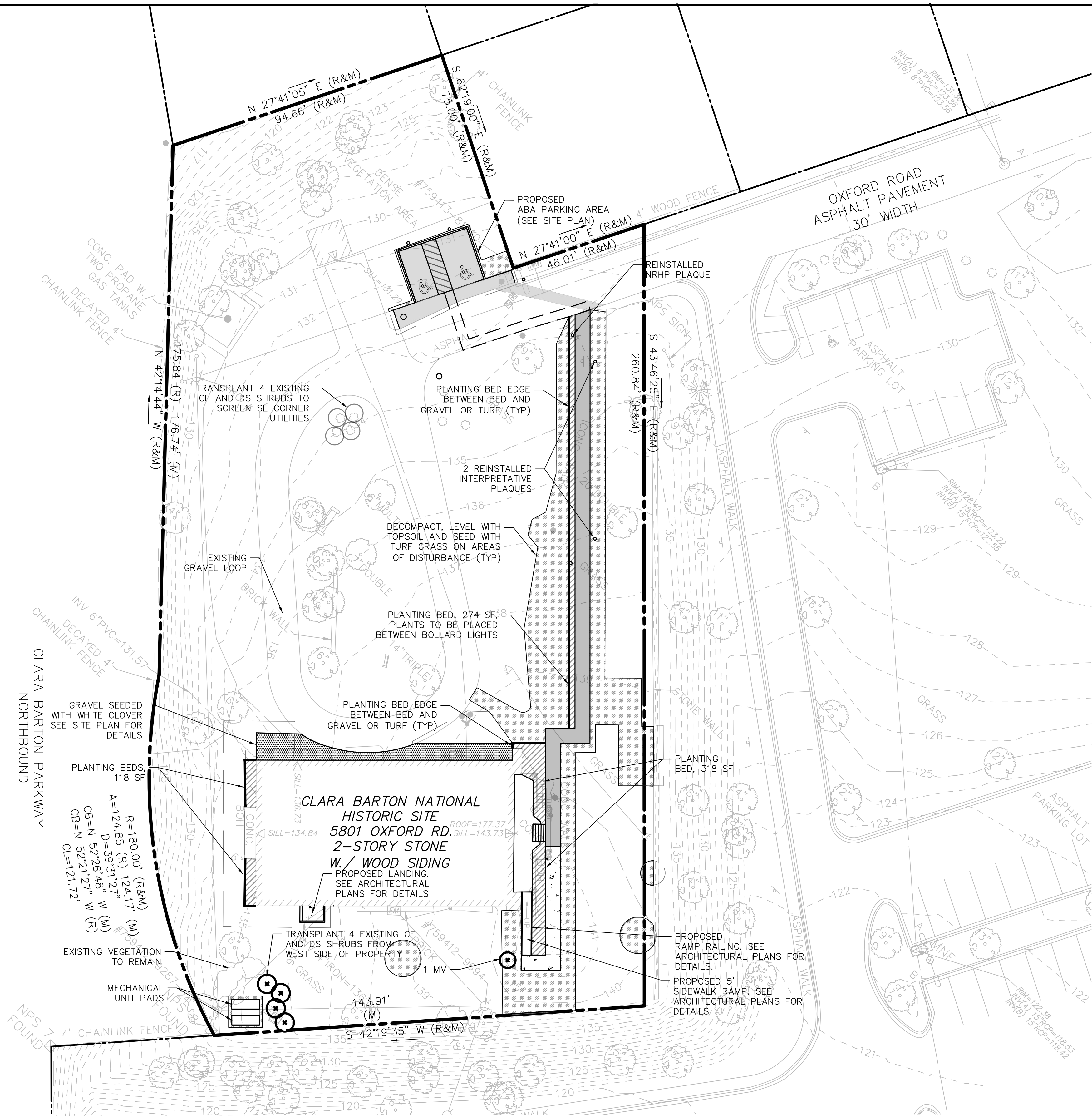
- PROPERTY LINE
- PROPOSED ELECTRICAL DUCTBANK
- PROPOSED TELECOM DUCTBANK
- PROPOSED SANITARY PIPE
- PROPOSED ELECTRICAL STRUCTURE



1 UTILITY PLAN  
SCALE (A)

	DESIGNED: J. CANCHAN	SUB SHEET NO.  C-5.0	TITLE OF SHEET <b>UTILITY PLAN</b>  CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF
	CHAD			
	TECH. REVIEW: J. OSORIO			
	DATE: 12/08/2023			

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LANDSCAPE PLAN LEGEND

- PROPERTY LINE
- EXPOSED AGGREGATE CONCRETE SIDEWALK
- CONCRETE SIDEWALK
- PLANTING BED EDGE
- PLANTING BED
- SEEDED TURF GRASS
- SEEDED CLOVER OVER GRAVEL
- PROPOSED TREE/SHRUB

NOTES

- RESEED ALL AREAS DISTURBED BY INSTALLATION OF UTILITIES AND BY CONSTRUCTION.
- PLANTING BEDS TO BE PLANTED WITH ROSES AND PERENNIALS, SPECIES TO BE DETERMINED AND BASED ON THE CULTURAL LANDSCAPE REPORT.

PLANT LIST

CODE	SCIENTIFIC NAME	COMMON NAME	QTY	SIZE	NOTES
MV	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	1	2" - 2 1/2"	B&B, FULL/SPECIMEN
TRANSPLANT	FROM ON SITE:				
CF	CALYCANTHUS FLORIDUS	CAROLINA ALLSPICE	2		EXISTING, MATURE
DS	DEUTZIA SCABRA	FLORE PLENO DEUTZIA	2		EXISTING, MATURE

1 SITE PLAN  
SCALE (A)

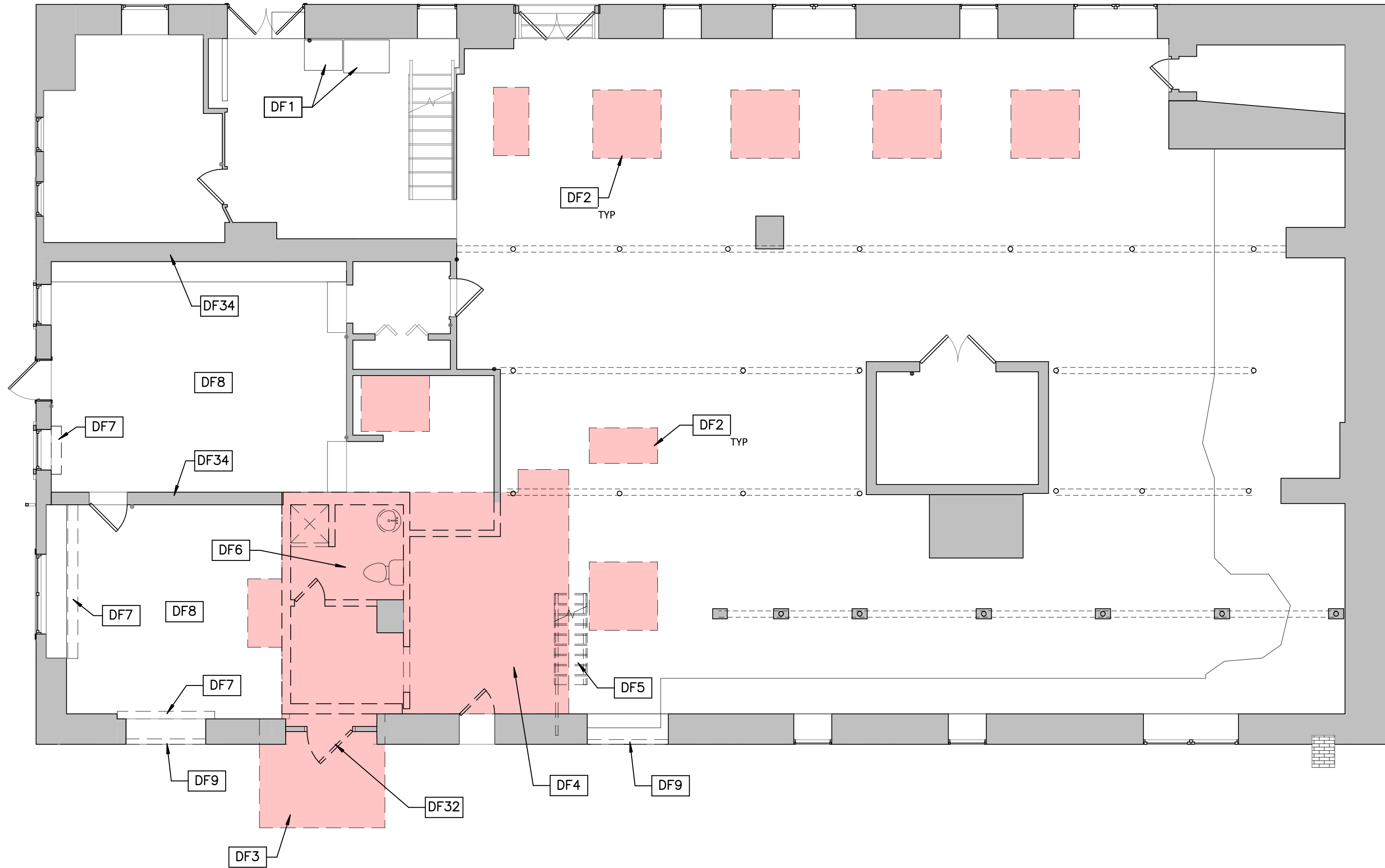


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### DEMOLITION FLOOR PLAN LEGEND

	EXISTING WALL TO REMAIN
	EXISTING WALL TO BE REMOVED
	EXISTING DOOR TO REMAIN
	EXISTING DOOR TO BE REMOVED/SALVAGED
	GENERAL AREA OF FLOOR DEMOLITION OR GROUND EXCAVATION

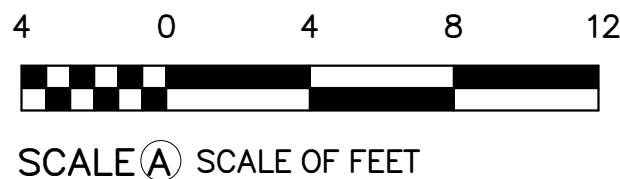
### DEMOLITION GENERAL NOTES

- CONTRACTOR TO VERIFY ALL CONDITIONS IN FIELD PRIOR TO DEMOLITION AND TO COORDINATE ALL DEMOLITION ACTIVITIES WITH INTENDED CONSTRUCTION. REPORT ALL DISCREPANCIES TO ARCHITECT FOR RESOLUTION.
- PROTECT ALL CONSTRUCTION TO REMAIN FROM DAMAGE DURING DEMOLITION OF ADJACENT CONSTRUCTION. REPAIR/REPLACE CONSTRUCTION TO REMAIN DAMAGED DURING DEMOLITION TO MATCH THE QUALITY OF THE NEW WORK.
- WHERE WALLS, COUNTERS, DOORS, ETC ARE SHOWN TO BE REMOVED, ALL WIRING IN DEMOLISHED AREAS SHALL BE REMOVED BACK TO PANEL EXCEPT WIRING THAT IS NECESSARY TO FACILITATE NEW CONSTRUCTION. ALL PIPING BRANCHES, SOIL LINES, ETC TO BE REMOVED BACK TO THE NEXT LARGEST SERVICE LINE EXCEPT WHERE TO BE ALTERED TO FACILITATE NEW CONSTRUCTION.
- REVIEW RELOCATION OF EXISTING ELECTRICAL SWITCHES, OUTLETS, FIXTURES (IF ANY) WITH CONTRACTING OFFICER PRIOR TO DEMOLITION.
- SALVAGED ITEMS TO BE REINSTALLED IN CONJUNCTION WITH NEW WORK TO BE STORED IN A SAFE, SECURE, AND DRY LOCATION AND TO NOT INTERFERE WITH OCCUPANT EGRESS, ACTIVITIES, OR SPACE REQUIREMENTS.
- CONTRACTOR TO DISPOSE OF DEMOLISHED MATERIALS OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- REMOVE ALL WINDOW TREATMENTS AND UV ROLLER SHADES.
- SALVAGE WOOD DOORS U.O.N. AND RETURN TO NPS.
- SEE REGULATED BUILDING MATERIALS REPORT FOR FULL LIST OF HAZARDOUS MATERIALS TO BE REMOVED PRIOR TO DEMOLITION.

### DEMOLITION KEYNOTES

DF1	RELOCATE EXISTING WASHER AND DRYER AS NECESSARY TO COORDINATE WITH EXCAVATION FOR ADJACENT STRUCTURAL FOOTER.
DF2	EXCAVATE AS NECESSARY FOR INSTALLATION OF NEW CONCRETE FOOTER. REFER TO STRUCTURAL DRAWINGS.
DF3	EXCAVATE AS NECESSARY FOR INSTALLATION OF NEW EGRESS AREAWAY. REFER TO CIVIL AND ARCHITECTURAL DRAWINGS.
DF4	EXCAVATE AS NECESSARY TO INSTALL NEW STAIRWAY AND BEARING WALL FOOTER. REMOVE ALL EXISTING PARTITIONS WITHIN THIS HATCHED BOUNDARY. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS.
DF5	REMOVE EXISTING STAIR AND RAILINGS.
DF6	REMOVE EXISTING SHOWER, SINK, AND TOILET. REFER TO PLUMBING DRAWINGS. REMOVE EXISTING MILLWORK AND TOILET ACCESSORIES.
DF7	REMOVE EXISTING FAN COIL OR CONVECTION HEAT UNIT. REFER TO MECHNAICAL DRAWINGS.
DF8	REMOVE EXISTING GYPSUM BOARD CEILING TO INSTALL NEW STRUCTURAL BEAM. REFER TO STRUCTURAL DRAWINGS.
DF9	REMOVE EXISTING WINDOW IN PREPARATION FOR NEW LOUVER INSTALLATION. REFER TO MECHANICAL DRAWINGS.
DF10	REMOVE PORTION OF EXISTING FLOOR AS NECESSARY TO INSTALL NEW FLOOR MOUNTED REGISTER. WITHIN THE MAIN HALL CLOSETS, PROPOSED FLOOR OPENINGS ARE FOR VERTICAL DUCTWORK. REFER TO MECHANICAL DRAWINGS.
DF11	REMOVE FLOOR AS NECESSARY FOR INSTALLATION OF NEW STAIRWELL AND VERTICAL PLATFORM LIFT. REFER TO ARCHITECURAL AND STRUCTURAL DRAWINGS.
DF12	REMOVE EXISTING DOUBLE DOOR AND ASSOCIATED HARDWARE. SALVAGE FOR REVERSE-SWING REINSTALLATION. REFER TO PROPOSED ARCHITECTURAL PLAN AND DOOR SCHEDULE.
DF13	REMOVE EXISTING SCREEN DOORS, DOUBLE DOOR, NON-HISTORIC SLIDE BOLT, AND ASSOCIATED HARDWARE. SALVAGE FOR REVERSE-SWING REINSTALLATION. REFER TO PROPOSED ARCHITECTURAL PLAN AND DOOR SCHEDULE.
DF14	EXISTING DOOR(S) TO BE FIXED SHUT AND REMAIN IN PLACE.
DF15	CAREFULLY REMOVE EXISTING MUSLIN CEILING (ORIGINAL) UNDER THE CARE OF A CONSERVATOR FOR OFF-SITE CLEANING, REPLACEMENT OF BACKING, AND REINSTALLATION AFTER STRUCTURAL WORK IS COMPLETE.
DF16	REMOVE EXISTING MUSLIN CEILING (PREVIOUSLY RESTORED) FOR REPLACEMENT AFTER STRUCTURAL WORK IS COMPLETE. REFER TO REFLECTED CEILING PLAN FOR REPLACEMENT SCOPE.
DF17	REMOVE EXISTING PLASTER CEILING WHERE REQUIRED TO COORDINATE WITH STRUCTURAL WORK. REFER TO PROPOSED REFLECTED CEILING PLANS FOR REPLACEMENT SCOPE.
DF18	REMOVE EXISTING GYPSUM BOARD CEILING FOR REPLACEMENT IN-KIND AFTER STRUCTURAL WORK IS COMPLETE.
DF19	FOR EXISTING CLOSETS WITHIN MAIN HALL: CAREFULLY DISMANTLE CLOSET WALLS ONLY AT POINT OF ATTACHMENT (NEAR CEILING) TO INSTALL NEW METAL SISTER. REFER TO STRUCTURAL DRAWINGS AND ENLARGED SECTION DRAWING ON SHEET A-4.0.
DF20	REMOVE EXISTING FRONT PORCH SYSTEM (DECK, APRON, FRAMING, COLUMNS, PORTICO, FOUNDATIONS, RAMP, STAIR) TO PREPARE FOR INSTALLATION OF NEW PORCH.
DF21	REMOVE EXISTING DOOR AND STORE IN BASEMENT. REMOVE STOPS SURROUNDING FRAME. REFER TO DOOR SCHEDULE.
DF22	CAREFULLY REMOVE AND SALVAGE EXISTING WALL PORTIONS AND DOOR FOR REINSTALLATION. REFER TO PROPOSED PLAN FOR RECONFIGURED CLOSET SIZE IN EFFORT TO COMPLY WITH REQUIRED CLEARANCE WIDTH TO EGRESS STAIRWELL.
DF23	CAREFULLY REMOVE PORTION OF EXISTING WALL TO CREATE ACCESSIBLE 32" CLEARANCE WIDTH.
DF24	CAREFULLY REMOVE EXISTING ASBESTOS FLOORING LAYERS DOWN TO SUBSTRATE. REVIEW HAZARDOUS MATERIALS REPORT.
DF25	REMOVE EXISTING DOOR FROM HINGES. REMOVE STOPS SURROUNDING FRAME. AVOID LOSS OF DOOR BY FASTENING TO WALL AT INTERIOR SIDE OF LOBBY IN ROOM 116. REFER TO PROPOSED FLOOR PLAN.
DF26	REMOVE TEMPORARY SHORING AFTER COMPLETION OF STABILIZATION WORK.
DF27	REMOVE EXISTING MUSLIN CEILING (PREVIOUSLY RESTORED) FOR REPLACEMENT IN-KIND AFTER STRUCTURAL WORK IS COMPLETE. CAREFULLY MITIGATE ASBESTOS BACKING. REVIEW HAZARDOUS MATERIALS REPORT.
DF28	REMOVE EXISTING DAMAGED PLASTER CEILING FOR REPLACEMENT IN-KIND. REFER TO REFLECTED CEILING PLAN.
DF29	CAREFULLY REMOVE EXISTING WALL BASE COVE TO MITIGATE ASBESTOS MASTIC. REVIEW HAZARDOUS MATERIALS REPORT.
DF30	CAREFULLY REMOVE EXISTING MUSLIN WALL FINISH (PREVIOUSLY RESTORED) TO MITIGATE ASBESTOS BACKING. REVIEW HAZARDOUS MATERIALS REPORT.
DF31	DISMANTLE AND SALVAGE EXISTING BALCONY AND RAILING. REFER TO PROPOSED PLAN FOR REINSTALLATION SCOPE.
DF32	REMOVE EXISTING WOOD BOARD DOOR FOR HEIGHT MODIFICATIONS TO ACCOMODATE EGRESS. REFER TO PROPOSED PLAN FOR REINSTALLATION SCOPE.
DF33	EXISTING HISTORIC WOOD STOVE TO REMAIN. REMOVE FLOOR PLATE OF STOVE. REFER TO PROPOSED PLAN FOR REPLACEMENT SCOPE.
DF34	REMOVE EXISTING PLASTER WALL FINISH TO INSTALL ADDITIONAL STUDS. REFER TO STRUCTURAL DRAWINGS.
DF35	EXISTING HALF-HEIGHT DOOR TO REMAIN.

1 DEMOLITION BASEMENT PLAN  
D-1.0 SCALE (A)



DESIGNED: JA SS	SUB SHEET NO. D-1.0	TITLE OF SHEET DEMOLITION BASEMENT PLAN REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. 895 179603 PMIS/PKG NO. 312325 SHEET OF X
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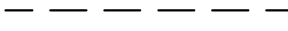
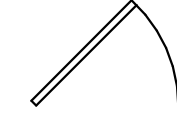
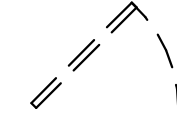

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D-1.1

DEMOLITION FIRST FLOOR PLAN

SCALE (A)

DEMOLITION FLOOR PLAN LEGEND

-  EXISTING WALL TO REMAIN
-  EXISTING WALL TO BE REMOVED
-  EXISTING DOOR TO REMAIN
-  EXISTING DOOR TO BE REMOVED/SALVAGED
-  GENERAL AREA OF FLOOR DEMOLITION OR GROUND EXCAVATION

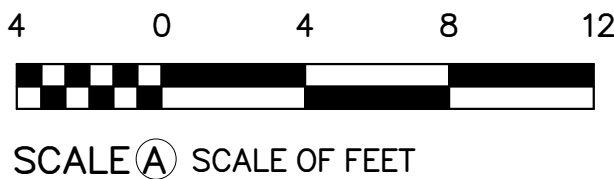
DEMOLITION GENERAL NOTES

- CONTRACTOR TO VERIFY ALL CONDITIONS IN FIELD PRIOR TO DEMOLITION AND TO COORDINATE ALL DEMOLITION ACTIVITIES WITH INTENDED CONSTRUCTION. REPORT ALL DISCREPANCIES TO ARCHITECT FOR RESOLUTION.
- PROTECT ALL CONSTRUCTION TO REMAIN FROM DAMAGE DURING DEMOLITION OF ADJACENT CONSTRUCTION. REPAIR/REPLACE CONSTRUCTION TO REMAIN DAMAGED DURING DEMOLITION TO MATCH THE QUALITY OF THE NEW WORK.
- WHERE WALLS, COUNTERS, DOORS, ETC ARE SHOWN TO BE REMOVED, ALL WIRING IN DEMOLISHED AREAS SHALL BE REMOVED BACK TO PANEL EXCEPT WIRING THAT IS NECESSARY TO FACILITATE NEW CONSTRUCTION. ALL PIPING BRANCHES, SOIL LINES, ETC TO BE REMOVED BACK TO THE NEXT LARGEST SERVICE LINE EXCEPT WHERE TO BE ALTERED TO FACILITATE NEW CONSTRUCTION.
- REVIEW RELOCATION OF EXISTING ELECTRICAL SWITCHES, OUTLETS, FIXTURES (IF ANY) WITH CONTRACTING OFFICER PRIOR TO DEMOLITION.
- SALVAGED ITEMS TO BE REINSTALLED IN CONJUNCTION WITH NEW WORK TO BE STORED IN A SAFE, SECURE, AND DRY LOCATION AND TO NOT INTERFERE WITH OCCUPANT EGRESS, ACTIVITIES, OR SPACE REQUIREMENTS.
- CONTRACTOR TO DISPOSE OF DEMOLISHED MATERIALS OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- REMOVE ALL WINDOW TREATMENTS AND UV ROLLER SHADES.
- SALVAGE WOOD DOORS U.O.N. AND RETURN TO NPS.
- SEE REGULATED BUILDING MATERIALS REPORT FOR FULL LIST OF HAZARDOUS MATERIALS TO BE REMOVED PRIOR TO DEMOLITION.

DEMOLITION KEYNOTES

DF1	RELOCATE EXISTING WASHER AND DRYER AS NECESSARY TO COORDINATE WITH EXCAVATION FOR ADJACENT STRUCTURAL FOOTER.
DF2	EXCAVATE AS NECESSARY FOR INSTALLATION OF NEW CONCRETE FOOTER. REFER TO STRUCTURAL DRAWINGS.
DF3	EXCAVATE AS NECESSARY FOR INSTALLATION OF NEW EGRESS AREAWAY. REFER TO CIVIL AND ARCHITECTURAL DRAWINGS.
DF4	EXCAVATE AS NECESSARY TO INSTALL NEW STAIRWAY AND BEARING WALL FOOTER. REMOVE ALL EXISTING PARTITIONS WITHIN THIS HATCHED BOUNDARY. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS.
DF5	REMOVE EXISTING STAIR AND RAILINGS.
DF6	REMOVE EXISTING SHOWER, SINK, AND TOILET. REFER TO PLUMBING DRAWINGS. REMOVE EXISTING MILLWORK AND TOILET ACCESSORIES.
DF7	REMOVE EXISTING FAN COIL OR CONVECTION HEAT UNIT. REFER TO MECHNAICAL DRAWINGS.
DF8	REMOVE EXISTING GYPSUM BOARD CEILING TO INSTALL NEW STRUCTURAL BEAM. REFER TO STRUCTURAL DRAWINGS.
DF9	REMOVE EXISTING WINDOW IN PREPARATION FOR NEW LOUVER INSTALLATION. REFER TO MECHANICAL DRAWINGS.
DF10	REMOVE PORTION OF EXISTING FLOOR AS NECESSARY TO INSTALL NEW FLOOR MOUNTED REGISTER. WITHIN THE MAIN HALL CLOSETS, PROPOSED FLOOR OPENINGS ARE FOR VERTICAL DUCTWORK. REFER TO MECHANICAL DRAWINGS.
DF11	REMOVE FLOOR AS NECESSARY FOR INSTALLATION OF NEW STAIRWELL AND VERTICAL PLATFORM LIFT. REFER TO ARCHITECURAL AND STRUCTURAL DRAWINGS.
DF12	REMOVE EXISTING DOUBLE DOOR AND ASSOCIATED HARDWARE. SALVAGE FOR REVERSE-SWING REINSTALLATION. REFER TO PROPOSED ARCHITECTURAL PLAN AND DOOR SCHEDULE.
DF13	REMOVE EXISTING SCREEN DOORS, DOUBLE DOOR, NON-HISTORIC SLIDE BOLT, AND ASSOCIATED HARDWARE. SALVAGE FOR REVERSE-SWING REINSTALLATION. REFER TO PROPOSED ARCHITECTURAL PLAN AND DOOR SCHEDULE.
DF14	EXISTING DOOR(S) TO BE FIXED SHUT AND REMAIN IN PLACE.
DF15	CAREFULLY REMOVE EXISTING MUSLIN CEILING (ORIGINAL) UNDER THE CARE OF A CONSERVATOR FOR OFF-SITE CLEANING, REPLACEMENT OF BACKING, AND REINSTALLATION AFTER STRUCTURAL WORK IS COMPLETE.
DF16	REMOVE EXISTING MUSLIN CEILING (PREVIOUSLY RESTORED) FOR REPLACEMENT AFTER STRUCTURAL WORK IS COMPLETE. REFER TO REFLECTED CEILING PLAN FOR REPLACEMENT SCOPE.
DF17	REMOVE EXISTING PLASTER CEILING WHERE REQUIRED TO COORDINATE WITH STRUCTURAL WORK. REFER TO PROPOSED REFLECTED CEILING PLANS FOR REPLACEMENT SCOPE.
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DF34	REMOVE EXISTING PLASTER WALL FINISH TO INSTALL ADDITIONAL STUDS. REFER TO STRUCTURAL DRAWINGS.
DF35	EXISTING HALF-HEIGHT DOOR TO REMAIN.

DESIGNED: JA SS	SUB SHEET NO. <div>D-1.1</div>	TITLE OF SHEET <div>DEMOLITION FIRST FLOOR PLAN</div>	DRAWING NO. <div>895</div> <div>179603</div>
TECH. REVIEW: MJM, MS		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	PMIS/PKG NO. 312325
DATE: 12/8/2023			SHEET OF X





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DEMOLITION SECOND FLOOR PLAN

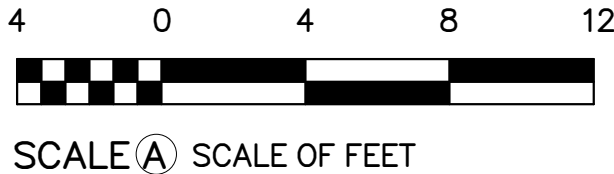
SCALE (A)

DEMOLITION FLOOR PLAN LEGEND

	EXISTING WALL TO REMAIN
	EXISTING WALL TO BE REMOVED
	EXISTING DOOR TO REMAIN
	EXISTING DOOR TO BE REMOVED/SALVAGED
	GENERAL AREA OF FLOOR DEMOLITION OR GROUND EXCAVATION

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DF5	REMOVE EXISTING STAIR AND RAILINGS.
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DESIGNED:	JA
	SS
TECH. REVIEW:	MJM, MS
DATE:	12/8/2023

SUB SHEET NO.	D-1.2
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TITLE OF SHEET	DEMOLITION SECOND FLOOR PLAN
	REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE

DRAWING NO.	895
	179603
PMIS/PKG NO.	312325
SHEET	OF X



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DEMOLITION THIRD FLOOR PLAN

0-1.3

SCALE A

DEMOLITION FLOOR PLAN LEGEND

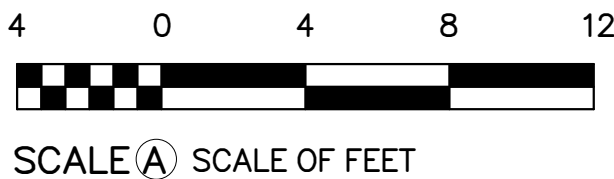
	EXISTING WALL TO REMAIN
	EXISTING WALL TO BE REMOVED
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DF18	REMOVE EXISTING GYPSUM BOARD CEILING FOR REPLACEMENT IN-KIND AFTER STRUCTURAL WORK IS COMPLETE.
DF19	FOR EXISTING CLOSETS WITHIN MAIN HALL: CAREFULLY DISMANTLE CLOSET WALLS ONLY AT POINT OF ATTACHMENT (NEAR CEILING) TO INSTALL NEW METAL SISTER. REFER TO STRUCTURAL DRAWINGS AND ENLARGED SECTION DRAWING ON SHEET A-4.0.
DF20	REMOVE EXISTING FRONT PORCH SYSTEM (DECK, APRON, FRAMING, COLUMNS, PORTICO, FOUNDATIONS, RAMP, STAIR) TO PREPARE FOR INSTALLATION OF NEW PORCH.
DF21	REMOVE EXISTING DOOR AND STORE IN BASEMENT. REMOVE STOPS SURROUNDING FRAME. REFER TO DOOR SCHEDULE.
DF22	CAREFULLY REMOVE AND SALVAGE EXISTING WALL PORTIONS AND DOOR FOR REINSTALLATION. REFER TO PROPOSED PLAN FOR RECONFIGURED CLOSET SIZE IN EFFORT TO COMPLY WITH REQUIRED CLEARANCE WIDTH TO EGRESS STAIRWELL.
DF23	CAREFULLY REMOVE PORTION OF EXISTING WALL TO CREATE ACCESSIBLE 32" CLEARANCE WIDTH.
DF24	CAREFULLY REMOVE EXISTING ASBESTOS FLOORING LAYERS DOWN TO SUBSTRATE. REVIEW HAZARDOUS MATERIALS REPORT.
DF25	REMOVE EXISTING DOOR FROM HINGES. REMOVE STOPS SURROUNDING FRAME. AVOID LOSS OF DOOR BY FASTENING TO WALL AT INTERIOR SIDE OF LOBBY IN ROOM 116. REFER TO PROPOSED FLOOR PLAN.
DF26	REMOVE TEMPORARY SHORING AFTER COMPLETION OF STABILIZATION WORK.
DF27	REMOVE EXISTING MUSLIN CEILING (PREVIOUSLY RESTORED) FOR REPLACEMENT IN-KIND AFTER STRUCTURAL WORK IS COMPLETE. CAREFULLY MITIGATE ASBESTOS BACKING. REVIEW HAZARDOUS MATERIALS REPORT.
DF28	REMOVE EXISTING DAMAGED PLASTER CEILING FOR REPLACEMENT IN-KIND. REFER TO REFLECTED CEILING PLAN.
DF29	CAREFULLY REMOVE EXISTING WALL BASE COVE TO MITIGATE ASBESTOS MASTIC. REVIEW HAZARDOUS MATERIALS REPORT.
DF30	CAREFULLY REMOVE EXISTING MUSLIN WALL FINISH (PREVIOUSLY RESTORED) TO MITIGATE ASBESTOS BACKING. REVIEW HAZARDOUS MATERIALS REPORT.
DF31	DISMANTLE AND SALVAGE EXISTING BALCONY AND RAILING. REFER TO PROPOSED PLAN FOR REINSTALLATION SCOPE.
DF32	REMOVE EXISTING WOOD BOARD DOOR FOR HEIGHT MODIFICATIONS TO ACCOMODATE EGRESS. REFER TO PROPOSED PLAN FOR REINSTALLATION SCOPE.
DF33	EXISTING HISTORIC WOOD STOVE TO REMAIN. REMOVE FLOOR PLATE OF STOVE. REFER TO PROPOSED PLAN FOR REPLACEMENT SCOPE.
DF34	REMOVE EXISTING PLASTER WALL FINISH TO INSTALL ADDITIONAL STUDS. REFER TO STRUCTURAL DRAWINGS.
DF35	EXISTING HALF-HEIGHT DOOR TO REMAIN.



DESIGNED: JA SS	SUB SHEET NO. <b>D-1.3</b>	TITLE OF SHEET <b>DEMOLITION THIRD FLOOR PLAN</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
TECH. REVIEW: MJM, MS			
DATE: 12/8/2023			

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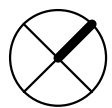
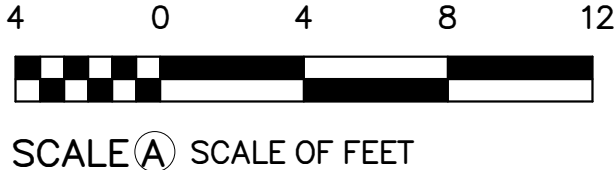
1 PROPOSED BASEMENT PLAN  
A-1.0 SCALE (A)

FLOOR PLAN LEGEND

- NEW WALL
- EXISTING WALL TO REMAIN
- DOOR TYPE & TAG
- EXISTING DOOR & TAG

GENERAL FLOOR PLAN NOTES

- ALL DIMENSIONS TO FINISHED FACE OF CONSTRUCTION, UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD. REPORT ALL DISCREPANCIES IN THESE DRAWINGS AND RELATED SPECIFICATIONS TO ARCHITECT FOR RESOLUTION PRIOR TO START OF CONSTRUCTION. FAILURE TO VERIFY ALL CONDITIONS AFFECTING THE WORK AND FAILURE TO REPORT DISCREPANCIES WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE COORDINATION OF ALL ASPECTS OF THE WORK.
- ALL MATERIAL TO REMAIN IS TO BE PROTECTED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE.
- REFER TO SPECIFICATIONS AND ALL TRADE DRAWINGS FOR ADD'L INFORMATION.
- CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SUPPORT AND SHORING.
- REFINISH EXISTING WOOD FLOORS. PATCH WHERE REQUIRED.
- CLEAN EXISTING TRANSPARENT FINISHED WOODWORK.
- REPAINT ALL WALLS AND PAINTED WOOD TRIM TO MATCH HISTORIC PAINT COLORS. SEE CONSERVATION ASSESSMENT.

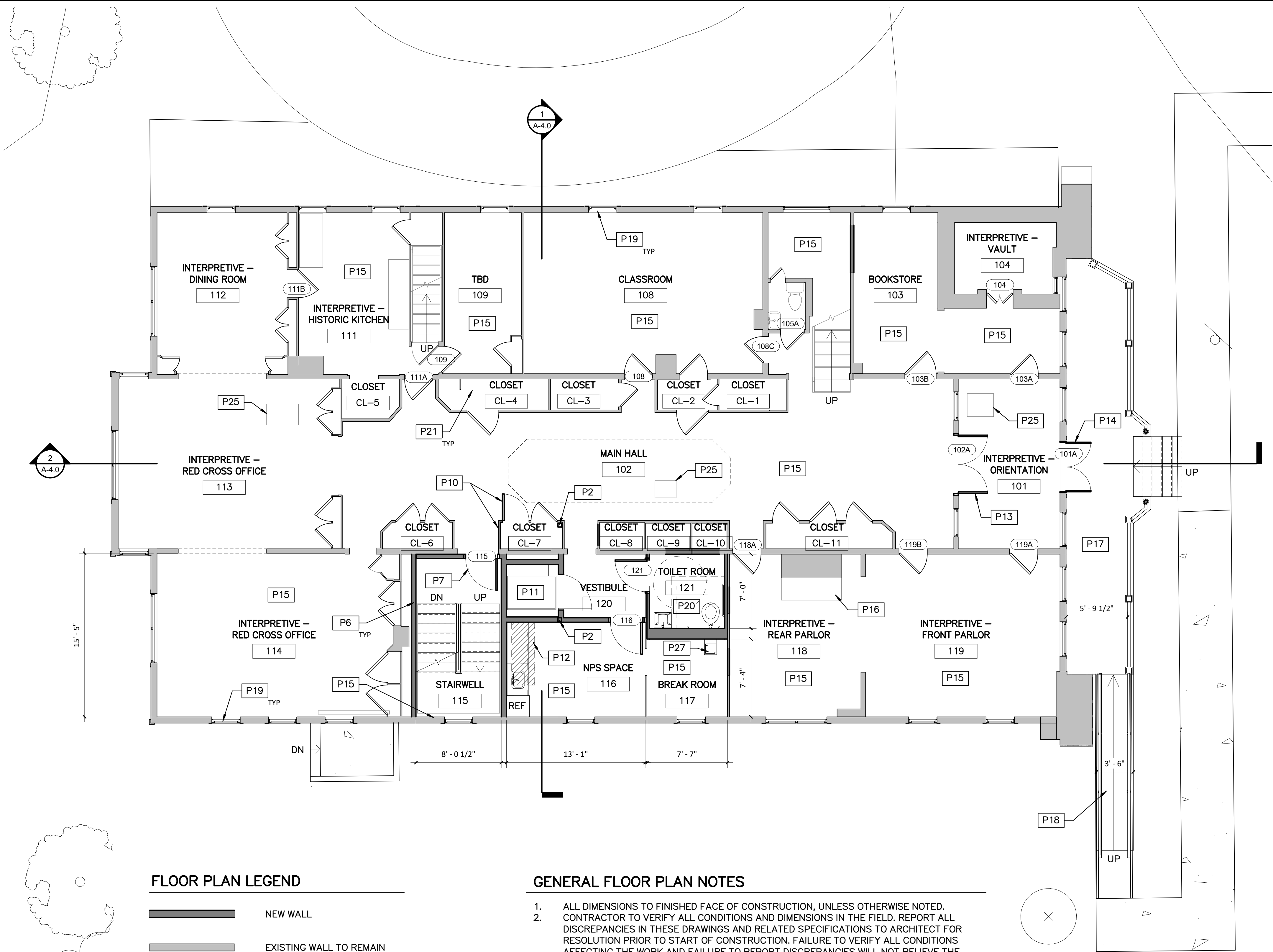


FLOOR PLAN KEYNOTES

P1	REPOINT MASONRY FOUNDATION.
P2	NEW PTD STEEL COLUMN. REFER TO STRUCTRAL DRAWINGS.
P3	NEW AREAWAY STAIR WITH DRAIN AND GRATE AT LANDING. NEW CURB WALLS AT EDGES. REFER TO CIVIL DRAWINGS.
P4	INSTALL NEW LOUVER WITHIN EXISTING OPENING. REFER TO MECHANICAL DRAWINGS.
P5	NEW ELECTRICAL COMPONENTS. REFER TO ELECTRICAL DRAWINGS.
P6	NEW 1-HOUR FIRE RATED PARTITION ENCLOSURE AT EGRESS STAIR.
P7	PROVIDE NEW FIRE RATED 34" FOUR-PANEL WOOD DOOR AND FRAME TO MATCH EXISTING (MAY REQUIRE APPROVAL BY AHJ FOR A DOOR WITHOUT A VISION PANEL). NEW TRANSOM TO MATCH EXISTING SIZE WITH 1-HOUR FIRE RESISTANT GLAZING. ADD PANIC HARDWARE AND CLOSER. REFER TO DOOR SCHEDULE.
P8	INSTALL MODIFIED EXISTING DOOR (TALLER FOR A CODE COMPLIANT EGRESS STAIR). REFER TO DOOR SCHEDULE.
P9	NEW WOOD STAIR.
P10	REINSTALL SALVAGED EXISTING VERTICAL BOARDS AND DOOR FOR RECONFIGURED CLOSET.
P11	NEW VERTICAL PLATFORM LIFT (TRAVELS FROM FIRST TO SECOND FLOOR).
P12	INFILL FLOOR WITH WOOD FLOORING (TO MATCH IN KIND) AT REMOVED STAIR.
P13	INSTALL SALVAGED DOOR WITH REVERSED SWING. REFER TO DOOR SCHEDULE.
P14	INSTALL SALVAGED DOOR WITH REVERSED SWING. INSTALL PANIC BAR ON INTERIOR SIDE. PROVIDE POWER DOOR OPERATOR AND COORDINATOR IN CONCEALED LOCATION FOR USE AS THE ACCESSIBLE ENTRANCE. REFER TO DOOR SCHEDULE.
P15	REPAIR EXISTING PLASTER WALLS. REFER TO CONSERVATION ASSESSMENT PLASTER SURVEY.
P16	REPAIR LOOSE BRICKS IN HEARTH.
P17	NEW WOOD PORCH SYSTEM (DECK, HANDRAIL, APRON, STAIR, COLUMNS, CENTRAL ROOF).
P18	NEW ACCESSIBLE WOOD RAMP AND HANDRAIL.
P19	INSTALL INTERIOR STORM WINDOWS.
P20	NEW ACCESSIBLE TOILET ROOM. NEW CERAMIC TILE FLOOR AND 48" TALL WAINSCOT. PTD GWB FINISH ABOVE WAINSCOT.
P21	FOR EXISTING CLOSETS WITHIN MAIN HALL: RECONSTRUCT REAR WALL AROUND NEW METAL SISTERED JOIST. REFER TO STRUCTURAL DRAWINGS FOR SCOPE ABOVE CEILING.
P22	NEW METAL ROOF TO MATCH UPPER ROOFS.
P23	NEW FAN COIL UNIT. REFER TO MECHANICAL DRAWINGS. REFER TO DRAWING 4/A-4.0 FOR EXAMPLE OF CUSTOM PTD WOOD ENCLOSURE FOR CONCEALING UNIT.
P24	REINSTALL SALVAGED BALCONY AND RAILING. REPLACE DAMAGED COMPONENTS TO MATCH IN KIND, AND REPAINT. ADD FLAT SEAM METAL ON BALCONY FLOOR TO MATCH UPPER ROOF.
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P27	NEW DRINKING FOUNTAIN. REFER TO PLUMBING DRAWINGS.
P28	NEW GLASS CURTAIN WALL SYSTEM WITH SLIDING DOOR.
P29	PROVIDE NEW FIRE RATED 36" HM DOOR AND FRAME. ADD PANIC HARDWARE, CLOSER, AND HARDWARE TO ALLOW FOR PRIVATE ACCESS.

DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-1.0	TITLE OF SHEET <b>PROPOSED BASEMENT PLAN</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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### FLOOR PLAN LEGEND

	NEW WALL
	EXISTING WALL TO REMAIN
	DOOR TYPE & TAG
	EXISTING DOOR & TAG

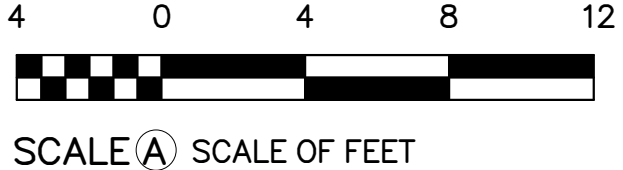
### GENERAL FLOOR PLAN NOTES

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- REFINISH EXISTING WOOD FLOORS. PATCH WHERE REQUIRED.
- CLEAN EXISTING TRANSPARENT FINISHED WOODWORK.
- REPAINT ALL WALLS AND PAINTED WOOD TRIM TO MATCH HISTORIC PAINT COLORS. SEE CONSERVATION ASSESSMENT.

### FLOOR PLAN KEYNOTES

P1	REPOINT MASONRY FOUNDATION.
P2	NEW PTD STEEL COLUMN. REFER TO STRUCTRAL DRAWINGS.
P3	NEW AREAWAY STAIR WITH DRAIN AND GRATE AT LANDING. NEW CURB WALLS AT EDGES. REFER TO CIVIL DRAWINGS.
P4	INSTALL NEW LOUVER WITHIN EXISTING OPENING. REFER TO MECHANICAL DRAWINGS.
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P8	INSTALL MODIFIED EXISTING DOOR (TALLER FOR A CODE COMPLIANT EGRESS STAIR). REFER TO DOOR SCHEDULE.
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P23	NEW FAN COIL UNIT. REFER TO MECHANICAL DRAWINGS. REFER TO DRAWING 4/A-4.0 FOR EXAMPLE OF CUSTOM PTD WOOD ENCLOSURE FOR CONCEALING UNIT.
P24	REINSTALL SALVAGED BALCONY AND RAILING. REPLACE DAMAGED COMPONENTS TO MATCH IN KIND, AND REPAINT. ADD FLAT SEAM METAL ON BALCONY FLOOR TO MATCH UPPER ROOF.
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1  
A-1.1  
PROPOSED FIRST FLOOR PLAN  
SCALE (A)



DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-1.1	TITLE OF SHEET <b>PROPOSED FIRST FLOOR PLAN</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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1  
A-1.2  
SCALE (A)

PROPOSED SECOND FLOOR PLAN

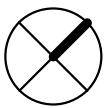
### FLOOR PLAN LEGEND

- NEW WALL
- EXISTING WALL TO REMAIN
- DOOR TYPE & TAG
- EXISTING DOOR & TAG

### GENERAL FLOOR PLAN NOTES

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- CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD. REPORT ALL DISCREPANCIES IN THESE DRAWINGS AND RELATED SPECIFICATIONS TO ARCHITECT FOR RESOLUTION PRIOR TO START OF CONSTRUCTION. FAILURE TO VERIFY ALL CONDITIONS AFFECTING THE WORK AND FAILURE TO REPORT DISCREPANCIES WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE COORDINATION OF ALL ASPECTS OF THE WORK.
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- CLEAN EXISTING TRANSPARENT FINISHED WOODWORK.
- REPAINT ALL WALLS AND PAINTED WOOD TRIM TO MATCH HISTORIC PAINT COLORS. SEE CONSERVATION ASSESSMENT.

4 0 4 8 12  
SCALE (A) SCALE OF FEET



### FLOOR PLAN KEYNOTES

P1	REPOINT MASONRY FOUNDATION.
P2	NEW PTD STEEL COLUMN. REFER TO STRUCTRAL DRAWINGS.
P3	NEW AREAWAY STAIR WITH DRAIN AND GRATE AT LANDING. NEW CURB WALLS AT EDGES. REFER TO CIVIL DRAWINGS.
P4	INSTALL NEW LOUVER WITHIN EXISTING OPENING. REFER TO MECHANICAL DRAWINGS.
P5	NEW ELECTRICAL COMPONENTS. REFER TO ELECTRICAL DRAWINGS.
P6	NEW 1-HOUR FIRE RATED PARTITION ENCLOSURE AT EGRESS STAIR.
P7	PROVIDE NEW FIRE RATED 34" FOUR-PANEL WOOD DOOR AND FRAME TO MATCH EXISTING (MAY REQUIRE APPROVAL BY AHJ FOR A DOOR WITHOUT A VISION PANEL). NEW TRANSOM TO MATCH EXISTING SIZE WITH 1-HOUR FIRE RESISTANT GLAZING. ADD PANIC HARDWARE AND CLOSER. REFER TO DOOR SCHEDULE.
P8	INSTALL MODIFIED EXISTING DOOR (TALLER FOR A CODE COMPLIANT EGRESS STAIR). REFER TO DOOR SCHEDULE.
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P12	INFILL FLOOR WITH WOOD FLOORING (TO MATCH IN KIND) AT REMOVED STAIR.
P13	INSTALL SALVAGED DOOR WITH REVERSED SWING. REFER TO DOOR SCHEDULE.
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P15	REPAIR EXISTING PLASTER WALLS. REFER TO CONSERVATION ASSESSMENT PLASTER SURVEY.
P16	REPAIR LOOSE BRICKS IN HEARTH.
P17	NEW WOOD PORCH SYSTEM (DECK, HANDRAIL, APRON, STAIR, COLUMNS, CENTRAL ROOF).
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P29	PROVIDE NEW FIRE RATED 36" HM DOOR AND FRAME. ADD PANIC HARDWARE, CLOSER, AND HARDWARE TO ALLOW FOR PRIVATE ACCESS.

DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-1.2	TITLE OF SHEET <b>PROPOSED SECOND FLOOR PLAN</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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1

A-1.3

PROPOSED THIRD FLOOR PLAN

SCALE **A**

FLOOR PLAN LEGEND

- NEW WALL
- EXISTING WALL TO REMAIN
- DOOR TYPE & TAG
- EXISTING DOOR & TAG

GENERAL FLOOR PLAN NOTES

1.

ALL DIMENSIONS TO FINISHED FACE OF CONSTRUCTION, UNLESS OTHERWISE NOTED.
2.

CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD. REPORT ALL DISCREPANCIES IN THESE DRAWINGS AND RELATED SPECIFICATIONS TO ARCHITECT FOR RESOLUTION PRIOR TO START OF CONSTRUCTION. FAILURE TO VERIFY ALL CONDITIONS AFFECTING THE WORK AND FAILURE TO REPORT DISCREPANCIES WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE COORDINATION OF ALL ASPECTS OF THE WORK.
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ALL MATERIAL TO REMAIN IS TO BE PROTECTED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE.
4.

REFER TO SPECIFICATIONS AND ALL TRADE DRAWINGS FOR ADD'L INFORMATION.
5.

CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SUPPORT AND SHORING.
6.

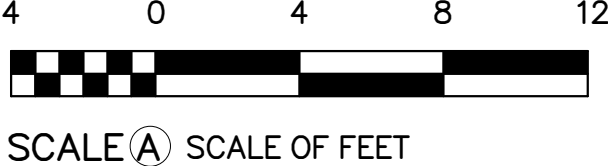
REFINISH EXISTING WOOD FLOORS. PATCH WHERE REQUIRED.
7.

CLEAN EXISTING TRANSPARENT FINISHED WOODWORK.
8.

REPAINT ALL WALLS AND PAINTED WOOD TRIM TO MATCH HISTORIC PAINT COLORS. SEE CONSERVATION ASSESSMENT.

FLOOR PLAN KEYNOTES

P1	REPOINT MASONRY FOUNDATION.
P2	NEW PTD STEEL COLUMN. REFER TO STRUCTRAL DRAWINGS.
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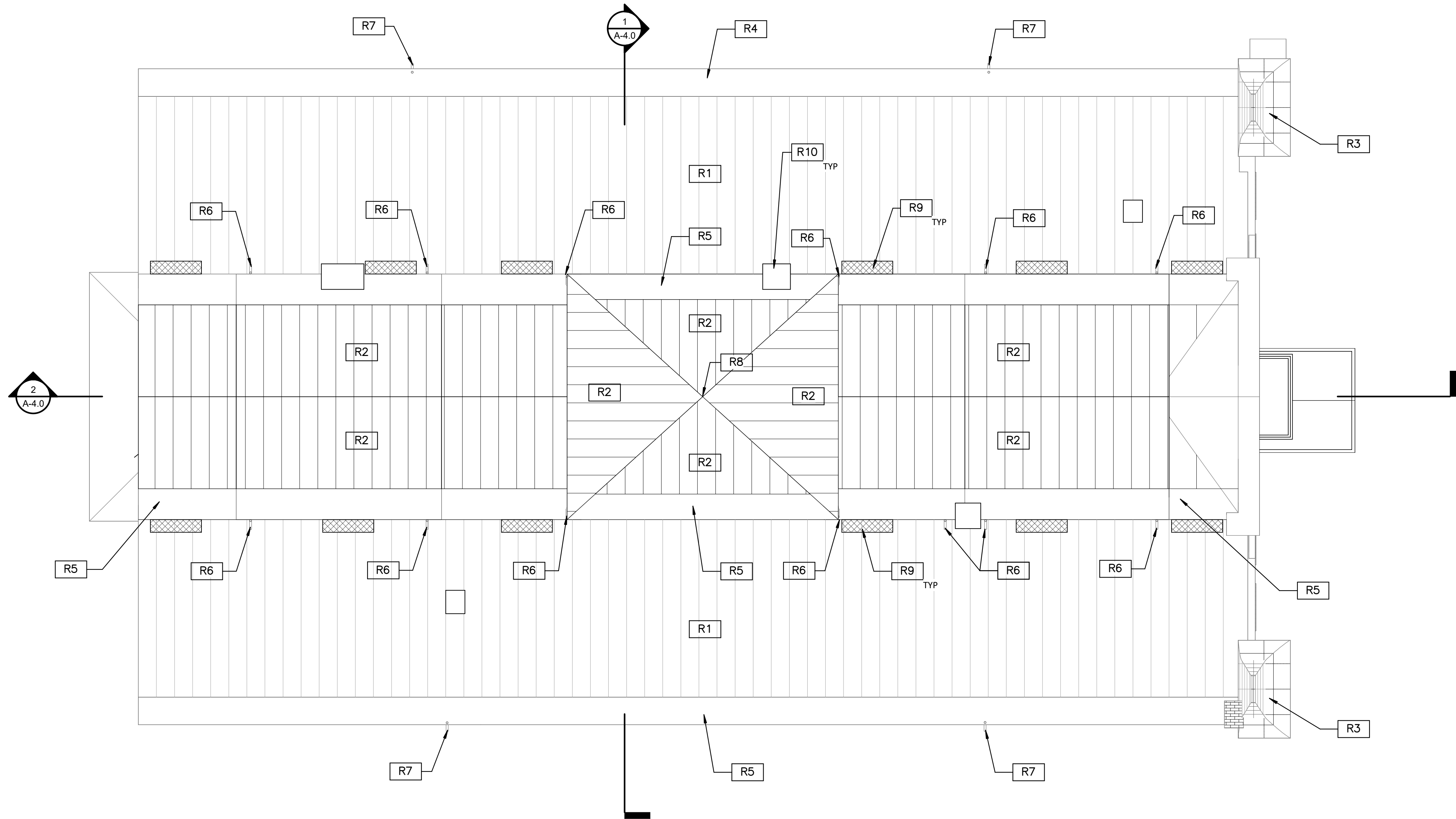


DESIGNED: JA	SUB SHEET NO.  <b>A-1.3</b>	TITLE OF SHEET <b>PROPOSED THIRD FLOOR PLAN</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
<b>SS</b>			
TECH. REVIEW: MJM, MS			
DATE: 12/8/2023			

Autodesk Docs://Clara Barton National Historic Site/2203.4 Clara Barton House\_ RV/T23.rvt

12/8/2023 3:15:52 PM

1  
A-1.4  
PROPOSED ROOF PLAN  
SCALE A



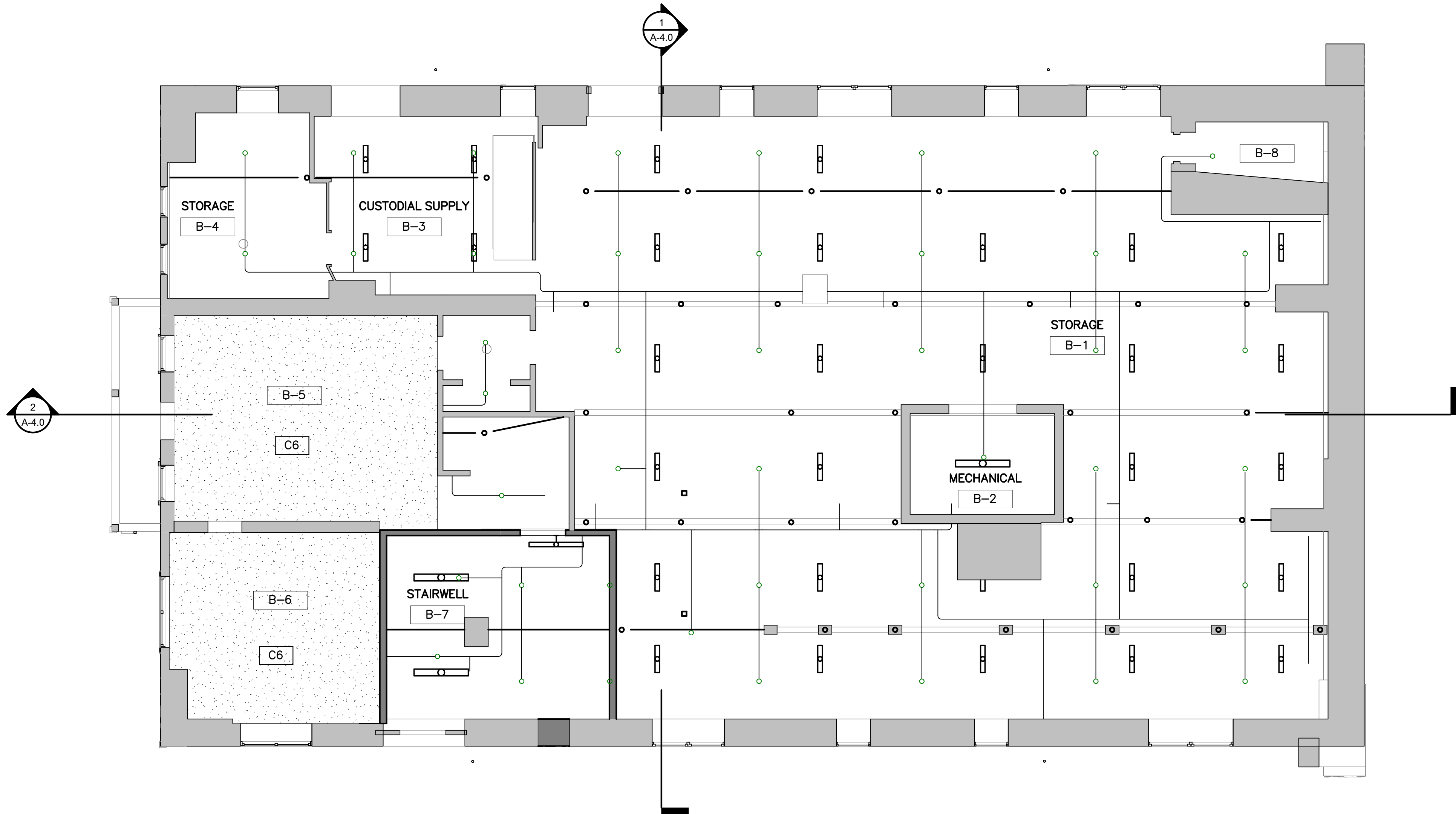
ROOF PLAN KEYNOTES

R1	REPAINT EXISTING COPPER STANDING SEAM ROOF.
R2	REPLACE ROOF WITH NEW PTD STANDING SEAM COPPER TO MATCH EXISTING.
R3	REPLACE EXISTING FLAT SEAM SHEET METAL WITH COPPER TO MATCH EXISTING.
R4	REPAIR EXISTING COPPER POLE GUTTER AND REPAINT.
R5	REPLACE EXISTING COPPER POLE GUTTER AND REPAINT.
R6	RETAIN EXISTING COPPER DOWNSPOUT FOR REUSE.
R7	INSTALL NEW COPPER DOWNSPOUT.
R8	INSTALL NEW COPPER FLASHING AT FLAGPOLE.
R9	REMOVE/MODIFY STANDING SEAM METAL ROOF OR FLASHING TO ACCOMODATE FALL PROTECTION ANCHORS.
R10	EXISTING CHIMNEY TO REMAIN. REFER TO REPAIR ELEVATION FOR BRICK REPOINTING SCOPE.

DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-1.4	TITLE OF SHEET <b>PROPOSED ROOF PLAN</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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### CEILING PLAN LEGEND

	PLASTER CEILING REPLACEMENT
	GWB CEILING REPLACEMENT
	MUSLIN REPLACEMENT
	ORIGINAL MUSLIN REINSTALLATION

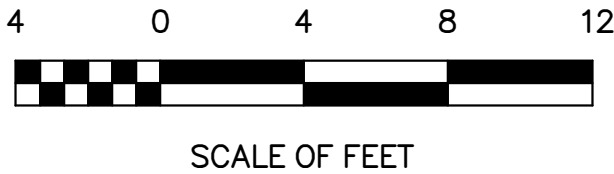
### CEILING PLAN GENERAL NOTES

- MECHANICAL & ELECTRICAL DEVICES, LIGHTING, FIRE ALARM DEVICES, AND SPRINKLER HEADS ARE SHOWN FOR PLACEMENT ONLY. REFER TO SYSTEM DRAWINGS FOR TYPES & NUMBER OF DEVICES.
- PROVIDE GWB RETURN AT ALL GWB SOFFITS.
- CENTER ALL DEVICES IN CENTER OF CEILING UNLESS OTHERWISE NOTED.
- EXISTING PAINTED WOOD BOARD CEILINGS IN CLOSETS TO REMAIN.

### REFLECTED CEILING PLAN KEYNOTES

C1	REPLACE EXISTING MUSLIN (PREVIOUSLY RESTORED) WITH NEW MUSLIN WITH FIRE RETARDANT TREATMENT ON NEW BACKING. ATTACH WITH TACKS TO MATCH EXISTING AND PAINT.
C2	CAREFULLY REINSTALL EXISTING MUSLIN (ORIGINAL) ON NEW BACK WITH TACKS TO MATCH EXISTING.
C3	REPLACE PLASTER CEILING IN KIND.
C4	REPAIR EXISTING PLASTER CEILING. REFER TO CONSERVATION ASSESSMENT.
C5	EXISTING MUSLIN (PREVIOUSLY RESTORED) TO REMAIN.
C6	REPLACE EXISTING GWB CEILING WITH NEW PTD GWB CEILING.
C7	EXISTING CEILING TO REMAIN.

1  
A-2.0  
PROPOSED BASEMENT REFLECTED CEILING PLAN  
SCALE (A)



DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-2.0	TITLE OF SHEET <b>PROPOSED BASEMENT REFLECTED CEILING PLAN</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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1  
A-2.1

PROPOSED FIRST FLOOR REFLECTED CEILING PLAN

SCALE (A)

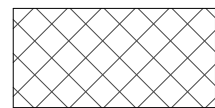
CEILING PLAN LEGEND



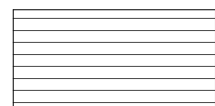
PLASTER CEILING REPLACEMENT



GWB CEILING REPLACEMENT



MUSLIN REPLACEMENT



ORIGINAL MUSLIN REINSTALLATION

CEILING PLAN GENERAL NOTES

- MECHANICAL & ELECTRICAL DEVICES, LIGHTING, FIRE ALARM DEVICES, AND SPRINKLER HEADS ARE SHOWN FOR PLACEMENT ONLY. REFER TO SYSTEM DRAWINGS FOR TYPES & NUMBER OF DEVICES.
- PROVIDE GWB RETURN AT ALL GWB SOFFITS.
- CENTER ALL DEVICES IN CENTER OF CEILING UNLESS OTHERWISE NOTED.
- EXISTING PAINTED WOOD BOARD CEILINGS IN CLOSETS TO REMAIN.



SCALE OF FEET



REFLECTED CEILING PLAN KEYNOTES

C1	REPLACE EXISTING MUSLIN (PREVIOUSLY RESTORED) WITH NEW MUSLIN WITH FIRE RETARDANT TREATMENT ON NEW BACKING. ATTACH WITH TACKS TO MATCH EXISTING AND PAINT.
C2	CAREFULLY REINSTALL EXISTING MUSLIN (ORIGINAL) ON NEW BACK WITH TACKS TO MATCH EXISTING.
C3	REPLACE PLASTER CEILING IN KIND.
C4	REPAIR EXISTING PLASTER CEILING. REFER TO CONSERVATION ASSESSMENT.
C5	EXISTING MUSLIN (PREVIOUSLY RESTORED) TO REMAIN.
C6	REPLACE EXISTING GWB CEILING WITH NEW PTD GWB CEILING.
C7	EXISTING CEILING TO REMAIN.



DESIGNED:

JA

SS

TECH. REVIEW:

MJM, MS

DATE:

12/8/2023

SUB SHEET NO.

A-2.1

TITLE OF SHEET

PROPOSED FIRST FLOOR  
REFLECTED CEILING PLAN

REHABILITATE CLARA BARTON NATIONAL  
HISTORIC SITE

DRAWING NO.

895

179603

PMIS/PKG NO.

312325

SHEET

OF X



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1  
A-2.2

PROPOSED SECOND FLOOR REFLECTED CEILING PLAN

SCALE (A)

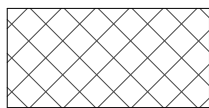
CEILING PLAN LEGEND



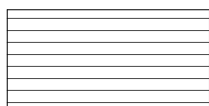
PLASTER CEILING REPLACEMENT



GWB CEILING REPLACEMENT



MUSLIN REPLACEMENT



ORIGINAL MUSLIN REINSTALLATION

CEILING PLAN GENERAL NOTES

- MECHANICAL & ELECTRICAL DEVICES, LIGHTING, FIRE ALARM DEVICES, AND SPRINKLER HEADS ARE SHOWN FOR PLACEMENT ONLY. REFER TO SYSTEM DRAWINGS FOR TYPES & NUMBER OF DEVICES.
- PROVIDE GWB RETURN AT ALL GWB SOFFITS.
- CENTER ALL DEVICES IN CENTER OF CEILING UNLESS OTHERWISE NOTED.
- EXISTING PAINTED WOOD BOARD CEILINGS IN CLOSETS TO REMAIN.

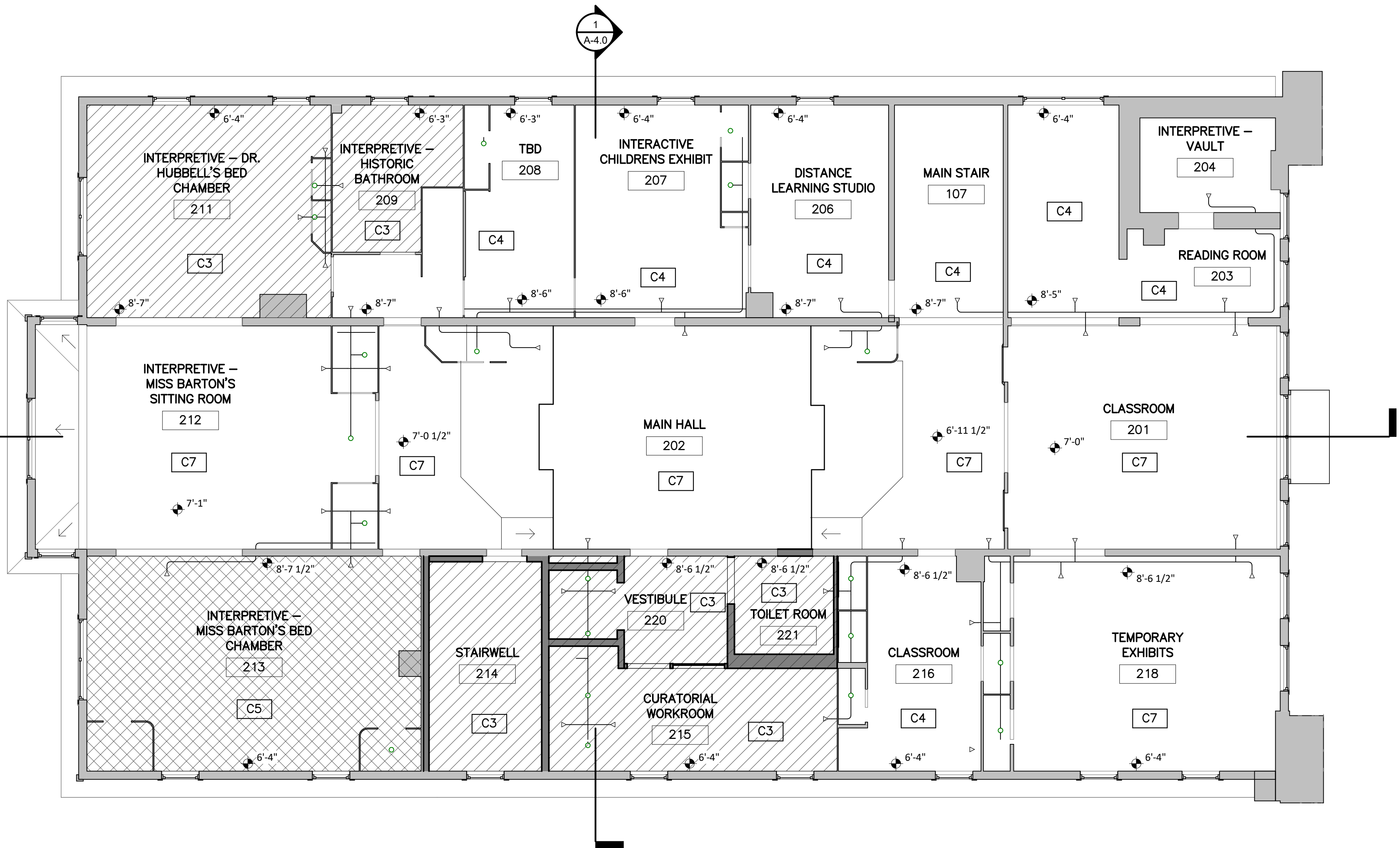


SCALE OF FEET



REFLECTED CEILING PLAN KEYNOTES

C1	REPLACE EXISTING MUSLIN (PREVIOUSLY RESTORED) WITH NEW MUSLIN WITH FIRE RETARDANT TREATMENT ON NEW BACKING. ATTACH WITH TACKS TO MATCH EXISTING AND PAINT.
C2	CAREFULLY REINSTALL EXISTING MUSLIN (ORIGINAL) ON NEW BACK WITH TACKS TO MATCH EXISTING.
C3	REPLACE PLASTER CEILING IN KIND.
C4	REPAIR EXISTING PLASTER CEILING. REFER TO CONSERVATION ASSESSMENT.
C5	EXISTING MUSLIN (PREVIOUSLY RESTORED) TO REMAIN.
C6	REPLACE EXISTING GWB CEILING WITH NEW PTD GWB CEILING.
C7	EXISTING CEILING TO REMAIN.



DESIGNED:

JA

SS

TECH. REVIEW:

MJM, MS

DATE:

12/8/2023

SUB SHEET NO.

A-2.2

TITLE OF SHEET

PROPOSED SECOND FLOOR  
REFLECTED CEILING PLAN

REHABILITATE CLARA BARTON NATIONAL  
HISTORIC SITE

DRAWING NO.

895

179603

PMIS/PKG NO.

312325

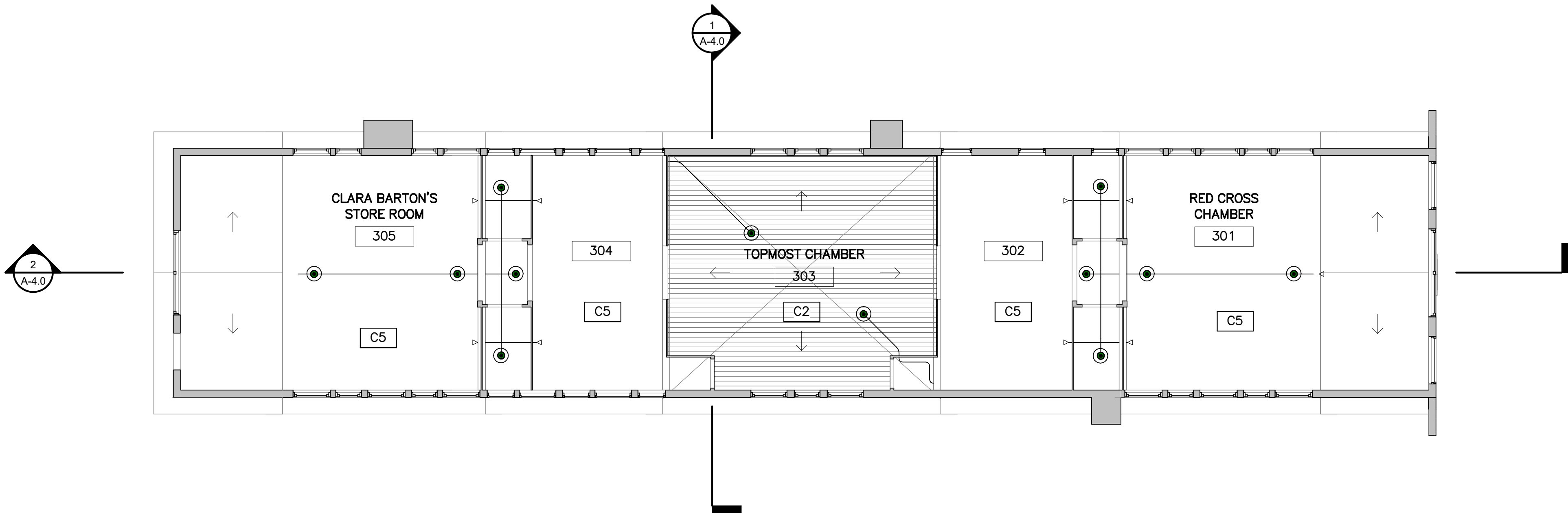
SHEET

OF X

12/8/2023 3:16:03 PM Autodesk Docs://Clara Barton National Historic Site/2203.4 Clara Barton House\_ RV723.rvt

REFLECTED CEILING PLAN KEYNOTES

C1	REPLACE EXISTING MUSLIN (PREVIOUSLY RESTORED) WITH NEW MUSLIN WITH FIRE RETARDANT TREATMENT ON NEW BACKING. ATTACH WITH TACKS TO MATCH EXISTING AND PAINT.
C2	CAREFULLY REINSTALL EXISTING MUSLIN (ORIGINAL) ON NEW BACK WITH TACKS TO MATCH EXISTING.
C3	REPLACE PLASTER CEILING IN KIND.
C4	REPAIR EXISTING PLASTER CEILING. REFER TO CONSERVATION ASSESSMENT.
C5	EXISTING MUSLIN (PREVIOUSLY RESTORED) TO REMAIN.
C6	REPLACE EXISTING GWB CEILING WITH NEW PTD GWB CEILING.
C7	EXISTING CEILING TO REMAIN.



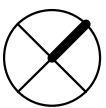
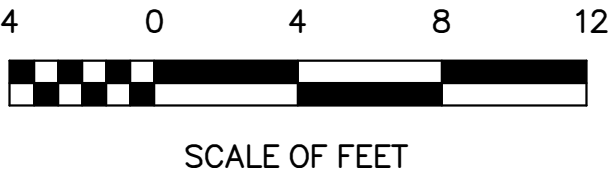
CEILING PLAN LEGEND

	PLASTER CEILING REPLACEMENT
	GWB CEILING REPLACEMENT
	MUSLIN REPLACEMENT
	ORIGINAL MUSLIN REINSTALLATION

CEILING PLAN GENERAL NOTES

- MECHANICAL & ELECTRICAL DEVICES, LIGHTING, FIRE ALARM DEVICES, AND SPRINKLER HEADS ARE SHOWN FOR PLACEMENT ONLY. REFER TO SYSTEM DRAWINGS FOR TYPES & NUMBER OF DEVICES.
- PROVIDE GWB RETURN AT ALL GWB SOFFITS.
- CENTER ALL DEVICES IN CENTER OF CEILING UNLESS OTHERWISE NOTED.
- EXISTING PAINTED WOOD BOARD CEILINGS IN CLOSETS TO REMAIN.

1 PROPOSED THIRD FLOOR REFLECTED CEILING PLAN  
A-2.3 SCALE (A)



DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-2.3	TITLE OF SHEET <b>PROPOSED THIRD FLOOR REFLECTED CEILING PLAN</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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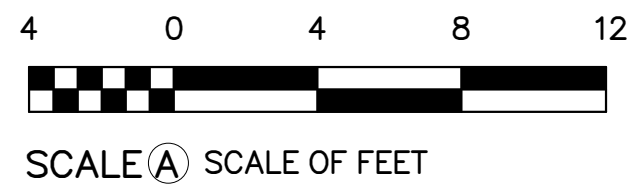
Autodesk Docs://Clara Barton National Historic Site/2203.4 Clara Barton House\_ RV123.rvt 12/8/2023 4:09:38 PM



1 EAST ELEVATION  
A-3.0 SCALE A



2 NORTH ELEVATION  
A-3.0 SCALE A



SEE DRAWING SHEETS A-4.2 AND A-4.3 FOR REPAIR SCOPE TO EXISTING HISTORIC HOUSE

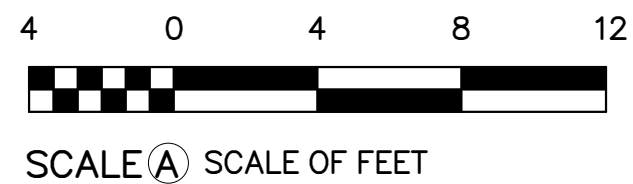
DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-3.0	TITLE OF SHEET <b>PROPOSED ELEVATIONS</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> 179603 PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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1 WEST ELEVATION  
A-3.1 SCALE A



2 SOUTH ELEVATION  
A-3.1 SCALE A



SEE DRAWING SHEETS A-4.2 AND A-4.2 FOR REPAIR SCOPE TO EXISTING HISTORIC HOUSE

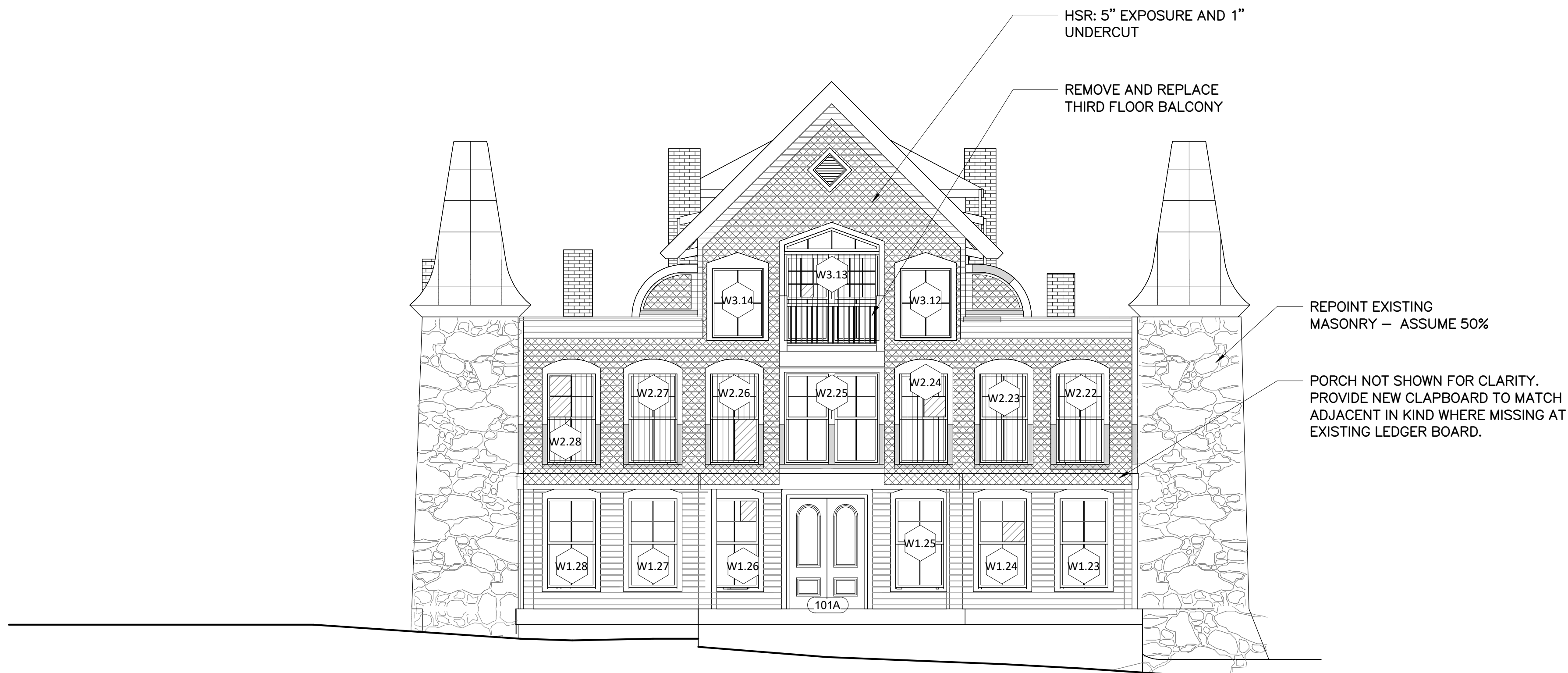
DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-3.1	TITLE OF SHEET <b>PROPOSED ELEVATIONS</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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1 REPAIR WORK – EAST ELEVATION  
A-3.2 SCALE (A)



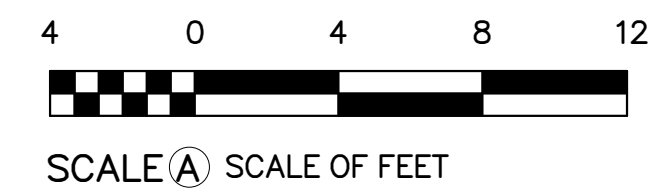
2 REPAIR WORK – NORTH ELEVATION  
A-3.2 SCALE (A)

## REPAIR WORK LEGEND

	REPLACE BROKEN WINDOW PANE
	RESTORE/REPLACE SASH WITH SALVAGED GLASS
	ASSUME 100% REPLACEMENT OF CLAPBOARDS WITH NEW TO MATCH EXISTING.
	REPLACE WOOD TRIM WITH NEW TO MATCH EXISTING. ASSUME 20% TRIM REPLACEMENT AT ALL OTHER AREAS.
	ROTTED AREAS OF EXTERIOR VERTICAL BOARD AND BATTEN OR VERTICAL BOARD INFILL AT GRADE.
	AREA OF RECENT CORNICE REPLACEMENT
	HSR: GERMAN SIDING WITH 4 1/2" TO 5" EXPOSURE AND 3/4" UNDERCUT
	HSR: GERMAN SIDING WITH 5" EXPOSURE AND 1 3/4" UNDERCUT
	HSR: GERMAN SIDING WITH 5" EXPOSURE AND 3/4" UNDERCUT. (LIKELY REPLACED AT SAME TIME AS SIDING ON THE SOUTHWEST ELEVATION)

## FRAME & WINDOW REPAIR NOTES

- REFER TO WINDOW SCHEDULE FOR REPAIR SCOPE. SOME WINDOWS WILL REQUIRE REMOVAL OF SASH FOR REPAIRS TO BE COMPLETED. RESTORE BOTH WINDOW & DOOR FRAMES.
- CONTRACTOR SHOULD BEGIN REMOVALS CAREFULLY AND REPORT DETERIORATED CONDITIONS AT HEADERS AND OTHER COMPONENTS TO ARCHITECT BEFORE PROCEEDING.
- PROVIDE PROTECTION TO OPENINGS WHERE SASH ARE REMOVED. DO NOT FASTEN PROTECTION TO HISTORIC WOOD FINISHES OR MASONRY. SUBMIT PROTECTION DESIGN FOR APPROVAL BY ARCHITECT PRIOR TO INSTALLATION.
- SCRAPE OR STRIP PAINT, FILL HOLES, SAND, PRIME & PAINT ALL EXTERIOR FRAMES, SASH, AND TRIM TO MATCH EXISTING. NEW WOOD COMPONENTS TO BE BACKPRIMED AND FIELD FINISHED.
- WHERE SASH ARE RESTORED IN PLACE, FILL MINOR HOLES AND SCRATCHES WITH PUTTY OR EPOXY. REPLACE WINDOW PUTTY WHERE DETERIORATED. SCRAPE OR STRIP PAINT, SAND, PRIME, AND PAINT EXTERIOR.
- WHERE SASH ARE REMOVED FROM SITE FOR RESTORATION:
  - REPAIR SASH TO MATCH EXISTING SIZE AND PROFILE OF COMPONENTS.
  - REPLACE SEVERELY DETERIORATED WOOD WITH NEW WOOD DUTCHMAN TO MATCH SPECIES.
  - ASSUM HEM-FIR, DOUGLAS FIR FOR NEW COMPONENTS. USE CLEAR GRADE, DECAY RESISTANT HEARTWOOD STOCK, WOOD GRAIN FINISH TO MATCH EXISTING.
  - WHERE PARTING BEADS ARE DAMAGED IN SASH REMOVAL, REPLACE TO MATCH EXISTING. REMOVE AND REINSTALL CASING AS REQUIRED.
  - INSTALL NEW GLAZING PUTTY WHERE DETERIORATED.
  - REPLACE GLAZING TO MATCH EXISTING WHERE CRACKED OR BROKEN.
  - SAND, PRIME, AND PAINT ALL EXTERIOR PORTIONS. PROVIDE (1) INTERIOR COLOR TO MATCH EXISTING.
  - REINSTALL WINDOW SASH, TRIM, WINDOW STOPS OR BEADS, AND FINAL PAINT AS REQUIRED.



DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-3.2	TITLE OF SHEET <b>REPAIR WORK ELEVATIONS</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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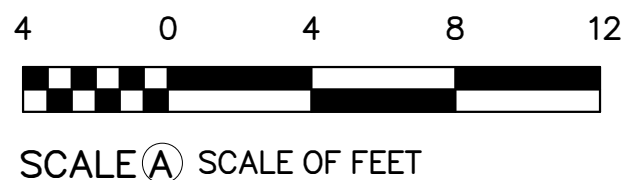
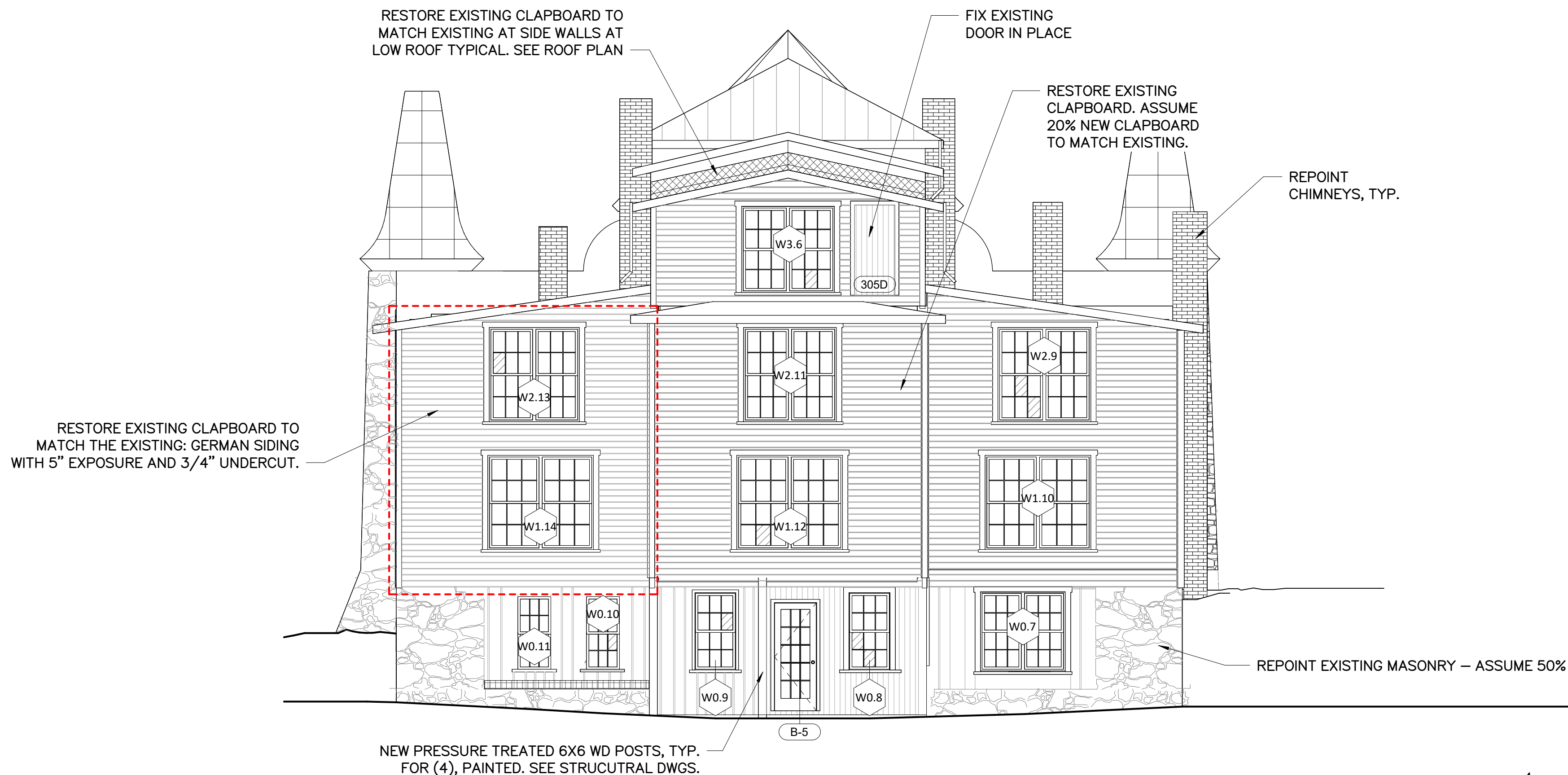


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1 REPAIR WORK – WEST ELEVATION  
A-3.3 SCALE (A)



2 REPAIR WORK – SOUTH ELEVATION  
A-3.3 SCALE (A)



REPAIR WORK LEGEND

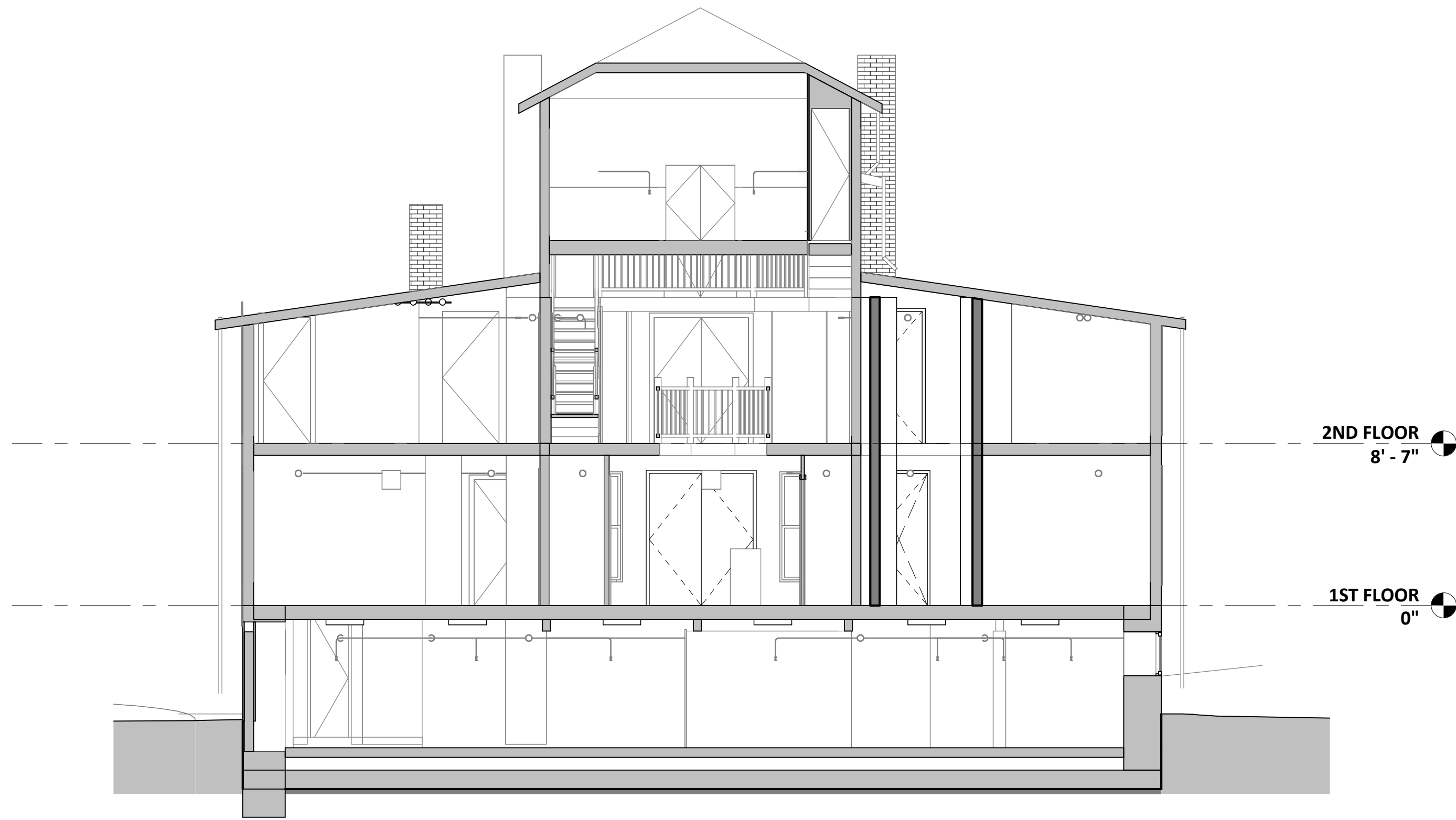
- REPLACE BROKEN WINDOW PANE
- RESTORE/REPLACE SASH WITH SALVAGED GLASS
- ASSUME 100% REPLACEMENT OF CLAPBOARDS WITH NEW TO MATCH EXISTING.
- REPLACE WOOD TRIM WITH NEW TO MATCH EXISTING. ASSUME 20% TRIM REPLACEMENT AT ALL OTHER AREAS.
- ROTTED AREAS OF EXTERIOR VERTICAL BOARD AND BATTEN OR VERTICAL BOARD INFILL AT GRADE.
- AREA OF RECENT CORNICE REPLACEMENT
- HSR: GERMAN SIDING WITH 4 1/2" TO 5" EXPOSURE AND 3/4" UNDERCUT
- HSR: GERMAN SIDING WITH 5" EXPOSURE AND 1 3/4" UNDERCUT
- HSR: GERMAN SIDING WITH 5" EXPOSURE AND 3/4" UNDERCUT. (LIKELY REPLACED AT SAME TIME AS SIDING ON THE SOUTHWEST ELEVATION)

FRAME & WINDOW REPAIR NOTES

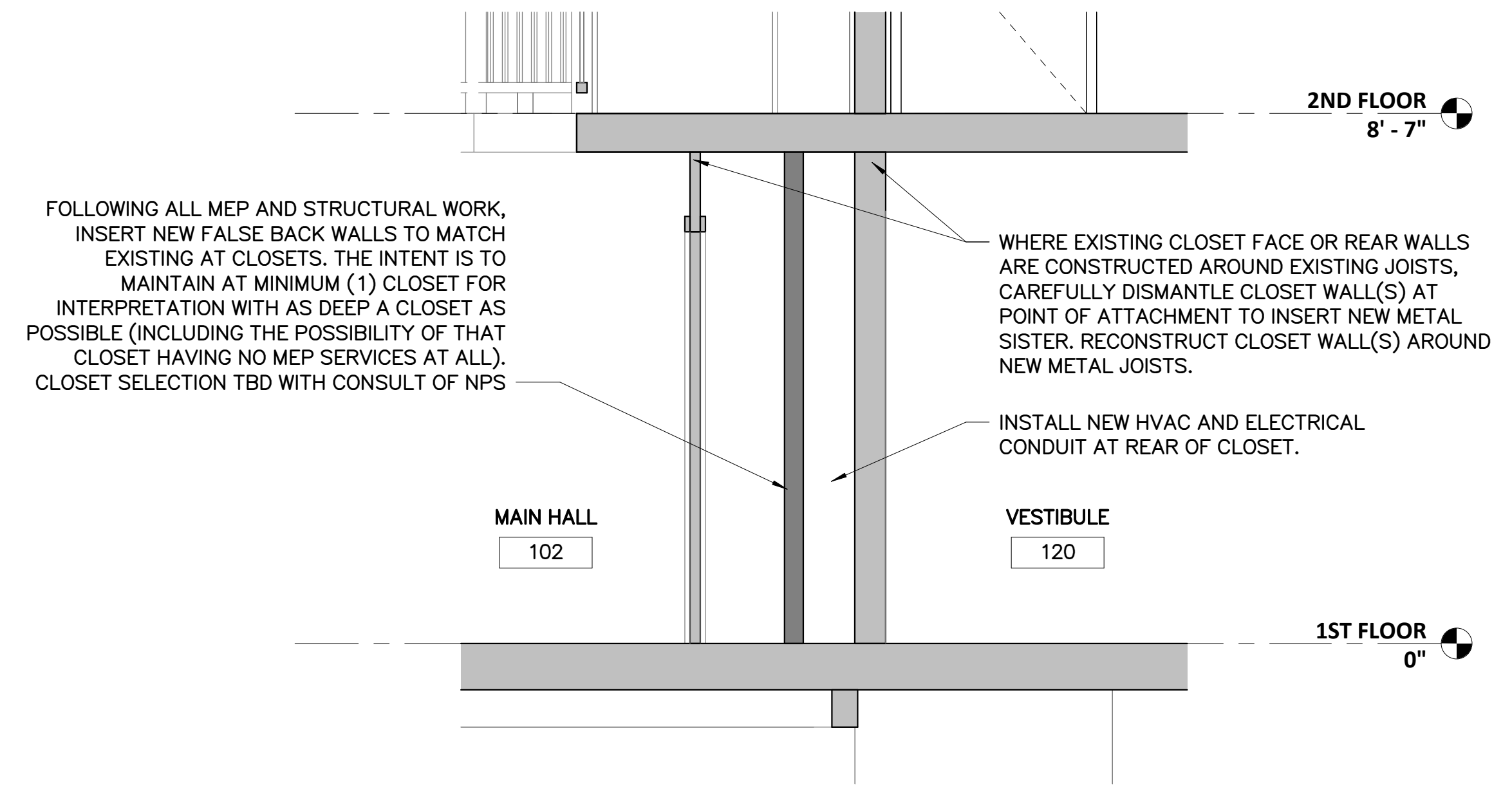
- REFER TO WINDOW SCHEDULE FOR REPAIR SCOPE. SOME WINDOWS WILL REQUIRE REMOVAL OF SASH FOR REPAIRS TO BE COMPLETED. RESTORE BOTH WINDOW & DOOR FRAMES.
- CONTRACTOR SHOULD BEGIN REMOVALS CAREFULLY AND REPORT DETERIORATED CONDITIONS AT HEADERS AND OTHER COMPONENTS TO ARCHITECT BEFORE PROCEEDING.
- PROVIDE PROTECTION TO OPENINGS WHERE SASH ARE REMOVED. DO NOT FASTEN PROTECTION TO HISTORIC WOOD FINISHES OR MASONRY. SUBMIT PROTECTION DESIGN FOR APPROVAL BY ARCHITECT PRIOR TO INSTALLATION.
- SCRAPE OR STRIP PAINT, FILL HOLES, SAND, PRIME & PAINT ALL EXTERIOR FRAMES, SASH, AND TRIM TO MATCH EXISTING. NEW WOOD COMPONENTS TO BE BACKPRIMED AND FIELD FINISHED.
- WHERE SASH ARE RESTORED IN PLACE, FILL MINOR HOLES AND SCRATCHES WITH PUTTY OR EPOXY. REPLACE WINDOW PUTTY WHERE DETERIORATED. SCRAPE OR STRIP PAINT, SAND, PRIME, AND PAINT EXTERIOR.
- WHERE SASH ARE REMOVED FROM SITE FOR RESTORATION:
  - REPAIR SASH TO MATCH EXISTING SIZE AND PROFILE OF COMPONENTS.
  - REPLACE SEVERELY DETERIORATED WOOD WITH NEW WOOD DUTCHMAN TO MATCH SPECIES.
  - ASSUM HEM-FIR, DOUGLAS FIR FOR NEW COMPONENTS. USE CLEAR GRADE, DECAY RESISTANT HEARTWOOD STOCK, WOOD GRAIN FINISH TO MATCH EXISTING.
  - WHERE PARTING BEADS ARE DAMAGED IN SASH REMOVAL, REPLACE TO MATCH EXISTING. REMOVE AND REINSTALL CASING AS REQUIRED.
  - INSTALL NEW GLAZING PUTTY WHERE DETERIORATED.
  - REPLACE GLAZING TO MATCH EXISTING WHERE CRACKED OR BROKEN.
  - SAND, PRIME, AND PAINT ALL EXTERIOR PORTIONS. PROVIDE (1) INTERIOR COLOR TO MATCH EXISTING.
  - REINSTALL WINDOW SASH, TRIM, WINDOW STOPS OR BEADS, AND FINAL PAINT AS REQUIRED.

DESIGNED: JA 	SUB SHEET NO.  A-3.3	TITLE OF SHEET <b>REPAIR WORK ELEVATIONS</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> <b>179603</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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1 CROSS SECTION THRU EXISTING  
A-4.0 SCALE (A)



3 SECTION THROUGH EXISTING MAIN HALL CLOSET (TYP)  
A-4.0 SCALE (A)

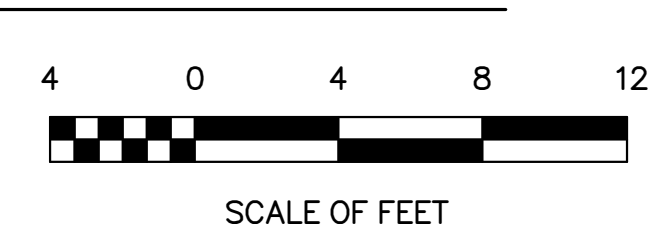


2 LONG SECTION THRU EXISTING  
A-4.0 SCALE (A)



THIS EXAMPLE DEMONSTRATES A CUSTOM ENCLOSURE FOR A FAN COIL UNIT. THE DESIGN INTENT IS TO BE COMPATIBLE WITH EXISTING HISTORIC ROOM FINISHES. SIZE AND LOCATION TO BE COORDINATED WITH FURNISHING AND EXHIBIT LAYOUT IN NEXT DESIGN PHASE.

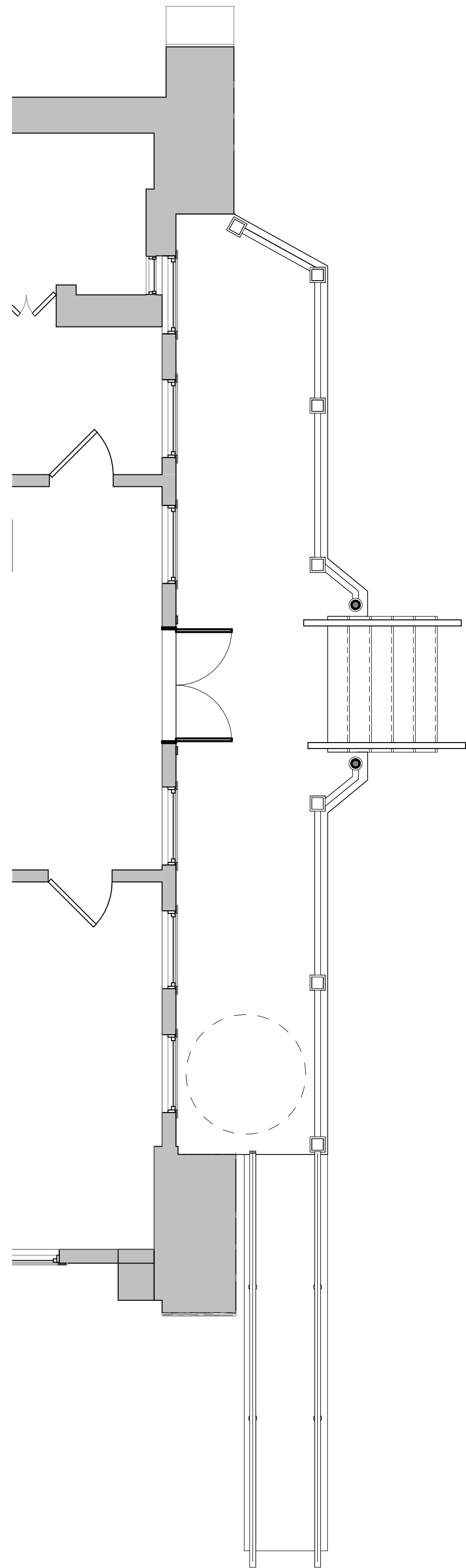
4 CUSTOM ENCLOSURE EXAMPLE FOR FCU  
A-4.0



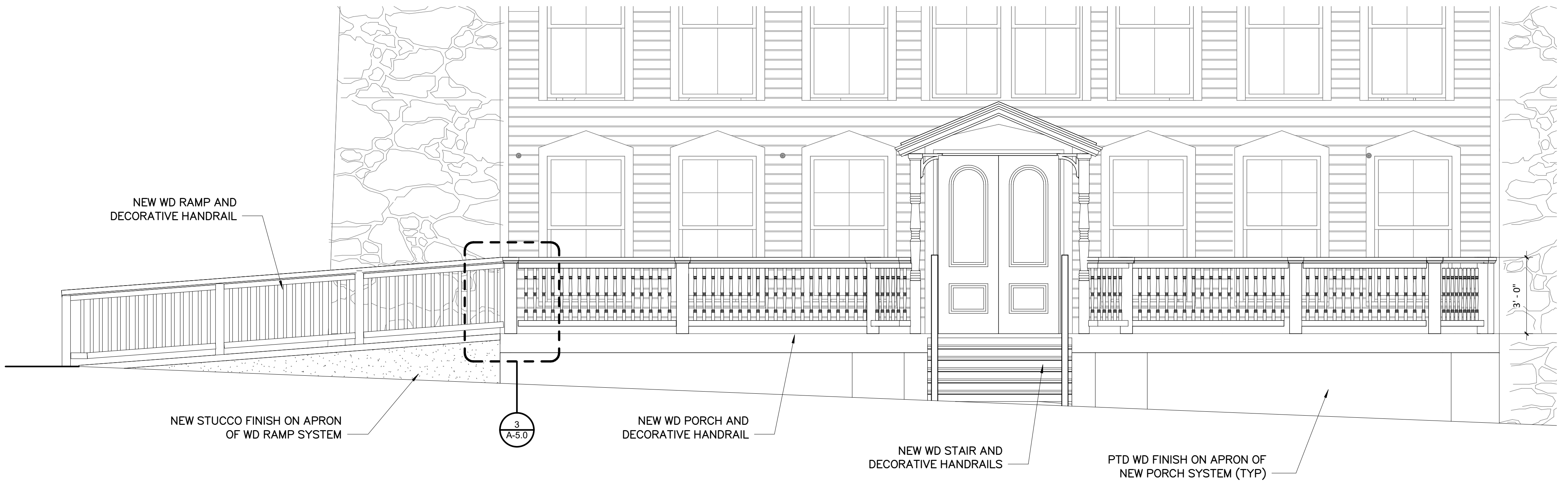
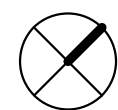
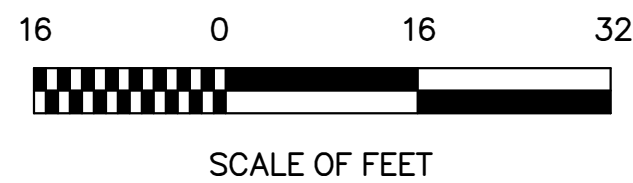
DESIGNED: JA SS	SUB SHEET NO. <b>A-4.0</b>	TITLE OF SHEET <b>PROPOSED SECTIONS</b>	DRAWING NO. <b>895</b> <b>179603</b>
TECH. REVIEW: MJM, MS		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	PMIS/PKG NO. 312325
DATE: 12/8/2023			SHEET OF <b>X</b>

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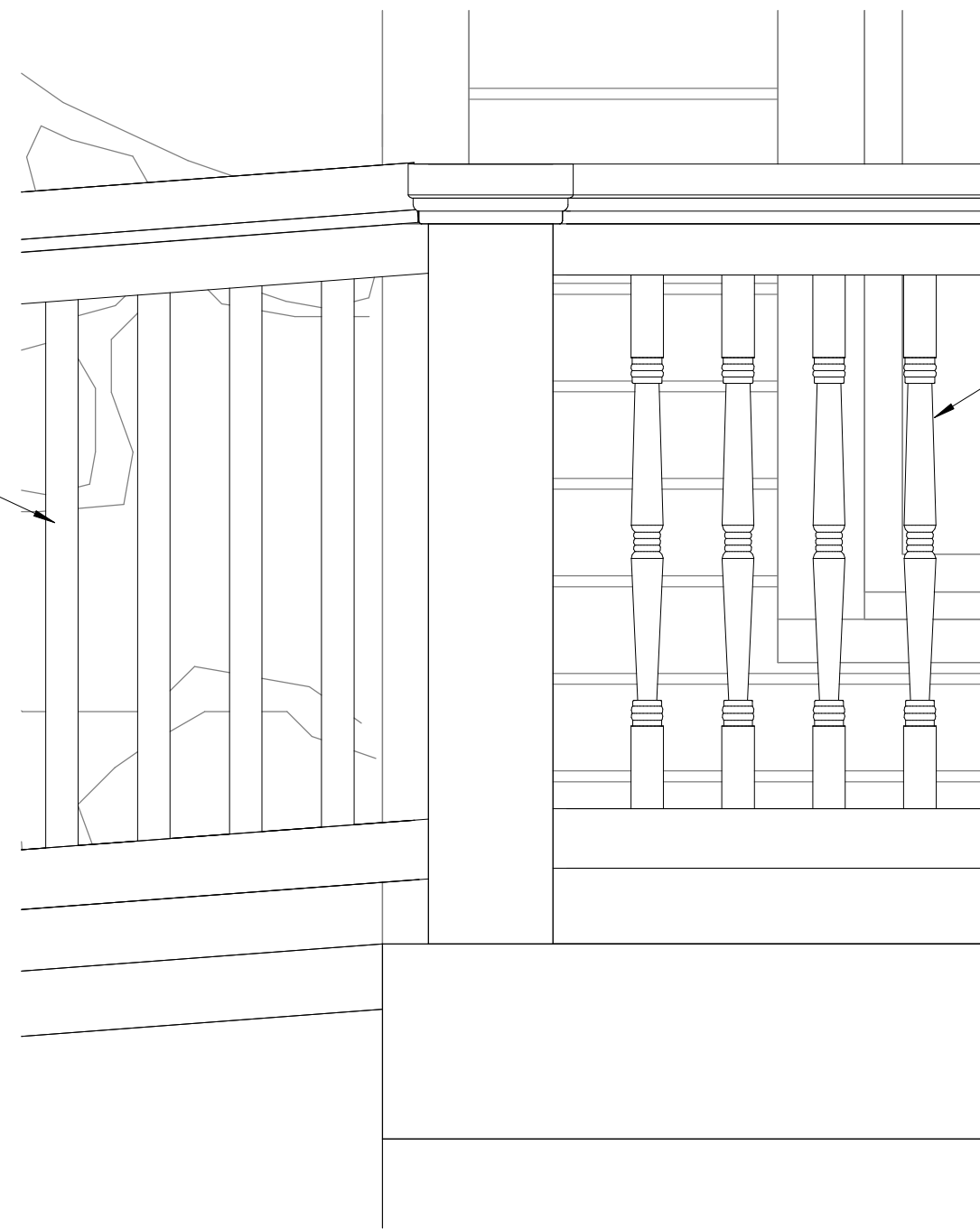


1 FRONT PORCH ENLARGED PLAN  
A-5.0 SCALE (A)



2 ENLARGED FRONT PORCH ELEVATION  
A-5.0 SCALE (A)

NEW DECORATIVE WD HANDRAIL AT NEW RAMP. DESIGN INTENT IS TO CONTINUE THE ADJACENT PORCH RAILING HEIGHT AND PICKET SPACING TO SHOW THAT RAILING COMPONENTS ARE DIFFERENTIATED. RAILS AND PICKET PROFILES TO BE DEVELOPED IN DESIGN DEVELOPMENT PHASE.



NEW DECORATIVE WD HANDRAIL AT NEW PORCH. DESIGN INTENT IS TO ALLUDE TO THE HISTORIC FRONT PORCH DESIGN.

3 ENLARGED RAILING ELEVATION AT RAMP AND PORCH RAIL  
A-5.0 SCALE (A)


DESIGNED: JA SS TECH. REVIEW: MJM, MS DATE: 12/8/2023	SUB SHEET NO.  A-5.0	TITLE OF SHEET <b>FRONT PORCH PLAN AND ELEVATION</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING NO. <b>895</b> 179603 PMIS/PKG NO. 312325 SHEET OF <b>X</b>
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DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
JA		DOOR SCHEDULE	895
CADD			179603
SS	A-6.0	REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	PMIS/PKG NO.
TECH. REVIEW:			312325
MJM, MS			SHEET
DATE:			OF X
12/8/2023			

EXISTING WINDOW CONDITIONS SCHEDULE									
WINDOW #	TYPE	CONDITION	BROKEN PANES	BROKEN CORDS	STOPS	RAIL	FINISH NOTES	SCREEN	HARDWARE NOTES
W0.1	(1) 6-lite fixed	Fair							
W0.2	(1) 6-lite fixed	Fair							
W0.3	(1) 6-lite fixed	Fair	1						
W0.4	(1) 6-lite fixed	Fair							
W0.5	(2) 6-lite fixed	Fair							
D0.1	Bead board door	Fair							
D0.2	Bead board door	Fair							
W0.6	(2) 6/6 double-hung	Poor							
W0.7	(2) 6/6 double-hung	Fair							Storm/Screen hardware present at top
W0.8	6/6 double-hung	Fair	2					Poor condition	
D0.3	15-lite	Fair						Screen	
W0.9	6/6 double-hung	Fair	1						
W0.10	6/6 double-hung	Fair	1			Rot at sill			
W0.11	6/6 double-hung	Fair					Putty loss; lead paint		
W0.12	6/6 double-hung	Fair	1						
D0.4	Pair of Plain Board doors with windows in each leaf	Fair							
W0.13	(1) 6-lite fixed - wide frame	Fair	1						
D0.5	Bead board paird doors	Rot at frame; open CMU at sill				Wood below plain boards			
W0.14	(1) 6-lite fixed	Fair				Wood below			
W0.15	(2) 6-lite fixed	Hose bibb at center mullion				Wood below			
W0.16	(1) 6-lite fixed	Fair				Wood below			
W0.17	(2) 6-lite fixed	Poor	1			Conc sill below wood sill	Mud runoff		
W1.1	6/6 double-hung	Fair	1					Screen	Porcelain knob sash lock
W1.2	6/6 double-hung	Fair		1					
W1.3	(2) 6/6 double-hung	Fair	1	1				Screen at left sash only	Rusted sash lock
W1.4	6/6 double-hung	Poor	2		Gaps at stop				Rusted sash limiter
W1.5	6/6 double-hung	Fair			Gaps at stop				No sash lock; sash limiter
W1.6	6/6 double-hung	Fair	3			Poor at bottom rail			
W1.7	6/6 double-hung	Fair	3				Crazed paint finish / transparent finish at trim		Rusted sash lock
W1.8	6/6 double-hung	Fair	2						
W1.9	6/6 double-hung	Fair							
W1.10	(2) 6/6 double-hung				Split stop; gap at stops	Poor at bottom rail			
W1.11	6/6 double-hung								
W1.12	(2) 6/6 double-hung		1			Poor at bottom rail			
W1.13	6/6 double-hung								
W1.14	(2) 6/6 double-hung					Poor at bottom rail, but salvageable			
W1.15	6/6 double-hung	Fair				Water infiltration			Rusty sash lock
W1.16	6/6 double-hung	Fair	1				Unpainted jamb		Sash limiter
W1.17	6/6 double-hung	Fair	1				Interior sill poor		
W1.18	6/6 double-hung	Fair	1	2			Dirt at interior sill		
W1.19	6/6 double-hung	Fair	1	1			Unpainted jamb		
W1.20	6/6 double-hung	Fair			Gaps at stops		Unpainted jamb		
W1.21	6 lite awning	Fair	1			Gaps around window frame; gaps to exterior		interior screen	
W1.22	6/6 double-hung	Fair			Gaps at stops		Unpainted jamb	screen	
W1.23	4/2 DH blind, small int casement	Fair							
W1.24	4/2 double-hung	Fair							sash lock with porcelain knob
W1.25	4/2 double-hung	Fair	1				transparent finish	screen - poor	regular sash lock
W1.26	4/2 double-hung	Fair	1	2			transparent finish		old sash lock
W1.27	4/2 double-hung	Fair						screen	rusty sash lock
W1.28	4/2 double-hung	Fair						screen	regular sash lock
W2.1	6/6 double-hung	Fair						screen	
W2.2	6/6 double-hung	Fair	1					screen	
W2.3	6/6 double-hung	Fair	1					screen	
W2.4	6/6 double-hung	Poor					Dirt/water infiltration		
W2.5	6/6 double-hung	Fair						screen	
W2.6	6/6 double-hung	Fair						screen	
W2.7	6/6 double-hung	Fair						screen	
W2.8	6/6 double-hung	Fair	1					screen	
W2.9	(2) 6/6 double-hung	Poor	2						
W2.10	6/6 double-hung	Good					white paint at interior		no locks; new pulley
W2.11	(2) 6/6 double-hung	Good					white paint at interior		no locks; new pulley
W2.12	6/6 double-hung	Good					white paint at interior		no locks; new pulley
W2.13	6/6 double-hung	Fair	1				white paint at interior		no locks; new pulley
W2.14	6/6 double-hung	Good					white paint at interior		no locks; new pulley
W2.15	6/6 double-hung	Good					white paint at interior		no locks; new pulley
W2.16	6/6 double-hung	Fair	1				unpainted jamb		
W2.17	6/6 double-hung	Fair		1	Gaps at stops		unpainted jamb		
W2.18	6/6 double-hung	Fair	2			Bottom rail damage	unpainted jamb		
W2.19	6/6 double-hung	Fair			Gaps at stops		unpainted jamb		
W2.20	Fixed multi-lite	Fair					transparent finish		
W2.21	(2) 6/6 double-hung		3	1			transparent finish		
W2.22	4/2 double-hung	Poor				Bottom rail poor			
W2.23	4/2 double-hung	Poor				Top sash total loss, rot at bottom rail			
W2.24	4/2 double-hung	Poor	1			Top sash putty failure, rot at bottom rail	transparent finish		
W2.25	4/2 double-hung	Poor				Rot at bottom rail	transparent finish		
D2.1	4/2 casement					Astragal & bot. rail poor	transparent finish		Top and mid slide bolts - brass; bottom latch
W2.26	4/2 double-hung	Poor	1			Rot at bottom rail	transparent finish		
W2.27	4/2 double-hung	Poor				Rot at bottom rail			sash limiter
W2.28	4/2 double-hung	Poor	1			Open joints at bot. rail			sash limiter
W3.1	(5) 6/6; 4/4; 6/6; 4/4; 6/6	Poor	6			Poor bottom rails	Water infiltration		
W3.2	(4) 6-lite; 2/2 casement; 6-lite; 4-lite fixed	Fair	2				worn	screen at casement	
W3.3	(3) 6/6; 4/4; 6/6	Poor	5	No cords			paint on glass	screen at right	
W3.4	(5) 4 lite pivot; 6 lite fixed; 4 lite pivot; 6 lite fixed; 4 lite fixed	Fair							
W3.5	(5) 6/6; 4/4; 6/6; 4/4; 6/6	Poor	17						
W3.6	(2) 6/2	Fair	1						
W3.7	(4) 6/6; 4/4; 4/4; 6/6	Fair	3				Poor finish		
W3.8	(5) 4 lite fixed; 6 lite fixed; 4 lite pivot; 6 lite fixed; 4 lite fixed	Fair	3			Worn rails and muntins		Screen casement at sash	
W3.9	(2) 6/6; 4/4; 6/6	Fair	2			Separation/wear at muntin	Poor finish	Screen at 6/6	
W3.10	(5) 2/2 pivot; 6 lite fixed; 2/2 casement; 6 lite fixed; 2/2 fixed	Fair	4			Separated bottom rail	worn	screen at casement	
W3.11	(5) DH sash; (3) 6/6; (2) 4/4	Poor	3			Muntins deteriorated	transparent finish		
W3.12	(1) 2/2	Poor	1						
W3.13	Red Cross 9/2 DH + casement	Fair							
W3.14	(1) 2/2	Poor							

DESIGNED:  
JA



SS

TECH. REVIEW:  
MJM, MS

DATE:  
12/8/2023

SUB SHEET NO.  
  

A-6.1

TITLE OF SHEET  
**WINDOW SCHEDULE**  
  
REHABILITATE CLARA BARTON NATIONAL  
HISTORIC SITE

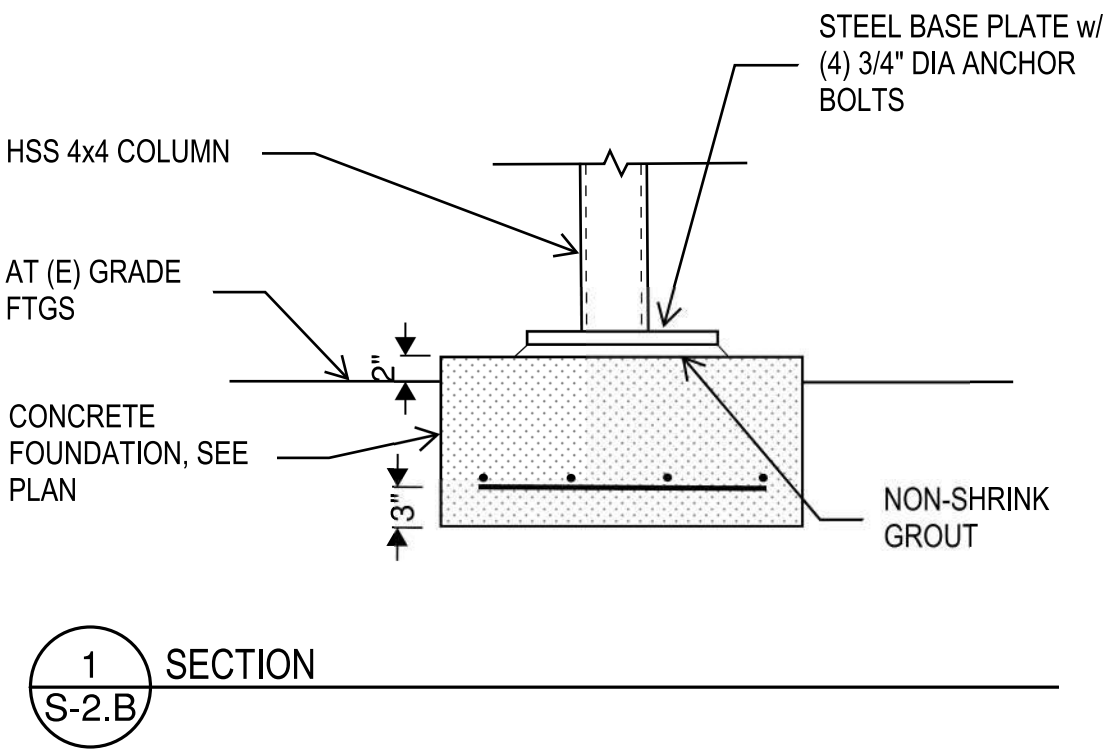
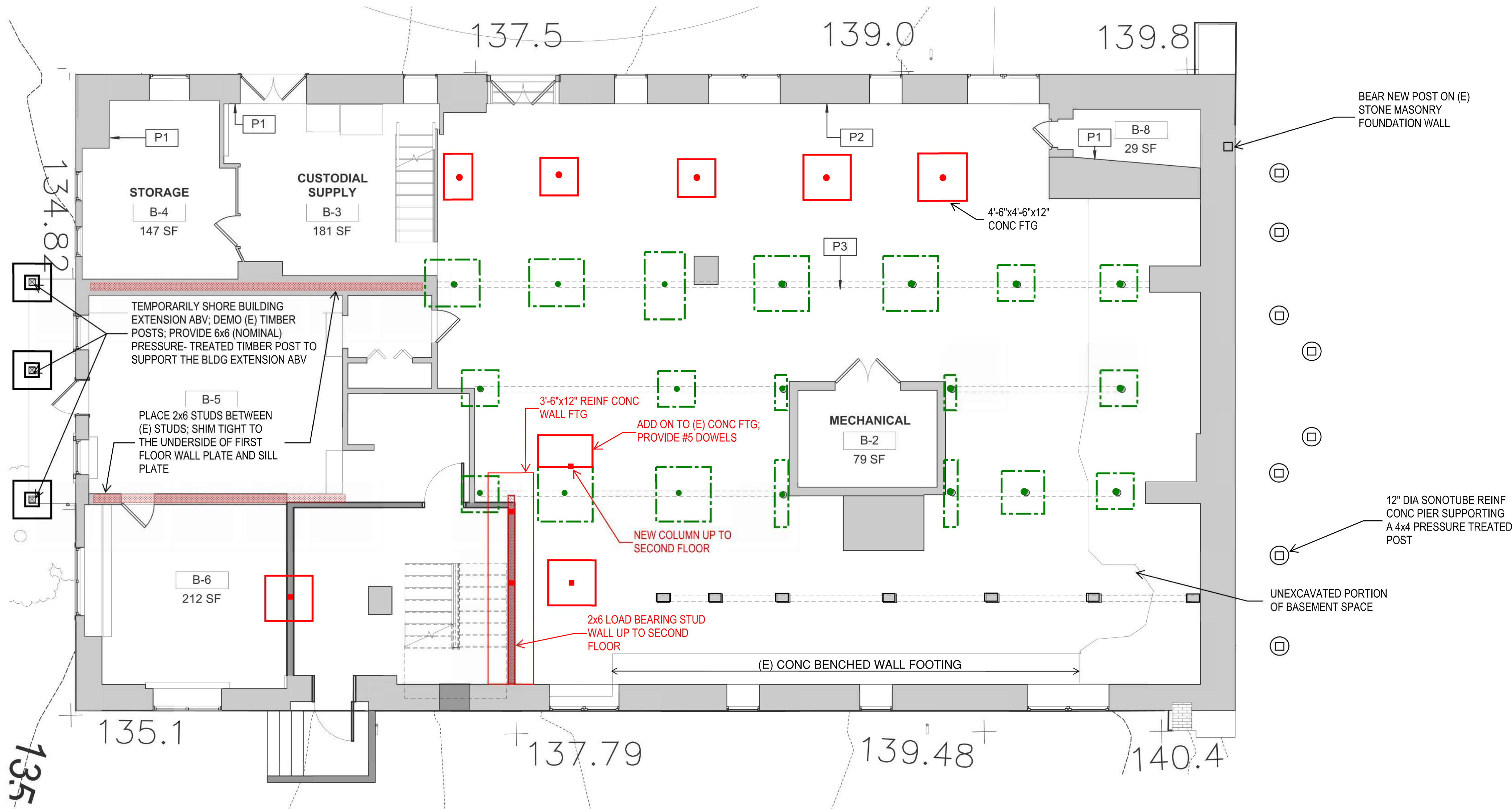
DRAWING NO.  
**895**  
**179603**  
PMIS/PKG NO.  
312325  
SHEET  
OF **X**



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KEY:

- Indicates a HSS 4" diameter steel column bearing on a new foundation up to the underside of the W6 steel beam below the first floor steel framing.
- Indicates an existing steel column.
- Indicates new 12" thick reinforced concrete footing; assume average footing dimensions of 4'-6" square. See typical detail.
- Indicates an existing concrete foundation.
- Indicates the demolition of an existing CMU pier. Provide temporary shoring to allow the installation of new footing and steel column.
- Indicates a 4'-0"x4'-0"x12" reinforced concrete footing (-3'-0") with a 12"x12" reinforced concrete pier supporting a new 6x6 pressure treated timber post.
- Indicates a HSS 4x4 steel column inserted from a new foundation up through the floor framing to the underside of the second floor.



SCHEMATIC PLAN MARKUPS BY KEAST & HOOD  
STRUCTURAL ENGINEERS  
DATE OF SUBMISSION: 7/14/2023  
ARCH PLANS BY MILLS + SCHNOERING ARCHITECTS, LLC  
FOR COORDINATION AND ESTIMATION  
NOT FOR CONSTRUCTION

1 PROPOSED BASEMENT & FOUNDATION PLAN



DESIGNE D: KF	SUB SHEET NO.  S-2.B	TITLE OF PROPOSED BASEMENT & FOUNDATION PLAN ALTERNATIVE 2 CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING 895 179603 PMIS/PKG 312325 SHEET 0 X
SS			
TECH. REVIEW: MS			
DATE 10/28/2022			



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KEY:

Indicates a W6 steel beam installed just below the existing floor framing. Provide shims between the top of steel and the underside of the existing wood floor framing.

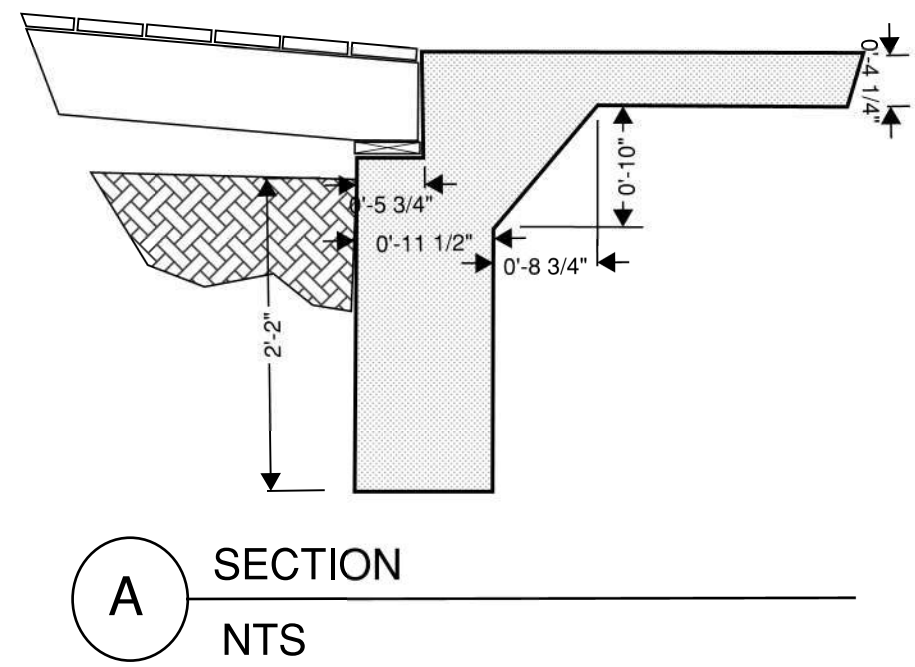
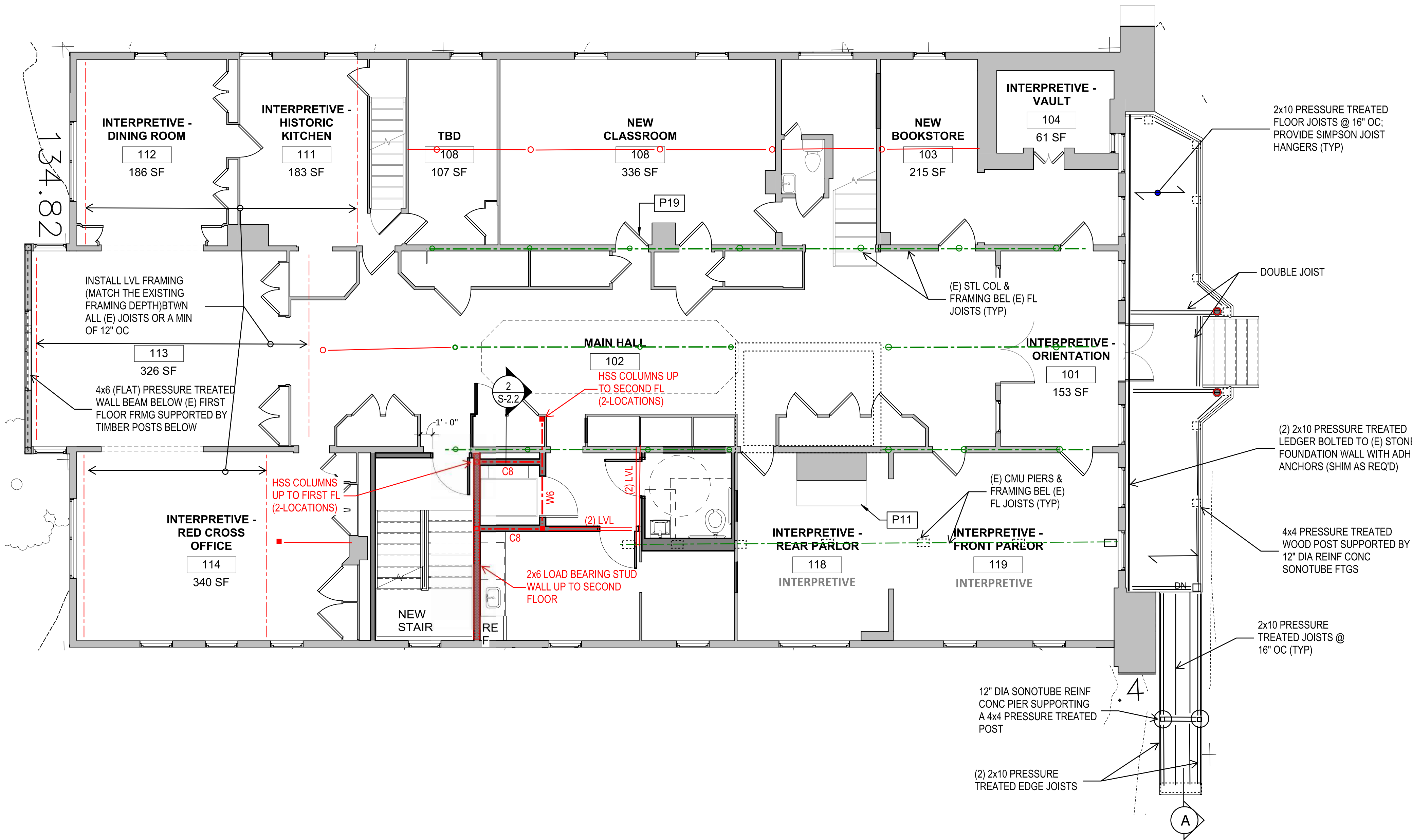
Indicates an existing W6 steel beam or timber beam installed below the existing first floor joist.

Indicates a HSS 4" diameter steel column bearing on a new foundation up to the underside of the W6 steel beam below the first floor steel framing.

Indicates an existing steel column below.

Indicates a HSS 4x4 steel column inserted from a new foundation up through the floor framing to the underside of the second floor.

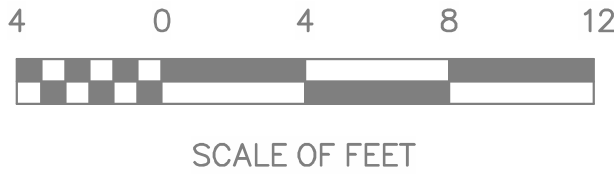
2x6 Load bearing wall; space studs at 16" on-centers.



SCHEMATIC PLAN MARKUPS BY KEAST & HOOD  
STRUCTURAL ENGINEERS  
DATE OF SUBMISSION: 7/14/2023  
ARCH PLANS BY MILLS + SCHNOERING ARCHITECTS, LLC  
FOR COORDINATION AND ESTIMATION  
NOT FOR CONSTRUCTION

1 PROPOSED FIRST FLOOR FRAMING

SCALE: 3/16" = 1'-0"



DESIGNED:  
TECH. REVIEW:  
DATE:  
10/28/2022

SUB SHEET NO.  
S-2.1

TITLE OF SHEET  
PROPOSED FIRST FLOOR  
FRAMING PLAN  
ALTERNATIVE 2  
CLARA BARTON  
NATIONAL HISTORIC SITE  
CLBA

DRAWING NO.  
895  
179603  
PMIS/PKG NO.  
312325  
SHEET  
OF X



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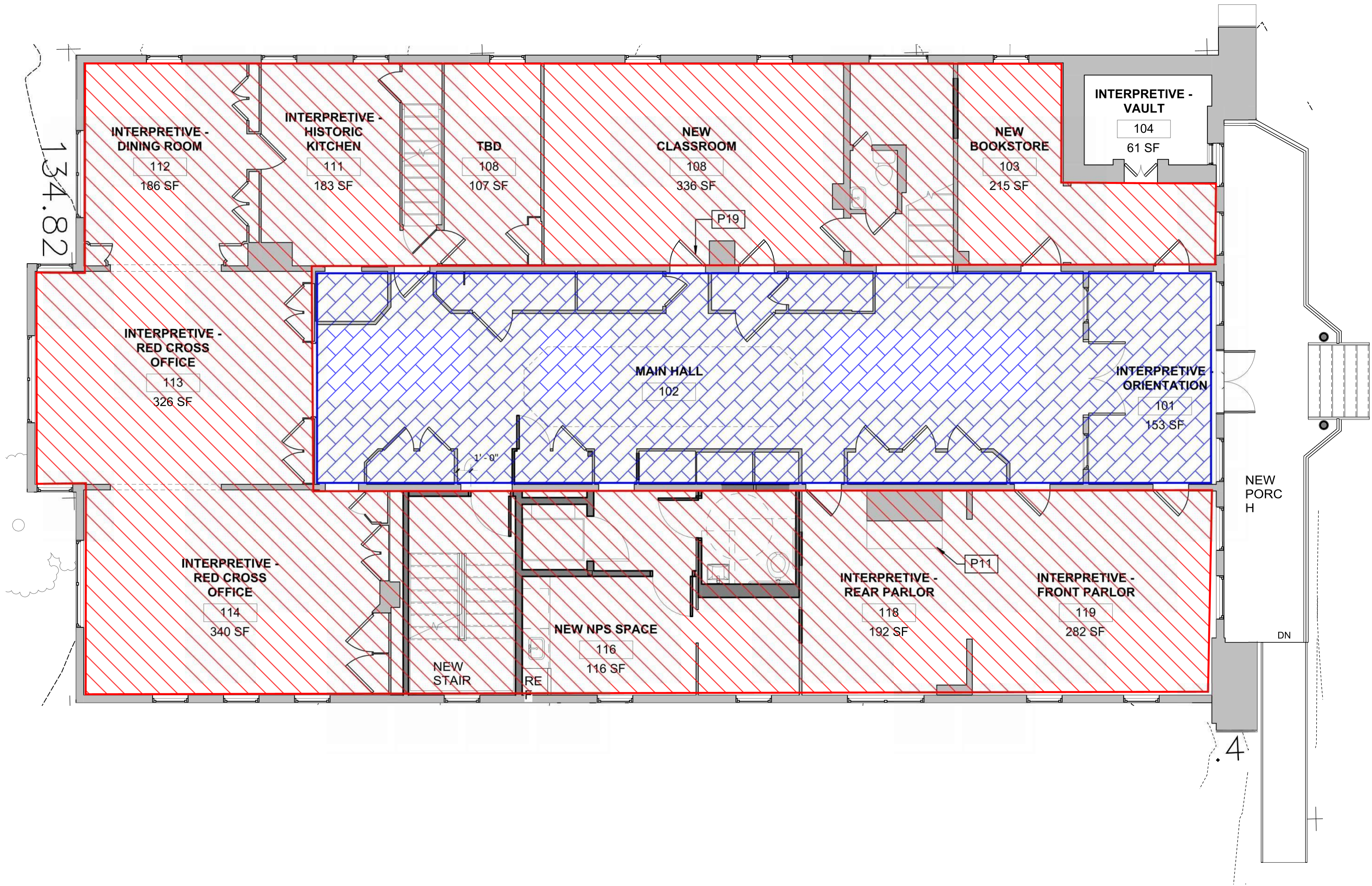
KEY:



Proposed live load: 100psf



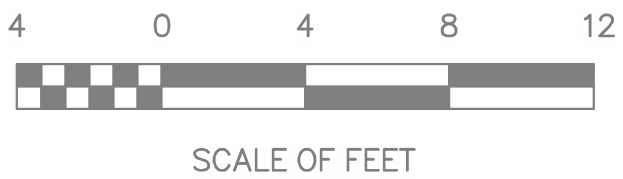
Proposed live load: 50psf + 15psf  
(partition loading)



SCHEMATIC PLAN MARKUPS BY KEAST & HOOD  
STRUCTURAL ENGINEERS  
DATE OF SUBMISSION: 7/14/2023  
ARCH PLANS BY MILLS + SCHNOERING ARCHITECTS, LLC  
FOR COORDINATION AND ESTIMATION  
NOT FOR CONSTRUCTION

1 PROPOSED FIRST FLOOR FRAMING

SCALE: 3/16" = 1'-0"



DESIGNED:  
CADD  
TECH. REVIEW:  
DATE:  
10/28/2022

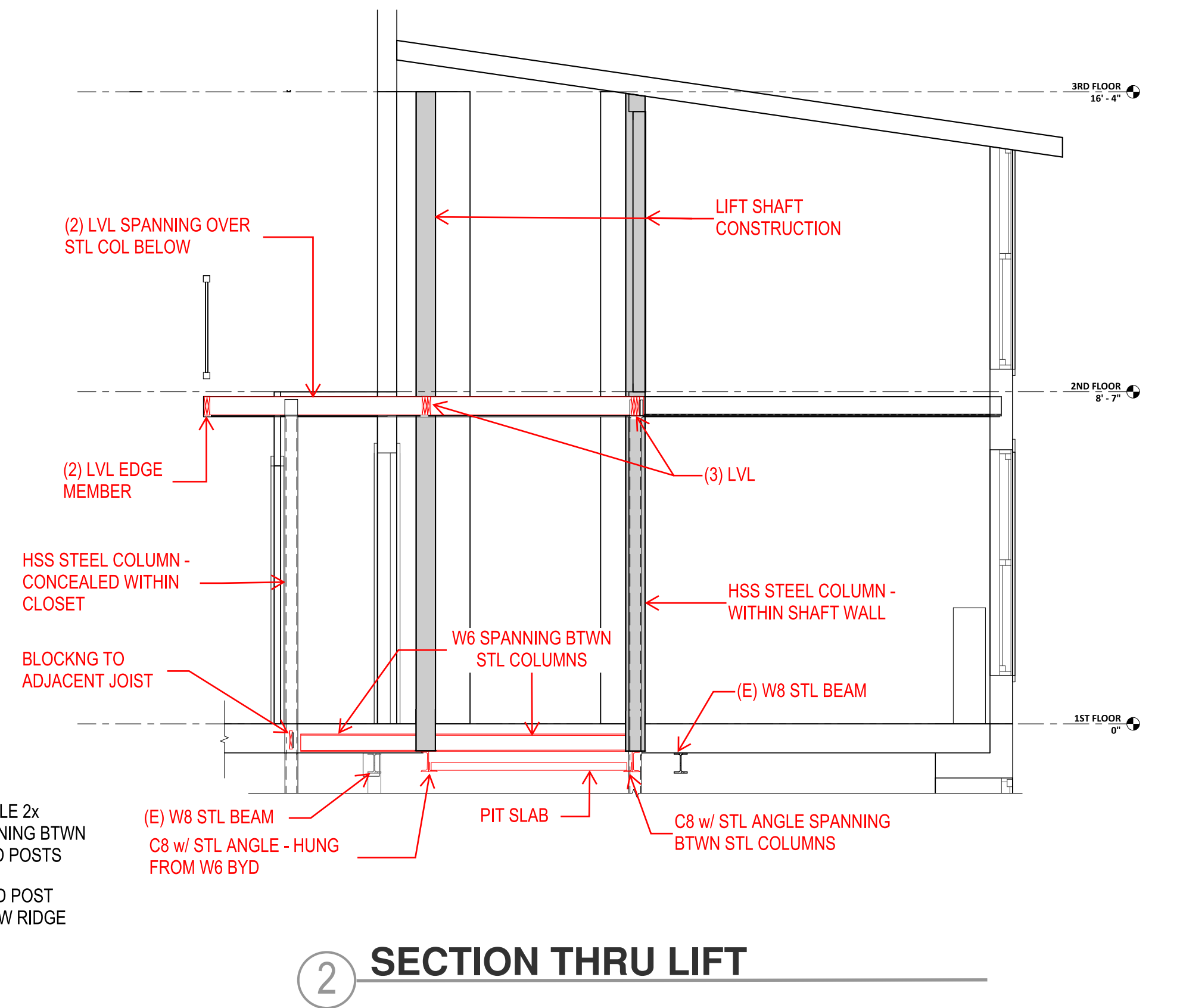
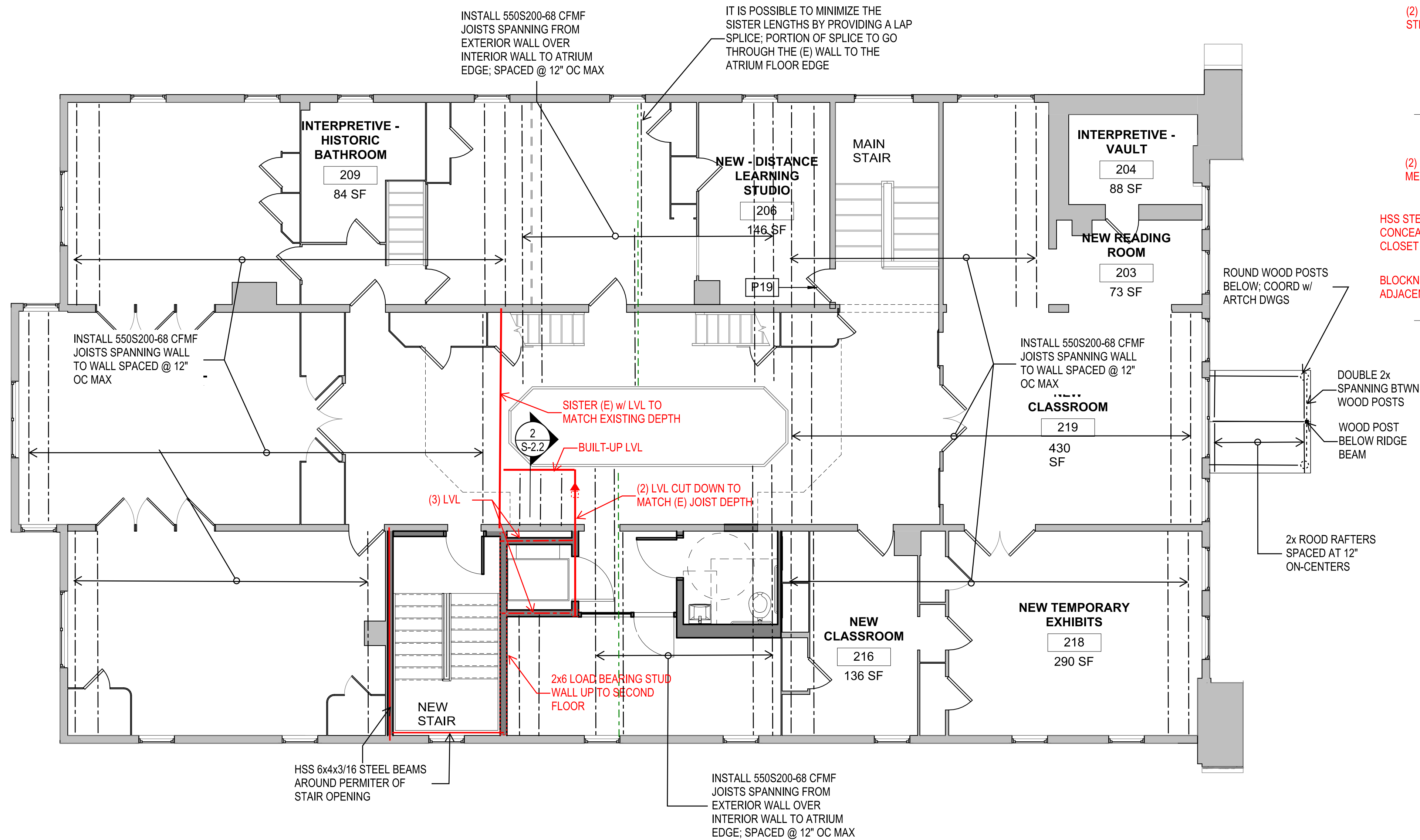
SUB SHEET NO.  
S-2.1A

TITLE OF SHEET  
PROPOSED FIRST FLOOR  
PROPOSED LIVE LOADS  
ALTERNATIVE 2  
CLARA BARTON  
NATIONAL HISTORIC SITE  
CLBA

DRAWING NO.  
895  
179603  
PMIS/PKG NO.  
312325  
SHEET  
OF X

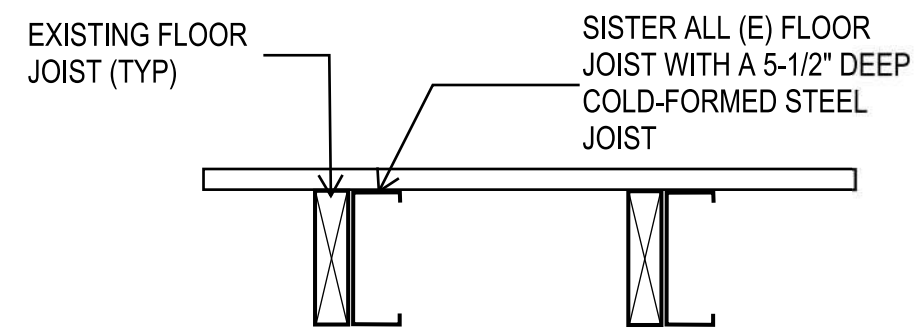


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## 1 PROPOSED SECOND FLOOR FRAMING

SCALE: 3/16" = 1'-0"



A SECTION - SISTERING  
NTS

## KEY:

- Indicates a HSS 4x4 steel column inserted from a new foundation up through the floor framing to the underside of the second floor.
- Indicates a double LVL joist spanning between existing load bearing walls.
- Indicates the cantilevered beam to atrium edge; possible moment connection at column.

4 0 4 8 12  
SCALE OF FEET

SCHEMATIC PLAN MARKUPS BY KEAST & HOOD  
STRUCTURAL ENGINEERS  
DATE OF SUBMISSION: 7/14/2023  
ARCH PLANS BY MILLS + SCHNOERING ARCHITECTS, LLC  
FOR COORDINATION AND ESTIMATION  
NOT FOR CONSTRUCTION

DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
CADD	S-2.2	PROPOSED SECOND FLOOR FRAMING PLAN ALTERNATIVE 2	895 179603
TECH. REVIEW:		CLARA BARTON NATIONAL HISTORIC SITE CLBA	PMIS/PKG NO. 312325
DATE: 10/28/2022			SHEET OF X



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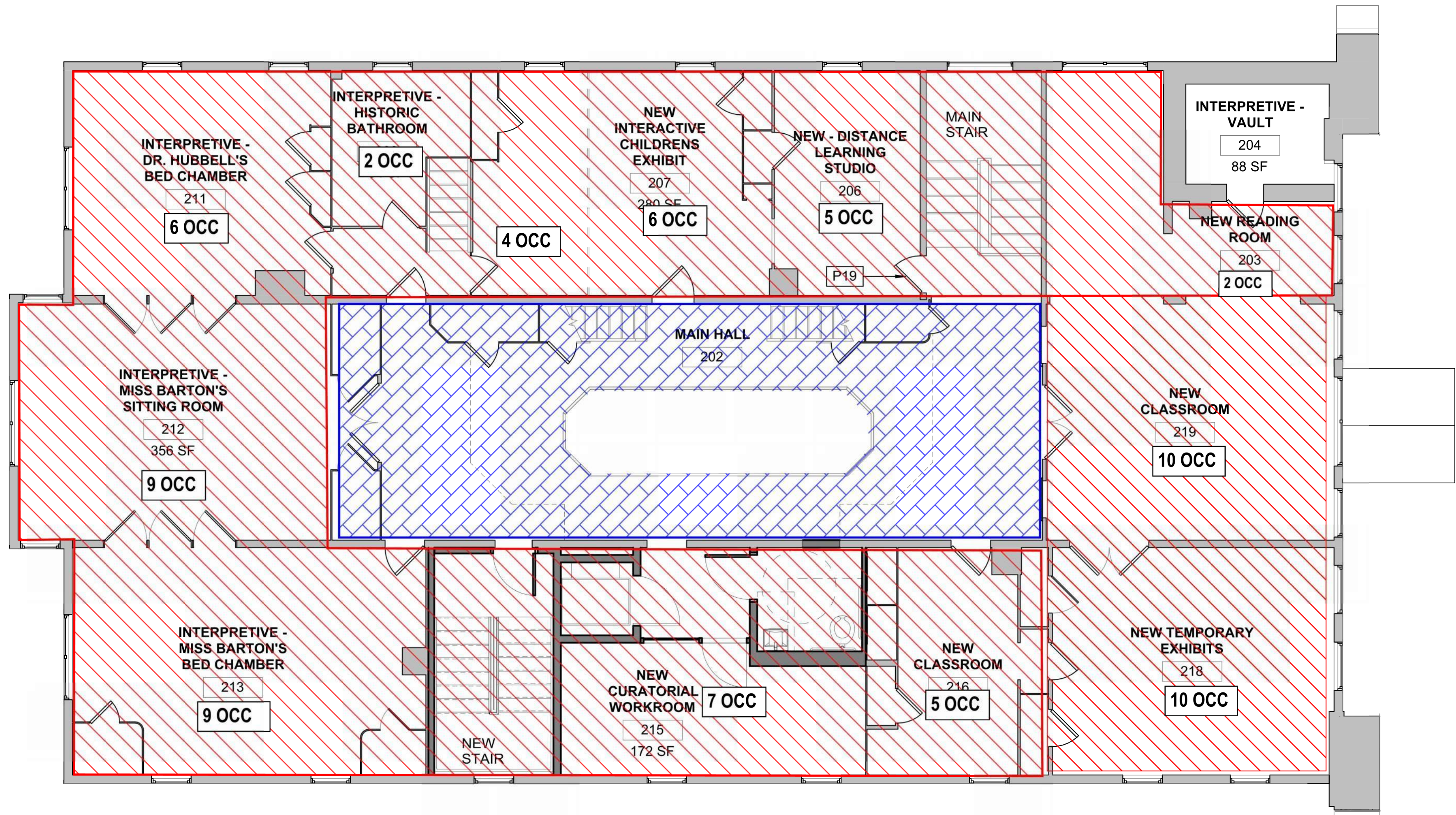
KEY:



Proposed live load: 60 psf



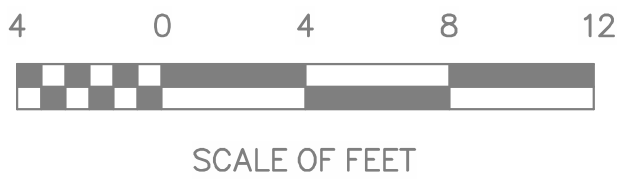
Proposed live load: 40 psf



SCHEMATIC PLAN MARKUPS BY KEAST & HOOD  
STRUCTURAL ENGINEERS  
DATE OF SUBMISSION: 7/14/2023  
ARCH PLANS BY MILLS + SCHNOERING ARCHITECTS, LLC  
FOR COORDINATION AND ESTIMATION  
NOT FOR CONSTRUCTION

1 EXISTING SECOND FLOOR FRAMING

SCALE: 3/16" = 1'-0"



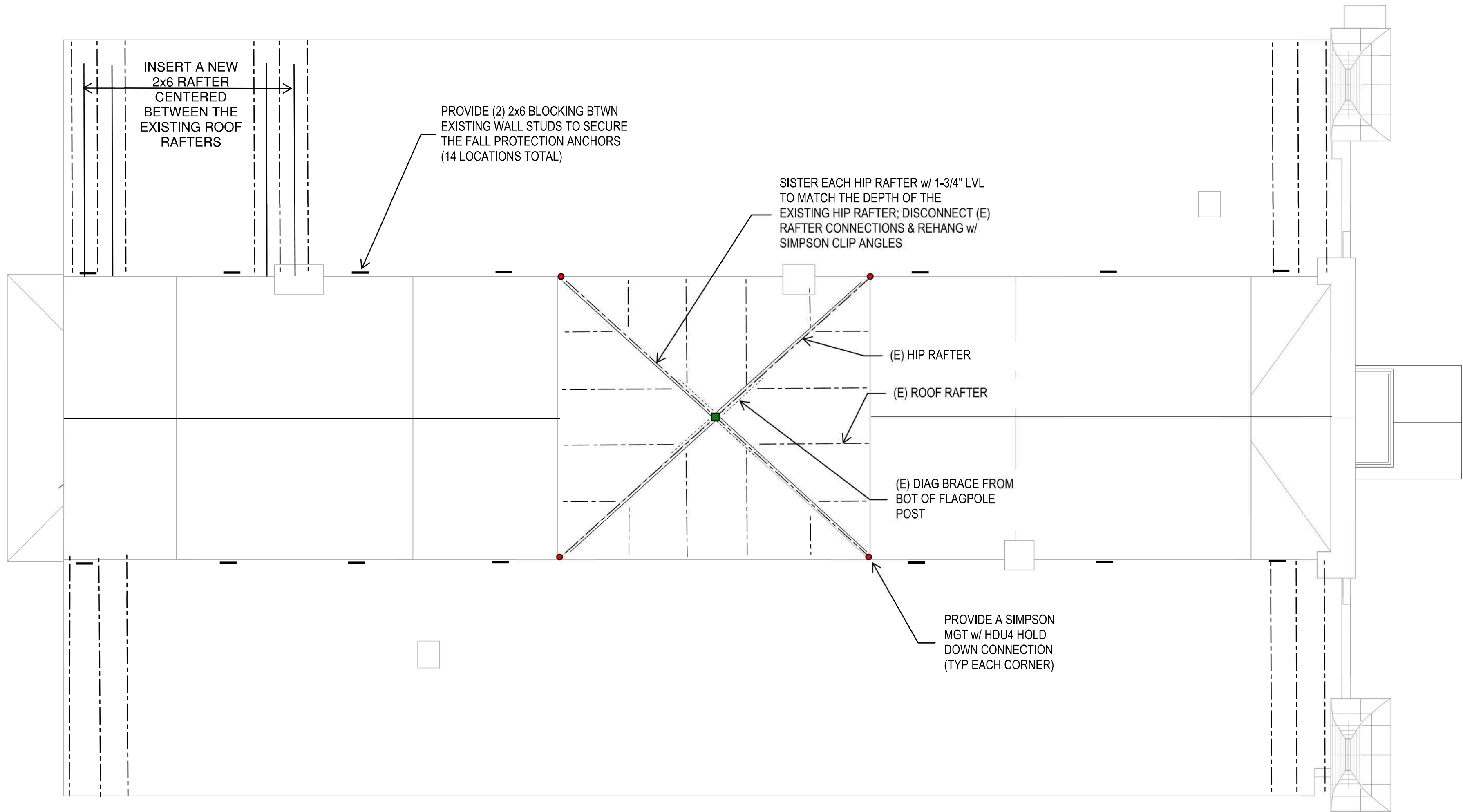
DESIGNED:  
CADD  
TECH. REVIEW:  
DATE:  
10/28/2022

SUB SHEET NO.  
S-2.2A

TITLE OF SHEET  
PROPOSED SECOND FLOOR LIVE  
LOADS & OCCUPANCY  
ALTERNATIVE 2  
CLARA BARTON  
NATIONAL HISTORIC SITE  
CLBA

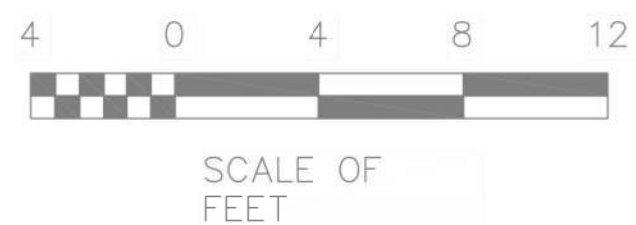
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179603  
PMIS/PKG NO.  
312325  
SHEET  
OF X





**1** PROPOSED ROOF FRAMING

SCALE: 3/16" = 1'-0"



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STRUCTURAL ENGINEERS  
DATE OF SUBMISSION: 7/14/2023  
ARCH PLANS BY MILLS + SCHNOERING ARCHITECTS, LLC  
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NOT FOR CONSTRUCTION

DESIGNED: KF	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
SS	S-2.R	PROPOSED ROOF FRAMING PLAN ALTERNATIVE 2	895 179603
TECH. REVIEW: MS		CLARA BARTON NATIONAL HISTORIC SITE CLBA	PMIS/PKG NO. 312325
DATE: 10/28/2022			SHEET OF X



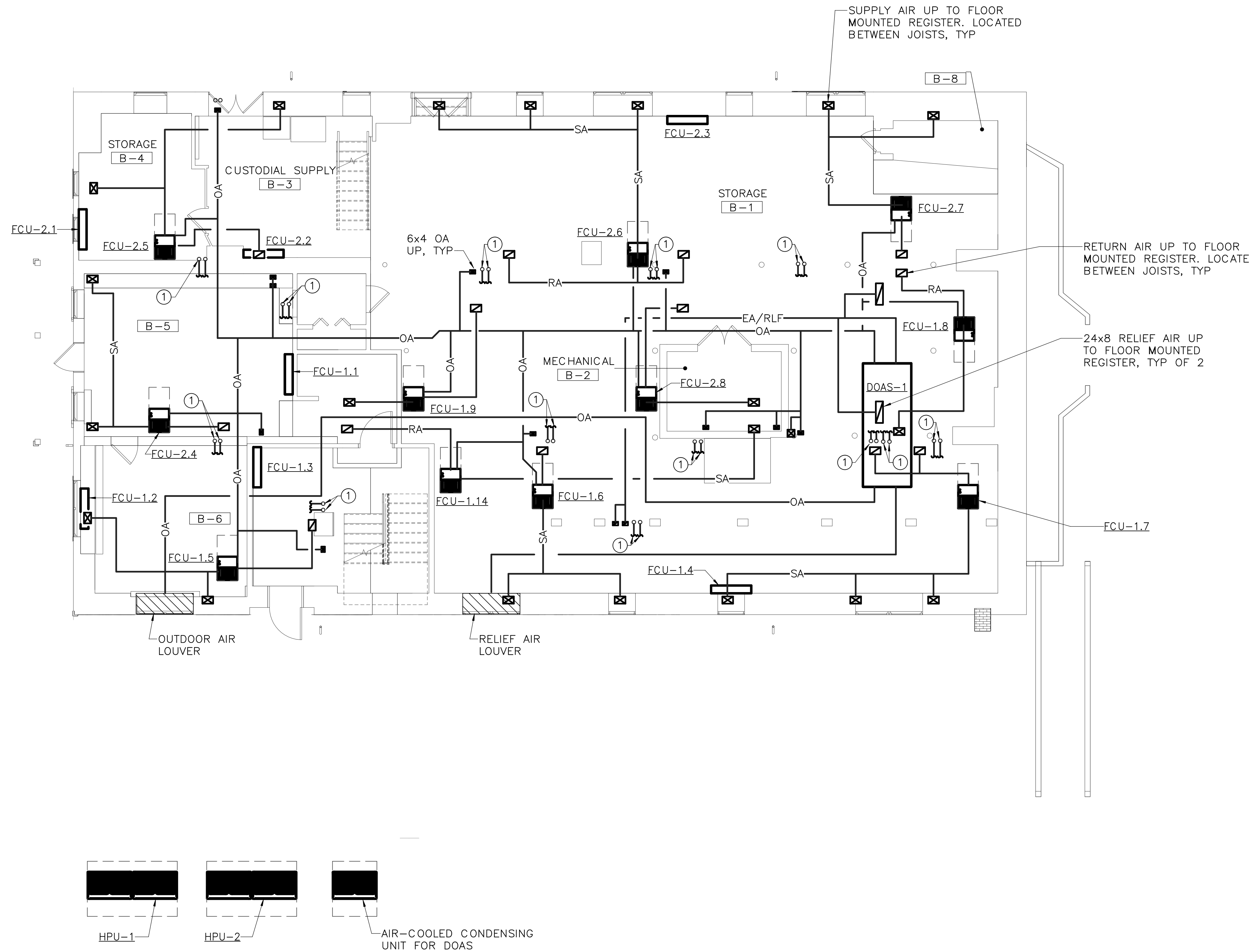
MECHANICAL ABBREVIATIONS			
(APPLICABLE TO ALL MECHANICAL DRAWINGS)			
AFF	ABOVE FINISHED FLOOR	KW	KILOWATTS
AHU	AIR HANDLING UNIT		
ALT	ALTERNATE	L	LENGTH
		LAT	LEAVING AIR TEMPERATURE
B	BOTTOM	LLS	LIQUID LEVEL SENSOR
BAS	BUILDING AUTOMATION SYSTEM		
BHP	BRAKE HORSEPOWER	M	MECHANICAL
BTU	BRITISH THERMAL UNIT	MAX	MAXIMUM
BTUH	BRITISH THERMAL UNIT PER HOUR	MBH	THOUSANDS BTU PER HOUR
		MD	MECHANICAL DEMOLITION
CAP	CAPACITY		
CC	COOLING COIL	MECH	MECHANICAL
CFM	CUBIC FEET PER MINUTE	MIN	MINIMUM
CLG	CEILING / COOLING	MOD	MOTOR OPERATED
CNTR	CENTER		DAMPER
COND	CONDENSATE / CONDENSER	N	NORTH
CW	COLD WATER	NC	NORMALLY CLOSED
CX	CONNECT TO EXISTING	NO	NORMALLY OPEN / NUMBER
		NTS	NOT TO SCALE
D	DAMPER / DIAMETER / DRAIN / DROP		
DB	DRY BULB	OA	OUTDOOR AIR
DEG	DEGREES	OED	OPEN END DUCT
DIA	DIAMETER		
DIFF	DIFFUSER	PD	PRESSURE DROP
DN	DOWN	PSI	PRESSURE – POUNDS PER SQUARE INCH
DOAS	DEDICATED OUTDOOR AIR SYSTEM		
DP	DIFFERENTIAL PRESSURE	R	RADIUS / RISE / RISER
EA	EACH / EXHAUST AIR	RA	RETURN AIR
EAT	ENTERING AIR TEMPERATURE	RAD	RADIUS
		RD	ROUND
EER	ENERGY EFFICIENCY RATIO	REG	REGISTER
EF	EXHAUST FAN	RET	RETURN
EFT	ENTERING FLUID TEMPERATURE	RH	REHEAT / RELATIVE HUMIDITY
ESP	EXTERNAL STATIC PRESSURE	RHC	REHEAT COIL
		RL	REFRIGERANT LIQUID
ETR	EXISTING TO REMAIN	RLF	RELIEF AIR
EX	EXISTING	RPM	REVOLUTIONS PER MINUTE
F	FAHRENHEIT	RS	REFRIGERANT SUCTION
FC	FLEXIBLE CONNECTION	RX	REMOVE EXISTING
FCU	FAN COIL UNIT		
FD	FIRE DAMPER	S	SWITCH
FPD	FLUID PRESSURE DROP	SA	SUPPLY AIR
FPM	FEET PER MINUTE	SD	SMOKE DAMPER / SMOKE DETECTORS
FT	FEET / FOOT		STATIC PRESSURE
		SP	
G	GAS / GRILLE		
		T	TEMPERATURE SENSOR / THERMOSTAT
H	HEIGHT		
HC	HEATING COIL	TEMP	TEMPERATURE
HP	HORSEPOWER	TYP	TYPICAL
HPU	HEAT PUMP UNIT		
HVAC	HEATING, VENTILATING AND AIR CONDITIONING	UH	UNIT HEATER
HZ	HERTZ	V	VALVE / VENT / VOLTS
IN	INCH / INCHES	VD	VOLUME DAMPER
		VOL	VOLUME
		W	WATT / WIDTH
		WB	WET BULB

MECHANICAL LEGEND	
(APPLICABLE TO ALL MECHANICAL DRAWINGS)	
SYMBOL	DESCRIPTION
	CONDENSATE DRAIN
	HOT WATER HEATING RETURN
	HOT WATER HEATING SUPPLY
	REFRIGERANT LIQUID
	REFRIGERANT SUCTION
	CONNECT TO EXISTING
	END POINT OF REMOVAL OF EXISTING
	PLAN/ SECTION DESIGNATION TOP - PLAN/ SECTION REFERENCE, BOTTOM - REFERENCED DRAWING
	CAP (PIPE OR DUCT)
	UNION
	EXHAUST AIR DUCT
	OUTDOOR AIR OR SUPPLY AIR DUCT
	RETURN AIR DUCT
	HUMIDISTAT/HUMIDITY SENSOR
	THERMOSTAT/TEMPERATURE SENSOR
	DUCT MOUNTED SMOKE DETECTOR
	BAROMETRIC BACKDRAFT DAMPER
	FIRE DAMPER
	MOTOR OPERATED DAMPER
	VOLUME DAMPER
	FLEXIBLE CONNECTION
	DIFFUSER TAG: TOP- NECK SIZE CENTER- SPECIFICATION TYPE BOTTOM- AIRFLOW IN CFM

GENERAL MECHANICAL NOTES	
(APPLICABLE TO ALL MECHANICAL DRAWINGS)	
1. COORDINATE ALL MECHANICAL WORK WITH PLUMBING WORK, ELECTRICAL WORK, AND WORK OF OTHER TRADES SHOWN ON OTHER DRAWINGS.	
2. THE LOCATION OF EXISTING UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. REPAIR ALL DAMAGES OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.	
3. RUN ALL DRAIN PIPING WITH 2 PERCENT MINIMUM GRADE UNLESS OTHERWISE NOTED.	
4. ELEVATIONS NOTED ARE TO CENTERLINES OF PIPES FOR ALL PRESSURE LINES AND TO INVERT FOR ALL GRAVITY FLOW LINES.	
5. INSTALL PIPING AND DUCTWORK SO THAT ALL VALVES AND DAMPERS ARE ACCESSIBLE.	
6. UNLESS OTHERWISE NOTED, ROUTE ALL PIPING AND DUCTWORK OVERHEAD, TIGHT TO UNDERSIDE OF SLAB, WITH SPACE FOR INSULATION IF REQUIRED.	
7. MAINTAIN MINIMUM 6'–8" CLEARANCE TO UNDERSIDE OF PIPES, DUCTS, CONDUITS, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL AND ELECTRICAL ROOMS.	
8. CERTAIN ITEMS SUCH AS ACCESS DOORS, CLEANOUTS, RISE AND DROPS IN DUCTWORK AND PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.	
9. WHERE THE INSTALLATION OF NEW SERVICES OR THE EXTENSION OF EXISTING SERVICES REQUIRES CUTTING OF EXISTING FLOORS, WALLS, PARTITIONS, ETC., CHECK FOR THE PRESENCE OF EXISTING MECHANICAL, PLUMBING AND ELECTRICAL SERVICES WITHIN OR IMMEDIATELY BENEATH CONSTRUCTION. EXERCISE NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE SERVICES OR INJURY TO PERSONNEL DUE TO CONTACT WITH SAME. TEMPORARILY DISCONNECT SERVICES DURING THE CUTTING OPERATION. SCHEDULE SERVICE OUTAGES IN ADVANCE WITH THE COR.	
10. FLOW SCHEMATIC AND RISER DIAGRAMS INDICATE FLOW AND OPERATION CONCEPTS AS WELL AS GENERAL ARRANGEMENT OF EQUIPMENT. VALVES, PRESSURE GAUGES, ETC. ARE INDICATED FOR THIS PURPOSE. PROVIDE ADDITIONAL VALVES, PRESSURE GAUGES, ETC. AS SHOWN ON VARIOUS EQUIPMENT DETAILS. SEE PLANS AND DETAILS FOR PIPE SIZES NOT INDICATED ON FLOW SCHEDULES AND RISER DIAGRAMS.	
11. CONTRACTOR SHALL BE RESPONSIBLE FOR RESEARCHING ALL SYSTEMS THAT A PARTICULAR OUTAGE WILL AFFECT AS WELL AS LOCATING ALL SHUTOFF POINTS. INCLUDE THIS INFORMATION IN THE OUTAGE PLAN AND SUBMIT TO THE COR FOR APPROVAL.	
12. EXCEPT AS OTHERWISE NOTED, LOCATE ALL ROOM TEMPERATURE SENSORS ABOVE FINISHED FLOOR ON SAME HORIZONTAL CENTERLINE AS LIGHT SWITCH. WHERE LIGHT SWITCH AND TEMPERATURE SENSOR ARE ADJACENT TO EACH OTHER, LIGHT SWITCH SHALL BE CLOSEST TO THE DOOR. COORDINATE WITH ELECTRICAL CONTRACTOR. NOTIFY THE COR OF ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.	
13. IN CORRIDORS WHERE CEILING SPEAKERS AND AIR DIFFUSERS ARE INDICATED BETWEEN THE SAME LIGHTING FIXTURES, RELOCATE BOTH DEVICES TO QUARTER POINTS BETWEEN THE SAME FIXTURE.	
14. INFORMATION SHOWN ON THE MECHANICAL DRAWINGS PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO DEMOLITION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, OR THERE IS A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COR IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.	
15. REMOVE ALL EXISTING PIPING, DUCTWORK, EQUIPMENT, AND MATERIALS NOT REQUIRED FOR RE–USE OR RE–INSTALLATION (SHOWN OR OTHERWISE). ALL EXISTING MATERIALS AND EQUIPMENT WHICH ARE REMOVED AND ARE DESIRED BY THE COR, OR ARE INDICATED TO REMAIN THE PROPERTY OF GOVERNMENT SHALL BE DELIVERED BY THE CONTRACTOR WHERE DIRECTED BY THE COR. ALL OTHER MATERIALS AND EQUIPMENT WHICH ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY THE CONTRACTOR FROM THE PREMISES.	
16. DISCONNECT EXISTING PIPING NO LONGER REQUIRED TO REMAIN IN SERVICE (SHOWN OR OTHERWISE) AND REMOVE PIPING BACK TO SERVICE MAINS UNLESS OTHERWISE INDICATED OR NOTED ON PLANS. REMOVE EXISTING PIPE HANGERS, SUPPORTS, VALVES, ETC. CAP, PLUG, OR SEAL EXISTING PIPING INDICATED OR REQUIRED TO REMAIN IN SERVICE OR IN PLACE. NO EXISTING PIPING SHALL BE LEFT UNSEALED VALVE ALL TERMINATED PRESSURE PIPE.	
17. EXISTING MECHANICAL PIPING, DUCTWORK, EQUIPMENT, AND MATERIALS AFFECTED BY DEMOLITION OR NEW WORK INSTALLATION AND REQUIRED TO REMAIN IN SERVICE SHALL BE RE–INSTALLED OR SUPPORTED AS REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE COR AND AT NO ADDITIONAL CONTRACT COST.	
18. REMOVE ALL ACCESSORIES, CONTROLS, ENCLOSURES, SUPPORTS, HANGERS, PADS, ETC. ASSOCIATED WITH ALL EQUIPMENT SHOWN TO BE REMOVED. REPAIR AND PAINT DAMAGED SURFACES AND ALL SURFACES BEHIND ALL EQUIPMENT SHOWN TO BE DEMOLISHED TO MATCH EXISTING ADJACENT SURFACES.	

DESIGNED: CEL	SUB SHEET NO.  MO.1	TITLE OF SHEET MECHANICAL COVER SHEET  CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895
			179603
MAV			PMS/PKG NO. 312325
TECH. REVIEW: CEL			SHEET
DATE: 12/06/23			OF X

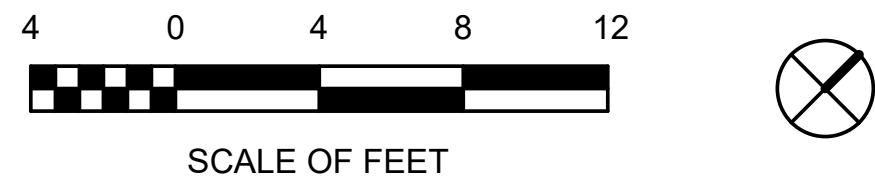
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- SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)
1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, —
  2. NEW WORK SHOWN WITH HEAVY WEIGHT LINE, —
  3. ALL ITEMS THAT REQUIRE ACCESS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS IN WRITING TO THE COR FOR RESOLUTION AND AWAIT WRITTEN DIRECTIONS BEFORE PROCEEDING W/ WORK.
  4. IF DIFFUSER RUNOUT IS NOT INDICATED THEN RUNOUT SIZE IS SAME AS THE AIR DEVICE NECK SIZE.

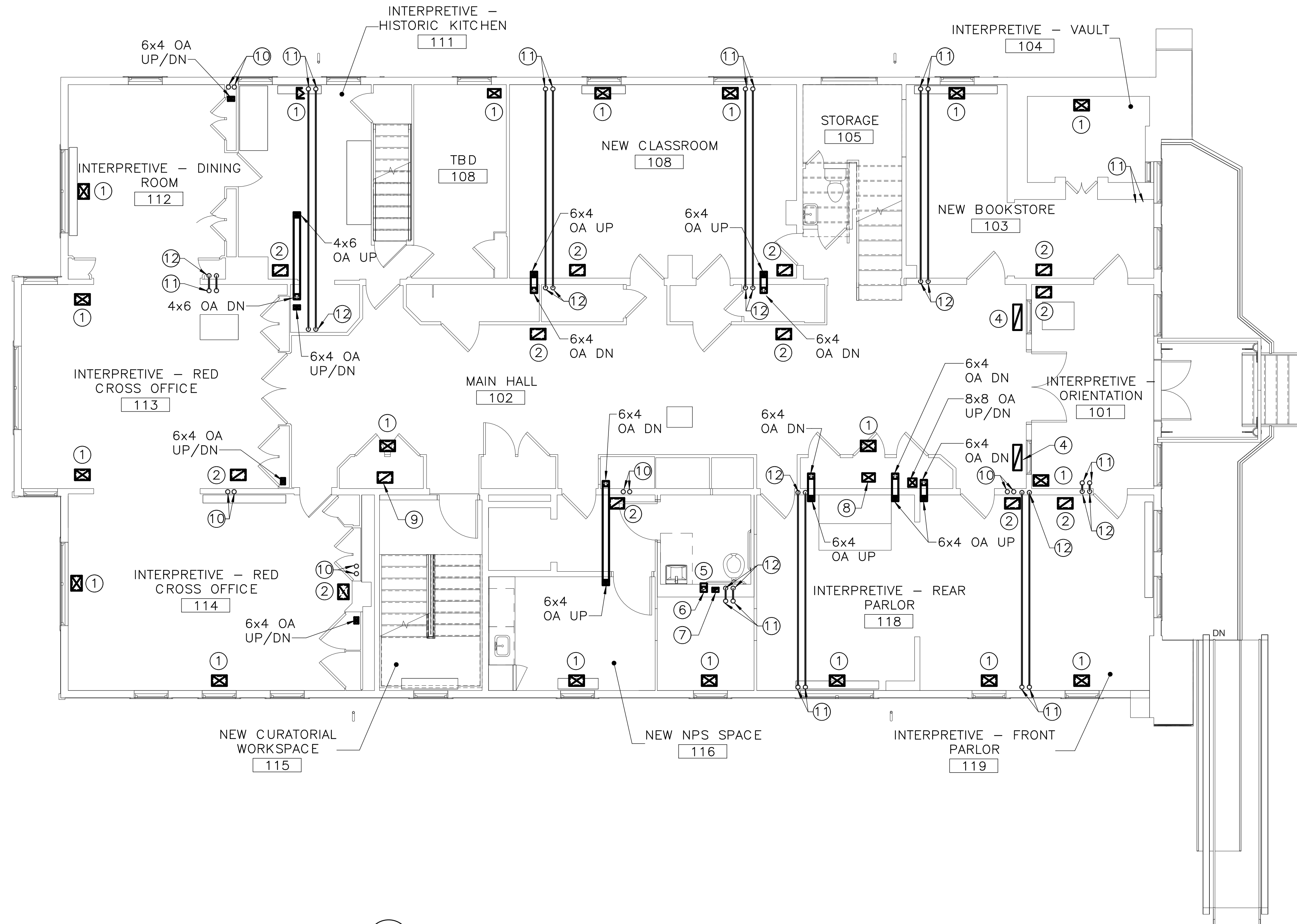
- DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)
- ① REFRIGERANT PIPING UP

1 BASEMENT — HVAC — NEW WORK PLAN  
M1.0 SCALE (A)



DESIGNED: CEL	SUB SHEET NO. M1.0	TITLE OF SHEET BASEMENT — HVAC — NEW WORK CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 179603 PMIS/PKG NO. 312325 SHEET OF X
CHAD MAV TECH. REVIEW: CEL DATE: 12/06/23			





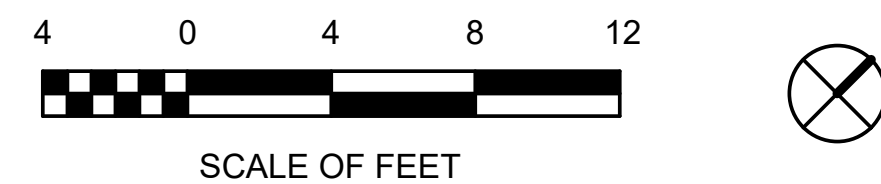
1 FIRST FLOOR - HVAC - NEW WORK PLAN  
M1.1 SCALE (A)

SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

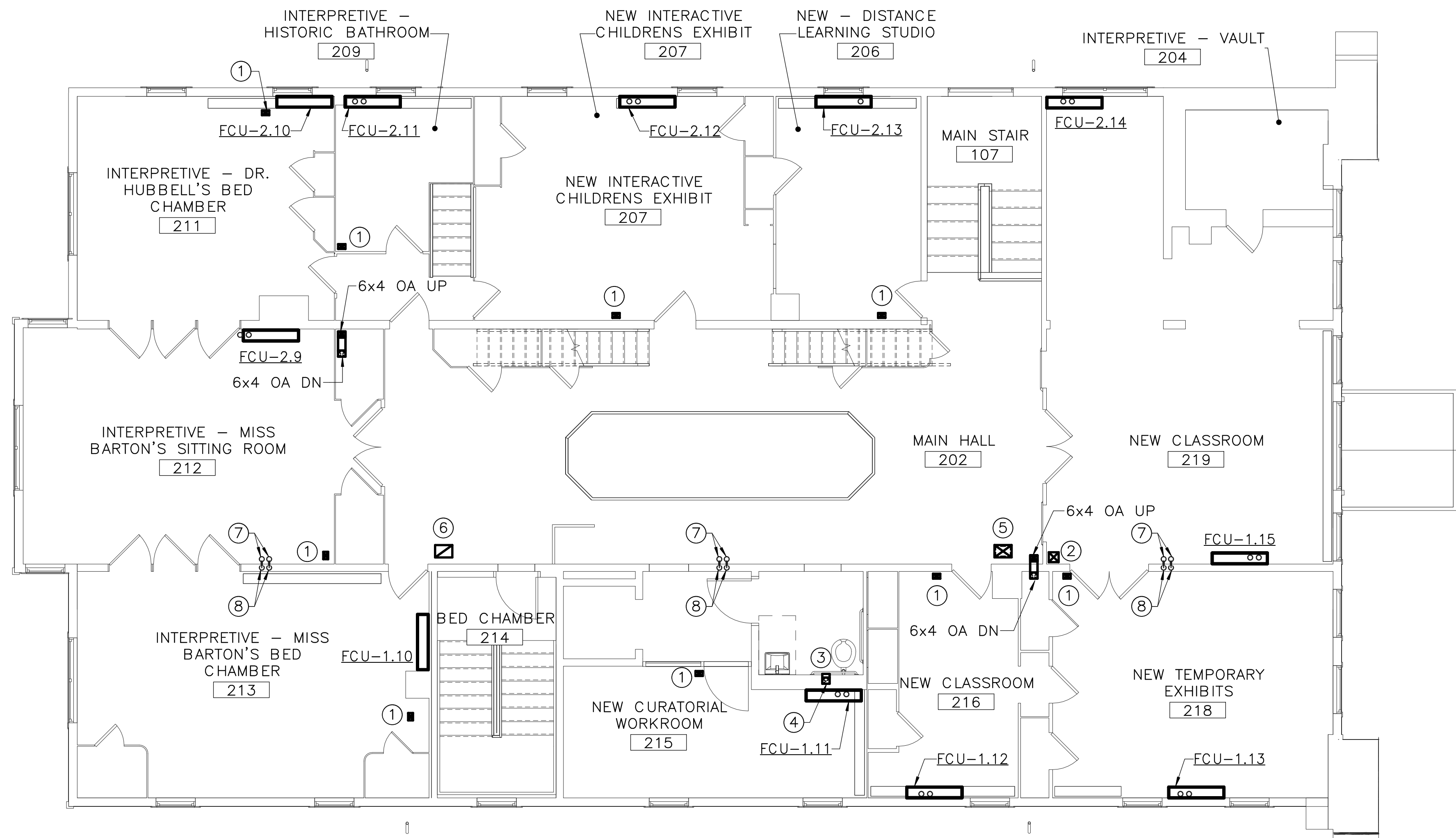
1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, —
2. NEW WORK SHOWN WITH HEAVY WEIGHT LINE, —
3. ALL ITEMS THAT REQUIRE ACCESS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS IN WRITING TO THE COR FOR RESOLUTION AND AWAIT WRITTEN DIRECTIONS BEFORE PROCEEDING W/ WORK.
4. IF DIFFUSER RUNOUT IS NOT INDICATED THEN RUNOUT SIZE IS SAME AS THE AIR DEVICE NECK SIZE.
5. ALL REFRIGERANT PIPING SHALL BE ROUTED BETWEEN THE JOISTS.

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- 1 FLOOR MOUNTED SA REGISTER
- 2 FLOOR MOUNTED RA REGISTER
- 3 6x4 FLOOR MOUNTED OA REGISTER
- 4 FLOOR MOUNTED RELIEF AIR REGISTER
- 5 6x4 SIDEWALL EA REGISTER
- 6 6x4 EA DN
- 7 6x4 EA UP/DN
- 8 12x8 SA UP/DN
- 9 12x8 RA UP/DN
- 10 REFRIGERANT PIPING UP/DN
- 11 REFRIGERANT PIPING UP
- 12 REFRIGERANT PIPING DN

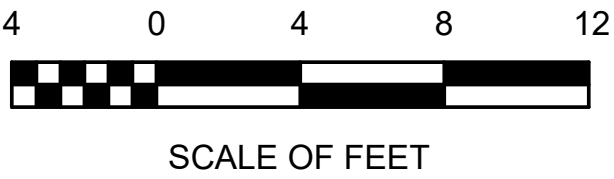


DESIGNED: CEL MAV TECH. REVIEW: CEL DATE: 12/06/23	SUB SHEET NO.  M1.1	TITLE OF SHEET FIRST FLOOR - HVAC - NEW WORK CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 179603 PMIS/PKG NO. 312325 SHEET OF X
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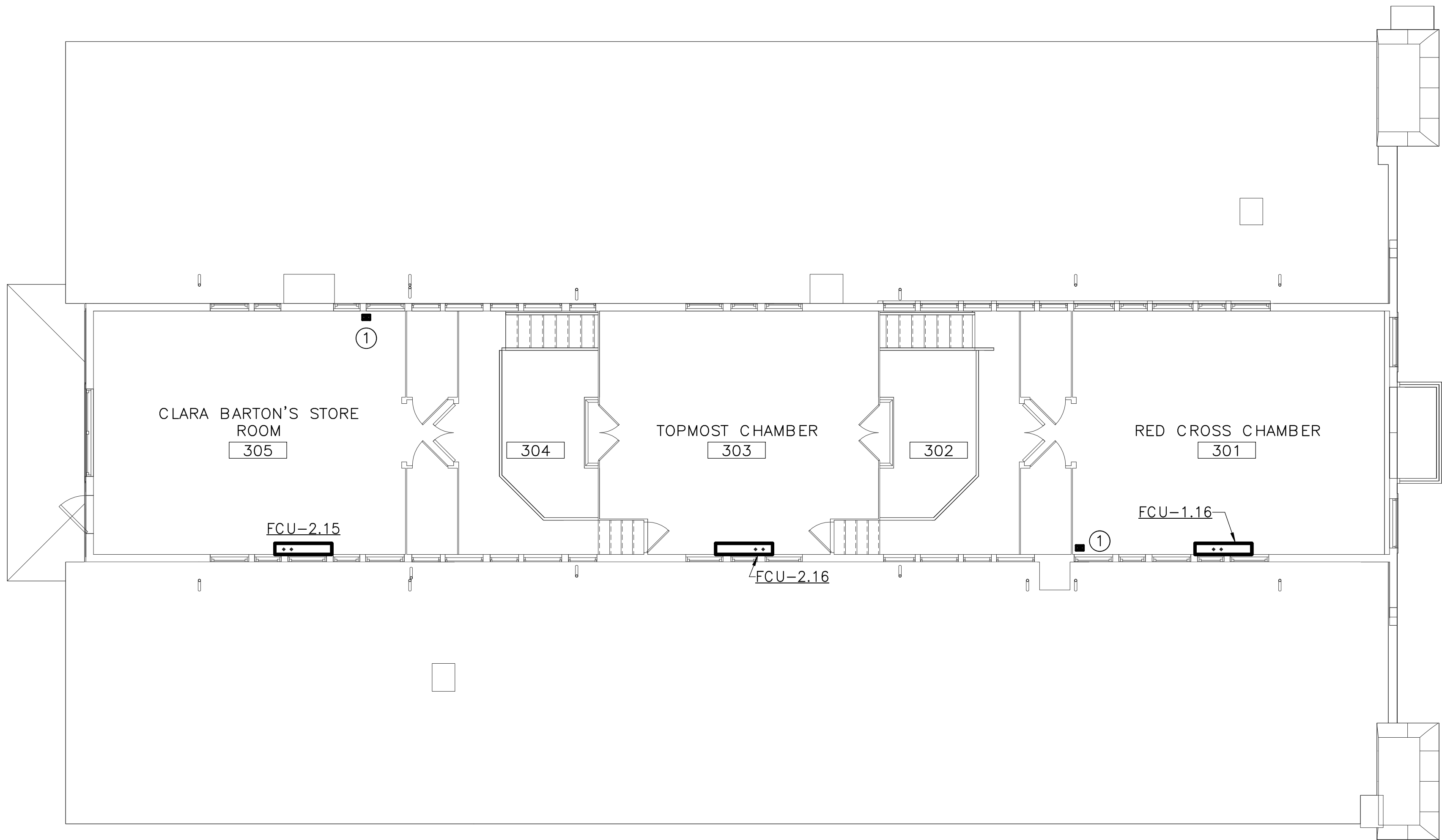
1 SECOND FLOOR - HVAC - NEW WORK PLAN  
M1.2 SCALE (A)

- SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)
- 1.EXISTING SHOWN WITH LIGHT WEIGHT LINE, —
  - 2.NEW WORK SHOWN WITH HEAVY WEIGHT LINE, —
  - 3.ALL ITEMS THAT REQUIRE ACCESS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS IN WRITING TO THE COR FOR RESOLUTION AND AWAIT WRITTEN DIRECTIONS BEFORE PROCEEDING W/ WORK.
  - 4.IF DIFFUSER RUNOUT IS NOT INDICATED THEN RUNOUT SIZE IS SAME AS THE AIR DEVICE NECK SIZE.
- DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)
- ① 6x4 OA FLOOR MOUNTED REGISTER
  - ② 8x8 OA FLOOR MOUNTED REGISTER
  - ③ 6x4 SIDEWALL EA REGISTER
  - ④ 6x4 EA DN
  - ⑤ FLOOR MOUNTED SA REGISTER
  - ⑥ FLOOR MOUNTED RA REGISTER
  - ⑦ REFRIGERANT PIPING UP
  - ⑧ REFRIGERANT PIPING DN



DESIGNED: CEL	SUB SHEET NO. <b>M1.2</b>	TITLE OF SHEET <b>SECOND FLOOR - HVAC - NEW WORK</b>	DRAWING NO. <b>895</b>
TECH. REVIEW: CEL		CLARA BARTON NATIONAL HISTORIC SITE CLBA	PMIS/PKG NO. 312325
DATE: 12/06/23			SHEET OF <b>X</b>

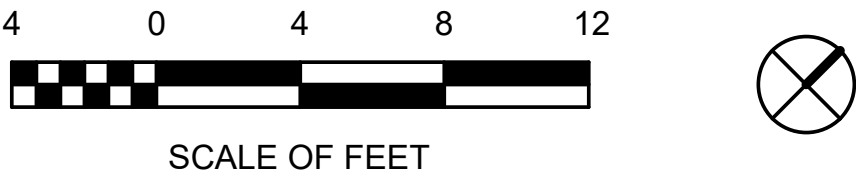




1 THIRD FLOOR — HVAC — NEW WORK PLAN  
M1.3 SCALE (A)

- SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)
- 1.EXISTING SHOWN WITH LIGHT WEIGHT LINE, —
  - 2.NEW WORK SHOWN WITH HEAVY WEIGHT LINE, —
  - 3.ALL ITEMS THAT REQUIRE ACCESS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS IN WRITING TO THE COR FOR RESOLUTION AND AWAIT WRITTEN DIRECTIONS BEFORE PROCEEDING W/ WORK.
  - 4.IF DIFFUSER RUNOUT IS NOT INDICATED THEN RUNOUT SIZE IS SAME AS THE AIR DEVICE NECK SIZE.

- DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)
- 1 6x4 OA FLOOR MOUNTED REGISTER



DESIGNED: CEL	SUB SHEET NO. <b>M1.3</b>	TITLE OF SHEET THIRD FLOOR — HVAC — NEW WORK CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. <b>895</b> PMIS/PKG NO. 312325 SHEET OF <b>X</b>
TECH. REVIEW: CEL			
DATE: 12/06/23			

PLUMBING ABBREVIATIONS (APPLICABLE TO ALL PLUMBING DRAWINGS)			
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
B	BOTTOM	L	LENGTH
BAS	BUILDING AUTOMATION SYSTEM	LAV	LAVATORY
BFP	BACKFLOW PREVENTER	LWT	LEAVING WATER TEMPERATURE
BLDG	BUILDING		
CO	CLEANOUT	MAX	MAXIMUM
COND	CONDENSATE	MIN	MINIMUM
CP	CONDENSATE PUMP	N	NORTH
CW	COLD WATER	NTS	NOT TO SCALE
CX	CONNECT TO EXISTING		
D	DEEP / DEPTH / DIAMETER / DRAIN DEGREES	P	PLUMBING / PLUMBING FIXTURE TYPE
DEG	DEGREES	PD	PUMP DISCHARGE / PLUMBING DEMOLITION PHASE
DIA	DIAMETER	PH	
DN	DOWN		
DWG	DRAWING	R	RADIUS
DWH	DOMESTIC WATER	RECIRC	RECIRCULATION
HEATER		RX	REMOVE EXISTING
EFT	ENTERING FLUID TEMPERATURE	S	SANITARY
EL	ELEVATION	SAN	SANITARY
ELEV	ELEVATION / ELEVATOR	SS	SERVICE SINK
ET	EXPANSION TANK	SW	STORM WATER
EWT	ENTERING WATER TEMPERATURE	TEMP	TEMPERATURE
EX	EXISTING	TYP	TYPICAL
F	FAHRENHEIT	UR	URINAL
FD	FLOOR DRAIN		
FPD	FLUID PRESSURE DROP	V	VENT / VOLTS
FT	FEET / FOOT	VTR	VENT THROUGH ROOF
GAL	GALLON	W	WIDTH
GPM	GALLONS PER MINUTE	W/	WITH
H	HEIGHT / HIGH	WC	WATER CLOSET
HP	HORSEPOWER	WH	WALL HYDRANT
HW	HOT WATER		
HWR	HOT WATER RETURN		
HZ	HERTZ		
IN	INCH / INCHES		
INV	INVERT		

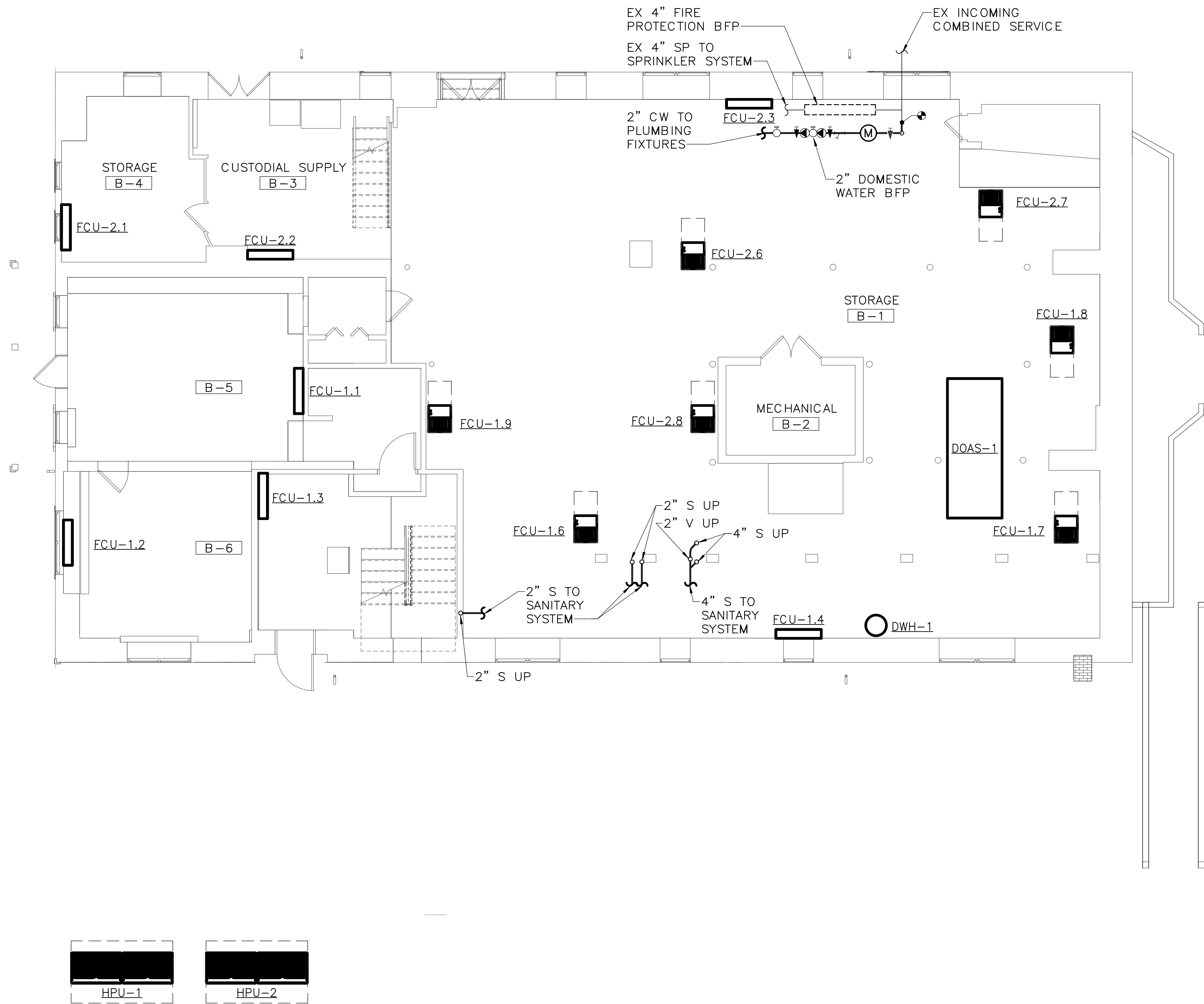
PLUMBING LEGEND (APPLICABLE TO ALL PLUMBING DRAWINGS)	
SYMBOL	DESCRIPTION
	COLD WATER
	HOT WATER
	HOT WATER RETURN
	140 DEGREES F HOT WATER
	STORM WATER
	SOIL OR WASTE
	VENT
	PUMP DISCHARGE
	BACK WATER VALVE
	DOMESTIC WATER SERVICE REDUCED PRESSURE ZONE BACKFLOW PREVENTER
	DRAIN (ALL TYPES)
	HOSE BIBB
	WALL HYDRANT
	WATER METER
	CONDENSATE DRAIN
	CONNECT TO EXISTING
	END POINT OF REMOVAL OF EXISTING
	PLAN/ SECTION DESIGNATION TOP - PLAN/ SECTION REFERENCE, BOTTOM - REFERENCED DRAWING
	AIR VENT
	PRESSURE GAUGE
	STRAINER
	THERMOMETER
	UNION
	BALANCING VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE
	RELIEF VALVE
	SHUTOFF VALVE

GENERAL PLUMBING NOTES (APPLICABLE TO ALL PLUMBING DRAWINGS)	
<p>1. THE LOCATION OF ALL EXISTING UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. REPAIR ALL DAMAGES OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.</p> <p>2. RUN ALL SOIL, WASTE AND DRAIN PIPING WITH 2 PERCENT MINIMUM GRADE UNLESS OTHERWISE NOTED. HORIZONTAL VENT PIPING SHALL BE GRADED TO DRIP BACK TO THE SOIL OR WASTE PIPE BY GRAVITY.</p> <p>3. ELEVATIONS NOTED ARE TO CENTERLINES OF PIPES FOR ALL PRESSURE LINES AND TO INVERT FOR ALL GRAVITY FLOW LINES.</p> <p>4. ADJUST SEWER INVERTS TO KEEP TOPS OF PIPE IN LINE WHERE PIPE SIZE CHANGES.</p> <p>5. MAINTAIN MINIMUM OF 3’–0” COVER OVER UNDERGROUND WATER MAIN AND MINIMUM OF 2’–6” COVER OVER UNDERGROUND SEWERS AND DRAINS.</p> <p>6. PROVIDE SHUTOFF VALVES IN DOMESTIC WATER SYSTEMS IN BRANCH LINES SERVING TWO OR MORE FIXTURES.</p> <p>7. UNLESS OTHERWISE NOTED, ALL PIPING IS OVERHEAD, TIGHT TO UNDERSIDE OF SLAB, WITH SPACE FOR INSULATION IF REQUIRED.</p> <p>8. INSTALL PIPING SO THAT ALL VALVES ARE ACCESSIBLE.</p> <p>9. COORDINATE ALL PLUMBING WORK WITH MECHANICAL, ELECTRICAL WORK, ETC., SHOWN ON OTHER DRAWINGS.</p> <p>10. MAINTAIN MINIMUM 6’–8” CLEARANCE TO UNDERSIDE OF PIPES, CONDUITS, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL AND ELECTRICAL ROOMS.</p> <p>11. UNLESS OTHERWISE NOTED, WHERE HOT AND COLD WATER PIPING DROPS INTO PIPE CHASE, THE SIZE SHOWN FOR THE PIPE DROPS SHALL BE USED TO THE LAST FIXTURE.</p> <p>12. CERTAIN ITEMS SUCH AS ACCESS DOORS, CLEANOUTS, RISE AND DROPS IN PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.</p> <p>13. WHERE THE INSTALLATION OF NEW SERVICES OR THE EXTENSION OF EXISTING SERVICES REQUIRE CUTTING OF EXISTING FLOORS, WALLS, PARTITIONS, ETC., IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK FOR THE PRESENCE OF EXISTING MECHANICAL AND / OR ELECTRICAL SERVICES WITHIN OR IMMEDIATELY BENEATH CONSTRUCTION AND EXERCISE NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE SERVICES OR INJURY TO HIS PERSONNEL DUE TO CONTACT WITH SAME. WHERE PRACTICAL, SUCH EXISTING SERVICES SHALL BE TEMPORARILY DISCONNECTED DURING THE CUTTING OPERATION. SUCH OUTAGES IN SERVICE SHALL BE SCHEDULED IN ADVANCE WITH THE COR.</p> <p>14. FLOW SCHEMATIC AND RISER DIAGRAMS INDICATE FLOW AND OPERATION CONCEPTS AS WELL AS GENERAL ARRANGEMENT OF EQUIPMENT. VALVES, PRESSURE GAUGES, ETC. ARE INDICATED FOR THIS PURPOSE. ADDITIONAL VALVES, PRESSURE GAUGES, ETC. SHALL BE PROVIDED AS SHOWN ON VARIOUS EQUIPMENT DETAILS. SEE PLANS AND DETAILS FOR PIPE SIZES NOT INDICATED ON FLOW SCHEDULES AND RISER DIAGRAMS.</p> <p>15. CONTRACTOR SHALL BE RESPONSIBLE FOR RESEARCHING ALL SYSTEMS THAT A PARTICULAR OUTAGE WILL AFFECT AS WELL AS LOCATING ALL SHUTOFF POINTS. THIS INFORMATION SHALL BE INCLUDED IN THE OUTAGE PLAN TO BE SUBMITTED TO COR FOR APPROVAL.</p> <p>16. USE OF COMBINATION WYE FITTINGS OR CROSS TEES IN THE PLUMBING SANITARY SYSTEM ARE NOT ALLOWED.</p> <p>17. INFORMATION SHOWN ON THE PLUMBING DRAWINGS PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO DEMOLITION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, OR THERE IS A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COR IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.</p> <p>18. REMOVE ALL EXISTING PIPING, FIXTURES, EQUIPMENT, AND MATERIALS NOT REQUIRED FOR RE–USE OR RE–INSTALLATION (SHOWN OR OTHERWISE). ALL EXISTING MATERIALS AND EQUIPMENT WHICH ARE REMOVED AND ARE DESIRED BY THE COR, OR ARE INDICATED TO REMAIN THE PROPERTY OF GOVERNMENT SHALL BE DELIVERED BY THE CONTRACTOR WHERE DIRECTED BY THE COR. ALL OTHER MATERIALS AND EQUIPMENT WHICH ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY THE CONTRACTOR FROM THE PREMISES.</p> <p>19. DISCONNECT EXISTING PIPING NO LONGER REQUIRED TO REMAIN IN SERVICE (SHOWN OR OTHERWISE) AND REMOVE PIPING BACK TO SERVICE MAINS UNLESS OTHERWISE INDICATED OR NOTED ON PLANS. REMOVE EXISTING PIPE HANGERS, SUPPORTS, VALVES, ETC. CAP, PLUG, OR SEAL EXISTING PIPING INDICATED OR REQUIRED TO REMAIN IN SERVICE OR IN PLACE. NO EXISTING PIPING SHALL BE LEFT UNSEALED VALVE ALL TERMINATED PRESSURE PIPE.</p> <p>20. EXISTING PLUMBING PIPING, FIXTURES, EQUIPMENT, AND MATERIALS AFFECTED BY DEMOLITION OR NEW WORK INSTALLATION AND REQUIRED TO REMAIN IN SERVICE SHALL BE RE–INSTALLED OR SUPPORTED AS REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE COR AND AT NO ADDITIONAL CONTRACT COST.</p> <p>21. REMOVE ALL ACCESSORIES, CONTROLS, ENCLOSURES, SUPPORTS, HANGERS, PADS, ETC. ASSOCIATED WITH ALL EQUIPMENT SHOWN TO BE REMOVED. REPAIR AND PAINT DAMAGED SURFACES AND ALL SURFACES BEHIND ALL EQUIPMENT SHOWN TO BE DEMOLISHED TO MATCH EXISTING ADJACENT SURFACES.</p>	

PLUMBING FIXTURES						
UNIT SYMBOL	FIXTURE	CW	HW	SAN	VENT	NOTES
P–1	WATER CLOSET – FLOOR MOUNTED	1	–	4	2	
P–2	LAVATORY – WALL HUNG	1/2	1/2	1–1/2	1–1/2	
P–3	SINK – SINGLE COMPARTMENT	1/2	1/2	1–1/2	1–1/2	

DESIGNED: CEL	SUB SHEET NO.  P0.1	TITLE OF SHEET PLUMBING COVER SHEET		DRAWING NO. 895
MAV				179603
TECH. REVIEW: CEL				PMS/PKG NO. 312325
DATE: 12/06/23		CLARA BARTON NATIONAL HISTORIC SITE CLBA		SHEET OF X





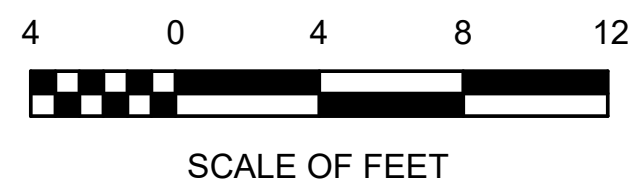
1 BASEMENT — PLUMBING — NEW WORK PLAN  
P1.0 SCALE (A)

SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

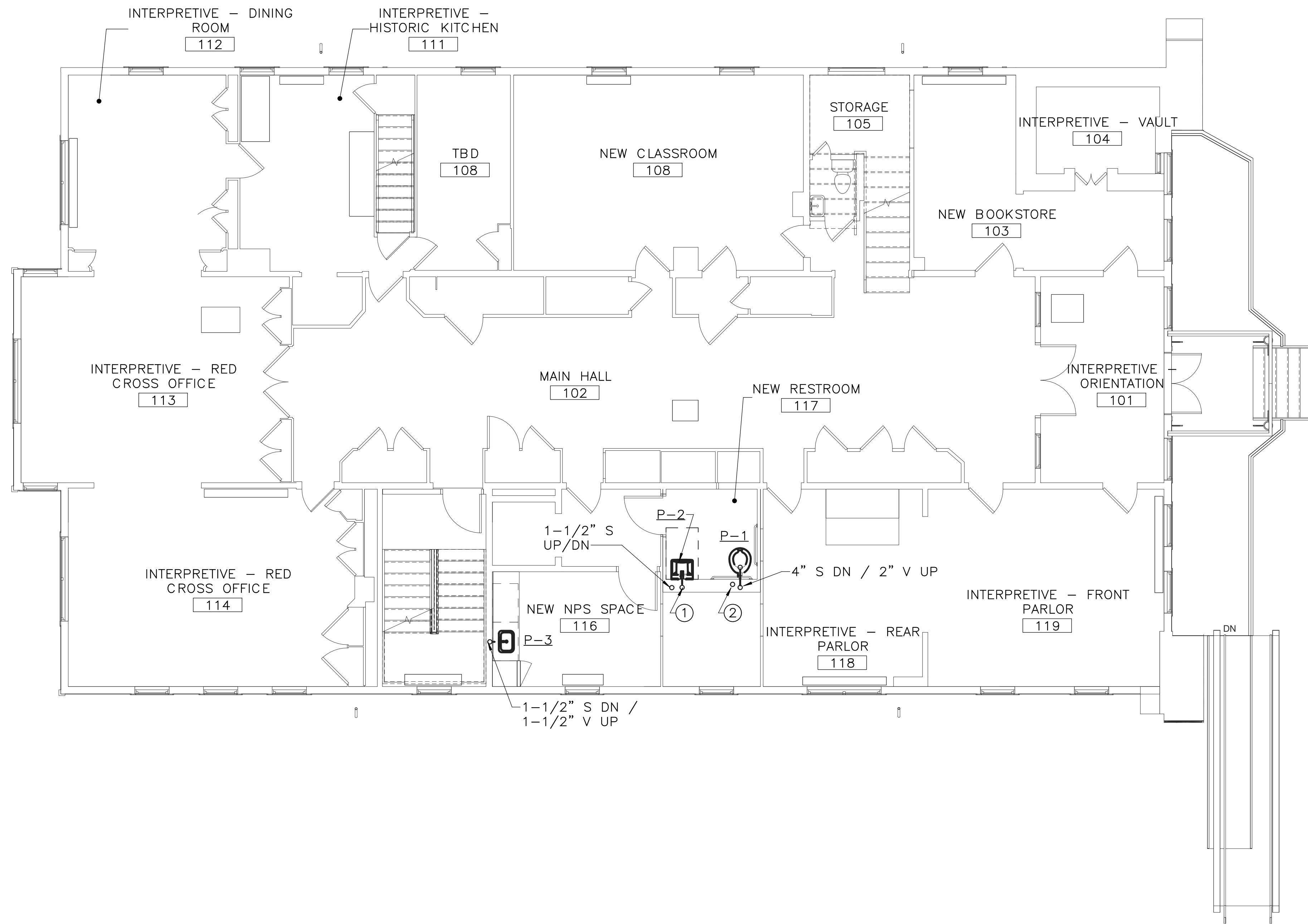
- 1.EXISTING SHOWN WITH LIGHT WEIGHT LINE, —
- 2.NEW WORK SHOWN WITH HEAVY WEIGHT LINE, —
- 3.ALL ITEMS THAT REQUIRE ACCESS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS IN WRITING TO THE COR FOR RESOLUTION AND AWAIT WRITTEN DIRECTIONS BEFORE PROCEEDING W/ WORK.

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- ① NOT USED
- ② NOT USED



DESIGNED: CEL	SUB SHEET NO. P1.0	TITLE OF SHEET BASEMENT — PLUMBING — NEW WORK	DRAWING NO. 895
TECH. REVIEW: CEL		CLARA BARTON NATIONAL HISTORIC SITE CLBA	PMIS/PKG NO. 312325
DATE: 12/06/23			SHEET OF X



1 FIRST FLOOR — PLUMBING — NEW WORK PLAN  
P1.1 SCALE A

**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, —

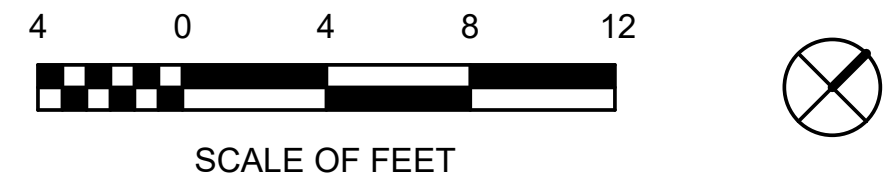
2. NEW WORK SHOWN WITH HEAVY WEIGHT LINE, —

3. ALL ITEMS THAT REQUIRE ACCESS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS IN WRITING TO THE OWNER FOR RESOLUTION AND AWAIT WRITTEN DIRECTIONS BEFORE PROCEEDING W/ WORK.

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

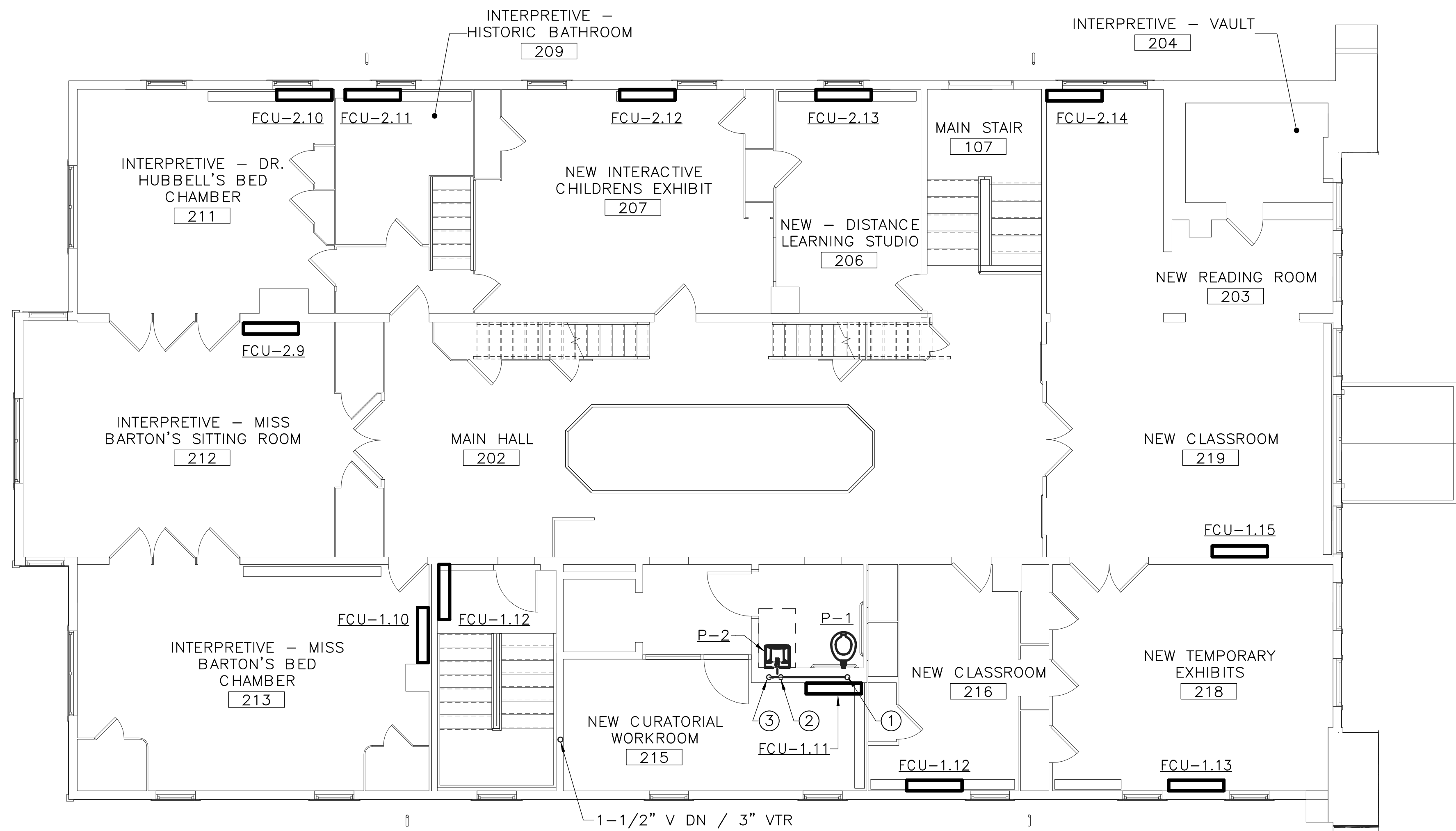
① 1-1/2" S DN / 1-1/2" V UP

② 4" S UP/DN



DESIGNED: CEL	SUB SHEET NO. P1.1	TITLE OF SHEET FIRST FLOOR — PLUMBING — NEW WORK CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 179603 PMIS/PKG NO. 312325 SHEET OF X
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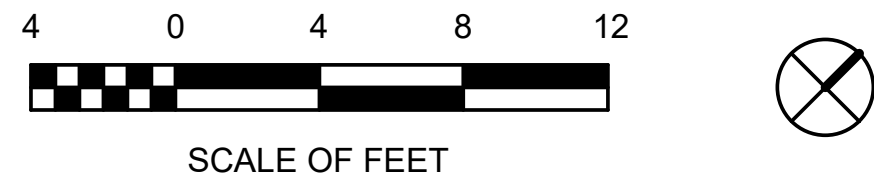
1 SECOND FLOOR - PLUMBING - NEW WORK PLAN  
P1.2 SCALE (A)

SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

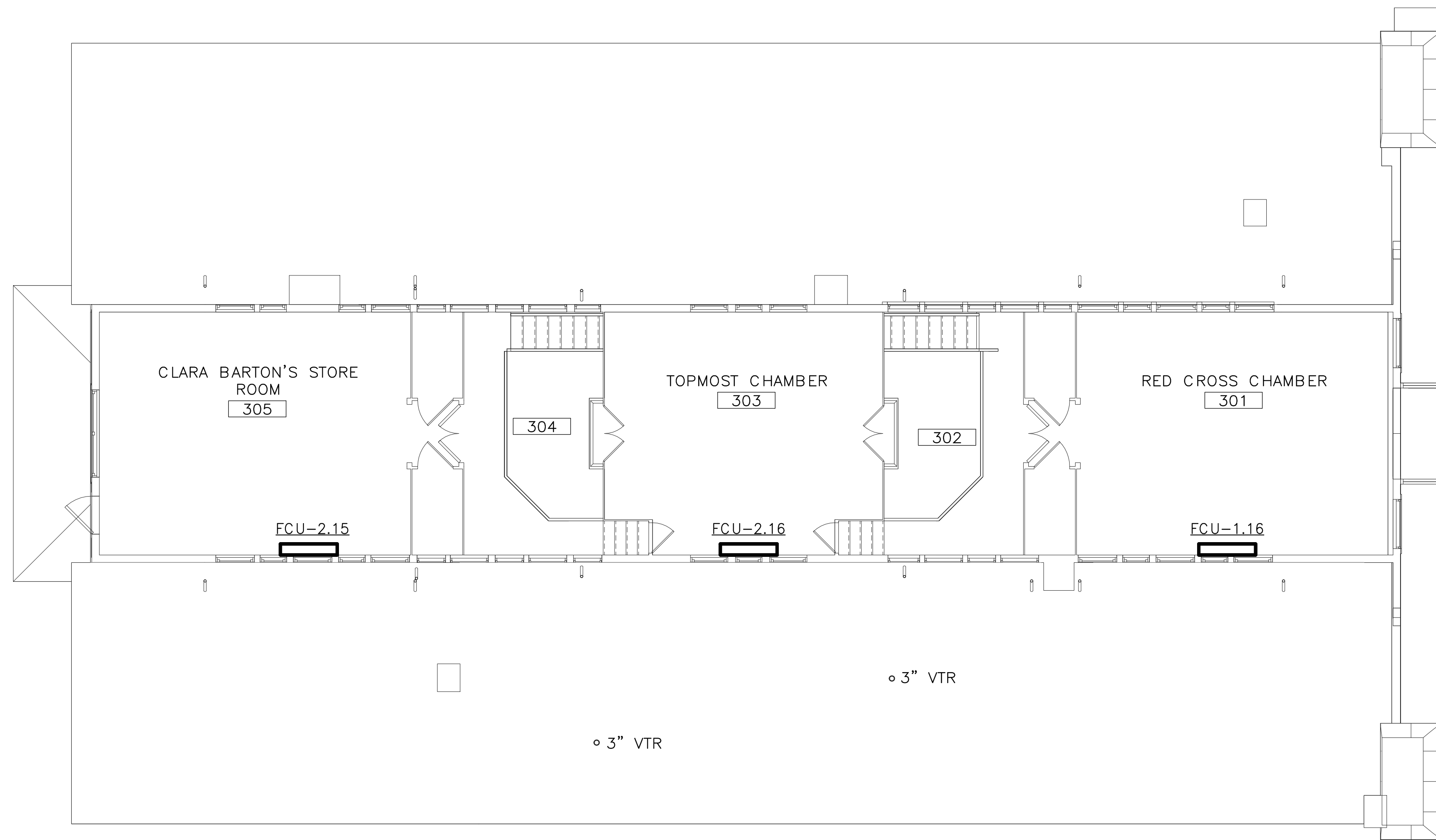
1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, —
2. NEW WORK SHOWN WITH HEAVY WEIGHT LINE, —
3. ALL ITEMS THAT REQUIRE ACCESS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS IN WRITING TO THE OWNER FOR RESOLUTION AND AWAIT WRITTEN DIRECTIONS BEFORE PROCEEDING W/ WORK.

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- ① 3" VTR
- ② 1-1/2" V DN
- ③ 1-1/2" S DN



DESIGNED: CEL	SUB SHEET NO. P1.2	TITLE OF SHEET SECOND FLOOR - PLUMBING - NEW WORK CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 179603 PMIS/PKG NO. 312325 SHEET OF X
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, ———

2. NEW WORK SHOWN WITH HEAVY WEIGHT LINE, ———

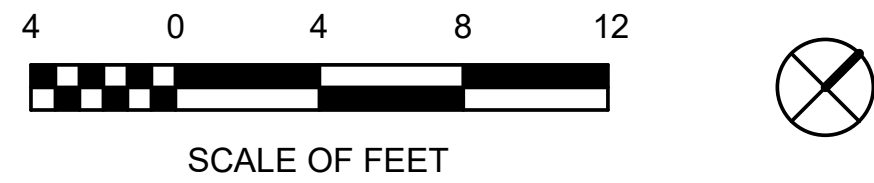
3. ALL ITEMS THAT REQUIRE ACCESS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS, STRAINERS, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS IN WRITING TO THE OWNER FOR RESOLUTION AND AWAIT WRITTEN DIRECTIONS BEFORE PROCEEDING W/ WORK.

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

① NOT USED



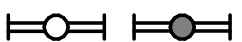





















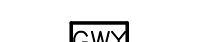









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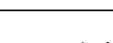
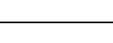


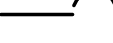
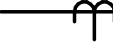
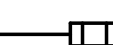


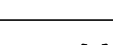
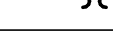
1 THIRD FLOOR — PLUMBING — NEW WORK PLAN  
P1.3 SCALE (A)



DESIGNED: CEL	SUB SHEET NO. P1.3	TITLE OF SHEET THIRD FLOOR — PLUMBING — NEW WORK CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 PMIS/PKG NO. 312325 SHEET OF X
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ELECTRICAL LEGEND		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	LUMINAIRE - SEE SCHEDULE FOR TYPE (NOMINAL 2X2)	--
	LUMINAIRE - SEE SCHEDULE FOR TYPE (NOMINAL 1X4)	--
	LUMINAIRE - SEE SCHEDULE FOR TYPE (INDUSTRIAL)	--
	LUMINAIRE - SEE SCHEDULE FOR TYPE (WALL SCONCE)	AS NOTED
	LUMINAIRE - SEE SCHEDULE FOR TYPE (RECESSED OR CEILING MOUNTED)	--
	LUMINAIRE - SEE SCHEDULE FOR TYPE (WALL MOUNTED)	AS NOTED
	LUMINAIRE - SEE SCHEDULE FOR TYPE (TRACK MOUNTED)	--
	EMERGENCY LUMINAIRE, BATTERY POWERED - SEE SCHEDULE FOR TYPE	-- / 90"
	ILLUMINATED EXIT SIGN, SINGLE FACE - SEE SCHEDULE FOR TYPE (ARROW INDICATED DIRECTIONAL CHEVRON) (CEILING/WALL MOUNTED)	-- / 90"
	ILLUMINATED EXIT SIGN, DOUBLE FACE - SEE SCHEDULE FOR TYPE (CEILING/WALL MOUNTED)	-- / 90"
	SINGLE POLE TOGGLE SWITCH	46"
	THREE-WAY TOGGLE SWITCH	46"
	OCCUPANCY SENSOR SWITCH	46"
	OCCUPANCY SENSOR SWITCH WITH 0-10V DIMMING	46"
	LIGHTING CONTROL SYSTEM - LOW VOLTAGE SWITCH FOR ONE ZONE, ON/OFF CONTROL	46"
	LIGHTING CONTROL SYSTEM - LOW VOLTAGE SWITCH FOR ONE ZONE, ON/OFF AND UP/DOWN DIMMING	46"
	LIGHTING CONTROL SYSTEM - LOW VOLTAGE SWITCH FOR TWO ZONES, ON/OFF AND UP/DOWN DIMMING	46"
	RELAY	--
	LIGHTING CONTROL SYSTEM - RELAY PACK	--
	LIGHTING CONTROL SYSTEM - RELAY PACK FOR EMERGENCY, UL924	--
	LIGHTING CONTROL SYSTEM - RELAY PACK FOR DIMMING 0-10V LOADS	--
	LIGHTING CONTROL SYSTEM - RELAY PACK FOR DIMMING 0-10V LOADS, AND EMERGENCY	--
	PHOTOCELL CONTROLLER (WALL AND CEILING MOUNTED)	--
	LIGHTING CONTROL SYSTEM - GATEWAY (MAIN HEADEND CONTROLLER)	46"
	OCCUPANCY SENSOR (CEILING AND WALL MOUNTED) SUBSCRIPTS: DT: DUAL TECHNOLOGY (DEFAULT IF NO SUBSCRIPT INDICATED) U: ULTRASONIC P: PASSIVE INFRARED	-- / 92"
	RECEPTACLE - NEMA CONFIGURATION 5-20R (SHADING INDICATES CONNECTED TO EMERGENCY/STANDBY POWER CIRCUIT) SUBSCRIPTS: GFI: WITH 5mA GROUND FAULT INTERRUPTER IG: ISOLATED GROUND TYPE SPD: INTEGRAL SURGE PROTECTION AND INDICATOR LIGHT TR: TAMPER-RESISTANT EXP: EXPLOSION PROOF WP: WEATHER-RESISTANT RECEPTACLE WITH WEATHERPROOF WHILE-IN-USE COVER	18"
	JUNCTION BOX (CEILING AND WALL MOUNTED)	-- / AS NOTED
	FRACTIONAL HORSEPOWER MANUAL MOTOR SWITCH	46"
	MOTOR	--
	SAFETY SWITCH	60" TO TOP
	PANELBOARD	78" TO TOP
	SURGE PROTECTIVE DEVICE	60" TO TOP
	FIRE ALARM SYSTEM - SPRINKLER FLOW DETECTION SWITCH	--
	FIRE ALARM SYSTEM - VALVE WITH TAMPER DETECTION SWITCH	--

ELECTRICAL LEGEND (CONTINUED)		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	TELEPHONE OUTLET, WALL MOUNTED	18"
	DATA OUTLET, WALL MOUNTED	18"
	COMBINATION TELEPHONE/DATA OUTLET, WALL MOUNTED	18"
	TELEPHONE TERMINAL BACKBOARD	--
	GROUNDING SYSTEM - GROUND CONNECTION	--
	MOLDED CASE CIRCUIT BREAKER (600V AND BELOW)	--
	FIXED CURRENT TRANSFORMER WITH TURN RATIO	--
	CURRENT LIMITING FUSE (600V AND BELOW)	--
	DISCONNECT SWITCH (600V AND BELOW)	--
	KILOWATT METER (KWH = KILOWATT HOURS)	--
	TRANSFORMER	--
	GROUNDING SYSTEM WYE GROUNDED NEUTRAL WINDING	--
	DELTA WINDING	--

NOTES: (APPLICABLE TO ELECTRICAL LEGEND ONLY)

1. THE MOUNTING HEIGHTS GIVEN ON THIS SHEET IN THE ELECTRICAL LEGEND ARE GENERAL AND SHALL BE USED ONLY WHEN MOUNTING HEIGHTS CANNOT BE ESTABLISHED BY REFERENCE TO DETAILS, ELEVATIONS, AND NOTES ON THE DRAWINGS.

2. ALL MOUNTING HEIGHTS, UNLESS OTHERWISE NOTED, SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE OUTLET OR DEVICE.

3. HEIGHTS OF ALL ITEMS NOT COVERED BY THE ELECTRICAL LEGEND AND NOT SHOWN ON THE DRAWINGS SHALL BE AS DIRECTED BY THE CONTRACTING OFFICER.

4. WHERE PLACING ANY ITEM AT THE HEIGHTS LISTED OR NOTED WILL CAUSE INTERFERENCE WITH THE WORK OF OTHER TRADES, OR IS NOT PHYSICALLY POSSIBLE OR DESIRABLE FOR ONE REASON OR ANOTHER, THE ITEM SHALL BE INSTALLED AT A LOCATION APPROVED BY THE CONTRACTING OFFICER.

ELECTRICAL ABBREVIATIONS			
A	AMPERE	LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND-- FAULT
ACH	ABOVE CABINET HEIGHT	MCB	MAIN CIRCUIT BREAKER
ACU	AIR CONDITIONING UNIT	MCC	MOTOR CONTROL CENTER
AFF	ABOVE FINISHED FLOOR		
AFG	ABOVE FINISHED GRADE	MDP	MAIN DISTRIBUTION PANEL
AHU	AIR HANDLING UNIT	MH	MANHOLE
AIC	AMPERE INTERRUPTING CAPACITY	M/L	MAIN LUGS
AL	ALUMINUM	MOA	MULTI OUTLET ASSEMBLY
ASYM	ASYMMETRICAL	MSP	MOTOR STARTER PANEL
		MTD	MOUNTED
		MV	MEDIUM VOLTAGE
C	CONDUIT	NC	NORMALLY CLOSED
CB	CIRCUIT BREAKER		
CKT	CIRCUIT	NF	NON--FUSED
CT	CURRENT TRANSFORMER	NO	NORMALLY OPEN
CU	COPPER	NTS	NOT TO SCALE
CX	CONNECT TO EXISTING		
		OC P	OVERCURRENT PROTECTION
DP	DISTRIBUTION PANEL	OH	OVERHEAD
DT	DOUBLE THROW	OHE	OVERHEAD ELECTRIC
DWC	DRINKING WATER COOLER		
DWG	DRAWING	P	POLE(1P., 2P., 3P.)
E	EMERGENCY	PB	PUSH BUTTON
		PH	PHASE
EQUIP	EQUIPMENT	PL	PILOT LIGHT
ETR	EXISTING TO REMAIN	PP	POWER PANEL
EW	ELECTRIC WATER HEATER	PT	POTENTIAL TRANSFORMER
EX	EXISTING	PVC	POLYVINYL CHLORIDE
		R	RACEWAY
F	FUSED OR FUSIBLE	RCS	REMOTE CONTROL SWITCH
FDR	FEEDER	RP	RECEPTACLE PANEL
		RX	REMOVE EXISTING
GEC	GROUNDING ELECTRODE CONDUCTOR	SN	SOLID NEUTRAL
GFI	GROUND FAULT INTERRUPTER	SS	SAFETY SWITCH
GFEP	GROUND FAULT EQUIPMENT PROTECTION	ST	SINGLE--THROW SWITCH
GW	GROUND WIRE	SW	SWITCHBOARD
		SWBD	SWITCHBOARD
		SWGR	SWITCHGEAR
		SYM	SYMMETRICAL
HOA	HAND--OFF--AUTOMATIC	TS	TIE SWITCH
HP	HORSE POWER	TTB	TELEPHONE TERMINAL BOARD
HPU	HEAT PUMP UNIT		
HV	HIGH VOLTAGE	TYP	TYPICAL
HZ	HERTZ		
IG	ISOLATED GROUND	UE	UNDERGROUND ELECTRIC
JB	JUNCTION BOX	UH	UNIT HEATER
		UON	UNLESS OTHERWISE NOTED
KCMIL	THOUSAND CIRCULAR MILS	UT	UNDERGROUND TELECOM
KV	KILO--VOLTS		
KVA	KILO--VOLT--AMPERE	V	VOLTS
KW	KILOWATTS	W	WIRE
		WP	WEATHER PROOF
LAD	LOCATE AS DIRECTED	XFMR	TRANSFORMER
LC	LOAD CENTER		
LP	LIGHTING PANEL		
LV	LOW VOLTAGE		
LSI	LONG TIME, SHORT TIME, INSTANTANEOUS		

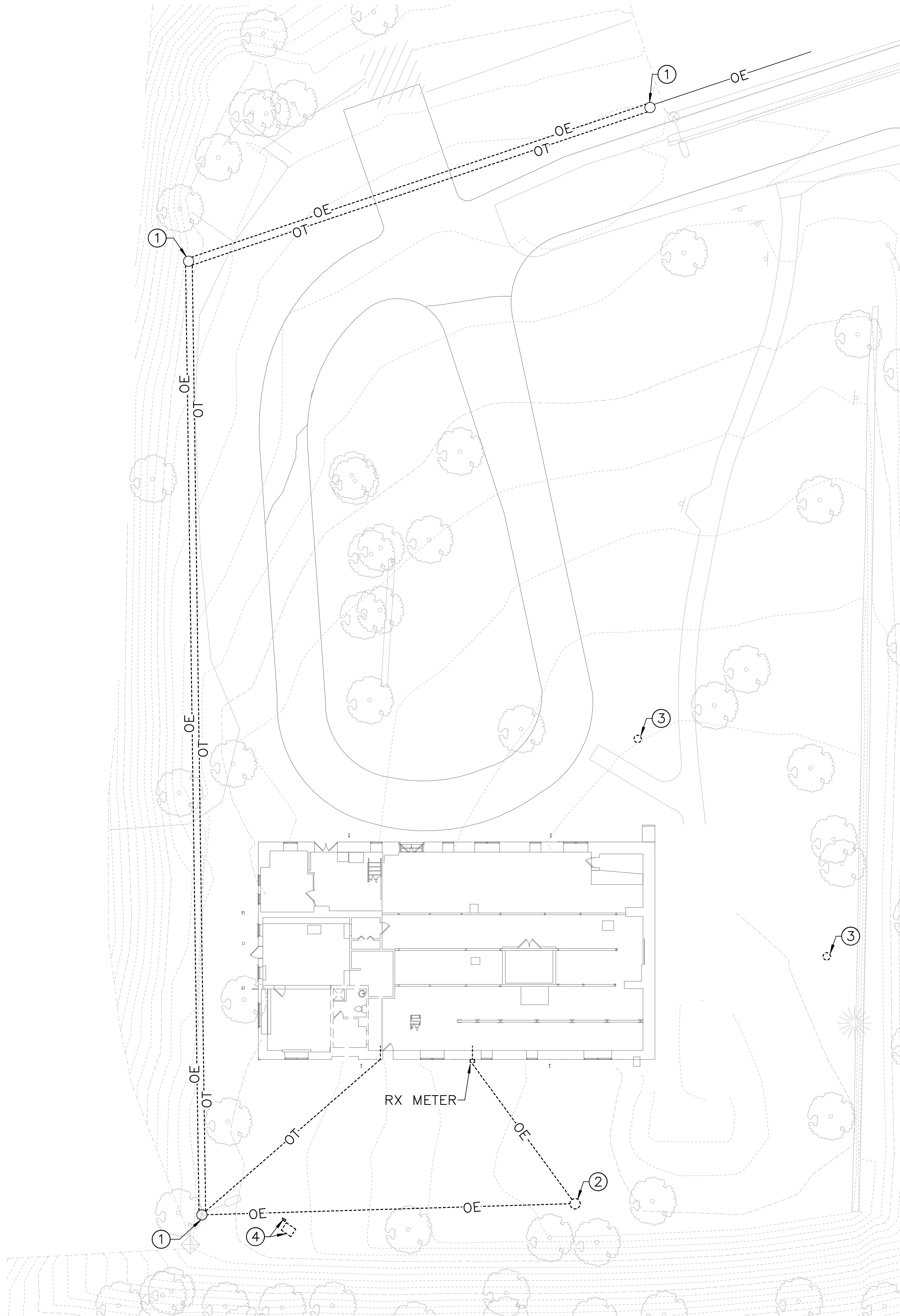
DESIGNE	SUB SHEET NO	TITLE OF	DRAWING
JLW	E0.1	ELECTRICAL COVER SHEET	895
ADD			179603
JLW			PMIS/PKG
TECH.			312325
JST		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	SHEET
DAT			o X
12/06/2023			

GENERAL ELECTRICAL NOTES (APPLICABLE TO ALL ELECTRICAL DRAWINGS)	
<div>1. PROVIDE LABOR, MATERIALS, TOOLS, EQUIPMENT, COORDINATION, DELEGATED DESIGN AND INCIDENTALS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.</div> <div>2. PERFORM WORK AS REQUIRED BY APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION.</div> <div>3. MATERIAL AND EQUIPMENT SHALL BE LISTED AND LABELED BY NATIONALLY RECOGNIZED TESTING LABORATORIES FOR INTENDED SERVICE.</div> <div>4. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION.</div> <div>5. MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET SHALL BE COMPLETE, CURRENT, AND AVAILABLE UPON REQUEST.</div> <div>6. SUBMIT FOR APPROVAL, SHOP DRAWINGS FOR EQUIPMENT AND MATERIALS USED ON PROJECT. OBTAIN APPROVAL BY ENGINEER PRIOR TO PURCHASE OF EQUIPMENT AND MATERIALS.</div> <div>7. REPAIR OR REPLACE DAMAGE TO FACILITIES AND EQUIPMENT AT NO ADDITIONAL EXPENSE TO OWNER.</div> <div>8. PATCH AND REPAIR DISTURBED AREAS TO MATCH ADJACENT SURFACES AND FINISHES.</div> <div>9. PROVIDE TEMPORARY POWER AND LIGHTING FOR OTHER TRADES AS REQUIRED TO COMPLETE PROJECT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.</div> <div>10. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS. PROVIDE COMPONENTS INDICATED ON RISER DIAGRAMS WHETHER OR NOT INDICATED ON PLANS, AND VICE VERSA.</div> <div>11. LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND REQUIRE COORDINATION WITH OTHER TRADES. ROUTING OF CONDUIT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO SHOW REQUIRED OFFSETS AND DETAILS. OBTAIN DRAWINGS AND SPECIFICATIONS FROM OTHER TRADES AND COORDINATE WITH OTHER TRADES.</div> <div>12. COORDINATE ELECTRICAL INSTALLATION WITH FIELD CONDITIONS. LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY REQUIRE ADJUSTMENT IN FIELD.</div> <div>13. COORDINATE LOCATIONS OF ELECTRICAL DEVICES WITH ARCHITECTURAL [ELEVATIONS,] [CASEWORK DETAILS,] [AND KITCHEN EQUIPMENT] DRAWINGS PRIOR TO INSTALLATION.</div> <div>14. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS.</div> <div>15. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE [AND SOUND RATED] WALLS REQUIRING SPECIAL CONSTRUCTION.</div> <div>16. PERMANENTLY LABEL NEW ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, DEVICE DESIGNATION AND SUPPLY CIRCUIT DESIGNATION.</div> <div>17. CORE DRILL CONCRETE WALLS AND FLOORS TO PROVIDE OPENINGS FOR CONDUIT INSTALLATION. PRIOR TO CORE DRILLING, LOCATE REINFORCING BARS IN EXISTING WALLS AND FLOORS USING A NON-DESTRUCTIVE METHOD. COORDINATE AND OBTAIN FINAL APPROVAL OF CORE DRILL LOCATIONS FROM [CONTRACTING OFFICER] [STRUCTURAL ENGINEER]. DO NOT CUT THROUGH EXISTING REINFORCING BARS [WITHOUT APPROVAL OF CONTRACTING OFFICER] [WITHOUT APPROVAL OF STRUCTURAL ENGINEER]. MAXIMUM CORE DRILL SIZE SHALL BE 5-INCH DIAMETER. SPACE CORE DRILL LOCATIONS A MINIMUM OF 6 INCHES FROM EACH OTHER, MEASURED FROM CORE DRILL OPENINGS. PROPERLY SEAL OPENINGS ACCORDING TO LOCATION AND APPLICATION.</div> <div>18. PROVIDE EACH CIRCUIT WITH A DEDICATED NEUTRAL UNLESS NOTED OTHERWISE.</div> <div>19. CONDUIT HOMERUNS SHOWN ON DRAWINGS WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMMATICALLY. DO NOT INSTALL MORE THAN 3 CURRENT CARRYING CONDUCTORS IN A SINGLE RACEWAY UNLESS INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.</div> <div>20. PROVIDE FIRESTOPPING FOR ELECTRICAL PENETRATIONS IN FIRE RATED ASSEMBLIES.</div> <div>21. INSTALL ELECTRICAL WORK IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE. INSTALL RACEWAYS TIGHT TO STRUCTURAL CEILING AND AS HIGH AS POSSIBLE WITHIN CEILING SPACES TO MAINTAIN MAXIMUM AMOUNT OF CLEAR SPACE BELOW RACEWAY.</div> <div>22. INSTALL RACEWAYS CONCEALED IN BUILDING FINISHES FOR ALL EXTERIOR MOUNTED DEVICES. DO NOT ROUTE EXPOSED ON BUILDING EXTERIOR.</div> <div>23. INSTALL RACEWAYS CONCEALED IN WALLS, UNDER FLOORS, ABOVE CEILINGS, ETC., EXCEPT AS FOLLOWS: -WHERE SUSPENDED CEILINGS ARE NOT PROVIDED -IN VERTICAL SHAFTS, ELECTRICAL CLOSETS, ETC., MECHANICAL AND ELECTRICAL EQUIPMENT SPACES WHERE CONCEALMENT IS NOT PRACTICAL. -AT SURFACE-MOUNT PANELBOARDS IN OTHERWISE FINISHED SPACES LIMITED TO VERTICAL RUNS ABOVE AND BELOW PANEL -WHERE REQUIRED FOR EQUIPMENT CONNECTIONS -WHERE SPECIFICALLY INDICATED ON DRAWINGS</div> <div>24. OWNER-FURNISHED EQUIPMENT: VERIFY AND COORDINATE ELECTRICAL ROUGH-IN REQUIREMENTS FOR OWNER-FURNISHED EQUIPMENT WITH OWNER PRIOR TO PULLING CONDUCTORS AND MAKING FINAL CONNECTIONS. LACK OF COORDINATION SHALL NOT JUSTIFY CHANGE ORDERS.</div> <div>25. WHERE SUBMITTED EQUIPMENT REQUIRES REVISION TO OVERCURRENT PROTECTION, CONDUIT, AND WIRING, COORDINATE AND MAKE CHANGE TO PROVIDE A COMPLETE INSTALLATION IN ACCORDANCE WITH APPLICABLE CODES.</div> <div>26. [PRIOR TO SUBMITTING BID, VISIT SITE AND BECOME THOROUGHLY FAMILIAR WITH EXISTING CONDITIONS AND PROPOSED CONSTRUCTION]</div> <div>27. [COORDINATE WORK WITH PHASES INDICATED ON DRAWINGS OF OTHER TRADES.]</div> <div>28. PROVIDE NECESSARY SUPPORTING STRUT CHANNEL AND ALL MISCELLANEOUS HARDWARE FOR MOUNTING ELECTRICAL EQUIPMENT. MAINTAIN NEC WORKING CLEARANCES. COORDINATE EXACT LOCATION IN FIELD. DO NOT MOUNT ON EQUIPMENT ACCESS PANELS OR IN EQUIPMENT MANUFACTURER’S RECOMMENDED MAINTENANCE CLEARANCES.</div>	

GENERAL ELECTRICAL DEMOLITION/RENOVATION NOTES (APPLICABLE TO ALL ELECTRICAL DRAWINGS)	
<div>1. THE FACILITY WILL [NOT] REMAIN OCCUPIED DURING RENOVATIONS.</div> <div>2. MINIMIZE OUTAGES. COORDINATE OUTAGES WITH OWNER. [PERFORM WORK REQUIRING SUSTAINED EQUIPMENT OUTAGE CONTINUOUSLY AROUND THE CLOCK UNTIL WORK IS COMPLETE, UNLESS NOTED OTHERWISE.]</div> <div>3. PRIOR TO DEMOLITION, FIELD VERIFY CONDUITS, CONDUCTORS, AND CABLES THAT PASS THROUGH AND SERVE AREAS OUTSIDE THE SCOPE OF WORK. MAINTAIN CONTINUITY OF SYSTEMS. PROTECT OR RELOCATE SYSTEMS TO PREVENT DAMAGE. RESTORE SYSTEMS TO NORMAL OPERATION. COORDINATE SYSTEM OUTAGES WITH OWNER.</div> <div>4. IDENTIFY NONFUNCTIONING EQUIPMENT AND DEVICES TO REMAIN AFTER DEMOLITION. NOTIFY OWNER IN WRITING PRIOR TO DEMOLITION. UPON COMPLETION OF WORK, ENSURE THAT EXISTING EQUIPMENT AND DEVICES OPERATE PROPERLY.</div> <div>5. IN AREAS REQUIRING THE PERFORMANCE OF WORK OF OTHER TRADES, CAREFULLY DISCONNECT, MAKE SAFE, REMOVE AND STORE ELECTRICAL ITEMS IN PATH OF WORK. REINSTALL AND RECONNECT SAME AFTER COMPLETION OF OTHER TRADE’S WORK. COORDINATE REMOVAL OF EQUIPMENT WITH OTHER TRADES PRIOR TO DEMOLITION.</div> <div>6. AFTER DEMOLITION VERIFY AND SUPPORT REMAINING CABLES, WIRES, AND CONDUIT IN ACCORDANCE WITH THE APPLICABLE VERSION OF THE NEC. DISCONNECT, MAKE SAFE AND REMOVE ABANDONED AND TEMPORARY WIRE WITHIN SPACE.</div> <div>7. EXISTING CONDITIONS REFLECT GENERAL OBSERVATIONS AND ARE NOT INTENDED TO INDICATE DETAILS OR DIMENSIONS. NO ATTEMPT HAS BEEN MADE TO SHOW ALL ELECTRICAL EQUIPMENT. VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK. NOTIFY [ARCHITECT, ENGINEER] IN WRITING IF CONDITIONS ARE DISCOVERED THAT PREVENT EXECUTION OF WORK.</div> <div>8. PROTECT REMAINING ELECTRICAL SYSTEMS AND COMPONENTS FROM DAMAGE. REMOVE PROTECTIVE MATERIALS UPON COMPLETION OF WORK.</div> <div>9. IN AREAS NOTED TO REMOVE ELECTRICAL WORK, REMOVE CONDUITS AND ASSOCIATED SUPPORTS BACK TO POINT OF CONCEALMENT AND REMOVE WIRING BACK TO REMAINING ACTIVE DEVICES OR SOURCE.</div> <div>10. DISPOSE OF LIGHTING BALLASTS AND CAPACITORS CONTAINING PCB’S, AS DEFINED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA), IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, FEDERAL AND EPA REGULATIONS.</div> <div>11. PROVIDE OWNER WITH INVENTORY OF MAJOR ELECTRICAL ITEMS TO BE REMOVED. OWNER WILL SELECT ITEMS TO BE SALVAGED. TURN SALVAGED ITEMS OVER TO OWNER. ITEMS REJECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR. REMOVE DEMOLISHED ITEMS FROM SITE.</div> <div>12. UPDATE PANELBOARD DIRECTORIES TO INCLUDE MODIFICATIONS BY THIS PROJECT. TRACE CIRCUITS TO IDENTIFY UNLABELED LOADS.</div> <div>13. REPAIR DISTURBED AREAS TO MATCH EXISTING CONDITIONS.</div> <div>14. PROVIDE BLANK COVER PLATES FOR DEVICES REMOVED WHEN A REPLACEMENT DEVICE IS NOT INDICATED.</div> <div>15. MAINTAIN CONTINUITY OF CIRCUITS AND FEEDERS REMAINING AFTER DEMOLITION IN PANELS INDICATED TO BE DEMOLISHED OR REPLACED. EXTEND EXISTING CIRCUITS AND FEEDERS REMAINING AFTER DEMOLITION TO NEW PANELS. CIRCUIT BREAKER, CONDUIT, AND WIRE SHALL MATCH EXISTING TYPES AND SIZES.</div> <div>16. [PRIOR TO SUBMITTING BID, VISIT SITE AND IDENTIFY EXISTING CONDITIONS AND CHALLENGES THAT WILL AFFECT DEMOLITION AND CONSTRUCTION. REPORT DISCREPANCIES TO OWNER DURING BID PROCESS. ADDITIONAL COMPENSATION WILL NOT BE GRANTED FOR WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS.] {DESIGNER NOTE: USE FOR PRIVATE PROJECTS ONLY}</div> <div>17. [WHERE CIRCUITS ARE REMOVED BACK TO PANELS, REMOVE ASSOCIATED BREAKERS. USE SPACES FOR NEW BREAKERS AND CIRCUITING.] [WHERE CIRCUITS ARE REMOVED BACK TO PANELS, ASSOCIATED BREAKERS WILL BE UTILIZED FOR NEW CIRCUITING.]</div>	

DESIGNE	SUB SHEET NO.	TITLE OF	DRAWING
JLW	E0.2	ELECTRICAL NOTES	895
			179603
JLW		PMIS/PKG	
TECH.		312325	
JST		SHEET	
DAT			___ o <b>X</b>
12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	





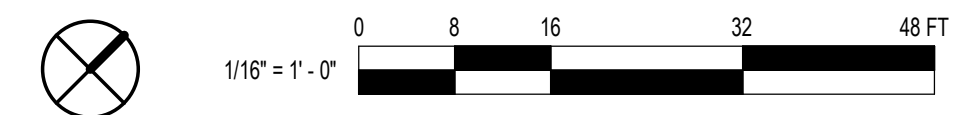
1 ELECTRICAL SITE PLAN - DEMOLITION  
E0.3 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

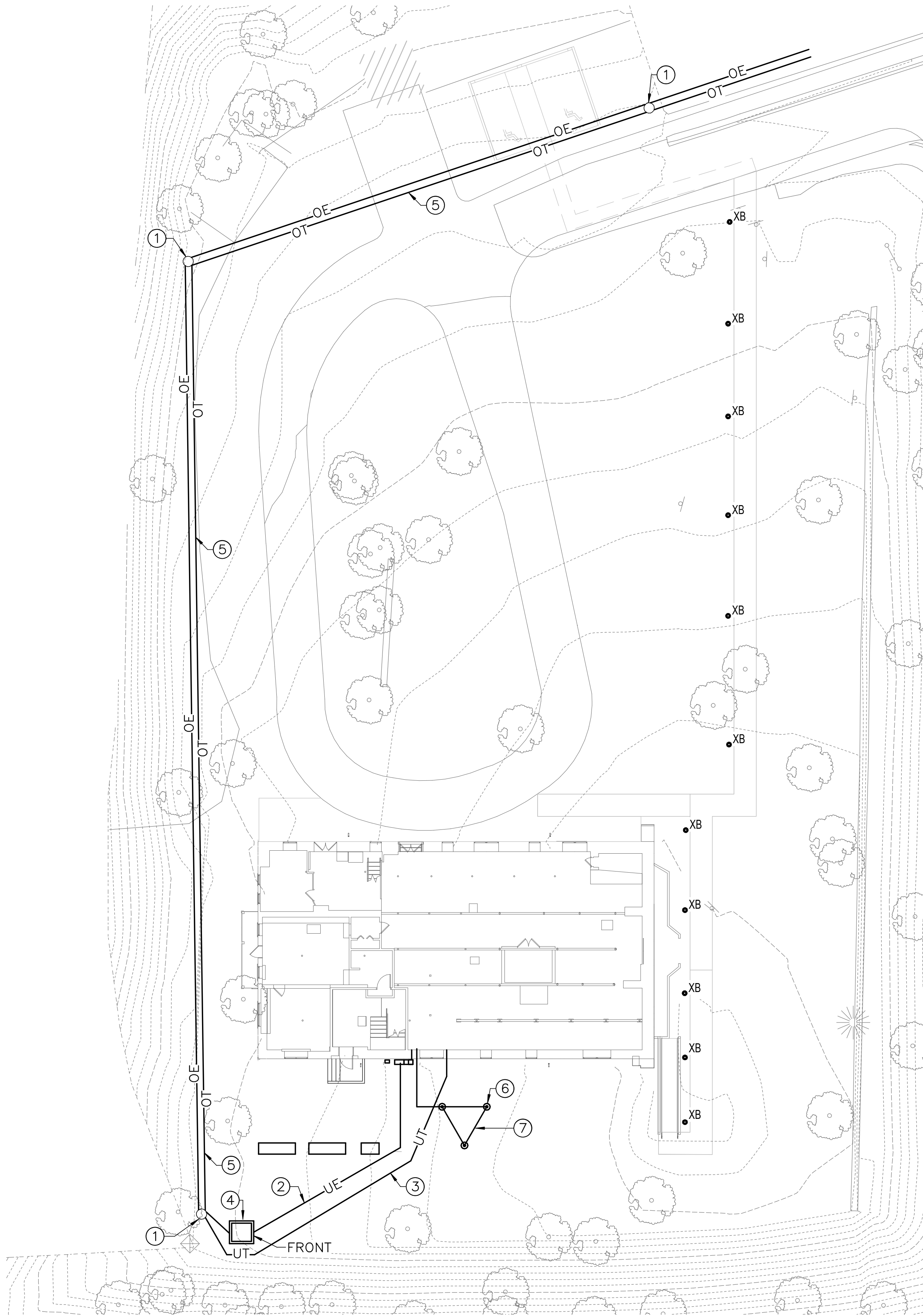
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① ETR UTILITY POLE.
- ② RX UTILITY POLE AND TRANSFORMER.
- ③ RX GROUND-MOUNTED FLOOD LUMINAIRE.
- ④ RX HVAC UNIT, DISCONNECT, AND WIRING BACK TO SOURCE PANELBOARD.



DESIGNE	SUB SHEET NO.	TITLE OF		DRAWING
JLW	E0.3	<b>ELECTRICAL SITE PLAN - DEMOLITION</b>		<b>895</b>
JLW				<b>179603</b>
TECH.				PMIS/PKG 312325
JST				SHEET
DAT 12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE		o <b>X</b>



1 ELECTRICAL SITE PLAN – NEW WORK  
E0.4 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

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3. COORDINATE INSTALLATION OF NEW ELECTRICAL UTILITIES WITH UTILITIES PROVIDED UNDER OTHER DIVISIONS. REFER TO CIVIL, LANDSCAPE, MECHANICAL, AND ARCHITECTURAL SITE PLANS.
4. COORDINATE ELECTRICAL PENETRATIONS THROUGH BUILDING FOUNDATION WALLS WITH STRUCTURAL DIVISION.
5. PERFORM GROUND DISTURBING SITE WORK WITHIN ARCHEOLOGICAL BOUNDARIES IN ACCORDNACE WITH ARCHEOLOGICAL PROTECTION REQUIREMENTS. REFER TO CIVIL DRAWINGS.

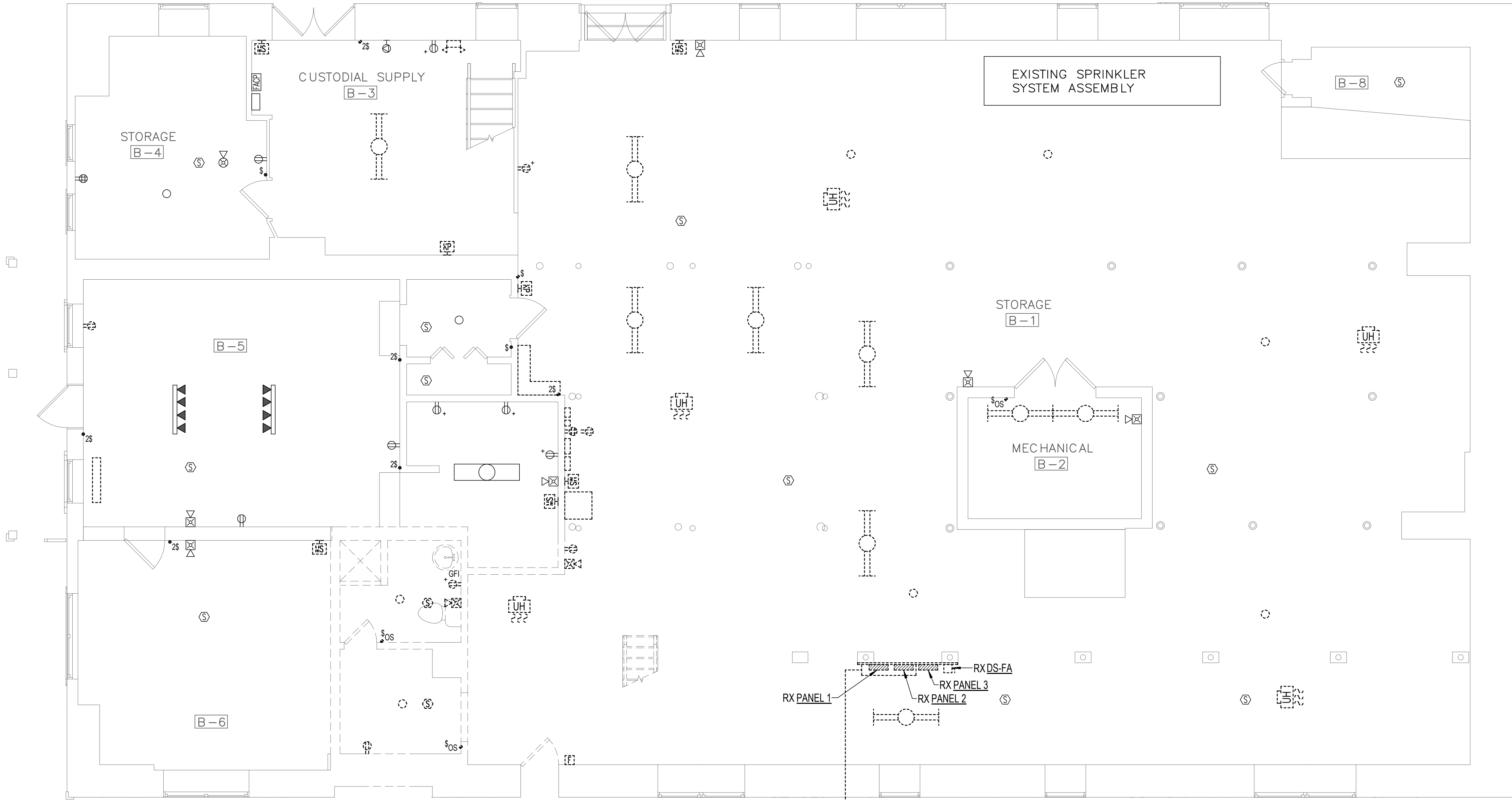
**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① ETR UTILITY POLE.
- ② PROPOSED FOUR TRADE SIZE 4" CONDUITS.
- ③ PROPOSED THREE TRADE SIZE 4" CONDUITS.
- ④ UTILITY COMPANY PAD-MOUNTED TRANSFORMER. REFER TO DETAILS ON SHEET E5.2.
- ⑤ OVERHEAD TELECOMMUNICATIONS CABLING PROVIDED BY SERVICE PROVIDER.
- ⑥ GROUND ROD, TYPICAL OF 3.
- ⑦ BURY GROUNDING CONDUCTOR 24 INCHES BELOW FINISHED GRADE, MINIMUM. REFER TO GROUNDING DETAILS ON SHEET E5.X FOR ADDITIONAL GROUNDING REQUIREMENTS.



DESIGNE	SUB SHEET NO.	TITLE OF		DRAWING
JLW	E0.4	<b>ELECTRICAL SITE PLAN - NEW WORK</b>		<b>895</b>
JLW				<b>179603</b>
TECH.				PMIS/PKG 312325
JST				SHEET
DAT 12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE		o <b>X</b>





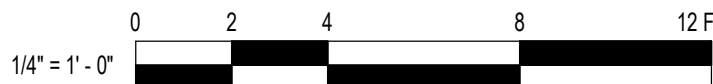
1 BASEMENT — ELECTRICAL DEMOLITION  
ED1.0 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

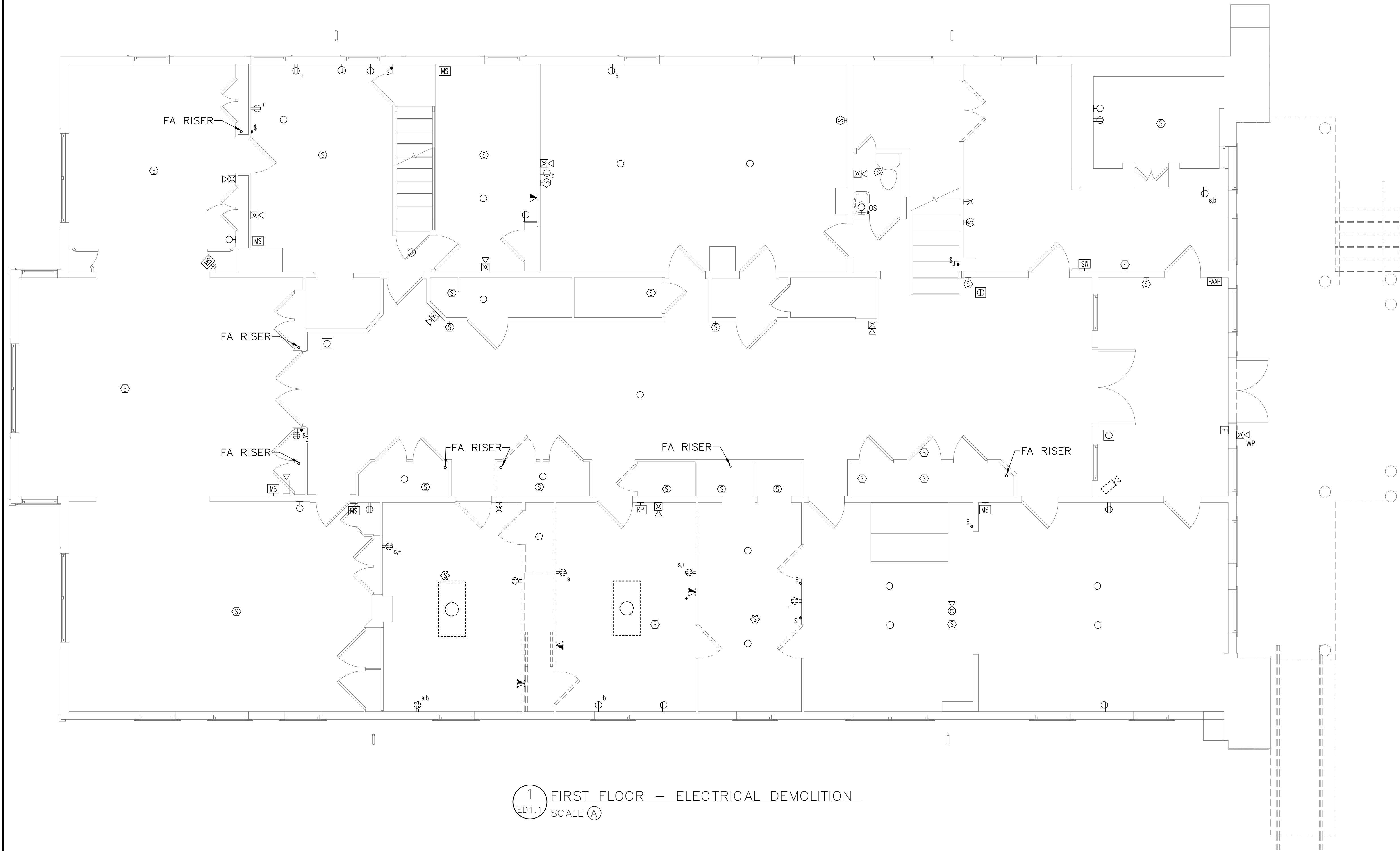
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO <b>ED1.0</b>	TITLE OF <b>BASEMENT ELECTRICAL DEMOLITION</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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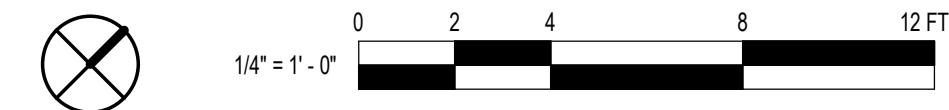
1 FIRST FLOOR — ELECTRICAL DEMOLITION  
ED1.1 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

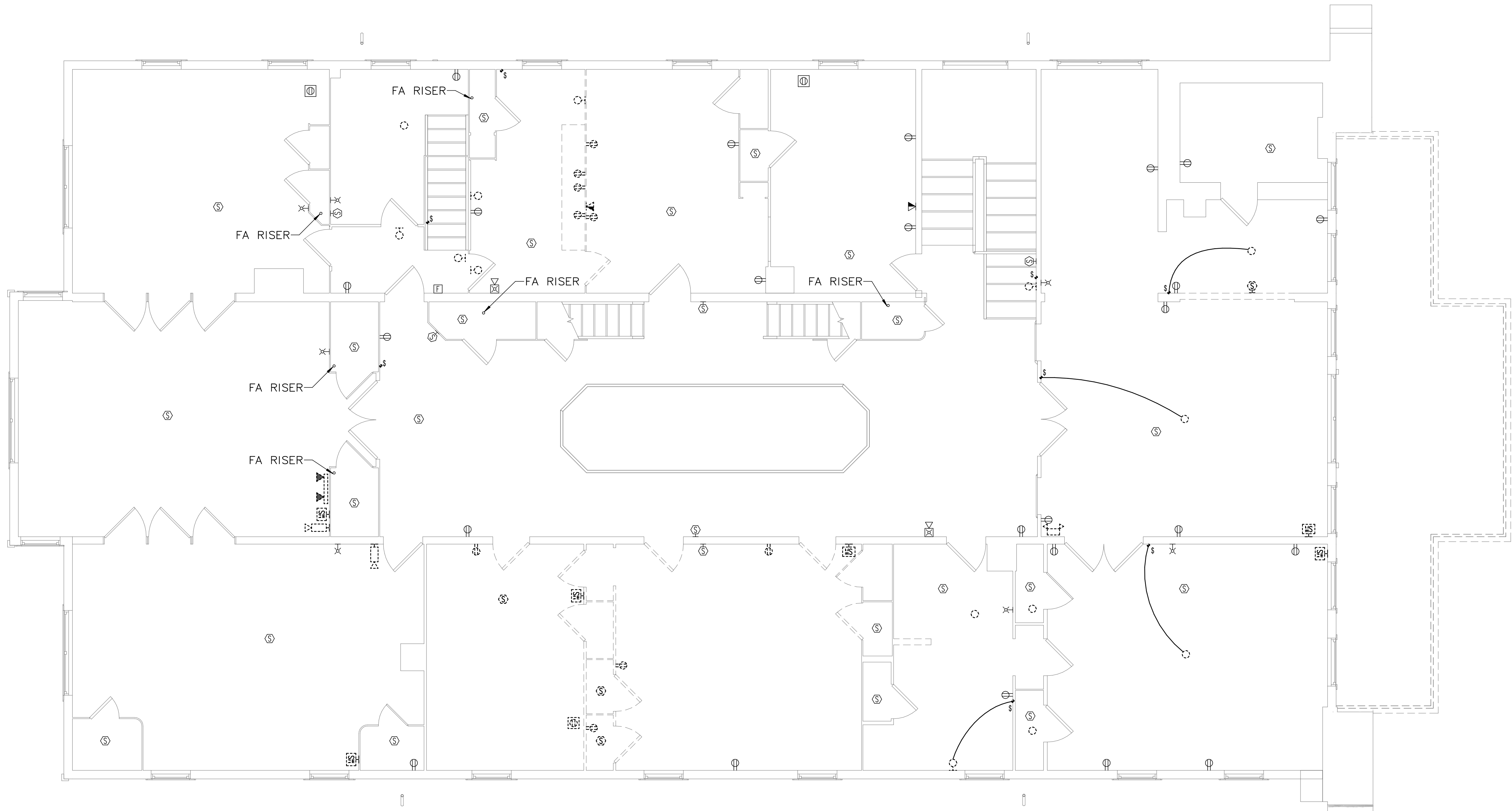
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO <b>ED1.1</b>	TITLE OF <b>FIRST FLOOR ELECTRICAL DEMOLITION</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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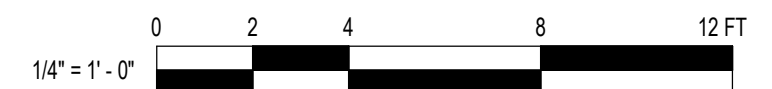
1 SECOND FLOOR — ELECTRICAL DEMOLITION  
ED1.2 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

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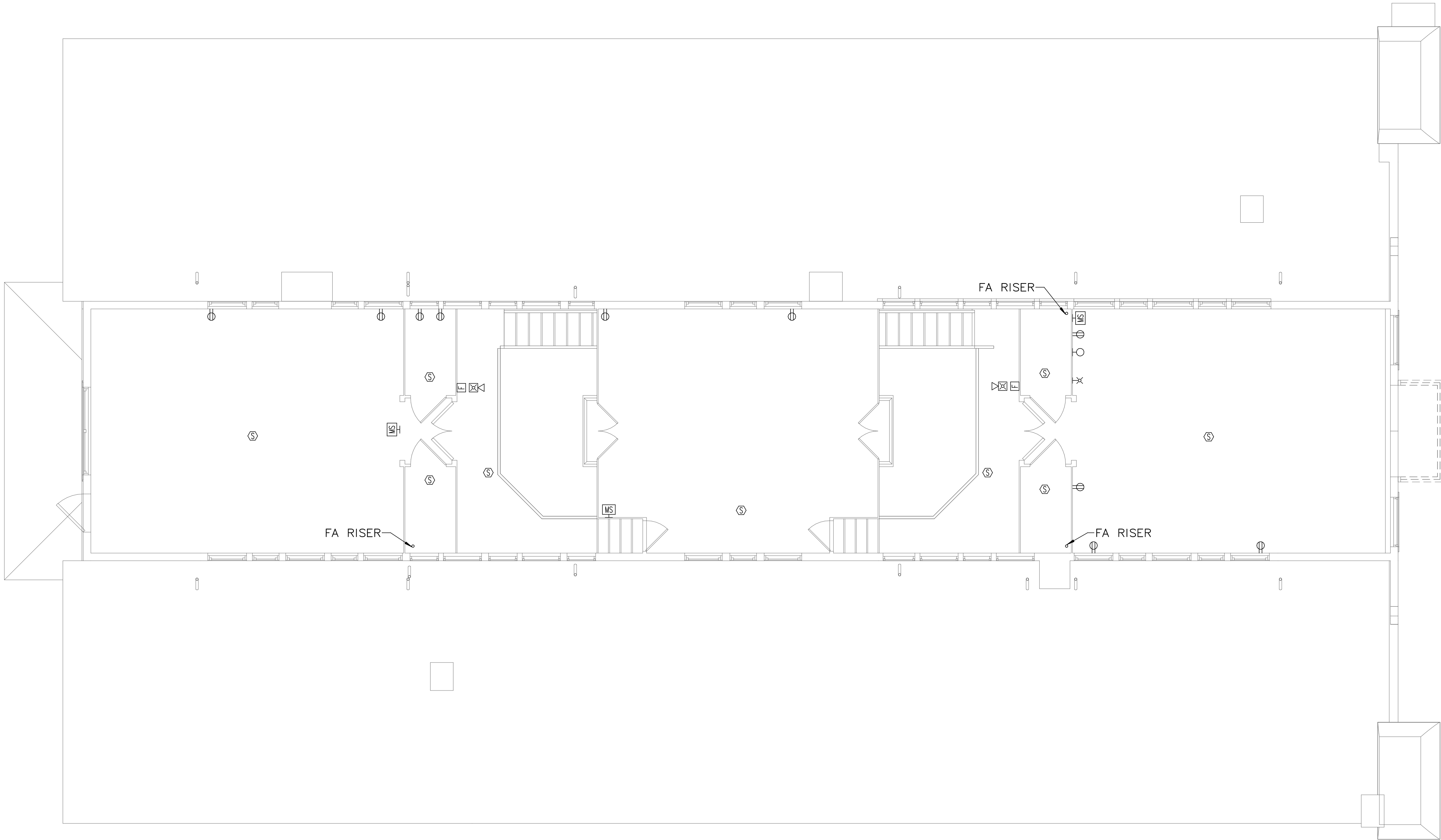
**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO.  <b>ED1.2</b>	TITLE OF  <b>SECOND FLOOR ELECTRICAL DEMOLITION</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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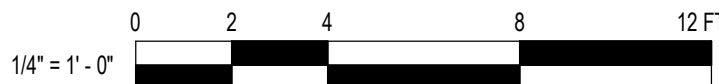
1 THIRD FLOOR — ELECTRICAL DEMOLITION  
ED1.3 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

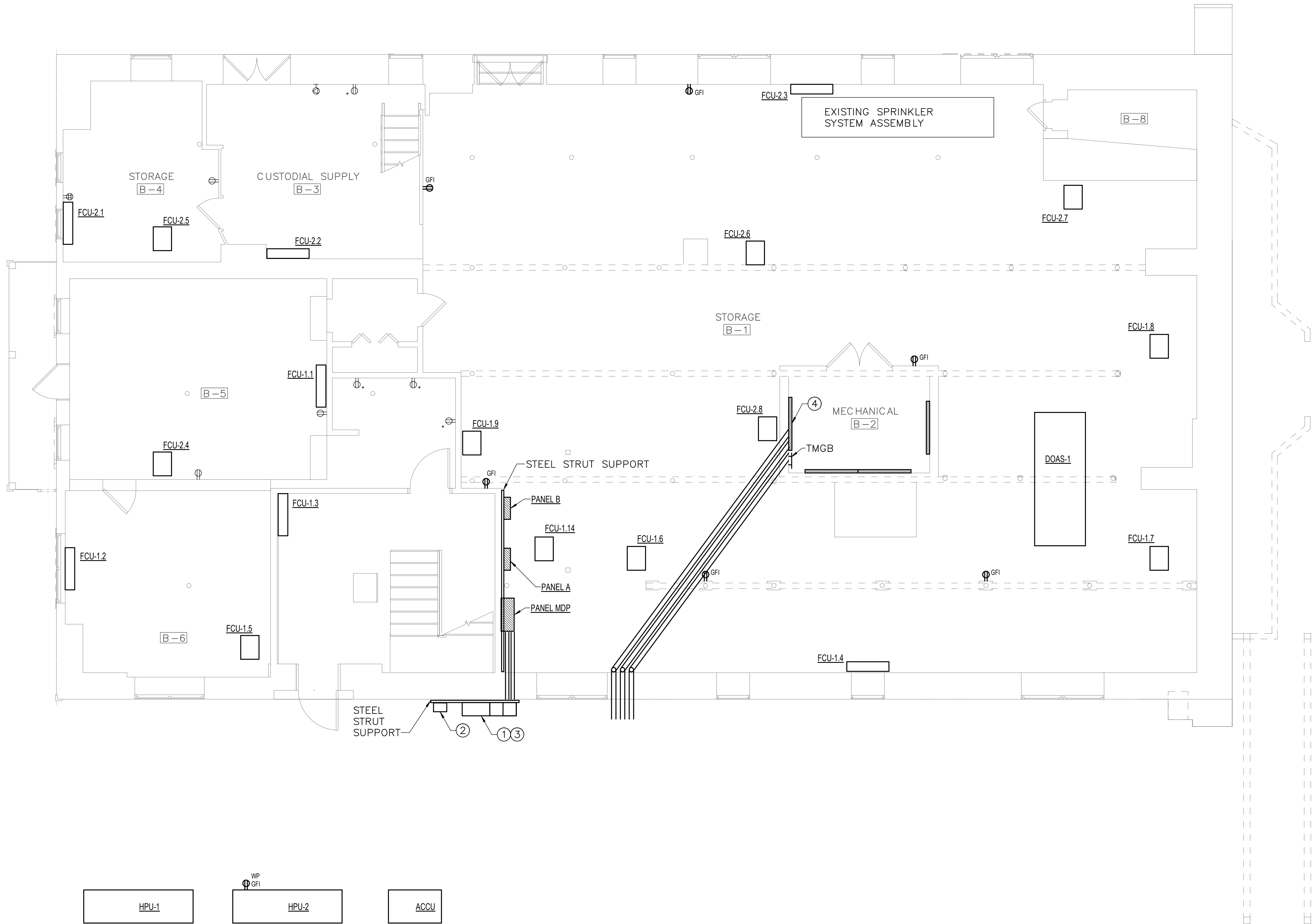
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx



DESIGNE	SUB SHEET NO	TITLE OF		DRAWING
JLW	ED1.3	THIRD FLOOR ELECTRICAL DEMOLITION		895
JLW				179603
TECH.				PMIS/PKG 312325
JST				SHEET
DAT 12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE		o X



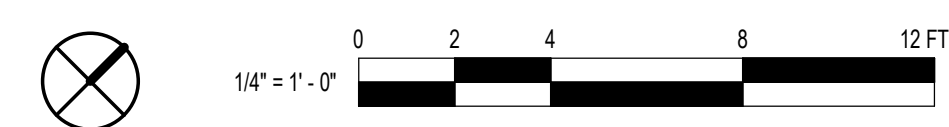
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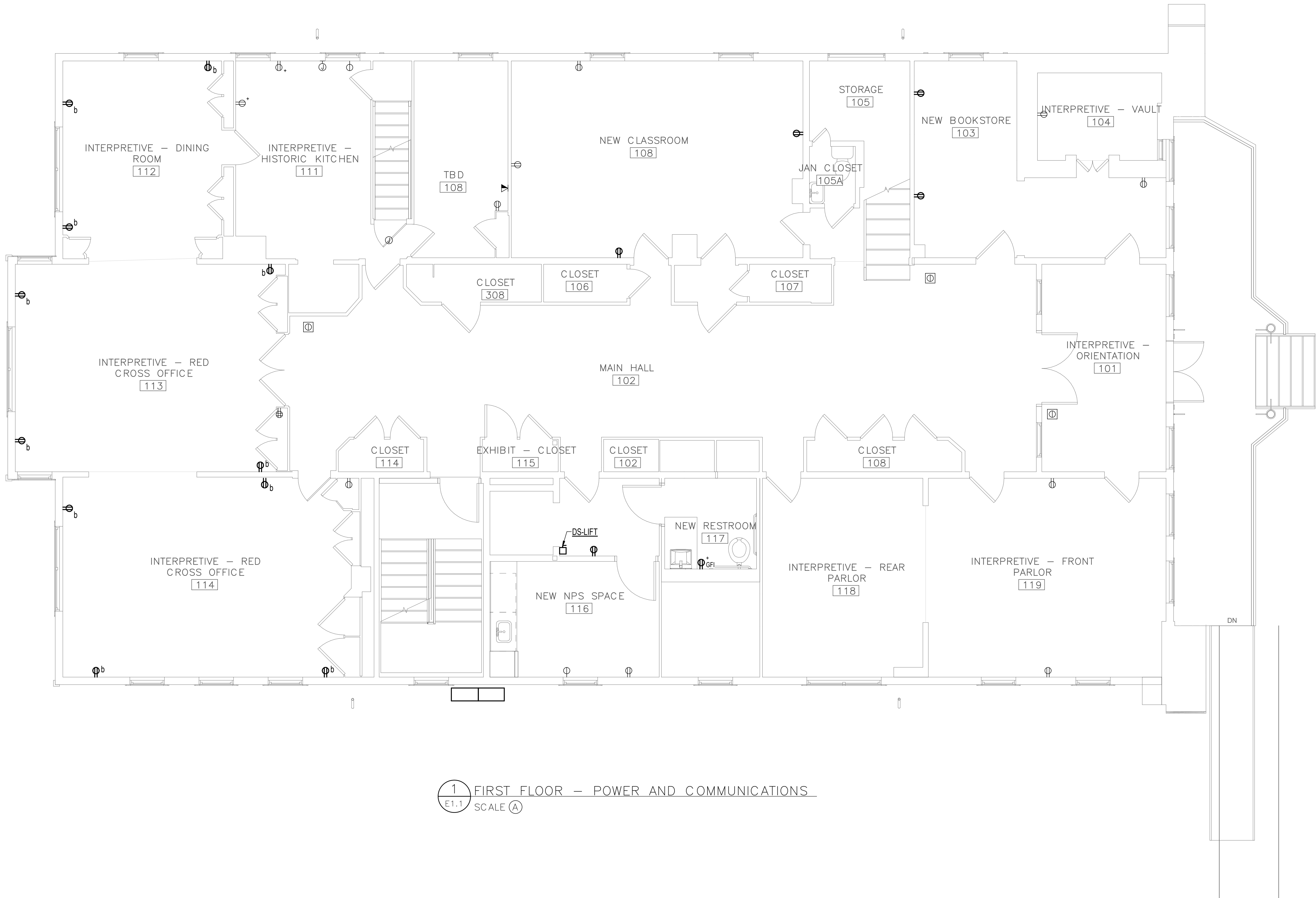
**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① 2'-1" X 12" X 12" TROUGH.
- ② UTILITY METER.
- ③ CT CABINET.
- ④ TELEPHONE TERMINAL BACKBOARD.

1 BASEMENT — POWER AND COMMUNICATIONS  
E1.0 SCALE (A)



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO <b>E1.0</b>	TITLE OF <b>BASEMENT - POWER AND COMMUNICATIONS</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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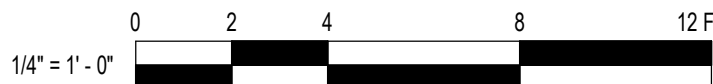
1 FIRST FLOOR — POWER AND COMMUNICATIONS  
E1.1 SCALE (A)

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(APPLICABLE TO THIS DRAWING ONLY)

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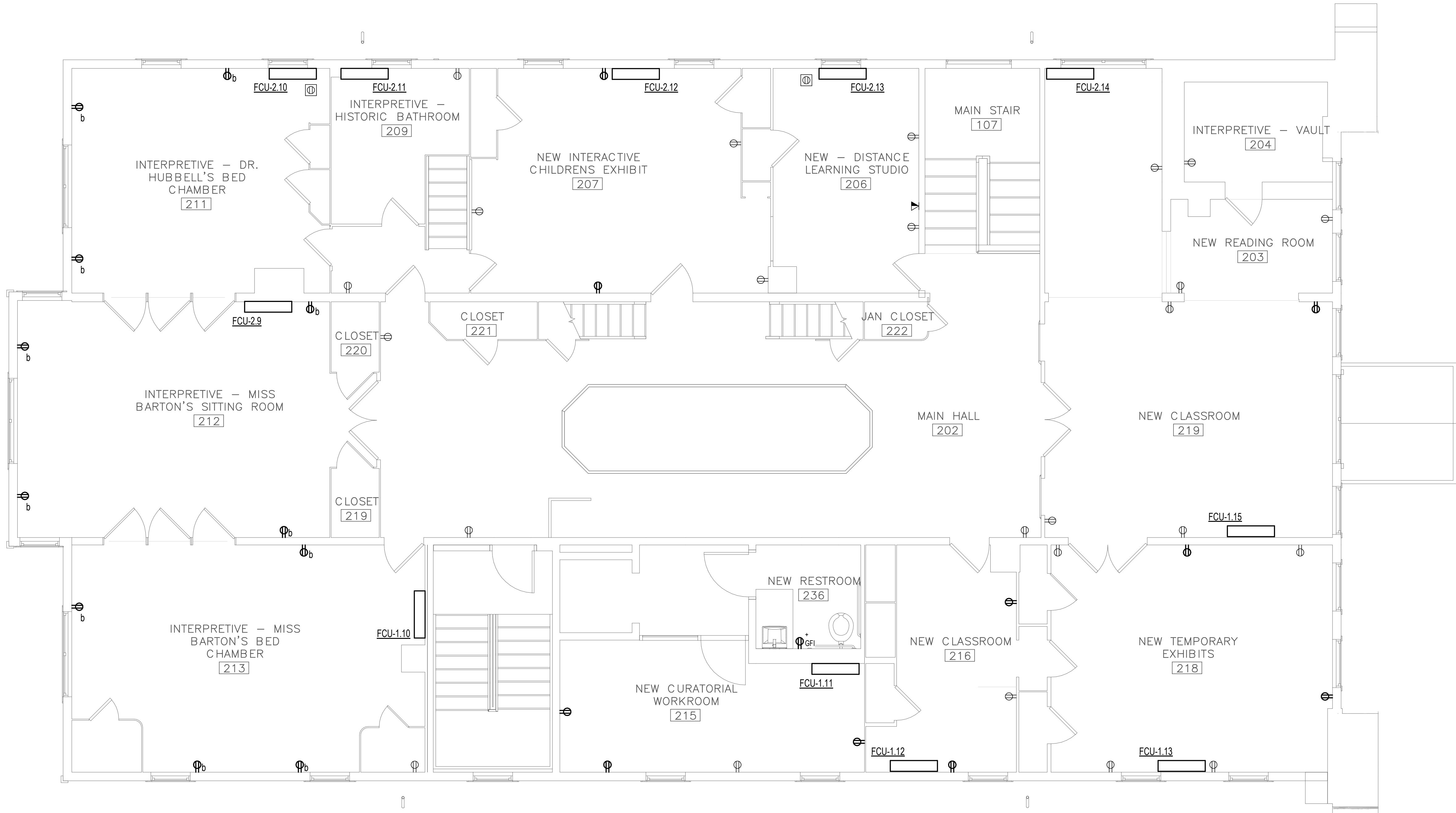
**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO <b>E1.1</b>	TITLE OF <b>FIRST FLOOR-POWER AND COMMUNICATIONS</b> REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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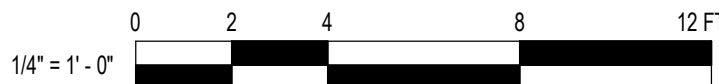
1 SECOND FLOOR — POWER AND COMMUNICATIONS  
E1.2 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

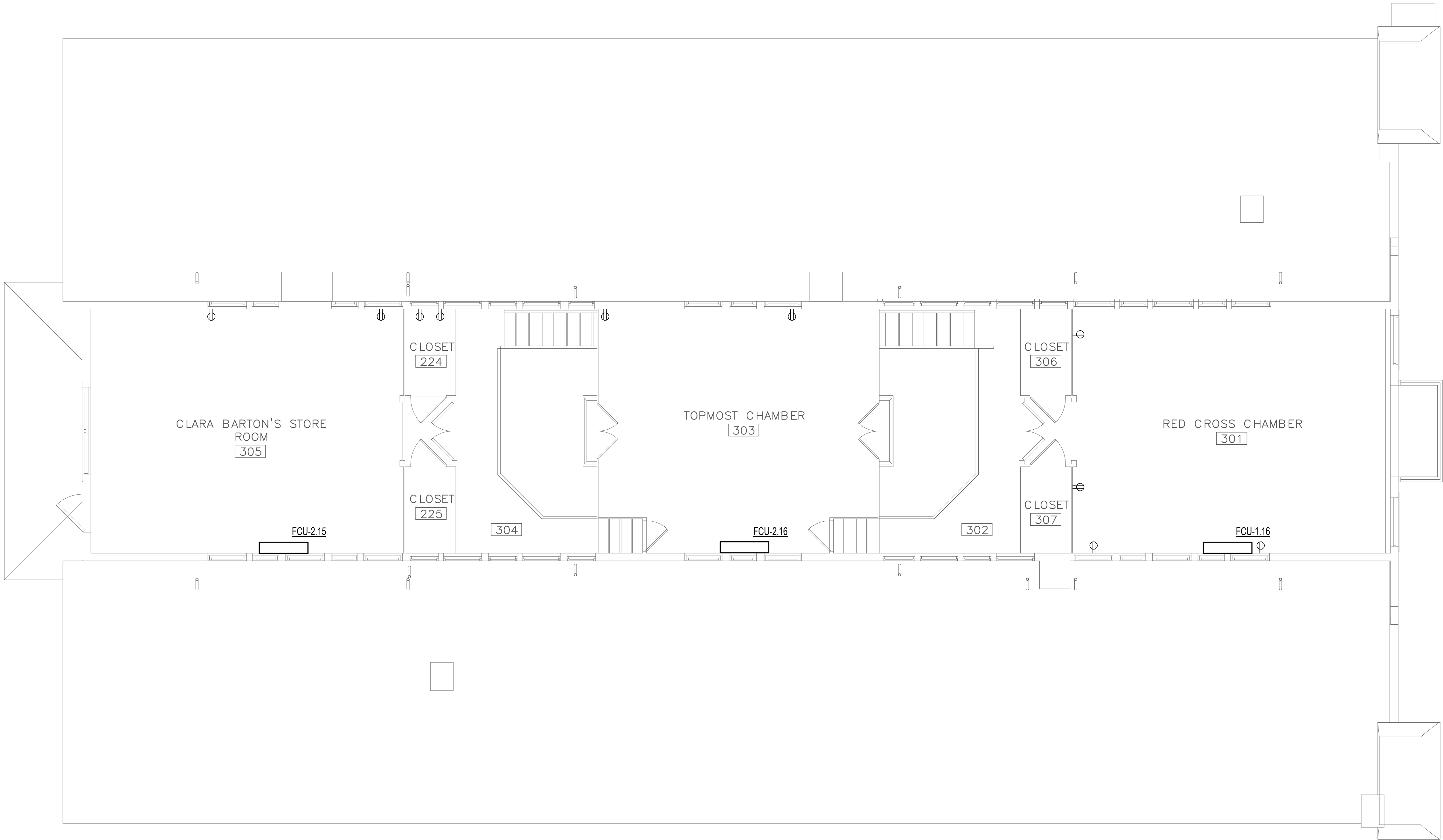
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE JLW JLW TECH. JST DAT 12/06/2023	SUB SHEET NO <b>E1.2</b>	TITLE OF <b>SECOND FLOOR-POWER AND COMMUNICATIONS</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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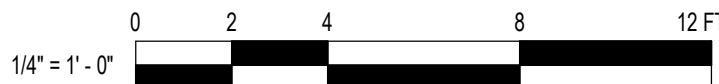
1 THIRD FLOOR — POWER AND COMMUNICATIONS  
E1.3 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

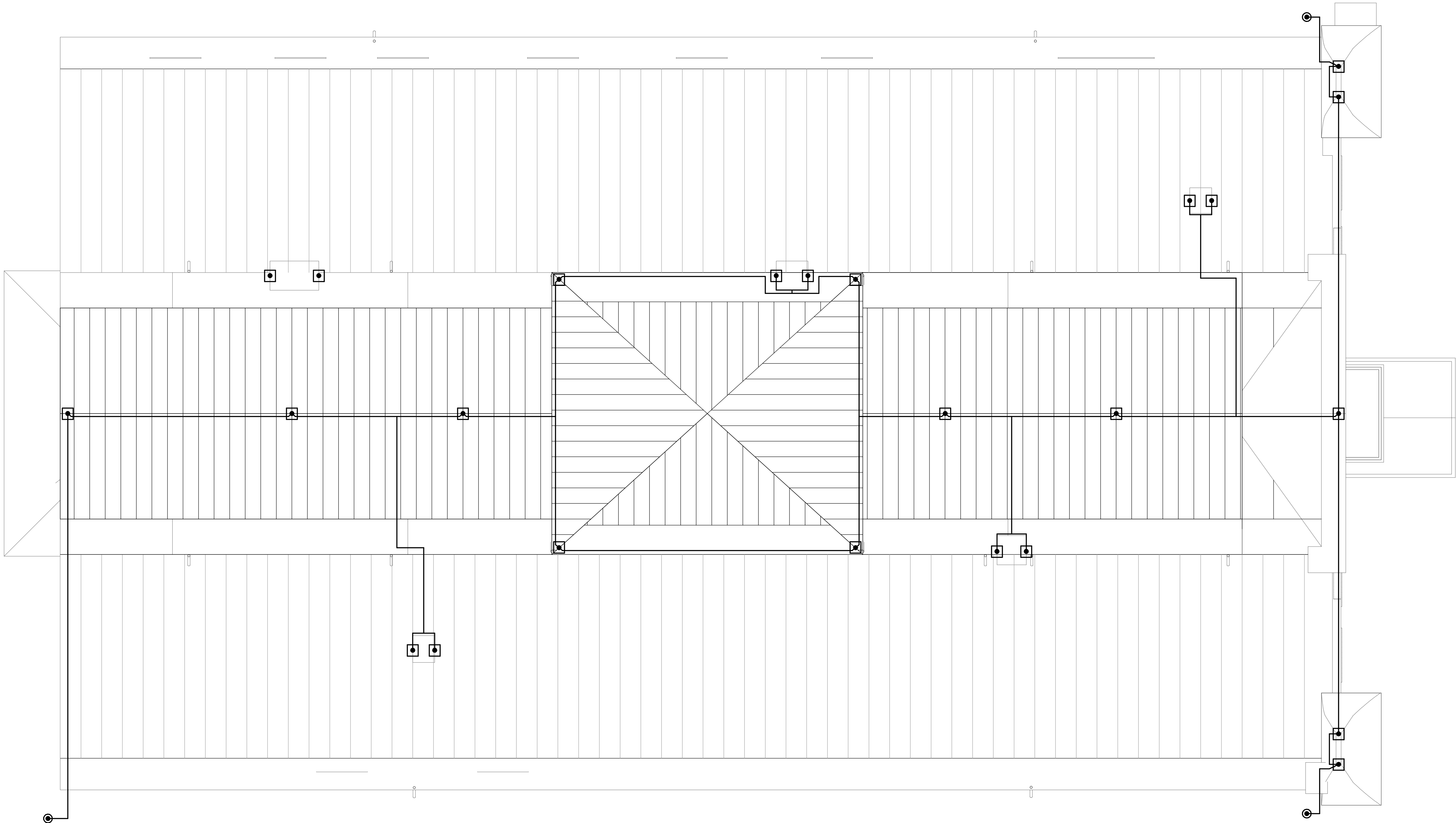
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE	SUB SHEET NO	TITLE OF	DRAWING
JLW	<b>E1.3</b>	<b>THIRD FLOOR-POWER AND COMMUNICATIONS</b>	<b>895</b>
JLW			<b>179603</b>
TECH.			PMIS/PKG
JST			312325
DAT		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	SHEET
12/06/2023			o <b>X</b>



1 ROOF LIGHTNING PROTECTION  
E1.4 SCALE (A)

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
2. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.

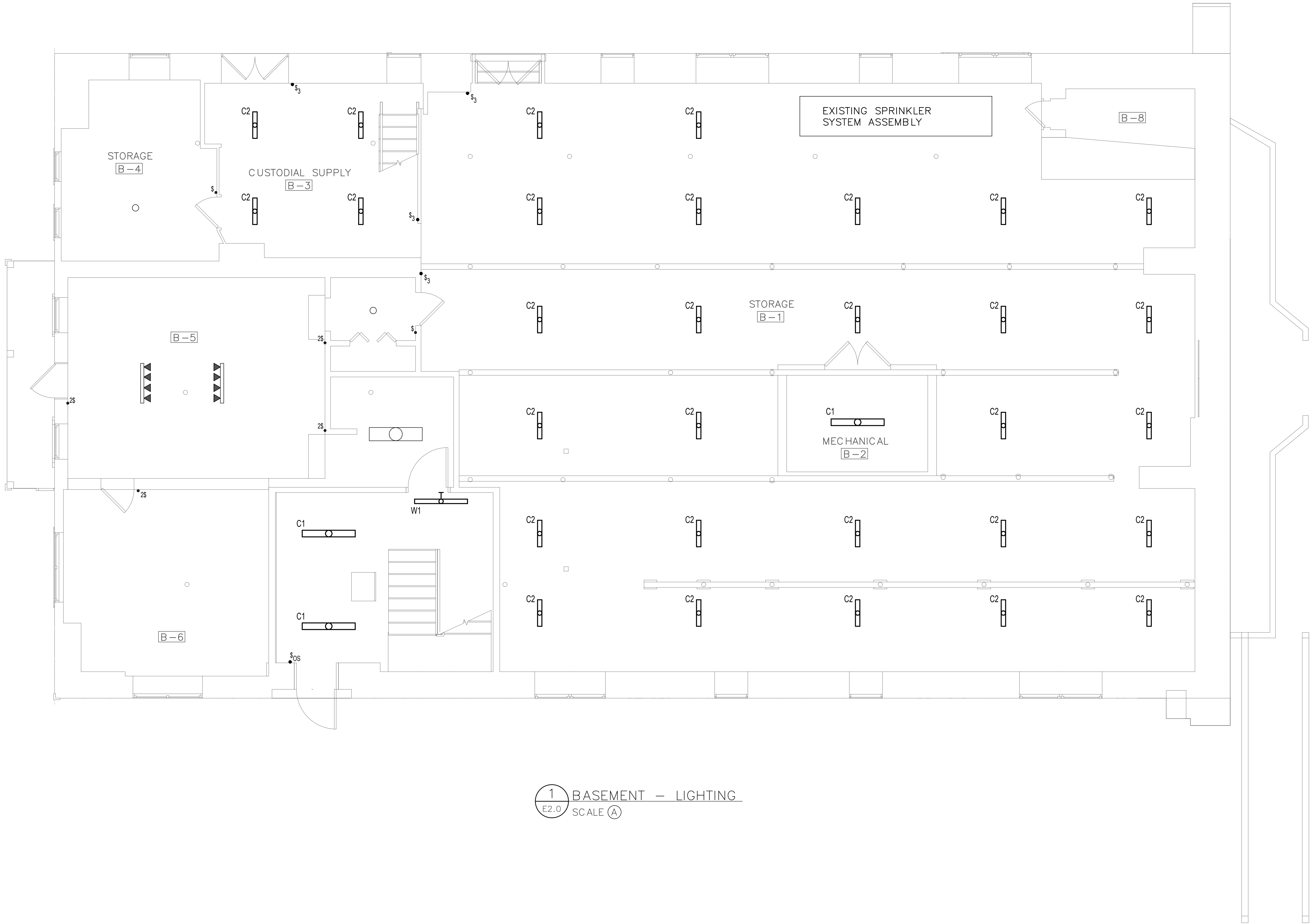
SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- 1 xxx.
- 2 xxx.



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO.  E1.4	TITLE OF  ROOF LIGHTNING PROTECTION  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING 895 179603 PMIS/PKG 312325 SHEET o X
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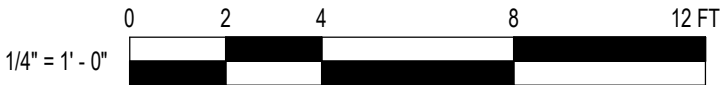
1 BASEMENT — LIGHTING  
E2.0 SCALE (A)

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

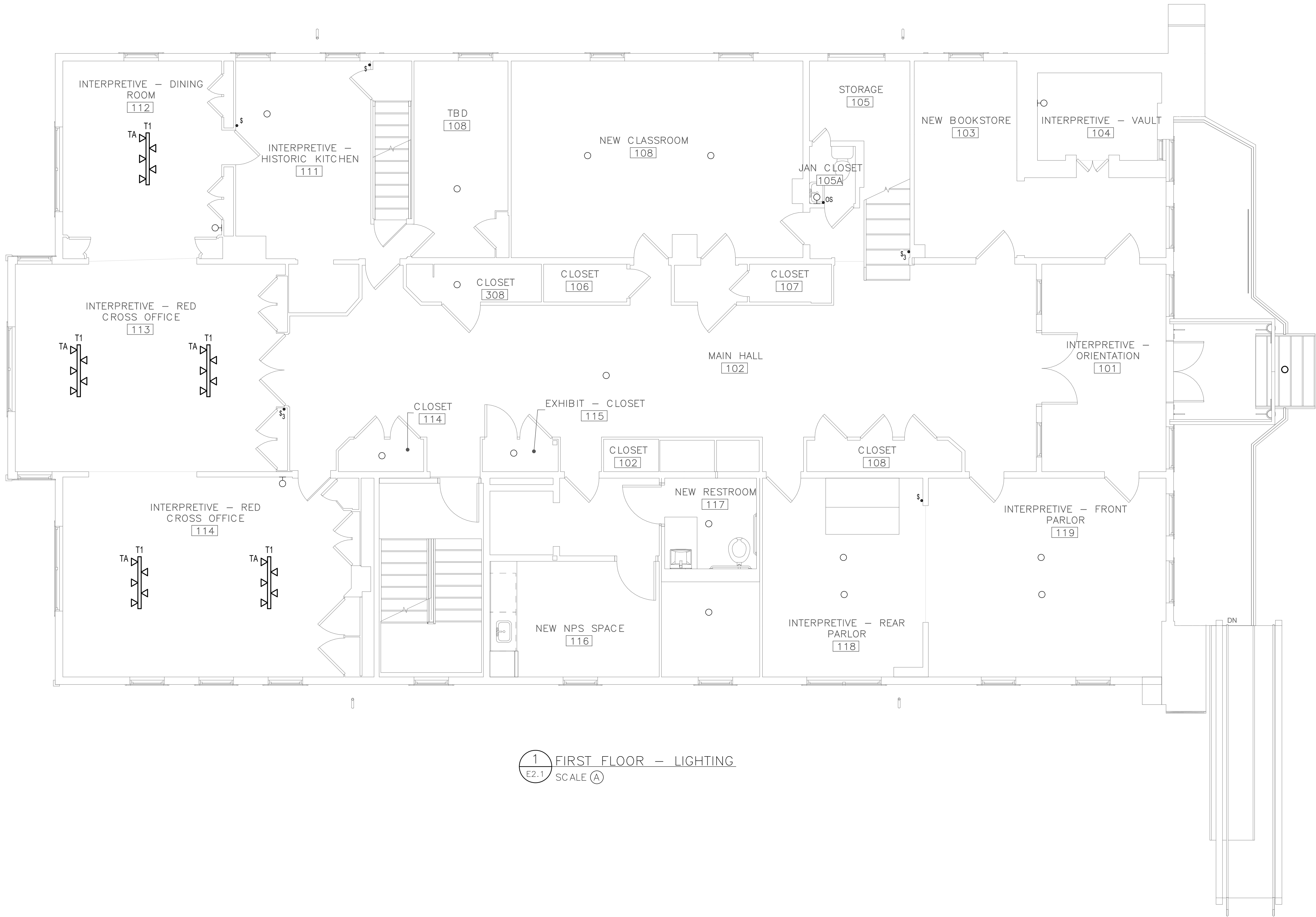
1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE		SUB SHEET NO	TITLE OF		DRAWING	
JLW			BASEMENT - LIGHTING		895	
					179603	
JLW					PMIS/PKG	312325
TECH.					SHEET	
JST		E2.0	REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE			
DAT						
12/06/2023						



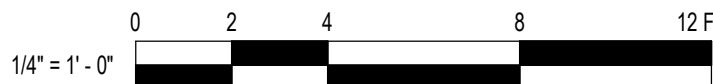
1 FIRST FLOOR — LIGHTING  
E2.1 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

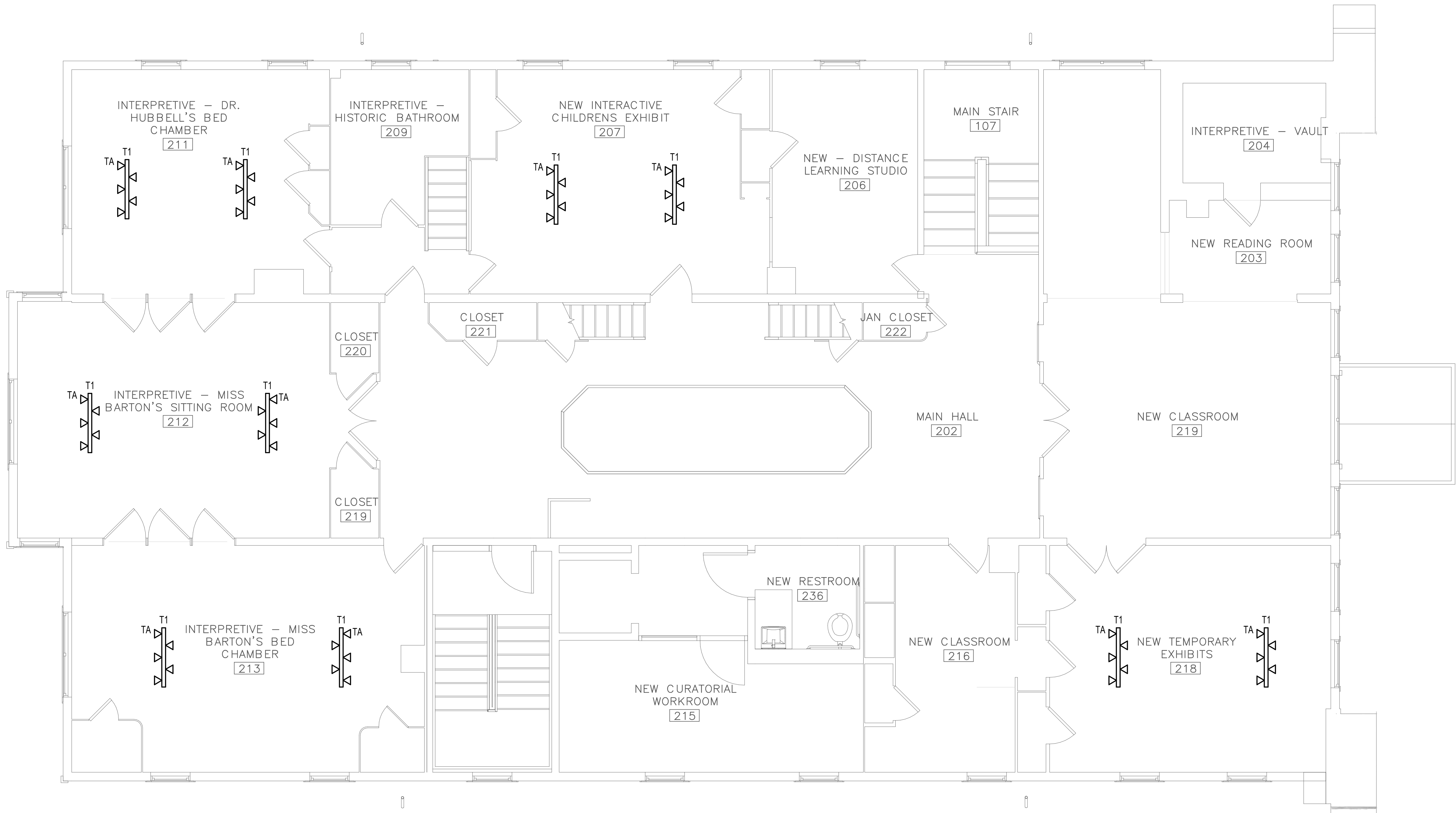
1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO <b>E2.1</b>	TITLE OF <b>FIRST FLOOR - LIGHTING</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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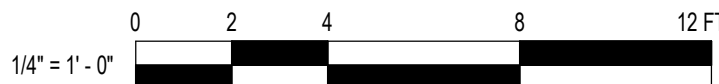
1 SECOND FLOOR - LIGHTING  
E2.2 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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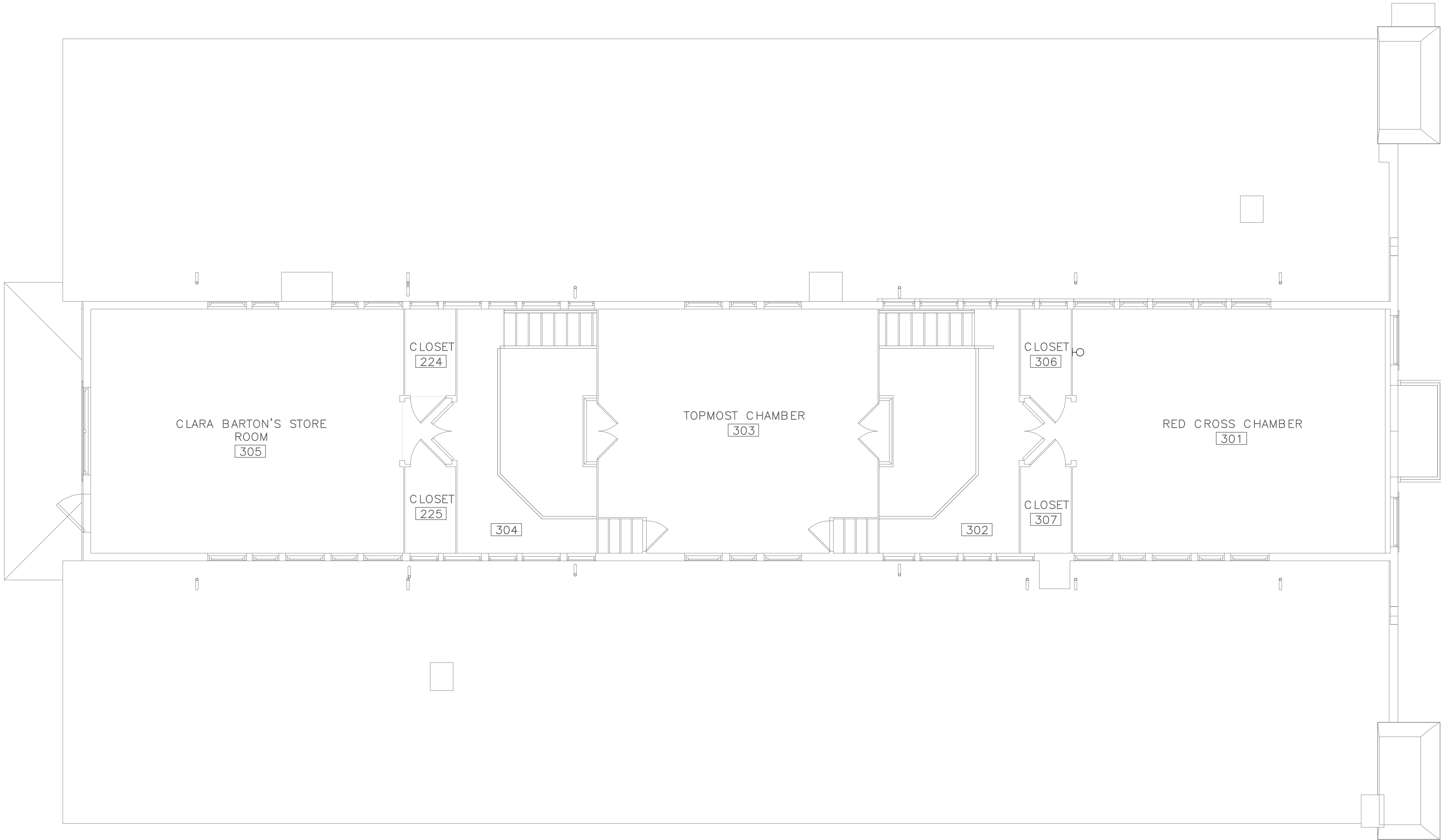
**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE	SUB SHEET NO	TITLE OF		DRAWING
JLW	<b>E2.2</b>	<b>SECOND FLOOR - LIGHTING</b>		<b>895</b>
<b>ADD</b>				<b>179603</b>
JLW				PMIS/PKG
TECH.				312325
JST			REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	SHEET
DAT				o <b>X</b>
12/06/2023				





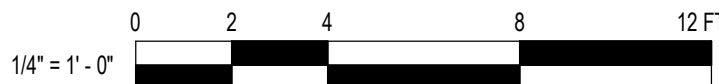
1 THIRD FLOOR - LIGHTING  
E2.3 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

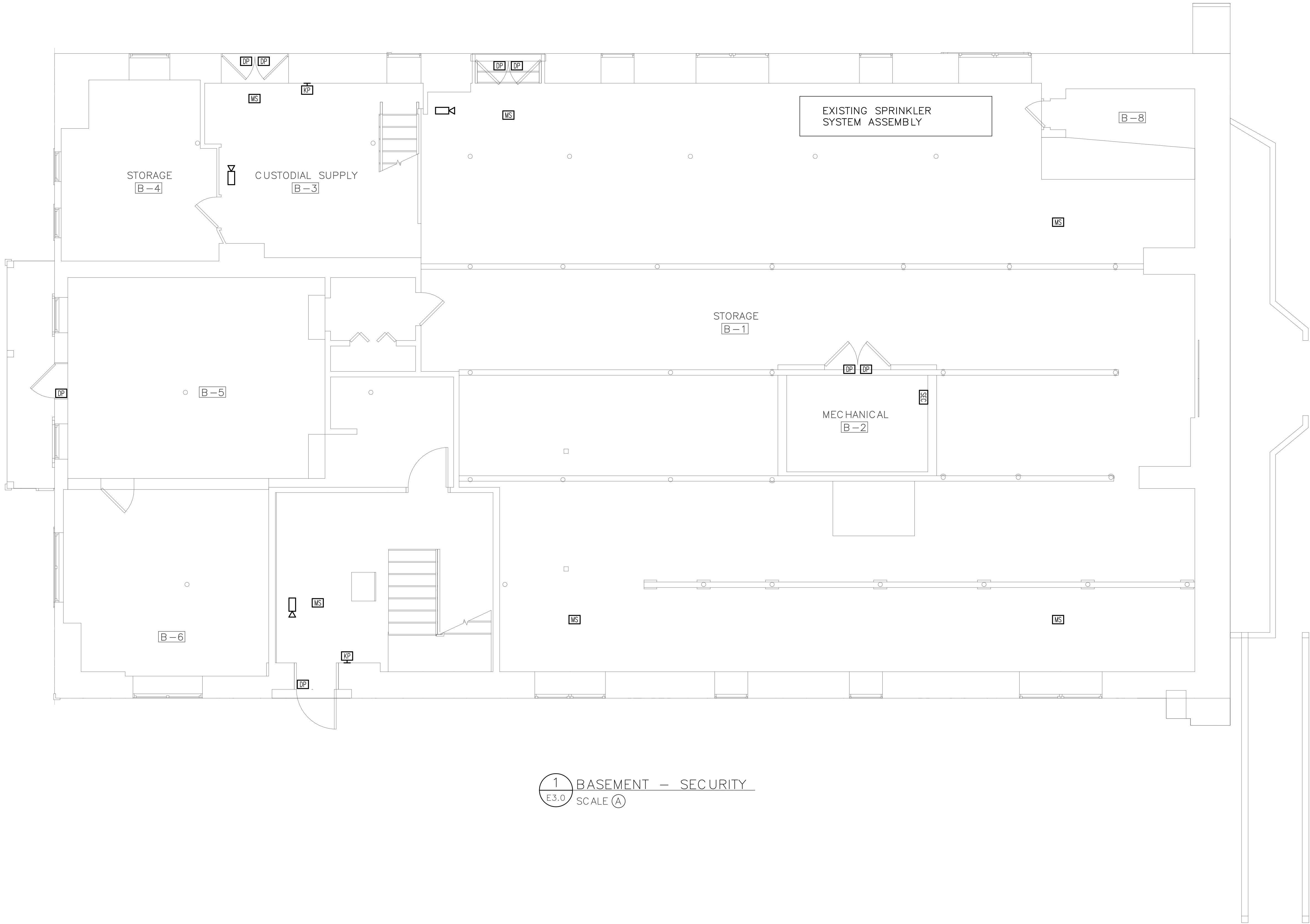
1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO <b>E2.3</b>	TITLE OF <b>THIRD FLOOR - LIGHTING</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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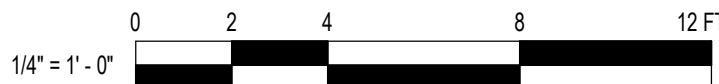
1 BASEMENT - SECURITY  
E3.0 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

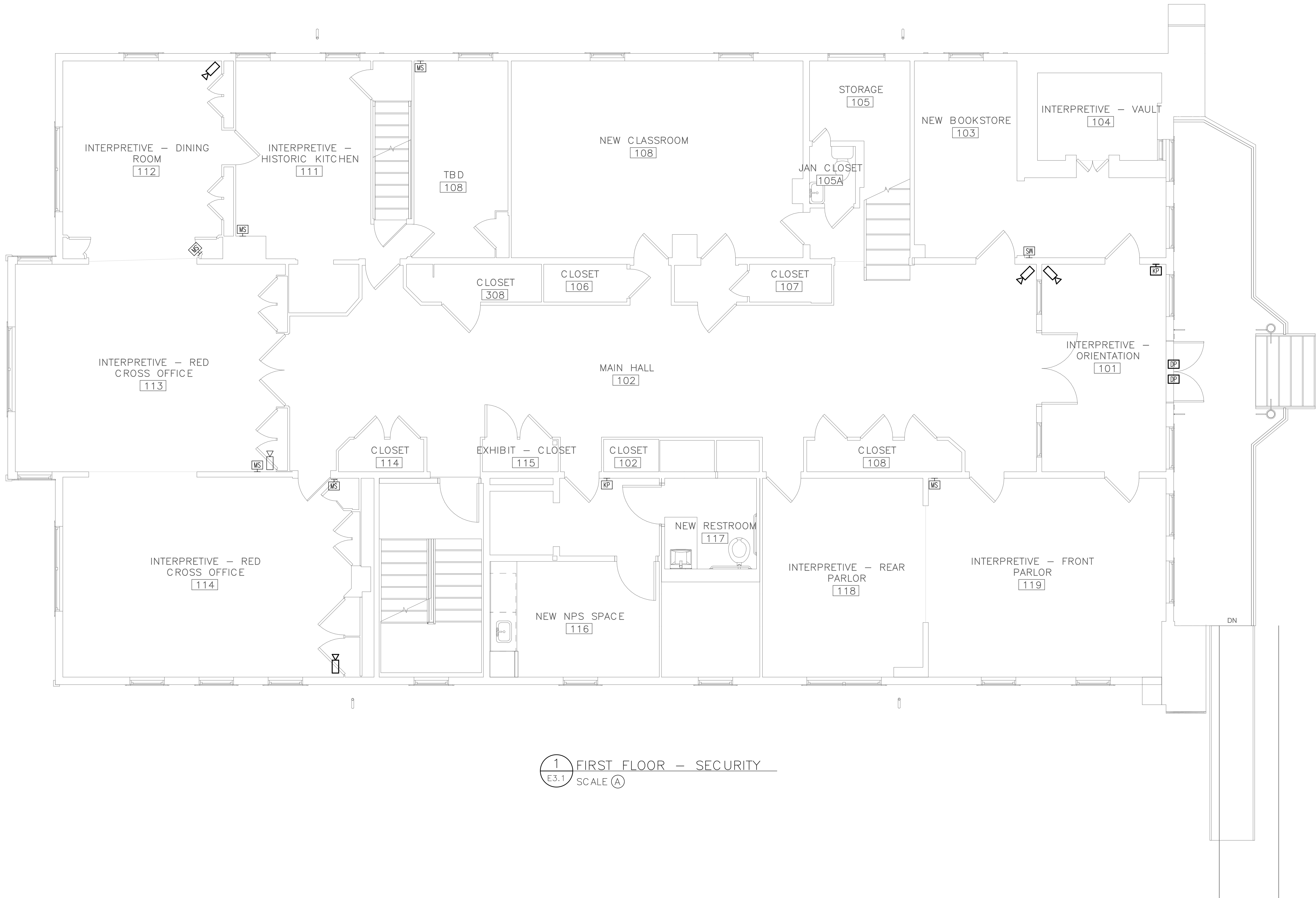
1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO. <b>E3.0</b>	TITLE OF <b>BASEMENT - SECURITY</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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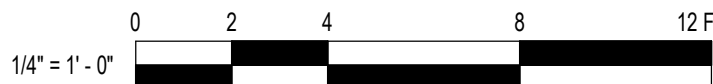
1 FIRST FLOOR - SECURITY  
E3.1 SCALE (A)

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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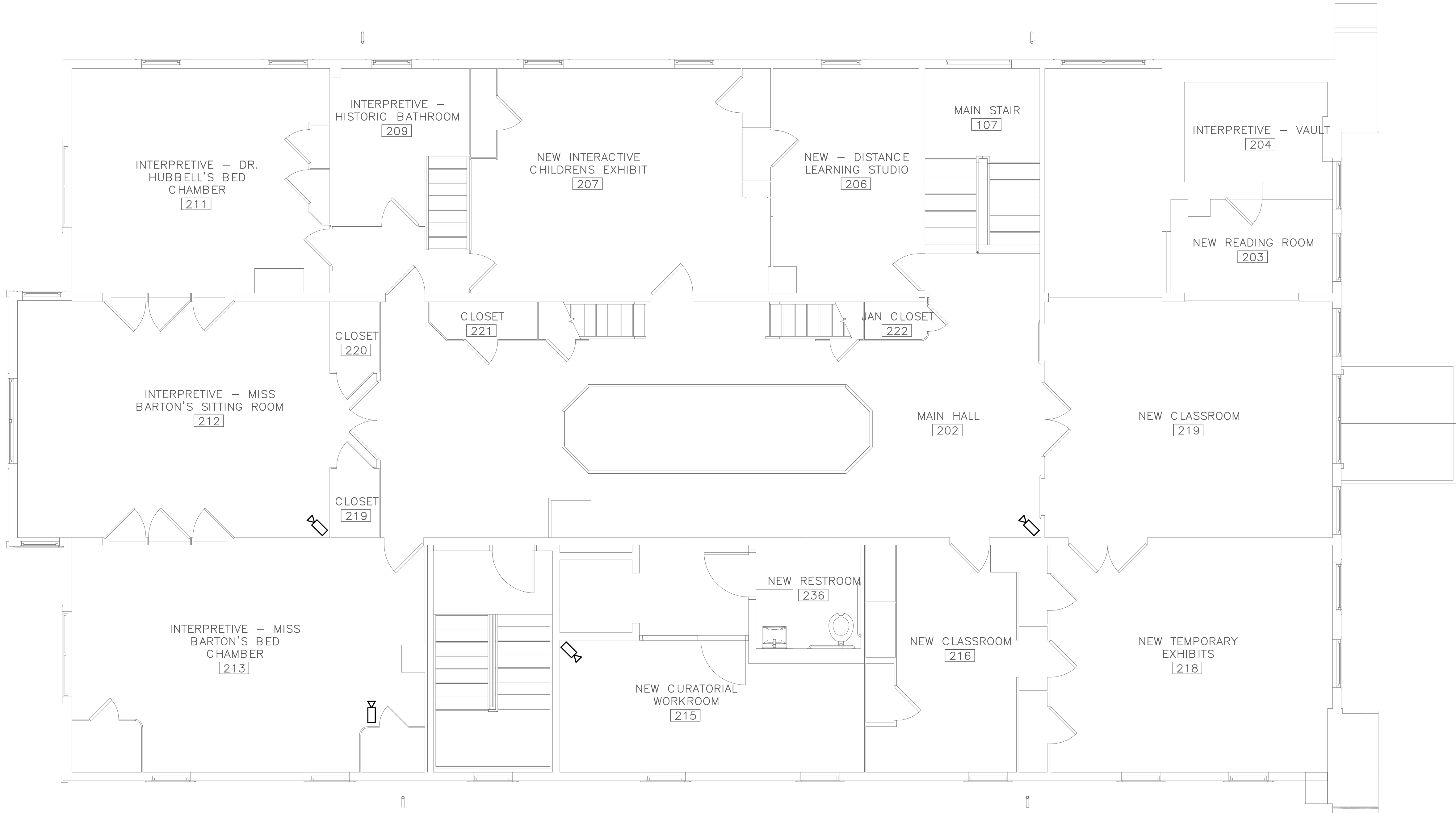
SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE JLW ADD JLW TECH. JST DAT 12/06/2023	SUB SHEET NO. <b>E3.1</b>	TITLE OF <b>FIRST FLOOR - SECURITY</b>  REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	DRAWING <b>895</b> <b>179603</b> PMIS/PKG 312325 SHEET o <b>X</b>
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1 SECOND FLOOR - SECURITY  
E3.2 SCALE (A)

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

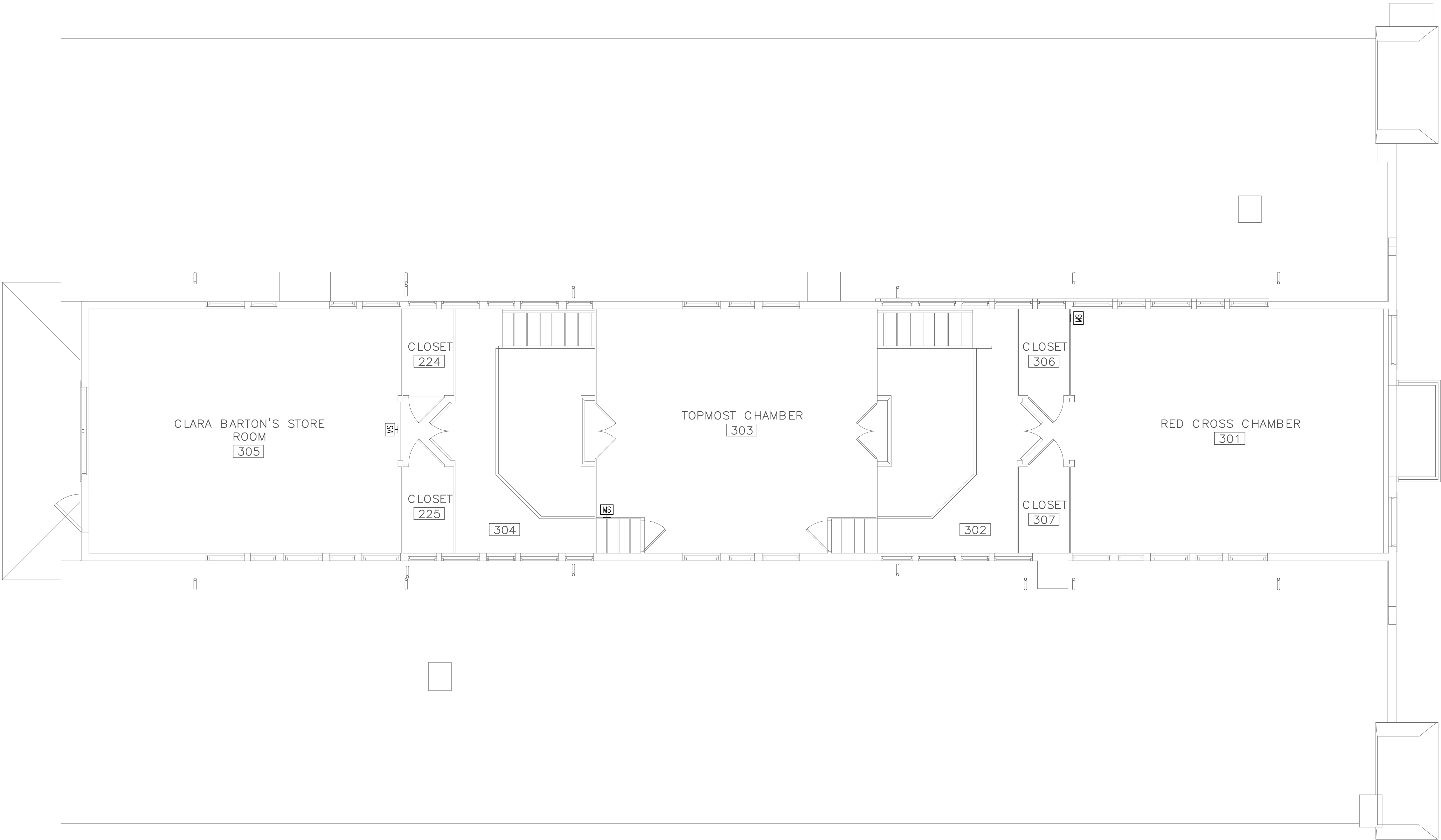
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SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.



DESIGNE	SUB SHEET NO.	TITLE OF		DRAWING
JLW	E3.2	SECOND FLOOR - SECURITY		895
JLW				179603
TECH.				PMIS/PKG 312325
JST				SHEET
DAT 12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE		o X



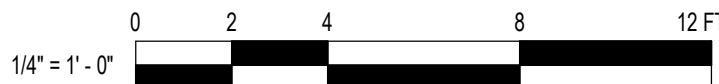
1 THIRD FLOOR - SECURITY  
E3.3 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.

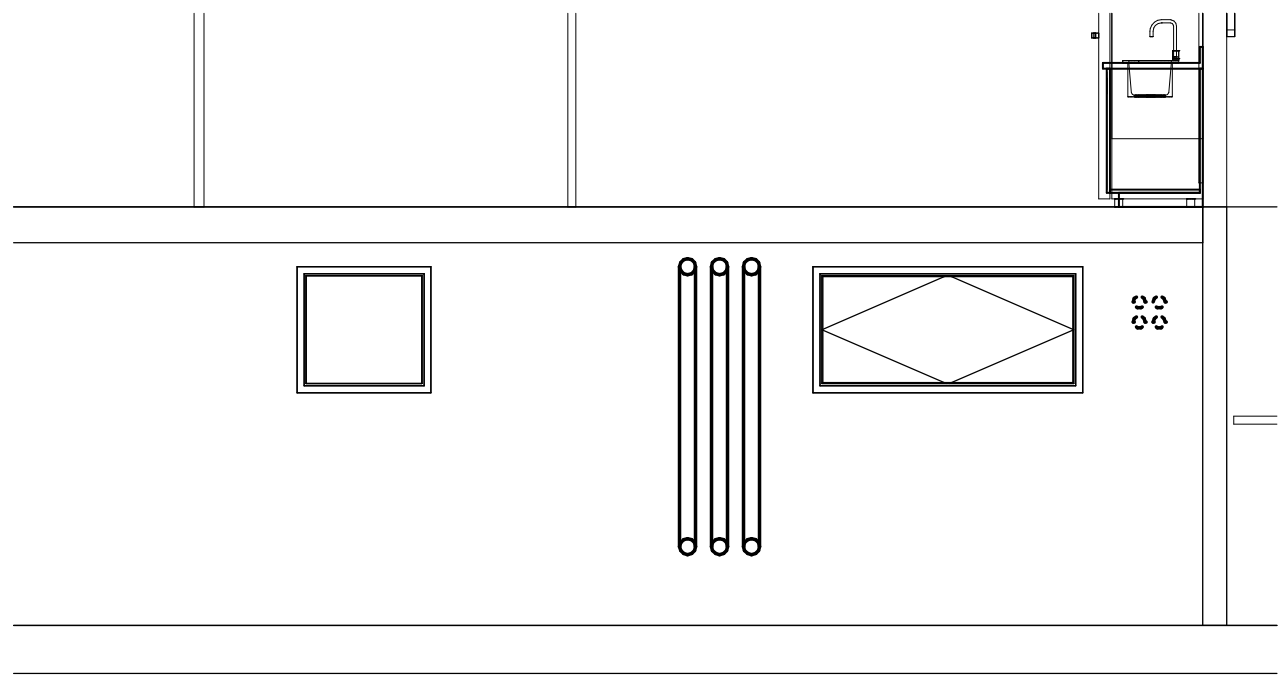


DESIGNE	SUB SHEET NO.	TITLE OF	DRAWING
JLW	<b>E3.3</b>	<b>THIRD FLOOR - SECURITY</b>	<b>895</b>
<b>ADD</b>			<b>179603</b>
JLW			PMIS/PKG
TECH.			312325
JST			SHEET
DAT			o <b>X</b>
12/06/2023			

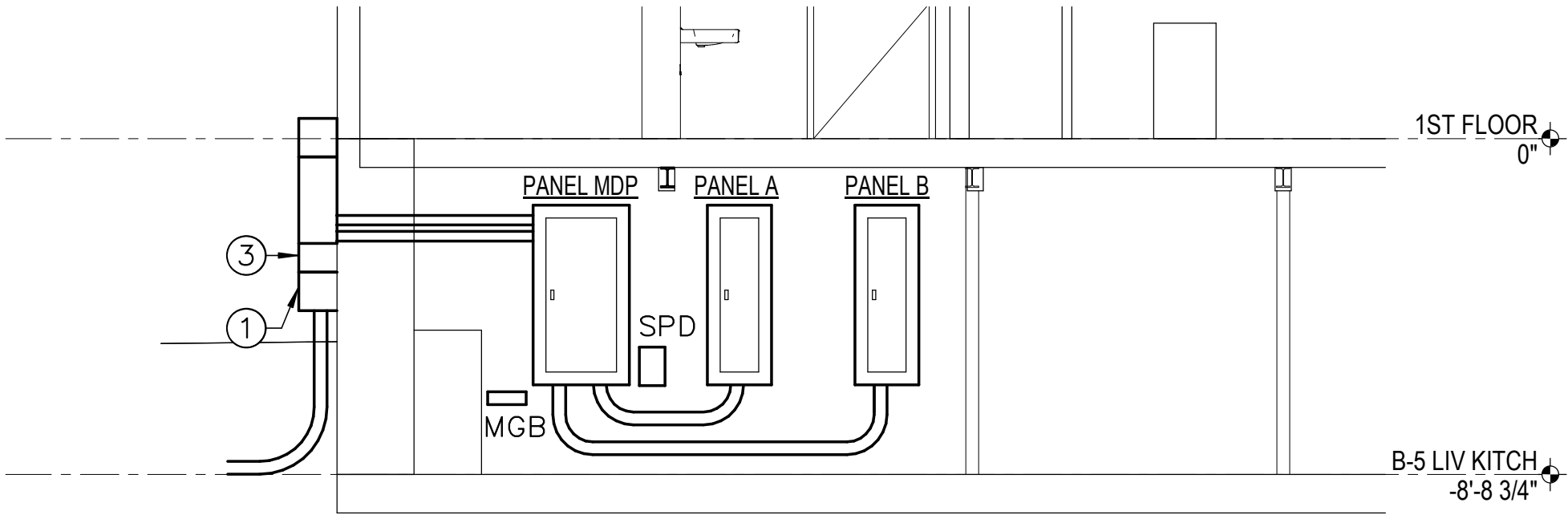
REHABILITATE CLARA BARTON  
NATIONAL HISTORIC SITE



1 EAST ELEVATION - POWER AND TELECOMMUNICATIONS  
E4.1 SCALE (A)



2 BASEMENT EAST WALL ELEVATION - POWER AND COMMUNICATIONS  
E4.1 SCALE (A)



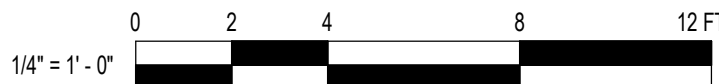
3 BASEMENT SOUTH WALL ELEVATION - POWER AND COMMUNICATIONS  
E4.1 SCALE (A)

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- 1 2'-1" X 12" X 12" TROUGH.
- 2 UTILITY METER.
- 3 CT CABINET.



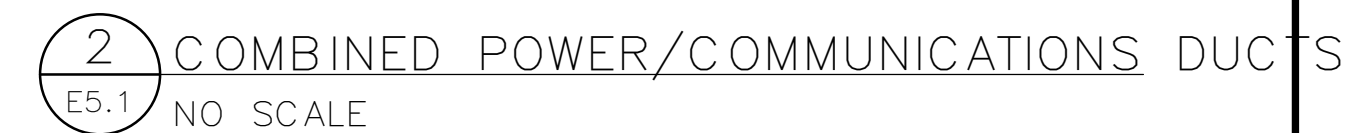
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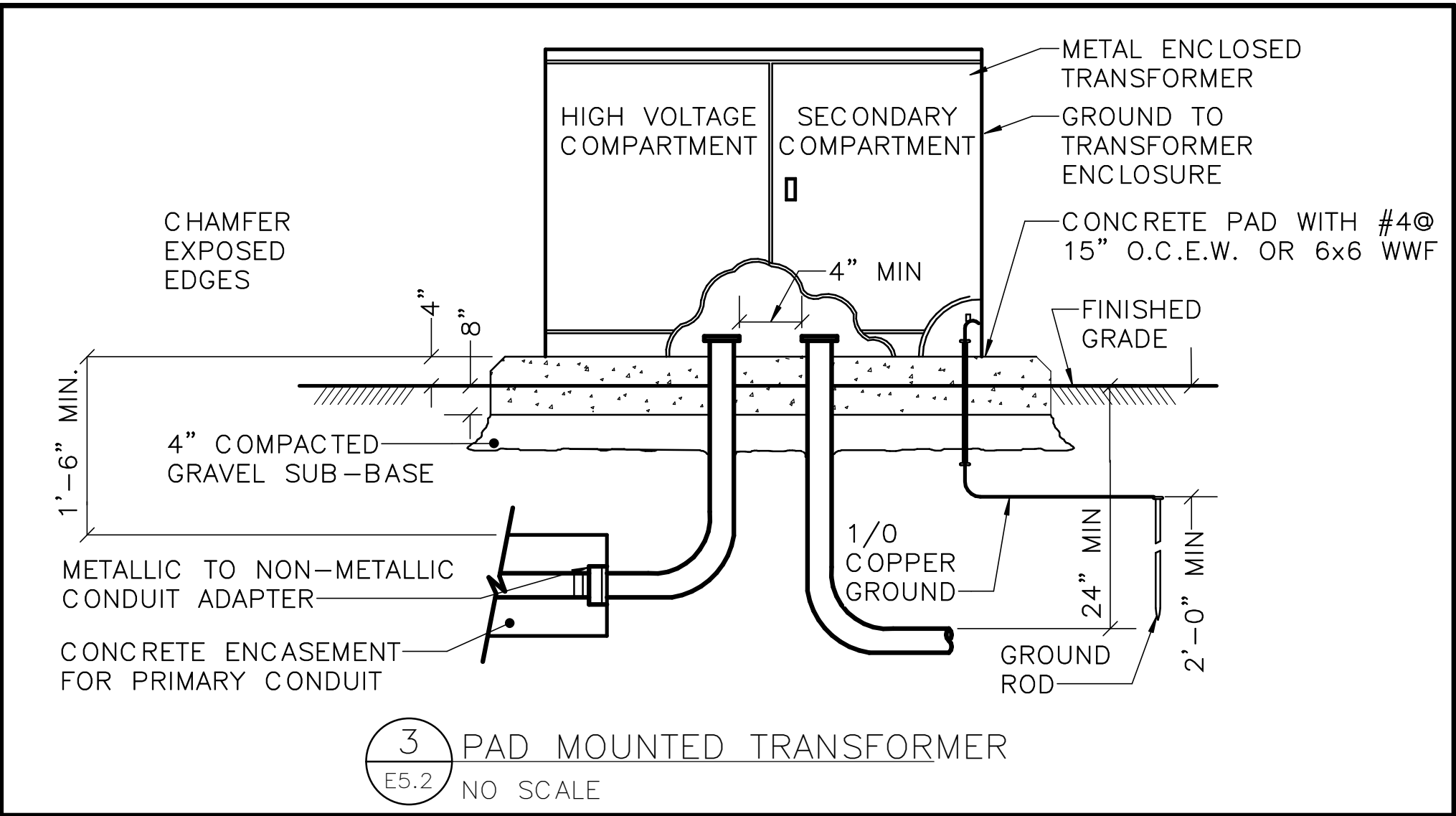
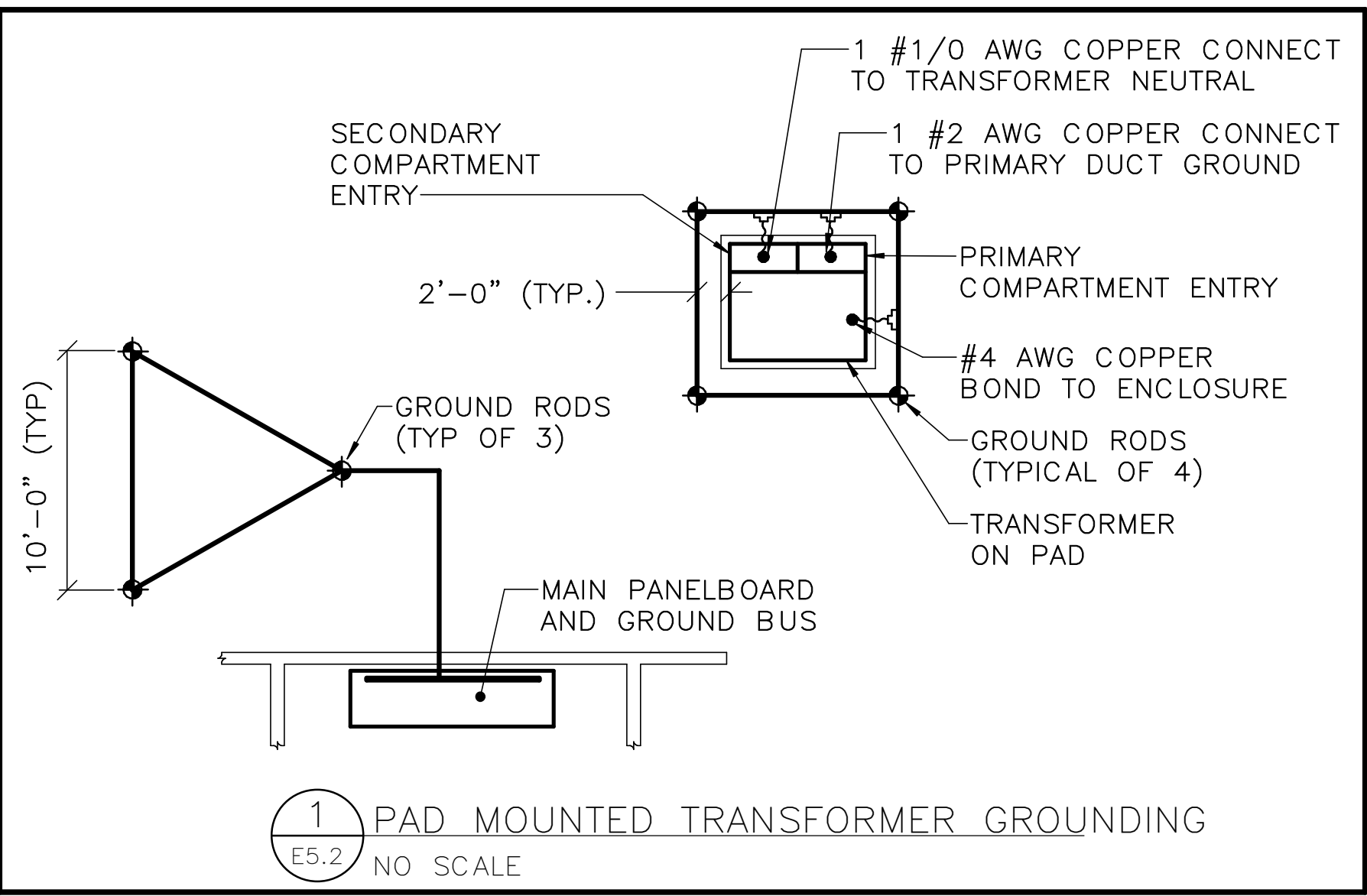
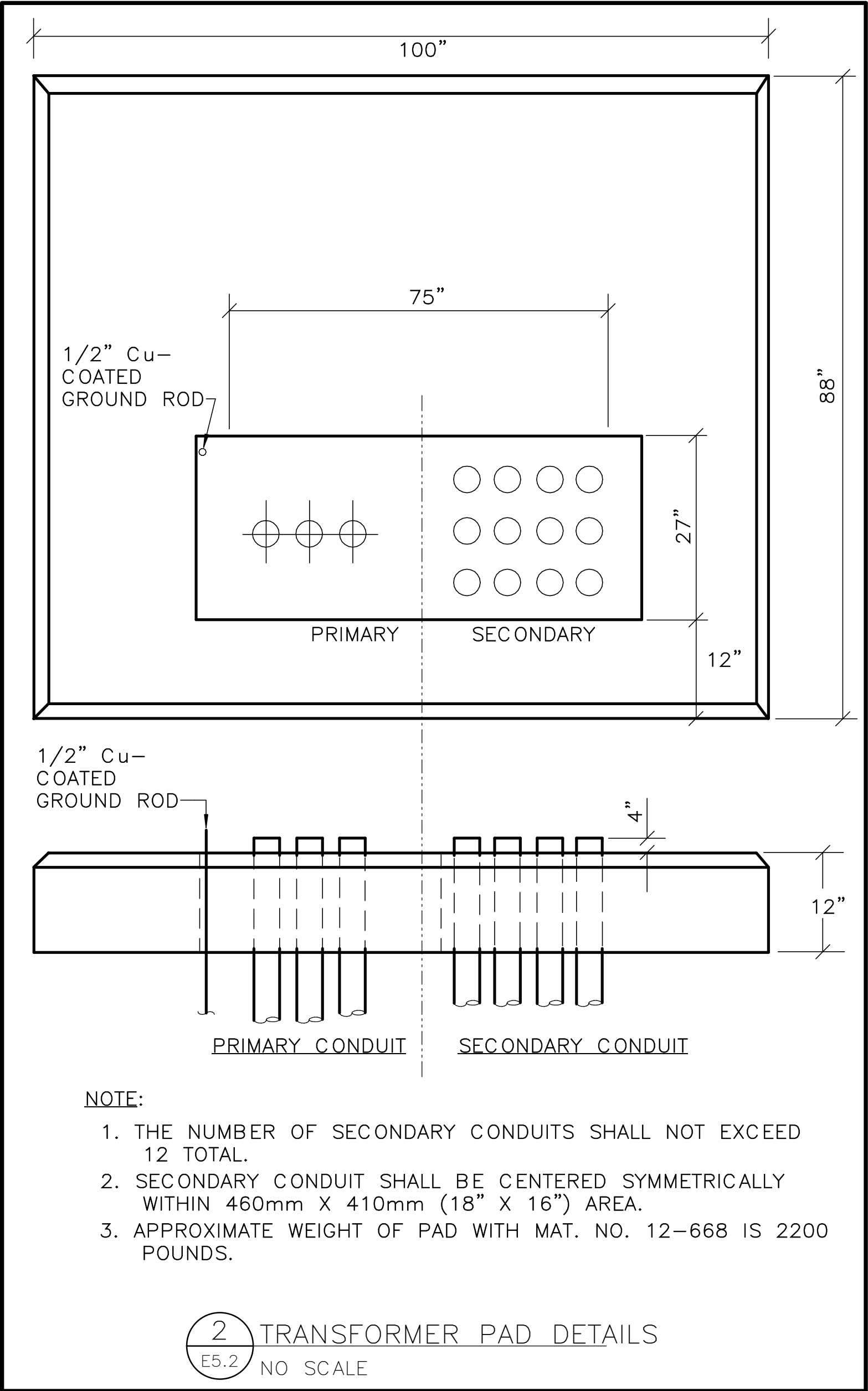


7. MINIMUM ANSI SCTE TIER RATING, INSTALLATION IN:  
LAWN AND SIDEWALKS: 8  
PARKING LOT/DRIVEWAYS: 15  
LOADING DOCKS: 22  
AREAS SUBJECT TO HEAVY VEHICULAR TRAFFIC: 22

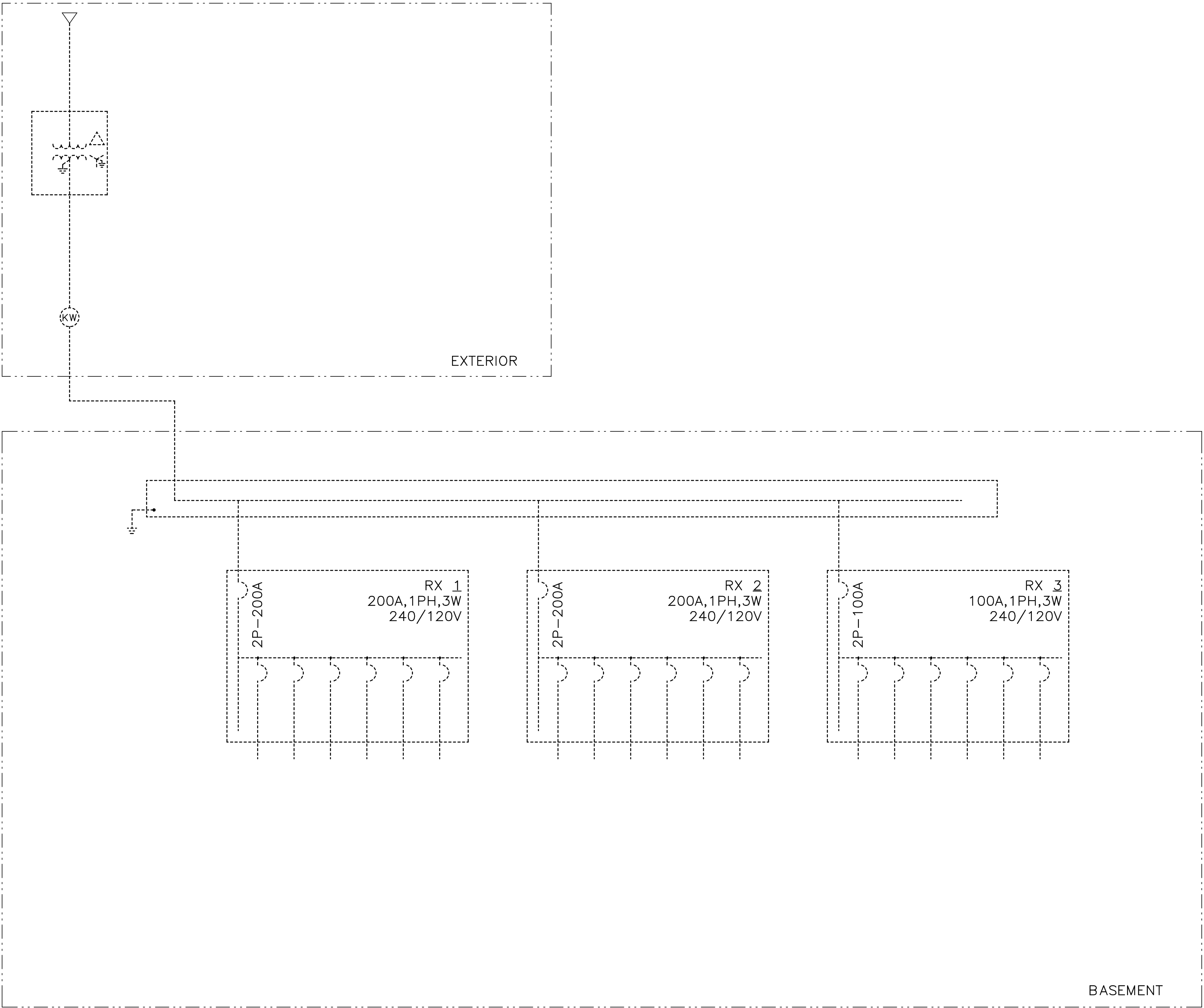
HANDHOLE SCHEDULE					
DESIGNATION	NOMINAL	BOX	DIMENSIONS	EXTENSION	NOTES
	A	B	C	D	
A	12	12	12	-	PC
B	24	24	24	-	PG
C	36	36	36	-	PG



DESIGNE	SUB SHEET NO	TITLE OF	DRAWING
JLW	E5.1	ELECTRICAL DETAILS	895
<b>ADD</b>			179603
JLW			PMIS/PKG
TECH.			312325
JST			SHEET
DATE			o <b>X</b>
12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	



DESIGNE	SUB SHEET NO	TITLE OF	DRAWING
JLW			895
ADD			179603
JLW			PMIS/PKG
TECH.			312325
JST	E5.2	REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	SHEET
DAT			___ o <b>X</b>
12/06/2023			



1 ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION  
E6.1 NO SCALE

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

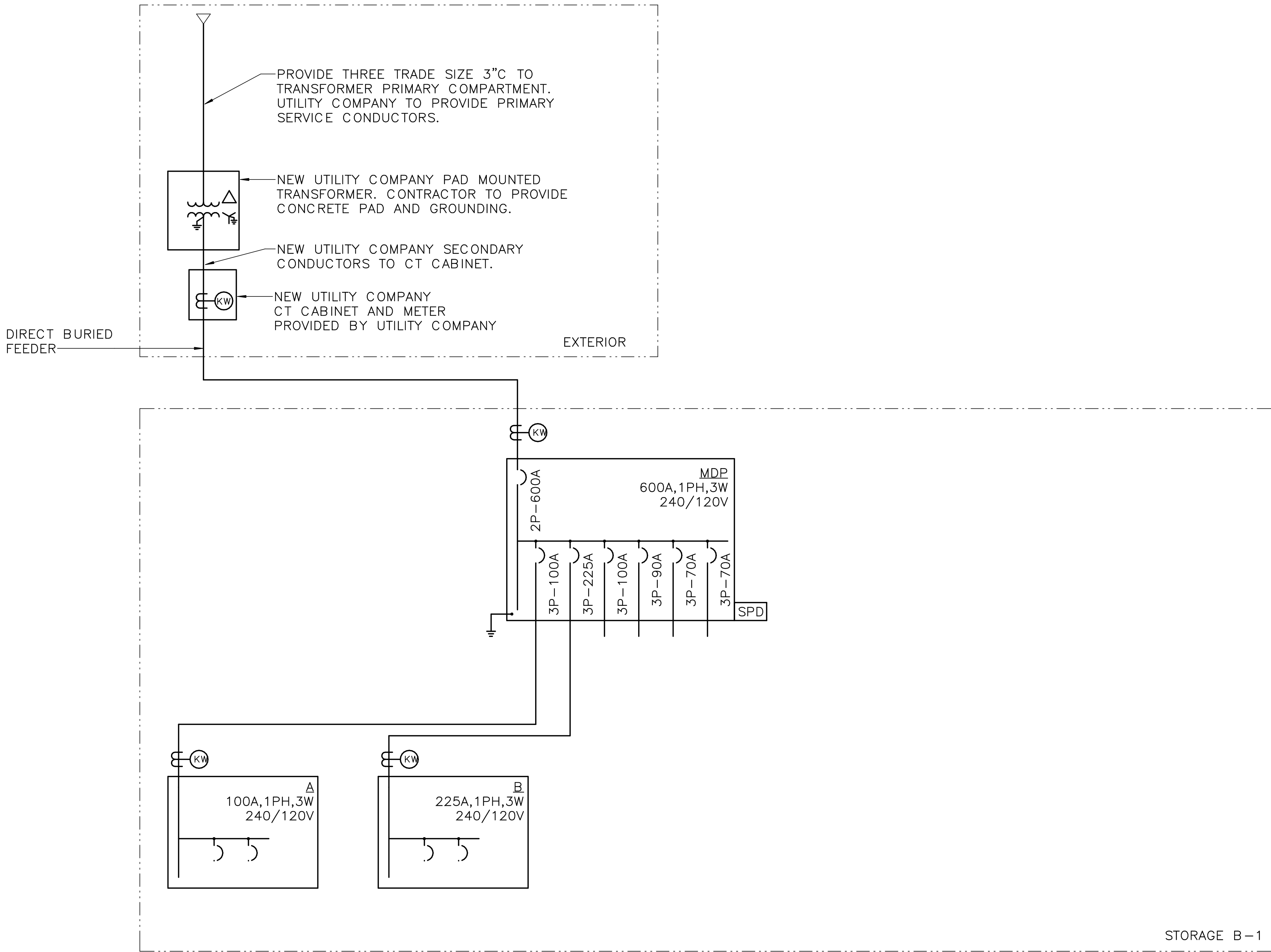
1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY DASHED HEAVY LINEWEIGHT (-----) INDICATES EXISTING WORK TO BE REMOVED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (——) INDICATES EXISTING ITEMS TO REMAIN.
2. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.

SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx

DESIGNE	SUB SHEET NO.	TITLE OF	DRAWING
JLW	E6.1	ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION	895
JLW			179603
TECH.			PMIS/PKG 312325
JST			SHEET
DAT 12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	o X





1 ELECTRICAL ONE-LINE DIAGRAM - NEW WORK  
E6.2 NO SCALE

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (——) INDICATES EXISTING ITEMS TO REMAIN.
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SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx.

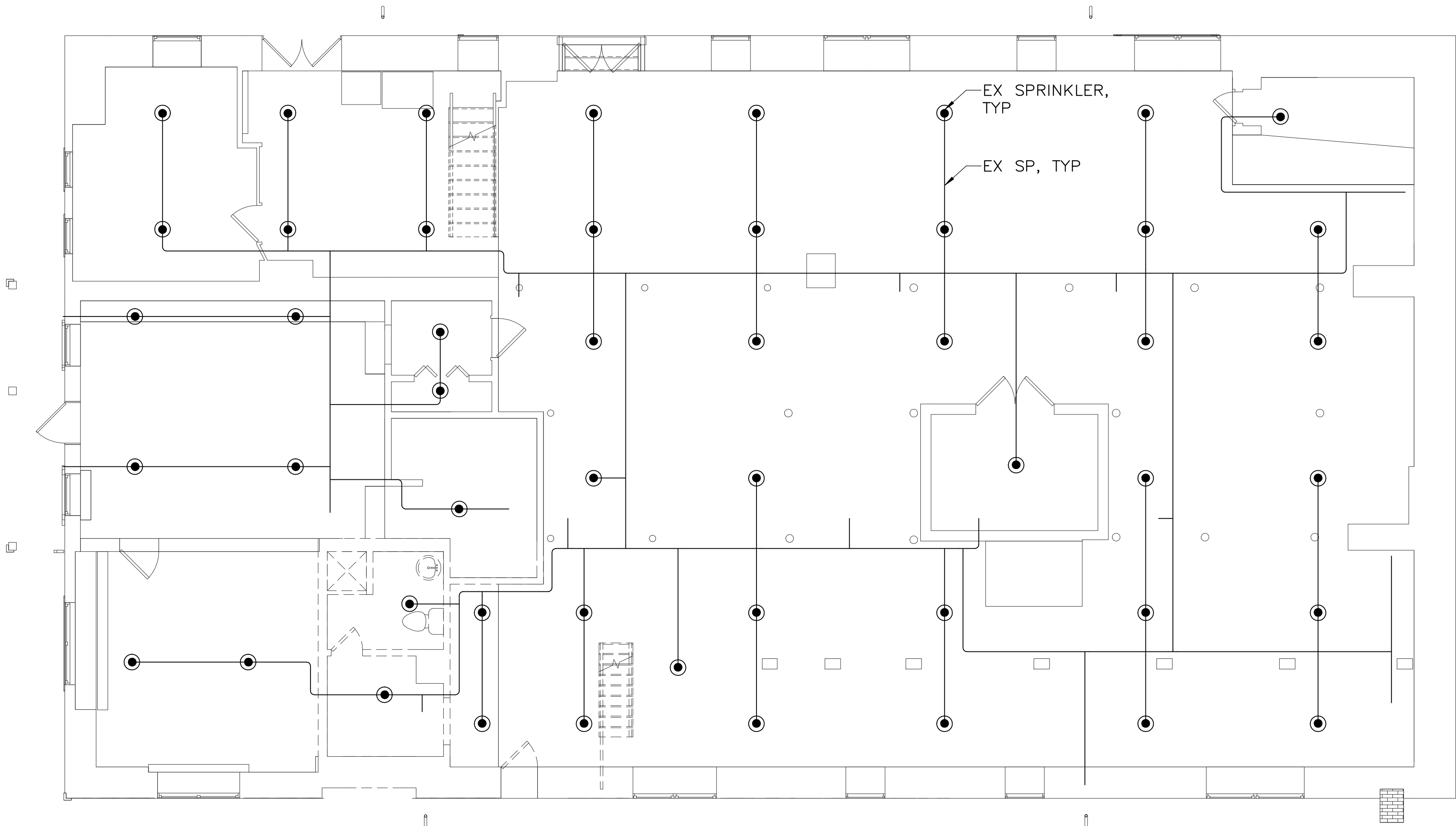
DESIGNE	SUB SHEET NO.	TITLE OF	DRAWING
JLW	E6.2	ELECTRICAL ONE-LINE DIAGRAM - NEW WORK	895
JLW			179603
TECH.			PMIS/PKG 312325
JST			SHEET
DAT 12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	o X

FIRE PROTECTION ABBREVIATIONS	
(APPLICABLE TO ALL FIRE PROTECTION DRAWINGS)	
BFP	BACKFLOW PREVENTER
CW	COLD WATER
D	DEEP / DEPTH / DIAMETER / DRAIN / DROP
DN	DOWN
F	FIRE / FIRE LINE
FDC	FIRE DEPARTMENT CONNECTION
FDV	FIRE DEPARTMENT VALVE
FP	FIRE PROTECTION
FS	FLOW SWITCH
FT	FEET / FOOT
N	NORTH
SP	SPRINKLER PIPING
TS	TAMPER SWITCH
TYP	TYPICAL
W/	WITH

FIRE PROTECTION LEGEND	
(APPLICABLE TO ALL FIRE PROTECTION DRAWINGS)	
SYMBOL	DESCRIPTION
	COLD WATER
	DOMESTIC WATER SERVICE DOUBLE CHECK BACKFLOW PREVENTER
	PRESSURE GAUGE
	UNION
	SHUTOFF VALVE
	FIRE LINE
	SPRINKLER PIPING
	ALARM CHECK VALVE
	FIRE SERVICE CHECK VALVE
	FLOW ALARM SWITCH
	SUPERVISED VALVE
	FIRE DEPARTMENT CONNECTION
	FIRE SERVICE DOUBLE CHECK BACKFLOW PREVENTER

GENERAL FIRE PROTECTION NOTES	
(APPLICABLE TO ALL FIRE PROTECTION DRAWINGS)	
<div>1. PROVIDE A MODIFICATION TO THE EXISTING AUTOMATIC SPRINKLER SYSTEM THROUGHOUT THE BUILDING INCLUDING PIPING, HANGERS, SPRINKLERS, AND ALL ASSOCIATED EQUIPMENT. ALL WORK AND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 13, IBC, LOCAL AND STATE AUTHORITIES AND THE SPECIFICATIONS.</div> <div>2. SPRINKLER SYSTEM FOR THIS PROJECT SHALL BE HYDRAULICALLY DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13.</div> <div>3. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE PROCEEDING WITH FABRICATION AND INSTALLATION OF WORK.</div> <div>4. SPRINKLER SYSTEM SHALL BE A SINGLE WET PIPE TYPE THROUGHOUT THE ENTIRE FACILITY.</div> <div>5. COORDINATE CONNECTION OF SPRINKLER FLOW AND SUPERVISORY DEVICES WITH FIRE ALARM DRAWINGS.</div> <div>6. OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONDUCTING WELDING AND CUTTING OPERATIONS.</div> <div>7. MAINTAIN MINIMUM 6' – 8" HEAD ROOM CLEARANCE BETWEEN BOTTOM OF SPRINKLER PIPE AND FLOOR INCLUDING ACCESS ROUTES IN MECHANICAL AND ELECTRICAL ROOMS.</div> <div>8. UNLESS OTHERWISE NOTED, INSTALL PIPING OVERHEAD, TIGHT TO UNDERSIDE OF STRUCTURE, WITH SPACE FOR INSULATION AS REQUIRED.</div> <div>9. INSTALL EXPOSED PIPING TO MAXIMIZE AESTHETICS AND MINIMIZE OBSTRUCTION TO OCCUPANTS. INSTALL PIPING AND VALVES TIGHT TO CEILINGS AND WALLS AS MUCH AS PRACTICAL WITH SPACE TO REMOVE ACCESSIBLE CEILINGS. COORDINATE PIPING WITH OTHER TRADES. PRIOR TO INSTALLATION, SUBMIT DRAWINGS TO ARCHITECT AND ENGINEER OF RECORD FOR APPROVAL.</div> <div>10. INSTALL PIPING SO THAT ALL VALVES ARE ACCESSIBLE.</div> <div>11. COORDINATE FIRE PROTECTION WORK WITH THE WORK OF OTHER TRADES SHOWN ON OTHER DRAWINGS.</div> <div>12. COORDINATE EXACT SPRINKLER HEAD LOCATIONS WITH LIGHTING FIXTURES, DIFFUSERS, GRILLES, DUCTS, STRUCTURAL MEMBERS, SPEAKERS, AND OTHER DEVICES AND OBSTRUCTIONS ENCOUNTERED.</div> <div>13. SPRINKLERS INSTALLED IN PROXIMITY TO DUCTS AND OTHER OBSTRUCTIONS SHALL BE LOCATED TO MINIMIZE OBSTRUCTION TO DISCHARGE IN ACCORDANCE WITH NFPA 13.</div> <div>14. PROVIDE SPRINKLER COVERAGE AROUND FIXED OBSTRUCTIONS, SUCH AS LARGE DUCTS, ETC. IN ACCORDANCE WITH NFPA 13.</div> <div>15. LOCATE SPRINKLER HEADS IN ACCORDANCE WITH NFPA 13. PROVIDE ADDITIONAL HEADS TO SATISFY REQUIREMENTS OF SYMMETRY AND AESTHETICS.</div> <div>16. INSTALL SPRINKLER PIPING SO THAT ALL PORTIONS CAN BE DRAINED BACK THROUGH DRAIN VALVES.</div> <div>17. CERTAIN ITEMS SUCH AS RISES AND DROPS IN PIPING ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.</div> <div>18. PATCH PENETRATIONS THROUGH FIRE RATED WALLS WITH APPROVED FIRE STOPPING MATERIAL TO MAINTAIN THE RATING OF THE WALL.</div> <div>19. CONCEAL ALL SPRINKLER PIPING IN AREAS PROVIDED WITH SUSPENDED CEILINGS.</div> <div>20. REFER TO ARCHITECTURAL PLANS AND INTERIOR FINISH SCHEDULES FOR ALL CEILING HEIGHTS.</div> <div>21. PROTECT SPRINKLERS SUBJECT TO MECHANICAL DAMAGE WITH GUARDS IN ACCORDANCE WITH NFPA 13.</div> <div>22. DO NOT CUT, DRILL, BURN OR MODIFY STRUCTURAL MEMBERS AND SYSTEMS.</div> <div>23. ARRANGE FOR APPROVAL OF SPRINKLER SYSTEM AND CONDUCT TESTS IN ACCORDANCE WITH NFPA 13 AND NFPA 14.</div> <div>24. SUBMIT FULLY COORDINATED SHOP DRAWINGS, HYDRAULIC CALCULATIONS, AND MANUFACTURER'S DATA SHEETS TO ENGINEER FOR APPROVAL BEFORE PURCHASE AND INSTALLATION. COORDINATE FINAL DESIGN OF THE SYSTEM WITH FILED CONDITIONS, THE ARCHITECT AND AVAILABLE WATER SUPPLY.</div> <div>25. PROVIDE ALL NECESSARY PARTS AND ACCESSORIES EVEN THOUGH THE PARTS AND ACCESSORIES ARE NOT SPECIFICALLY MENTIONED OR SHOWN HEREIN.</div> <div>26. THE SPRINKLER SYSTEM SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE TO NFPA 13.</div> <div>27. PROVIDE PIPE HANGERS IN ACCORDANCE WITH NFPA 13. HANGER MATERIALS SHALL BE UL LISTED AND FM APPROVED.</div> <div>28. REFER TO SPECIFICATION SECTION 212000 FOR FIRE PROTECTION PIPING REQUIREMENTS. SCHEDULE 10 PIPE IS NOT PERMITTED.</div>	

DESIGNED:	SUB SHEET NO.  FP0.1	TITLE OF SHEET  FIRE PROTECTION COVER  SHEET  CLARA BARTON NATIONAL HISTORIC SITE  CLBA	DRAWING NO. 895
CEL			179603
QAPP			PMIS/PKG NO. 312325
MAV			SHEET
TECH. REVIEW:			OF X
CEL			
DATE:			
12/06/23			



1 BASEMENT — FIRE PROTECTION — DEMOLITION PLAN  
FD1.0 SCALE (A)

**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, —

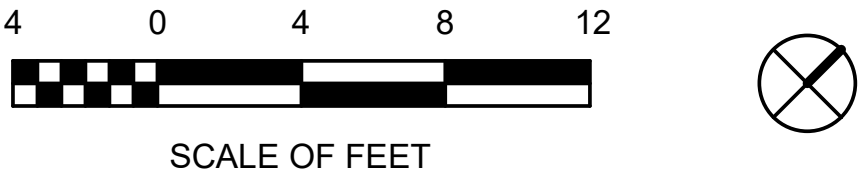
2. DEMOLITION WORK SHOWN WITH HEAVY WEIGHT DASHED LINE, ----

3. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. VERIFY THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

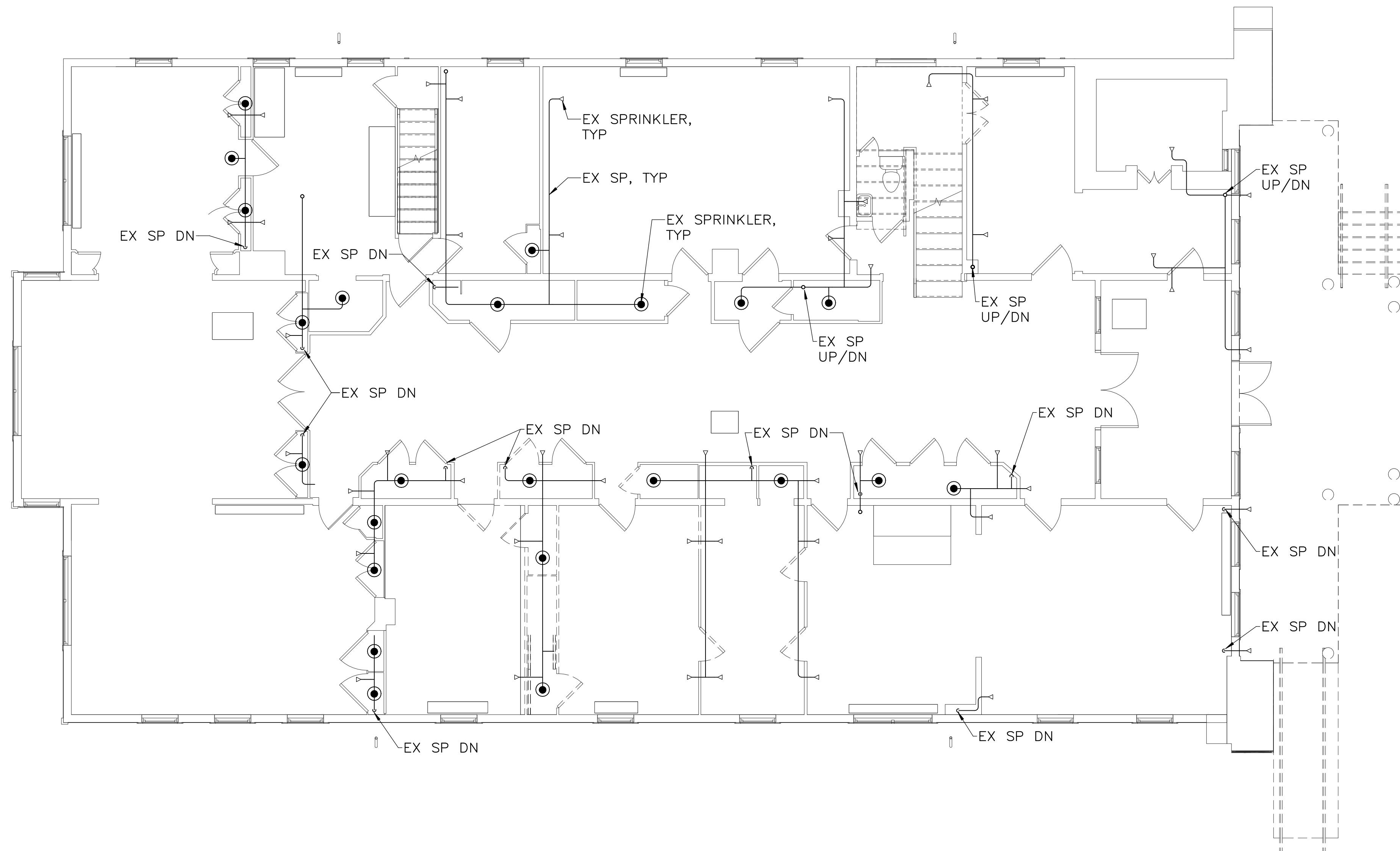
① NOT USED

② NOT USED



DESIGNED: CEL MAV TECH. REVIEW: CEL DATE: 12/06/23	SUB SHEET NO.  FD1.0	TITLE OF SHEET BASEMENT — FP — DEMOLITION CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 179603 PMS/PKG NO. 312325 SHEET OF X
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1 FIRST FLOOR — FIRE PROTECTION — DEMOLITION PLAN  
FD1.1 SCALE (A)

**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, —

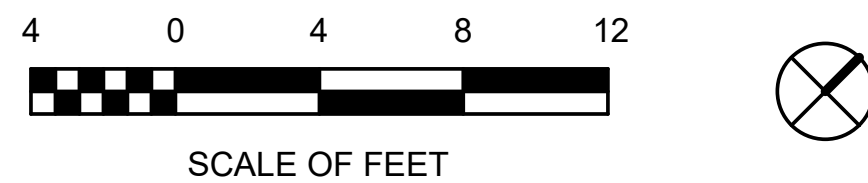
2. DEMOLITION WORK SHOWN WITH HEAVY WEIGHT DASHED LINE, ----

3. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. VERIFY THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.

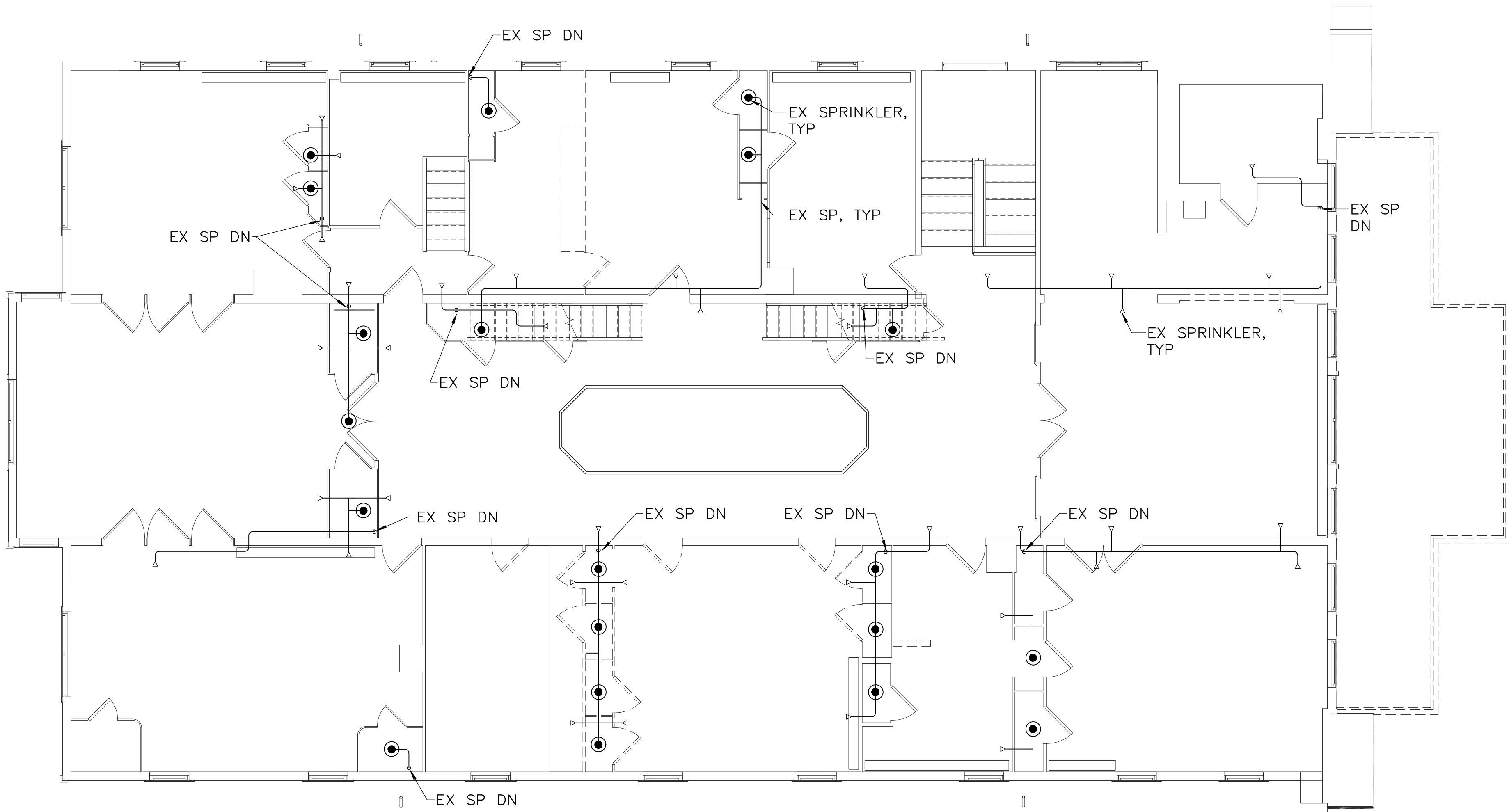
**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

① NOT USED

② NOT USED



DESIGNED: CEL	SUB SHEET NO. FD1.1	TITLE OF SHEET FIRST FLOOR — FP — DEMOLITION CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 179603 PMS/PKG NO. 312325 SHEET OF X
TECH. REVIEW: CEL			
DATE: 12/06/23			



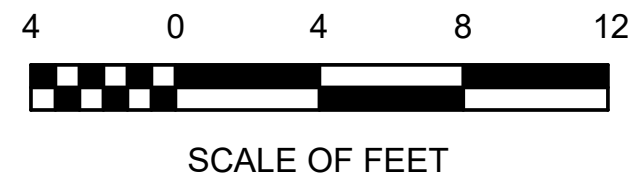
1 SECOND FLOOR — FIRE PROTECTION — DEMOLITION PLAN  
FD1.2 SCALE (A)

**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

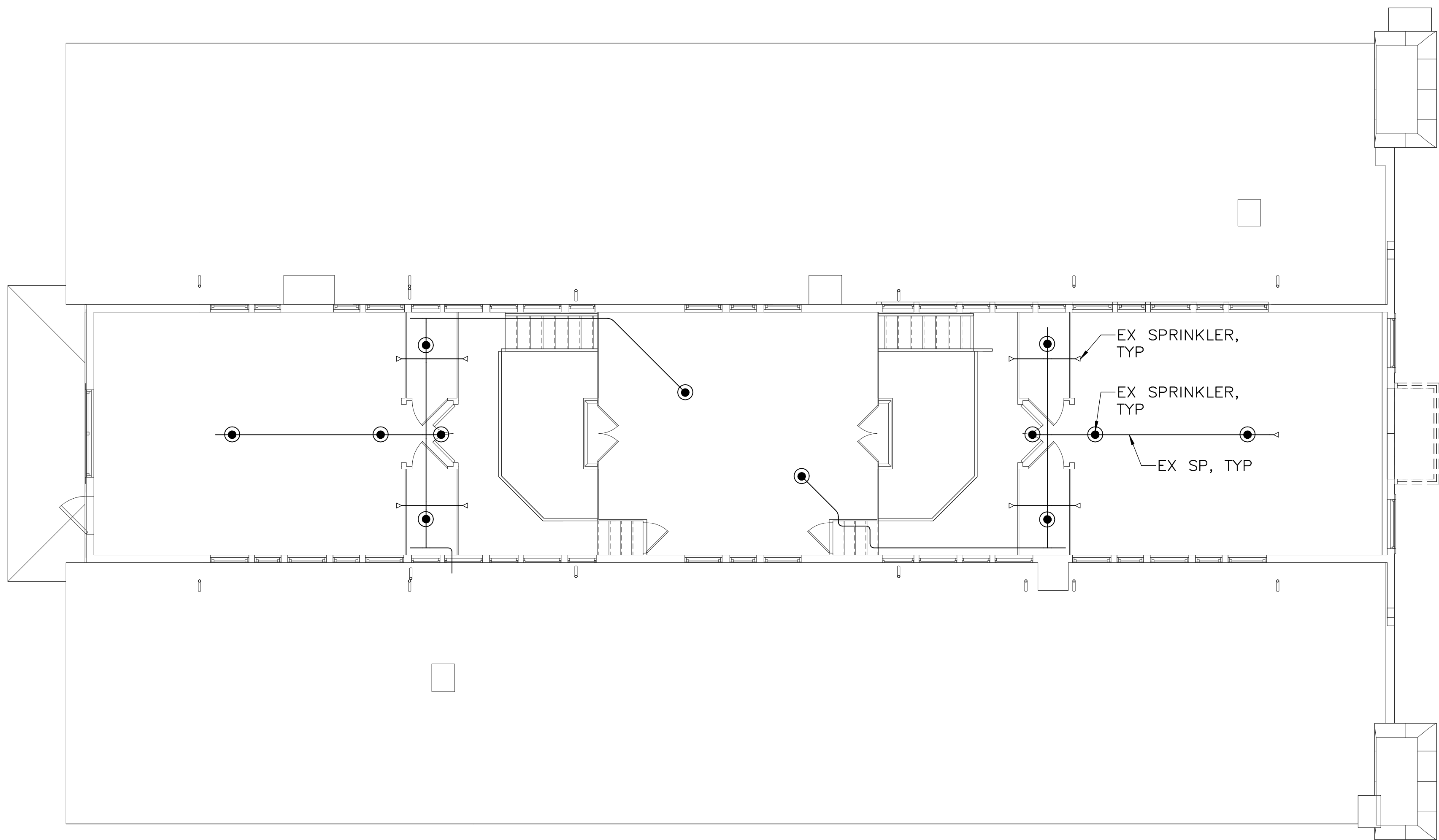
1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, —
2. DEMOLITION WORK SHOWN WITH HEAVY WEIGHT DASHED LINE, ----
3. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. VERIFY THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① NOT USED
- ② NOT USED



DESIGNED: CEL	SUB SHEET NO. FD1.2	TITLE OF SHEET SECOND FLOOR — FP — DEMOLITION CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 PMS/PKG NO. 312325 SHEET OF X
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1 THIRD FLOOR — FIRE PROTECTION — DEMOLITION PLAN  
FD1.3 SCALE (A)

**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING SHOWN WITH LIGHT WEIGHT LINE, ———

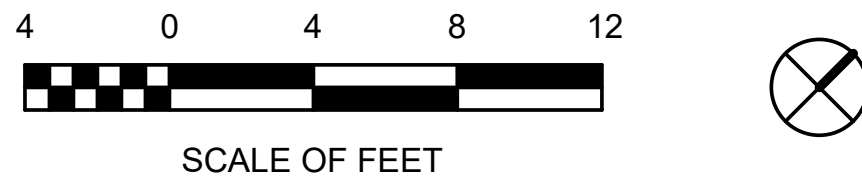
2. DEMOLITION WORK SHOWN WITH HEAVY WEIGHT DASHED LINE, - - - -

3. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. VERIFY THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

① NOT USED


② NOT USED

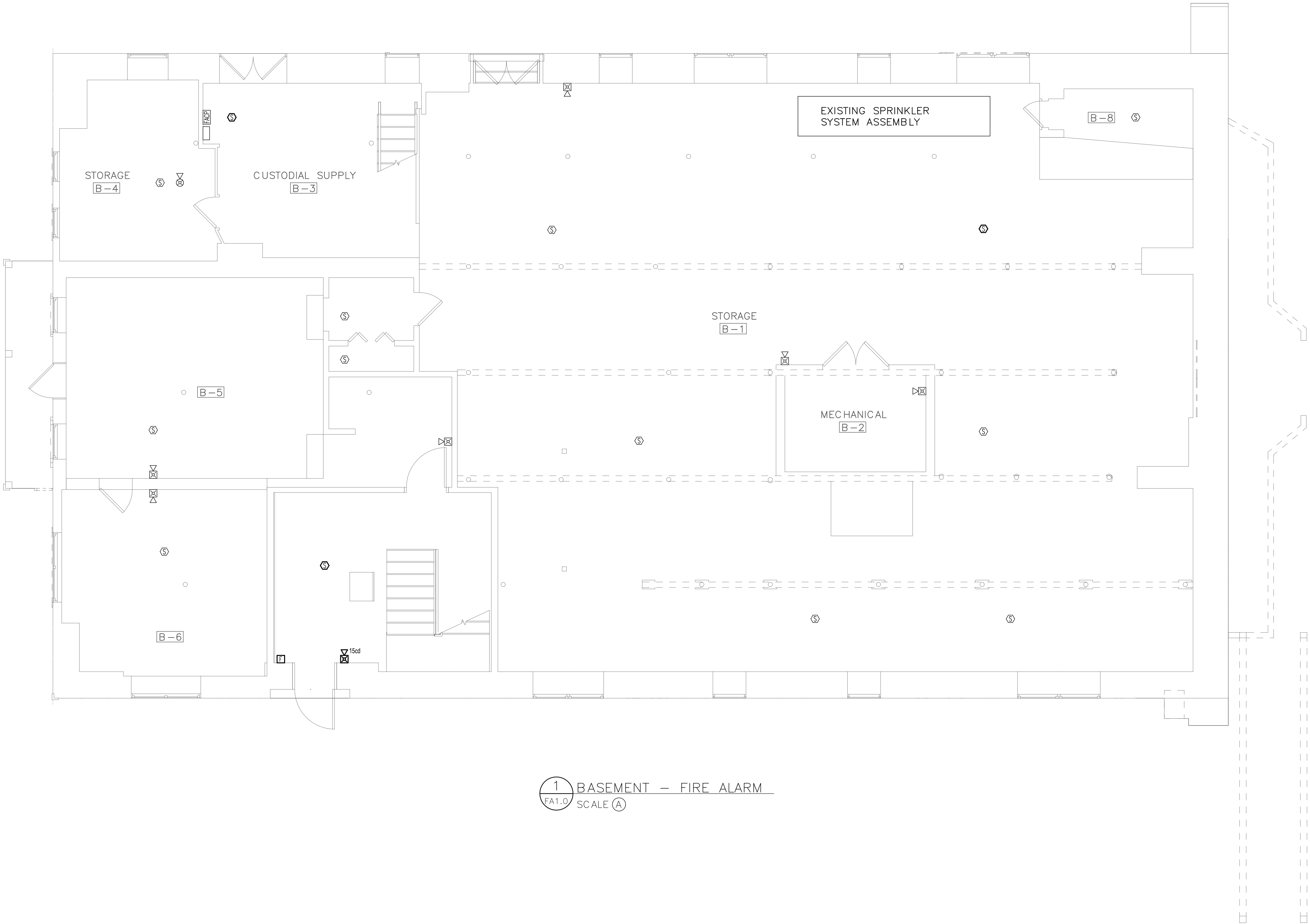


DESIGNED: CEL	SUB SHEET NO. FD1.3	TITLE OF SHEET THIRD FLOOR — FP — DEMOLITION CLARA BARTON NATIONAL HISTORIC SITE CLBA	DRAWING NO. 895 179603 PMIS/PKG NO. 312325 SHEET OF X
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GENERAL FIRE ALARM NOTES (APPLICABLE TO ALL FIRE ALARM DRAWINGS)	
<div>1. VERIFY THAT EXISTING FIRE ALARM SYSTEM IS OPERATIONAL BEFORE MAKING CHANGES OR CONNECTIONS.</div> <div>2. DO NOT INTERRUPT EXISTING FIRE ALARM SYSTEM WITHOUT [CONTRACTING OFFICER’S] [OWNER’S] [OWNER’S REPRESENTATIVE’S] [ENGINEER’S] [ARCHITECT’S] WRITTEN PERMISSION.</div> <div>3. ENGAGE A MANUFACTURER’S AUTHORIZED SERVICE COMPANY TO PERFORM MODIFICATIONS TO THE FIRE ALARM SYSTEM.</div> <div>4. FOR NEW DEVICES THAT RECEIVE POWER FROM AN EXISTING CONTROL UNIT’S INITIATING DEVICE CIRCUIT OR SIGNALING LINE CIRCUIT, PROVDE DEVICES THAT ARE LISTED FOR USE WITH THE EXISTING CONTROL UNIT.</div> <div>5. DRAWINGS ARE CONCEPTUAL, INTENDED TO SHOW GENERAL SYSTEM CONFIGURATION AND PERFORMANCE. PREPARE SHOP DRAWINGS AND PROVIDE CONDUITS, WIRING, SYSTEM COMPONENTS AND EQUIPMENT FOR A COMPLETE AND OPERATIONAL SYSTEM IN COMPLIANCE WITH NFPA 70, NFPA 72, NFPA 90A, NFPA 101 IBC, THE AUTHORITY HAVING JURISDICTION AND THE CONTRACT DOCUMENTS.</div> <div>6. CONNECT NEW FIRE ALARM DEVICES TO RESPECTIVE EXISTING FLOOR INITIATING AND SIGNALING CIRCUITS.</div> <div>7. EXISTING FIRE ALARM SYSTEM IS A [MANUFACTURER AND MODEL] [ANALOG ADDRESSABLE] [DIGITAL ADDRESSABLE] [CONVENTIONAL] FIRE ALARM CONTROL PANEL WITH [TONE EVACUATION] [VOICE EVACUATION] [MASS NOTIFICATION].</div> <div>8. COORDINATE FIRE ALARM WORK WITH LOCAL FIRE MARSHAL, FIRE ALARM PLANS REVIEW, AND FIRE DEPARTMENT INSPECTORS.</div> <div>9. OBTAIN AND PAY FOR PERMITS REQUIRED FOR INSTALLATION OF FIRE ALARM SYSTEM. PROVIDE SHOP DRAWING SUBMITTAL DOCUMENTS TO AUTHORITY HAVING JURISDICTION TO OBTAIN PERMIT. SUBMITTAL MUST INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:<div>A. SCALED FLOOR PLANS WITH ROOM NAMES AND NUMBERS WHICH INDICATE USE OF ALL ROOMS.</div><div>B. FIRE ALARM DEVICE AND CABLE SYMBOL LEGEND</div><div>C. FLOOR PLAN LAYOUT SHOWING LOCATIONS OF ALL DEVICES AND CONTROL EQUIPMENT, INCLUDING MOUNTING HEIGHTS OF ALARM INITIATING DEVICES AND NOTIFICATION DEVICES.</div><div>D. FIRE ALARM CONTROL PANEL AND ANNUNCIATOR LOCATION.</div><div>E. POWER CONNECTION.</div><div>F. BATTERY CALCULATIONS.</div><div>G. VOLTAGE DROP CALCULATIONS FOR NOTIFICATION APPLIANCE CIRCUITS.</div><div>H. SIZE, TYPE, AND NUMBER OF CONDUCTORS.</div><div>I. MANUFACTURER’S TECHNICAL DATA SHEETS INCLUDING MODEL NUMBERS AND LISTING INFORMATION FOR EQUIPMENT, DEVICES, AND MATERIALS.</div><div>J. DETAILS OF CEILING HEIGHT AND CONSTRUCTION.</div><div>K. INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.</div><div>L. FIRE ALARM SYSTEM RISER.</div><div>M. SEQUENCE OF OPERATIONS INPUT/OUTPUT MATRIX.</div><div>N. DEVICE TO DEVICE WIRING.</div><div>O. LOUDNESS AND CANDELA SETTINGS FOR EVERY NOTIFICATION APPLIANCE.</div></div> <div>10. INCREASE BATTERY CAPACITY OF FIRE ALARM SYSTEM TO ACCOMMODATE ADDITIONAL LOAD.</div> <div>11. FIRE ALARM BRANCH CIRCUIT IDENTIFICATION MUST COMPLY WITH NFPA 70 AND NFPA 72:<div>PROVIDE APPROVED RED CIRCUIT BREAKER LOCKOUT DEVICE FOR EACH CIRCUIT BREAKER SERVING A FIRE ALARM CIRCUIT.</div><div>IDENTIFY EACH FIRE ALARM CIRCUIT WITH A RED PHENOLIC NAMEPLATE WITH WHITE LETTERING. NAMEPLATE MUST READ "FIRE ALARM CIRCUIT". FASTEN NAMEPLATE IN PANELBOARD ADJACENT TO CIRCUIT BREAKER.</div></div> <div>12. IDENTIFY POWER SOURCE AND LOCATION OF BRANCH CIRCUIT DISCONNECTING SERVING FIRE ALARM EQUIPMENT. FASTEN PHENOLIC NAMEPLATE TO FIRE ALARM SYSTEM PANEL(S) INDICATING LOCATION OF DEDICATED BRANCH CIRCUIT DISCONNECTING MEANS. NAMEPLATE MUST READ "THIS PANEL FED FROM PANEL _____, CIRCUIT NO. _____, LOCATED IN _____."</div> <div>13. IDENTIFY EACH FIRE ALARM DEVICE AND EQUIPMENT ENCLOSURE. DEVICE LABELS MUST INDICATE ADDRESS AND ZONE.</div> <div>14. IDENTIFY FIRE ALARM CIRCUITS AT TERMINAL AND JUNCTION LOCATIONS WITH PERMANENT LABELS. PAINT FIRE ALARM CIRCUIT JUNCTION BOX COVERS RED AND LABEL COVER "FIRE ALARM". [MARK CONDUITS CARRYING FIRE ALARM SYSTEM CIRCUITS WITH RED STRIPE EVERY 10 FEET] [PAINT CONDUITS CARRYING FIRE ALARM SYSTEM CIRCUITS RED].</div> <div>15. PERFORM RE–ACCEPTANCE TESTING IN ACCORDANCE WITH NFPA 72 TO VERIFY PROPER OPERATION OF ADDED OR REPLACED DEVICES INCLUDING BUT NOT LIMITED TO INITIATING DEVICES, NOTIFICATION APPLIANCES, EMERGENCY CONTROL FUNCTION DEVICES AND CONTROL EQUIPMENT.</div> <div>16. FIRE ALARM SYSTEM AUDIBLE NOTIFICATION APPLIANCES INSTALLED IN [DWELLING UNITS][SLEEPING UNITS][HOTEL ROOMS] MUST PRODUCE A LOW FREQUENCY ALARM SIGNAL HAVING A FUNDAMENTAL FREQUENCY OF 520 HZ +/- 10 PERCENT. THESE APPLIANCES MUST BE LISTED AND LABELED FOR PRODUCING THE LOW FREQUENCY WAVEFORM.</div>	

DESIGNE	SUB SHEET NO	TITLE OF	DRAWING
JLW	FA0.1	FIRE ALARM COVER SHEET	895
			179603
JLW			PMIS/PKG
TECH.			312325
JST			SHEET
DAT			o X
12/06/2023			
		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	



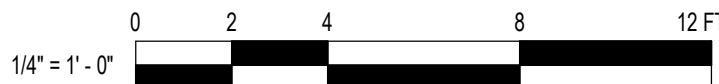
1 BASEMENT - FIRE ALARM  
FA1.0 SCALE (A)

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

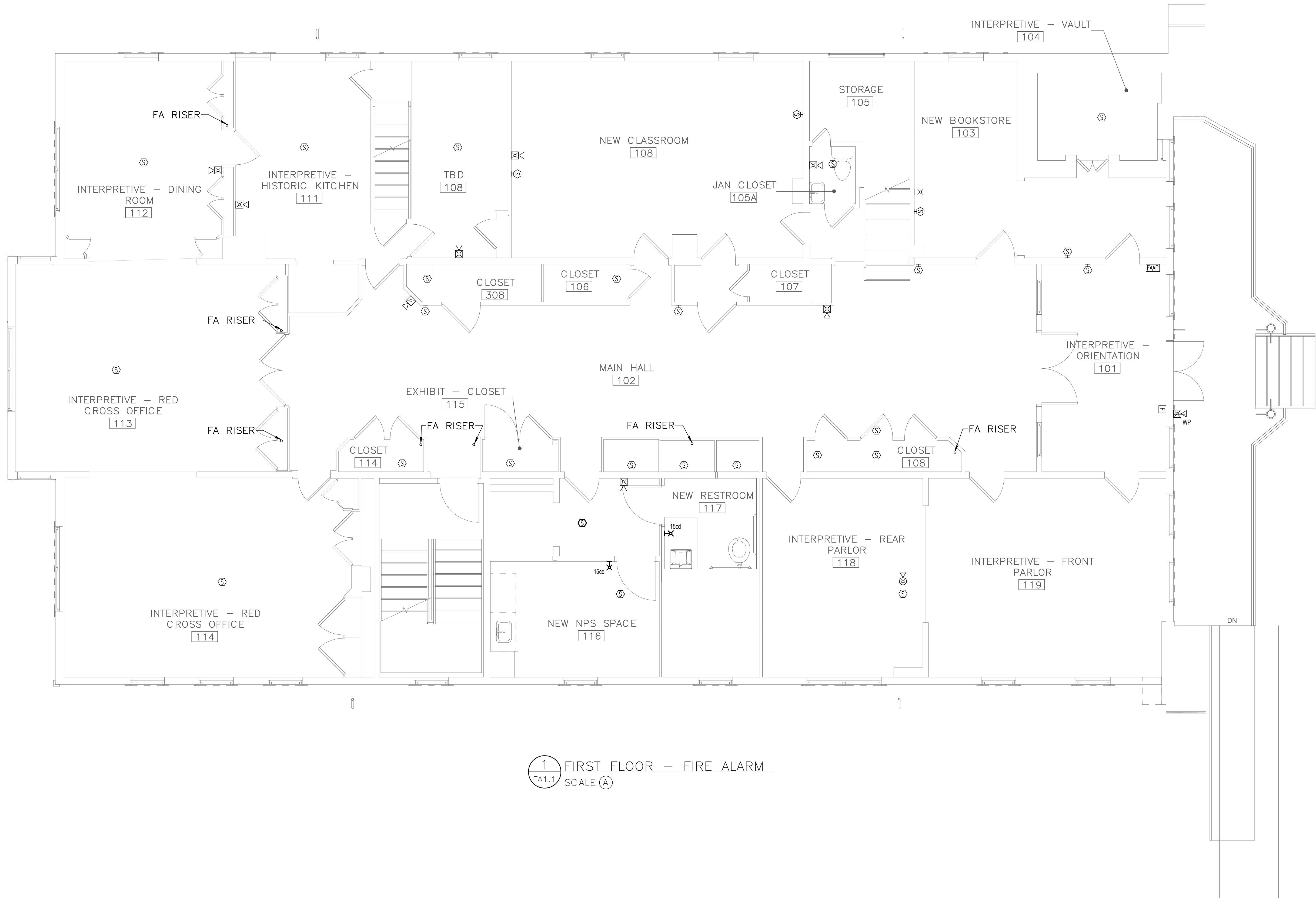
1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (---) INDICATES EXISTING ITEMS TO REMAIN.
2. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.

SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx



DESIGNE	SUB SHEET NO.	TITLE OF	DRAWING
JLW	FA1.0	BASEMENT - FIRE ALARM	895
JLW			179603
TECH.			PMIS/PKG
JST			312325
DAT		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	SHEET
12/06/2023			o X



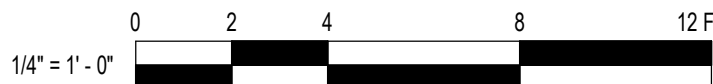
1 FIRST FLOOR - FIRE ALARM  
FA1.1 SCALE (A)

**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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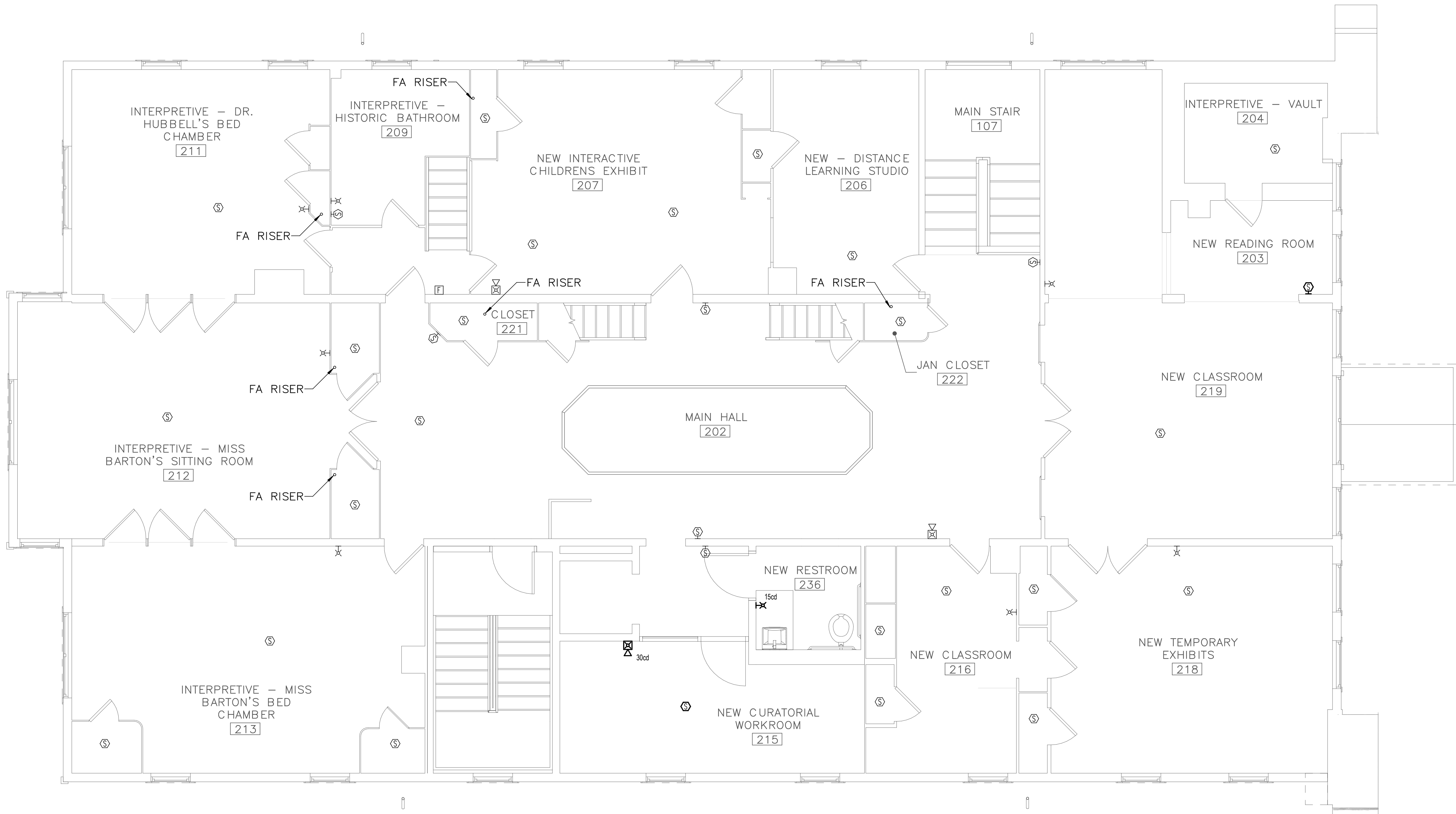
**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx



DESIGNE	SUB SHEET NO.	TITLE OF		DRAWING
JLW	FA1.1	<b>FIRST FLOOR - FIRE ALARM</b>		<b>895</b>
JLW				<b>179603</b>
TECH.				PMIS/PKG
JST				312325
DAT	12/06/2023		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	SHEET
				o <b>X</b>



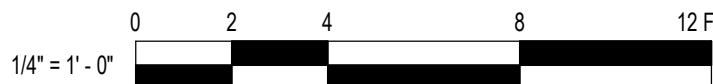


**DRAWING NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

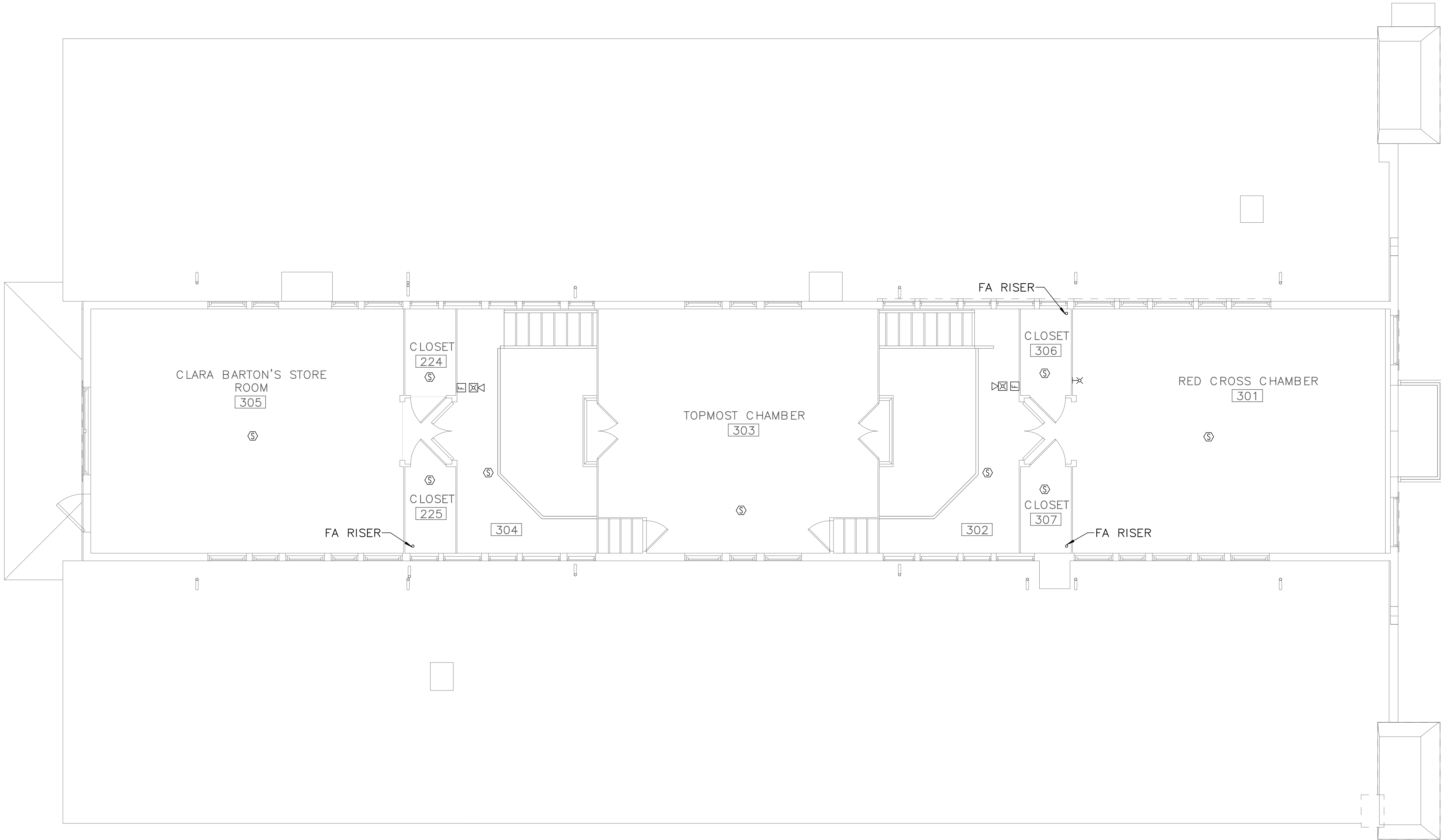
1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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**SPECIAL NOTES:**  
(APPLICABLE TO THIS DRAWING ONLY)

- ① xxx.
- ② xxx



DESIGNE	SUB SHEET NO   <
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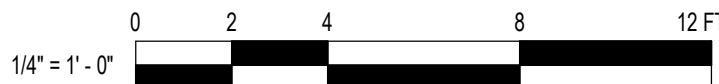
1 THIRD FLOOR - FIRE ALARM  
FA1.3 SCALE (A)

DRAWING NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (—) INDICATES NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (—) INDICATES EXISTING ITEMS TO REMAIN.
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SPECIAL NOTES:  
(APPLICABLE TO THIS DRAWING ONLY)

- 1 xxx.
- 2 xxx



DESIGNE	SUB SHEET NO.	TITLE OF	DRAWING
JLW	FA1.3	THIRD FLOOR - FIRE ALARM	895
JLW			179603
TECH.			PMIS/PKG
JST			312325
DAT		REHABILITATE CLARA BARTON NATIONAL HISTORIC SITE	SHEET
12/06/2023			o X

**Appendix:**  
**Dew Point Analysis**



## Dew Point Analysis

### Overview:

Due to the fact that The Clara Barton House does not have a proper vapor barrier, the following dew point analysis was performed to determine if condensation will form within the exterior envelope of the Clara Barton House.

There are multiple types of existing wall constructions used on the House. The chart below from the Historic Structures Report lists the different existing wall types:

Estimated R-values for Walls			
Wall Type	Typical Wall Locations	Wall Components	Approximate R-value
A	Rooms 112, 113, 114 and 213	<ul style="list-style-type: none"><li>• 7/8" German Siding</li><li>• 1" Wood Sheathing</li><li>• 2 x 4 Stud with 3½ Foil Backed Batt Insulation</li><li>• Building Paper</li><li>• Fabric and Paint</li></ul>	R=19
B	Rooms 103, 105, 108, 109, 115, 116, 117, 118, 119, 203, 203A(?), 206, 207, 208, 211, 214, 215, 217 and 218	<ul style="list-style-type: none"><li>• 7/8" German Siding</li><li>• 1" Wood Sheathing</li><li>• 2 x 4 Stud with ± 4" air space</li><li>• ± ¾ Plaster on wood lath or Gypsum Board</li></ul>	R=4
C	Rooms 101, 111, 201, 209, 212, 301, 302, 303, 304 and 305	<ul style="list-style-type: none"><li>• 7/8" German Siding</li><li>• 1" Wood Sheathing</li><li>• 2 x 4 Stud with ± 4" air space</li><li>• 7/8" Beaded Board</li></ul>	R=4.5
D	Rooms B-4, B-5 and B-6	<ul style="list-style-type: none"><li>• 1" Wood Board &amp; Batten Sheathing</li><li>• 2 x 4 Stud with 3½ Batt Insulation</li><li>• ± ¾ Gypsum Board</li></ul>	R=18.5
E	Rooms 104 and 204	<ul style="list-style-type: none"><li>• 1'-8 Brick</li></ul>	R=4
F	Rooms B-1, B-3, B-4, B-6 and B-8	<ul style="list-style-type: none"><li>• ± 2'-0" Stone</li></ul>	R=2
F	Room B-1	<ul style="list-style-type: none"><li>• 1" Wood Board &amp; Batten Sheathing</li></ul>	R=1.5

There are also multiple existing roof types used on the Clara Barton House. The chart below from the Historic Structures Report lists the different roof types:

Estimated R-values for Roofs			
Roof Type	Typical Roof Locations	Roof Components	Approximate R-value
A	Above Rooms 107, 203, 203A, 206, 207, 208, 209, 211, 213, 214, 215, 216, 217, 218	<ul style="list-style-type: none"> <li>• Standing Seam Metal on Rosin Paper</li> <li>• 1" Wood Roof Deck</li> <li>• 5½" Air Space</li> <li>• ± ¾ Plaster on wood lath</li> </ul>	R=3.5
B	Above Room 303	<ul style="list-style-type: none"> <li>• Standing Seam Metal on Rosin Paper</li> <li>• 1" Wood Roof Deck</li> <li>• 5½" Air Space</li> <li>• Fabric and Paint</li> </ul>	R=3
C	Above Rooms 301, 305	<ul style="list-style-type: none"> <li>• Standing Seam Metal on Rosin Paper</li> <li>• 1" Wood Roof Deck</li> <li>• 7" Air Space</li> <li>• Fabric and Paint</li> </ul>	R=3
D	Above Rooms 301, 302, 304 and 305	<ul style="list-style-type: none"> <li>• Standing Seam Metal on Rosin Paper</li> <li>• 1" Wood Roof Deck</li> <li>• 3½" Air Space</li> <li>• Fabric and Paint</li> </ul>	R=3

To analyze the conditions occurring in the wall and roof systems, a temperature profile for each type of material was created to determine the surface temperature at the face of each material. The worst case summer and winter dew point temperatures are shown in the spreadsheet. Any point where the surface temperature is less than the dew point temperature is where condensation can occur.

#### **Walls:**

The analysis of the existing wall conditions shows that condensation is not being controlled during the winter. During the winter, the movement of moisture is from the indoors to the outdoors. When the indoor space temperature is 70 degrees F and 15 percent or higher relative humidity, the surface temperature drops below the dewpoint temperature within the wall assembly for both Type A and D walls. For Type A walls, condensation will form in the space between the wood sheathing and siding. For Type D walls, the condensation will form in the space between the batt insulation and the wood board. When the indoor space temperature is 70 degrees F and 17 percent or higher relative humidity, the surface temperature drops below the dewpoint temperature within the wall assembly for Type B, C, and E walls. For Type B walls, condensation will form in the space between the wood sheathing and siding. For Type D walls, the condensation will form in the space between the batt insulation and the wood board. For Type E walls, the condensation will form on the inside surface of the brick. For Type F walls, the condensation will form on the inside surface of the stone when the indoor space temperature is 70 degrees F and the relative humidity is above 19%.

The results for the summer wall conditions are marginal. During the summer, the movement of moisture is from the outdoors to the interior. At outdoor conditions of 95 degrees F and 50% relative humidity, the surface temperatures of the walls remain above the dewpoint. However, Wall Type A and D are close, so under the worst wet bulb temperature conditions, it is possible that moisture could occur on the inside surface of the walls, of the Type A and D walls.

Base on the results for both winter and summer, the two wall types with insulation are the most likely to have condensation form. So that means that it is not advisable to add insulation to the non-insulated walls without adding a vapor barrier.

### **Roofs:**

The analysis of the existing roof conditions shows that condensation is not being controlled during the winter. During the winter, the movement of moisture is from the indoors to the outdoors. When the indoor space temperature is 70 degrees F and 17 percent or higher relative humidity, the surface temperature drops below the dewpoint temperature within the roof assembly for all roof types. The condensation will form in the space between the air space and roof deck.

The analysis of the existing roof conditions shows that condensation will not likely form during the summer. During the summer the movement of moisture is from the outdoors to the interior. At outdoor conditions of 95 degrees F and 50% relative humidity, the surface temperatures of the roofs remain above the dewpoint.

A scenario with insulation added to the attic was also analyzed. For both the summer and winter it made it more likely for condensation to form within the roof assembly.

**Clara Barton Dew Point Analysis****Summer Conditions 95 F Outside and 75 F Inside**

$$R1 = [(t_i - t_x) * R2] / (t_i - t_o)$$

Where,

R1=	resistance from indoor air to point in question	
R2=	overall resistance	
t <sub>i</sub> =	<b>indoor air temperature</b>	<b>75 F</b>
t <sub>x</sub> =	temperature in question	
t <sub>o</sub> =	outdoor air temperature	95 F
	outdoor air relative humidity	50 %

**dewpoint temperature** **73.50 F**

**Wall Type A**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	19.12	95.0
7/8" German Siding	0.81	18.87	94.7
1" Wood Sheathing	0.94	18.06	93.9
3.5" Batt Insulation	16	17.12	92.9
Building Paper	0.44	1.12	76.2
Inside Surface	<u>0.68</u>	0.68	<b>75.7</b>
	19.12		

**Wall Type B**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	4.11	95.0
7/8" German Siding	0.81	3.86	93.8
1" Wood Sheathing	0.94	3.05	89.8
4" Air Space	0.87	2.11	85.3
3/4" Gypsum Board	0.56	1.24	81.0
Inside Surface	<u>0.68</u>	0.68	<b>78.3</b>
	4.11		

**Wall Type C**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	4.48	95.0
7/8" German Siding	0.81	4.23	93.9
1" Wood Sheathing	0.94	3.42	90.3
4" Air Space	0.87	2.48	86.1
7/8" Beaded Board	0.93	1.61	82.2
Inside Surface	<u>0.68</u>	0.68	<b>78.0</b>
	4.48		



**Wall Type D**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	18.43	95.0
1" Wood Board	0.94	18.18	94.7
3.5" Batt Insulation	16	17.24	93.7
3/4" Gypsum Board	0.56	1.24	76.3
		0.68	75.7
Inside Surface	<u>0.68</u>	0.68	<b>75.7</b>
	18.43		

**Wall Type E**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	4.035	95.0
1'-8" Brick	3.1	3.785	93.8
Inside Surface	<u>0.685</u>	0.685	<b>78.4</b>
	4.035		

**Wall Type F**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	2.035	95.0
2'-0" Stone	1.1	1.785	92.5
Inside Surface	<u>0.685</u>	0.685	<b>81.7</b>
	2.035		

**Roof Type A**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	3.540	95.0
Standing Seam Metal	0.000	3.290	93.6
1" Wood Roof Deck	0.940	3.290	93.6
5.5" Air Space	0.870	2.350	88.3
3/4" Plaster	0.560	1.480	83.4
Inside Surface	<u>0.920</u>	0.920	<b>80.2</b>
	3.540		

**Roof Type B**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	3.080	95.0
Standing Seam Metal	0.000	2.830	93.4
1" Wood Roof Deck	0.940	2.830	93.4
5.5" Air Sapce	0.870	1.890	87.3
Fabric and Paint	0.100	1.020	81.6
Inside Surface	<u>0.920</u>	0.920	<b>81.0</b>
	3.080		

**Roof Type C**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	3.080	95.0
Standing Seam Metal	0.000	2.830	93.4
1" Wood Rood Deck	0.940	2.830	93.4
7" Air Space	0.870	1.890	87.3
Fabric and Paint	0.100	1.020	81.6
Inside Surface	0.920	0.920	<b>81.0</b>
	<u>3.080</u>		

**Roof Type D**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	3.080	95.0
Standing Seam Metal	0.000	2.830	93.4
1" Wood Rood Deck	0.940	2.830	93.4
3.5" Air Space	0.870	1.890	87.3
Fabric and Paint	0.100	1.020	81.6
Inside Surface	0.920	0.920	<b>81.0</b>
	<u>3.080</u>		

**Roof w/ Insulation**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	17.210	95.0
Standing Seam Metal	0.000	16.960	94.7
1" Wood Rood Deck	0.940	16.960	94.7
3.5" Batt Insulation	15.000	16.020	93.6
Fabric and Paint	0.100	1.020	76.2
Inside Surface	0.920	0.920	<b>76.1</b>
	<u>17.210</u>		

**Clara Barton Dew Point Analysis****Winter Conditions 20 F Outside and 70 F Inside**

$$R1 = [(t_i - t_x) * R2] / (t_i - t_o)$$

Where,

R1= resistance from indoor air to point in question

R2= overall resistance

ti= indoor air temperature 70 F

tx= temperature in question

to= outdoor air temperature 20 F

indoor air relative humidity 17 %

**dewpoint temperature 24.20 F****Wall Type A**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	19.12	20.0
7/8" German Siding	0.81	18.87	20.7
1" Wood Sheathing	0.94	18.06	<b>22.8</b>
3.5" Batt Insulation	16	17.12	25.2
Building Paper	0.44	1.12	67.1
Inside Surface	0.68	0.68	68.2
	<u>19.12</u>		

**Wall Type B**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	4.11	20.0
7/8" German Siding	0.81	3.86	23.0
1" Wood Sheathing	0.94	3.05	<b>32.9</b>
4" Air Space	0.87	2.11	44.3
3/4" Gypsum Board	0.56	1.24	54.9
Inside Surface	0.68	0.68	61.7
	<u>4.11</u>		

**Wall Type C**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	4.48	20.0
7/8" German Siding	0.81	4.23	22.8
1" Wood Sheathing	0.94	3.42	<b>31.8</b>
4" Air Space	0.87	2.48	42.3
7/8" Beaded Board	0.93	1.61	52.0
Inside Surface	0.68	0.68	62.4
	<u>4.48</u>		

**Wall Type D**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	18.43	20.0
1" Wood Board	0.94	18.18	20.7
3.5" Batt Insulation	16	17.24	<b>23.2</b>
3/4" Gypsum Board	0.56	1.24	66.6
Inside Surface	<u>0.68</u>	0.68	68.2
	18.43		

**Wall Type E**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	4.035	20.0
1'-8" Brick	3.1	3.785	<b>23.1</b>
Inside Surface	<u>0.685</u>	0.685	61.5
	4.035		

**Wall Type F**

Material	R-Value	R1-Value	Temp
Outside Surface	0.25	2.035	20.0
2'-0" Stone	1.1	1.785	<b>26.1</b>
Inside Surface	<u>0.685</u>	0.685	53.2
	2.035		

**Roof Type A**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	3.540	20.0
Standing Seam Metal	0.000	3.290	23.5
1" Wood Roof Deck	0.940	3.290	23.5
5.5" Air Space	0.870	2.350	36.8
3/4" Plaster	0.560	1.480	49.1
Inside Surface	<u>0.920</u>	0.920	<b>57.0</b>
	3.540		

**Roof Type B**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	3.080	20.0
Standing Seam Metal	0.000	2.830	24.1
1" Wood Roof Deck	0.940	2.830	24.1
5.5" Air Sapce	0.870	1.890	39.3
Fabric and Paint	0.100	1.020	53.4
Inside Surface	<u>0.920</u>	0.920	<b>55.1</b>
	3.080		



**Roof Type C**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	3.080	20.0
Standing Seam Metal	0.000	2.830	24.1
1" Wood Rood Deck	0.940	2.830	24.1
7" Air Space	0.870	1.890	39.3
Fabric and Paint	0.100	1.020	53.4
Inside Surface	0.920	0.920	<b>55.1</b>
	<u>3.080</u>		

**Roof Type D**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	3.080	20.0
Standing Seam Metal	0.000	2.830	24.1
1" Wood Rood Deck	0.940	2.830	24.1
3.5" Air Space	0.870	1.890	39.3
Fabric and Paint	0.100	1.020	53.4
Inside Surface	0.920	0.920	<b>55.1</b>
	<u>3.080</u>		

**Roof w/ Insulation**

Material	R-Value	R1-Value	Temp
Outside Surface	0.250	17.210	20.0
Standing Seam Metal	0.000	16.960	20.7
1" Wood Rood Deck	0.940	16.960	20.7
3.5" Batt Insulation	15.000	16.020	23.5
Fabric and Paint	0.100	1.020	67.0
Inside Surface	0.920	0.920	<b>67.3</b>
	<u>17.210</u>		

**Appendix:**  
**Electrical Load and Demand Calculations**

Group Name	Area (SqFt)	VA/sf by Load Type			Power (KVA)			Amps (A) 3-Phase		Amps (A) 1-Phase
Building Total:	8229.00	Lighting	Misc. Power	HVAC	Kitchen Equipment	Special Equipment	Total	@480V	@208V	@240V
<b>Basement Level</b>										
Electric Vehicle Charging Stations							0.0	0.0	0.0	0.0
B-2	78.00	0.46	1.5	7	0	2	2.7	3.3	7.5	11.2
B-1	1592.00	0.46	1.5	7	0	2	16.3	19.6	45.2	67.8
B-2	78.00	0.46	1.5	7	0	2	2.7	3.3	7.5	11.2
B-4 Catering/Prep/Laundry	260.00	1.06	1.5	7	10	0	12.5	15.0	34.7	52.0
B-5 Workshop	350.00	1.14	2.5	7	0	0	3.7	4.5	10.3	15.5
B-6 Workshop	310.00	1.14	2.5	7	0	0	3.3	4.0	9.2	13.7
Storage	450.00	0.46	0.5	7	0	0	3.6	4.3	10.0	14.9
Stairs	138.00	0.58	0	0	0	0	0.1	0.1	0.2	0.3
B-8 Fruit Cellar	43.00	0.00	0	0	0	0	0.0	0.0	0.0	0.0
Total:	3299.00									
<b>First Floor</b>										
101 Interpretive Orientation	154.00	1.07	1	7	0	0	1.4	1.7	3.9	5.8
102 Main Hall	708.00	1.07	1	10	0	0	8.5	10.3	23.7	35.6
103 New Bookstore	215.00	0.46	0.5	7	0	0	1.7	2.1	4.8	7.1
104 Interpretive Vault	61.00	0.46	0.5	7	0	0	0.5	0.6	1.3	2.0
105 Storage	50.00	0.46	0.5	7	0	0	0.4	0.5	1.1	1.7
106 Closet	20.00	0.97	0	0	0	0	0.0	0.0	0.1	0.1
108 New Classroom	336.00	1.07	2.5	7	0	0	3.6	4.3	9.9	14.8
109 TBD	107.00	1.07	2.5	7	0	0	1.1	1.4	3.1	4.7
111 Interpretive Historic Kitchen	183.00	1.07	2.5	7	0	0	1.9	2.3	5.4	8.1
112 Interpretive Dining Room	186.00	0.93	2.5	7	0	0	1.9	2.3	5.4	8.1
113 Interpretive Red Cross Office	326.00	1.07	2.5	7	0	0	3.4	4.1	9.6	14.4
114 Interpretive Red Cross Office	340.00	1.07	2.5	7	0	0	3.6	4.3	10.0	15.0
116 Break Room	180.00	0.62	3	7	5	0	6.9	8.3	19.2	28.8
117 Restroom	59.00	0.93	0.5	7	0	0	0.5	0.6	1.4	2.1
118 Interpretive Rear Parlor	192.00	1.07	2.5	7	0	0	2.0	2.4	5.6	8.5
119 Interpretive Front Parlor	282.00	1.07	2.5	7	0	0	3.0	3.6	8.3	12.4
Closets	175.00	0.46	0	0	0	0	0.1	0.1	0.2	0.3
Stairs	138.00	0.58	0	0	0	0	0.1	0.1	0.2	0.3
Restroom	16.00	0.85	0.5	7	0	0	0.1	0.2	0.4	0.6
Total:	3728.00									
<b>Second Floor</b>										
201 Office + Storage	122.00	0.93	2.5	7	0	0	1.3	1.5	3.5	5.3
202 Main Hall	702.00	0.66	0.5	7	0	0	5.7	6.9	15.9	23.9
206 Distance Learning Studio	120.00	0.93	2.5	7	0	0	1.3	1.5	3.5	5.2
207 Interactive Childrens Exhibit	70.00	0.93	2.5	7	0	0	0.7	0.9	2.0	3.0
209 Interpretive Historic bathroom	70.00	0.58	2.5	7	0	0	0.7	0.8	2.0	2.9
Stairs	97.00	0.58	0	0	0	0	0.1	0.1	0.2	0.2
211 Interpretive Dr. Hubbell's Bed Chamber	140.00	1.07	2.5	7	0	0	1.5	1.8	4.1	6.2
212 Interpretive Miss Barton's Sitting Room	190.00	1.07	2.5	7	0	0	2.0	2.4	5.6	8.4
213 Interpretive Miss Barton's Bed Chamber	120.00	1.06	2.5	7	0	0	1.3	1.5	3.5	5.3
Stairs	140.00	0.58	0	0	0	0	0.1	0.1	0.2	0.3
215 New Curatorial Workroom	260.00	1.07	2.5	7	0	0	2.7	3.3	7.6	11.5
236 New Restroom	390.00	0.93	3	7	0	0	4.3	5.1	11.8	17.8
216 New Classroom	360.00	1.07	3	7	0	0	4.0	4.8	11.1	16.6
218 New Temporary Exhibits	285.00	1.07	2.5	7	0	0	3.0	3.6	8.4	12.6
219 New Classroom	140.00	1.07	2.5	7	0	0	1.5	1.8	4.1	6.2
Closets	57.00	0.46	0.5	0	0	0	0.1	0.1	0.2	0.2
Total:	3263.00									
<b>Third Floor</b>										
301 Red Cross Chamber	347.00	0.46	1.5	5	0	0	2.4	2.9	6.7	10.1
Landings	168.00	0.46	0.5	5	0	0	1.0	1.2	2.8	4.2
Closets	80.00	0.46	0.5	0	0	0	0.1	0.1	0.2	0.3
303 Topmost Chamber	279.00	0.46	1.5	5	0	0	1.9	2.3	5.4	8.1
305 Clara Barton's Store Room	328.00	0.46	1.5	5	0	0	2.3	2.7	6.3	9.5
Total:	1202.00									
<b>Building Total:</b>							<b>123.5</b>	<b>148.8</b>	<b>343.3</b>	<b>514.8</b>
<b>Building Total with 25% Growth</b>							<b>154.4</b>	<b>186.0</b>	<b>429.2</b>	<b>643.4</b>

**Appendix:**

**Limited Pre-Renovation Regulated Building Materials Survey**



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**LIMITED PRE-RENOVATION  
REGULATED BUILDING MATERIALS SURVEY  
for**

**CLARA BARTON NATIONAL HISTORIC SITE  
5801 Oxford Road  
Glen Echo, MD**

*Prepared For:*

**Katherine Frey  
Mills + Schnoering Architects, LLC  
200 Forrestal Road, Suite 3A  
Princeton, NJ 08540**

*Prepared By:*

**Langan Engineering and Environmental Services, Inc.  
1300 Wilson Boulevard, Suite 450  
Arlington, Virginia 22209**



**Tess Reardon  
Senior Staff Geologist**



**Peter C. Frederick, CIEC  
Associate**

***LANGAN***

**14 August 2022  
270128401**

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## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>1 INTRODUCTION .....</b>	<b>4</b>
<b>2 SITE DESCRIPTION .....</b>	<b>4</b>
<b>3 ASBESTOS-CONTAINING MATERIALS SURVEY.....</b>	<b>4</b>
3.1 ACM SURVEY METHODOLOGY .....	5
3.2 ACM FINDINGS .....	6
<b>4 LEAD-CONTAINING PAINT ASSESSMENT .....</b>	<b>7</b>
4.1 LIMITED ASSESSMENT METHODOLOGY .....	7
4.2 LCP FINDINGS .....	7
<b>5 PCB-CONTAINING CAULK LIMITED SCREENING ASSESSMENT .....</b>	<b>8</b>
5.1 SAMPLING METHODOLOGY .....	8
5.2 PCB LIMITED SAMPLING FINDINGS .....	8
<b>6 UNIVERSAL WASTE AND REGULATED BUILDING MATERIALS INVENTORY .....</b>	<b>9</b>
6.1 INVENTORY METHODOLOGY .....	9
6.2 UNIVERSAL WASTE AND REGULATED BUILDING MATERIALS FINDINGS .....	9
<b>7 LIMITED WATER INTRUSION AND VISIBLE MOLD GROWTH ASSESSMENT .....</b>	<b>10</b>
7.1 ASSESSMENT METHODOLOGY .....	10
7.2 VISUAL ASSESSMENT FINDINGS .....	10
<b>8 CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>10</b>
8.1 ASBESTOS CONTAINING MATERIALS.....	10
8.2 LEAD-CONTAINING PAINT ASSESSMENT.....	12
8.3 PCB-CONTAINING CAULK .....	12
8.4 UNIVERSAL WASTE AND REGULATED BUILDING MATERIALS .....	13
8.5 WATER INTRUSION AND SUSPECT VISIBLE MOLD GROWTH .....	14
<b>9 LIMITATIONS AND SERVICE CONSTRAINTS .....</b>	<b>15</b>

## TABLES

Table 1	Summary of Asbestos Laboratory Analytical Results
Table 2	Summary of Lead in Paint Laboratory Analytical Results
Table 3	Summary of PCB Laboratory Analytical Results
Table 4	Summary of Universal Waste and Other Regulated Materials Inventory

## FIGURES

Figures 1A through 1D      Hazardous Building Materials Survey Summary

## **APPENDICES**

Appendix A	Acronyms and Definitions
Appendix B	Survey Personnel Qualifications
Appendix C	Photograph Log
Appendix D	Asbestos Laboratory Analytical Results and Chain of Custody Documentations
Appendix E	Lead in Paint Laboratory Analytical Results and Chain of Custody Documentations
Appendix F	PCBs Laboratory Analytical Results and Chain of Custody Documentations

## Survey Personnel Signatory Page

A handwritten signature in dark ink, reading "Tess Reardon". The signature is written in a cursive style with a horizontal line underneath.

**Tess Reardon**

Maryland Department of the Environment-Licensed Asbestos Inspector



## **EXECUTIVE SUMMARY**

Langan Engineering and Environmental Services, Inc. (Langan) has prepared this Limited Pre-Renovation Regulated Building Materials (RBM) Survey Report for the Clara Barton National Historic Site located at 5801 Oxford Road in Glen Echo, Maryland (Site). The survey was conducted by Tess Reardon, a Maryland Department of the Environment-Licensed Asbestos Inspector, on July 13, 2022.

The objective of the survey was to identify the presence of asbestos-containing materials (ACM), lead-containing paint (LCP), polychlorinated biphenyl (PCB)-containing materials, and universal waste or other RBMs for compliance with applicable federal and state EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) and Occupational Safety and Health Administration (OSHA) regulations prior to the planned renovation. The scope of the survey included non-destructive/non-intrusive surveying of limited areas of the interior and exterior of the building for proper management prior to planned renovations of the building.

Due to the historic significance of the Site, Langan was not authorized to conduct our survey in a manner that could cause objectionable damage to building materials or compromise their structural integrity or functionality; therefore, suspect ACM may still be present in concealed or hidden areas that are not addressed in this report. Non-destructive and non-intrusive inspection and bulk sampling was performed within the building interior, perimeter envelope, and exterior. The roof was not included in Langan's scope of work. If requested, Langan can remobilize to the Site and sample the roofing materials using an articulated lift provided by the client.

This executive summary is provided as a convenience to the reader and should not be relied upon without reading the full content of this report, including information provided in the appendices and other referenced materials. The following summarizes our key findings.

## **KEY FINDINGS**

### ***ASBESTOS-CONTAINING MATERIALS SURVEY***

The following homogenous areas (HAs) were confirmed to be ACM (i.e. >1% asbestos):

- HA-9 – 12"x12"brown speckled vinyl floor tile (VFT) located in room 106.
- HA-15 – Tan cove base mastic located in room 217.
- HA-19 – Gray paper backing behind gauze / fabric wall coverings located in rooms 212 and 213.

The following suspect ACM homogenous areas (HAs) were not sampled due to the limitations of our scope of our services and/or the necessity of destructive sampling methods, and are either presumed to be present and/or assumed to be ACM until sampled and confirmed otherwise:

- HA-22 – 1" x 1" ceramic floor tile grout located in the basement.
- HA-23 – 1" x 1" ceramic floor tile adhesive located in the basement.

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- HA-24 – Fire door located in the basement.
- HA-25 – 9" x 9" white speckled VFT located in room 117.
- HA-26 – Floor tile mastic associated with HA-25.
- HA-27 – 12" x 12" brown VFT located in room 104.
- HA-28 – Floor tile mastic associated with HA-27.
- HA-29 – 12" x 12" black VFT located in room 104.
- HA-30 – Floor tile mastic associated with HA-29.

Refer to Table 1 for a detailed summary of Langan's asbestos survey sampling data. Refer to Figures 1A through 1D for approximate asbestos sampling locations. Refer to Appendix C for representative photographs.

Langan was also provided two previous ACM survey reports from Apex Companies, LLC (Apex) for review. The reports included a limited ACM survey report dated June 23, 2010 and July 22, 2011 (which also included limited lead paint testing). These previous survey reports should be reviewed in combination with Langan's survey results for a more comprehensive assessment of ACMs at the Site.

The following ACMs were identified by Apex in those two previous survey reports:

- Beige with brown & blue floor tile in basement;
- Tan 12x12 inch floor tile with wormy gouges, first floor kitchen;
- Gray 9x9 floor tile, first floor office;
- Tan 12x12 inch floor tile, second floor west bathroom;
- Off-white 12x12 floor tile, second floor vault foyer; and
- Black glue dots on drywall of second floor bathroom ceiling.

It should be noted that the ACMs previously identified in Apex's survey reports (2010, 2011) may have been removed prior to Langan's survey in 2022. Langan was not provided documentation of ACM removal, but current site conditions may differ from what was documented by Apex previously.

### **LEAD-CONTAINING PAINT ASSESSMENT**

Langan collected 16 bulk paint chips from various painted building materials for laboratory analysis to screen the building for lead-containing paint. Of the 16 bulk paint chips collected, 14 paint chip samples had detectable concentrations of lead.

Detectable concentrations of lead were identified in the basement support beams; on first, second, and third floor interior plaster and drywall, wood walls, stone walls, and doors; exterior porch columns; and exterior wood walls, doors, and window components. Paint chips collected from basement stone and wood walls did not have concentrations of lead above the laboratory reporting limit.

Langan was also provided a previous limited lead survey report, dated July 22, 2011, from Apex Companies, LLC (Apex) for review.

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Detectable concentrations of lead were identified by Apex in the previous survey reports:

- Yellow chimney paint in bedroom;
- Tan plaster wall paint in bedroom;
- Tan plaster ceiling paint in bedroom;
- Beige wood closet paint in bedroom;
- Tan wood wall paint in bedroom;
- Tan plaster ceiling paint in bathroom;
- Tan window sill paint in bathroom;
- Tan plaster wall paint in kitchen;
- Yellow exterior wood siding paint; and
- Tan ceiling paint in the original kitchen.

Based upon the age and use of the building, and testing results, painted surfaces should be assumed and treated as containing lead.

Refer to Table 2 for a detailed summary of Langan's lead in paint assessment data. Refer to Figures 1A through 1D for approximate lead paint sampling locations.

#### ***POLYCHLORINATED BIPHENYL (PCB) CONTAINING CAULK/SEALANTS ASSESSMENT***

Langan collected four bulk samples from exterior window glazing, concrete masonry unit (CMU) mortar, and stone/brick mortar for analysis of PCBs.

PCBs were not detected above the laboratory reporting limit in the submitted samples.

Refer to Table 3 for detailed summary of sampling results. Refer to Figures 1A through 1D for approximate PCB sampling locations.

#### ***UNIVERSAL WASTE AND OTHER REGULATED BUILDING MATERIALS INVENTORY***

Langan compiled an inventory of universal waste and other RBMs at the Site. Langan identified eight different types of potential universal waste or other RBMs as part of our survey, including various fluorescent light tubes and ballasts, refrigerants, fire alarms, sprinkler heads, and smoke detectors.

The identified universal wastes and other RBMs should be managed in accordance with applicable federal, state, and local regulations and guidance. When appropriate, Langan recommends that universal wastes and RBMs be recycled to the extent possible before opting to have them disposed of in a landfill.

Refer to Table 4 for detailed summary of the RBM inventory. Refer to Appendix C for representative photographs.

## **LIMITED WATER INTRUSION AND VISIBLE MOLD GROWTH ASSESSMENT**

Langan conducted a limited water intrusion and visible mold growth assessment at the building. Historical water staining was identified in closets in Room 212 on the building's second floor. No visible suspect mold growth was observed at the time of our visit.

### **1 INTRODUCTION**

Langan Engineering and Environmental Services, Inc. (Langan) has prepared this Limited Pre-Renovation Regulated Building Materials (RBM) Survey Report for the Clara Barton National Historic Site located at 5801 Oxford Road in Glen Echo, Maryland (Site).

The objective of the survey was to identify the presence of asbestos-containing materials (ACM), lead-containing paint (LCP), polychlorinated biphenyl (PCB)-containing caulk, and universal waste or other RBMs for compliance with applicable federal and state EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) and Occupational Safety and Health Administration (OSHA) regulations prior to the planned renovation. The scope of the survey included non-destructive/non-intrusive surveying of limited areas of the interior and exterior of the building for proper management prior to the renovations of the building.

The remainder of this report presents our Site description, observations, findings, conclusions, and recommendations.

### **2 SITE DESCRIPTION**

The Clara Barton National Historic Site is located at 5801 Oxford Road in Glen Echo, Maryland. The building was constructed by 1891. The building's interiors were renovated in the 1980s, with little to no change to the exterior envelope. The building has a full basement and three levels above grade. The building totals approximately 4,600 square feet and is a historic site.

### **3 ASBESTOS-CONTAINING MATERIALS SURVEY**

Federal and state regulations define ACM as containing greater than one percent ( $>1\%$ ) asbestos when analyzed by appropriate laboratory analytical methods by an appropriately qualified laboratory. Materials that are confirmed to contain one percent or less asbestos by laboratory analyses (i.e.  $\leq 1\%$ ) are not regulated by EPA regulations, however OSHA still regulates these materials under its asbestos regulations. Therefore, there can be situations where EPA regulations may not apply for specific materials, but the OSHA regulations would still be applicable.

Any building material suspected to contain asbestos that was not inspected and/or sampled by a qualified asbestos inspector should be handled as if it were an ACM until sampled and proven otherwise.



### **3.1 ACM SURVEY METHODOLOGY**

The ACM survey was conducted on July 13, 2022 by Langan employee Tess Reardon. Ms. Reardon is a Maryland Department of the Environment-Licensed Asbestos Inspector. The asbestos inspector's qualifications are attached in Appendix B.

Langan conducted the ACM survey in general accordance with the guidelines outlined for Pre-Construction/Pre-Renovation Surveys in ASTM E2356 Standard Practice for Comprehensive Building Asbestos Surveys. ASTM E2356 guidance meets the applicable requirements of current EPA NESHAP Standard 40 Code of Federal Regulations (CFR) 61, Subpart M (Asbestos), EPA Asbestos Hazard Emergency Response Act (AHERA) Standard 40 CFR 763, Subpart E, and OSHA Standard 29 CFR 1926.1101 asbestos survey and/or sampling regulations. However, certain recommended practices of E2356 may not have been performed, based upon our professional opinion, and scope and/or budget constraints, such as performing additional confirmatory analyses on certain types of materials that are not required by state or federal regulations.

Due to the historic significance of the Site, Langan was not authorized to conduct our survey in a manner that could cause objectionable damage to building materials or compromise their structural integrity or functionality; therefore, suspect ACM may still be present in concealed or hidden areas that are not addressed in this report. Non-destructive and non-intrusive inspection and bulk sampling was performed within the building interior, perimeter envelope, and exterior. The roof was not included in Langan's scope of work. If requested, Langan can remobilize to the Site and sample the roofing materials using an articulated lift provided by the client

During the asbestos survey, Ms. Reardon inventoried, mapped and assessed suspect ACM observed throughout the accessible areas of the building interior, perimeter envelope, and exterior of the Site in accordance with our proposed scope of services. We grouped suspect ACM by building material homogeneity. A homogeneous area (HA) refers to any building material uniform in construction date, use, color, texture, and similar method of application. The condition, and approximate location and quantity of each identified HA were documented.

Langan collected a total of 68 bulk samples from 30 observed suspect ACM at the Site. The samples were submitted under chain of custody to EMSL Analytical, Inc. (EMSL), located in Cinnaminson, New Jersey. EMSL is a member of the American Industrial Hygiene Association (AIHA), National Voluntary Laboratory Accreditation Program (NVLAP).

Laboratory analysis were performed following the EPA 600/R-93/116 Method using Polarized Light Microscopy with Dispersion Staining (PLM/DS) which utilizes Visual Area Estimation (VAE) for determining concentrations of asbestos in a sample.

Although recommended in ASTM E2356, Langan did not perform additional supplementary analyses for Non-Organically Bound (NOB) materials that did not have asbestos detected. These additional analyses are not required by current federal or Maryland regulations.

### 3.2 ACM FINDINGS

The following suspect ACM homogenous areas were confirmed to be ACM (i.e. >1 % asbestos):

- HA-9 – 12"x12"brown speckled vinyl floor tile (VFT) located in room 106.
- HA-15 – Tan cove base mastic located in room 217.
- HA-19 – Gray paper backing behind gauze / fabric wall coverings located in rooms 212 and 213.

The following suspect ACM homogenous areas (HAs) were not sampled due to the limitations of our scope of our services and/or the necessity of destructive sampling methods, and are either presumed to be present and/or assumed to be ACM until sampled and confirmed otherwise:

- HA-22 – 1" x 1" ceramic floor tile grout located in the basement.
- HA-23 – 1" x 1" ceramic floor tile adhesive located in the basement.
- HA-24 – Fire door located in the basement.
- HA-25 – 9" x 9" white speckled VFT located in room 117.
- HA-26 – Floor tile mastic associated with HA-25.
- HA-27 – 12" x 12" brown VFT located in room 104.
- HA-28 – Floor tile mastic associated with HA-27.
- HA-29 – 12" x 12" black VFT located in room 104.
- HA-30 – Floor tile mastic associated with HA-29.

Table 1 provides detailed summary of our ACM survey sampling, with descriptions of suspect ACM and their locations, bulk sample locations, and laboratory analytical results. Asbestos sample locations are depicted on Figures 1A through 1D. Representative photographs are presented in Appendix C. Laboratory analytical results and chain of custody documentation are provided in Appendix D.

Langan was also provided two previous ACM survey reports from Apex Companies, LLC (Apex) for review. The reports included a limited ACM survey report dated June 23, 2010 and July 22, 2011 (which also included limited lead paint testing). These previous survey reports should be reviewed in combination with Langan's survey results for a more comprehensive assessment of ACMs at the Site.

The following ACMs were identified by Apex in those two previous survey reports:

- Beige with brown & blue floor tile in basement;
- Tan 12x12 inch floor tile, first floor kitchen;
- Gray 9x9 floor tile, first floor office;
- Tan 12x12 inch floor tile, second floor west bathroom;
- Off-white 12x12 floor tile, second floor vault foyer; and
- Black glue dots on drywall of second floor bathroom ceiling.

It should be noted that the ACMs previously identified in Apex's survey reports (2010, 2011) may have been removed prior to Langan's survey in 2022. Langan was not provided documentation of ACM removal, but current site conditions may differ from what was documented by Apex previously.

## **4 LEAD-CONTAINING PAINT ASSESSMENT**

### **4.1 LIMITED ASSESSMENT METHODOLOGY**

Langan conducted a limited assessment for lead-containing paint at the Site. The purpose of the lead paint assessment was to determine the general presence of lead-containing paints at the Site.

Any detectable concentration of lead in paint or surface coatings is regulated by OSHA in accordance with the Lead in Construction standard (29 CFR 1926.62) for purposes of worker protection.

Langan conducted a walkthrough of the Site to generally determine where suspect lead-containing surface coatings may be present. Langan then collected 16 paint chip samples from areas suspected to be LCP in general accordance with ASTM E1729 Standard Practice for Field Collection of Dried Paint Samples for Subsequent Lead Determination and EPA guidelines. Paint chip samples were submitted under chain of custody to EMSL Analytical, Inc. Laboratory analysis was performed following EPA Method SW-846-7000B Flame Atomic Absorption (FAA) for lead content as a percentage by weight.

### **4.2 LCP FINDINGS**

Detectable concentrations of lead were identified in 14 of the 16 bulk paint chips collected.

Detectable concentrations of lead were identified in the basement support beams; on first, second, and third floor interior plaster and drywall, wood walls, stone walls, and doors; exterior porch columns; and exterior wood walls, doors, and window components. Paint chips collected from basement stone and wood walls did not have concentrations of lead above the laboratory reporting limit.

Langan was also provided a previous limited lead survey report, dated July 22, 2011, from Apex Companies, LLC (Apex) for review.

Detectable concentrations of lead were identified by Apex in the previous survey reports:

- Yellow chimney paint in bedroom;
- Tan plaster wall paint in bedroom;
- Tan plaster ceiling paint in bedroom;
- Beige wood closet paint in bedroom;
- Tan wood wall paint in bedroom;
- Tan plaster ceiling paint in bathroom;

- Tan window sill paint in bathroom;
- Tan plaster wall paint in kitchen;
- Yellow exterior wood siding paint; and
- Tan ceiling paint in the original kitchen.

Based upon the age and use of the building, and testing results, painted surfaces should be assumed and treated as containing lead.

In general, the exterior paints and coatings were in poor condition due to age and weathering.

Table 2 provides detailed summary of our lead survey, with descriptions of suspect LCP and their locations, sample locations, and laboratory analytical results. Refer to Figures 1A through 1D for approximate sampling locations. The lead paint laboratory reports are provided as Appendix E.

## **5 PCB-CONTAINING CAULK LIMITED SCREENING ASSESSMENT**

### **5.1 SAMPLING METHODOLOGY**

PCBs are regulated under the Toxic Substances Control Act (TSCA) (40 CFR 261), as well as Federal regulation 40 CFR 761.

As defined in 40 CFR 761.3, “PCB-containing bulk product waste” is any waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal is greater than or equal to 50 ppm or milligrams per kilogram (mg/kg). Any product containing less than 50 ppm or mg/kg PCBs is considered a non-PCB product.

The PCB limited assessment involved a visual examination of the building and limited sampling of suspect PCB-containing materials. A total of four bulk samples were collected from the building and submitted to EMSL Analytical, Inc. under chain-of-custody for PCB analysis using EPA SW-846 3540C/8082A.

### **5.2 PCB LIMITED SAMPLING FINDINGS**

Langan collected 4 bulk samples from exterior window glazing, concrete masonry unit (CMU) mortar, and stone/brick mortar for analysis of PCBs.

PCBs were not detected above the laboratory reporting limit in the submitted samples.

Refer to Table 3 for detailed summary of sampling results. Refer to Figures 1A through 1D for approximate sampling locations. Photos of examples of the materials sampled for PCBs are included in Appendix C. The PCB laboratory reports are provided as Appendix F.



## **6 UNIVERSAL WASTE AND REGULATED BUILDING MATERIALS INVENTORY**

### **6.1 INVENTORY METHODOLOGY**

As mandated by Subtitle C of the Resource Conservation and Recovery Act (RCRA), EPA established hazardous waste regulations in 1980 to ensure that wastes which pose a threat to human health and the environment would be managed safely. Hazardous waste is a waste with properties that make it potentially harmful to human health or the environment. Hazardous wastes are divided into listed wastes, characteristic wastes, universal wastes, and mixed wastes.

Federal EPA regulations (40 CFR 273) identify five specific categories of materials that can be managed as universal wastes: batteries, pesticides, mercury-containing equipment, lamps and aerosol cans. The regulations define the type of materials that fall under the universal waste categories and specify in what situations that material can be considered a universal waste. These universal wastes are subject to special management provisions intended to ease the management burden and facilitate the recycling or proper treatment and disposal of such materials.

Langan compiled d an inventory of universal waste and other RBMs at the Site.. Testing of these materials was not included in the scope of work. The following materials were included in the inventory if identified at the Site:

- PCBs and building materials and/or equipment containing PCBs (e.g. transformers, ballasts, hydraulic equipment).
- Ozone Depleting Substances (ODS) (e.g. refrigerants and fire extinguishers/chemical suppression systems).
- Radioactive Sources (e.g. x-ray equipment, self-illuminating signs, smoke detectors).
- Oils and oil-containing equipment that may contain RCRA metals, total halogens, and/or PCBs (e.g. engines, motors, machinery, hydraulic devices).
- Universal waste, which includes: batteries, pesticides, mercury-containing equipment, lamps, and aerosol cans.
- Electronic Wastes (eWastes), which include essentially any equipment or building components with electrical components.

### **6.2 UNIVERSAL WASTE AND REGULATED BUILDING MATERIALS FINDINGS**

Potential universal wastes and/or other RBMs were identified in the building. Langan identified eight different types of potential universal waste or other RBMs as part of our survey, including various fluorescent light bulbs and ballasts, refrigerants, fire alarms, sprinkler heads, and smoke detectors.

Please refer to Table 4 for a complete listing of the universal waste and RBM inventory.

## **7 LIMITED WATER INTRUSION AND VISIBLE MOLD GROWTH ASSESSMENT**

### **7.1 ASSESSMENT METHODOLOGY**

Langan conducted an inspection Site for the presence of visible water damage and visible suspect mold growth. The results of the visual assessment are summarized below and photographs of select key observations are included in Appendix C.

### **7.2 VISUAL ASSESSMENT FINDINGS**

#### Basement

- No visible evidence of water intrusion or mold growth was observed in the basement.

#### First Floor

- No visible evidence of water intrusion or mold growth was observed on the first floor.

#### Second Floor

- Water staining associated with a historical pipe leak was observed in the closets of Room 212 on the second floor. The leak had been repaired and no visible suspect mold growth was observed.

#### Third Floor

- No visible evidence of water intrusion or mold growth was observed on the third floor.

## **8 CONCLUSIONS AND RECOMMENDATIONS**

### **8.1 ASBESTOS CONTAINING MATERIALS**

Federal and state regulations require that ACM and assumed ACM above a defined threshold quantity that is friable (i.e. crumbled, pulverized, or reduced to powder), will become friable, will be subjected to forces such as sanding, grinding, and abrading, or have a high probability of becoming friable during renovation or demolition activities must be removed by an appropriately qualified asbestos abatement contractor prior to being disturbed. These types of ACM are referred to as "Regulated ACM" (RACM) in NESHAP regulations. If these types of ACM are present in quantities below the regulatory defined threshold quantity values, then they would not be RACM and could remain in place during renovation and/or demolition activities. The NESHAP regulatory threshold quantities for RACM are 160 square feet, 260 linear feet, or 35 cubic feet.

Federal and state regulations allow ACM and assumed ACM that are non-friable, will not become friable (i.e. crumbled, pulverized, or reduced to powder), will not be subjected to forces such as sanding, grinding, and abrading, and/or do not have a high probability of becoming friable during renovation or demolition activities, to be left in place during renovation or demolition activities regardless of quantity. The EPA NESHAP regulations further categorize these non-friable ACMs as either Category I or II.

The identified ACM and assumed ACM at the Site are classified as NESHAP Category I and/or Category II non-friable ACM and according to federal and state regulations, can be left in place during certain building razing and demolition activities provided they do not become crumbled, pulverized, or reduced to powder, or subjected to forces such as sanding, grinding, and abrading. ACM waste can only be disposed of at a waste facility that accepts asbestos waste. The asbestos waste facility must provide the waste generator with signed waste shipment records (WSR) (i.e. manifests) within 30 calendar days of disposal to assure proper disposal to a regulated landfill was executed.

Even though federal and Maryland regulations would allow ACM and assumed ACM identified at the Site to be left in place during certain building razing and demolition activities, Langan recommends that the ACM be removed by a Maryland-certified asbestos abatement contractor prior to demolition activities in order to minimize the potential risk of worker or public exposure to airborne asbestos fibers during the renovation and/or demolition activities. In addition, OSHA considers the renovation or demolition of a building with ACM and assumed ACM still present to be an OSHA Class II abatement activity which would require the contractor to perform the work under OSHA's Asbestos in Construction regulations as an asbestos abatement action. Most general and demolition contractors are not trained, experienced, equipped, or insured to do asbestos abatement work. Therefore, Langan recommends that the identified ACM and assumed ACM be removed by a qualified asbestos abatement contractor prior to disturbance.

Prior to disturbance of assumed ACM, Langan recommends that it be inspected, sampled by a MDEP-licensed asbestos inspector, and analyzed to confirm if whether it is ACM, or that it be treated as ACM and removed by a Maryland-certified asbestos abatement contractor with oversight and air monitoring by a consulting firm, in accordance with applicable federal, state, and local regulations.

Maintenance, renovation, or demolition activities that will impact identified confirmed ACM should only be conducted by a properly qualified asbestos abatement contractor in accordance with applicable federal, state, and local regulations.

Any damaged ACM, assumed ACM, and/or materials containing trace amounts of asbestos should be either be repaired or removed by a properly qualified asbestos abatement contractor in accordance with applicable federal, state, and local regulations to mitigate potential exposures to building occupants.

If areas of debris associated with ACM, assumed ACM, and materials containing trace amounts of asbestos were identified, they should be cleaned up by a properly qualified asbestos abatement contractor in accordance with applicable federal, state, and local regulations to mitigate potential exposures to building occupants.

The EPA NESHAP regulation requires a mandatory notification of any demolition (regardless of the presence or absence of ACM) or ACM removal activities that are regulated under the standard at least 10 business-days prior to starting that work. In addition, Maryland requires notification 10 business-days prior to starting work.

## **8.2 LEAD-CONTAINING PAINT ASSESSMENT**

The LCP screening assessment that was performed was not intended to be a surface-by-surface determination of specific locations of LCP or lead-based paint, but rather the purpose of the assessment was to provide a general understanding of the presence of lead in surface coatings at the Site that could be impacted by planned interior demolition and renovation activities.

### Renovation, Demolition, Repainting, and Construction Disturbing Lead

Regardless of the type of building, any disturbance of paints that contain lead or are assumed to contain lead will need to be performed using lead-safe work practices in compliance with OSHA regulations.

The OSHA Lead in Construction Standard does not currently define a specific concentration of lead that must be present within paint for it to be considered "lead-containing." In addition, the EPA lead-based paint regulations do not pertain to this Site as they only regulate target-housing (i.e. residential structures older than 1978) and child-occupied facilities. Therefore, painted and glazed surfaces that contain detectable concentrations of lead must be handled in accordance with the OSHA Lead in Construction Standard. Persons performing work that could impact lead-containing surface coatings should be informed of the testing results, and should take appropriate actions to comply with the OSHA Lead in Construction Standard.

Personnel performing work on lead-containing surface coatings must have, at a minimum, two-hour lead awareness training in accordance with OSHA Standard 29 CFR 1926.62. If lead-containing surface coatings are required to be stripped or removed from the building component substrates, additional training would be required based upon the airborne lead concentrations measured during the work activity.

The handling, disposal, and management of waste generated during any restoration, renovation, or demolition operations is regulated by the RCRA regulations (40 CFR 240-280). These regulations require that a Toxic Characteristic Leaching Procedure (TCLP) test be utilized to determine if the waste generated during demolition, renovation, or removal projects is considered hazardous waste. A material is considered hazardous if it is ignitable, reactive, corrosive, or toxic. Toxicity is determined by TCLP analysis, which simulates the migration of a contaminant, such as cadmium, arsenic, or lead, at a disposal site. TCLP sampling was not part of the scope of work for this project. Therefore, prior to demolition it is recommended that representative samples of the building materials to be disposed of be sampled and analyzed to determine if the construction debris would be considered a hazardous waste.

## **8.3 PCB-CONTAINING CAULK**

PCBs are regulated under the EPA TSCA regulations (40 CFR 261) as well as EPA regulation 40 CFR 761, and are subject to Maryland solid waste regulations when sent to a solid waste landfill.



None of the caulk samples were reported to have concentrations of PCBs exceeding 50 mg/kg, which is the definition of PCB bulk-product waste. Therefore no specific recommendations regarding PCBs in the caulking sampled are necessary.

#### **8.4 UNIVERSAL WASTE AND REGULATED BUILDING MATERIALS**

Potential universal waste and RBMs were identified in the building. Universal waste and RBMs should be properly removed, carefully handled and recycled and/or disposed of at a landfill permitted to accept such waste. ODSs should be drained and disposed of by properly trained and qualified technicians.

##### PCB-Containing Equipment

Potential or assumed PCB-containing fluids and ballasts were identified during our survey. However, none were observed to be damaged or leaking at the time of the inspection. If leaking PCB-containing equipment and/or ballasts are identified during demolition activities, they should be segregated from the other non-leaking items and immediately placed in sealed 6-mil thick plastic bags and/or lined 55-gallon metal drums for handling. These materials should be recycled or incinerated at an approved facility rather than disposed of at a municipal solid waste landfill.

PCBs are regulated under the EPA TSCA regulations (40 CFR 261) program as well as EPA regulation 40 CFR 761, and are subject to State of Maryland solid waste regulations when sent to a solid waste landfill.

In accordance with current State of Maryland and EPA recommendations, Langan recommends that if PCB-containing and/or di(2-ethylhexyl)phthalate (DEHP)-containing equipment and ballasts are discovered during the demolition project, they should be removed and transported by a qualified hazardous waste contractor and sent to an EPA and State of Maryland-approved recycling facility.

##### Mercury-Containing Sources

Older fluorescent lamps typically contain mercury. In addition, low-mercury or “green end cap” lamps are not necessarily mercury free and are recommended to be recycled. Additional types of fluorescent lamps and High Intensity Discharge (HID) lamps that may be discovered in the building during demolition activities that do not have the green painted end caps or green stamped writing, should be assumed to contain concentrations of mercury and other metals such as cadmium and lead higher than the regulatory limits. These materials should be considered as an EPA universal waste.

Mercury-containing equipment that will be impacted by the demolition activities should be removed, packaged, transported, and recycled or incinerated at an EPA and/or Maryland approved facility. This task should be completed by a qualified hazardous waste contractor in accordance with State of Maryland hazardous waste regulations or Federal universal waste regulations (40 CFR 273).

### Chlorofluorocarbon (CFC) Refrigerants and ODS

Under the Clean Air Act, the EPA has regulated CFCs (40 CFR 82, Subpart F). The EPA requires all CFC refrigerants and ODSs be properly evacuated from equipment prior to dismantling and/or restoration of the equipment.

With the exception of a refrigerator observed at the Site, equipment suspected of containing CFCs or ODSs were not observed at the Site. If equipment is discovered that would be impacted by the demolition activities, Langan recommends that the equipment be inspected and, if necessary, the refrigerant be evacuated and recovered in accordance with 40 CFR 82 by a qualified technician.

### Radioactive Sources

Langan recommends that smoke detectors, fire alarms, and other radioactive source materials be removed, packaged, and returned to the manufacturer for recycling, reuse, or proper disposal.

### Miscellaneous Household Chemicals and Electronics (eWaste)

Langan recommends that miscellaneous containers of cleaners, paints, stains, petroleum-containing products, solvents, other household chemicals, and household electronics be disposed of in accordance with Maryland household waste regulations and/or recommendations.

## **8.5 WATER INTRUSION AND SUSPECT VISIBLE MOLD GROWTH**

Due to the observed historic water staining at the Site, there is a concern of the potential for the observed wood and plaster building materials and other porous and semi-porous materials to be compromised by routinely being impacted by water. These materials can become structurally compromised by the water and/or by resulting microbial growth (e.g. wood rot, decay, etc.).

Because there has not been a dose/response relationship established between mold exposure and health effects in the general public, there are currently no federal, state, or local regulations regarding permissible exposure limits for mold. There is not enough reliable research and verifiable scientific evidence to determine that a certain concentration or type of mold present in a building will cause adverse health effects to the general population. The reaction time and severity of response of a person exposed to any molds and/or their by-products is dependent upon the individual's personal susceptibility and allergic sensitivity. However, it is not acceptable to have water intrusion into a building. Mold growth can occur and building materials can become structurally compromised when impacted by water, in addition to causing other potentially hazardous situations such as electrical shock when the water contacts energized equipment.

Even though there may not be any current regulatory occupational exposure limits related to mold, it is known that they can be potential health hazards and that water damage to building materials can cause potential safety issues. OSHA regulates situations where the absence of a specific regulatory standard may not absolve an employer of liability for a workplace for which they are responsible. The OSHA General Duty Clause - Section 5(a)(1) of the OSH Act requires

each employer to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm." The general duty provisions are to be used only where there is no standard that applies to the particular hazard involved.

Langan recommends that the water intrusion sources be investigated and repaired by Maryland-licensed mold professionals. In addition, if any water intrusion sources are uncovered during renovations, they should be investigated and repaired by qualified mold and/or water intrusion mitigation professionals.

Concurrently or subsequent with the water intrusion source mitigation work, the water-impacted and damaged building materials would need to be remediated by a Maryland-licensed mold professional in accordance with Maryland regulations. Specialized remediation work practices, engineering controls, and personal protective equipment (PPE) would need to be implemented.

Applicable Maryland regulations and guidance from federal government and industry organizations regarding water intrusion and mold growth include:

- Maryland Department of the Environment (MDE) Indoor Air Quality:
  - <https://mde.maryland.gov/publichealth/pages/indoorairquality.aspx>
- OSHA's Guidelines for Mold:
  - <https://www.osha.gov/dts/shib/shib101003.html>
- EPA's Guidelines for Mold:
  - <https://www.epa.gov/mold/mold-remediation-schools-and-commercial-buildings-guide>
  - <https://www.epa.gov/mold/mold-resources-schools-and-commercial-buildings>
- American National Standards Institute (ANSI)/Institute of Inspection, Cleaning, and Restoration Certification (IICRC) S500 Standard for Professional Water Damage Restoration
- ANSI/IICRC S520 Standard for Professional Mold Remediation
- American Industrial Hygiene Association (AIHA)'s Recognition, Evaluation, and Control of Indoor Mold

## **9 LIMITATIONS AND SERVICE CONSTRAINTS**

To the extent feasible based upon Site conditions, samples were collected in a random, representatively distributed manner at the inspector's judgment. However, based upon Site conditions, scope, budgetary, and/or schedule constraints, observations and samples may have been collected at points of convenience to facilitate the execution of the survey. Langan's survey services were performed and recommendations made with the understanding that the Site will not be used for any type of residential purposes.

No survey, assessment, or inspection method can completely eliminate the possibility of obtaining partial, imprecise, or incomplete information. Thus, this report does not warranty, guaranty, or represent that the surveys, assessments, and/or inspections completely defined the locations, quantities, and/or condition of any regulated materials. Professional judgment was exercised in gathering and analyzing the information obtained, and Langan performed our services using that degree of skill and care ordinarily exercised under similar conditions by reputable members of Langan's profession practicing in the same or similar locality at the time of our performance. Any materials found during demolition and/or renovation activities which differ from materials sampled as part of this survey should be assumed to be regulated (e.g., asbestos-containing, lead-containing, PCB-containing, etc.) until inspected by a properly trained individual that are also accredited and/or licensed by the EPA and/or state in which the work was performed and determined otherwise.

The findings and conclusions contained herein are professional judgments based upon the data that was reviewed and documented in this report along with our experience on similar projects. The discovery of any additional suspect materials within the project area should be reported to us for our review so that we can reassess potential environmental impacts and modify our conclusions, if necessary.

This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party without Langan's expressed prior written consent. Should this report and the findings contained herein, in whole or in part, be disseminated or conveyed to any other party or be used or relied upon by any other party, whole or in part, any interpretations made, opinions formed, and conclusions drawn, as a result of examining this report, those interpretations, opinions, and conclusions will be those made, formed, and drawn solely by that party.



## **TABLES**

Table 1  
Summary of Asbestos Laboratory Analytical Results  
Clara Barton National Historic Site  
5801 Oxford Road, Glen Echo, MD 20812  
Project Number: 270128401



HA No.	Surfacing, TSI, Miscellaneous	HA Material Description	Primary Color	HA Material Location Within Building	Sample #	Bulk Sample Collection Location	Analytical Result	Asbestos Type	ACM Present?	Friable	HA Condition	Potential for Disturbance (Low, Medium, High)	HA Total Quantity	Units	Notes	Recommended Response Action
1	Miscellaneous	Joint compound	White	Throughout basement	1A	Basement - NW wall	None Detected	---	No	Yes	Good	Low	---	---	---	-
					1B	Basement - B-5 - Kitchen	None Detected	---								
					1C	Basement - W wall	None Detected	---								
2	Miscellaneous	Drywall	Gray	Throughout basement	2A	Basement - NW wall	None Detected	---	No	Yes	Good	Low	---	---	---	---
					2B	Basement - B-5 - Kitchen	None Detected	---								
					2C	Basement - W wall	None Detected	---								
3	TSI	Insulation	Yellow	Throughout basement	3A	Basement - B-6	None Detected	---	No	Yes	Good	Low	---	---	---	---
					3B	Basement - B-6	None Detected	---								
					3C	Basement - B-6	None Detected	---								
4	Miscellaneous	Stone/brick mortar	Gray	Throughout building	4A	Basement - NW wall	None Detected	---	No	No	Good	Low	---	---	---	---
					4B	Basement - SE wall	None Detected	---								
					4C	Basement - SE wall	None Detected	---								
5	Miscellaneous	CMU mortar	Gray	Throughout basement	5A	Basement - B-2	None Detected	---	No	No	Good	Low	---	---	---	---
					5B	Basement - B-2	None Detected	---								
					5C	Basement - B-2	None Detected	---								
6	Miscellaneous	Paper backing	Brown	Throughout 1st, 2nd, and 3rd floors	6A	1st floor - 113	None Detected	---	No	No	Good	Low	-	---	Damaged on 1st and 3rd floors	---
					6B	1st floor - 114 - Closet	None Detected	---								
					6C	1st floor - 114 - Closet	None Detected	---								
					6D	1st floor - 113	None Detected	---								
					6E	2nd floor - 213	None Detected	---								
					6F	2nd floor - 211	None Detected	---								
					6G	3rd floor - 303	None Detected	---								
					6H	3rd floor - 303	None Detected	---								
					6I	3rd floor - 303	None Detected	---								
7	Miscellaneous	Drywall	Gray	Throughout 1st, 2nd, and 3rd floors	7A	1st floor - 110 - Closet	None Detected	---	No	Yes	Good	Low	---	---	Damaged on 1st floor. Samples 7B and 7C appear to be homogenous with HAs 10 and and 11 and are listed below	---
					7B	1st Floor - Room 117	None Detected	---								
					7C	2nd Floor - Room 207	None Detected	---								
8	Miscellaneous	Joint compound	White	Throughout 1st, 2nd, and 3rd floors	8A	1st floor - 110 - Closet	None Detected	---	No	Yes	Good	Low	---	---	Damaged on 1st floor. Samples 7B and 7C appear to be homogenous with HAs 10 and and 11 and are listed below	---
					8B	1st Floor - Room 117	None Detected	---								
					8C	2nd Floor - Room 207	None Detected	---								

Table 1  
Summary of Asbestos Laboratory Analytical Results  
Clara Barton National Historic Site  
5801 Oxford Road, Glen Echo, MD 20812  
Project Number: 270128401



HA No.	Surfacing, TSI, Miscellaneous	HA Material Description	Primary Color	HA Material Location Within Building	Sample #	Bulk Sample Collection Location	Analytical Result	Asbestos Type	ACM Present?	Friable	HA Condition	Potential for Disturbance (Low, Medium, High)	HA Total Quantity	Units	Notes	Recommended Response Action
9	Miscellaneous	12"x12" speckled vinyl floor tile (VFT)	Brown	1st floor - 106	9A-VFT	1st floor - 106	>1%-10%	Chrysotile	Yes	No	Good	Low	200	SF	Associated floor mastic does not contain asbestos	OSHA Class II removal activity
					9A-Mastic (Yellow)	1st floor - 106	None Detected									
					9B-VFT	1st floor - 106	Pos Stop	---								
					9B-Mastic (Yellow)	1st floor - 106	None Detected									
					9C-VFT	1st floor - 106	Pos Stop	---								
10	Miscellaneous	Ceiling plaster	Gray	First, Second, and Third Floors	10A	2nd floor - 209	None Detected	--	No	Yes	Good	Low	---	---	Damaged on 2nd floor. HA-10 and HA-11 appear to be homogenous. Sampling was limited to the proposed path of construction.	---
					10B	2nd floor - 209	None Detected	--								
					10C	2nd floor - 209	None Detected	--								
11	Miscellaneous	Wall plaster - base coat	Gray	First, Second, and Third Floors	11A-Skim Coat	2nd floor - 209	None Detected	--	No	No	Good	Low	---	---	HAs 10 and 11 appear to be homogenous. Sampling was limited to the proposed path of construction.	---
					11A-Base Coat	2nd floor - 209	None Detected	--								
					11B-Skim Coat	2nd floor - 209	None Detected	--								
					11b-Base Coat	2nd floor - 209	None Detected	--								
					11C-Skim Coat	2nd floor - 209	None Detected	--								
					11C-Base Coat	2nd floor - 209	None Detected	--								
12	Miscellaneous	Paper backing	White	2nd floor - 212 - closets	12A	2nd floor - 212 - Closets	None Detected	--	No	No	Good	Low	---	---	Damaged in 2nd floor closets	---
					12B	2nd floor - 212 - Closets	None Detected	--								
					12C	2nd floor - 212 - Closets	None Detected	--								
13	Miscellaneous	White ceiling plaster	White	Second and Third Floor Ceilings	13A	3rd floor - 301 - Closets	None Detected	--	No	Yes	Good	Low	---	---	---	---
					13B	3rd floor - 301 - Closets	None Detected	--								
					13C	3rd floor - 305 - Closets	None Detected	--								
14	Miscellaneous	Tile mastic	Tan	2nd floor - 217 and 203A	14A	2nd floor - 217	None Detected	--	No	No	Good	Low	---	---	---	---
					14B	2nd floor - 203A	None Detected	--								
					14C	2nd floor - 203A	None Detected	--								
15	Miscellaneous	Cove base mastic	Tan	2nd floor - 217	15A	2nd floor - 217	>1%-10%	Chrysotile	Yes	No	Good	Low	5	LF	---	OSHA Class II removal activity
					15B	2nd floor - 217	Pos Stop	---								
16	TSI	Insulation	Tan	3rd floor - 305 - closets	16A	3rd floor - 305 - Closet	None Detected	--	No	No	Good	Low	---	---	-	-
					16B	3rd floor - 305 - Closet	None Detected	--								
					16C	3rd floor - 305 - Closet	None Detected	--								
17	Miscellaneous	Window glazing	Gray	Exterior - windows	17A	1st floor - SE window	None Detected	--	No	No	Good	Low	---	---	---	---
					17B	Basement - SE window	None Detected	--								
					17C	Basement - NW window	None Detected	--								

Table 1  
Summary of Asbestos Laboratory Analytical Results  
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5801 Oxford Road, Glen Echo, MD 20812  
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HA No.	Surfacing, TSI, Miscellaneous	HA Material Description	Primary Color	HA Material Location Within Building	Sample #	Bulk Sample Collection Location	Analytical Result	Asbestos Type	ACM Present?	Friable	HA Condition	Potential for Disturbance (Low, Medium, High)	HA Total Quantity	Units	Notes	Recommended Response Action
18	Miscellaneous	Stone mortar	Tan	Exterior - stone walls	18A	Basement - SE wall	None Detected	---	No	No	Good	Low	---	---	---	---
					18B	Basement - W wall	None Detected	---								
					18C	Basement - NW wall	None Detected	---								
19	Miscellaneous	Paper backing	Gray	2nd floor - 212 and 213	19A	2nd floor - 213	>10%	Chrysotile	Yes	Yes	Good	Low	---	---	---	700 SF
					19B	2nd floor - 213	Pos Stop	---								
					19C	2nd floor - 212	Pos Stop	---								
20	Miscellaneous	Paper flooring	White	Basement - foyer and bathroom	20A	Basement - foyer	None Detected	---	No	No	Good	Low	---	---	---	---
					20B	Basement - foyer	None Detected	---								
					20C	Basement - bathroom	None Detected	---								
21	Miscellaneous	Paper flooring	White	2nd floor - kitchen	21A-Paper	2nd floor - kitchen	None Detected	---	No	No	Good	Low	---	---	---	---
					21A-Backing	2nd floor - kitchen	None Detected	---								
					21B-Paper	2nd floor - kitchen	None Detected	---								
					21B-Backing	2nd floor - kitchen	None Detected	---								
					21C-Paper	2nd floor - kitchen	None Detected	---								
					21C-Backing	2nd floor - kitchen	None Detected	---								
					21C-Paper	2nd floor - kitchen	None Detected	---								
					21C-Backing	2nd floor - kitchen	None Detected	---								
22	Miscellaneous	1"x1" ceramic floor tile grout	White	Basement	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	25	SF	Observed but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity
23	Miscellaneous	1'x1" ceramic floor tile adhesive	Not Visible	Basement	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	25	SF	Observed but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity
24	Miscellaneous	Fire door	Gray	Basement	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	1	EA	Observed but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity
25	Miscellaneous	9"x9" speckled VFT	Gray	1st floor - 117	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	60	SF	Observed under wood flooring but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity
26	Miscellaneous	Floor tile mastic associated with HA-25	Not Visible	1st floor - 117	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	60	SF	Observed under wood flooring but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity
27	Miscellaneous	12"x12" VFT	Brown	1st floor - 104	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	30	SF	Observed but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity
28	Miscellaneous	Floor tile mastic associated with HA-27	Not Visible	1st floor - 104	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	30	SF	Observed but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity

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Clara Barton National Historic Site  
5801 Oxford Road, Glen Echo, MD 20812  
Project Number: 270128401



HA No.	Surfacing, TSI, Miscellaneous	HA Material Description	Primary Color	HA Material Location Within Building	Sample #	Bulk Sample Collection Location	Analytical Result	Asbestos Type	ACM Present?	Friable	HA Condition	Potential for Disturbance (Low, Medium, High)	HA Total Quantity	Units	Notes	Recommended Response Action
29	Miscellaneous	12"x12" VFT	Black	1st floor - 104	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	30	SF	Observed but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity
30	Miscellaneous	Floor tile mastic associated with HA-29	Not Visible	1st floor - 104	---	Not Sampled	Not Analyzed	---	Assumed ACM	Assumed ACM	Good	Low	30	SF	Observed but not sampled due to destructive nature of sampling	Collect confirmation sample or conduct OSHA Class II removal activity
31	Miscellaneous	Wall and ceiling plaster	Brown	Select areas of building	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified as samples B9-B13	---
32	Miscellaneous	12"x12" floor tile (beige with brown and blue)	Beige	Basement - storage, foyer, and bathroom	---	Not Sampled by Langan	>1%-10%	Chrysotile	Yes	No	Good	Low	200	SF	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified by samples B1-B2. Not observed during Langan's survey	OSHA Class II removal activity
33	Miscellaneous	12"x12" floor tile with wormy gouges	Tan	1st floor - kitchen	---	Not Sampled by Langan	>1%-10%	Chrysotile	Yes	No	Good	Low	120	SF	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified by samples B3-B4. Not observed during Langan's survey	OSHA Class II removal activity
34	Miscellaneous	9"x9" floor tile	Gray	1st floor - office	---	Not Sampled by Langan	>1%-10%	Chrysotile	Yes	No	Good	Low	120	SF	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified by samples B5-B6. Not observed during Langan's survey	OSHA Class II removal activity
35	Miscellaneous	12"x12" floor tile	Tan	2nd floor - west north bathroom	---	Not Sampled by Langan	>1%-10%	Chrysotile	Yes	No	Good	Low	15	SF	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified by samples B7-B8. Not observed during Langan's survey	OSHA Class II removal activity
36	Miscellaneous	Linoleum with paper back	Tan	2nd floor - kitchen	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified as samples B14-15. Same as Langan's HA-21	---
37	Miscellaneous	12"x12" floor tile	White	2nd floor - foyer at vault	---	Not Sampled by Langan	>1%-10%	Chrysotile	Yes	No	Good	Low	90	SF	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified by samples B16-B17. Not observed during Langan's survey	OSHA Class II removal activity
38	Miscellaneous	12"x12" floor tile (green and yellow)	Green	2nd floor - SE bath	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified as samples B18-19	---
39	Miscellaneous	Vinyl flooring (black and yellow)	Black	1st floor - vault	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified as samples B20-21	---



Table 1  
Summary of Asbestos Laboratory Analytical Results  
Clara Barton National Historic Site  
5801 Oxford Road, Glen Echo, MD 20812  
Project Number: 270128401



HA No.	Surfacing, TSI, Miscellaneous	HA Material Description	Primary Color	HA Material Location Within Building	Sample #	Bulk Sample Collection Location	Analytical Result	Asbestos Type	ACM Present?	Friable	HA Condition	Potential for Disturbance (Low, Medium, High)	HA Total Quantity	Units	Notes	Recommended Response Action
40	Miscellaneous	Floor mastic	Black	Throughout under floor tile	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from June 23, 2010 Apex Companies, LLC report. Identified as samples B22-24	---
41	Miscellaneous	Plaster (tan and brown)	Brown	Bathroom ceiling	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from July 22, 2011 Apex Companies, LLC report. Identified as samples B1-B3	---
41	Miscellaneous	Glue dots on drywall	Black	2nd floor - bathroom ceiling	---	Not Sampled by Langan	>1%-10%	Chrysotile	Yes	No	Good	Low	--	--	Previous survey data from July 22, 2011 Apex Companies, LLC report. Identified as samples B4-B5. Observed during Langan's survey	OSHA Class II removal activity
42	Miscellaneous	Drywall	White	Bathroom ceiling	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from July 22, 2011 Apex Companies, LLC report. Identified as samples B6-B7	---
43	Miscellaneous	Plaster (tan and brown)	Brown	Bedroom ceiling	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from July 22, 2011 Apex Companies, LLC report. Identified as samples B8-B10	---
44	Miscellaneous	Plaster	Gray	Bedroom wall	---	Not Sampled by Langan	None Detected	---	No	No	Good	Low	---	---	Previous survey data from July 22, 2011 Apex Companies, LLC report. Identified as samples B11-B13	---
<p><b>Notes</b></p> <p>1. Any materials discovered during renovation/demolition activities and not described on this table should be assumed to contain asbestos until subsequent sampling is conducted by an accredited asbestos inspector.</p> <p>2. Definitions for Asbestos Present: ACM = Asbestos Containing Material. Material analyzed by Polarized Light Microscopy (PLM) using U.S. EPA Method 600/R-93/116 where the presence of asbestos fiber concentrations are greater than one percent (&gt;1%) of the total weight or volume for at least one of the samples of the Homogenous Area. Trace ACM = material analyzed by PLM using EPA Method 600/R-93/116 where the presence of asbestos fiber concentrations are equal to one percent or less (1% or &lt;1%) of the total weight or volume for at least one of the samples of the HA. Assumed ACM = Homogenous Area observed or assumed to be present, but could not be sampled and is assumed to be ACM until sampled and proven otherwise. Non-ACM = material analyzed by PLM using EPA Method 600/R-93/116 where asbestos fibers were not detected in any of the bulk samples analyzed within the HA.</p> <p>3. Quantities and locations are approximations and estimations.</p> <p>4. Friable – means any material, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Nonfriable - means any material that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.</p> <p>5. Abbreviations include: EA = Each HA = Homogeneous Area. An area of surfacing materials, thermal surface insulation, or miscellaneous material that is uniform in color and texture. LF = Linear Feet OSHA = Occupational Safety and Health Administration Pos Stop = Positive Stop. The sample was not analyzed because asbestos was detected at greater than 1% in another sample of the same HA. SF = Square Feet</p>																

Table 2

## Summary of Lead in Paint Laboratory Analytical Results

Clara Barton National Historic Site

5801 Oxford Road, Glen Echo, MD 20812

Project Number: 270128401

Sample #	Component	Substrate	Color	Floor	Testing Location	Condition	Result Total Lead (%)	Comments
Pb-1	Wall	Wood	White	Basement	B-3	Poor	<0.0080	---
Pb-2	Wall	Drywall	White	Basement	B-5 - kitchen	Good	<0.0080	---
<b>Pb-3</b>	<b>Support beam</b>	<b>Metal</b>	<b>Brown</b>	<b>Basement</b>	<b>Basement</b>	<b>Good</b>	<b>37</b>	<b>Lead-Containing Paint</b>
<b>Pb-4</b>	<b>Ceiling</b>	<b>Drywall</b>	<b>White</b>	<b>1</b>	<b>110 - closet</b>	<b>Good</b>	<b>1.9</b>	<b>Lead-Containing Paint</b>
<b>Pb-5</b>	<b>Wall</b>	<b>Wood</b>	<b>White</b>	<b>1</b>	<b>111</b>	<b>Poor</b>	<b>5.7</b>	<b>Lead-Containing Paint</b>
<b>Pb-6</b>	<b>Wall</b>	<b>Stone</b>	<b>White</b>	<b>1</b>	<b>110</b>	<b>Poor</b>	<b>9.7</b>	<b>Lead-Containing Paint</b>
<b>Pb-7</b>	<b>Door</b>	<b>Wood</b>	<b>White</b>	<b>1</b>	<b>Hall</b>	<b>Poor</b>	<b>1.0</b>	<b>Lead-Containing Paint</b>
<b>Pb-8</b>	<b>Window sill</b>	<b>Wood</b>	<b>White</b>	<b>2</b>	<b>Exterior window</b>	<b>Poor</b>	<b>0.12</b>	<b>Lead-Containing Paint</b>
<b>Pb-9</b>	<b>Wall</b>	<b>Wood</b>	<b>Tan</b>	<b>2</b>	<b>Exterior wall</b>	<b>Poor</b>	<b>0.67</b>	<b>Lead-Containing Paint</b>
<b>Pb-10</b>	<b>Ceiling</b>	<b>Drywall</b>	<b>White</b>	<b>2</b>	<b>209</b>	<b>Poor</b>	<b>16</b>	<b>Lead-Containing Paint</b>
<b>Pb-11</b>	<b>Wall</b>	<b>Stone</b>	<b>Yellow</b>	<b>2</b>	<b>211</b>	<b>Poor</b>	<b>18</b>	<b>Lead-Containing Paint</b>
<b>Pb-12</b>	<b>Wall</b>	<b>Stone</b>	<b>Tan</b>	<b>1</b>	<b>Porch</b>	<b>Poor</b>	<b>0.018</b>	<b>Lead-Containing Paint</b>
<b>Pb-13</b>	<b>Column</b>	<b>Wood</b>	<b>White</b>	<b>1</b>	<b>Porch</b>	<b>Poor</b>	<b>0.97</b>	<b>Lead-Containing Paint</b>
<b>Pb-14</b>	<b>Door</b>	<b>Wood</b>	<b>Tan</b>	<b>Basement</b>	<b>Exterior wall</b>	<b>Poor</b>	<b>13</b>	<b>Lead-Containing Paint</b>
<b>Pb-15</b>	<b>Window frame</b>	<b>Wood</b>	<b>White</b>	<b>Basement</b>	<b>Exterior window</b>	<b>Poor</b>	<b>2.6</b>	<b>Lead-Containing Paint</b>
<b>Pb-16</b>	<b>Wall</b>	<b>Wood</b>	<b>White</b>	<b>Basement</b>	<b>Exterior wall</b>	<b>Poor</b>	<b>2.2</b>	<b>Lead-Containing Paint</b>

**Table 3**  
**Summary of PCB-Containing Caulk Laboratory Analytical Results**  
**Clara Barton National Historic Site**  
**5801 Oxford Road, Glen Echo, MD 20812**  
**Project Number: 270128401**

PCB Sample ID	PCB Material Description	Floor	Location	Result (mg/kg)	Notes
PCB-1	Stone/brick mortar	Basement	NW wall	<0.25	No PCBs detected
PCB-2	Concrete masonry unit (CMU) mortar	Basement	B-2 wall	<0.25	No PCBs detected
PCB-3	Exterior window glazing	Basement	SE exterior wall	<0.25	No PCBs detected
PCB-4	Exterior stone mortar	Basement	NW exterior wall	<0.25	No PCBs detected

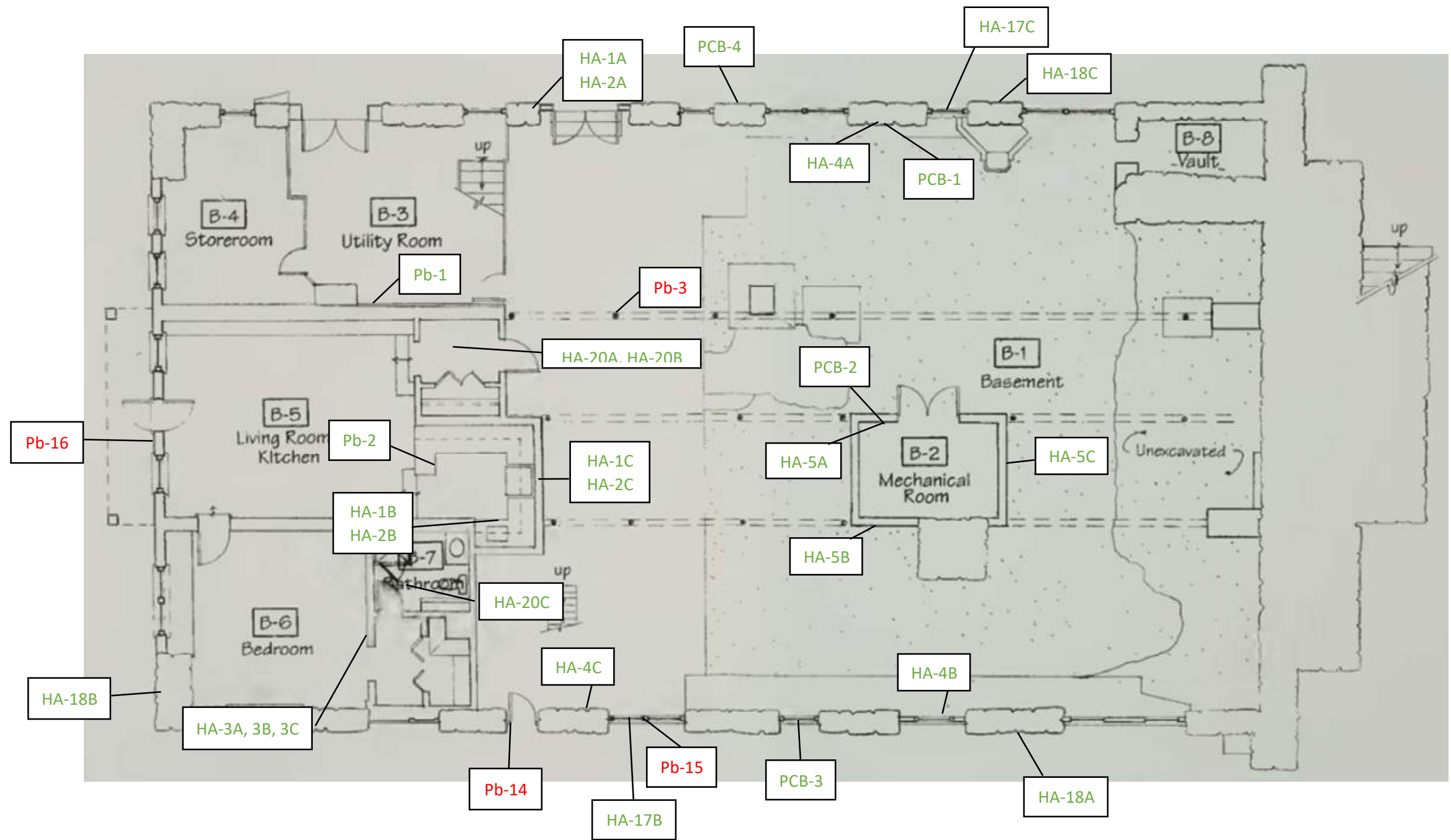
Notes:  
mg/kg = milligrams per kilogram

Regulated Material Type	Location	ODS?	PCB Containing?	Mercury Containing?	Radioactive Source?	Oils	Batteries	Pesticides	Aerosol Cans	eWaste	Size	Quantity	Notes
Fluorescent Light Tubes	Basement	--	--	ASSUMED	--	--	--	--	--	--	4'	1	Single tubes
Fluorescent Light Tubes	Basement	--	--	ASSUMED	--	--	--	--	--	--	4'	5	Dual tubes
Fluorescent Light Ballasts	Basement	--	ASSUMED	--	--	--	--	--	--	--	--	6	
Sprinkler Heads	Interior	--	--	ASSUMED	--	--	--	--	--	--	--	141	
Smoke Detectors	Interior	--	--	--	ASSUMED	--	--	--	--	--	--	63	
Refrigerators	Interior	ASSUMED	--	--	--	--	--	--	--	--	--	1	
Fire Alarms	Interior	--	--	--	---	--	--	--	--	YES	--	25	
Fire Extinguishers	Interior	ASSUMED	--	--	--	--	--	--	--	--	--	5	
Computers	Exterior	--	--	--	--	--	--	--	--	YES	--	3	

Notes:  
ODS = ozone-depleting substances  
PCB = polychlorinated biphenyls

## **FIGURES**





Project Number: 270128401  
Inspector: T. Reardon  
Date of Inspection: 7/13/2022

LEGEND

- Non-Detect for Asbestos/Lead/PCB
- Sample ≤ 1% Asbestos/Detectable Lead/Detectable PCB
- Sample > 1% Asbestos/>0.5% weight Lead/>50 parts per million PCB



APPROXIMATE  
NORTH  
NOT TO SCALE

Notes:  
1. All locations and dimensions are approximate.

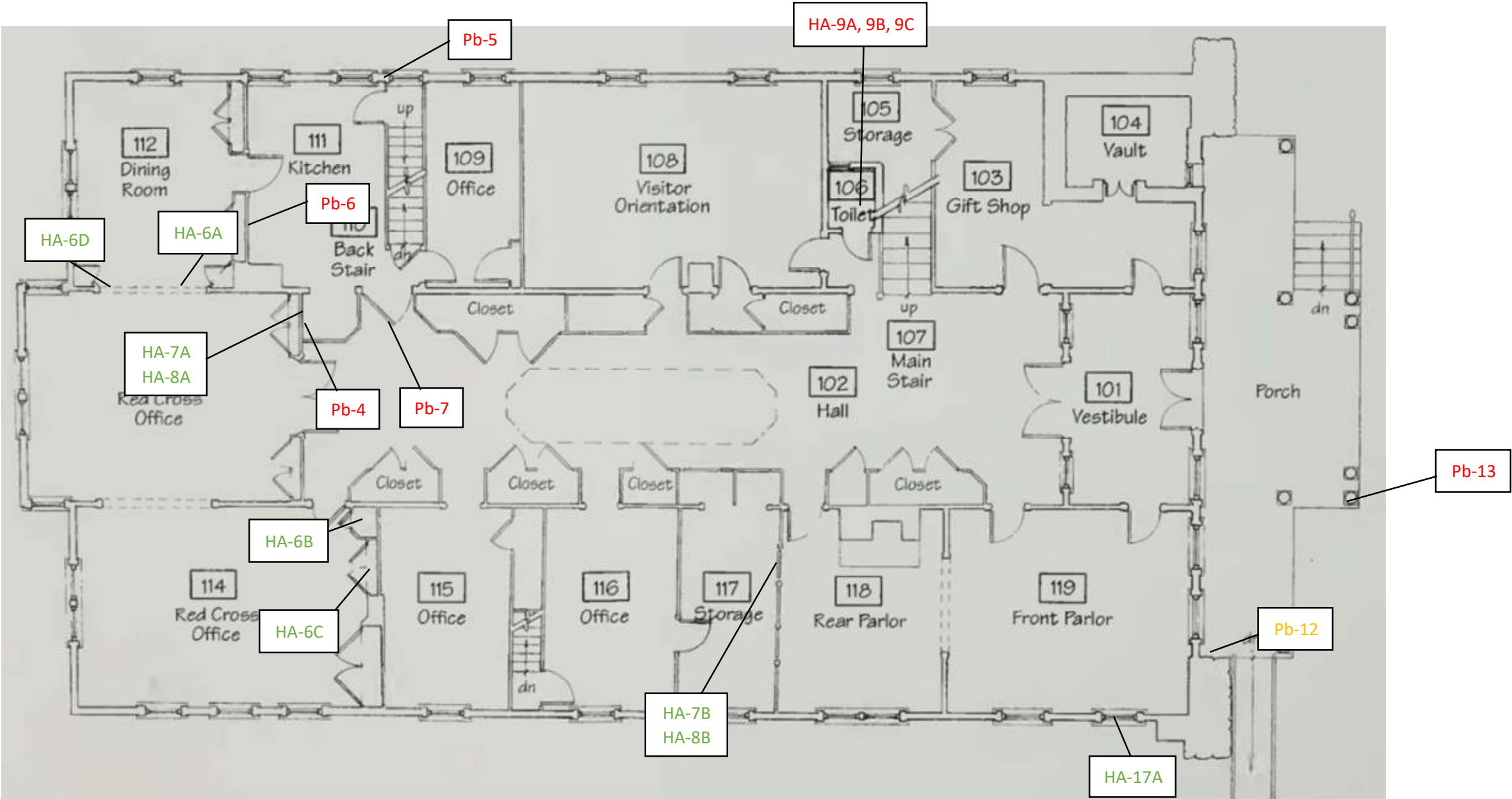
CLARA BARTON NATIONAL HISTORIC SITE, GLEN ECHO, MD 20812

Hazardous Building Materials Survey Summary

**Bulk Sample Location Map:**  
CLARA BARTON NATIONAL HISTORIC SITE – BASEMENT



Figure  
1A



Project Number: 270128401  
Inspector: T. Reardon  
Date of Inspection: 7/13/2022

LEGEND

- Non-Detect for Asbestos/Lead/PCB
- Sample  $\leq$  1% Asbestos/Detectable Lead/Detectable PCB
- Sample  $>$  1% Asbestos/ $>$ 0.5% weight Lead/ $>$ 50 parts per million PCB



APPROXIMATE  
NORTH  
NOT TO SCALE

Notes:  
1. All locations and dimensions are approximate.

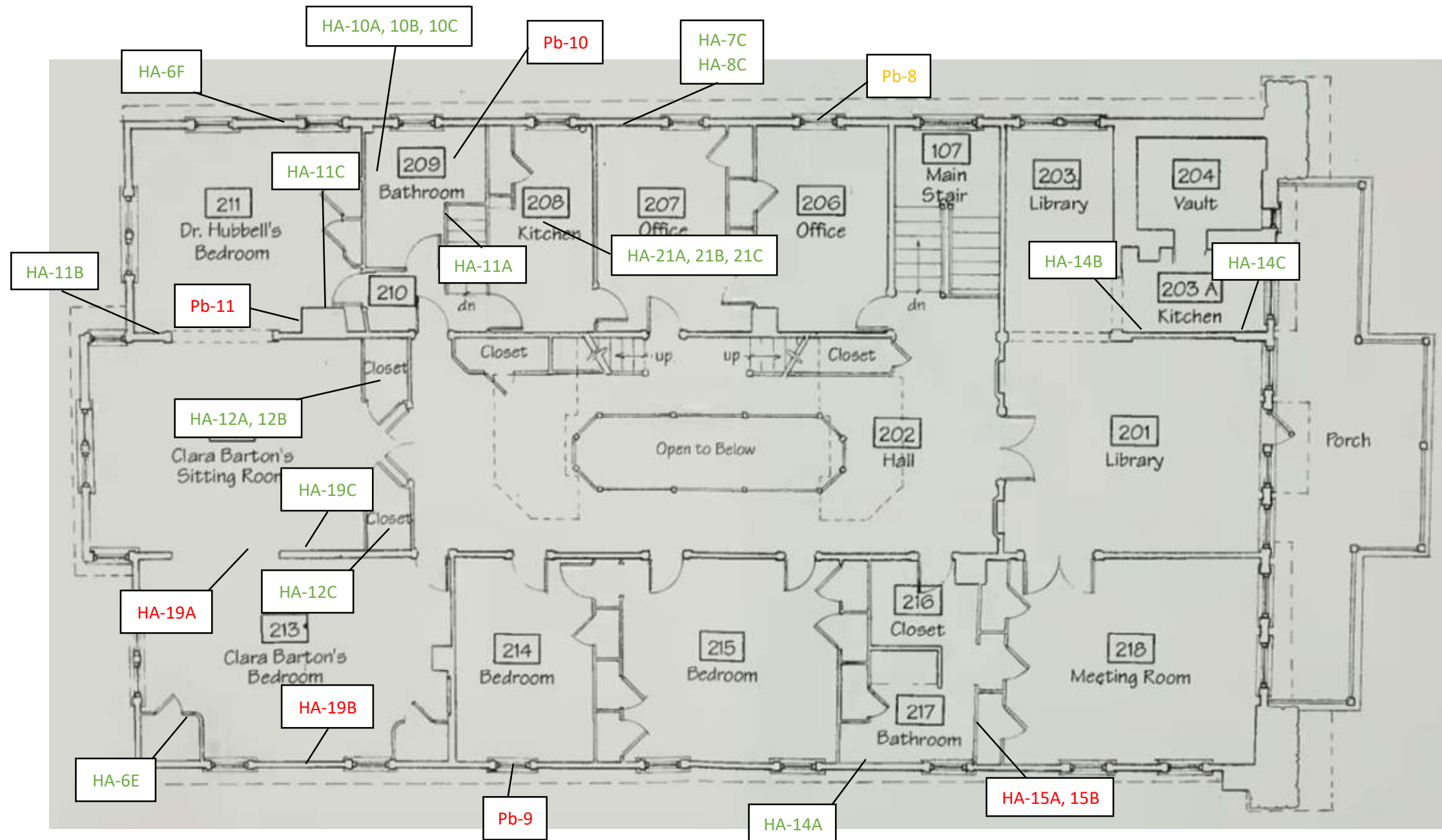
CLARA BARTON NATIONAL HISTORIC SITE, GLEN ECHO, MD 20812

Hazardous Building Materials Survey Summary

**Bulk Sample Location Map:**  
CLARA BARTON NATIONAL HISTORIC SITE – FIRST FLOOR

**LANGAN**  
ENGINEERING & ENVIRONMENTAL SERVICES

Figure  
1B



CLARA BARTON NATIONAL HISTORIC SITE, GLEN ECHO, MD 20812

## Hazardous Building Materials Survey Summary

### Bulk Sample Location Map:

CLARA BARTON NATIONAL HISTORIC SITE – SECOND FLOOR

**LANGAN**  
ENGINEERING & ENVIRONMENTAL SERVICES

Figure  
1C

Project Number: 270128401

Inspector: T. Reardon

Date of Inspection: 7/13/2022

### LEGEND

- Non-Detect for Asbestos/Lead/PCB
- Sample  $\leq 1\%$  Asbestos/Detectable Lead/Detectable PCB
- Sample  $> 1\%$  Asbestos/ $>0.5\%$  weight Lead/ $>50$  parts per million PCB

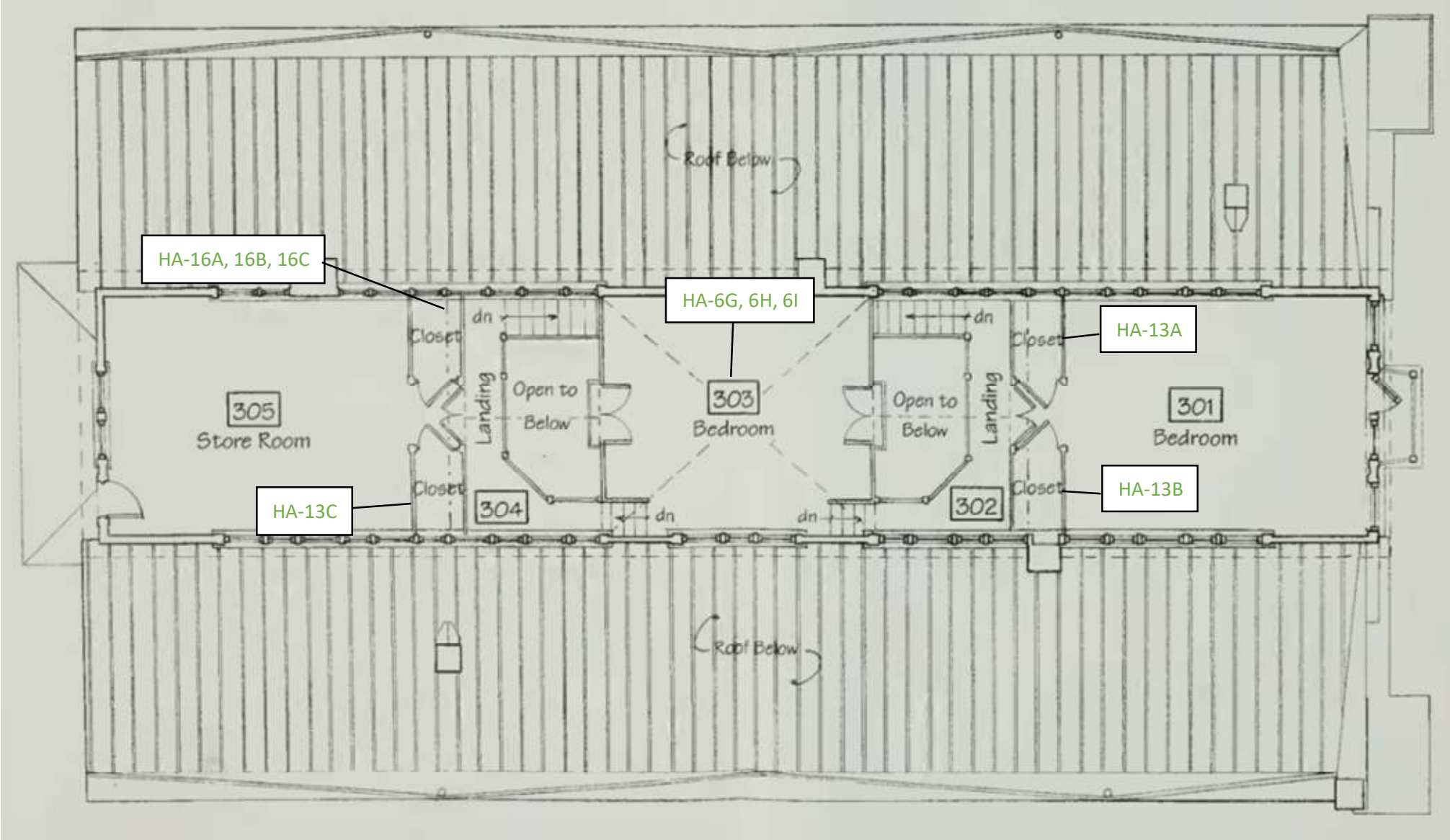


APPROXIMATE  
NORTH  
NOT TO SCALE

Notes:

1. All locations and dimensions are approximate.

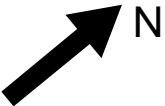




Project Number: 270128401  
Inspector: T. Reardon  
Date of Inspection: 7/13/2022

**LEGEND**

- Non-Detect for Asbestos/Lead/PCB
- Sample  $\leq$  1% Asbestos/Detectable Lead/Detectable PCB
- Sample  $>$  1% Asbestos/ $>$ 0.5% weight Lead/ $>$ 50 parts per million PCB



APPROXIMATE  
NORTH  
NOT TO SCALE

Notes:  
1. All locations and dimensions are approximate.

CLARA BARTON NATIONAL HISTORIC SITE, GLEN ECHO, MD 20812

**Hazardous Building Materials Survey Summary**

**Bulk Sample Location Map:**  
CLARA BARTON NATIONAL HISTORIC SITE – THIRD FLOOR

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Figure  
1D

## **APPENDIX A**



## ACRONYMS

ACM	Asbestos-Containing Material
AHERA	Asbestos Hazard Emergency Response Act
AIHA	American Industrial Hygiene Association
ANSI	American National Standards Institute (ANSI)
CFC	Chlorofluorocarbons (Refrigerants)
CFR	Code of Federal Regulation
DEHP	Di(2-ethylhexyl)phthalate
EPA	Environmental Protection Agency
HA	Homogenous Area
HID	High Intensity Discharge
IICRC	Institute of Inspection, Cleaning, and Restoration Certification
LCP	Lead Containing Paint
MDE	Maryland Department of the Environment
mg/kg	Milligram per kilogram
NESHAP	National Emission Standards for Hazardous Air Pollutants
NVLAP	National Voluntary Laboratory Accreditation Program
NOB	Non-friable Organically Bound
ODS	Ozone Depleting Substances
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PPE	Personal Protective Equipment
PLM/DS	Polarized Light Microscopy/Dispersion Staining
RACM	Regulated ACM
RBM	Regulated Building Materials
RCRA	Resource Conservation and Recovery Act
TCLP	Toxic Characteristic Leaching Procedure
TSCA	Toxic Substance Control Act
VAE	Visual Area Estimation
WSR	Waste Shipment Records

## **APPENDIX B**

# Results

Maryland Asbestos Accreditation Exam

---

**Certificate Number:** VAIREF12082021-12

**First Name:** Tess

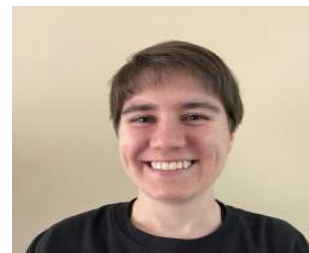
**Last Name:** Reardon

**Address:** 12020 Golf Ridge Court, Apt

**City:** Fairfax

**State:** VA

**Zip:** 22033



---

According to our records this test was completed on: **1/25/2022**

We administered the following asbestos certification exam: **Inspector**

## Your Results

Score: **86%**

Congratulations you have passed your Maryland asbestos accreditation exam. This document and your training certificate will serve as a temporary license until you receive your official license in the mail. Prior to issuing a license, MDE will verify all necessary information and submitted documents.  
necessary information and submitted documents.

Thank you for taking the Maryland asbestos accreditation exam. If you have any concerns or questions about the exam, including how to collect your photo ID, please direct them to the Maryland Department of the environment at (410) 537-3200.

Issued By \_\_\_\_\_

Date **1/25/2022**

United States Department of Commerce  
National Institute of Standards and Technology



---

## Certificate of Accreditation to ISO/IEC 17025:2017

---

NVLAP LAB CODE: 101048-0

**EMSL Analytical, Inc.**  
Cinnaminson, NJ

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

### **Asbestos Fiber Analysis**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

---

2022-07-01 through 2023-06-30  
Effective Dates



---

For the National Voluntary Laboratory Accreditation Program

**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017**

**EMSL Analytical, Inc.**  
200 Route 130 North  
Cinnaminson, NJ 08077  
Ms. Samantha Rundstrom  
Phone: 856-303-2577  
Email: [srundstrom@emsl.com](mailto:srundstrom@emsl.com)  
<http://www.emsl.com>

**ASBESTOS FIBER ANALYSIS**

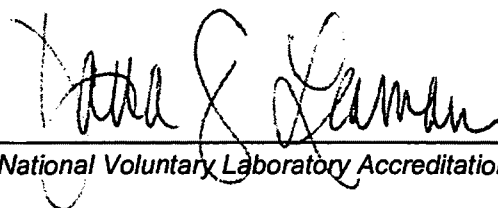
**NVLAP LAB CODE 101048-0**

**Bulk Asbestos Analysis**

<b><u>Code</u></b>	<b><u>Description</u></b>
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

**Airborne Asbestos Analysis**

<b><u>Code</u></b>	<b><u>Description</u></b>
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.



*For the National Voluntary Laboratory Accreditation Program*



## **APPENDIX C**

## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 1**

**Description:**

HA-1: White Joint  
Compound  
HA-2: White Drywall



**Photograph: 2**

**Description:**

HA-3: Yellow Insulation

## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401

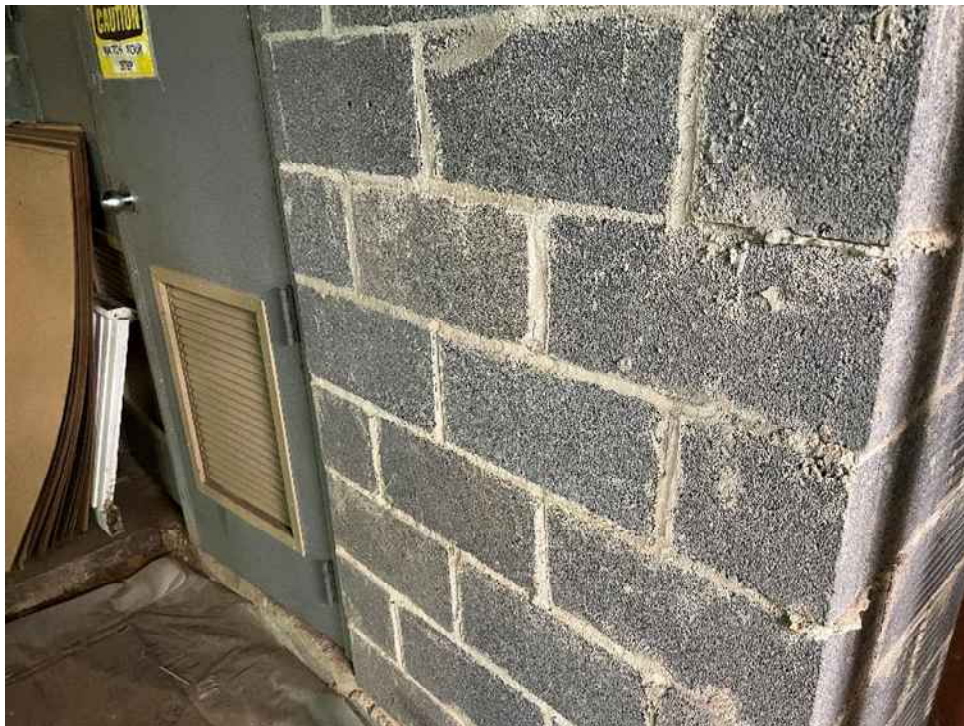


**Photograph: 3**

**Description:**

HA-4: Gray Stone/Brick  
Mortar

PCB-1: Gray stone/brick  
mortar



**Photograph: 4**

**Description:**

HA-5/PCB-2: Gray  
Concrete masonry unit  
(CMU) Mortar;

HA-24: Fire Door –  
assumed ACM

## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 5**

**Description:**

HA-6: Brown Paper  
Backing



**Photograph: 6**

**Description:**

HA-7: Gray Drywall;  
HA-8: White Joint  
Compound;  
Pb-4: White paint on  
drywall



## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 7**

**Description:**

HA-9: Brown 12"x12"  
Vinyl Floor Tile (VFT)  
and associated mastic



HA-10

**Photograph: 8**

HA-10: Gray Ceiling  
Plaster;  
HA-11: Gray Wall  
Plaster;  
Pb-10: White paint on  
drywall

HA-11



## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 9**

**Description:**

HA-12: White Paper  
Backing  
Note water staining  
from formerly leaking  
pipe



**Photograph: 10**

**Description:**

HA-13: White Ceiling  
Plaster

## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 11**

**Description:**

HA-14: Tan Tile Mastic;  
HA-15: Tan Cove Base  
Mastic



**Photograph: 12**

**Description:**

HA-16: Gray Insulation



## PHOTOGRAPH LOG

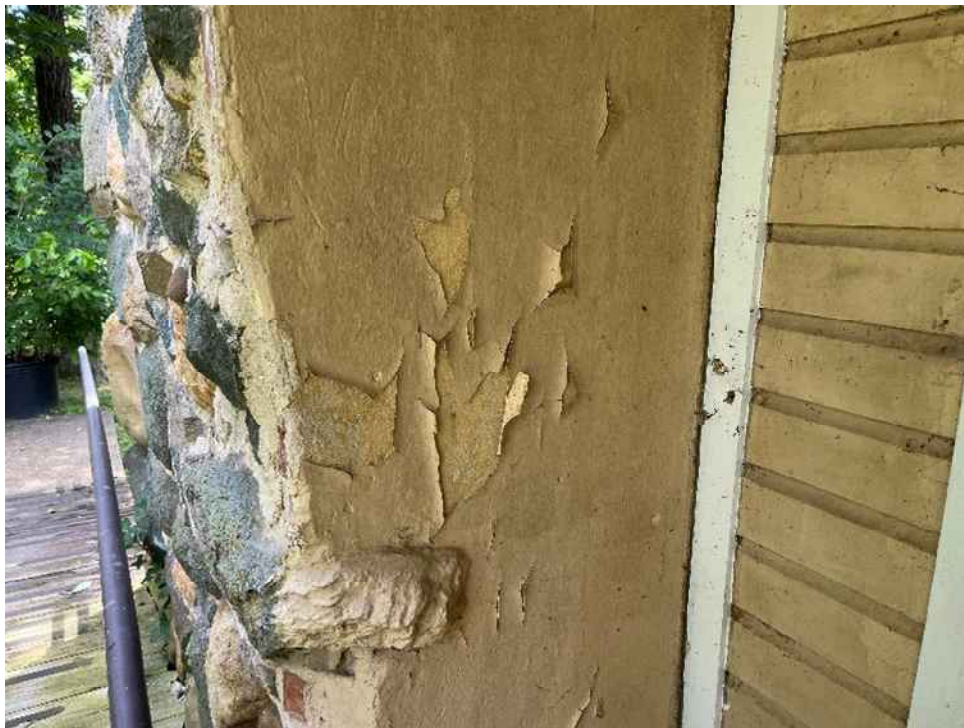
Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 13**

**Description:**

HA-17/PCB-3: Gray  
Exterior Window  
Glazing;  
Pb-8: White paint on  
exterior window sill



**Photograph: 14**

**Description:**

HA-18/PCB-4: Tan  
Exterior Stone Mortar;  
Pb-9: Tan paint on  
exterior wood wall;  
Pb-12: Tan paint on  
exterior stone

## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401

**LANGAN**  
ENGINEERING & ENVIRONMENTAL SERVICES



**Photograph: 15**

**Description:**

HA-19: Gray Paper  
Backing



**Photograph: 16**

**Description:**

HA-20: White Paper  
Flooring



## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 17**

**Description:**

HA-21: Tan Paper  
Flooring



**Photograph: 18**

**Description:**

HA-22: White Ceramic  
Floor Tile Grout –  
assumed ACM;  
HA-23: Ceramic Floor  
Tile Adhesive –  
assumed ACM



## PHOTOGRAPH LOG

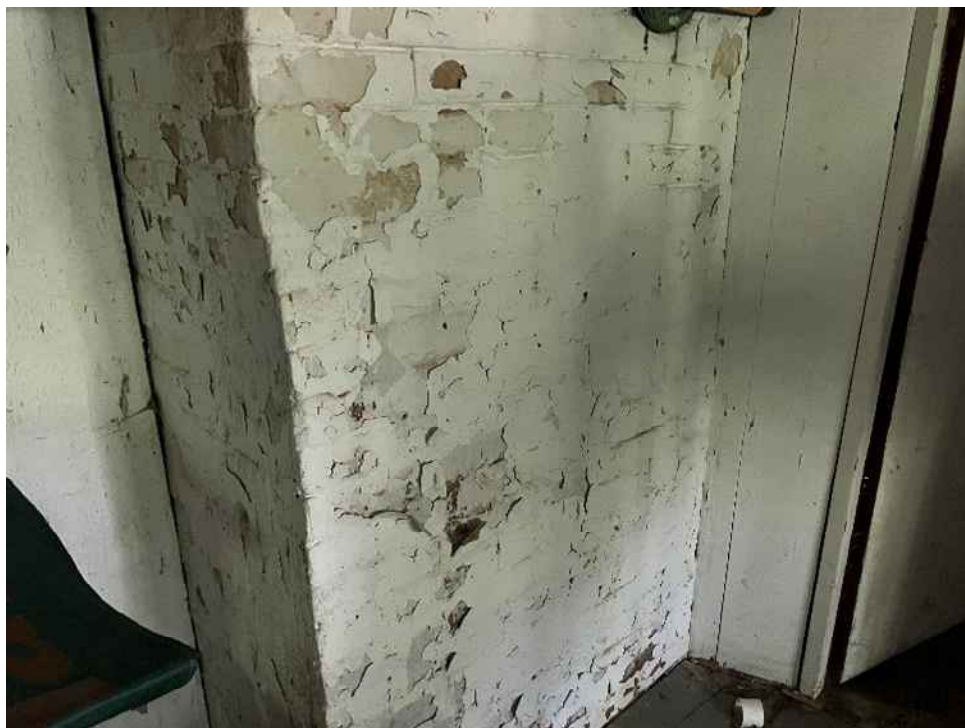
Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 19**

**Description:**

HA-25: White 12"x12"  
Vinyl Floor Tile under  
wood flooring –  
assumed ACM;  
HA-26: Floor Tile  
Mastic associated with  
HA-25 – assumed ACM



**Photograph: 20**

**Description:**

Pb-1: White paint on  
wood wall;  
Pb-2: White paint on  
stone wall

## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 21**

**Description:**

Pb-3: Brown paint on  
basement metal  
support beam



**Photograph: 22**

**Description:**

Pb-5: White paint on  
wood wall  
Pb-6: White paint on  
stone wall

Pb-5

Pb-6

## PHOTOGRAPH LOG

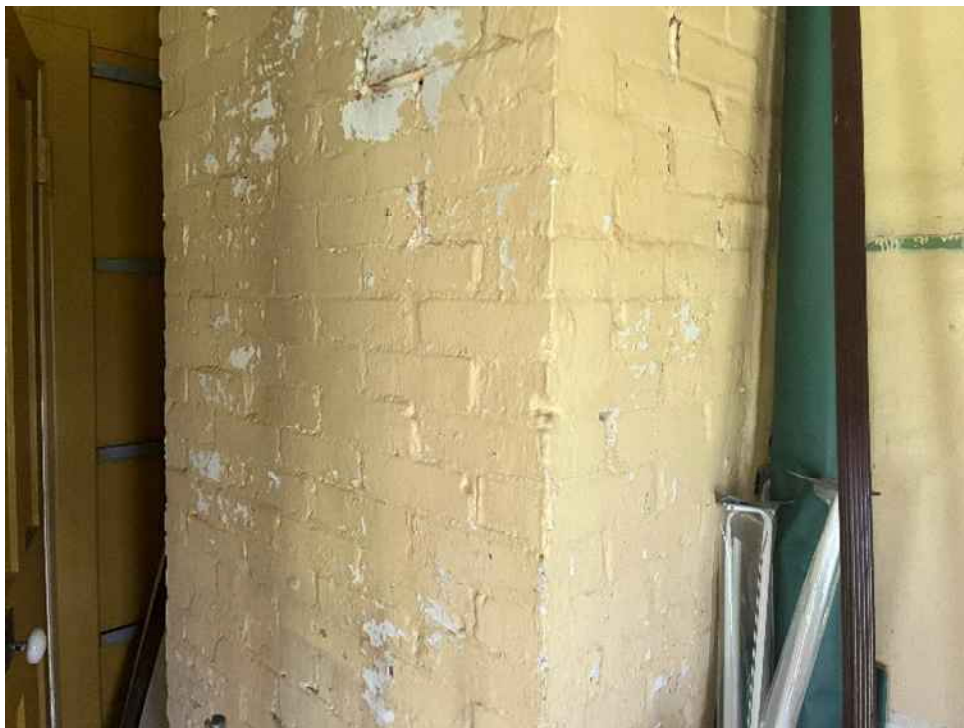
Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 23**

**Description:**

Pb-7: White paint on  
wood door



**Photograph: 24**

**Description:**

Pb-11: Yellow paint on  
brick wall



## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 25**

**Description:**

Pb-13: White paint on  
wood column



**Photograph: 26**

**Description:**

Pb-14: White paint on  
wood door  
Pb-16: White paint on  
wood wall

## PHOTOGRAPH LOG

Clara Barton National Historic Site  
Glen Echo, Maryland  
Langan Project No.: 270128401



**Photograph: 27**

**Description:**

Pb-15: White Paint on  
basement window  
frame



## **APPENDIX D**



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order: 042216789

Customer ID: LNGV42

Customer PO:

Project ID:

Attention: Tess Reardon

Langan Engineering

2300 Clarendon Blvd

Arlington, VA 22201

Phone: (703) 623-5707

Fax:

Received Date: 07/14/2022 9:10 AM

Analysis Date: 07/20/2022 - 07/21/2022

Collected Date: 07/13/2022

Project: CB House / Glen Echo, MD

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1A 042216789-0001	Basement - NW Wall - Joint Compound - White	White Non-Fibrous Homogeneous	HA: 1	100% Non-fibrous (Other)	None Detected
1B 042216789-0002	Basement - Kitchen - Joint Compound - White	White Non-Fibrous Homogeneous	HA: 1	100% Non-fibrous (Other)	None Detected
1C 042216789-0003	Basement - W Wall - Joint Compound - White	White Non-Fibrous Homogeneous	HA: 1	100% Non-fibrous (Other)	None Detected
2A 042216789-0004	Basement - NW Wall - Drywall - Gray	Brown/White Non-Fibrous Homogeneous	HA: 2	10% Cellulose 90% Non-fibrous (Other)	None Detected
2B 042216789-0005	Basement - Kitchen - Drywall - Gray	Brown/White Non-Fibrous Homogeneous	HA: 2	10% Cellulose 90% Non-fibrous (Other)	None Detected
2C 042216789-0006	Basement - W Wall - Drywall - Gray	Brown/White Non-Fibrous Homogeneous	HA: 2	10% Cellulose 90% Non-fibrous (Other)	None Detected
3A 042216789-0007	Basement - Bedroom - Insulation - Yellow	Yellow Fibrous Homogeneous	HA: 3	5% Cellulose 90% Min. Wool 5% Non-fibrous (Other)	None Detected
3B 042216789-0008	Basement - Bedroom - Insulation - Yellow	Yellow Fibrous Homogeneous	HA: 3	5% Cellulose 90% Min. Wool 5% Non-fibrous (Other)	None Detected
3C 042216789-0009	Basement - Bedroom - Insulation - Yellow	Yellow Fibrous Homogeneous	HA: 3	5% Cellulose 90% Min. Wool 5% Non-fibrous (Other)	None Detected
4A 042216789-0010	Basement - NW Wall - Stone/Brick Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 4	100% Non-fibrous (Other)	None Detected
4B 042216789-0011	Basement - SE Wall - Stone/Brick Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 4	100% Non-fibrous (Other)	None Detected
4C 042216789-0012	Basement - SE Wall - Stone/Brick Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 4	100% Non-fibrous (Other)	None Detected

Initial report from: 07/21/2022 11:14:40



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

EMSL Order: 042216789

Customer ID: LNGV42

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
5A 042216789-0013	Basement - Mechanical Room - CMU Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 5	100% Non-fibrous (Other)	None Detected
5B 042216789-0014	Basement - Mechanical Room - CMU Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 5	100% Non-fibrous (Other)	None Detected
5C 042216789-0015	Basement - Mechanical Room - CMU Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 5	100% Non-fibrous (Other)	None Detected
6A 042216789-0016	1st Floor - Red Cross Office - Paper Backing - Brown	Brown Fibrous Homogeneous	HA: 6	98% Cellulose 2% Non-fibrous (Other)	None Detected
6B 042216789-0017	1st Floor - Closet - Paper Backing - Brown	Brown Fibrous Homogeneous	HA: 6	98% Cellulose 2% Non-fibrous (Other)	None Detected
6C 042216789-0018	1st Floor - Closet - Paper Backing - Brown	Brown Non-Fibrous Homogeneous	HA: 6	80% Cellulose 20% Non-fibrous (Other)	None Detected
6D 042216789-0019	1st Floor - Red Cross Office - Paper Backing - Brown	Brown Fibrous Homogeneous	HA: 6	60% Cellulose 40% Non-fibrous (Other)	None Detected
6E 042216789-0020	2nd Floor - 213 - Paper Backing - Brown	Brown Fibrous Homogeneous	HA: 6	98% Cellulose 2% Non-fibrous (Other)	None Detected
6F 042216789-0021	2nd Floor - 211 - Paper Backing - Brown	Brown Fibrous Homogeneous	HA: 6	98% Cellulose 2% Non-fibrous (Other)	None Detected
6G 042216789-0022	3rd Floor - 303 - Paper Backing - Brown	Brown Fibrous Homogeneous	HA: 6	98% Cellulose 2% Non-fibrous (Other)	None Detected
6H 042216789-0023	3rd Floor - 303 - Paper Backing - Brown	Brown Fibrous Homogeneous	HA: 6	98% Cellulose 2% Non-fibrous (Other)	None Detected
6I 042216789-0024	3rd Floor - 303 - Paper Backing - Brown	Brown Fibrous Homogeneous	HA: 6	98% Cellulose 2% Non-fibrous (Other)	None Detected
7A 042216789-0025	1st Floor - 110 Closet - Drywall - Gray	Brown/White Non-Fibrous Homogeneous	HA: 7	10% Cellulose 90% Non-fibrous (Other)	None Detected
7B 042216789-0026	1st Floor - 117 - Drywall - Gray	Gray Non-Fibrous Homogeneous	HA: 7	3% Hair 97% Non-fibrous (Other)	None Detected

Initial report from: 07/21/2022 11:14:40



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order: 042216789

Customer ID: LNGV42

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
7C 042216789-0027	2nd Floor - 207 - Drywall - Gray	Gray Non-Fibrous Homogeneous	3% Hair  HA: 7	97% Non-fibrous (Other)	None Detected
8A 042216789-0028	1st Floor - 110 Closet - Joint Compound - White	White Non-Fibrous Homogeneous	  HA: 8	100% Non-fibrous (Other)	None Detected
8B 042216789-0029	1st Floor - 117 - Joint Compound - White	White Non-Fibrous Homogeneous	  HA: 8	100% Non-fibrous (Other)	None Detected
8C 042216789-0030	2nd Floor - 207 - Joint Compound - White	White Non-Fibrous Homogeneous	  HA: 8	100% Non-fibrous (Other)	None Detected
9A-VFT 042216789-0031	1st Floor - 106 - 12" x 12" Speckled VFT - Brown	Brown Non-Fibrous Homogeneous	  HA: 9	98% Non-fibrous (Other)	2% Chrysotile
9A-Mastic 042216789-0031A	1st Floor - 106 - Mastic	Yellow Non-Fibrous Homogeneous	  HA: 9	100% Non-fibrous (Other)	None Detected
9B-VFT 042216789-0032	1st Floor - 106 - 12" x 12" Speckled VFT - Brown		  HA: 9		Positive Stop (Not Analyzed)
9B-Mastic 042216789-0032A	1st Floor - 106 - Mastic	Yellow Non-Fibrous Homogeneous	  HA: 9	100% Non-fibrous (Other)	None Detected
9C-VFT 042216789-0033	1st Floor - 106 - 12" x 12" Speckled VFT - Brown		  HA: 9		Positive Stop (Not Analyzed)
9C-Mastic 042216789-0033A	1st Floor - 106 - Mastic	Yellow Non-Fibrous Homogeneous	  HA: 9	100% Non-fibrous (Other)	None Detected
10A 042216789-0034	2nd Floor - 209 - Drywall - Gray	Gray Non-Fibrous Homogeneous	3% Hair  HA: 10	97% Non-fibrous (Other)	None Detected
10B 042216789-0035	2nd Floor - 209 - Drywall - Gray	Gray Non-Fibrous Homogeneous	3% Hair  HA: 10	97% Non-fibrous (Other)	None Detected
10C 042216789-0036	2nd Floor - 209 - Drywall - Gray	Gray Non-Fibrous Homogeneous	3% Hair  HA: 10	97% Non-fibrous (Other)	None Detected
11A-Skim Coat 042216789-0037 Sample is plaster.	2nd Floor - 209 - Drywall - Gray	White Non-Fibrous Homogeneous	  HA: 11	100% Non-fibrous (Other)	None Detected

Initial report from: 07/21/2022 11:14:40





# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order: 042216789

Customer ID: LNGV42

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
11A-Base Coat  042216789-0037A Sample is plaster.	2nd Floor - 209 - Drywall - Gray	Gray Non-Fibrous Homogeneous	3% Hair	97% Non-fibrous (Other)	None Detected
HA: 11					
11B-Skim Coat  042216789-0038 Sample is plaster.	2nd Floor - 209 - Drywall - Gray	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 11					
11B-Base Coat  042216789-0038A Sample is plaster.	2nd Floor - 209 - Drywall - Gray	Gray Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
HA: 11					
11C-Skim Coat  042216789-0039 Sample is plaster.	2nd Floor - 209 - Drywall - Gray	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 11					
11C-Base Coat  042216789-0039A Sample is plaster.	2nd Floor - 209 - Drywall - Gray	Gray Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
HA: 11					
12A  042216789-0040	212 - Closets - Paper Backing - White	White Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
HA: 12					
12B  042216789-0041	212 - Closets - Paper Backing - White	White Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
HA: 12					
12C  042216789-0042	212 - Closets - Paper Backing - White	Tan/White Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
HA: 12					
13A  042216789-0043	3rd Floor - Closets - Drywall - White	White Non-Fibrous Homogeneous	3% Hair	97% Non-fibrous (Other)	None Detected
HA: 13					
13B  042216789-0044	3rd Floor - Closets - Drywall - White	White Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
HA: 13					
13C  042216789-0045	3rd Floor - Closets - Drywall - White	White Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
HA: 13					
14A  042216789-0046	2nd Floor - 217 - Tile Mastic - Tan	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 14					
14B  042216789-0047	2nd Floor - 203A - Tile Mastic - Tan	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 14					

Initial report from: 07/21/2022 11:14:40



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order: 042216789

Customer ID: LNGV42

Customer PO:

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
14C 042216789-0048	2nd Floor - 203A - Tile Mastic - Tan	Tan Non-Fibrous Homogeneous	HA: 14	100% Non-fibrous (Other)	None Detected
15A 042216789-0049	2nd Floor - 217 - Cove Base Mastic - Tan	Tan Non-Fibrous Homogeneous	HA: 15	97% Non-fibrous (Other)	3% Chrysotile
15B 042216789-0050	2nd Floor - 217 - Cove Base Mastic - Tan		HA: 15		Positive Stop (Not Analyzed)
16A 042216789-0051	3rd Floor - Closet - Insulation - Tan	Gray/Yellow Fibrous Homogeneous	HA: 16	96% Min. Wool 4% Non-fibrous (Other)	None Detected
16B 042216789-0052	3rd Floor - Closet - Insulation - Tan	Gray/Yellow Fibrous Homogeneous	HA: 16	96% Min. Wool 4% Non-fibrous (Other)	None Detected
16C 042216789-0053	3rd Floor - Closet - Insulation - Tan	Gray/Yellow Fibrous Homogeneous	HA: 16	96% Min. Wool 4% Non-fibrous (Other)	None Detected
17A 042216789-0054	1st Floor - SE Window - Window Glazing - White	White Non-Fibrous Homogeneous	HA: 17	100% Non-fibrous (Other)	None Detected
17B 042216789-0055	Basement - SE Window - Window Glazing - White	White Non-Fibrous Homogeneous	HA: 17	100% Non-fibrous (Other)	None Detected
17C 042216789-0056	Basement - NW Window - Window Glazing - White	White Non-Fibrous Homogeneous	HA: 17	100% Non-fibrous (Other)	None Detected
18A 042216789-0057	Basement - SE Wall - Stone Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 18	100% Non-fibrous (Other)	None Detected
18B 042216789-0058	Basement - W Wall - Stone Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 18	100% Non-fibrous (Other)	None Detected
18C 042216789-0059	Basement - NW Wall - Stone Mortar - Gray	Gray Non-Fibrous Homogeneous	HA: 18	100% Non-fibrous (Other)	None Detected



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EMSL Order: 042216789

Customer ID: LNGV42

Customer PO:

Project ID:

Analyst(s)

Mazen Elkhatib (21)

Selina Zeiss (41)

Samantha Rundstrom, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Hillside, IL NVLAP Lab Code 200399-0

Initial report from: 07/21/2022 11:14:40

042216789

CINNAMINSON, N.J.

Page 1 of



**LANGAN**

## ASBESTOS BULK SAMPLING DATA SHEET

042216789

Page 1 of 21

HA #	Material Description	Color	Sample Letter	Sample Location	Locations in Building	Friable Y/N	Cond (G,D,SD)	Areas of Damage	Total Quantity
Property Address: Glen Echo, MD Project Number: 270126804 Building Name: CB House Areas Surveyed: Interior, exterior Client: Langan Inspector(s): I. Reardon Date of Inspection: 7/13/2014 CINNAMINSON, NJ 22 JUL 14 AM 10:48									
1	Joint compound	White	A B C	Basement - NW wall Basement - kitchen Basement - W wall	Basement	Y	G	N/A	800 SF
2	Drywall	Gray	A B C	Basement - NW wall Basement - kitchen Basement - W wall	Basement	Y	G	N/A	800 SF
3	Insulation	Yellow	A B C	Basement - bedroom	Basement	Y	G	N/A	300 SF
4	Stone/brick mortar	Gray	A B C	Basement - NW wall Basement - SE wall Basement - SE wall	Throughout	N	G	N/A	<del>300 SF</del>
5	CMU mortar	Gray	A B C	Basement mechanical room	Basement	N	G	N/A	300 SF
6	Paper backing	Brown	A B C	1st floor - red cross office 1st floor - closet 1st floor - closet	1st, 2nd, 3rd floors	N	G	1st and 3rd floors	

**ADDITIONAL NOTES:** Assumed in basement: 1" x 1" white floor tile grout, 1 fire door  
 Assumed on 1st floor: 12" x 12" brown patterned VFI, 12" x 12" brown and 12" x 12" black VFI in vault



**LANGAN**

## ASBESTOS BULK SAMPLING DATA SHEET

042216789

Page 2 of 4

Property Address:		Building Name:		Client:		Date of Inspection:			
Project Number:		Areas Surveyed:		Inspector(s):					
HA #	Material Description	Color	Sample Letter	Sample Location	Locations in Building	Friable Y/N	Cond (G.D.S.D.)	Areas of Damage	Total Quantity
6	Paper backing	Brown	D	1st floor - Red Cross office	1st, 2nd, 3rd floors	Y	12 JUL 4	CINNAMINSON, NJ 1st and 4th 3rd floors	
			E	2nd floor - 213					
			F	2nd floor - 211					
6	Paper backing	Brown	G	3rd floor - 303		Y	G		
			H	3rd floor - 303					
			I	3rd floor - 303					
7	Drywall	Gray	A	1st floor - 110 closet		Y	G	1st floor	
			B	1st floor - 117					
			C	2nd floor - 207					
8	Joint compound	White	A	1st floor - 110 closet		Y	G	N/A	
			B	1st floor - 117					
			C	2nd floor - 207					
9	12" x 12" speckled VFT	Brown	A	1st floor - 106	1st floor - 106	Y	G	N/A	205F
			B						
			C						
10	Drywall	Gray	A	2nd floor - 209	1st, 2nd, 3rd floors wing	Y	D	2nd floor	
			B						
			C						

ADDITIONAL NOTES: Paper backing in 2nd floor kitchen

042216789

## ASBESTOS BULK SAMPLING DATA SHEET

LANGAN

Page 3 of 4

Property Address:		Building Name:		Client:		Date of Inspection:			
Project Number: 270126801		Areas Surveyed:		Inspector(s):					
HA #	Material Description	Color	Sample Letter	Sample Location	Locations in Building	Friable Y / N	Cond (G,D,SD)	Areas of Damage	Total Quantity
11	Drywall	<del>White</del> Gray	A B C	2nd Floor - 209	1st, 2nd, 3rd Floor 22 JUL 14 AM 10:48 <del>ceiling walls</del>	1	G	N/A	
12	Paper backing	White	A B C	212-closets	212-closets	N	SD	2nd floor closets	60 SF
13	Drywall	<del>White</del> White	A B C	3rd floor-closets	<del>2nd, 3rd floor</del> ceiling	Y	G	N/A	
14	Tile <del>g</del> mastic	Tan	A B C	2nd Floor - 217 2nd floor - 203A	2nd floor - 217 and 203A	N	G	N/A	150 SF
15	Love mastic base	Tan	A B C	2nd floor - 217	2nd floor - 217	N	G	N/A	5 LF
16	Insulation	Tan	A B C	3rd floor-closet	3rd floor closet	N	G	N/A	5 SF

ADDITIONAL NOTES:

# LANGAN

**ADDITIONAL NOTES:**

29/07/2014



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order: 042219613

Customer ID: LNGV42

Customer PO:

Project ID:

Attention: Tess Reardon

Langan Engineering

2300 Clarendon Blvd

Arlington, VA 22201

Phone: (703) 623-5707

Fax:

Received Date: 08/09/2022 9:20 AM

Analysis Date: 08/11/2022

Collected Date: 08/08/2022

Project: LB House

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
19A 042219613-0001	Room 213 - Paper Backing - Gray	Gray Non-Fibrous Homogeneous		65% Non-fibrous (Other)	35% Chrysotile
19B 042219613-0002	Room 213 - Paper Backing - Gray				Positive Stop (Not Analyzed)
19C 042219613-0003	Room 212 - Paper Backing - Gray				Positive Stop (Not Analyzed)
20A 042219613-0004	Basement - Foyer - Paper Flooring - White	White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
20B 042219613-0005	Basement - Foyer - Paper Flooring - White	White Fibrous Homogeneous	20% Cellulose 5% Glass	75% Non-fibrous (Other)	None Detected
20C 042219613-0006	Basement - Bathroom - Paper Flooring - White	White Fibrous Homogeneous	20% Cellulose 8% Glass	72% Non-fibrous (Other)	None Detected
21A-Paper Flooring 042219613-0007	2nd Floor - Kitchen - Paper Flooring - White	White Fibrous Homogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected
21A-Backing 042219613-0007A	2nd Floor - Kitchen - Backing	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
21B-Paper Flooring 042219613-0008	2nd Floor - Kitchen - Paper Flooring - White	White Fibrous Homogeneous	15% Cellulose 2% Glass	83% Non-fibrous (Other)	None Detected
21B-Backing 042219613-0008A	2nd Floor - Kitchen - Backing	Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (Other)	None Detected
21C-Paper Flooring 042219613-0009	2nd Floor - Kitchen - Paper Flooring - White	White Fibrous Homogeneous	20% Cellulose 8% Glass	72% Non-fibrous (Other)	None Detected
21C-Backing 042219613-0009A	2nd Floor - Kitchen - Backing	Black Fibrous Homogeneous	35% Cellulose	65% Non-fibrous (Other)	None Detected

Initial report from: 08/11/2022 16:35:47





## EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order: 042219613

Customer ID: LNGV42

Customer PO:

Project ID:

Analyst(s)

Quynh Vu (3)

Sarah Kleinbrahm (7)

Samantha Rundstrom, Laboratory Manager  
or Other Approved Signatory

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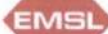
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NJ DEP 03036, PA ID# 68-00367, LA #04127

Initial report from: 08/11/2022 16:35:47



## Asbestos Chain of Custody (Air, Bulk, Soil)

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.  
200 Route 130 North  
Cinnaminson, NJ 08077EMSL ANALYTICAL, INC.  
TESTING LABS • PRODUCTS • TRAININGPHONE: (800) 220-3675  
EMAIL: CinnAble@EMSL.com

042219613

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information	Customer ID:	Billing ID:	
	Company Name:	Company Name: Same as customer info	
	Contact Name: Jess Reardon	Billing Contact:	
	Street Address: 1300 Wilson Blvd Suite 450	Street Address:	
	City, State, Zip: Arlington, VA 22033	City, State, Zip:	Country:
	Phone: 571-329-7485	Phone:	Country:
Email(s) for Report: treardon@langan.com		Email(s) for Invoice:	

## Project Information

Project Name/No: LB House	Purchase Order:	
EMSL LIMS Project ID: (If applicable, EMSL will provide)	US State where samples collected: MD	State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)
Sampled By Name: Jess Reardon	Sampled By Signature: [Signature]	No. of Samples in Shipment:

## Turn-Around-Time (TAT)

☐ 3 Hour ☐ 4-4.5 Hour AHERA ONLY ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☒ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

TEM Air 3-6 Hour, please call ahead to schedule. 32 Hour TAT available for select tests only; samples must be submitted by 11:30 am.

## Test Selection

<b>PCM Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> NIOSH 7400 w/ 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> POINT COUNT <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) POINT COUNT w/ GRAVIMETRIC <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) <input type="checkbox"/> NYS 198.1 (Friable - NY) <input type="checkbox"/> NYS 198.6 NOB (Non-Friable - NY) <input type="checkbox"/> NYS 198.8 (Vermiculite SM-V)	<b>TEM - Air</b> <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312* <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (Non-Friable-NY) <input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%) <b>Other Test (please specify)</b>	<b>TEM - Settled Dust</b> <input type="checkbox"/> Microvac - ASTM D5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Qualitative via Filtration Prep <input type="checkbox"/> Qualitative via Drop Mount Prep <b>Soil - Rock - Vermiculite (reporting limit)*</b> <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%) <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep
---	---	--

\*Please call with your project-specific requirements.

<input checked="" type="checkbox"/> Positive Stop - Clearly Identified Homogeneous Areas (HA)	Filter Pore Size (Air Samples) <input type="checkbox"/> 0.8um <input type="checkbox"/> 0.45um		
Sample Number	Sample Location / Description	Volume, Area or Homogeneous Area	Date / Time Sampled (Air Monitoring Only)
	See attached data sheets		

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment: FedEx	Sample Condition Upon Receipt:		
Relinquished by: [Signature]	Date/Time: 8/8/22 1100	Received by: [Signature]	Date/Time: 8-9-22 920A
Relinquished by:	Date/Time:	Received by:	Date/Time:

Controlled Document - COC-05 Asbestos R16 10/26/2021

☐ AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

Page 2 of 2

## **APPENDIX E**

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>[cinnaminsonleadlab@emsl.com](mailto:cinnaminsonleadlab@emsl.com)

EMSL Order: 202206298

CustomerID: LNGV42

CustomerPO:


ProjectID:

Attn: **Tess Reardon**  
**Langan Engineering**  
**2300 Clarendon Blvd**  
**Arlington, VA 22201**

Phone: (703) 623-5707  
Fax:  
Received: 7/14/2022 11:00 AM  
Collected: 7/13/2022

Project: **CB HOUSE****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\***

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>Lead Concentration</i>
PB-1	202206298-0001	7/13/2022	7/19/2022	0.2575 g	<0.0080 % wt
Site: BASEMENT UTILITY ROOM WALL / WHITE WOOD					
PB-2	202206298-0002	7/13/2022	7/19/2022	0.2641 g	<0.0080 % wt
Site: BASEMENT KITCHEN WALL / WHITE DRYWALL					
PB-3	202206298-0003	7/13/2022	7/18/2022	0.1330 g	37 % wt
Site: BASEMENT BASEMENT SUPPORT BEAM / BROWN METAL					
PB-4	202206298-0004	7/13/2022	7/18/2022	0.2678 g	1.9 % wt
Site: 1ST FLOOR KITCHEN CLOSET CEILING / WHITE DRYWALL					
PB-5	202206298-0005	7/13/2022	7/15/2022	0.2514 g	5.7 % wt
Site: 1ST FLOOR KITCHEN WALL / WHITE WOOD					
PB-6	202206298-0006	7/13/2022	7/15/2022	0.2740 g	9.7 % wt
Site: 1ST FLOOR KITCHEN WALL / WHITE STONE					
PB-7	202206298-0007	7/13/2022	7/18/2022	0.2509 g	1.0 % wt
Site: 1ST FLOOR HALL DOOR / WHITE WOOD					
PB-8	202206298-0008	7/13/2022	7/19/2022	0.2651 g	0.12 % wt
Site: 2ND FLOOR EXTERIOR WINDOW WINDOWSILL / WHITE WOOD					
PB-9	202206298-0009	7/13/2022	7/18/2022	0.2608 g	0.67 % wt
Site: 2ND FLOOR EXTERIOR WALL WALL / TAN WOOD					
PB-10	202206298-0010	7/13/2022	7/18/2022	0.2917 g	16 % wt
Site: 2ND FLOOR 209 CEILING / WHITE DRYWALL					
PB-11	202206298-0011	7/13/2022	7/18/2022	0.2837 g	18 % wt
Site: 2ND FLOOR 211 WALL / YELLOW STONE					
PB-12	202206298-0012	7/13/2022	7/18/2022	0.2753 g	0.018 % wt
Site: 1ST FLOOR PORCH WALL / TAN STONE					
PB-13	202206298-0013	7/13/2022	7/18/2022	0.2598 g	0.97 % wt
Site: 1ST FLOOR PORCH COLUMN / WHITE WOOD					
PB-14	202206298-0014	7/13/2022	7/18/2022	0.2740 g	13 % wt
Site: BASEMENT EXTERIOR WALL DOOR / TAN WOOD					

  
Owen Mckenna, Lead Laboratory Director  
or other approved signatory

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\* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 07/20/2022 18:32:43

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>[cinnaminsonleadlab@emsl.com](mailto:cinnaminsonleadlab@emsl.com)

EMSL Order: 202206298

CustomerID: LNGV42

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Attn: **Tess Reardon**  
**Langan Engineering**  
**2300 Clarendon Blvd**  
**Arlington, VA 22201**

Phone: (703) 623-5707  
Fax:  
Received: 7/14/2022 11:00 AM  
Collected: 7/13/2022

Project: **CB HOUSE****Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\***

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>Lead Concentration</i>
PB-15	202206298-0015	7/13/2022	7/18/2022	0.2540 g	2.6 % wt
Site: BASEMENT EXTERIOR WALL WINDOW FRAME / WHITE WOOD					
PB-16	202206298-0016	7/13/2022	7/18/2022	0.2843 g	2.2 % wt
Site: BASEMENT EXTERIOR WALL WALL / WHITE WOOD					

Owen McKenna, Lead Laboratory Director  
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

\* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 07/20/2022 18:32:43





## Lead Chain of Custody

EMSL Order Number / Lab Use Only

 EMSL Analytical, Inc.  
 200 Route 130 North  
 Cinnaminson, NJ 08077

 EMSL ANALYTICAL, INC.  
 TESTING LABS • PRODUCTS • TRAINING

202206298

PHONE: (800) 220-3675

EMAIL: CinnaminsonLeadLab@emsl.com

<b>Customer Information</b> Customer ID: Company Name: <u>Langan</u> Contact Name: <u>Tess Reardon</u> Street Address: <u>1300 Wilson Blvd, Suite 450</u> City, State, Zip: <u>Arlingbr VA 22209</u> Country: <u>US</u> Phone: <u>571-325-7485</u> Email(s) for Report: <u>treesdane@langan.com</u>		<b>Billing Information</b> Billing ID: Company Name: <u>Same as customer info</u> Billing Contact: Street Address: City, State, Zip: Country: Phone: Email(s) for Invoice:	
<b>Project Information</b>			
Project Name/No: <u>CB House</u>		Purchase Order:	
EMSL LIMS Project ID: (If applicable, EMSL will provide)		US State where samples collected: <u>MD</u> State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)	
Sampled By Name: <u>T. Reardon</u>		Sampled By Signature: <u>Tess Reardon</u> No. of Samples in Shipment: <u>16</u>	
Turn-Around-Time (TAT)			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 32 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
Please call ahead for large projects and/or turnaround times 6 Hours or Less. *32 Hour TAT available for select tests only; samples must be submitted by 11:30am.			
<b>MATRIX</b>	<b>METHOD</b>	<b>INSTRUMENT</b>	<b>REPORTING LIMIT</b>
CHIPS <input checked="" type="checkbox"/> % by wt. <input type="checkbox"/> ppm (mg/kg) <input type="checkbox"/> mg/cm <sup>2</sup>	SW 846-7000B	Flame Atomic Absorption	0.008% (80ppm)
*Reporting Limit based on a minimum 0.25g sample weight. **Not appropriate for Ceramic Tiles - XRF is recommended	SW 846-6010D*	ICP-OES	0.0004% (4ppm)
AIR	NIOSH 7082	Flame Atomic Absorption	4µg/filter
	NIOSH 7300M / NIOSH 7303M	ICP-OES	0.5µg/filter
	NIOSH 7300M / NIOSH 7303M	ICP-MS	0.05µg/filter
WIPE <input type="checkbox"/> ASTM <input type="checkbox"/> NON-ASTM	SW 846-7000B	Flame Atomic Absorption	10µg/wipe
*If no box is checked, non-ASTM Wipe is assumed	SW 846-6010D*	ICP-OES	1.0µg/wipe
TCLP	SW 846-1311 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)
	SW 846-1311 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)
SPLP	SW 846-1312 / 7000B / SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)
	SW 846-1312 / SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)
TTLC	22 CCR App. II, 7000B	Flame Atomic Absorption	40mg/kg (ppm)
	22 CCR App. II, SW 846-6010D*	ICP-OES	2mg/kg (ppm)
STLC	22 CCR App. II, 7000B	Flame Atomic Absorption	0.4 mg/L (ppm)
	22 CCR App. II, SW 846-6010D*	ICP-OES	0.1 mg/L (ppm)
Soil	SW 846-7000B	Flame Atomic Absorption	40mg/kg (ppm)
	SW 846-6010D*	ICP-OES	2mg/kg (ppm)
Wastewater	SM 3111B / SW 846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)
Unpreserved <input type="checkbox"/>	EPA 200.7	ICP-OES	0.020 mg/L (ppm)
Preserved with HNO <sub>3</sub> <input type="checkbox"/> PH<2	EPA 200.5	ICP-OES	0.003 mg/L (ppm)
Drinking Water	EPA 200.8	ICP-MS	0.001 mg/L (ppm)
Unpreserved <input type="checkbox"/>			
Preserved with HNO <sub>3</sub> <input type="checkbox"/> PH<2			
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter
Other:			
Sample Number	Sample Location	Volume / Area	Date / Time Sampled
	See attached data sheets		
Method of Shipment: <u>FedEx</u>		Sample Condition Upon Receipt:	
Relinquished by: <u>Tess Reardon</u>	Date/Time: <u>7/13/22 1500</u>	Received by: <u>FX</u>	Date/Time: <u>7-14-22 11am</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

202206298

## PAINT CHIP SAMPLE FIELD DATA SHEET

Project #: \_\_\_\_\_

Date of Survey: 7/13/22

Building Name: CB House

Area Surveyed: Interior, exterior

Sample #	Floor	Room / Area	Testing Combination	Color	Substrate	Condition
Pb-1	Basement	Utility room	Wall	White	Wood	Poor
Pb-2	Basement	Kitchen	Wall	White	Drywall	Good
Pb-3	Basement	Basement	Support beam	Brown	Metal	Good
Pb-4	1st	Kitchen closet	Ceiling	White	Drywall	Good
Pb-5	1st	Kitchen	Wall	White	Wood	Poor
Pb-6	1st	Kitchen	Wall	White	Stone	Poor
Pb-7	1st	Hall	Door	White	Wood	Poor



202206298

## PAINT CHIP SAMPLE FIELD DATA SHEET

Project #: \_\_\_\_\_

Date of Survey: 7/13/22

Building Name: CB House

Area Surveyed: Interior, exterior

Sample #	Floor	Room / Area	Testing Combination	Color	Substrate	Condition
Pb-8	2nd	Exterior Window	Window sill <del>Window</del>	White	Wood	Poor
Pb-9	2nd	Exterior wall	Wall	<del>Tan</del> Tan	Wood	Poor
Pb-10	2nd	209	Ceiling	White	Drywall	Poor
Pb-11	2nd	211	Wall	Yellow <del>Stone</del>	Stone	Poor
Pb-12	1st	Porch	Wall	Tan	Stone	Poor
Pb-13	1st	Porch	Column	White	Wood	Poor
Pb-14	Basement	Exterior wall	Door	Tan	Wood	Poor

202206298

## PAINT CHIP SAMPLE FIELD DATA SHEET

Project #: \_\_\_\_\_

Date of Survey: 7/13/22Building Name: 13 HouseArea Surveyed: Interior, exterior

Sample #	Floor	Room / Area	Testing Combination	Color	Substrate	Condition
Pb-15	Basement	Exterior wall	Window frame	White	Wood	Poor
Pb-16	Basement	Exterior wall	Wall	white	Wood	Poor

## **APPENDIX F**





**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: [EnvChemistry2@emsl.com](mailto:EnvChemistry2@emsl.com)

Attn:

**Tess Reardon  
Langan Engineering  
300 Kimball Drive  
Parsippany, NJ 07054**

7/28/2022

Phone: (973) 560-4900

Fax: (201) 794-7501

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 7/14/2022. The results are tabulated on the attached data pages for the following client designated project:

**CB House**

The reference number for these samples is EMSL Order #012210909. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

Owen McKenna, Chemistry Laboratory Director



The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.  
NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, CA ELAP 1877

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>[EnvChemistry2@emsl.com](mailto:EnvChemistry2@emsl.com)

EMSL Order: 012210909

CustomerID: LANG49

CustomerPO:

ProjectID:

Attn: **Tess Reardon**  
**Langan Engineering**  
**300 Kimball Drive**  
**Parsippany, NJ 07054**

Phone: (973) 560-4900  
 Fax: (201) 794-7501  
 Received: 07/14/22 9:10 AM

Project: **CB House****Analytical Results**

**Client Sample Description** PCB-1  
Basement  
**Collected:** 7/13/2022 9:40:00 AM  
**Lab ID:** 012210909-0001

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
<b>GC-SVOA</b>					
3546/8082A	Aroclor-1016	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1221	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1232	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1242	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1248	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1254	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1260	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1262	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1268	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL

**Client Sample Description** PCB-2  
Basement  
**Collected:** 7/13/2022 9:50:00 AM  
**Lab ID:** 012210909-0002

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
<b>GC-SVOA</b>					
3546/8082A	Aroclor-1016	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1221	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1232	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1242	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1248	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1254	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1260	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1262	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1268	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL

**Client Sample Description** PCB-3  
Basement - exterior  
**Collected:** 7/13/2022 1:30:00 PM  
**Lab ID:** 012210909-0003

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
<b>GC-SVOA</b>					
3546/8082A	Aroclor-1016	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1221	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1232	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1242	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1248	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>[EnvChemistry2@emsl.com](mailto:EnvChemistry2@emsl.com)

EMSL Order: 012210909

CustomerID: LANG49

CustomerPO:

ProjectID:

Attn: **Tess Reardon**  
**Langan Engineering**  
**300 Kimball Drive**  
**Parsippany, NJ 07054**

Phone: (973) 560-4900  
 Fax: (201) 794-7501  
 Received: 07/14/22 9:10 AM

Project: **CB House****Analytical Results**

**Client Sample Description** PCB-3  
 Basement - exterior  
**Collected:** 7/13/2022 1:30:00 PM  
**Lab ID:** 012210909-0003

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
<b>GC-SVOA</b>					
3546/8082A	Aroclor-1254	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1260	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1262	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1268	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL

**Client Sample Description** PCB-4  
 Basement - exterior  
**Collected:** 7/13/2022 1:40:00 PM  
**Lab ID:** 012210909-0004

Method	Parameter	Result	RL Units	Prep Date & Analyst	Analysis Date & Analyst
<b>GC-SVOA</b>					
3546/8082A	Aroclor-1016	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1221	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1232	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1242	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1248	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1254	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1260	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1262	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL
3546/8082A	Aroclor-1268	ND	0.25 mg/Kg	7/19/2022 AJ	07/22/22 0:00 TL

**Definitions:**

MDL - method detection limit

J - Result was below the reporting limit, but at or above the MDL

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit (Analytical)

D - Dilution Sample required a dilution which was used to calculate final results



## EMSL Chain of Custody - One Chain

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.  
200 Route 130 North  
Cinnaminson, NJ 08077PHONE: (800) 220-3675  
EMAIL: CinnAslab@EMSL.comEMSL ANALYTICAL, INC.  
TESTING LABS • PRODUCTS • TRAINING

012210909

If Bill-To is the same as Report-To leave this section blank. Third-party billing requires written authorization.

Customer Information	Customer ID:	Billing ID:
	Company Name: <i>Langan</i>	Company Name: <i>Same as customer info</i>
	Contact Name: <i>Tess Reardon</i>	Billing Contact:
	Street Address: <i>1300 Wilson Blvd, Suite 450</i>	Street Address:
	City, State, Zip: <i>Arlington VA 22209</i>	City, State, Zip:
	Country: <i>US</i>	Country:
Phone: <i>571-329-9485</i>	Phone:	
Email(s) for Report: <i>trier.don@langan.com</i>	Email(s) for Invoice:	

## Project Information

Project Name/No: <i>CB House</i>	Purchase Order:
EMSL LIMS Project ID: (If applicable, EMSL will provide)	US State where samples collected: <i>MD</i>
State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)	
Sampled By Name: <i>T. Reardon</i>	Sampled By Signature: <i>Tess Reardon</i>
No. of Samples in Shipment: <i>4</i>	

Turn-Around-Time (TAT)  
☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 32 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☐ 2 Week

Please call ahead for large projects and/or turnaround times 6 Hours or Less. \*32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

<b>PCM Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> NIOSH 7400 w/ 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> POINT COUNT <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) <input type="checkbox"/> POINT COUNT w/ GRAVIMETRIC <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) <input type="checkbox"/> NYS 198.1 (Friable - NY) <input type="checkbox"/> NYS 198.6 NOB (Non-Friable - NY) <input type="checkbox"/> NYS 198.8 (Vermiculite SM-V) <input type="checkbox"/> Positive Stop - Clearly Identified Homogeneous Areas (HA)	<b>ASBESTOS</b> <b>TEM - Air</b> <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312* <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (Non-Friable-NY) <input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%) <b>Other Test (please specify)</b> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <i>✓ PCB by 8082A/SU-84/6</i> </div>	<b>TEM - Settled Dust</b> <input type="checkbox"/> Microvac - ASTM D5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Qualitative via Filtration Prep <input type="checkbox"/> Qualitative via Drop Mount Prep <b>Soil - Rock - Vermiculite (reporting limit)*</b> <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.25%) <input type="checkbox"/> PLM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM EPA 600/R-93/116 with milling prep (<0.1%) <input type="checkbox"/> TEM Qualitative via Filtration Prep <input type="checkbox"/> TEM Qualitative via Drop Mount Prep
---	--	--

\*Please call with your project-specific requirements.

<b>LEAD (PB)</b> <b>Flame Atomic Absorption</b> <input type="checkbox"/> Chips SW846-7000B or AOAC 974.2 <input type="checkbox"/> Soil SW846-7000B/7420 <input type="checkbox"/> Air NIOSH 7082 <input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420 <input type="checkbox"/> ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> non-ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> TCLP SW846-1311/ 7420/ SM3111B	<b>ICP</b> <input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%) <input type="checkbox"/> Chatfield SOP	<b>MAT-SCI (TAT End of Business Day)</b> <input type="checkbox"/> Common Particle ID (large particles) <input type="checkbox"/> Full Particle ID (environmental dust) <input type="checkbox"/> Basic Material ID (solids) <input type="checkbox"/> Advanced Material ID <input type="checkbox"/> Physical Testing (Tensile, Compression) <input type="checkbox"/> Combustion-By-Products (Soot, Char, Etc.) <input type="checkbox"/> X-Ray Fluorescence (elem. Analysis) <input type="checkbox"/> X-Ray Diffraction (Crystalline Part.) <input type="checkbox"/> MMVF's (Fibrous Glass, RCF's) <input type="checkbox"/> Particle Size (Sieve, Microscopy, Laser) <input type="checkbox"/> Combustible Dust <input type="checkbox"/> Petrographic Examination
---	---	--

<b>MICROBIOLOGY</b> <b>Swab and Bulk Samples</b> <input type="checkbox"/> Mold & Fungi - Direct Examination <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi Culture (Genus & Species) <input type="checkbox"/> Bacterial Count & ID (Up to 3 Types) <input type="checkbox"/> Bacterial Count & ID (Up to 5 Types) <b>Sewage Screen</b> <input type="checkbox"/> Sewage Screen (P/A) <input type="checkbox"/> Sewage Screen (Membrane Filtration) <b>Water Samples</b> <input type="checkbox"/> Total Coliform & E. Coli (P/A, SM 9223B) <input type="checkbox"/> Heterotrophic Plate Count (PP, SM 9251B) <input type="checkbox"/> Fecal Coliform (SM 9222D)	<b>Air Samples</b> <input type="checkbox"/> Mold & Fungi (Spore Trap) <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi Culture (Genus & Species) <input type="checkbox"/> Bacterial Count & ID (Up to 3 Types) <input type="checkbox"/> Bacterial Count & ID (Up to 5 Types) <b>DNA &amp; PCR Testing:</b> (See Analytical Guide for Code) Test Code: <b>Legionella:</b> (See Analytical Guide for Code) Test Code: <b>P/A= Presence/Absence, PP= Pour Plate</b>	<b>IAQ (TAT End of Business Day)</b> <input type="checkbox"/> Nuisance Dust <input type="checkbox"/> NIOSH 0500 <input type="checkbox"/> NIOSH 0600 <input type="checkbox"/> Airborne Dust <input type="checkbox"/> PM10 <input type="checkbox"/> TSP Silica Analysis: <input type="checkbox"/> All Species Silica Analysis - Single Species <input type="checkbox"/> Alpha Quartz <input type="checkbox"/> Cristobalite <input type="checkbox"/> Tridymite <input type="checkbox"/> HVAC Efficiency <input type="checkbox"/> Carbon Black <input type="checkbox"/> Airborn Oil Mist Radon Testing: Call for Kit and COC
--	--	---

## Other Test (please specify)

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment: <i>FedEx</i>	Sample Condition Upon Receipt:
Relinquished by: <i>Tess Reardon</i>	Date/Time: <i>7/13/22 1500</i>
Relinquished by:	Date/Time:
Received by: <i>Colleen Kallisch</i>	Date/Time: <i>7/14/22 9:10AM</i>
Received by:	Date/Time:





EMSL Order Number / Lab Use Only

EMAIL: [CinnaminsonLeadLab@emsl.com](mailto:CinnaminsonLeadLab@emsl.com)

012210909

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time:	Received by:	Date/Time
Relinquished by:	Date/Time:	Received by:	Date/Time

Controlled Document - COC-25 Lead R16 4/19/2021

☐ **AGREE TO ELECTRONIC SIGNATURE** (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.