

Request for Proposals
General Contractor

Library Addition and Restoration
for the Town of Johnson, Library Building

CALENDAR OF EVENTS / RFP TIMELINE

Listed below are the important dates and times by which the actions noted must be completed. All dates are subject to change by the TOWN OF JOHNSON. If the TOWN OF JOHNSON finds it necessary to change any of these dates or times prior to the due date, the change will be accomplished by addendum.

ACTION Issue RFP	COMPLETION DATE
	11/7/202
Last Day for Questions	11/17/2025 at 4:00pm
Addendums Posted (If Necessary)	
Submission Deadline	11/28/2025 4:00pm
Mandatory Site Visit	11/14/2025 10:00am
Vendor Presentations	As requested by vendor, not required
Private Opening and Review	11/28/2025 4:00pm
Public Review and Award	12/1/2025 6:30pm
TO BE CONSIDERED: PROJECT MUST BE COMPLETED BY 10/1/2026	TO BE CONSIDERED: PROJECT MUST BE COMPLETED BY 10/1/2026

Request for Proposals General Contractor

Library Addition and Restoration for the Town of Johnson, Library Building

townofjohnson.com

The Town of Johnson requests proposals from qualified Concrete Contractors to construct a new foundation under the relocated Johnson Public Library.

Background:

The Johnson Public Library has been relocated to 73 School Street in Johnson, Vermont. The building is sitting on a new foundation. The Building is ready for interior restoration from flood damage. The building is also ready to receive its new addition. The foundation has been poured and is ready to accept the framing of the new addition.

The Building:

Johnson Public Library
73 School Street
Johnson, Vermont, 05656

The building is roughly 40' x 45'. The addition is approximately 40' x 60'. Please refer to the attached bid specifications for construction.

Contractors submitting a proposal will be expected to be able to:

- Provide a bid to construct the Library Addition and Restoration as specified.
- Provide the bid response sheet.
- Work with the Architect and Engineers to ensure the buildings are completed to specification.
- Provide examples of Contracting for other municipalities or government buildings.
- Clean up daily and after construction and ensure a safe construction zone throughout the construction.
- Work with Town staff and representatives to address any concerns that may arise.
- Attend the Site Visit on **5/5/25 at 4:00pm**
73 School Street, Johnson, Vermont 05656
- Maintain General Liability Insurance, and sign the Town of Johnson's Non-Employee Work Agreement

This request for proposal includes the following work; to be considered, your bid must contain all work included in this bid and drawing specifications provided.

General Contractors will:

- Be responsible for the Project Management, day-to-day construction, and coordination of the entire project.
- Complete both sections of the building in accordance with the specifications provided.
- Frame and finish the addition to the Library.
- Restore the interior of the Historic Library.
- Repoint any cracks in the exterior masonry of the Historic Library
- Extend the chimney and liner and enclose in wood with siding per specification.
- Install all plumbing, electrical, and mechanical per specification.
- Provide any temporary heat required for the construction phase.
- Track all expenses separately between the Historic Building and the Addition.
- Backfill the foundation with a 3:1 grade, approximately 4500 yds. Material to be provided by TOJ.
- Install sidewalks, parking lot, driveway, drainage, stairways and handrails to specifications.
- Work with the Library Trustees and Director to incorporate volunteer efforts for cost reduction and community building opportunities.
- Work with the Library Subcommittee, through the Architect, to consider options for cost reduction throughout the project.
- Complete the entire building, historic and addition, all sitework, and entries for public opening upon completion.
- Will be responsible for all subcontractors while on TOJ property and their work.
- **COMPLETE THE TOTAL PROJECT BY 10/1/2026, DUE TO FUNDING THERE WILL BE NO EXCEPTIONS. ANY SHORTFALL IN TIMING WILL PLACE ALL FINACIAL RESPONSIBILITY RESULTING FROM THE SHORTFALL IN TIMING ON THE CONTRACTOR. This project is grant funded with strict timelines dictating the schedule.**

Any contractor who submits a proposal must be willing and able to fulfill the assigned requirements of this contract and shall follow all Town of Johnson standards for equal-opportunity employment and non-discrimination practices.

Site Visit, Mandatory:

- **11/14/25 at 10:00am 73 School Street, Johnson, Vermont 05656**

Proposal Submittal

If the submitting contractor has not already been employed by the Town of Johnson, the proposal must include a minimum of three professional references or examples of similar work in picture or narrative form.

Please direct any questions regarding proposal submission to the Lead Architect, Paul Trudel, at prt4543@aol.com with CC to Peter Hammond at phammond@townofjohnson.com or 802-888-1275

Completed proposals must be received no later than 11/28/25 at 4pm and delivered by email to:

Paul Trudel
Prt4543@aol.com

AND

Peter Hammond
phammond@townofjohnson.com

Responses must be marked "Library General Contractor"

NOTE: The Town reserves the right to reject any and all proposals. Proposals received after this deadline may be refused and deemed ineligible for consideration.

Selection of Contractor

The Town of Johnson reserves the right to accept a proposal and enter into an agreement as a result of the initial proposals received, or alternatively, it may elect to conduct negotiations with those Bidders as determined by the Town, to be within an acceptable competitive range, or alternatively, to negotiate separately with any Bidders when it is determined to be in the best interest of the Town. In addition, the Town may request that Bidders provide a best and final offer. The Town may negotiate any proposal or best and final offer at any time after the deadline for the submission of proposals.

Proposal Requirements and Examination of Work to be Performed

The contractor is required to thoroughly examine the request for proposal requirements and the work contemplated, and it will be assumed that the contractor has investigated and is satisfied as to the requirements. It is mutually agreed that submission of a request for proposal shall be considered evidence that the contractor has made such examination.

Confidentiality:

Please be advised that all notifications, releases, and addendums associated with this RFP will be posted on-line at townofjohnson.com and copies provided at the Town Clerk's Office where the original solicitation resides. The Town may not attempt to contact consultants with updated information. It is the responsibility of each consultant to provide an email contact and to periodically check their email and the town website for notifications, releases and addendums associated with the RFP. The Town encourages proposals from economically disadvantaged businesses enterprises and consultants shall comply with all federal funding requirements. The Town reserves the right to reject any and all submittals and to make a consultant selection based on the needs and requirements of the Town and may select the consultant that it feels will provide the best value to the Town.

Response Form

COST PROPOSAL RFP Response (Library Addition and Site Work, Historic Renovation)

Addition and Sitework:

1, a, Addition	\$ _____(USD)
1, b, Sidewalks, Stairs, Parking lot, Sitework, Grading of Both Sections	\$ _____
Total for Addition/Sitework	\$ _____

Historic Restoration:

2, a, Interior Restoration, 2 Bathrooms, Artroom with Cabinets, Walls, Refinishing Floors, 2 Closets, All Plumbing, Electrical/Mechanical in Historic Section, Chimney Extension, Gas Insert with Liner, Fire Door, Exterior Door.	\$ _____
2, b, Exterior Masonry Repair	\$ _____
Total	\$ _____
Total Project	\$ _____

Written out Total cost proposal:

_____ Dollars

Recommendations to reduce costs from Contractor, not required for response, please attach a written explanation.

3, a, Concrete Stairs vs Granite	\$ Reduced _____
3, b, Alternative Siding	\$ Reduced _____
3, c, Alternative Trim	\$ Reduced _____
3, d, Building without Cupola	\$ Reduced _____
3, e, Alternative Entry	\$ Reduced _____

Name of Bidding Contractor: _____

Representative: _____

Email: _____

Phone: _____

Signature: _____ Date: _____



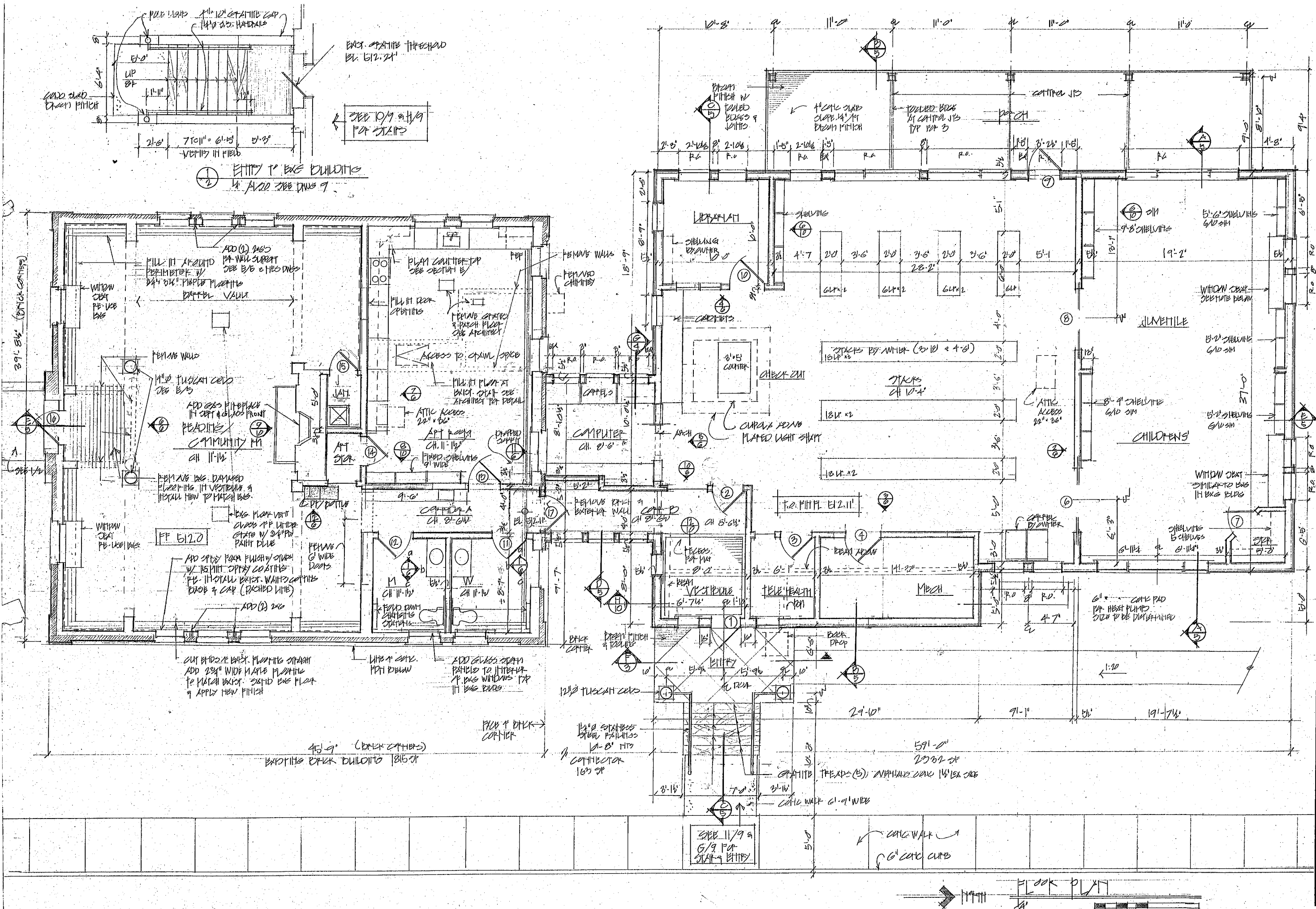
NOTES
1. FIN. PLAN OF ADDITION
TO EXIST. FIN. FLOOR
OF EXIST. BLDG. E12.11
2. DIMENSIONS ARE
GIVEN TO CENTER

PROJECT
JOHNSON PUBLIC
LIBRARY

75 SCHOOL ST.
JOHNSON, VT.

SHEET TITLE
FLOOR PLAN
EXIST. 1815 SF
NEW 2495 SF
TOTAL 4310 SF
SCALE: 1/4" = 1'-0"

2
SEPTEMBER 29, 2015

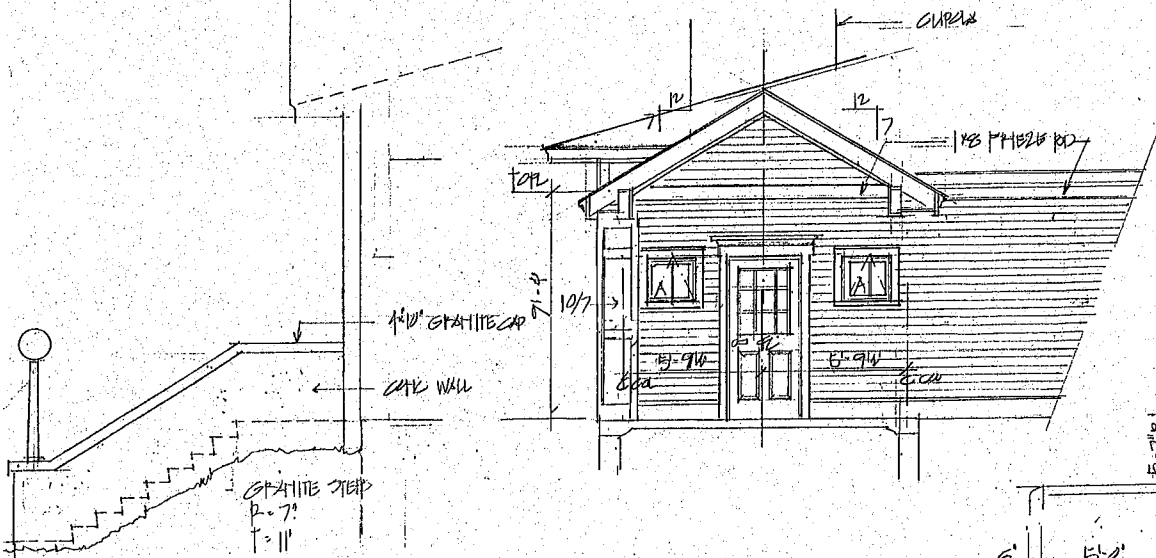


WINDOW SCHEDULE

NO.	QTY.	TYPE	R.O. W/H	REMARKS
A	2	AWH	2'-0" x 2'-0"	U = .29
B	12	DH	2'-10" x 5'-8"	U = .31
C	1	PH+P	5'-8" x 5'-8"	U = .31 + .25 PROVIDE 1 WAY UNIT
D	1	PH+P+DH	5'-8" x 5'-8"	U = .31 + .25 + .31 PROVIDE 1 WAY UNIT
E	1	PH	2'-10" x 2'-10"	U = .31
F	1	CASE	4'-0" x 4'-0"	FIXED U = .20
G	1	CASE	4'-0" x 3'-0"	FIXED U = .20
H	1	TRANSOM	1'-7" x 3'-2"	
I	1	PROVIDE INTERIOR STAIR CASE PANEL		SEE DET 15/7

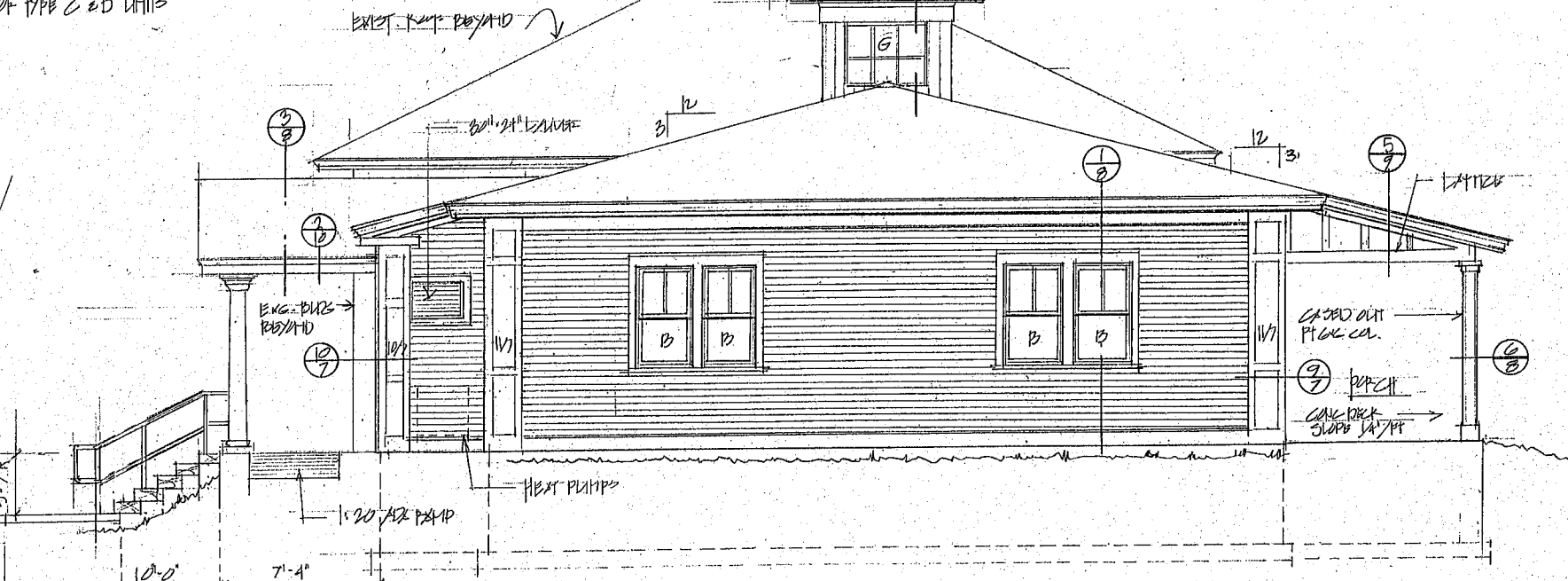
WINDOW NOTES

1. ANTI-SCOT 400 SERIES: WHITE
2. GLAZING: LOW-E w/ HEAT LOSS U = .27
3. FULL DIVIDED LITE w/ SPACER: WHITE ST
4. FULL CASE 1/2 PH+P+DH UNIT
5. HARDWARE: AWHS - TRADITIONAL POLISH
6. INTERIOR UNFINISHED STAIR CASE PANEL
7. PROVIDE VERTICAL FENESTRATION FOR TYPE C & D UNITS

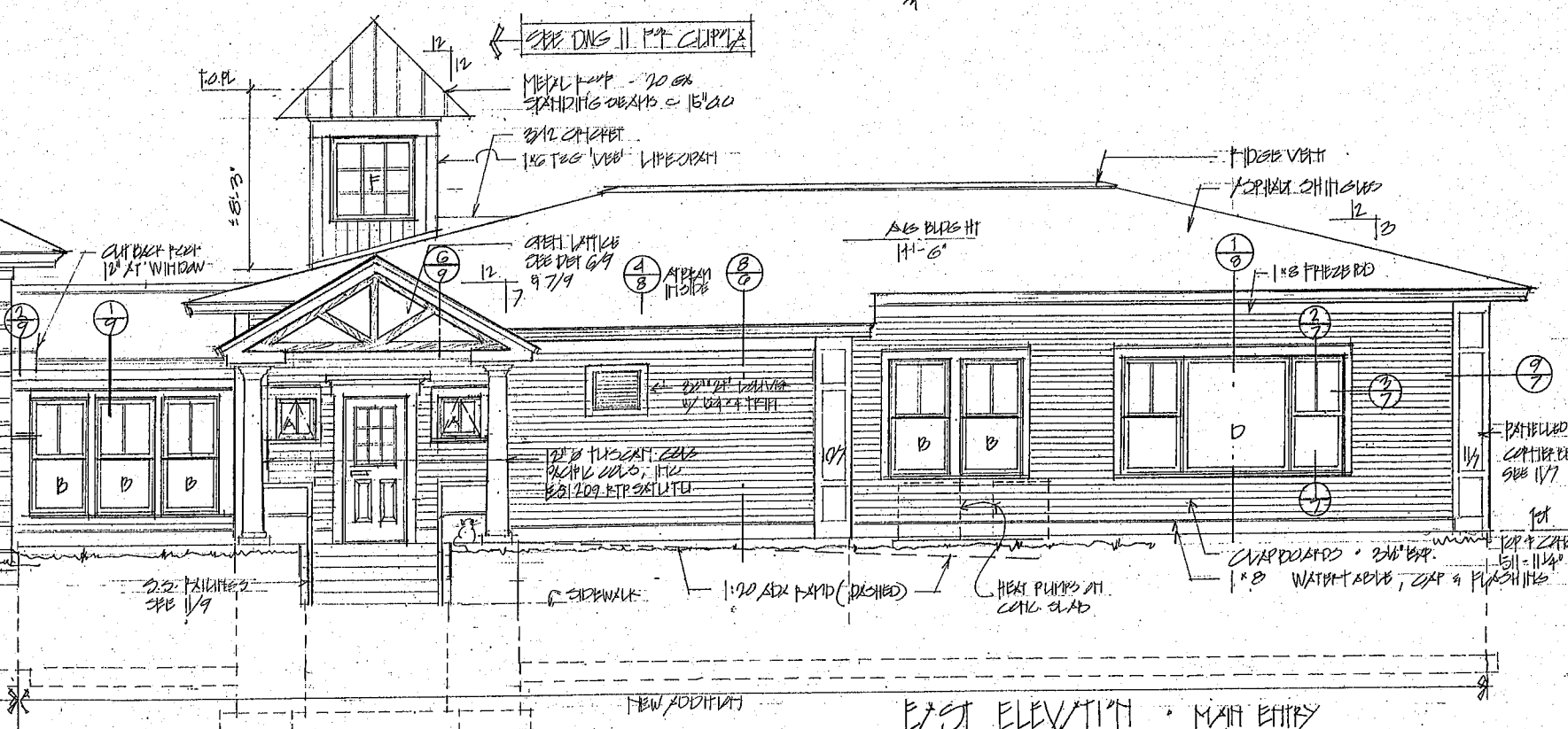
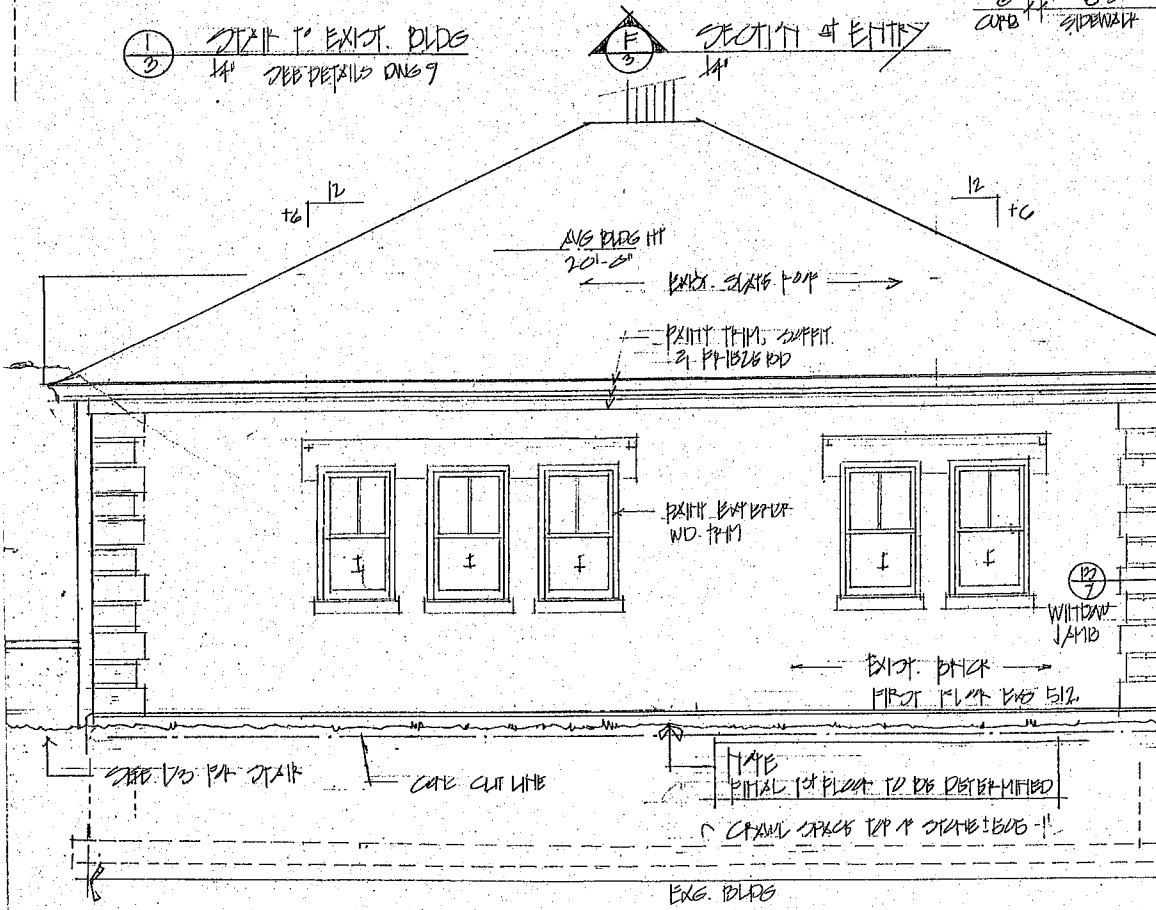


③ STAIR TO EXIST. BLDG
1/4\"/>

SECTION 4 ENTRY
1/4\"/>



NORTH ELEVATION
1/4\"/>



EAST ELEVATION - MAIN ENTRY
1/4\"/>

SRD
SILVER
RIDGE
DESIGN
INCORPORATED
ARCHITECTS

PO Box 32 • 37 Paul Lane
Hyde Park, Vermont 05655
802.888.2400 • 802.888.5073
Fax 802.888.2013



project
JOHNSON PUBLIC
LIBRARY

175 SOUTH ST.
JAHN TOWN, VT.

sheet title
ELEVATIONS

scale: 1/4" = 1'-0"

3

SEPTEMBER 24, 2025



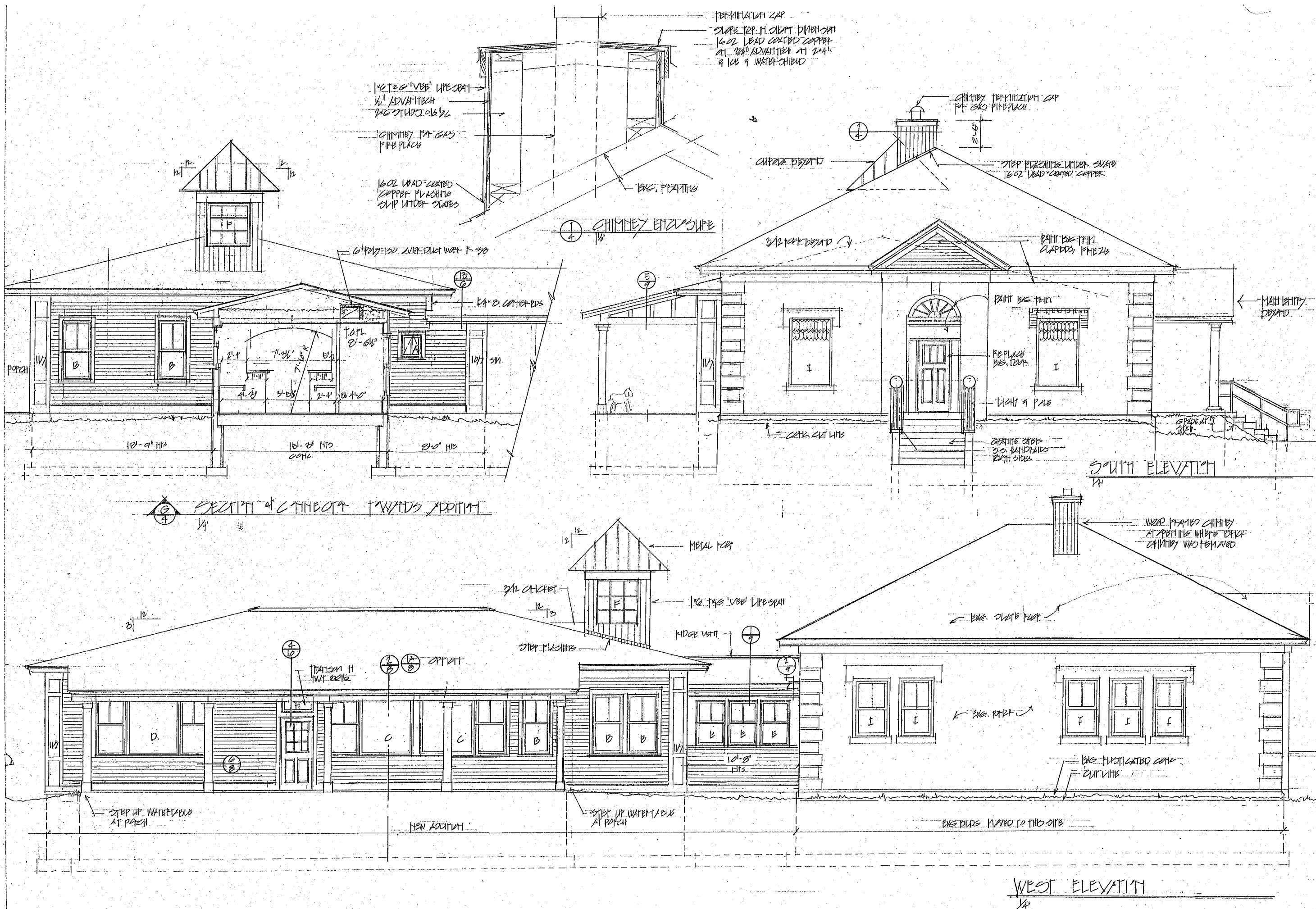
TO SCHOOL
JOHNSON, V.

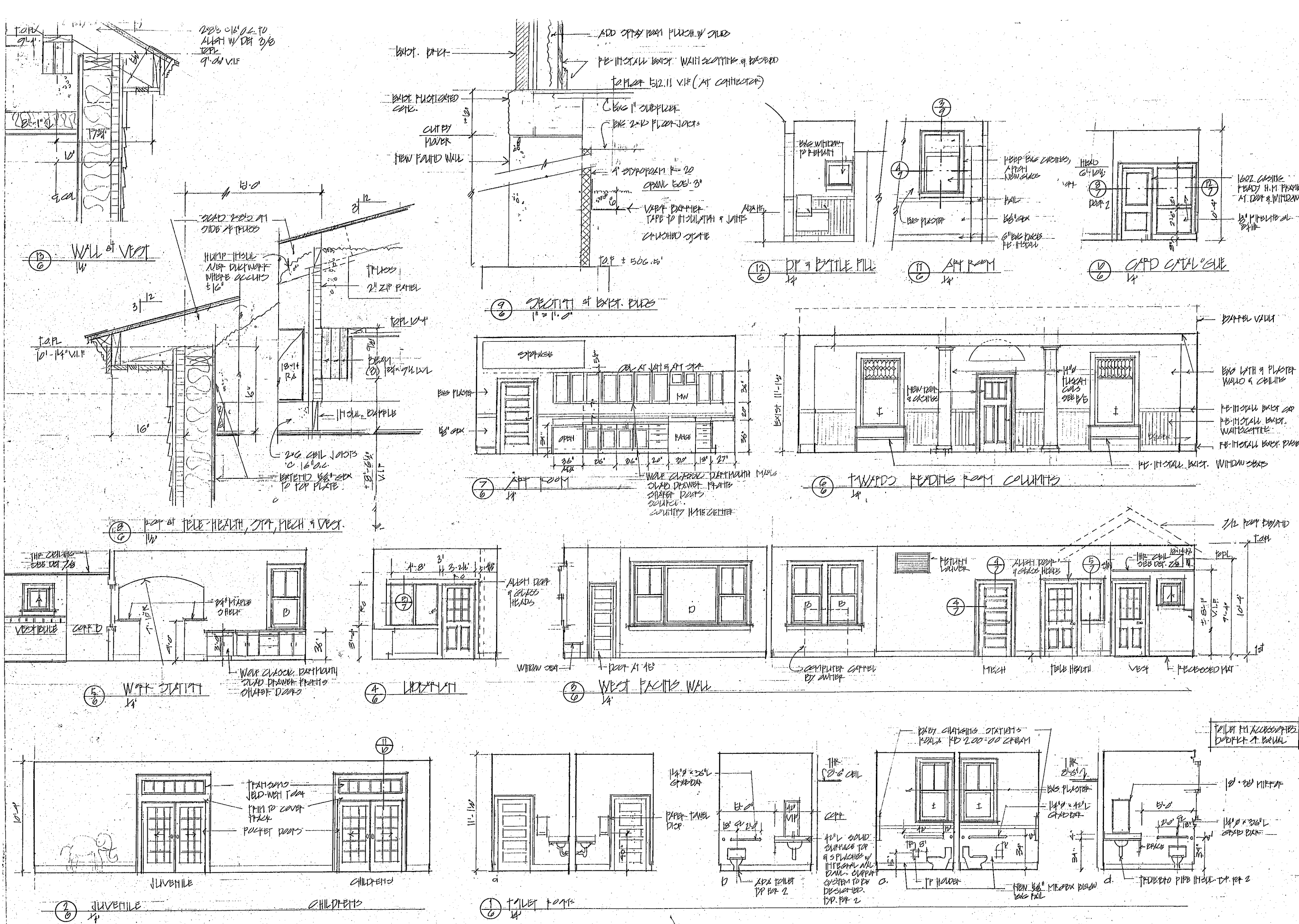
sheet title
ELEVATIONS

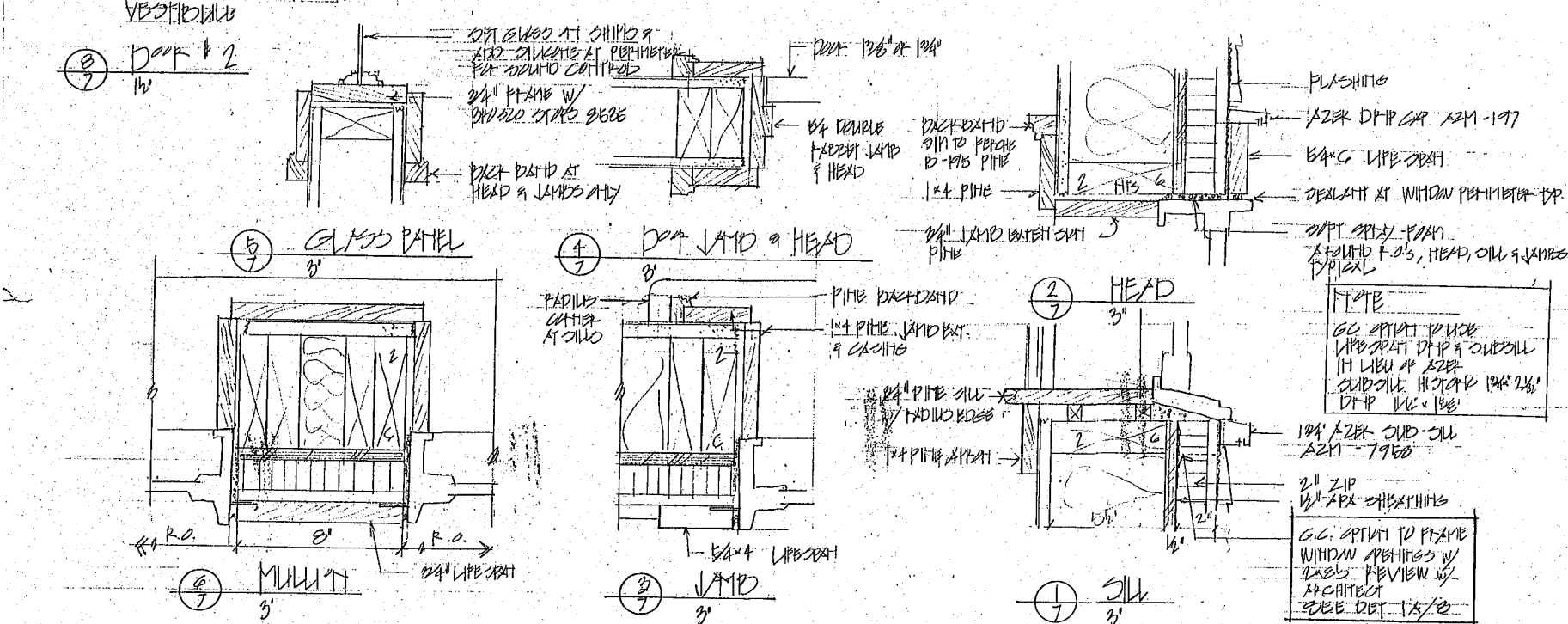
scale: $\|A\| = \|1.0\|$

4

SEPTEMBER 30, 2025

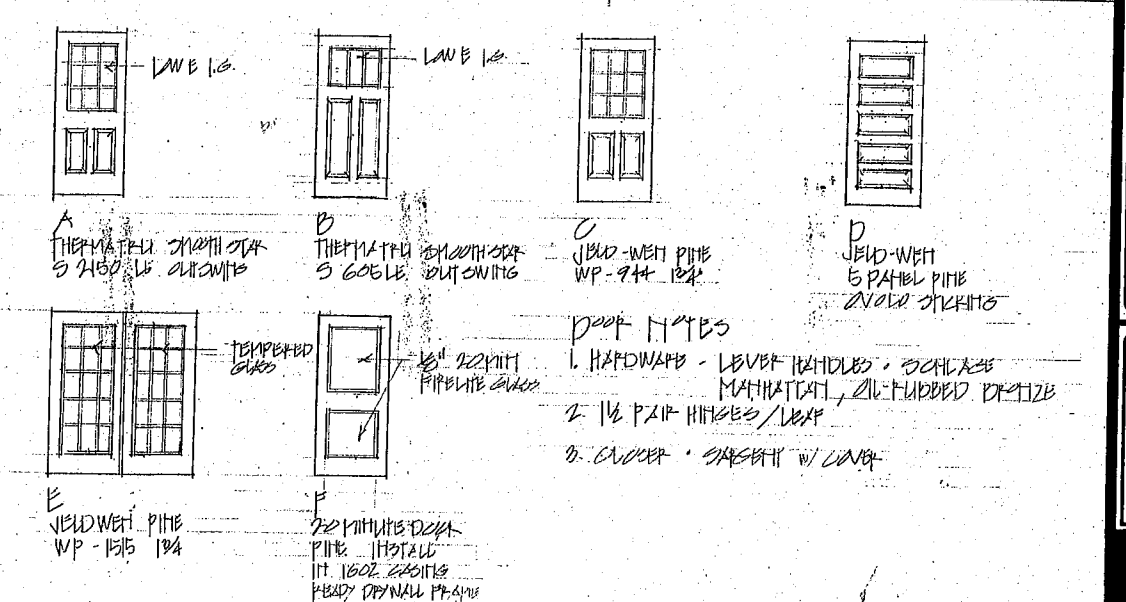


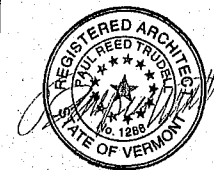




1. MAPLE PLANT - 2nd 2nd CHECK HEAD MAPLE PREPARED SATIN
2. DET. R.O. HEAD IN RY G-10K ABOVE MAPLE PLANT (C-1=114" ABOVE 1/2" SPARKTECH SUD PLANT)
3. BKG. WASHCOTTING, CAP & DASH BOARD STAYED OFF SATIN

DOOR SCHEDULE					
NO	SIZE	TYPE	DETAIL	LOCK SET	REMARKS
1	8'0" x 6'0" x 1 3/4"	A	5/10	ENTRY	ADA THREE, WS .P.
2	8'0" x 6'0" x 1 3/4"	F	27 = 12/7	ENTRY	CLOSET, HAT FRAME HAT PH
3	8'0" x 6'0" x 1 3/4"	C	47	PACASE	HAT PH
4	8'0" x 6'0" x 1 3/4"	D	47	GLASS	THREE-SIDE HAT PH
5	HAT HOB				
6	PR 8'0" x 6'0" x 1 3/4"	E	1/10		HEAVY DUTY PRCT, MINSET PLUGS, HAT PH
7	8'0" x 6'0" x 1 3/4"	D		GLASS	HAT PH
8	PR 8'0" x 6'0" x 1 3/4"	E	1/10		HEAVY DUTY PRCT, MINSET PLUGS HAT PH
9	8'0" x 6'0" x 1 3/4"	A	40	ENTRY	ADA THREE, PRCTIC, WS .P
10	8'0" x 6'0" x 1 3/4"	C	47	APPLE	HAT PH
11	8'0" x 6'0" x 1 3/8"	D	47	PRIVACY	HAT PH
12	8'0" x 6'0" x 1 3/8"	D	47	PRIVACY	HAT PH
13	8'0" x 6'0" x 1 3/8"	D	47	GLASS	HAT PH
14	8'0" x 6'0" x 1 3/8"	D	47	PACASE	HAT PH
15	ENG 2'				TO USE ENG DOOR E. HALLWAY
16	8'0" x 6'0" x 1 3/4"	D		ENTRY	ADA THREE, WS .P
17	8'0" x 6'0" x 1 3/4"	F	10/7	HOOKER	CLOSET, HAT FRAME HAT PH.





project
JOHNSON PUBLIC
LIBRARY

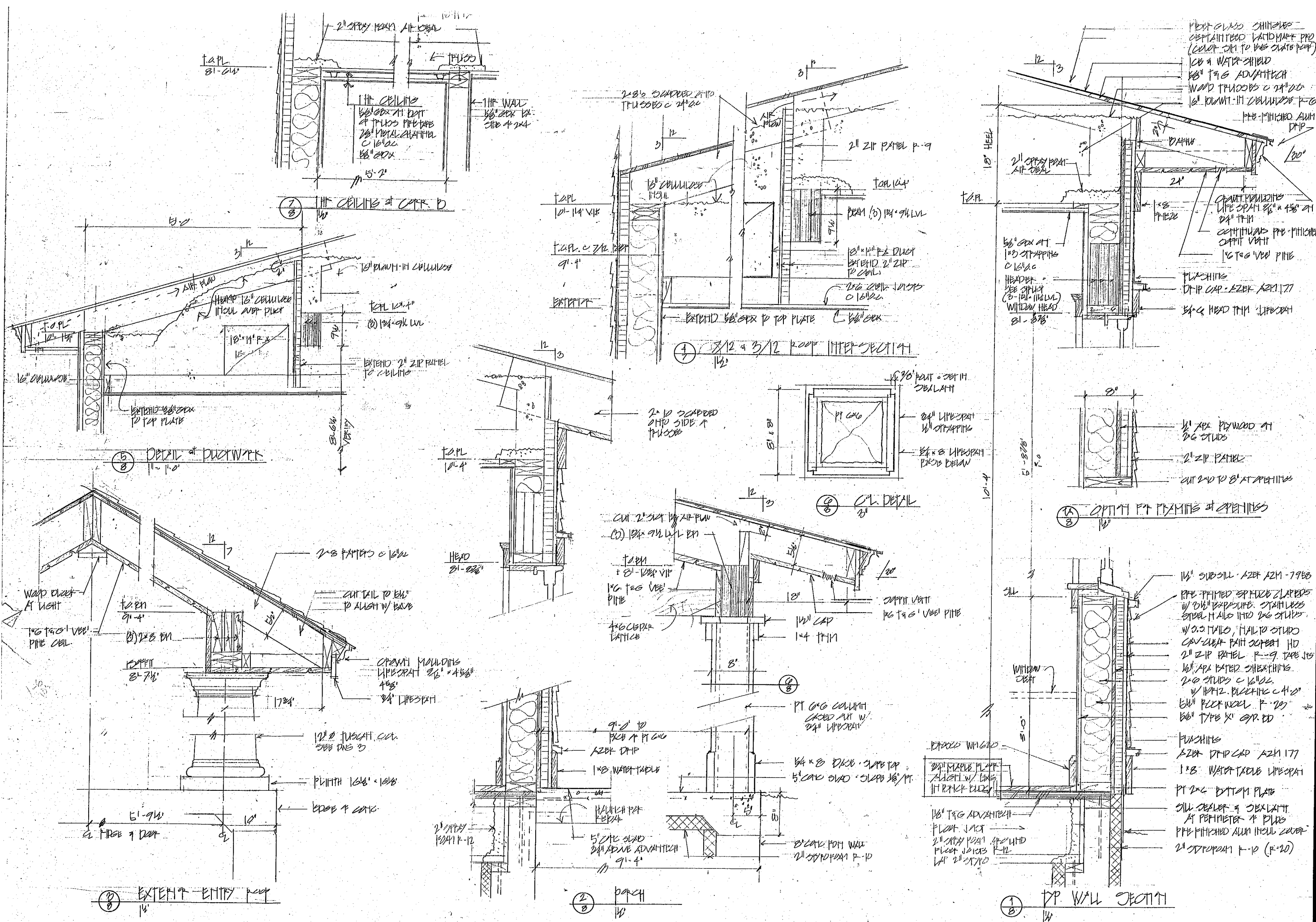
10 SCHOOL ST
JOHNSON, VT

sheet title
WALL SECTIONS

scale: AS NOTED



SEPTEMBER 24, 2025

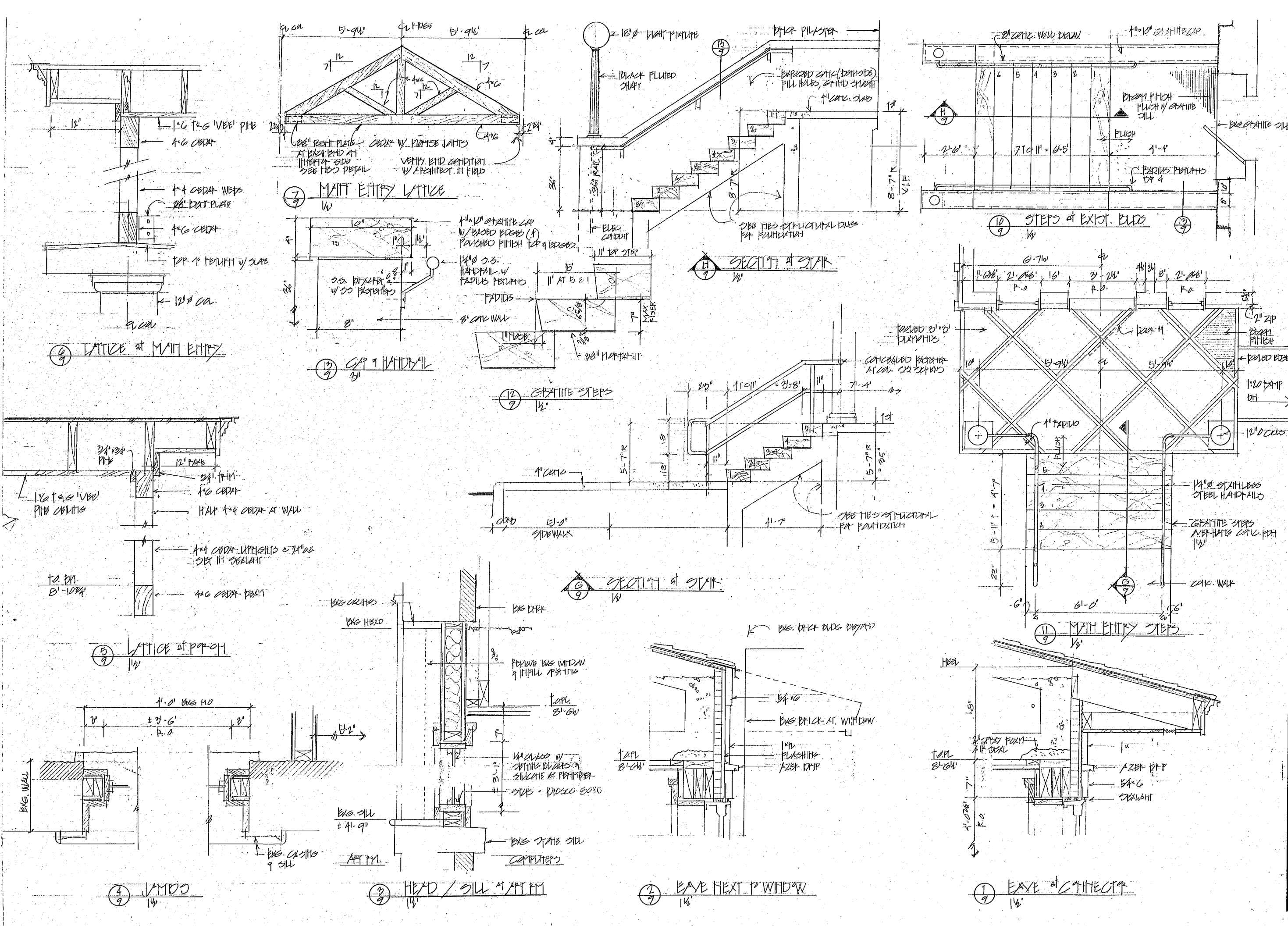


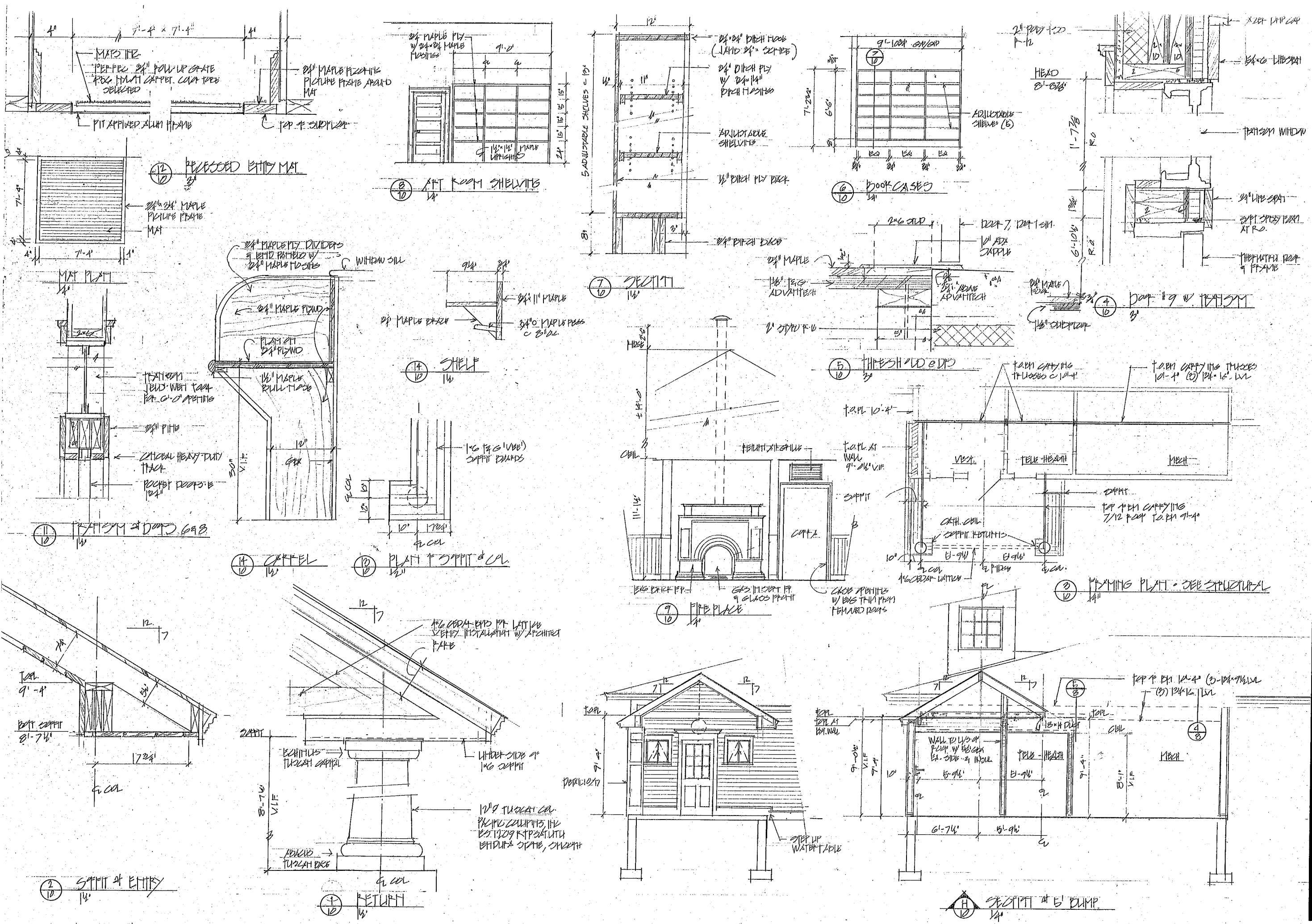


project
**JOHNSON PUBLIC
LIBRARY**
73 SCHOOL ST.
JOHNSON, VT

sheet title
DETAILS

scale: AS NOTED





SRD
SILVER
RIDGE
DESIGN
INCORPORATED
ARCHITECTS

PO Box 32 • 37 Paul Lane
Hyde Park, Vermont 05655
802.888.2400 • 802.888.5073
Fax 802.888.2013

REGISTERED ARCHITECT
PAID FEE TRUST
No. 1288
STATE OF VERMONT

project
JOHNSON PUBLIC
LIBRARY

73 SCHOOL ST
DUNSTON, VT.

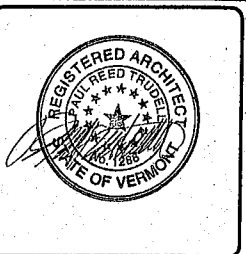
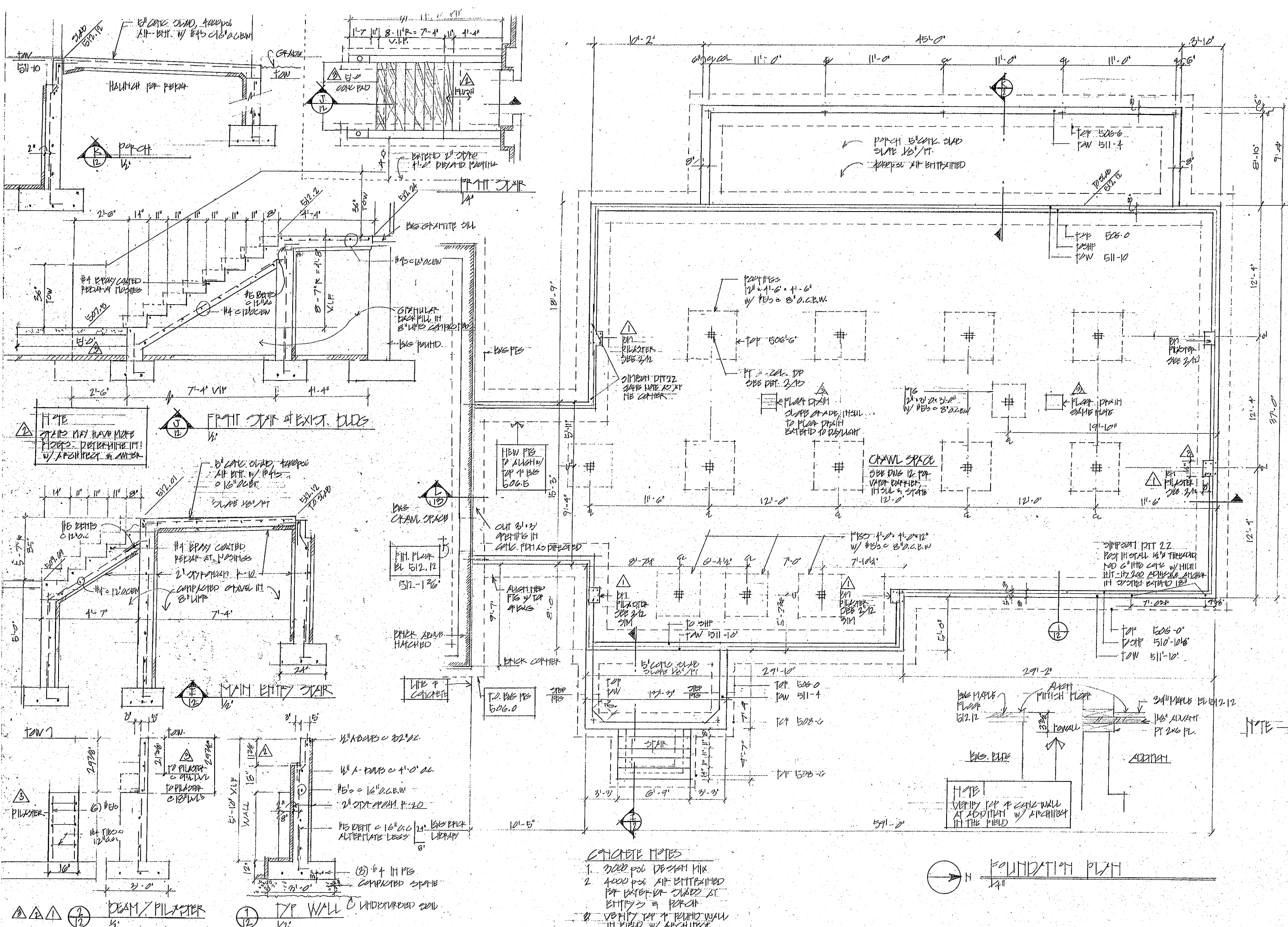
sheet title
DETAILS

scale: AS SHOWN

10

SEPTEMBER 30, 2008

SEPTEMBER 30, 2025



REVISIONS
1. 12-25 ADD PILE CAPS FOR INSULATION
2. 12-25 PILE CAPS
3. 12-25 PILE CAPS FOR CHAIR BAR EXTEND TO 12"

project
JOHNSON PUBLIC LIBRARY

73 School St.
JAHNSEN, VT.

sheet title
FOUNDATION PLAN
DRAWING ISSUED FOR
CONSTRUCTION
WORK BY OTHERS

scale: AS NOTED

12

DECEMBER 30, 2015



REVISIONS

- 9.22.24 ADD PLASTER
FLOOR INSULATION
PT 8 & 9
- 10.2.25 BEAMS AND
JOIST SIZE
7" x 7" VERTICAL LAM
DET 4/2

project

JOHNSON PUBLIC
LIBRARY

75 SCHOOL ST.
JOHNSON, VT.

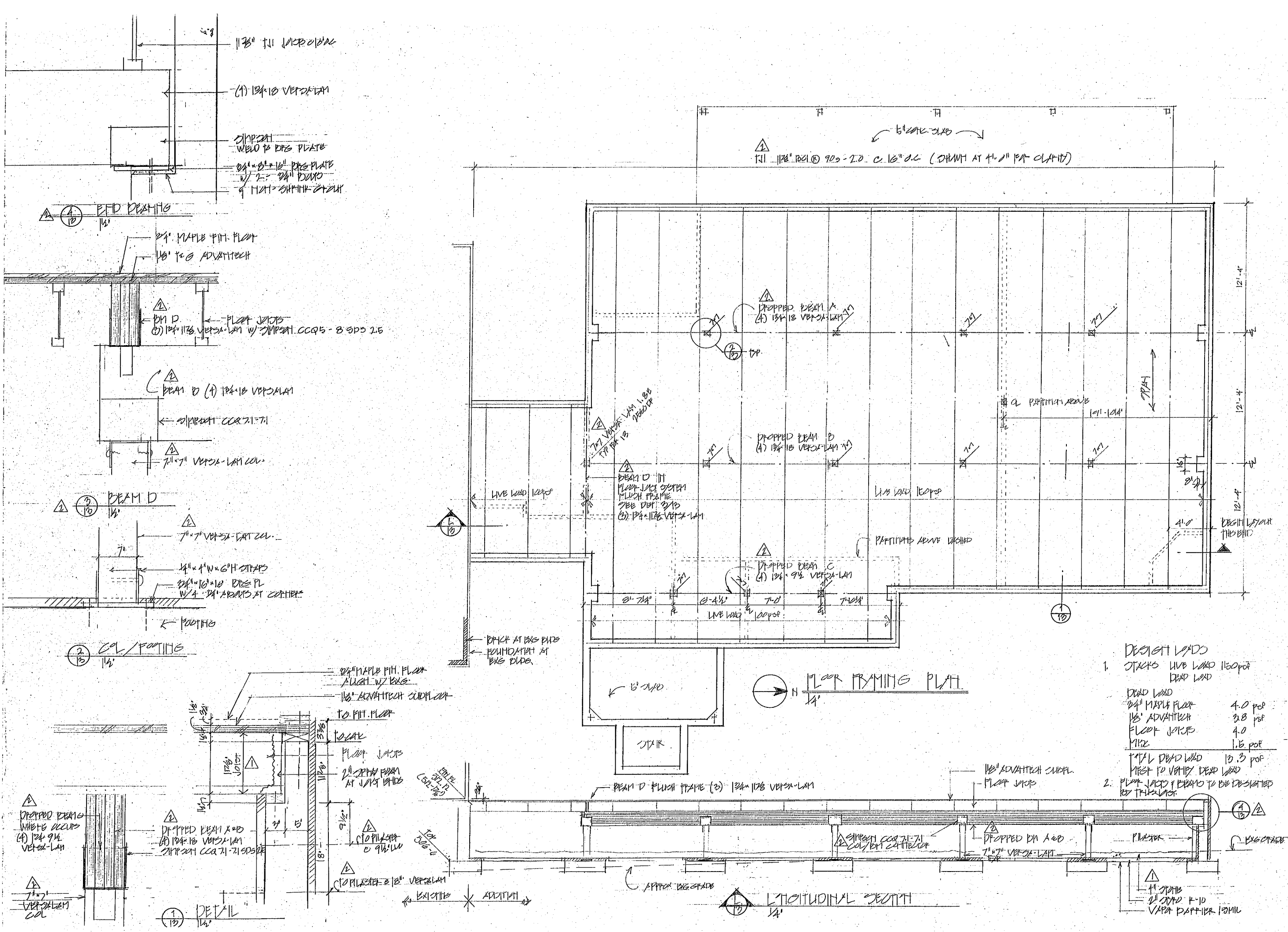
sheet title

FLOOR FRAMING
PLAN

scale: AS NOTED

13

SEPTEMBER 30, 2025



AGGREGATES, FREE OF ORGANIC MATTER OR OTHER NON-AGGREGATE MATERIALS:
• STRUCTURAL FILL: WELL GRADED SAND OR CRUSHER RUN GRAVEL

SIEVE	%PASSING
2"	100
1 1/2"	90-100
NO. 4	30-60
NO. 100	0-12
NO. 200	0-8

• CLEAN CRUSHED STONE: 3/4" CLEAN CRUSHED STONE

SIEVE	%PASSING
1"	100
3/4"	90-100
3/8"	20-55
NO. 4	0-10
NO. 8	0-5

• CLEAN CRUSHED STONE: 1 1/2" CLEAN CRUSHED STONE

SIEVE	%PASSING
2"	100
1 1/2"	95-100
3/4"	35-70
3/8"	10-30
NO. 4	0-5

• GRANULAR BACKFILL: WELL GRADED GRANULAR MATERIAL

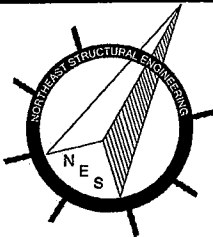
SIEVE	%PASSING
3"	100
NO. 4	45-75
NO. 100	0-12
NO. 200	0-6

1

SSK-2

Corrected - Site Material Specification

Not To Scale



Library Site Material Spec

SSK-2

Town Of Johnson

Corner of School St and George Hill Rd, Johnson, VT

NES PROJECT NO: 25016
DATE: 03/24/2025
DESIGNED BY: AD/BD

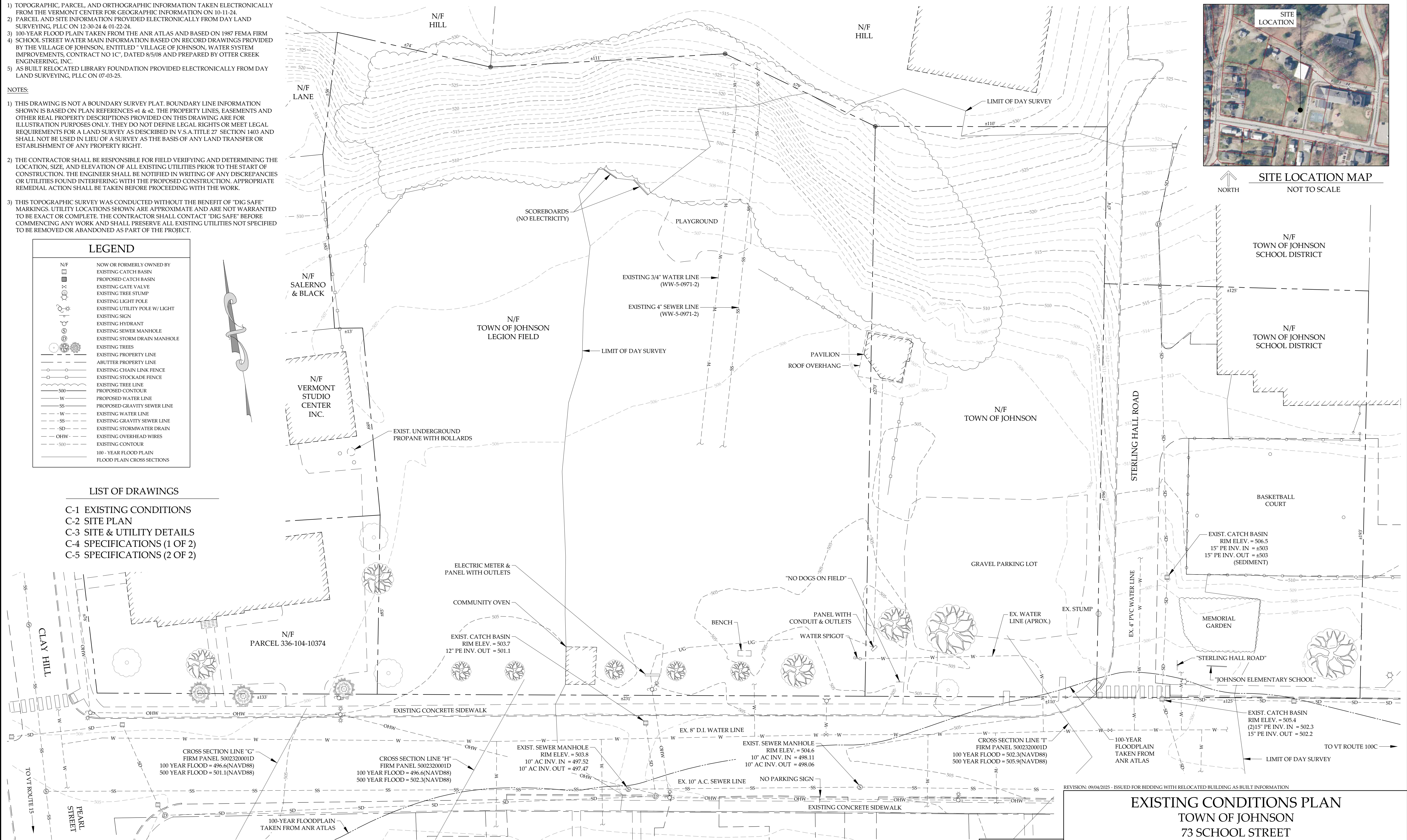
© Northeast Structural Engineering, PLLC 2025

- 1) TOPOGRAPHIC, PARCEL, AND ORTHOGRAPHIC INFORMATION TAKEN ELECTRONICALLY FROM THE VERMONT CENTER FOR GEOGRAPHIC INFORMATION ON 10-11-24.
- 2) PARCEL AND SITE INFORMATION PROVIDED ELECTRONICALLY FROM DAY LAND SURVEYING, PLLC ON 12-30-24 & 01-22-24.
- 3) 100 YEAR FLOOD PLAIN TAKEN FROM THE ANR ATLAS AND BASED ON 1987 FMEA FORM 4
- 4) SCHEMATIC DISTRIBUTION INFORMATION BASED ON RECORD DRAWINGS PROVIDED BY THE VILLAGE OF JOHNSON, ENTITLED "VILLAGE OF JOHNSON'S WATER SYSTEM IMPROVEMENTS, CONTRACT NO 1C", DATED 8/5/08 AND PREPARED BY OTTER CREEK ENGINEERING, INC.
- 5) AS BUILT RELOCATED LIBRARY FOUNDATION PROVIDED ELECTRONICALLY FROM DAY LAND SURVEYING, PLLC ON 07-03-25.

- 1) THIS DRAWING IS NOT A BOUNDARY SURVEY PLAT. BOUNDARY LINE INFORMATION SHOWN IS BASED ON PLAN REFERENCES $\frac{1}{4}$ & $\frac{1}{2}$. THE PROPERTY LINES, EASEMENTS AND OTHER REAL PROPERTY DESCRIPTIONS PROVIDED ON THIS DRAWING ARE FOR ILLUSTRATION PURPOSES ONLY. THEY DO NOT DEFINE LEGAL RIGHTS OR MEET LEGAL REQUIREMENTS FOR A LAND SURVEY AS DESCRIBED IN V.S.A. TITLE 27 SECTION 1403 AND SHALL NOT BE USED IN LIEU OF A SURVEY AS THE BASIS OF ANY LAND TRANSFER OR ESTABLISHMENT OF ANY PROPERTY RIGHT.
- 2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCY OR UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION. APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- 3) THIS TOPOGRAPHIC SURVEY WAS CONDUCTED WITHOUT THE BENEFIT OF "DIG SAFE" MARKINGS. UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND ARE NOT WARRANTED TO BE EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT "DIG SAFE" BEFORE COMMENCING ANY WORK AND SHALL PRESERVE ALL EXISTING UTILITIES NOT SPECIFIED TO BE REMOVED OR ABANDONED AS PART OF THE PROJECT.

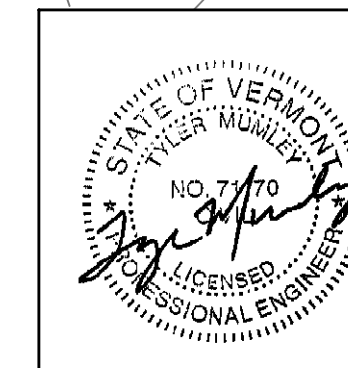
LEGEND	
N/F	NOW OR FORMERLY OWNED BY
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
	EXISTING GATE VALVE
	EXISTING TREE STUMP
	EXISTING LIGHT POLE
	EXISTING UTILITY POLE W/ LIGHT
	EXISTING SIGN
	EXISTING HYDRANT
	EXISTING SEWER MANHOLE
	EXISTING STORM DRAIN MANHOLE
	EXISTING TREES
	EXISTING PROPERTY LINE
	ABUTTER PROPERTY LINE
	EXISTING CHAIN LINK FENCE
	EXISTING STOCKADE FENCE
	EXISTING TREE LINE
	PROPOSED CONTOUR
	PROPOSED WATER LINE
	PROPOSED GRAVITY SEWER LINE
	EXISTING WATER LINE
	EXISTING GRAVITY SEWER LINE
	EXISTING STORMWATER DRAIN
	EXISTING OVERHEAD WIRES
	EXISTING CONTOUR
	100' YEAR FLOOD PLAIN
	FLOOD PLAIN CROSS SECTIONS

C-1 EXISTING CONDITIONS
C-2 SITE PLAN
C-3 SITE & UTILITY DETAILS
C-4 SPECIFICATIONS (1 OF 2)
C-5 SPECIFICATIONS (2 OF 2)


$$\frac{1}{C-1}$$

Graphic Scale

20 0 20 40 80 feet



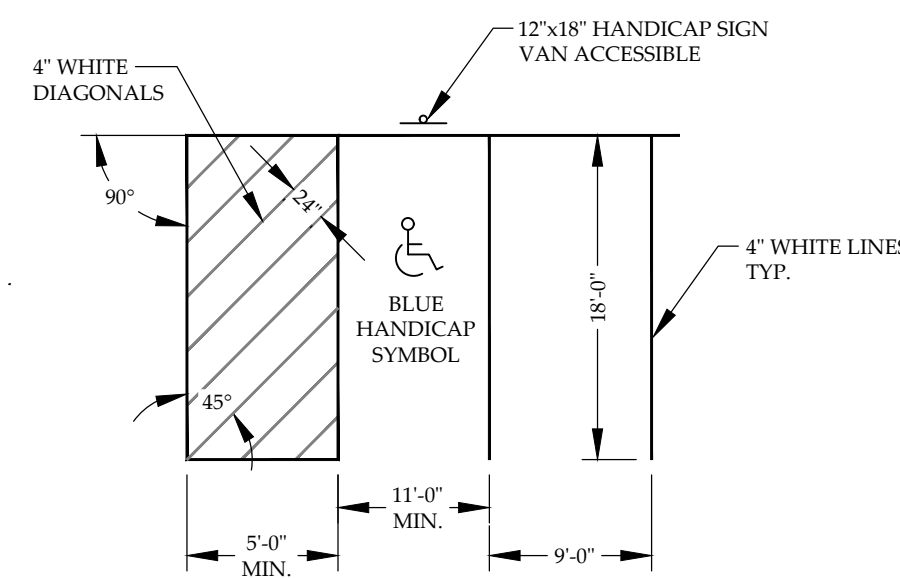
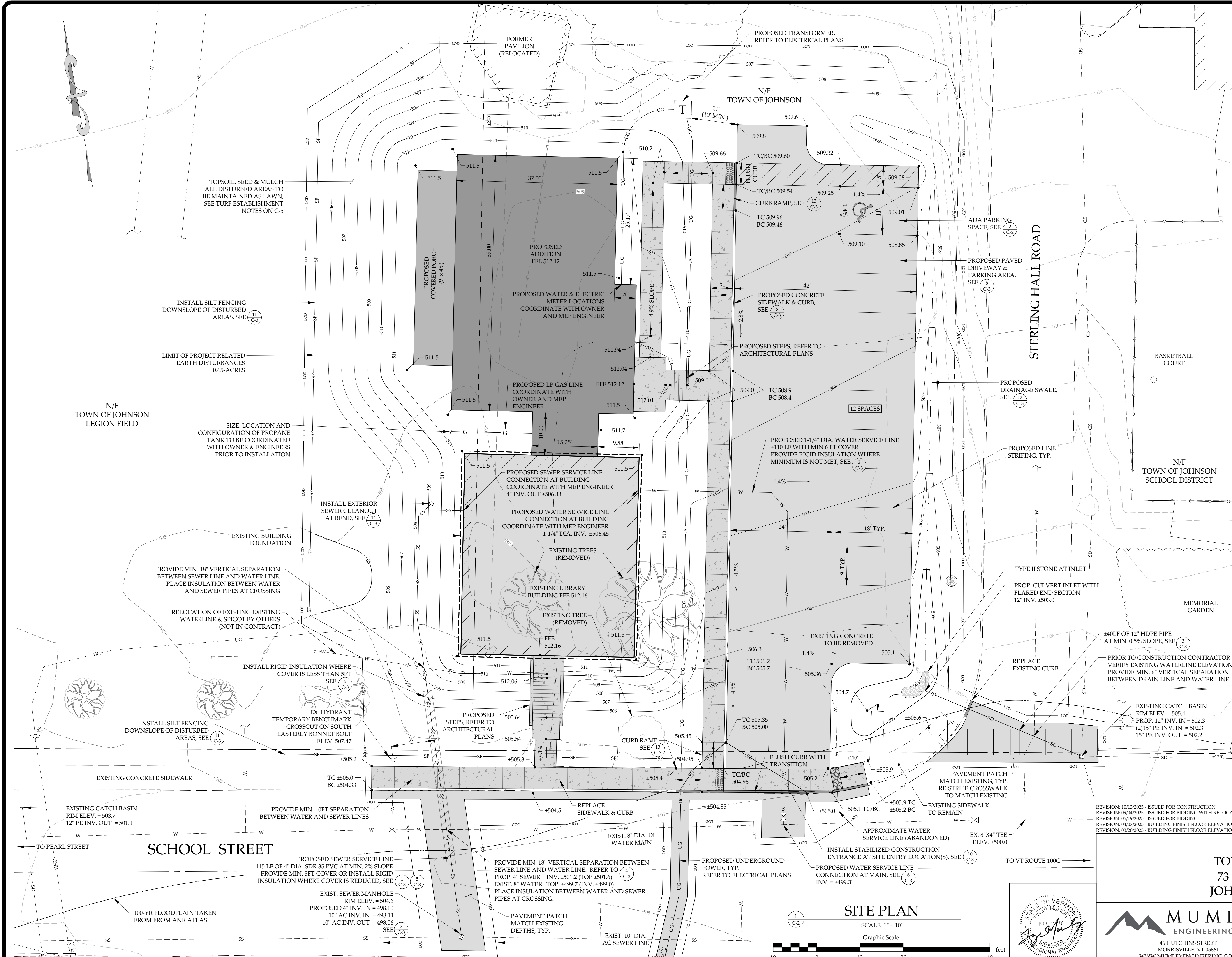
MUMLEY
ENGINEERING, INC.

46 HUTCHINS STREET
MORRISVILLE, VT 05661
WWW.MUMLEYENGINEERING.COM
COPYRIGHT © 2005 - MUMLEY ENGINEERING, INC.

SHEET NO. _____

C-1

OF 5 SHEETS



TYPICAL STANDARD AND HANDICAP PARKING PAVEMENT MARKINGS

NOT TO SCALE

PURPOSE OF PLAN:
RELOCATE EXISTING LIBRARY STRUCTURE AND CONSTRUCT ADDITION WITH NEW MUNICIPAL WATER AND SEWER SERVICE LINE CONNECTIONS

OWNER OF RECORD:
TOWN OF JOHNSON

VT ANR WATER / WASTEWATER DESIGN FLOW BASIS:

LIBRARY EMPLOYEES	2 x 15 GPD
LIBRARY VISITORS	50 x 4 GPD
COMMUNITY ROOM	30 x 30 GPD
TOTAL PROPOSED FLOWS	470 GPD

ZONING SUMMARY:

VILLAGE GENERAL ZONING DISTRICT
LOT SIZE (NO MINIMUM)
LOT COVERAGE (NO MAXIMUM)
BUILD TO LINE - PRINCIPAL 0 FT (MIN) - 4 FT (MAX)
BUILD TO LINE - SECONDARY 0 FT (MIN) - 12 FT (MAX)
PARKING - 1 SPACE / 700 SF OF OCCUPIED SPACE
4,300-SF BUILDING -> 7 SPACES REQUIRED
12 SPACES PROVIDED

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.

NOTIFY ENGINEER OF ANY DISCREPANCIES
COORDINATE MUNICIPAL CONNECTIONS WITH THE VILLAGE WATER/SEWER DEPARTMENT.

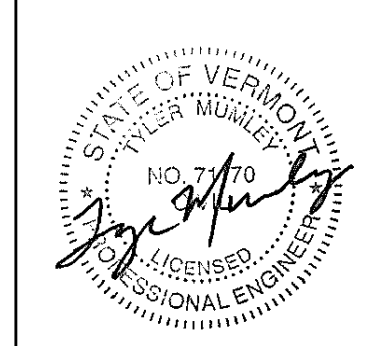
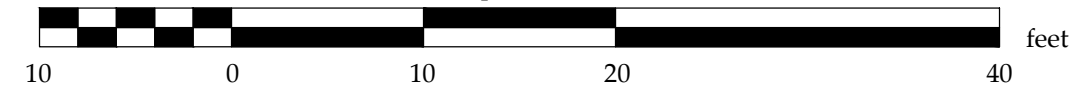
THE CONTRACTOR SHALL IMPLEMENT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES IN CONFORMANCE WITH "THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL", DATED JUNE 2025.

REVISION: 10/13/2025 - ISSUED FOR CONSTRUCTION
REVISION: 09/04/2025 - ISSUED FOR BIDDING WITH RELOCATED BUILDING AS BUILT INFORMATION
REVISION: 05/10/2025 - ISSUED FOR BIDDING
REVISION: 04/07/2025 - BUILDING FINISH FLOOR ELEVATIONS, SITE LAYOUT & GRADING, SEWER DESIGN
REVISION: 03/20/2025 - BUILDING FINISH FLOOR ELEVATIONS & SITE GRADING

SITE PLAN
TOWN OF JOHNSON
73 SCHOOL STREET
JOHNSON, VERMONT

SITE PLAN

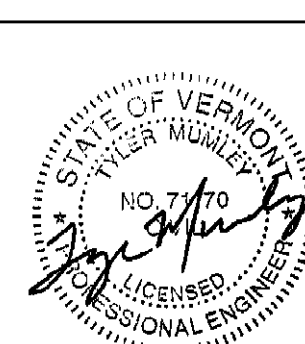
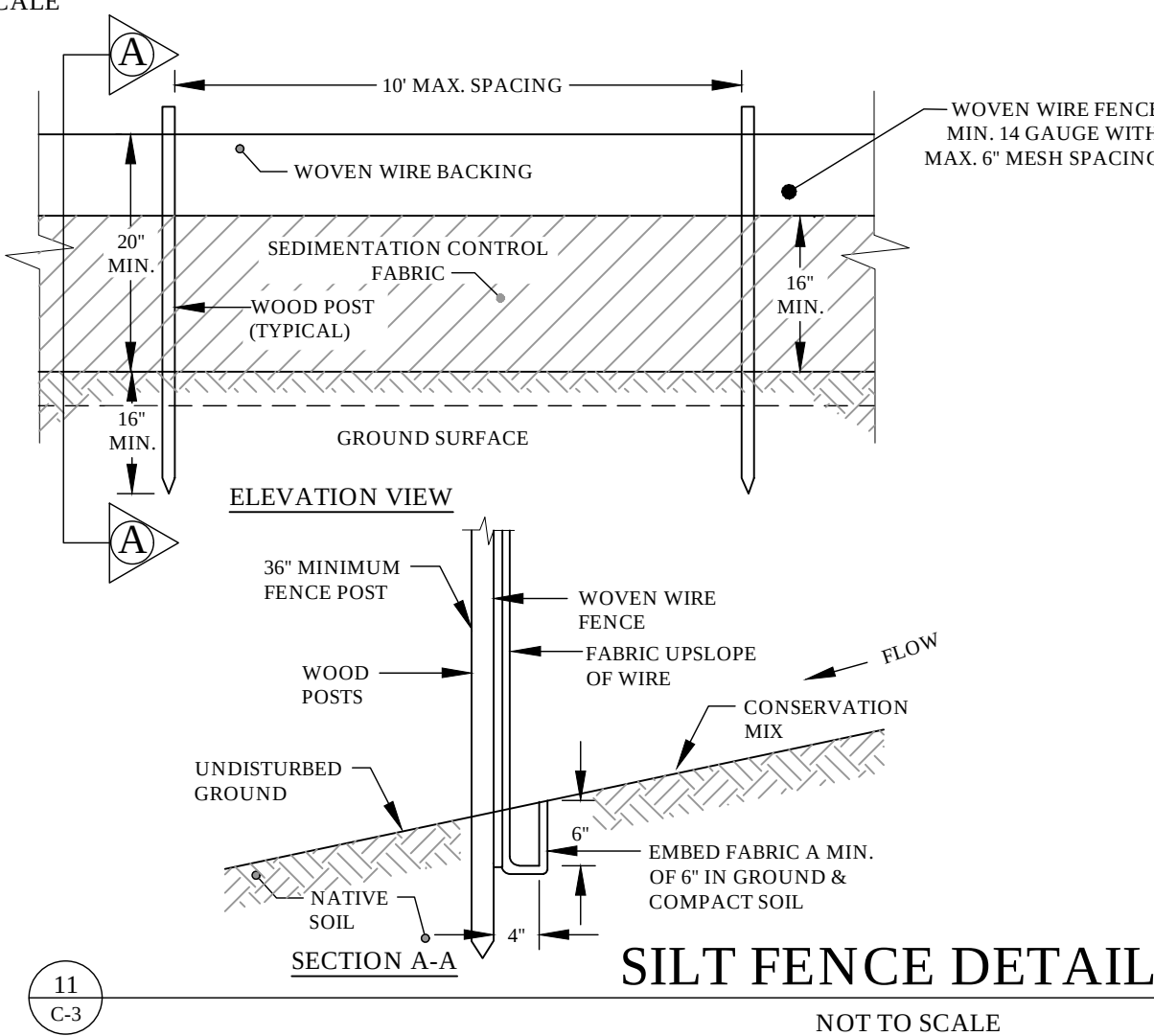
SCALE: 1" = 10'



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ENGINEERING, INC.
46 HUTCHINS STREET
MORRISVILLE, VT 05661
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PROJECT NO. 24128
DRAWN BY WEH
CHECKED BY TRM
SCALE 1" = 10'
DATE 03/12/25

SHEET NO.
C-2
2 OF 5 SHEETS



REVISION: 10/13/2025 - ISSUED FOR CONSTRUCTION

SITE DETAILS
TOWN OF JOHNSON
73 SCHOOL STREET
JOHNSON, VERMONT



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PROJECT NO.....24128
DRAWN BY.....WEH
CHECKED BY.....TRM
SCALE.....AS NOTED
DATE.....03/12/25

SHEET NO.

C-3

3 OF 5 SHEETS

[illegible]

PRE-CONSTRUCTION

1. THE CONTRACTOR SHALL IDENTIFY AN INDIVIDUAL RESPONSIBLE FOR INSPECTING AND MAINTAINING EPSC MEASURES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. ALL SEDIMENT CONTROL MEASURES TO BE CONSTRUCTED PRIOR TO INITIATING PRIMARY EARTHWORK ACTIVITIES.

CONSTRUCTION

3. CONSTRUCTION SCHEDULE AND PHASING SHALL BE COORDINATED TO MINIMIZE CONCURRENT EARTH DISTURBANCE. NOTWITHSTANDING, THE MAXIMUM EARTH DISTURBANCE AT ANY ONE TIME SHALL BE LESS THAN 1.0 ACRES.
4. ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR FINAL STABILIZATION WITHIN 7 DAYS OF THE INITIAL DISTURBANCE. AFTER THIS TIME, ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY. THE FOLLOWING EXCEPTIONS APPLY:
 - 4.1. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
 - 4.2. STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E. NO OUTLETS) WITH A DEPTH OF 2 FEET OR GREATER (E.G. FOUNDATION EXCAVATION, UTILITY TRENCHES).
5. WINTER CONSTRUCTION IS NOT ANTICIPATED FOR THIS PROJECT. IF ANY CONSTRUCTION IS PROPOSED OUTSIDE OF THE GROWING SEASON (OCT 15 - APR 15) APPROPRIATE WINTER

[illegible][illegible]

ALL DISTURBED AREAS THAT DO NOT HAVE AN IMPERVIOUS SURFACE (PAVEMENT, SIDEWALKS, ROOFS) OR ARE NOT LANDSCAPED WITH BARK MULCH, SHALL BE STABILIZED NEW GRASS COVER. ALL SEEDING AND MULCHING FOR ESTABLISHING NEW GRASS COVER SHALL BE COMPLETE PRIOR TO SEPTEMBER 15. PLACEMENT OF TOPSOIL, AND THE APPLICATION OF SEED, FERTILIZER, LIME (WHERE APPLICABLE), AND MULCH SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

1. A MINIMUM OF 4" OF CLEAN TOPSOIL SHALL BE PLACED IN ALL AREAS. PLACEMENT OF TOPSOIL SHALL NOT BE DONE WHEN THE GROUND OR TOPSOIL IS FROZEN, EXCESSIVELY WET, OR OTHERWISE IN A CONDITION DETRIMENTAL TO THE WORK. FOLLOWING PLACEMENT OF TOPSOIL, THE SURFACE SHALL BE RAKED. ALL STONES, LUMPS, ROOTS, OR OTHER OBJECTIONAL MATERIAL SHALL BE REMOVED.
2. URBAN SEED MIXTURE SHALL BE SPREAD UNIFORMLY IN ALL AREAS AT THE SPECIFIED RATE.
3. FERTILIZER SHALL BE APPLIED ONLY IF SPECIFICALLY REQUIRED BY THE OWNER AND AFTER PERFORMING A SOIL TEST AND BE APPLIED BASED UPON SOIL DEFICIENCIES. LIME SHALL ONLY BE APPLIED IF SPECIFICALLY REQUIRED BY THE OWNER AS NEEDED BASED UPON A SOIL pH TEST.
4. MULCHING SHALL FOLLOW THE SEEDING OPERATION BY NOT MORE THAN 24 HOURS. MULCH SHALL BE SPREAD UNIFORMLY OVER THE AREA AT A MINIMUM RATE OF 2 TONS PER ACRE. SITE CONDITIONS MAY WARRANT THE APPLICATION OF A TACKIFIER TO HOLD THE MULCH IN PLACE. IF NECESSARY TO RETAIN THE MULCH, THE CONTRACTOR SHALL APPLY AN APPROVED TACKIFIER WITHOUT ADDITIONAL COST TO THE OWNER.
5. ALL SLOPES STEEPER THAN 3:1 V/S SHALL HAVE EROSION MATTING APPLIED OVER THE SEED. ALL DITCH CENTERLINE GRADES GREATER THAN 1% OR AS SHOWN ON THE PLANS SHALL HAVE EROSION MATTING APPLIED OVER THE SEED. EROSION MATTING SHALL CONSIST OF EROSION CONTROL BLANKET WITH 50% AGRICULTURAL STRAW MATRIX STITCH BOUNDED WITH DEGRADABLE THREAD BETWEEN TWO PHOTODEGRADABLE POLYPROPYLENE NETTINGS, NORTH AMERICAN S150 OR EQUAL.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A FULL GROWTH OF GRASS IN ALL DISTURBED AREAS TO BE RE-VEGETATED. VEGETATION GROWTH SHALL BE PERMANENT AND SUFFICIENT TO PREVENT EROSION OF THE UNDERLYING SOIL UNDER ALL CONDITIONS OF PRECIPITATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND CARING FOR SEEDED, MULCHED, AND AREAS OF ESTABLISHED VEGETATION UNTIL FINAL ACCEPTANCE OF THE WORK BY THE OWNER.

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PROJECT NO.....24128
DRAWN BY.....WEH
CHECKED BY.....TRM
SCALE.....AS NOTED
DATE.....10/13/25

SHEET NO.

C-5

OF 5 SHEETS

PROJECT NOTES

THESE STRUCTURAL DRAWINGS SUPPLEMENT AND ARE TO BE COORDINATED WITH CIVIL, ARCHITECTURAL, MEPFP AND OTHER PROJECT-RELATED DOCUMENTS

CONTRACTOR SHALL FIELD VERIFY ALL RELEVANT EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS, ETC PRIOR TO THE START OF CONSTRUCTION. NOTIFY ENGINEER OF ANY SIGNIFICANT DISCREPANCIES. WHERE CONTRACTOR IS INSTRUCTED TO "FIT" OR "MATCH", THE CONTRACTOR IS RESPONSIBLE FOR GATHERING EXISTING INFO AND CONFIRMING & ADJUSTING THE DIMENSIONS SLIGHTLY IN ORDER TO FIT OR MATCH.

FOR WORK WITH EXISTING STRUCTURES:

- AN INSPECTION OF EXISTING, VISIBLE STRUCTURAL ELEMENTS WAS PERFORMED FOR THE PREPARATION OF THIS DESIGN. CONCEALED STRUCTURE ELEMENTS IN POOR CONDITION AND/OR UNFORESEEN CONDITIONS MAY BE ENCOUNTERED DURING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DESIGN AS SOON AS POSSIBLE. NES DOES NOT REPRESENT THAT EVERY FEATURE OR DEFECT IS FOUND AND INCORPORATED INTO THE DESIGN.

ANY WORK FOUND TO BE DEFECTIVE AND/OR NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

AS APPLICABLE, NOTIFY NES WITH 24 HOURS MINIMUM NOTICE OF:

- FIRST FOOTING PLACEMENT
- FIRST FOUNDATION WALL PLACEMENT
- AT THE 90% COMPLETION OF ROUGH CARPENTRY OR STRUCTURAL STEEL ERECTION.

COLD AND HOT WEATHER CONSTRUCTION:

- CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS RELATED TO THE MANAGEMENT OF HOT AND COLD WEATHER CONSTRUCTION. THIS INCLUDES AND IS NOT LIMITED TO: PROTECT SOILS IN THE CONSTRUCTION SITE FROM FREEZING, MANAGE HOT WEATHER CONCRETE PLACEMENT, PROTECTION OF CONSTRUCTION.
- ANY WORK DAMAGED BY ENVIRONMENTAL CONDITIONS IS TO BE REPAIRED OR REPLACED AT THE ENGINEER'S DISCRETION AT THE CONTRACTOR'S EXPENSE.
- PROTECTIONS AND MANAGEMENT OF COLD AND HOT WEATHER CONSTRUCTION IS AT THE EXPENSE OF THE CONTRACTOR.

NOTIFY ENGINEER OF SIGNIFICANT PROJECT MILESTONES WITH 24 HOURS MINIMUM NOTICE. THIS INCLUDES CONCRETE PLACEMENT, 90% COMPLETION OF ROUGH CARPENTRY, 90% COMPLETION OF STRUCTURAL STEEL ERECTION, ETC.

CONTRACTOR REQUESTED CHANGES: IF CONTRACTOR REQUESTS CHANGES TO CONSTRUCTION AND/OR MATERIALS, THEY ARE TO SUBMIT A FORMAL RFI TO DOCUMENT THE REQUEST AND THE ANSWER. ANY SUBSTITUTIONS MUST BE ACCOMPANIED BY DOCUMENTATION OR NARRATIVE DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS EQUAL TO THAT IN THE CONSTRUCTION DOCUMENTS.

THE CONCRETE STRUCTURES ARE DESIGNED TO ANTICIPATE AND MINIMIZE SHRINKAGE AND TEMPERATURE CRACKING. HOWEVER, HAIRLINE SHRINKAGE CRACKS MAY OCCUR. THESE TYPES OF CRACKS ARE TYPICALLY NOT STRUCTURAL IN NATURE AND SHOULD NOT AFFECT THE SERVICEABILITY OF THE CONCRETE.

STRUCTURAL DESIGN PARAMETERS

CODE:	IBC 2015, AMENDED BY THE VT. 2015 FIRE BUILDING SAFETY CODE
TOWN:	JOHNSON, VT
CONSTRUCTION TYPE	5 B
RISK CATEGORY AND IMPORTANCE FACTORS	
RISK CATEGORY:	II
IMPORTANCE FACTORS	
SNOW, Is	1.0
ICE, I	1.0
WIND, Iw	1.0
SEISMIC, Ie	1.0
1st FLOOR LIVE LOAD:	100 PSF
ROOF LOAD:	
GROUND SNOW LOAD(Pg):	60 PSF
FLAT ROOF SNOW LOAD(Pf):	47 PSF
SOLAR LOAD ALLOWANCE:	0 PSF (RELOCATED EXISTING) 5 PSF (NEW ROOF CONSTRUCTION)
EXPOSURE FACTOR(Ce):	1.0
THERMAL FACTOR (Ct):	1.1
SNOW DRIFT DATA	SEE PLANS (PHASE 3)
FLOOR AND ROOF DEFLECTION CRITERIA:	
INDIVIDUAL ROOF MEMBERS-LIVE LOAD	L/360 MAXIMUM
INDIVIDUAL FLOOR MEMBERS- LIVE LOAD	L/480 MAXIMUM
WIND LOAD:	
ULTIMATE DESIGN WIND SPEED (Vult):	115 MPH
NOMINAL DESIGN WIND SPEED (Vasd):	90 MPH
EXPOSURE CATEGORY:	C
SEISMIC LOAD: (WIND LOADING CONTROLS)	
MAPPED SPECTRAL RESPONSE COEFFICIENTS:	Ss = 0.29, S1=0.069
SITE CLASS:	D
DESIGN SPECTRAL RESPONSE ACC PARAMETERS:	Sds = 0.23, Sd1=0.097
SEISMIC DESIGN CATEGORY:	B
SEISMIC FORCE RESISTING SYSTEM:	WOOD SHEAR WALLS
DESIGN BASE SHEAR:	V= C&W
ANALYSIS PROCEDURE:	EQUIVALENT LATERAL FORCE
GEOTECHNICAL:	
DESIGN SOIL BEARING CAPACITY:	2,000 PSF
DESIGN METHODOLOGY:	ALLOWABLE STRESS DESIGN

STRUCTURAL DRAWING LEGEND

NOT ALL MAY APPLY DATUM OF 0'-0" MAY ALSO BE USED	
	STRUCTURAL FILL
	CRUSHED STONE
	GRANULAR BACKFILL
	CAST IN PLACE CONCRETE
	EARTH -GENERAL
	EXISTING SOIL -UNDISTURBED
	FOOTING MARK [TOP OF FOOTING ELEVATION]
	WALL FOOTING MARK [TOP OF FOOTING ELEVATION]
	BASE PLATE TAG
	EMBEDDED PLATE MARK
	SLAB ON GRADE TAG
	FOUNDATION WALL TAG
	BEARING WALL TAG
	HEADER TAG
	SLAB JOINT
	EXISTING
	BOTTOM OF FOOTING
	CENTERLINE
	CLEAR
	NOT TO SCALE
	PEDESTRIAN DOOR
	ROUGH OPENING
	TOP OF CONCRETE
	TOP OF FOOTING
	FACE OF FOUNDATION
	TOP OF STEEL
	TOP OF WALL
	UNLESS NOTED OTHERWISE
	VERIFY IN FIELD
	FOUNDATION WALL CRACK CONTROL JOINT
	FINISH FLOOR ELEVATION
	WALL STEP
	FOOTING STEP
	WOOD
	TOP & BOTTOM
	ON CENTER
	EACH WAY
	SPRUCE PINE FIR
	SOUTHERN YELLOW PINE
	ROUGH SAWN

SEE STRUCTURE
EXCAVATION, BACKFILL,
INSULATION AND VAPOR
BARRIER SPECIFICATION
FOR AGGREGATE SPECS

SCHEDULE OF STRUCTURAL SPECIAL INSPECTIONS CHAPTERS:	
1705.1 UNUSUAL CONSTRUCTION OR MATERIALS	N/A
1705.2.1 STRUCTURAL STEEL	N/A
1705.2.2 COLD FORMED STEEL DECK	N/A
1705.2.3 OPEN WEB STEEL JOISTS	N/A
1705.2.4 COLD FORMED STEEL TRUSSES > 60' SPAN	N/A
1705.3 CONCRETE CONSTRUCTION	YES
1705.4 MASONRY CONSTRUCTION	N/A
1705.5 WOOD CONSTRUCTION - PREFABRICATED	YES (PHASE 3)
1705.6 SOILS	YES
1705.7 DRIVEN DEEP FOUNDATIONS	N/A
1705.8 CIP DEEP FOUNDATIONS	N/A
1705.9 HELICAL PILE FOUNDATIONS	N/A
1705.10 FABRICATED ITEMS	N/A
1705.11 SP INSPECTIONS FOR WIND RESISTANCE (EXCEPTION #2)	EXEMPT
1705.12 SP INSPECTIONS FOR SEISMIC RESISTANCE(EXCEPTION #1)	EXEMPT
1705.13 TESTING FOR SEISMIC RESISTANCE	N/A
1705.14 SPRAYED FIRE-RESISTANT MATERIALS	N/A
1705.15 MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS	N/A
1705.16 EIFS FINISH SYSTEM & INSULATION	N/A
1705.17 FIRE-RESISTANT PENETRATIONS AND JOINTS	N/A

SOILS, CHAPTER 1705.6		
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1.) VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		✓
2.) VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		✓
3.) PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		✓
4.) VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	✓	
5.) PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		✓

CONCRETE, CHAPTER 1705.3		
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1.) VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		✓
2.) VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		✓
3.) PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		✓
4.) VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	✓	
5.) PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		✓

PHASE 1 - STRUCTURAL SHEET LIST

Sheet Number	Sheet Name
S 0.0	General Notes
S 0.1	General Notes
S 1.0A	Phase 1 - New Foundation Footings
S 1.1A	Phase 1 - New Foundation Walls
S 1.2A	Phase 1 - First Floor Framing Plan
S 4.0A	Phase 1 - Foundation Wall Details
S 4.1A	Phase 1 - Foundation Wall Details
S 4.2A	Phase 1 - Foundation Wall Details
SSK-1	Library Site Prep/Moving Pad
SSK-2	Library Site Material Spec
Total: 10	

PHASE 2 - STRUCTURAL SHEET LIST

Sheet Number	Sheet Name
S 0.0	General Notes
S 0.1	General Notes
S 1.2B	Phase 2 - New Floor Hatch
S 1.3B	Phase 2 - Wall Removal and Reframing
S 5.0	Framing Details
Total: 5	

PHASE 3 - STRUCTURAL SHEET LIST

Sheet Number	Sheet Name
S 0.0	General Notes
S 0.1	General Notes
S 1.0C	Phase 3 - New Foundation Footings
S 1.1C	Phase 3 - New Foundation Walls/Piers
S 1.2C	Phase 3 - Sub Plan
S 1.3C	Phase 3 - Truss Support Plan
S 1.4C	Phase 3 - Truss Framing Plan
S 1.5C	Phase 3 - Cupola Plans & Details
S 2.0C	Phase 3 - Section/Truss Profiles
S 2.1C	Phase 3 - Section/Truss Profiles
S 2.2C	Phase 3 - Section/Truss Profiles
S 2.3C	Phase 3 - Section/Truss Profiles
S 4.0C	Phase 3 - Foundation Details
S 4.1C	Phase 3 - Foundation Details
S 5.0	Framing Details
Total: 15	

NES PROJECT PHASING DESCRIPTION

PHASE #	DESCRIPTION	SHEET TITLE CONVENTION
PHASE 1	NEW FOUNDATION AND FIRST FLOOR FRAMING FOR EXISTING LIBRARY - FOR BUILDING RELOCATION FOCUS	S X.XA
PHASE 2	RENOVATION TO EXISTING LIBRARY FRAMING	S X.XB
PHASE 3	NEW ADDITION FOUNDATION AND FRAMING	S X.XC
ADDITIONAL NOTES: 1. PHASE 1 PRIORITIZES REQUIRED FOUNDATION AND FRAMING TO RELOCATE THE BUILDING, PHASE 2 WILL INCLUDE ALL ADDITIONAL STRUCTURAL WORK TO THE ORIGINAL VOLUME REQUIRED FOR PROJECT 2. PHASE 2 AND 3 WILL LIKELY BE DESIGNED SIMULTANEOUSLY BUT ARE SEPARATED DUE TO EXISTING RENOVATION VS NEW ADDITION CONDITIONS 3. THESE PHASING EFFORTS ARE LIMITED TO NES PROVIDED STRUCTURAL PLANS, OTHER DISCIPLINES MAY PROVIDE DIFFERENT PHASING OR NO PHASING FOR THIS PROJECT 4. SHEETS REGARDING ALL PHASES WILL BE IN A CONVENTION S X.X (NO TRAILING LETTER)		



FOR ALL PHASES
CONSTRUCTION

Town Of Johnson
293 Lower Main St W,
Johnson, VT 05656

Johnson Public
Library Relocation
& Addition

Corner of School St and
George Hill Rd,
Johnson, VT

Rev. No.	Date	Description

Title:
General Notes

NES PROJECT NO: 25016
DATE: 05/30/2025
DESIGNED BY: AD/BD

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S 0.0

SUBMITTALS

SUBMITTAL REVIEW IS FOR THE GENERAL CONFORMANCE WITH THE DESIGN CONCEPT ONLY AND DOES NOT RELIEVE THE CONTRACTOR OF COMPLIANCE WITH THE DESIGN DOCUMENTS WHICH HAVE PRIORITY OVER THE ENGINEER'S SHOP DRAWING REVIEW. ANY DEVIATIONS FROM THE DESIGN DOCUMENTS NOT CLEARLY NOTED BY THE CONTRACTOR WILL NOT BE CONSIDERED REVIEWED UNLESS HIGHLIGHTED AND NOTED. ENGINEER'S REVIEW OF THE SHOP DRAWINGS DOES NOT CONSTITUTE A COMPLETE CHECK OF DETAILED DIMENSIONS OR COUNT OR SERVE TO RELIEVE THE CONTRACTOR OF CONTRACTUAL RESPONSIBILITY FOR ANY ERROR OR DEVIATION FROM CONTRACT REQUIREMENTS.

THE SHOP DRAWINGS WILL BE RETURNED FOR RESUBMITTAL IF NOT FULLY REVIEWED AND STAMPED BY THE CONTRACTOR OR IF A CURSORY ENGINEER'S REVIEW SHOWS MAJOR ERRORS OR CHANGES THAT SHOULD HAVE BEEN FOUND BY THE CONTRACTOR'S REVIEW. ALL SHOP DRAWINGS SHALL INCLUDE PLAN LAYOUTS SHOWING LOCATIONS OF ITEMS DETAILED ON THE DRAWINGS. ANY CHANGES, SUBSTITUTIONS OR DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE CLOUDED BY THE VENDOR SUBMITTING THE SHOP DRAWINGS. ANY OF THE AFOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED MAY RESULT IN A RETURNED FOR RESUBMITTAL RESPONSE

THE CONTRACTOR SHALL FORWARD SUBMITTALS TO THE ENGINEER VIA EMAIL OR PROJECT MANAGEMENT SOFTWARE. A COVER SHEET AND DESIGNATED LOCATION FOR THE ENGINEER'S REVIEW STAMP IS REQUIRED. THE NES WILL REVIEW AND RESPOND TO SUBMITTALS WITHIN SEVEN WORKING DAYS AND THE CONTRACTOR(S) SHOULD PLAN ACCORDINGLY.

SUBMITTALS REQUIRED FOR ENGINEER REVIEW, AS APPLICABLE TO THE PROJECT:

- SOILS:
- SIEVE ANALYSES AND MOISTURE DENSITY CURVE RESULTS FOR EACH SOURCE OF EACH TYPE OF MATERIAL USED ON THE PROJECT. ADDITIONAL TESTS MAY BE PERFORMED THROUGH THE DURATION OF THE PROJECT TO VERIFY MATERIAL CONSISTENCY.
 - IN-PLACE TESTING OF MATERIALS USUALLY BY THE OWNER, SEE FOUNDATION EXCAVATION & BACKFILL NOTES

- CAST IN PLACE CONCRETE, REINFORCEMENT, & ACCESSORIES:
- MIX DESIGNS THAT INCLUDE MIX PROPORTIONS & ADMIXTURE DATA SHEETS, SUBMITTED IN ACCORDANCE WITH ACI 318 SECTION 5. MIX DESIGNS SUCCESSFULLY USED AND TESTED BY A RECOGNIZED TESTING AGENCY WITHIN THE LAST 6 MONTHS ARE ACCEPTABLE.
 - CURING/SEALING/HARDENING COMPOUNDS, JOINT FILLER MATERIAL, EMBEDDED AND POST-INSTALLED ANCHOR SYSTEMS.
 - REINFORCING SHOP DRAWINGS SHOWING AT A MINIMUM: DIMENSIONS, PLACEMENT, CLEAR DISTANCES, BENDS, SPLICE LENGTHS, AND MECHANICAL SPLICING.
 - CONCRETE SAMPLES FOR TESTING USUALLY IS BY THE OWNER, SEE CONCRETE NOTES

- STRUCTURAL STEEL:
- SUBMIT SHOP DRAWINGS PER AISC STANDARDS, INCLUDING MEMBER IDENTIFICATION, PLACEMENT, & ELEVATION.
 - SHOW ALL CONNECTION DETAILS INCLUDING CONNECTIONS NOT DETAILED ON THE CONSTRUCTION DOCUMENTS
 - INDICATE WELDED CONNECTIONS
 - MILL CERTIFICATIONS TO INDICATE COMPLIANCE WITH MINIMUM SPECIFICATIONS
 - WELDERS' CERTIFICATES
 - STAIR AND OTHER FABRICATIONS DESIGN DRAWINGS WHERE ASSEMBLIES ARE SHOWN SCHEMATICALLY ON STRUCTURAL OR ARCHITECTURAL DRAWINGS
 - OTHER MISCELLANEOUS METALS

- WOOD CONSTRUCTION:
- SPECIES AND CERTIFICATIONS FOR LUMBER AND ENGINEERED PRODUCTS INCLUDING ENGINEERED LUMBER AND SHEATHING.
 - PRODUCT DATA SHEETS ON LIGHT GAGE WOOD FRAMED CONSTRUCTION CONNECTORS
 - PRODUCT DATA INDICATING FASTENERS' COMPATIBILITY WITH PRESERVATIVE PRESSURE TREATED LUMBER

- PREFABRICATED WOOD TRUSSES: FLOOR AND ROOF
- SUBMIT TRUSS DESIGN DRAWINGS PREPARED BY THE TRUSS MANUFACTURER INDICATING THAT REQUIRED IN IBC CH. 2303.4.1.1 AND INCLUDING BUT NOT LIMITED TO:
 - TRUSS FABRICATION COMPANY AND NAME OF PROJECT
 - TRUSS PLACEMENT DIAGRAMS
 - ALL DIMENSIONS SHOWING SHAPE, SLOPE, SPANS, MEMBER SIZES, & CHORD CONFIGURATION
 - INDIVIDUAL TRUSS MEMBER MATERIAL SPECIFICATIONS
 - DESIGN LOADS
 - MEMBER FORCES
 - HANGAR SCHEDULE/SPECIFICATION
 - MINIMUM BEARING REQUIRED
 - FABRICATOR CERTIFICATION FOR IBC CHAPTER 17 SPECIAL INSPECTIONS.
 - PROFESSIONAL ENGINEER STAMPED TRUSS DESIGN DRAWINGS INCLUDING HANGARS AND OTHER ACCESSORIES. THE PE MUST BE LICENSED AND SEALING THE DESIGN(S) IN PROJECT'S STATE.
 - OTHER INFORMATION REQUIRED BY IBC CODE AND SPECIAL INSPECTIONS

CONCRETE REINFORCEMENT:

COMPLY WITH ALL RECOMMENDATIONS OF AMERICAN CONCRETE INSTITUTE PUBLICATION ACI 318 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES".

SUBMITTALS: SEE STRUCTURAL SUBMITTALS NOTES

- MATERIALS:
- REINFORCING BARS: ASTM A-615, GRADE 60. STIRRUPS AND TIES SHALL BE GRADE 40.
 - SUPPORTING DEVICES: GALVANIZED OR NON-RUSTING TYPE. USE PLASTIC TIPPED ACCESSORIES IN CONCRETE EXPOSED TO WEATHER, WATER OR VIEW. USE LOAD BEARING PAD OR OTHER MEASURES TO PREVENT PUNCTURING VAPOR BARRIER.
 - FIBER REINFORCEMENT: STRUX 90/40 SYNTHETIC MACRO FIBER REINFORCEMENT BY GCP APPLIED TECHNOLOGIES
 - POST INSTALLED DOWELS: REBAR: ASTM A-615, GRADE 60; SMOOTH DOWELS: ASTM A 36.

- CONCRETE COVER AROUND REINFORCING (MINIMUM):
- CONCRETE FORMED AGAINST THE EARTH: 3 INCHES
 - SLABS ON FILL: 1 1/2 INCHES
 - WALLS, COLUMNS, BEAMS AND INTERIOR SLABS: 1 1/2 INCHES

AT THE TIME CONCRETE IS PLACED, ALL REINFORCEMENT SHALL BE FREE FROM DIRT, MUD, ICE, RUST, SCALE, LOOSE MILL SCALE, OIL, PAINT AND ALL OTHER COATINGS WHICH MAY DESTROY OR REDUCE BOND BETWEEN STEEL AND CONCRETE.

- POST INSTALLED DOWELS:
- ALL HOLES SHALL BE DRILLED IN ACCORDANCE WITH THE MANUFACTURER'S DATA, INCLUDING HOLE DIAMETER. ALL HOLES SHALL BE CLEANED WITH COMPRESSED AIR OR MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL BE DRY PRIOR TO INSTALLATION OF EPOXY. HOLES SHALL BE FREE OF ALL MATERIAL SUCH AS LAITANCE, DUST, DIRT AND OIL.
 - ANCHOR BOLTS, REINFORCING STEEL, THREADED RODS, STAIR HANDRAILS, AND OTHER EMBEDDED STEEL ITEMS SHALL BE SET INTO HARDENED CONCRETE OR CORE-FILLED MASONRY WITH EPOXY OR EPOXY GROUT ONLY WHERE DETAILED ON THE DRAWINGS OR WHERE DETAILED ON THE DRAWINGS OR WHERE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
 - MANUFACTURER'S DATA FOR ALL EPOXY AND EPOXY GROUT SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO INSTALLATION. ACCEPTABLE EPOXY PRODUCTS ARE: HILTI HIT-HY200 OR APPROVED EQUAL. IN USING THE ABOVE LISTED PRODUCTS, FOLLOW STRICTLY THE MANUFACTURER'S SPECIFICATIONS AND DIRECTIONS FOR MIXING AND APPLICATION

STRUCTURE EXCAVATION, BACKFILL, INSULATION, & VAPOR BARRIER

THIS SECTION INCLUDES THE EXCAVATION, INSULATION, BACKFILL AND COMPACTION INSIDE THE STRUCTURE FOOTPRINT TO 5 FEET AROUND THE PERIMETER OF THE FOUNDATIONS

EXCAVATE TO THE SPECIFIED ELEVATIONS WITH A SMOOTH EDGED BUCKET & MINIMIZE DISTURBANCE TO EXISTING SOIL TO REMAIN. NOTIFY ENGINEER OF SUSPECT OR UNSUITABLE SOILS THAT VARY FROM THAT REPRESENTED IN THE GEOTECHNICAL REPORT

NOTIFY ENGINEER 24 HOURS IN ADVANCE OF COMPLETION OF EXCAVATIONS TO REVIEW SOIL CONDITIONS

- AGGREGATES, FREE OF ORGANIC MATTER OR OTHER NON-AGGREGATE MATERIALS:
- STRUCTURAL FILL : WELL GRADED SAND OR CRUSHER RUN GRAVEL

SIEVE	%PASSING
2"	100
1 1/2"	90-100
NO. 4	30-60
NO. 100	0-12
NO. 200	0-8

- CLEAN CRUSHED STONE : 3/4" CLEAN CRUSHED STONE
- | SIEVE | %PASSING |
|-------|----------|
| 1" | 100 |
| 3/4" | 90-100 |
| 3/8" | 20-55 |
| NO. 4 | 0-10 |
| NO. 8 | 0-5 |

- CLEAN CRUSHED STONE : 1 1/2" CLEAN CRUSHED STONE
- | SIEVE | %PASSING |
|--------|----------|
| 2" | 100 |
| 1 1/2" | 95-100 |
| 3/4" | 35-70 |
| 3/8" | 10-30 |
| NO. 4 | 0-5 |

- GRANULAR BACKFILL: WELL GRADED GRANULAR MATERIAL
- | SIEVE | %PASSING |
|---------|----------|
| 3" | 100 |
| NO. 4 | 45-75 |
| NO. 100 | 0-12 |
| NO. 200 | 0-6 |

WINTER CONDITIONS MAY WARRANT ALTERNATE AGGREGATE MATERIALS APPROPRIATE FOR FREEZING TEMPERATURES

ON SITE MATERIAL IS NOT TO BE USED FOR GRANULAR BACKFILL OUTSIDE OF THE FOUNDATION UNLESS THE CONTRACTOR HAS DEMONSTRATED TO THE ENGINEER'S SATISFACTION THAT THE ONSITE MATERIAL MEETS GRADATION, COMPACTION, CONSISTENCY OF AGGREGATE, AND ABSENCE OF LOAM, SILT, CLAY OR ORGANIC MATTER). CONTRACTOR IS TO ASSUME THAT THE ON-SITE MATERIAL IS NOT ACCEPTABLE AS BACKFILL UNTIL THE ENGINEER APPROVES THE MATERIAL.

REMOVE TOPSOIL AND ORGANICS AND PROVIDE 12 INCHES, MINIMUM STRUCTURAL FILL UNDER ALL SLABS. FINE GRADE TOP SLAB-ON-GRADE AGGREGATE TO THE FOLLOWING TOLERANCES: +0" TO - 3/4".

- MATERIAL PLACEMENT AND COMPACTION REQUIREMENTS:
- PLACE AND COMPACT/CONSOLIDATE FILL MATERIALS IN EVEN LIFTS NOT EXCEEDING 8 INCHES FOR HAND OPERATED VIBRATORY (PLATE) COMPACTION EQUIPMENT OR 12" FOR MECHANIZED VIBRATORY ROLLERS
 - INSIDE THE STRUCTURE FOOTPRINT/BELOW STRUCTURES, STRUCTURAL FILL COMPACTED TO 95% MODIFIED PROCTOR DENSITY, TEST FOR COMPACTION PER THE FIELD QUALITY CONTROL SCHEDULE. TEST IN ACCORDANCE WITH ASTM D6938
 - AROUND THE STRUCTURE PERIMETER: GRANULAR BACKFILL COMPACTED TO 90% MODIFIED PROCTOR DENSITY EXCEPT COMPACT TO 95% MODIFIED PROCTOR DENSITY UNDER SIDEWALKS, PAVEMENT AND OTHER STRUCTURES. TEST IN ACCORDANCE WITH ASTM D6938 PER THE FIELD QUALITY CONTROL SCHEDULE

BACKFILL EACH SIDE OF FOUNDATION WALLS EVENLY, WITH NO GREATER THAN 18 VERTICAL INCHES DIFFERENCE BETWEEN EACH SIDE OF WALL. IF WALL ARE DESIGNED FOR EARTH RETAINAGE, DO NOT BACKFILL DIFFERENTIALLY UNTIL ALL MEANS OF SUPPORT ARE IN PLACE AND CONCRETE HAS REACHED 100% OF DESIGN STRENGTH.

THE FOUNDATION DESIGN ASSUMES THAT THE FOOTINGS WILL REST UPON UNDISTURBED ORIGINAL SOIL TOPPED WITH AGGREGATE WHERE INDICATED. IN THE EVENT THAT DEMOLITION, SITE PREPARATION OR SOILS EXPLORATION DISTURBS SOIL DEEPER THAN THE SPECIFIED BOTTOM OF EXCAVATION, THAT DISTURBED SOIL MUST BE EXCAVATED. BACKFILL THE RESULTING EXCAVATION WITH STRUCTURAL FILL COMPACTED TO 95% MODIFIED PROCTOR DENSITY, MINIMUM. CONCRETE FLOWABLE FILL CAN BE USED TO FILL THE OVER-EXCAVATION WITH ENGINEER'S APPROVAL.

- FOUNDATION INSULATION:
- XPS RIGID INSULATION MEETING ASTM C578 TYPE IV (25 PSI) WITH R5 PER INCH UNLESS NOTED OTHERWISE. BUTT JOINTS TOGETHER TIGHTLY AND SECURE IN PLACE UNTIL BACKFILL OR PERMANENT CONSTRUCTION FEATURES HOLDING INSULATION IN PLACE ARE CONSTRUCTED.
 - WHERE CALLED FOR, USE UNFACED POLYISOCYANURATE INSULATION.
 - SECURE INSULATION TO AVOID DISPLACEMENT DURING CONSTRUCTION ACTIVITIES
 - ON HORIZONTAL APPLICATIONS, BUTT JOINTS TIGHTLY AND TAPE JOINTS

- VAPOR BARRIER:
- PLACE 15 MIL VAPOR BARRIER UNDER ENTIRE FLOOR SLAB AT LOCATION INDICATED
 - INSTALL VAPOR BARRIER IN ACCORDANCE ASTM E1643.
 - UNROLL VAPOR BARRIER WITH THE LONGEST DIMENSION PARALLEL WITH THE DIRECTION OF THE CONCRETE PLACEMENT AND FACE LAPS AWAY FROM THE EXPECTED DIRECTION OF THE PLACEMENT WHENEVER POSSIBLE.
 - EXTEND VAPOR BARRIER TO THE PERIMETER OF THE SLAB. IF PRACTICABLE, TERMINATE IT AT THE TOP OF THE SLAB, OTHERWISE (A) AT A POINT ACCEPTABLE TO THE STRUCTURAL ENGINEER OR (B) WHERE OBSTRUCTED BY IMPEDIMENTS, SUCH AS DOWELS, WATERSTOPS, OR ANY OTHER SITE CONDITION REQUIRING EARLY TERMINATION OF THE VAPOR BARRIER.

- OVERLAP JOINTS 6 INCHES AND SEAL WITH MANUFACTURER'S SEAM TAPE
- APPLY SEAM TAPE/CRETE CLAW TO A CLEAN AND DRY VAPOR BARRIER
- SEAL ALL PENETRATIONS (INCLUDING PIPES) PER MANUFACTURER'S INSTRUCTIONS.
- USE REINFORCING BAR SUPPORTS WITH BASE SECTIONS THAT ELIMINATE OR MINIMIZE THE POTENTIAL FOR PUNCTURE OF THE VAPOR BARRIER.
- REPAIR DAMAGED AREAS WITH VAPOR BARRIER MATERIAL OF SIMILAR (OR BETTER) PERMEANCE, PUNCTURE AND TENSILE.

CONCRETE

CAST IN PLACE CONCRETE WORK IS TO BE PERFORMED IN ACCORDANCE WITH ACI 318.

CONCRETE MUST BE SOURCED FROM A RECOGNIZED COMMERCIAL BATCH PLANT. ON-SITE BATCHING OF CONCRETE IS PROHIBITED

SUBMITTALS: SEE STRUCTURAL SUBMITTALS NOTES

FOUNDATION LAYOUT IS BY THE CONTRACTOR.

ENVIRONMENTAL EXTREMES: FOLLOW ACI 306 FOR COLD WEATHER CONCRETING AND ACI 305 FOR HOT WEATHER CONCRETING. ACCELERATING OR RETARDING ADMIXTURES IN EXTREME WEATHER MAY BE USED AFTER ENGINEER APPROVAL. CALCIUM CHLORIDE IS PROHIBITED.

- CONCRETE MIXTURE SPECIFICATIONS:
- PROVIDE COMPRESSIVE STRENGTH AS INDICATED ON THE PLANS
 - SLUMP: 2-4" BEFORE ADDITION OF ADMIXTURES AND 6-8" AFTER THE ADDITION OF ADMIXTURES
 - EXTERIOR CONCRETE IS TO BE AIR ENTRAINED USING ADMIXTURES: 4% - 6%, ASTM C260

ISOLATE SLABS ON GRADE FROM VERTICAL SURFACES WITH 1/2" EXPANSION JOINT FILLER OR RIGID INSULATION

FORM RELEASE AGENT: WATER BASED PRODUCT MANUFACTURED FOR THIS PURPOSE. DO NOT APPLY OR OVERSPRAY RELEASE AGENT ON REBAR. IF RELEASE AGENT IS ON REBAR, RELATED WORK WILL BE REJECTED AND RECONSTRUCTED AT ENGINEER'S DISCRETION.

WALL JOINTS INDICATED ON PLAN OR FOUNDATION ELEVATIONS CAN BE CONTROL JOINTS OR CONSTRUCTION JOINTS AT CONTRACTOR'S OPTION, BASED UPON MAXIMUM REASONABLE SECTION LENGTH OR DAILY CONCRETE PLACEMENT

FOUNDATION WALL AND SLAB PENETRATIONS NOT SHOWN. CONTRACTOR TO COORDINATE CONSTRUCTION WITH ARCHITECTURAL AND MEP PLANS.

PROVIDE 5' - 0" MINIMUM BOTTOM OF FOOTING DEPTH IN ALL LOCATIONS.

COLD JOINTS IN A SINGLE POUR ARE PROHIBITED. PROVIDE CONSTRUCTION JOINTS DETAILED ON THE DRAWINGS.

PROTECT PLACED AND FINISHED CONCRETE FROM INJURY, PREMATURE DRYING, MECHANICAL DAMAGE, AND TEMPERATURE EXTREMES. DO NOT PLACE UNEQUAL LATERAL PRESSURE ON WALLS UNTIL FULLY CURED AND SUPPORTING MEMBERS ARE IN PLACE.

BREAK OFF ALL FORM TIES. ON SURFACES TO REMAIN EXPOSED, PARGE HOLES SMOOTH FOR AN ATTRACTIVE FINISH.

- FORMWORK FINISHES PER ACI 347, AS APPLICABLE:
- FOUNDATION WALLS: CLASS C
 - RETAINING WALLS: CLASS C
 - FOOTINGS: CLASS D

- SLABS ON GRADE:
- PRIOR TO FLOOR SLAB CONSTRUCTION, THE DESIGN TEAM SHALL MEET TO DISCUSS FLOOR SLAB PLACEMENT, DESIRED FINISH, AND HOW TO ACHIEVE THAT FINISH, ETC. CONTRACTOR TO CALL FOR MEETING AT LEAST 3 WEEKS PRIOR TO SLAB CONSTRUCTION.
 - PROVIDE FINISH AS SHOWN ON THE PLANS

- WHERE LEVEL FLOORS ARE SPECIFIED, PROVIDE A FLOOR FLATNESS EXCEEDING $F_F = 25$, $F_L = 20$ FOR GROUND FLOOR. ELEVATED SLABS SHALL HAVE A FLOOR FLATNESS OF $F_F = 25$.

WHERE APPLICABLE, SLOPE FLOORS UNIFORMLY TO DRAIN(S)

- SLAB CURING: MODIFY OR AUGMENT THESE METHODS, OR ADOPT ADDITIONAL PROTECTIVE MEASURES, WHEN REQUIRED TO COMPENSATE FOR CHANGES IN HUMIDITY, TEMPERATURE, WIND, OR OTHER CONDITIONS. MINIMUM CURING PERIOD SHALL BE 7 DAYS.

- WATER CURING SLABS ON GRADE: WATER CURING DURING COLD WEATHER CONCRETING IS NOT PERMITTED. CONTINUOUSLY KEEP CONCRETE SURFACES WET BY COVERING WITH WATER, BY CONTINUOUS FOG SPRAYING, OR BY COVERING WITH BURLAP AND POLYETHYLENE, OR OTHER APPROVED MATERIAL THOROUGHLY SATURATED WITH WATER AND KEPT WET BY INTERMITTENT HOSING. BURLAP SHALL BE PLACED DIRECTLY ON THE CONCRETE, SATURATED WITH WATER, AND COVERED WITH 4 OR 6 MIL POLYETHYLENE SHEETING. PROVIDE SUFFICIENT ANCHORING TO PREVENT BLOW-OFF OF SHEETING. IN LIEU OF BURLAP, NON STAINING KRAFT PAPER COATED WITH NOT LESS THAN 2 MIL THICK POLYETHYLENE SHEETING MAY BE USED. PROTECT WATER CURED CONCRETE AGAINST FREEZING FOR THE FULL CURING PERIOD SPECIFIED. COMPLETELY COVER SURFACES, WITH EDGES AND ENDS LAPPED AT LEAST 4 INCH AND SEALED WITH A MASTIC OR PRESSURE-SENSITIVE TAPE. IMMEDIATELY REPAIR TEARS OR HOLES APPEARING DURING THE CURING PERIOD.

- AFTER THE WATER CURING PROCESS, APPLY FLOOR SEALER/HARDENER INDICATED ON THE DRAWINGS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- SLAB SEALER:
 - INTERIOR: CONSOLIDECK LS PREMIUM LITHIUM - SILICATE SEALER, HARDENER AND DENSIFIER BY PROSOCO.
 - EXTERIOR: CURE SHIELD, ONE STEP WATER REPELLANT SEALER, CLEAR SILANE ACRYLIC CURING AND SEALING COMPOUND MEETING ASTM C-1315 TYPE I, CLASS A AND NCHRP 244, 25-30% SOLIDS BY SPECICHEM.
- DO NOT APPLY FLOOR SEALER/HARDENER TO AREAS OF CONCRETE THAT WILL RECEIVE FLOOR FINISH
- SLAB PENETRATIONS NOT SHOWN. CONTRACTOR TO COORDINATE CONSTRUCTION WITH ARCHITECTURAL AND MEP PLANS.
- SLAB CRACK CONTROL JOINTS ARE SHOWN. CONTRACTOR MAY CHOOSE TO CREATE A CONSTRUCTION JOINT AT CONTROL JOINT LOCATIONS BASED UPON AMOUNT OF SLAB THAT CAN BE PROPERLY CONSTRUCTED. ALLOW 5 DAYS BETWEEN ADJACENT POURS.
- CONTROL JOINT LAYOUT: ALIGN CONTROL JOINTS WITH SLAB INTERRUPTIONS AS SHOWN. WHERE NOT DIMENSIONED, SPACE CONTROL JOINTS EQUALLY BETWEEN ALIGNED CONTROL JOINTS.
- FINE GRADING OF THE SLAB BASE IS CRITICAL TO SLAB PERFORMANCE AND MINIMIZATION OF CRACKS. SEE EXCAVATION AND BACKFILL NOTES

SEAL CONTROL JOINTS AS INDICATED WITH SIKADUR 51 SL BY SIKA CORPORATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

PROVIDE ONE #5 REBAR EXTENDING FROM AND CONNECTED TO FOOTING REBAR TO 6" ABOVE THE SLAB TO CREATE A CONCRETE-ENCASED ELECTRODE ELECTRICAL GROUND IN ACCORDANCE WITH ELECTRICAL CODE(S). CONTRACTOR TO VERIFY AND COORDINATE GROUNDING SYSTEM WITH ARCHITECTURAL AND ELECTRICAL DESIGNS. SYSTEM MAY VARY FROM THAT STATED.

FIELD QUALITY CONTROL

OWNER SHALL ENGAGE A QUALIFIED AND EXPERIENCED TESTING AND INSPECTION AGENCY FOR THE PERFORMANCE OF CONSTRUCTION FIELD TESTING

CONTRACTOR SHALL SCHEDULE THE TESTING AGENCY IN ACCORDANCE WITH THE REQUIREMENTS HEREIN.

- AGGREGATES
- IN-SITU AGGREGATE COMPACTION TESTING IN ACCORDANCE WITH ASTM D1557.

- TESTING FREQUENCY:
- BELOW STRUCTURE'S WALL FOOTINGS: ONE TEST FOR EACH LIFT FOR EVERY 20 FEET OF WALL
 - BELOW STRUCTURE'S ISOLATED FOOTINGS: ONE TEST FOR EACH LIFT
 - BELOW SLABS ON GRADE: ONE TEST FOR EVERY 500 SQUARE FEET, EACH LIFT WITH A MINIMUM OF 3 TESTS PER LIFT

IF COMPACTION TESTING DOES NOT MEET SPECIFICATION AND ADDITIONAL TESTING IS REQUIRED, THE OWNER MAY CHARGE CONTRACTOR FOR THE ADDITIONAL TESTING.

- CONCRETE:
- CONCRETE TESTING IN ACCORDANCE WITH ASTM C172

- TESTING FREQUENCY:
- ONE TEST FOR EACH 100 CY FOR EACH DESIGN MIX PER DAY
 - ONE TEST FOR EACH 1500 SF OF SLAB FOR EACH DESIGN MIX, PER DAY

- QUALITY CONTROL TESTING SCHEDULE:
- SAMPLING FRESH CONCRETE: TAKE ALL SAMPLES IN ACCORDANCE WITH ASTM C172, EXCEPT THAT SAMPLES OF FRESH CONCRETE SHALL BE TAKEN FROM THE MIDDLE THIRD OF EACH BATCH.
 - SLUMP TEST: TEST EACH BATCH OF CONCRETE IN ACCORDANCE WITH ASTM C143 AND WHEN ADDITIONAL WATER IS ADDED AND WHEN DIRECTED BY ENGINEER. PROVIDE CONES AND EQUIPMENT AND MAINTAIN THEM AT THE SITE WHENEVER CONCRETE IS PLACED.
 - ENTRAINED AIR CONTENT: TEST EACH BATCH OF CONCRETE IN ACCORDANCE WITH ASTM C231. MAINTAIN ENTRAINED AIR CONTENT TO WITHIN THE LIMITS SPECIFIED IN PAR. 2.01. PROVIDE THE PROPER EQUIPMENT AND MATERIALS AND PERFORM TESTS AT THE SITE.
 - COMPRESSIVE STRENGTH: MAKE AND CURE ONE SET OF FOUR 6 INCH X 12 INCH CYLINDERS IN ACCORDANCE WITH ASTM C31 FOR EACH 50 CY OF CONCRETE PLACED WITH AT LEAST ONE SET MADE FOR EACH DAY'S PLACEMENT OF CONCRETE. FOR EACH SET OF FOUR TEST CYLINDERS, TEST ONE CYLINDER AT 7 DAYS, TWO AT 28 DAYS AND IF ANY OF THE 28 DAY CYLINDERS ARE UNSATISFACTORY, THE REMAINING CYLINDER SHALL BE TESTED AT 42 DAYS. TESTING OF CYLINDERS SHALL BE IN ACCORDANCE WITH ASTM C39. PROVIDE ALL MATERIALS AND TRANSPORTING TEST CYLINDERS TO THE APPROVED TESTING LABORATORY.
 - DENSITY: EACH TIME A SET OF TEST CYLINDERS IS MADE, DETERMINE THE DENSITY OF THE CONCRETE IN ACCORDANCE WITH ASTM C138.

- FOR EACH TEST, FOUR CYLINDERS WILL BE TAKEN. TEST CYLINDERS AS FOLLOWS:
- @ 7 DAYS: TEST ONE CYLINDER
 - @ 28 DAYS: TEST TWO CYLINDERS
- IF THE 28 DAY TESTS FAIL TO MEET DESIGN PARAMETERS, HOLD THE REMAINING CYLINDERS AND TEST AT 56 DAYS.

UNTESTED CYLINDERS CAN BE DISCARDED AFTER SUCCESSFUL TESTING

- UNIT MASONRY
- IBC CHAPTER 17 SPECIAL INSPECTIONS, AS APPLICABLE
 - CMU TEST: FOR EACH TYPE OF UNIT USED, TEST ACCORDING TO ASTM C140 (COMPRESSIVE STRENGTH)
 - GROUT TEST: FOR EACH MIX PROVIDED, TEST ACCORDING TO ASTM C1019

ROUGH CARPENTRY

MATERIALS

- DIMENSIONAL LUMBER
- TYPICAL: SPF (SPRUCE-PINE-FIR) #2 OR BETTER
 - PRESSURE-TREATED LUMBER: SOUTHERN YELLOW PINE #1 OR BETTER.
 - MINIMUM MEMBER SIZE IS 2x4 NOMINAL WITH DESIGN PARAMETERS MEETING OR EXCEEDING SPF #2

- ENGINEERED LUMBER, IN ACCORDANCE WITH ASTM D 5456 AND D 2559
- LVL: LAMINATED VENEER LUMBER, 2.0E MINIMUM
 - PSL: PARALLEL STRAND LUMBER, 2.0E MINIMUM
 - LSL: LAMINATED STRAND LUMBER AS FRAMING OR RIM BOARDS, 1 1/4" THICKNESS
 - LSL BEAMS: 1.5SE, MINIMUM
 - LSL COLUMNS: 1.3E, MINIMUM

- WOOD I-JOISTS:
- TJI PREFABRICATED WOOD I-JOISTS BY TRUSJOIST OR APPROVED EQUIVALENT
 - UNITS TO BE MARKED WITH DEPTH, CLASS, SPAN RATING, MILL ID, AND ADA STANDARD IN ACCORDANCE WITH INDUSTRY STANDARDS

- WOOD SHEATHING: SEE ALSO PROJECT SPECIFIC DIAPHRAGM/SHEARWALL REQUIREMENTS ON PLANS
- FLOOR SHEATHING: 3/4" APA RATED PANELS, TONGUE & GROOVE, EXPOSURE 1 DURABILITY
 - ROOF SHEATHING: 5/8" APA RATED, EXPOSURE 1 DURABILITY
 - WALL SHEATHING: 7/16" APA RATED, EXPOSURE 1 DURABILITY

INSTALL SHEATHING WITH LONG EDGE PERPENDICULAR TO FRAMING, EDGE JOINTS EVENLY STAGGERED

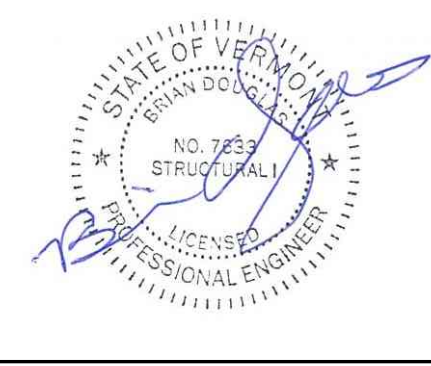
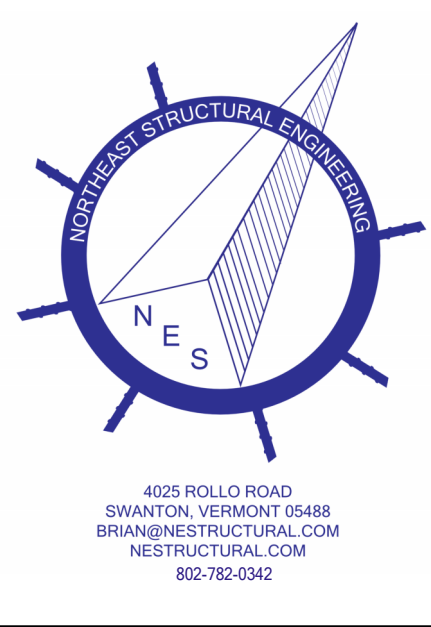
- SHEATHING FASTENERS
- FLOOR: SUBFLOOR ADHESIVE, 8d RING-SHANK NAILS WITH 6" EDGE FASTENING AND 12" FIELD FASTENING
 - ROOF: 8d RING-SHANK NAILS WITH 6" EDGE FASTENING AND 12" FIELD FASTENING
 - WALL: 8d RING-SHANK NAILS WITH 6" EDGE FASTENING AND 12" FIELD FASTENING U.N.O.

- ZIP-R INSULATED WALL SHEATHING BY HUBER ENGINEERED WOODS
- OSB EXPOSURE 1 SHEATHING, 7/16 PERFORMANCE CATEGORY, STRUCTURAL 1 RATED
 - FASTENERS: 0.131 SHANK NAILS WITH 3" EDGE AND 12" FIELD FASTENER SPACING, 1 1/2" MINIMUM EMBEDMENT

- LIGHT GAGE FRAMING CONNECTOR ACCESSORIES
- MANUFACTURED BY SIMPSON STRONG-TIE OR APPROVED EQUIVALENT
 - INSTALL IN ACCORDANCE WITH MANUFACTURER-PUBLISHED INSTRUCTIONS AND RECOMMENDATIONS
 - INSTALL WITH STATED FASTENERS OR MAXIMUM FASTENERS WHERE APPLICABLE, UNLESS OTHERWISE NOTED ON THE PLANS

- PREFABRICATED WOOD TRUSSES
- MANUFACTURER MUST BE SPECIALIZED IN THE DESIGN AND CONSTRUCTION OF PREFABRICATED TRUSSES, 5 YEARS MINIMUM EXPERIENCE PROVIDING SIMILAR PRODUCTS IN THE PROJECT'S GEOGRAPHICAL REGION.
 - COMPLY WITH THE DESIGN AND SUBMITTAL REQUIREMENTS OF IBC CH. 2303.4
 - MINIMUM MEMBER SIZE IS 2x4 NOMINAL WITH DESIGN PARAMETERS MEETING SPF#2. STUD GRADE MEMBERS ARE PROHIBITED.
 - BRACING DESIGN IS BY MANUFACTURER.
 - DO NOT MODIFY ENGINEERED TRUSSES WITHOUT ENGINEER'S PERMISSION. TRUSS MANUFACTURER MAY BE RE-ENGAGED FOR INPUT ON MODIFICATIONS.
 - ALLOWABLE DEFLECTIONS:
 - ROOF: L/360 MAXIMUM WITH 3/4" MAX.
 - FLOOR: L/480 MAXIMUM
 - PRESS PLATE STEEL CONNECTORS: ASTM A446 GRADE B HOT DIPPED GALVANIZED (G60), SIZE BY THE MANUFACTURER.
 - MANUFACTURE, HANDLE, AND INSTALL IN ACCORDANCE WITH APPLICABLE CODES INCLUDING HET-80, PCT-80 WITH SUPPLEMENT, TPI-85 WITH SUPPLEMENT, QSP -88,

- GENERAL
- ALL WOOD IN CONTACT WITH CONCRETE, MASONRY OR IS EXPOSED TO THE ELEMENTS IS TO BE PRESERVATIVE PRESSURE TREATED
 - FOR MINIMUM FASTING ON ALL CONNECTIONS NOT SHOWN IN PLANS, DETAILS OR SECTIONS REFER TO IBC 2018 TABLE 2304.10.1
 - ALL FASTENERS MUST BE COMPATIBLE WITH PRESERVATIVE TREATED WOOD CHEMICALS.
 - MINIMUM FRAMING FASTENERS: SEE IBC 2018 CHAPTER 2304.10.1 FASTENER REQUIREMENTS
 - PROVIDE DOUG-FIR #1 OR BETTER BLOCKING FOR GRAB BARS, HANDRAILS, CABINTRY, AND OTHER SIMILAR COMPONENT FASTENING
 - STORE ENGINEERED LUMBER IN A MANNER PROTECTED FROM THE WEATHER
 - USE AND INSTALL ONLY INTACT, UNDAMAGED WOOD PRODUCTS
 - ENGINEERED LUMBER PRODUCTS SHALL BE HANDLED AND INSTALLED IMPLEMENTING APPLICABLE MANUFACTURER RECOMMENDATIONS



FOR ALL PHASES
CONSTRUCTION

Town Of Johnson
293 Lower Main St W,
Johnson, VT 05656

Johnson Public
Library Relocation
& Addition

Corner of School St and
George Hill Rd,
Johnson, VT

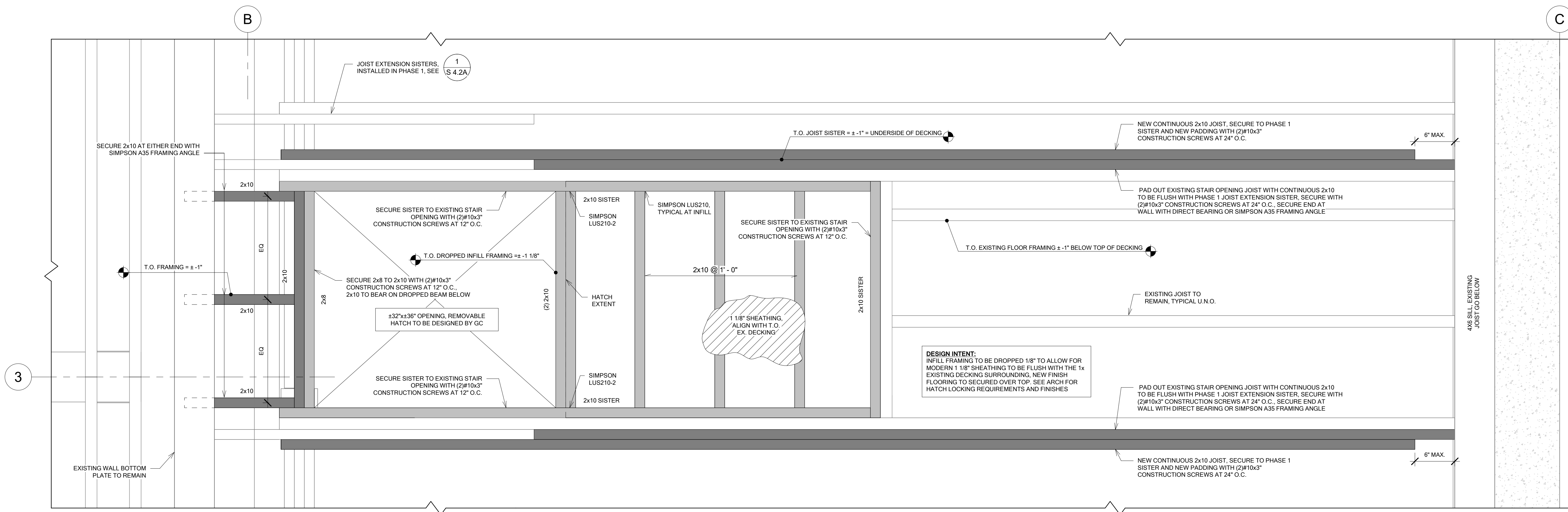
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Title:
General Notes

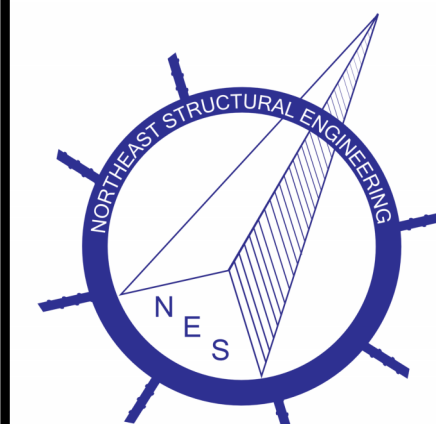
NES PROJECT NO: 25016
DATE: 05/30/2025
DESIGNED BY: AD/BD

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S 0.1



1 Stair Infill/New Floor Hatch Penetration Plan
 Scale: 1 1/2" = 1'-0"



4025 ROLLO ROAD
 BRANTON, VERMONT 05488
 BRIAN@NESTRUCTURAL.COM
 NESSTRUCTURAL.COM
 802-762-0242



FOR PHASE 2
 CONSTRUCTION

Town Of Johnson
 293 Lower Main St W,
 Johnson, VT 05656

Johnson Public
 Library Relocation
 & Addition

Corner of School St and
 George Hill Rd,
 Johnson, VT

Rev. No.	Date	Description

Title:
 Phase 2 - New
 Floor Hatch

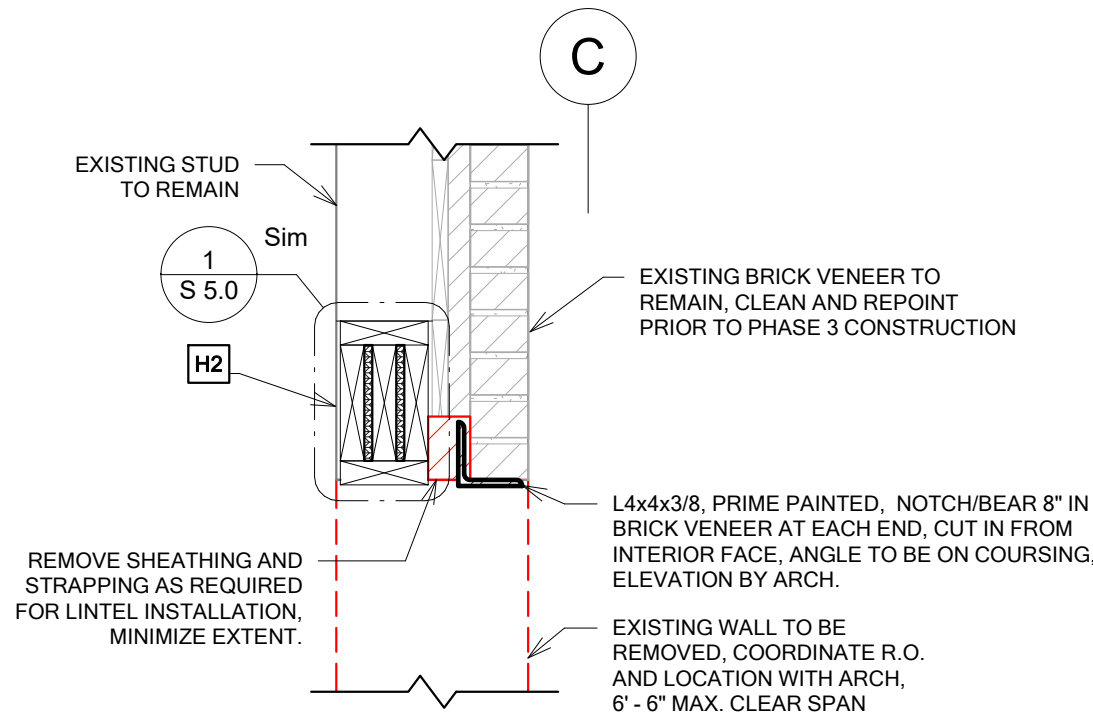
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S 1.2B

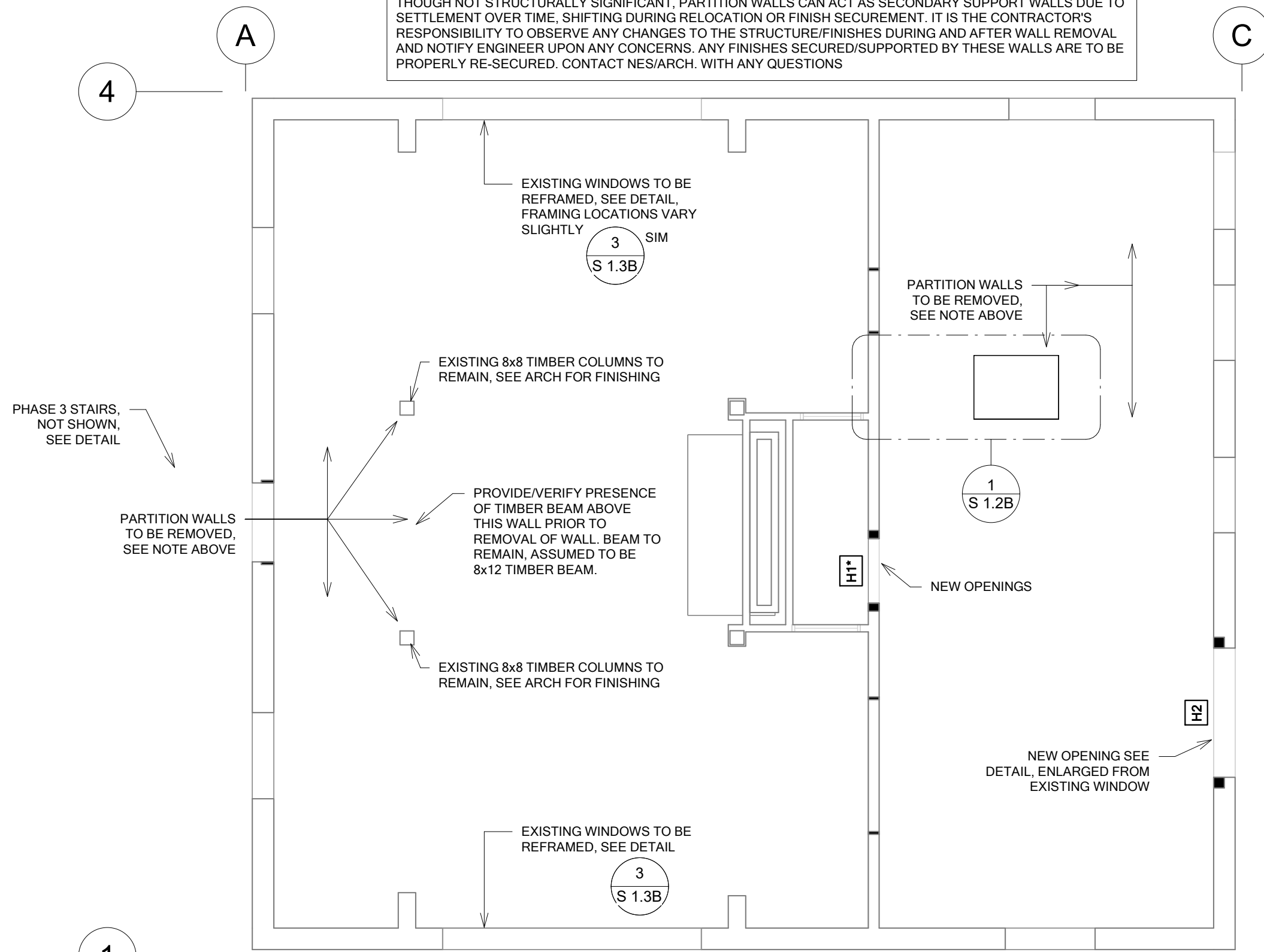
- ADDITIONAL WORK REQUIRED IN EXISTING (RELOCATED) BUILDING:
1. RE-CREATION OF REMOVED MASONRY CHIMNEY (SEE ARCH)
 2. ALL BRICK VENEER TO BE INSPECTED BY QUALIFIED MASON AND REPOINTED/REPLACED AT VENEER CRACKS
 3. GO TO INSPECT BUILDING FOR DAMAGE RESULTING FROM MOVE. IF DAMAGE OCCURRED, REPLACE IN KIND
 4. SEE ARCH. FOR ALL ADDITIONAL RENOVATION REQUIREMENTS

HEADER SCHEDULE				
* = DIFFERING HEADER TYPE AND/OR JACK AND KING STUD CONFIGURATION			SEE WOOD HEADER DETAIL FOR HEADER TYPE	
TAG	HEADER SIZE	JACK STUD(S) EACH END	KING STUD(S)	HEADER TYPE
EX	EXISTING TO REMAIN U.N.O.	EXISTING TO REMAIN U.N.O.	EXISTING TO REMAIN U.N.O.	EX. U.N.O.
H1*	(2) 2x8	DOUBLE 2x	SINGLE 2x	"A"
H2	(3) 2x8	DOUBLE 2x	SINGLE 2x OPENINGS < 5' DOUBLE 2x OPENINGS > 5'	"C"

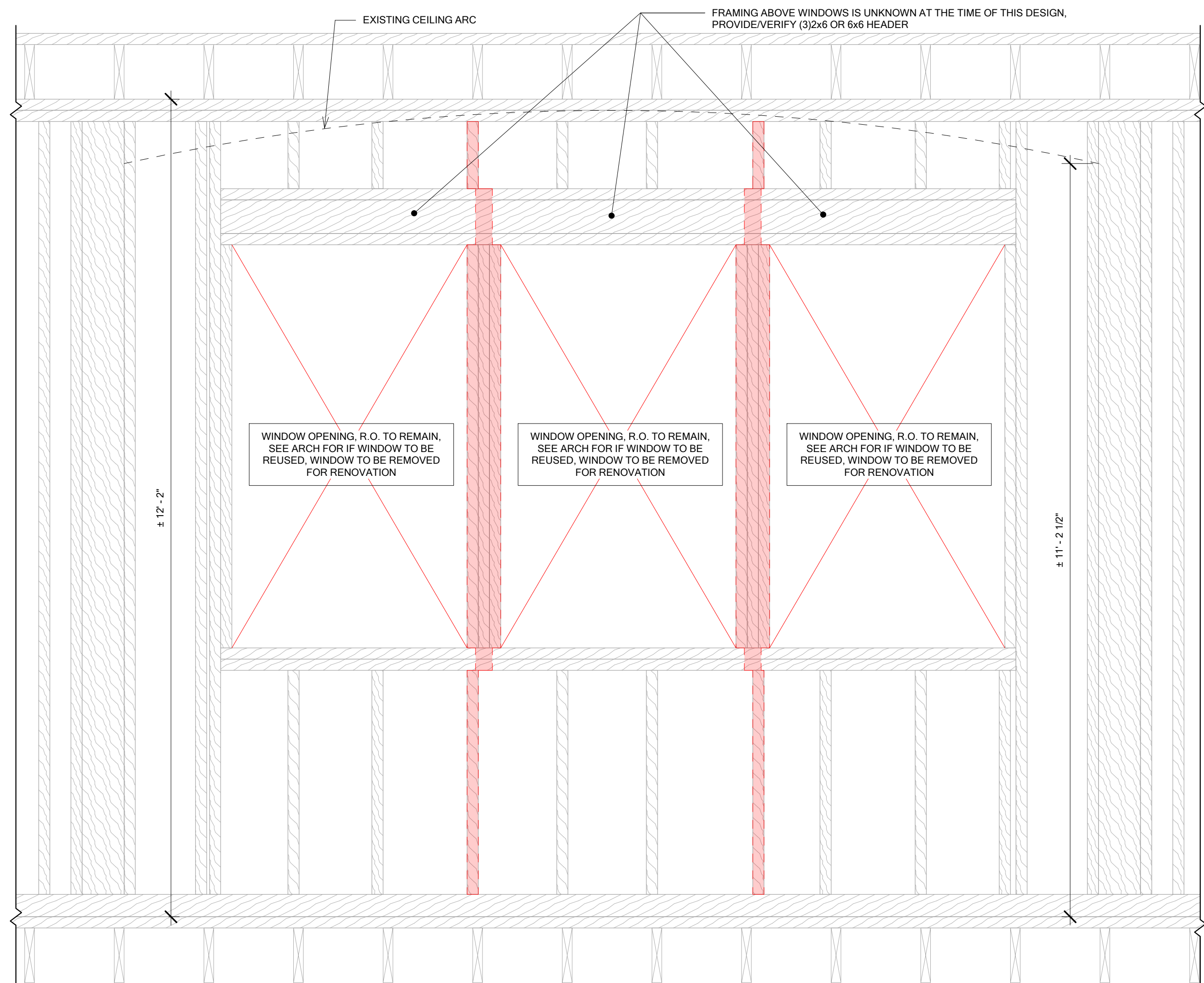


1
S 1.3B
Phase 2 - Connector Penetration
Scale: 1" = 1'-0"

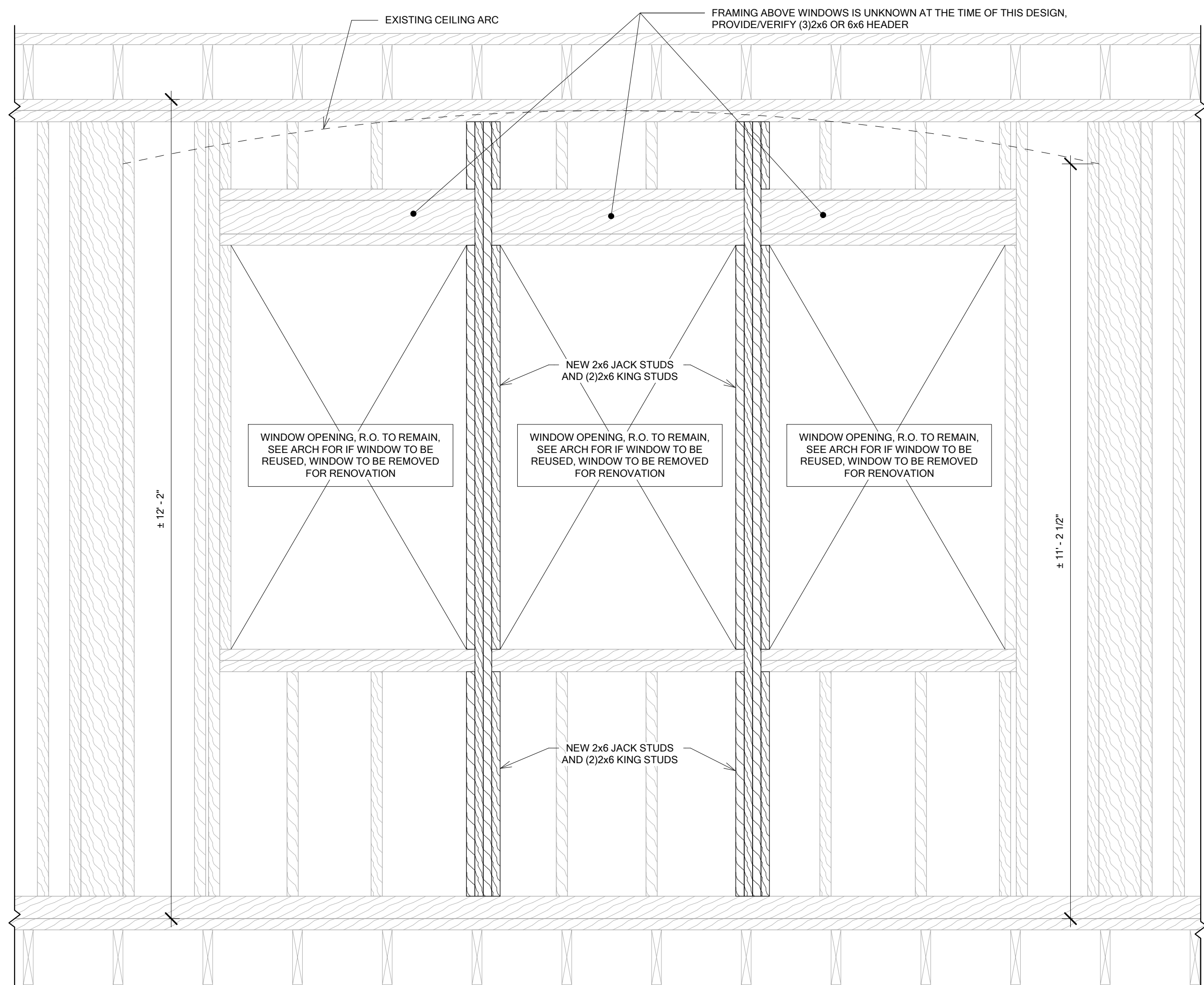
EXISTING PARTITION WALL REMOVAL NOTE:
THOUGH NOT STRUCTURALLY SIGNIFICANT, PARTITION WALLS CAN ACT AS SECONDARY SUPPORT WALLS DUE TO SETTLEMENT OVER TIME, SHIFTING DURING RELOCATION OR FINISH SECUREMENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBSERVE ANY CHANGES TO THE STRUCTURE/FINISHES DURING AND AFTER WALL REMOVAL AND NOTIFY ENGINEER UPON ANY CONCERNS. ANY FINISHES SECURED/SUPPORTED BY THESE WALLS ARE TO BE PROPERLY RE-SECURED. CONTACT NES/ARCH. WITH ANY QUESTIONS



2
S 1.3B
Phase 2 - Structural Demo/Key Plan
Scale: 3/16" = 1'-0"

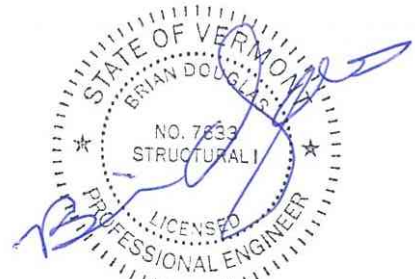


DEMO ELEVATION



NEW ELEVATION

3
S 1.3B
Phase 2 - Interior Window Reframing Elevation
Scale: 3/4" = 1'-0"



FOR PHASE 2
CONSTRUCTION

Town Of Johnson
293 Lower Main St W,
Johnson, VT 05656

Johnson Public
Library Relocation
& Addition

Corner of School St and
George Hill Rd,
Johnson, VT

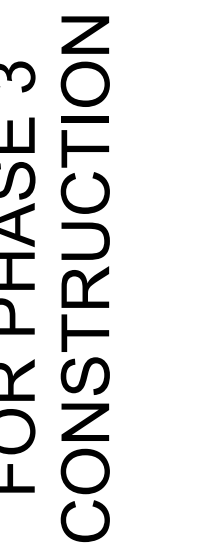
Rev. No.	Date	Description

Title:
Phase 2 - Wall
Removal and
Reframing

NES PROJECT NO: 25016
DATE: 05/30/2025
DESIGNED BY: AD/BD

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S 1.3B



Corner of School St and
George Hill Rd,
Johnson, VT

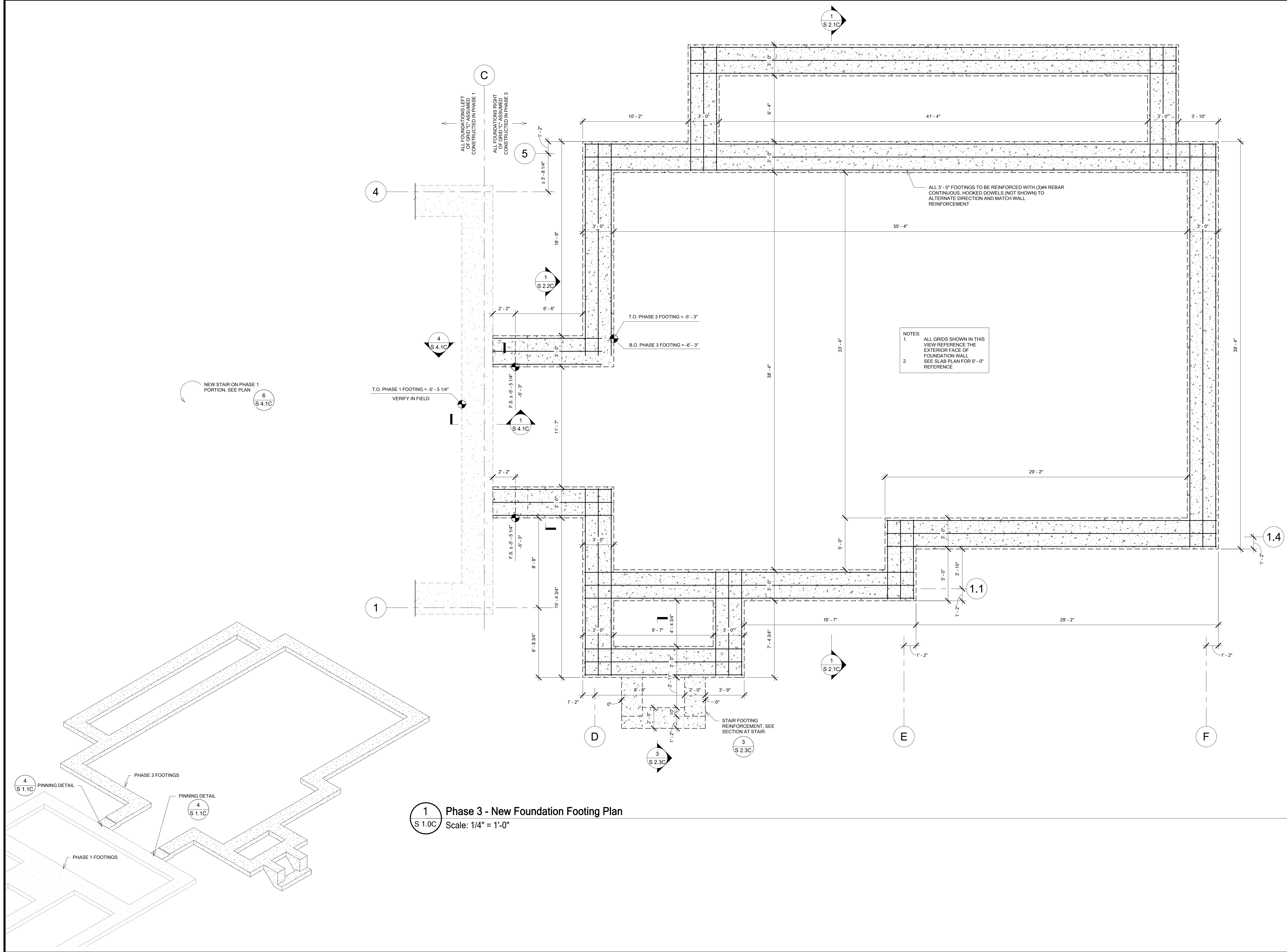
Rev. No.	Date	Description

Title: Phase 3 - New Foundation Footings

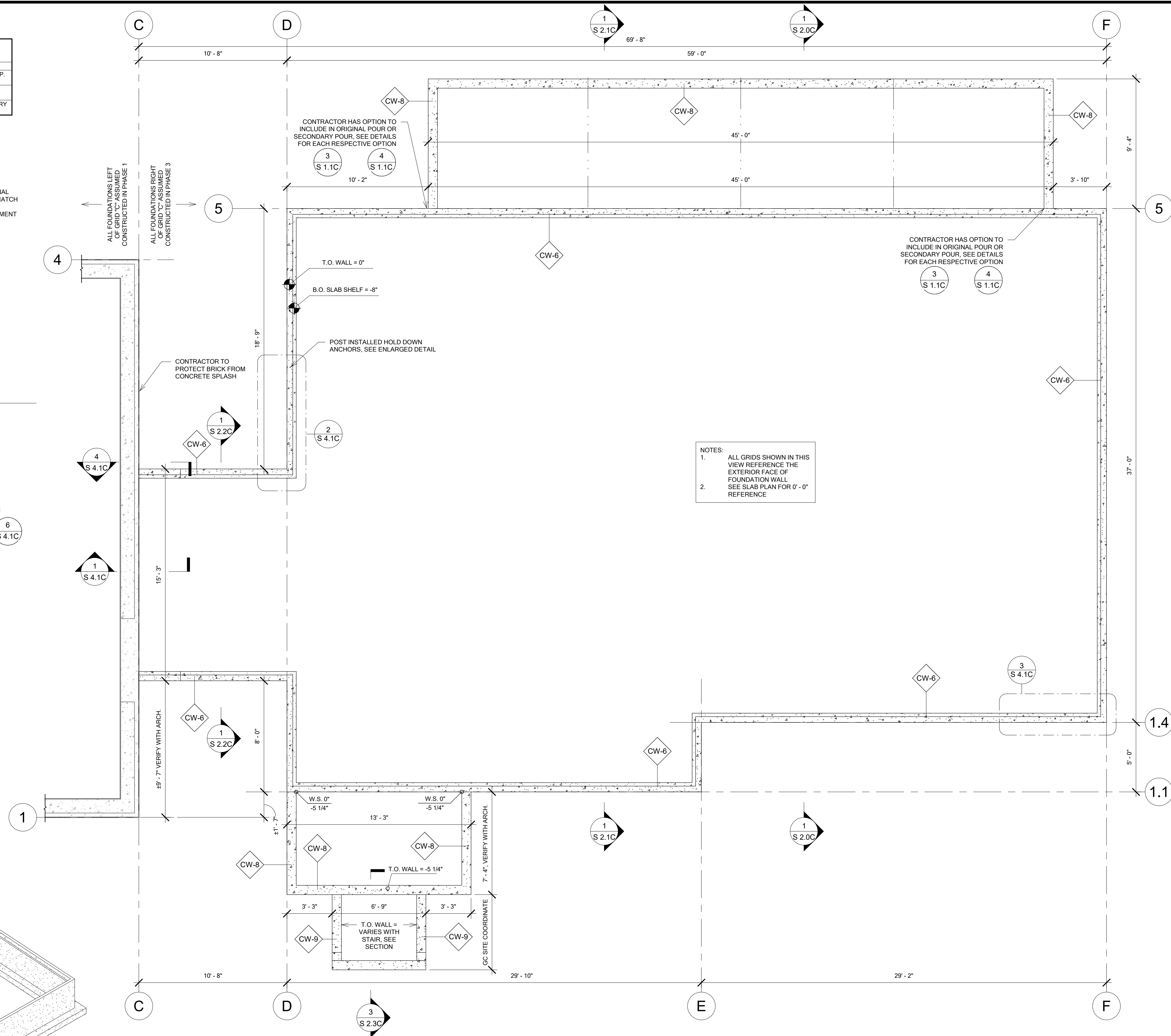
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Northeast Structural Engineering, PLLC 2025

S 1.0C



An isometric line drawing of a building's foundation. It features a large rectangular perimeter foundation with a double-layered structure. A smaller, separate foundation section is shown in the lower-left, which includes a set of stairs or a ramp leading up to it. The drawing uses stippling to indicate depth and structure.



1 Phase 3 - New Foundation Wall Plan
S 1.1C Scale: 1/4" = 1'-0"



Corner of School St and
George Hill Rd,
Johnson, VT

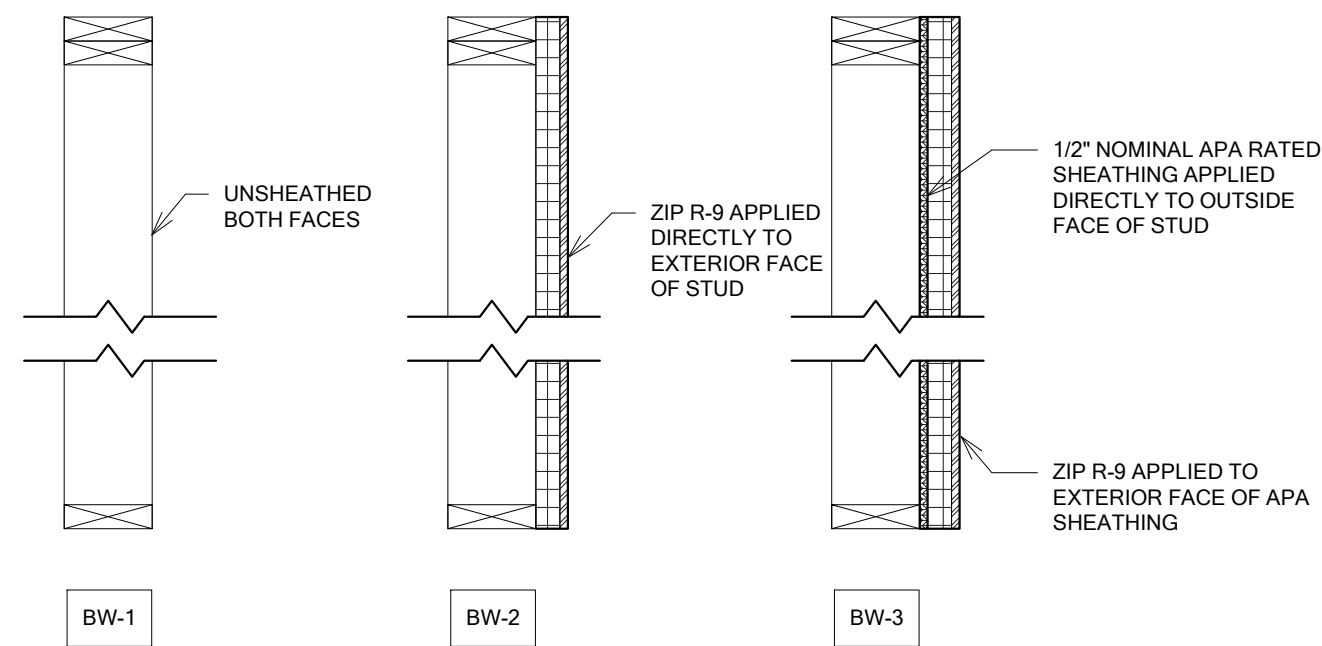
Rev. No.	Date	Description

NES PROJECT NO: 25016
 DATE: 05/30/2025
 DESIGNED BY: AD/BD

S 1.1C

HEADER SCHEDULE				
* = DIFFERING HEADER TYPE AND/OR JACK AND KING STUD CONFIGURATION			SEE WOOD HEADER DETAIL FOR HEADER TYPE	
TAG	HEADER SIZE	JACK STUD(S) EACH END	KING STUD(S)	HEADER TYPE
H1	(2) 2x8	SINGLE 2x	SINGLE 2x	TBD
H1*	(2) 2x8	DOUBLE 2x	SINGLE 2x	"A"
H2	(3) 2x8	DOUBLE 2x	SINGLE 2x OPENINGS < 5"	"C"
H3	(2) 2x10	SINGLE 2x	SINGLE 2x OPENINGS < 5"	"A"
H4	(3) 1 3/4"x 1 1/4" 2.0E LVL	DOUBLE 2x	SINGLE 2x6	"D"
H5	(2) 1 3/4"x 1 1/4" 2.0E LVL	DOUBLE 2x	DOUBLE 2x	"B"
H6	(3) 1 3/4"x 1 1/4" 2.0E LVL	DOUBLE 2x	(2) 2x6	"D"
H6*	(3) 1 3/4"x 1 1/4" 2.0E LVL	DOUBLE 2x	(3) 2x6	"D"

PHASE 3 - BEARING WALL SCHEDULE					
TAG	CONSTRUCTION	TOP PLATE	BOTTOM PLATE	SHEATHING	USE
BW-1	2x6 @ 16" o.c.	(2) 2x6	(1) 2x6	N/A, BLOCK AT 3RD POINTS	BEARING WALL
BW-2	2x6 @ 16" o.c.	(2) 2x6	(1) 2x6	ZIP R-9 SHEATHING TO BE APPLIED DIRECTLY TO OUTSIDE FACE OF STUD WITH 8d COMMON NAILS AT 9" O.C. EDGE AND 12" O.C. FIELD NAILING, SEE 4/S5.0	BEARING/SHEAR WALL
BW-3	2x6 @ 16" o.c.	(2) 2x6	(1) 2x6	1/2" NOMINAL APA RATED SHEATHING TO BE APPLIED DIRECTLY TO OUTSIDE FACE OF STUD WITH 8d COMMON NAILS AT 4" O.C. EDGE AND 12" O.C. FIELD NAILING, SEE 4/S5.0	BEARING/SHEAR WALL



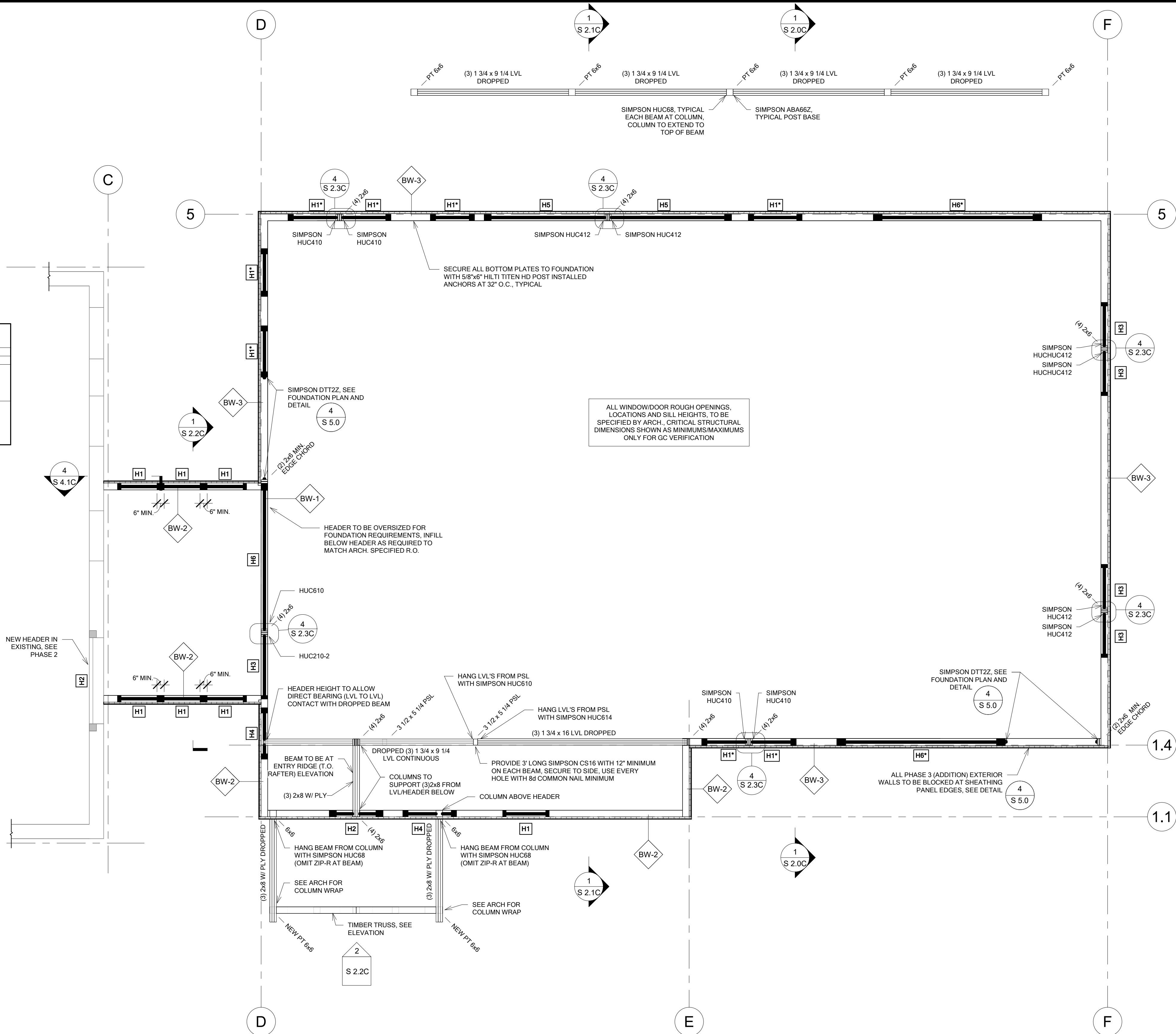
SEE SCHEDULE FOR NAILING REQUIREMENTS, SEE DETAIL 4/S5.0 FOR SHEAR WALL REQUIREMENTS, SEE TRUSS SUPPORT PLAN FOR HOLD DOWN REQUIREMENTS

2 Structural Wall Profiles (Phase 3)

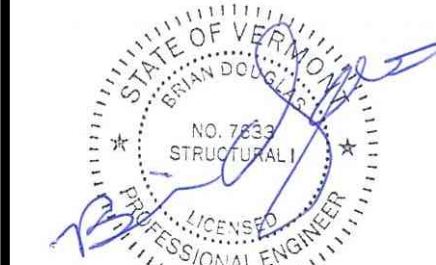
Scale: 1" = 1'-0"

1 Phase 3 - Roof Support Plan

Scale: 1/4" = 1'-0"



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FOR PHASE 3 CONSTRUCTION

Town Of Johnson
293 Lower Main St W,
Johnson, VT 05656

Johnson Public
Library Relocation
& Addition

Corner of School St and
George Hill Rd,
Johnson, VT

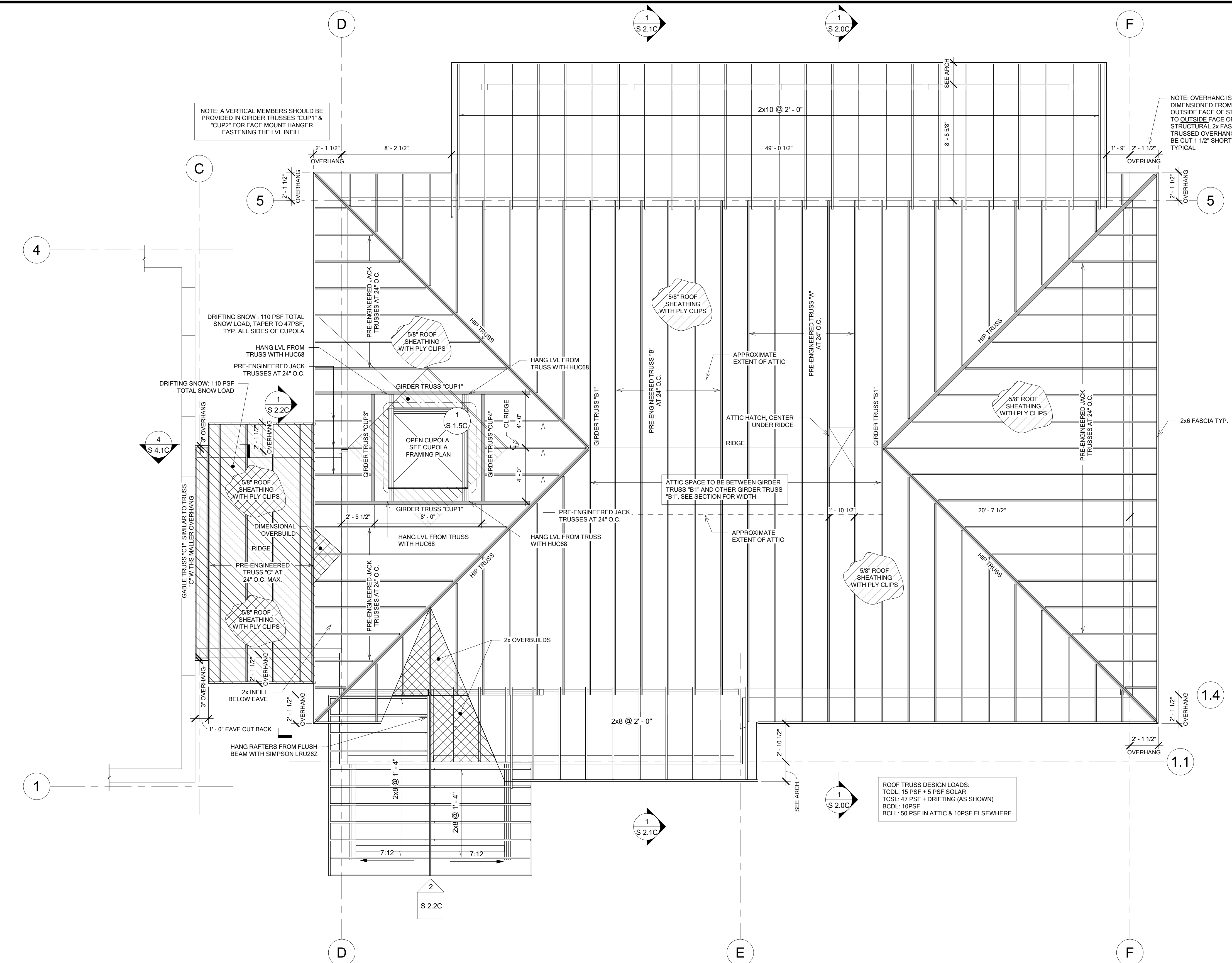
Rev. No.	Date	Description

Title:
Phase 3 - Truss
Support Plan

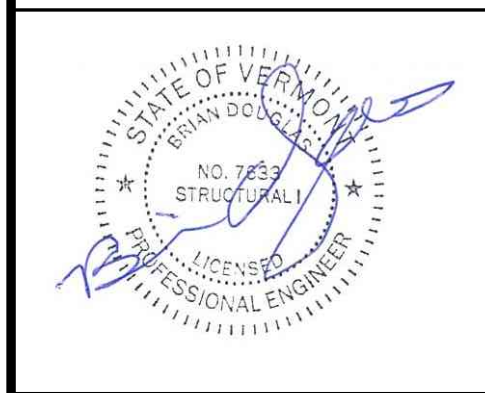
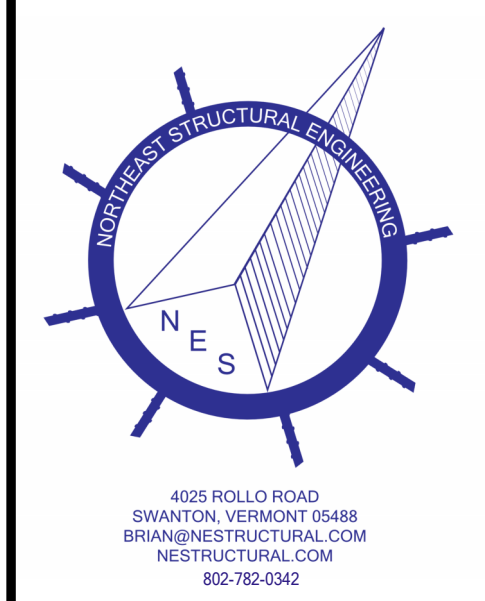
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S 1.3C



1 Phase 3 - Truss/Rafter Framing Plan
S 1.4C Scale: 1/4" = 1'-0"



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& Addition

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Johnson, VT

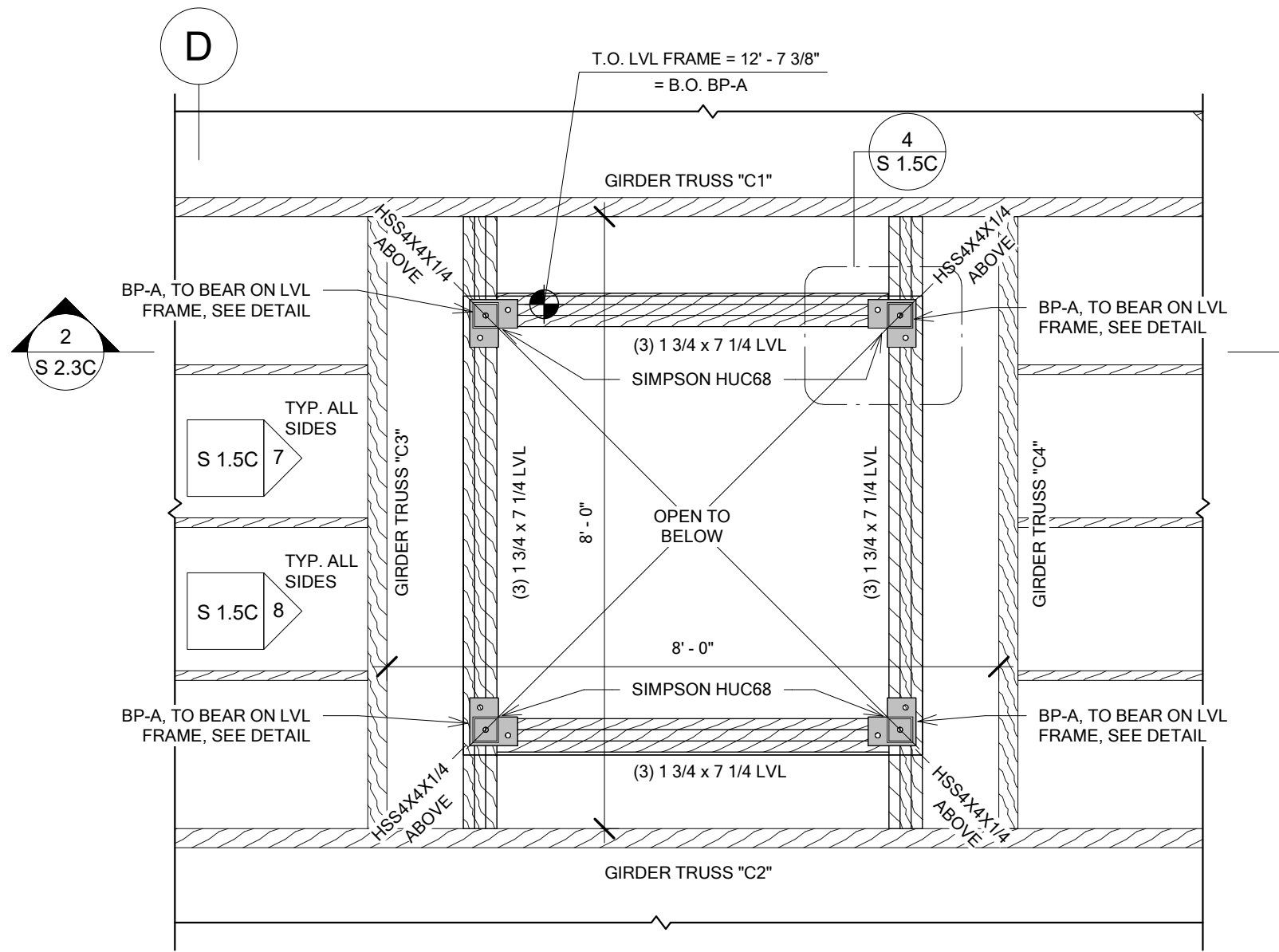
Rev. No.	Date	Description

Title:
Phase 3 - Truss
Framing Plan

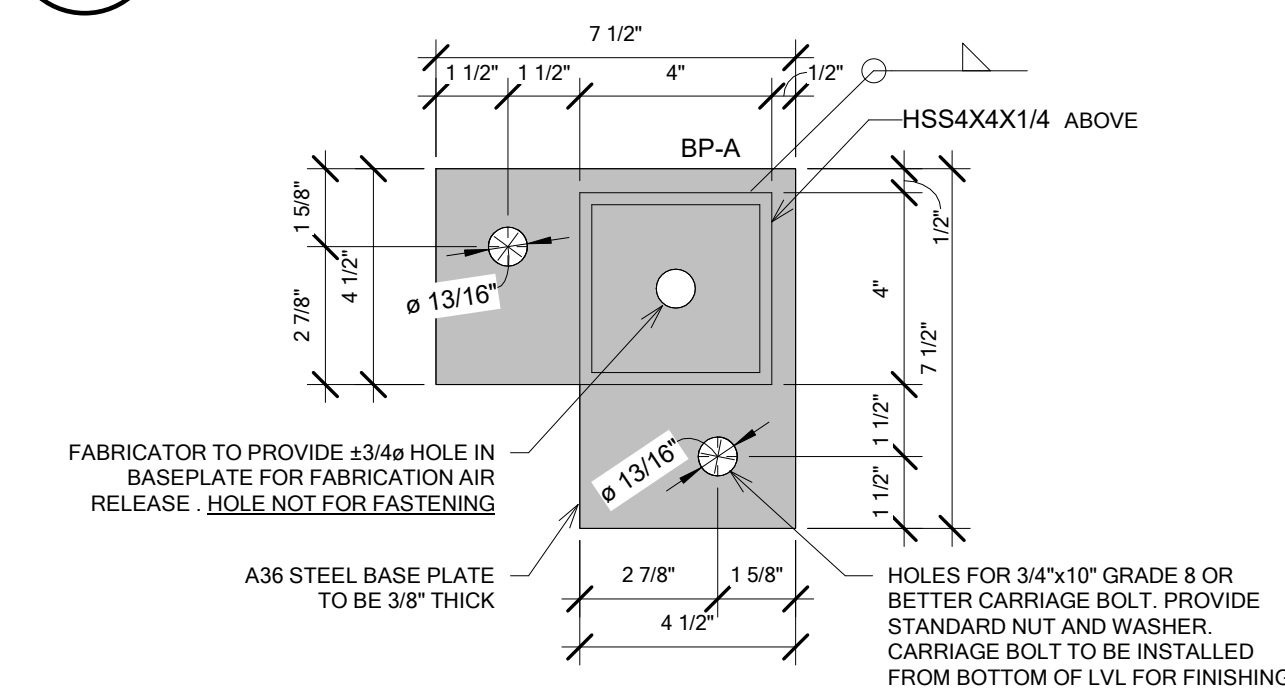
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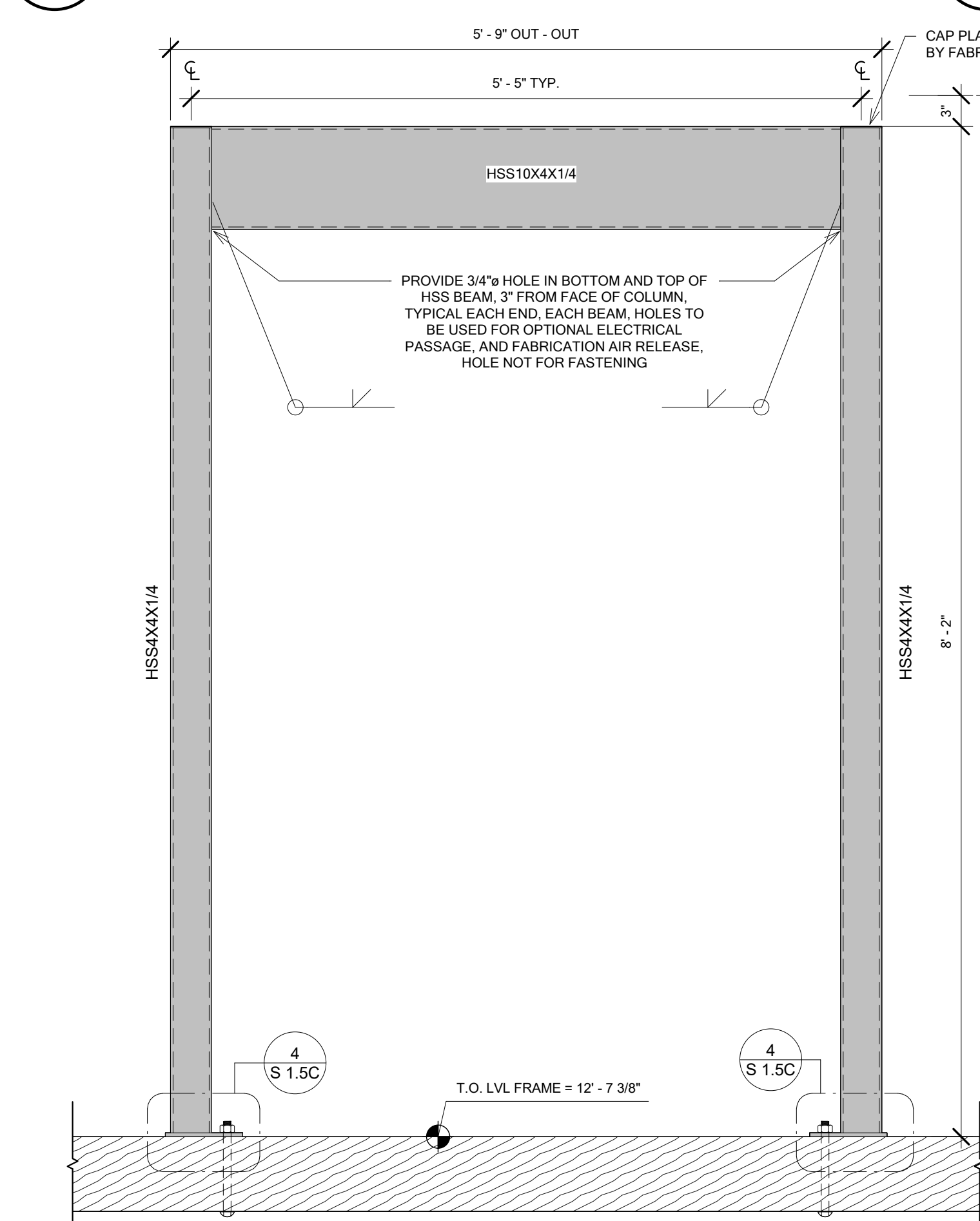
S 1.4C



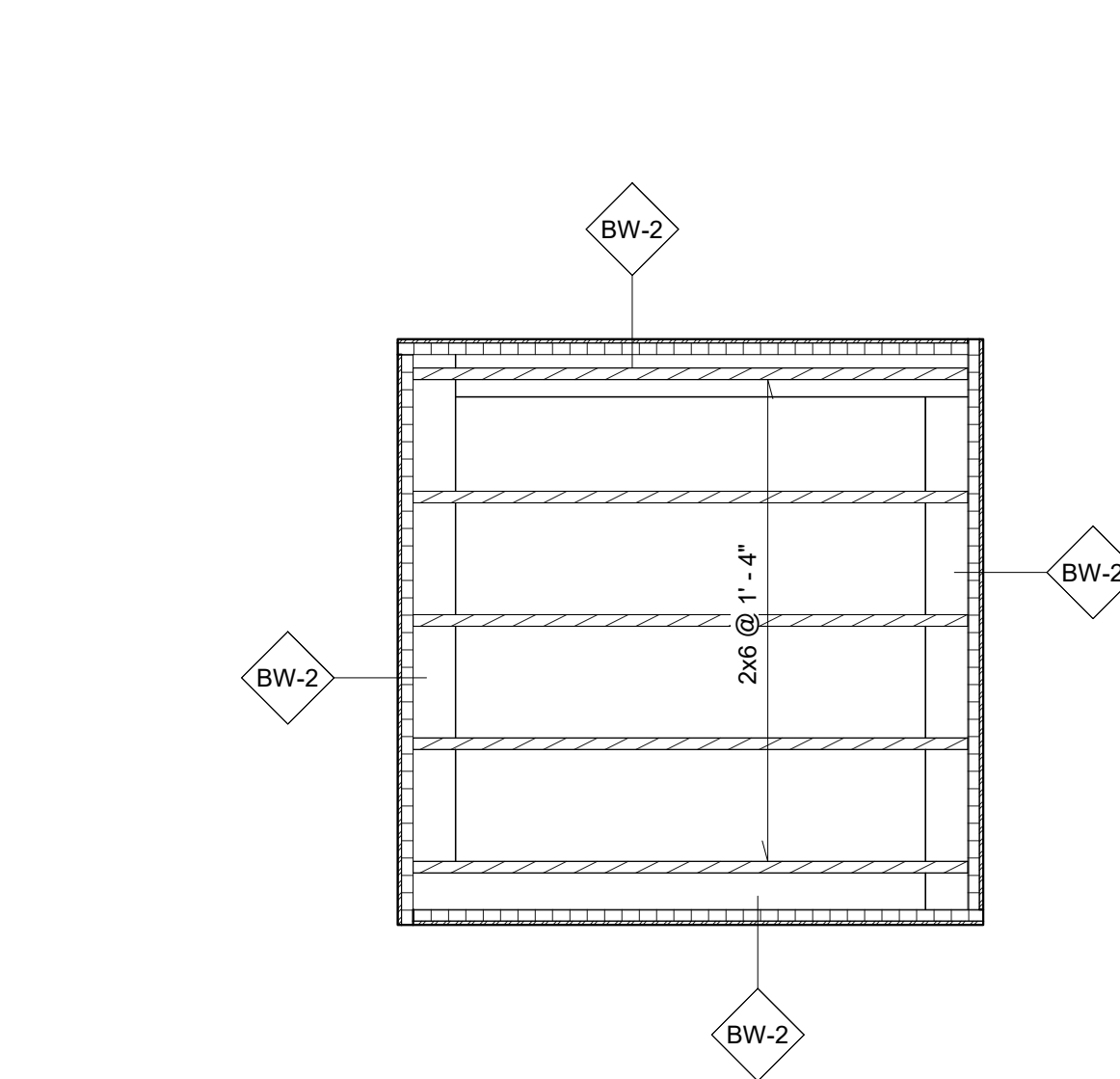
1 Phase 3 - Cupola Baseplate Plan
S 1.5C Scale: 1/2" = 1'-0"



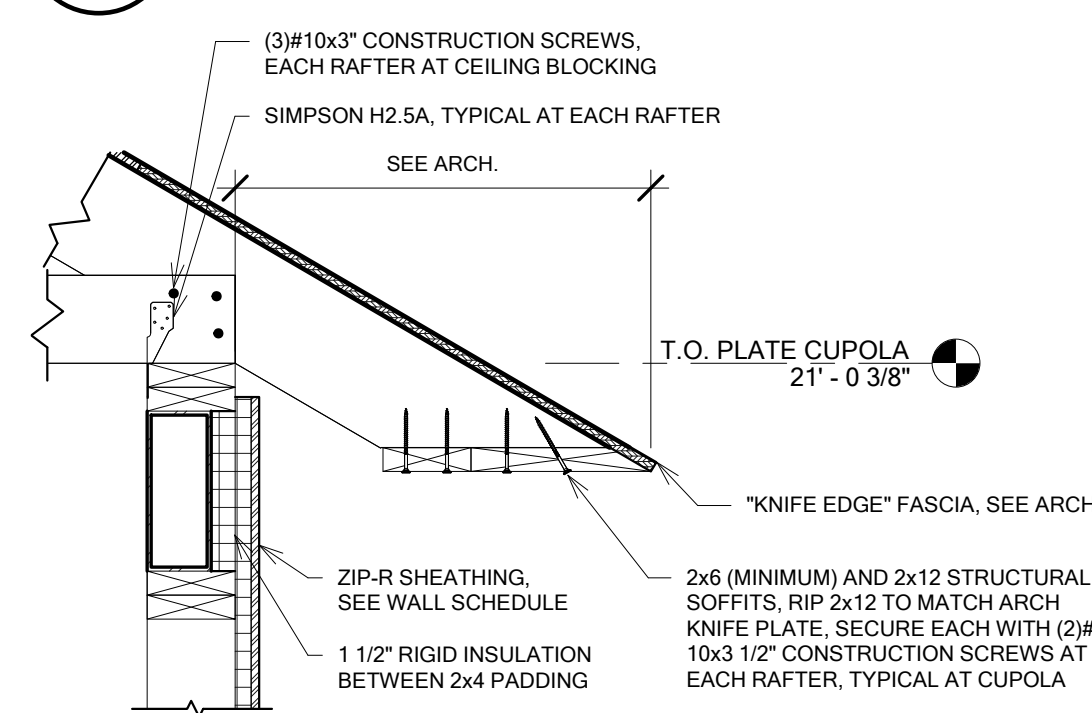
4 Phase 3 - Typical Enlarged BP-A Plan
S 1.5C Scale: 3" = 1'-0"



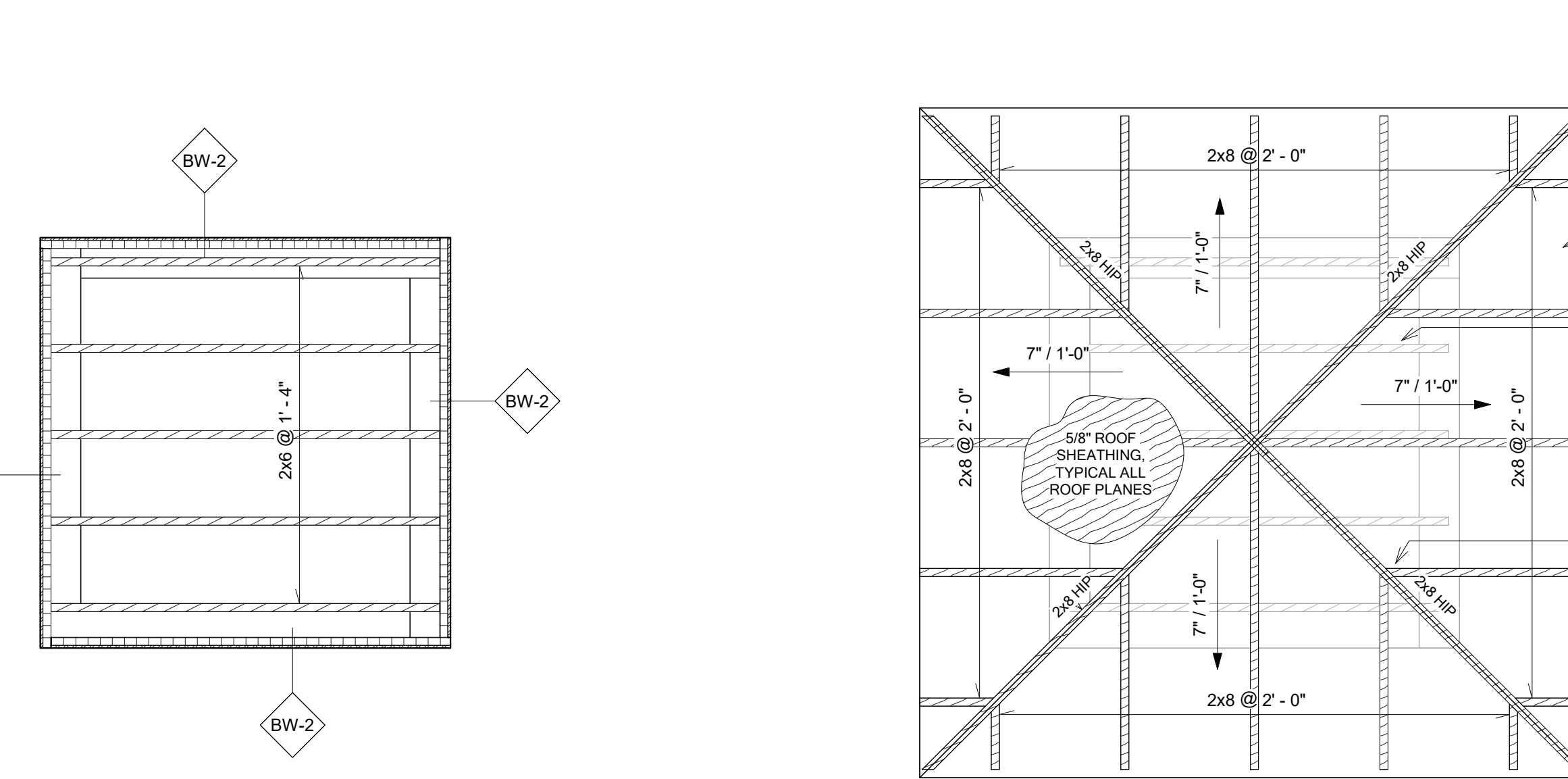
7 Typical Cupola Frame Elevation
S 1.5C Scale: 1" = 1'-0"



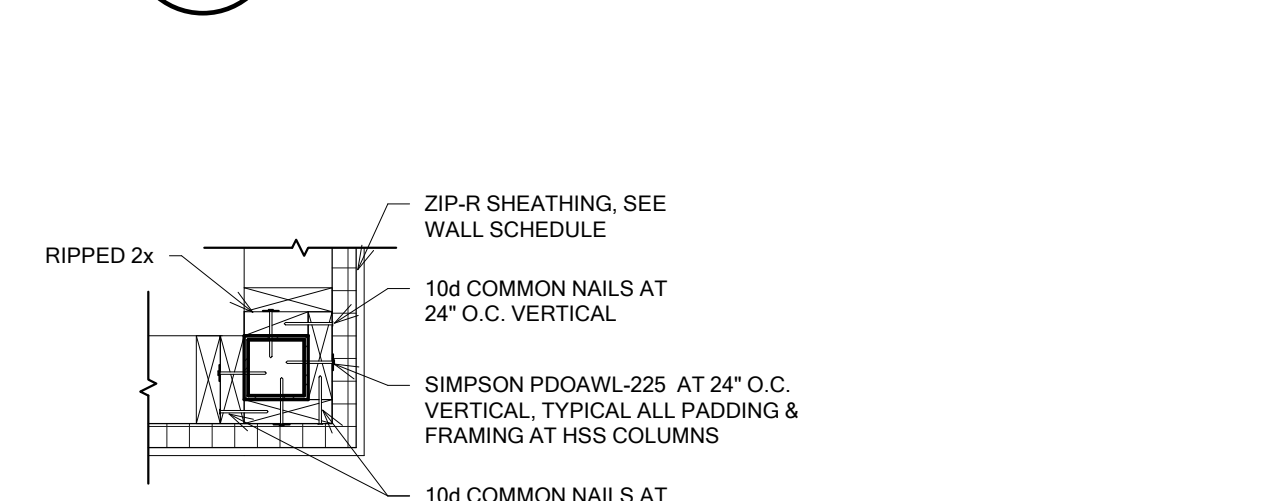
2 Phase 3 - Cupola Ceiling Plan
S 1.5C Scale: 1/2" = 1'-0"



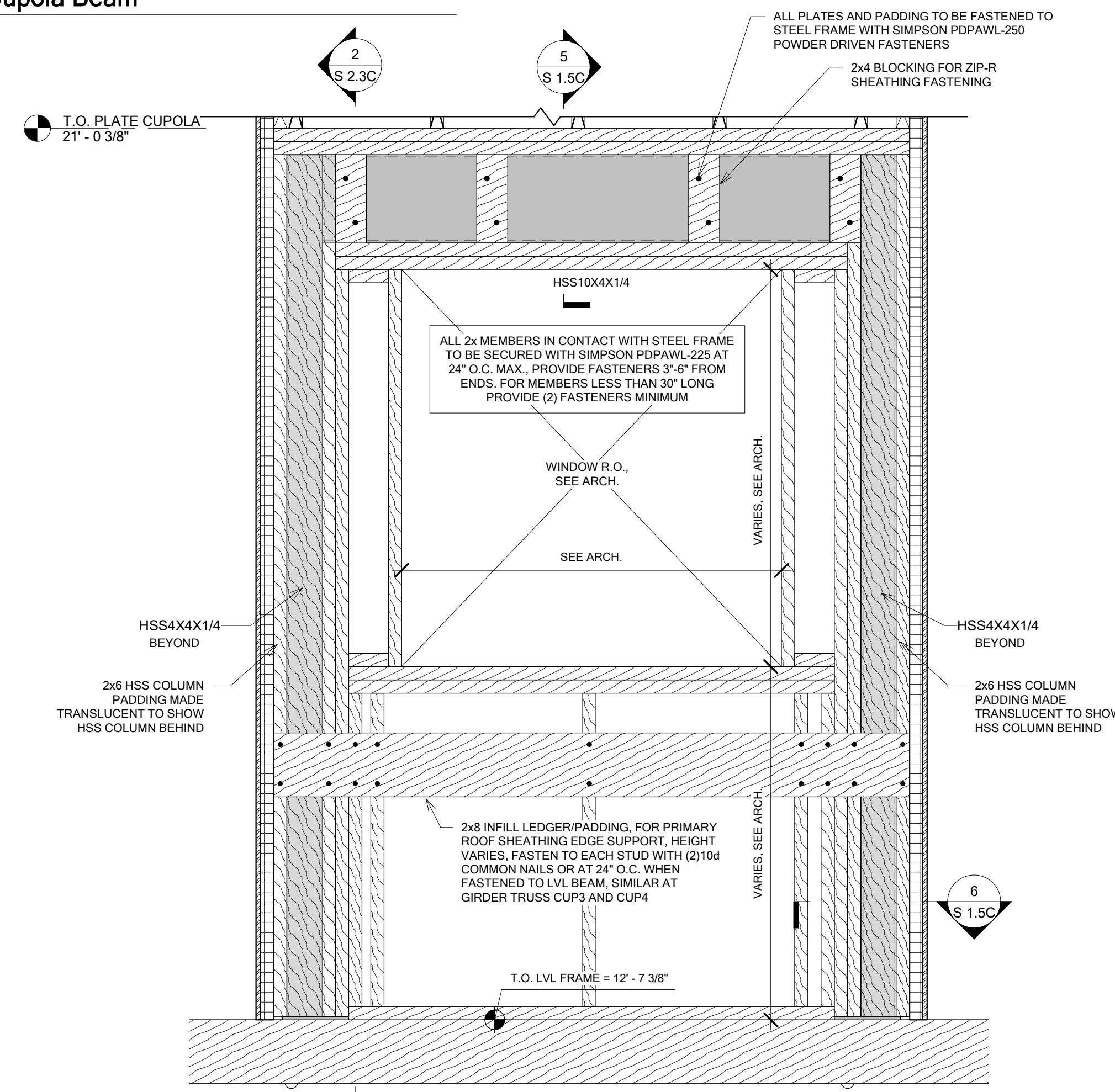
5 Section at HSS Cupola Beam
S 1.5C Scale: 1" = 1'-0"



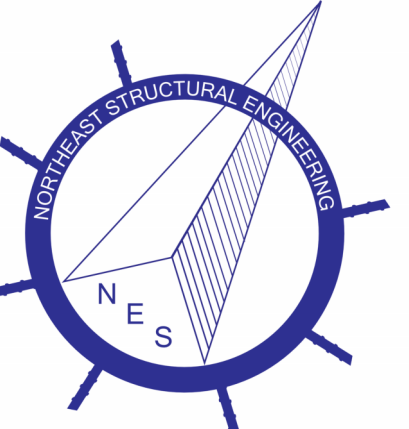
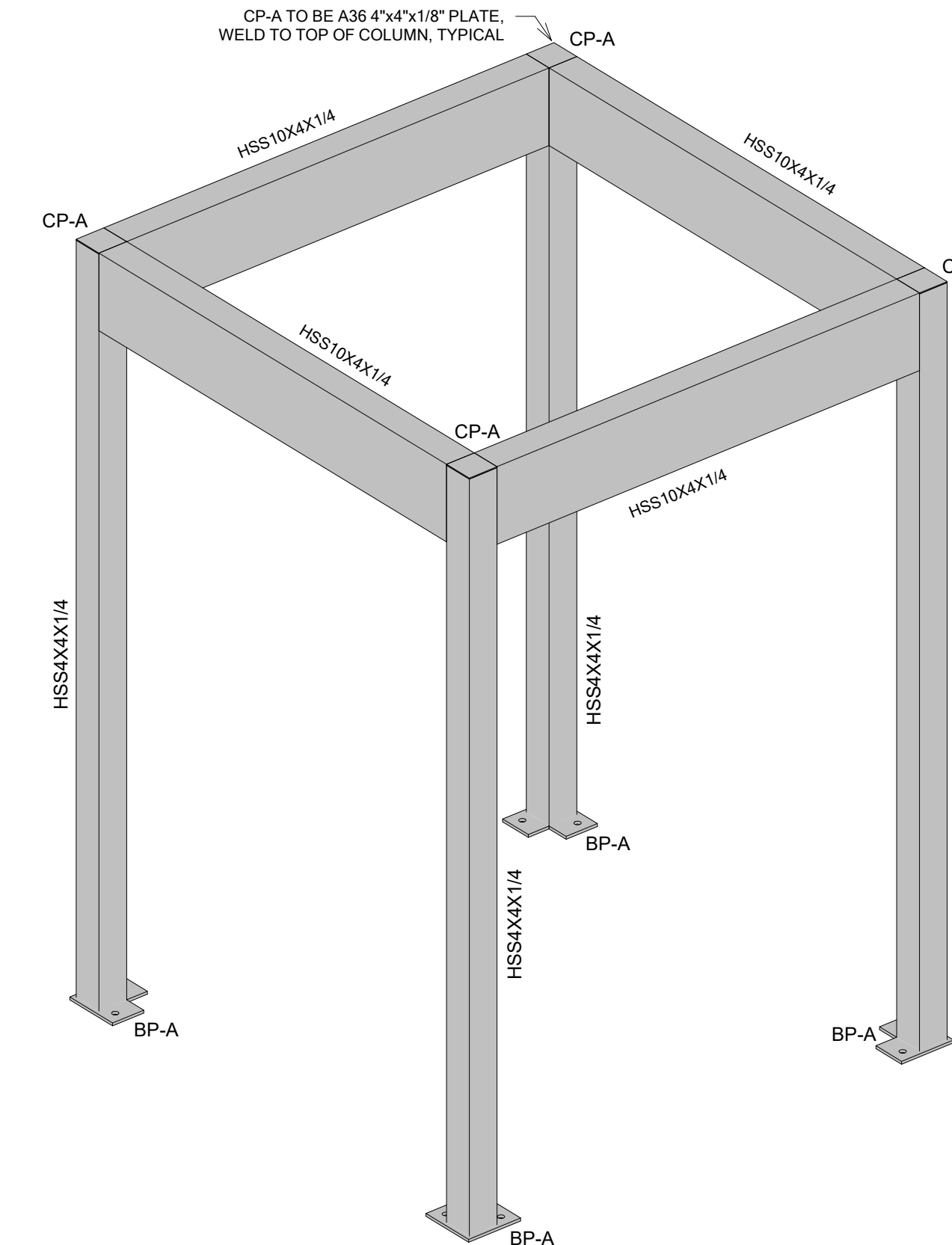
3 Phase 3 - Cupola Rafter Plan
S 1.5C Scale: 1/2" = 1'-0"



6 Section at Cupola Wall Corner
S 1.5C Scale: 1" = 1'-0"



8 Typical Cupola Wall Elevation
S 1.5C Scale: 1" = 1'-0"



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Johnson Public
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Corner of School St and
George Hill Rd,
Johnson, VT

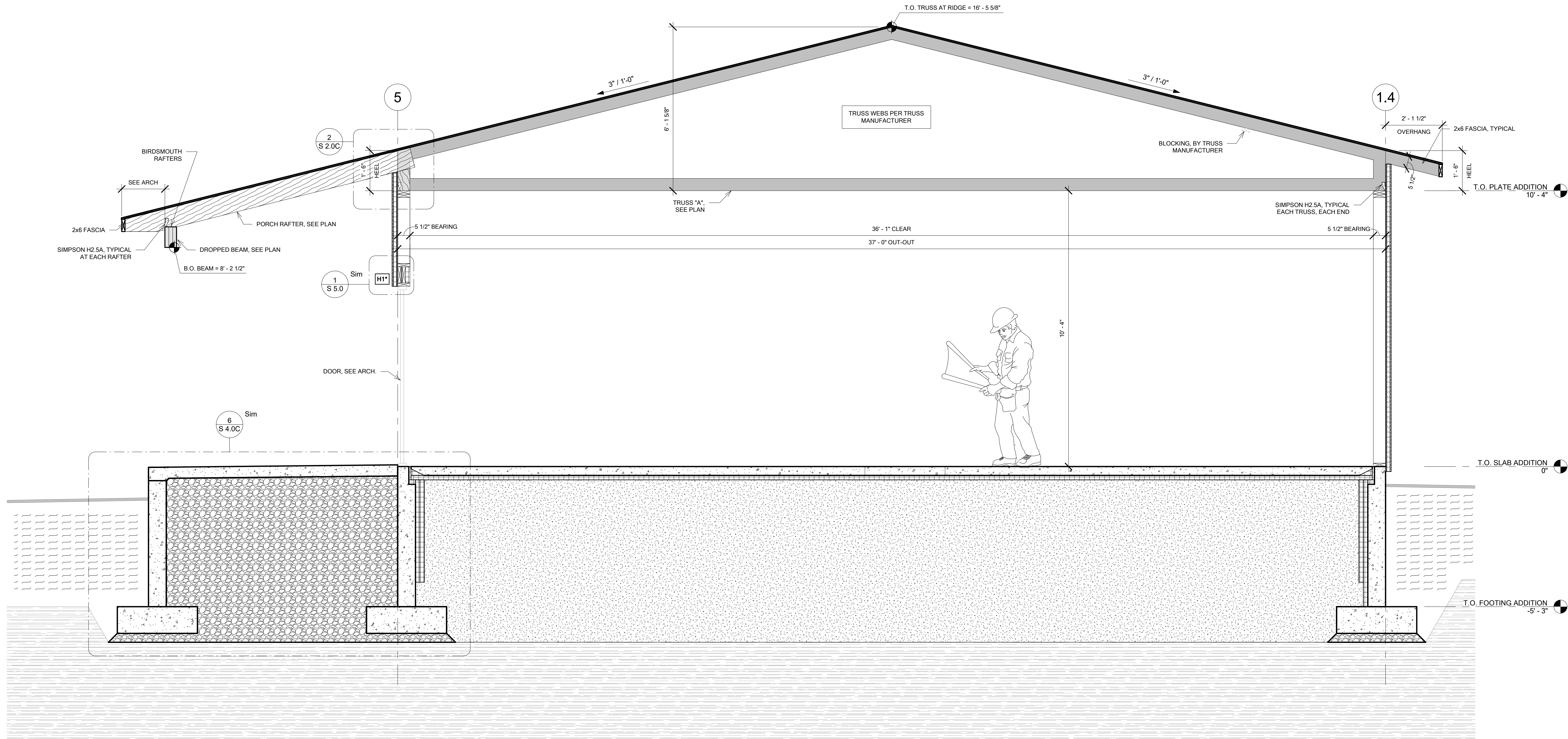
Rev. No.	Date	Description

Title:
Phase 3 - Cupola
Plans & Details

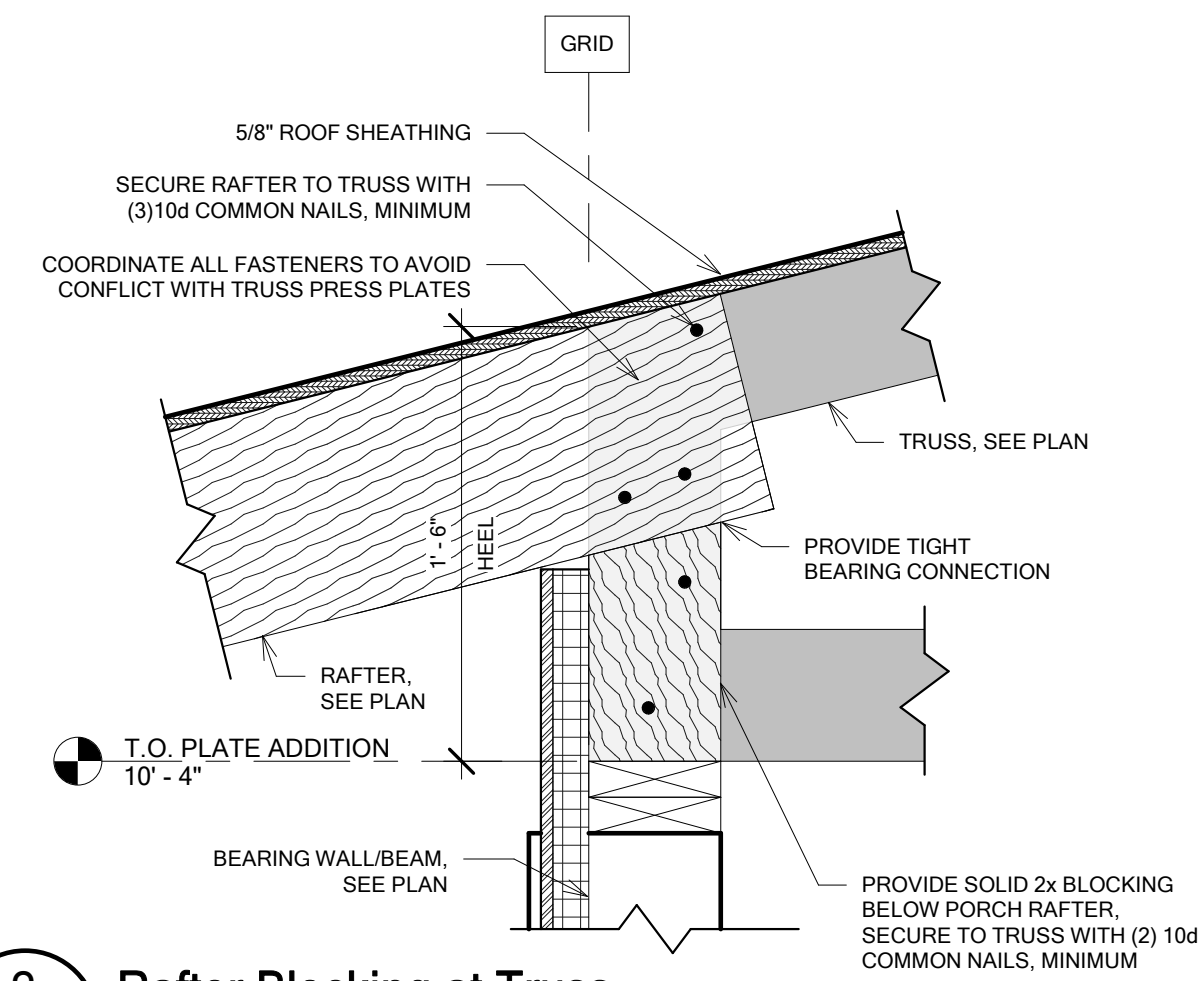
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S 1.5C



1 Typical Section at Addition East End
S 2.0C Scale: 1/2" = 1'-0"



2 Rafter Blocking at Truss
S 2.0C Scale: 1 1/2" = 1'-0"



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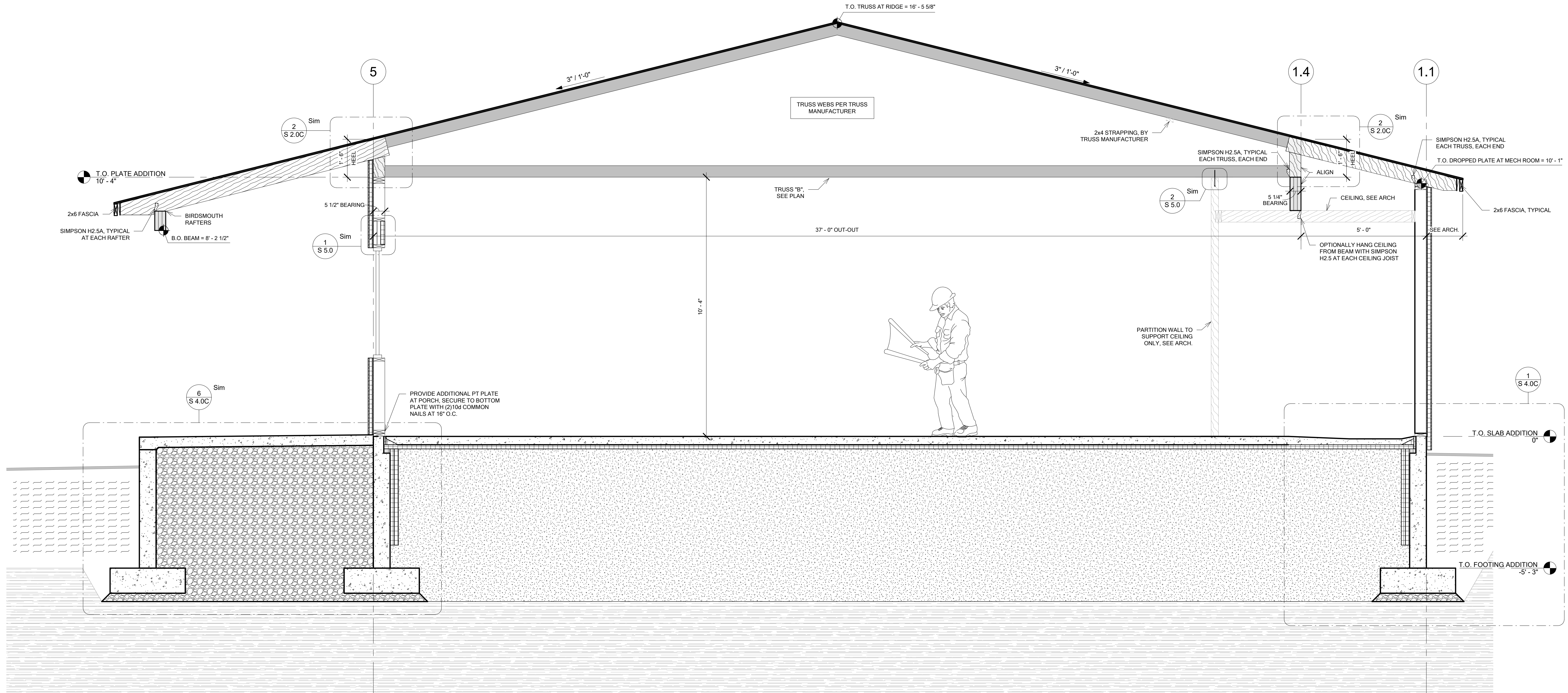
Rev. No.	Date	Description

Title:
Phase 3 -
Section/Truss
Profiles

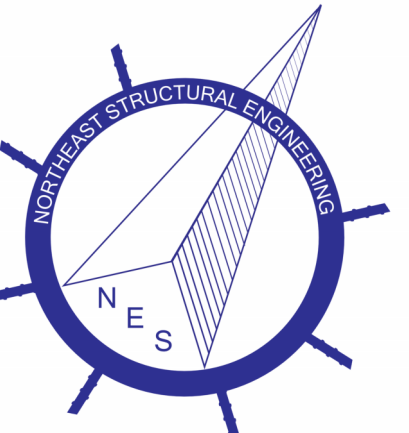
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S 2.0C



1 Section at Stacks and Mechanical Room
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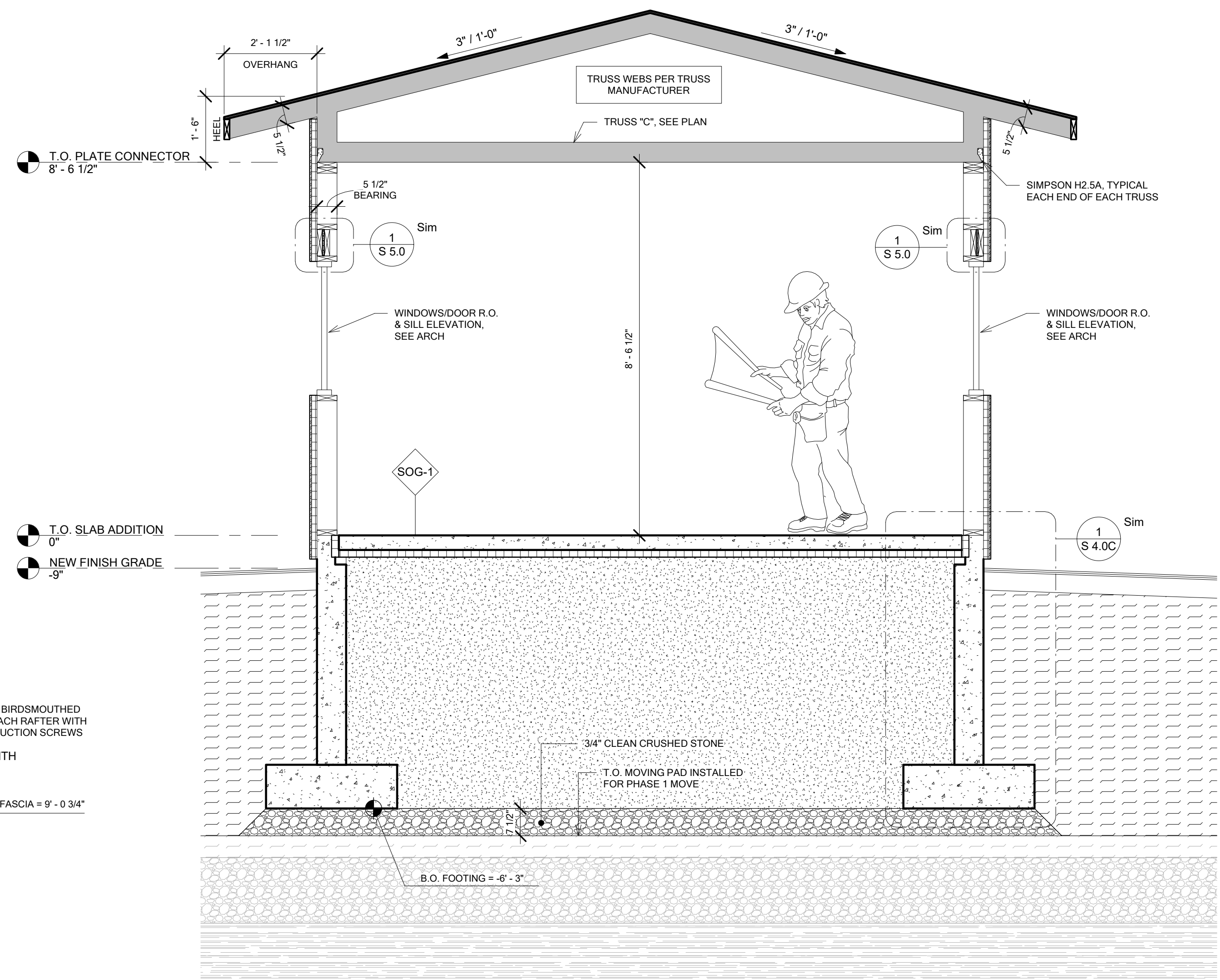
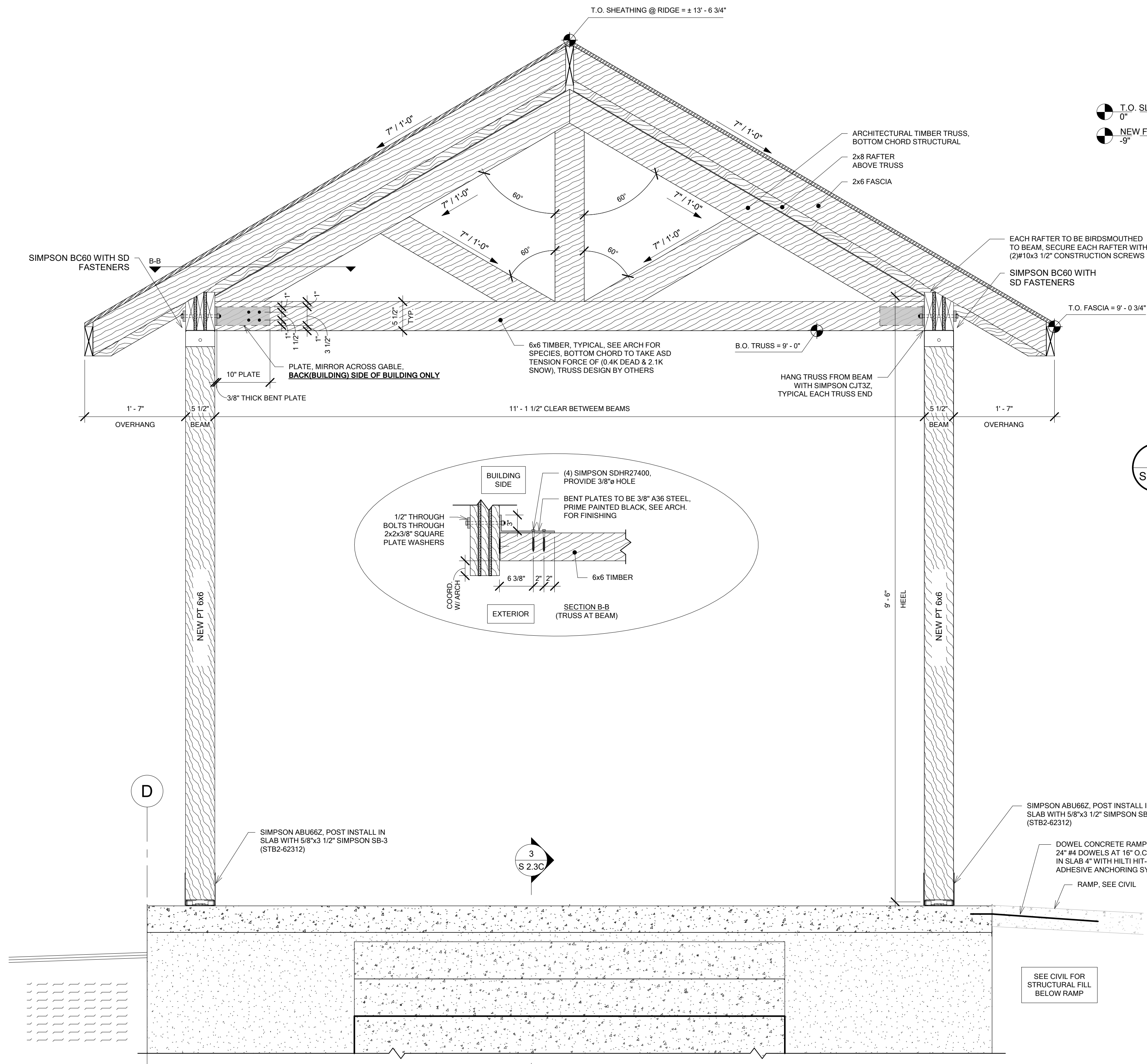
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S 2.1C



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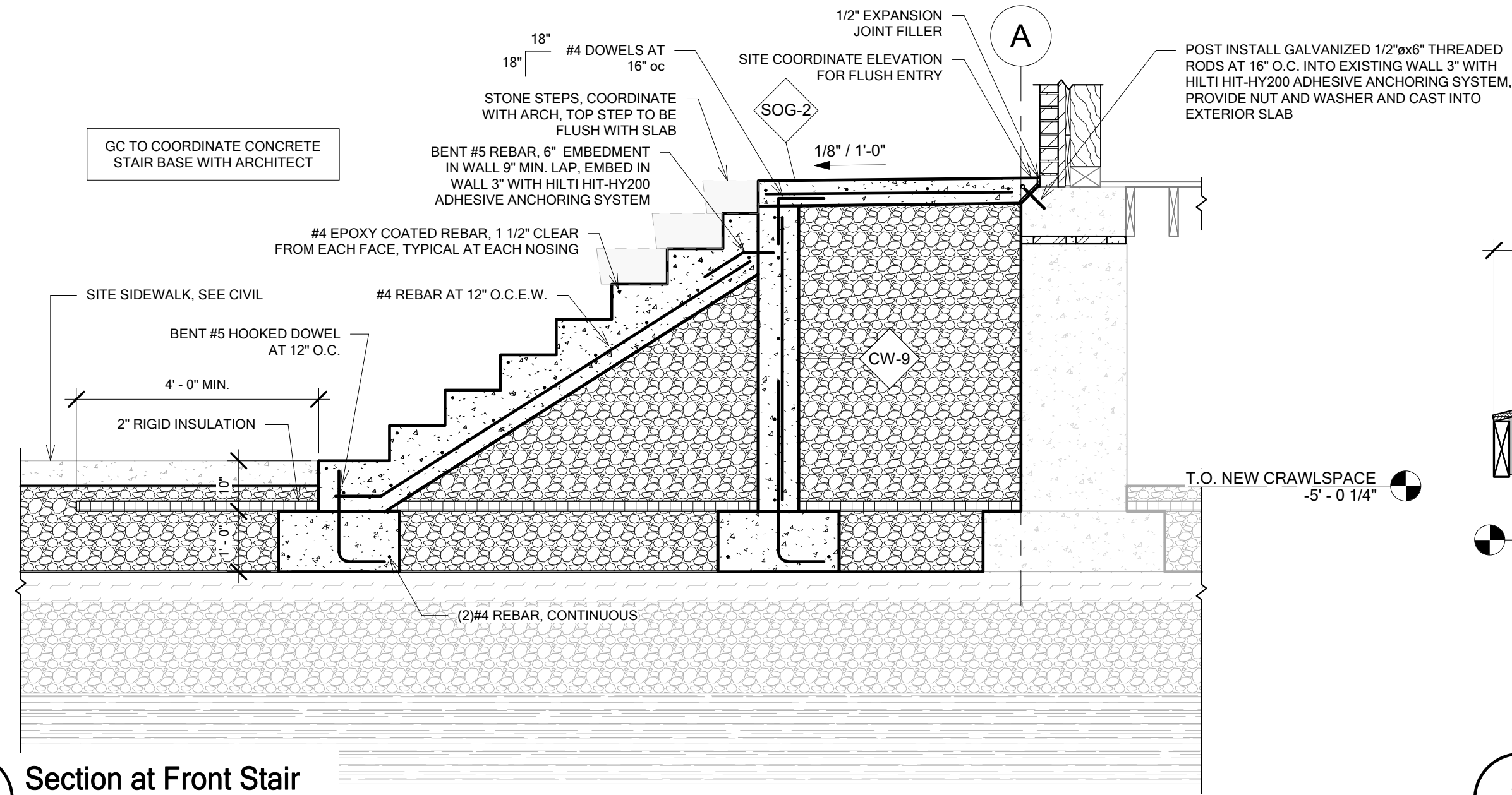
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Title:
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Profiles

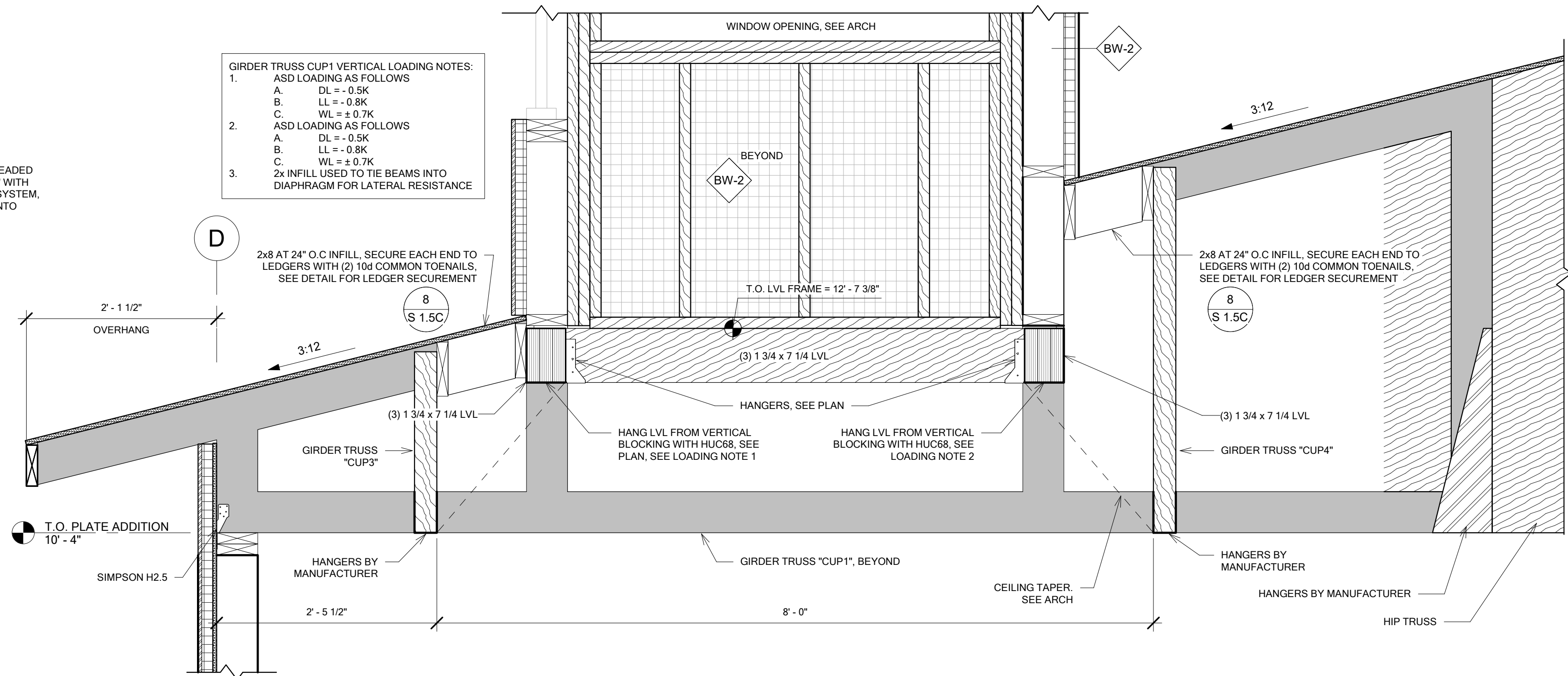
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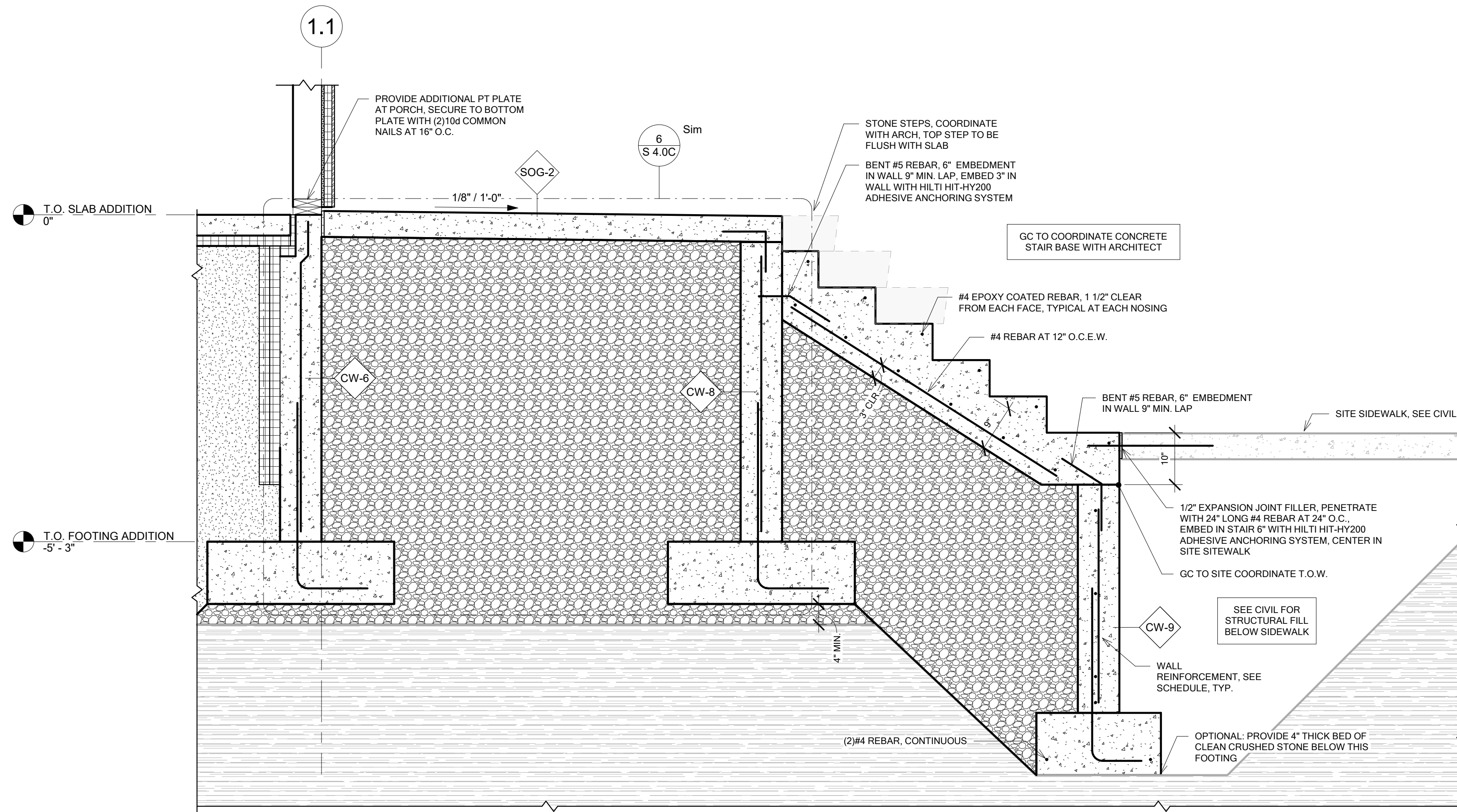
S 2.2C



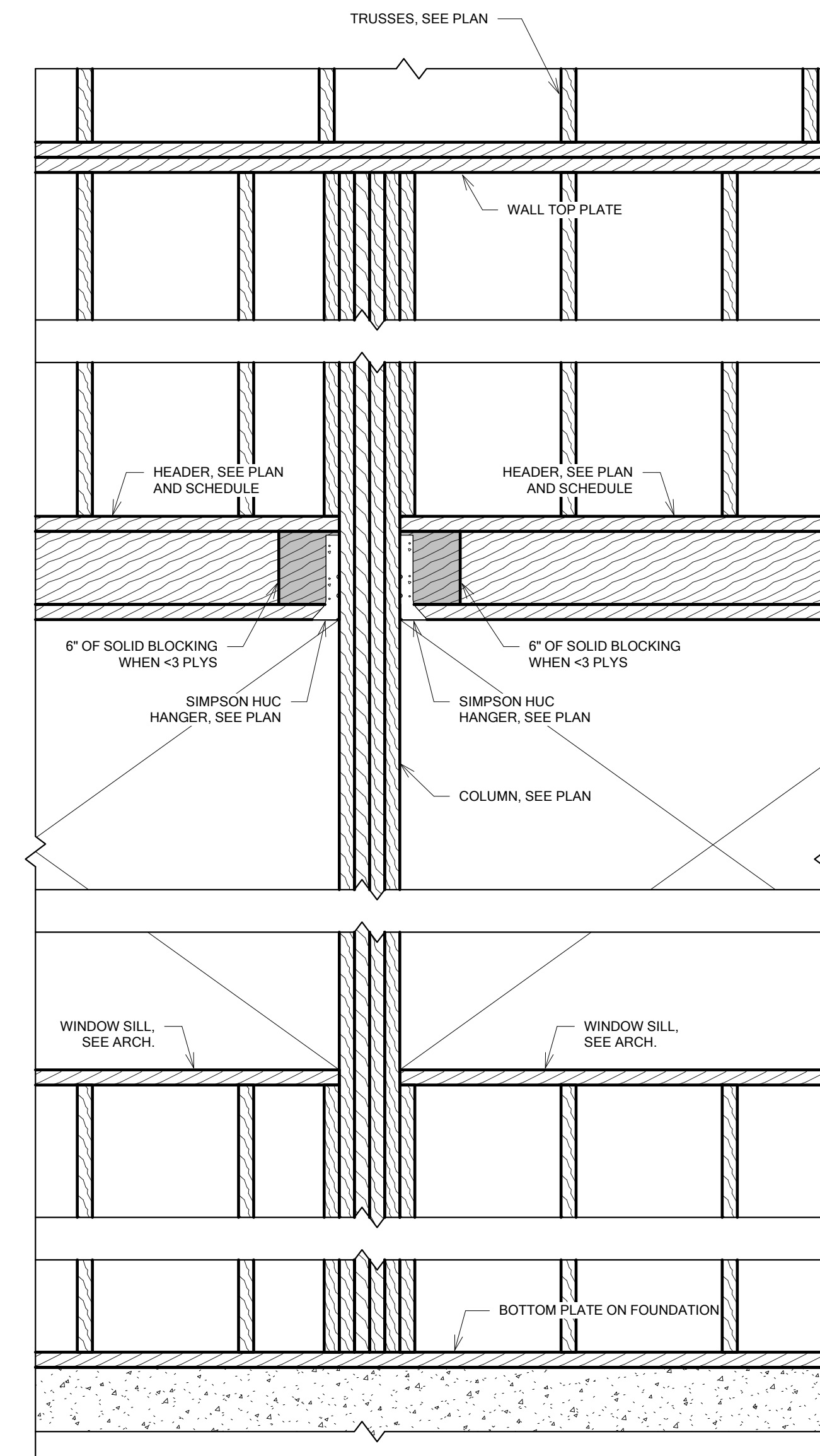
1 Section at Front Stair
Scale: 1/2" = 1'-0"



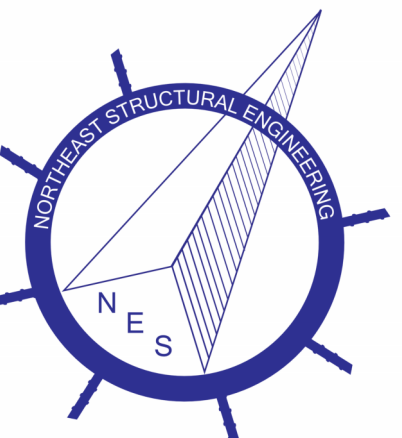
2 Section at Cupola/ Girder Truss "CUP1"
Scale: 1" = 1'-0"



3 Section at Entry Foundation & Stair
Not To Scale



4 Structural Mullion Elevation
Scale: 1" = 1'-0"



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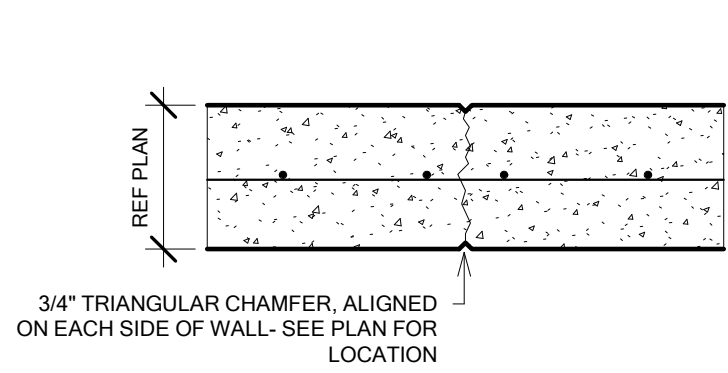
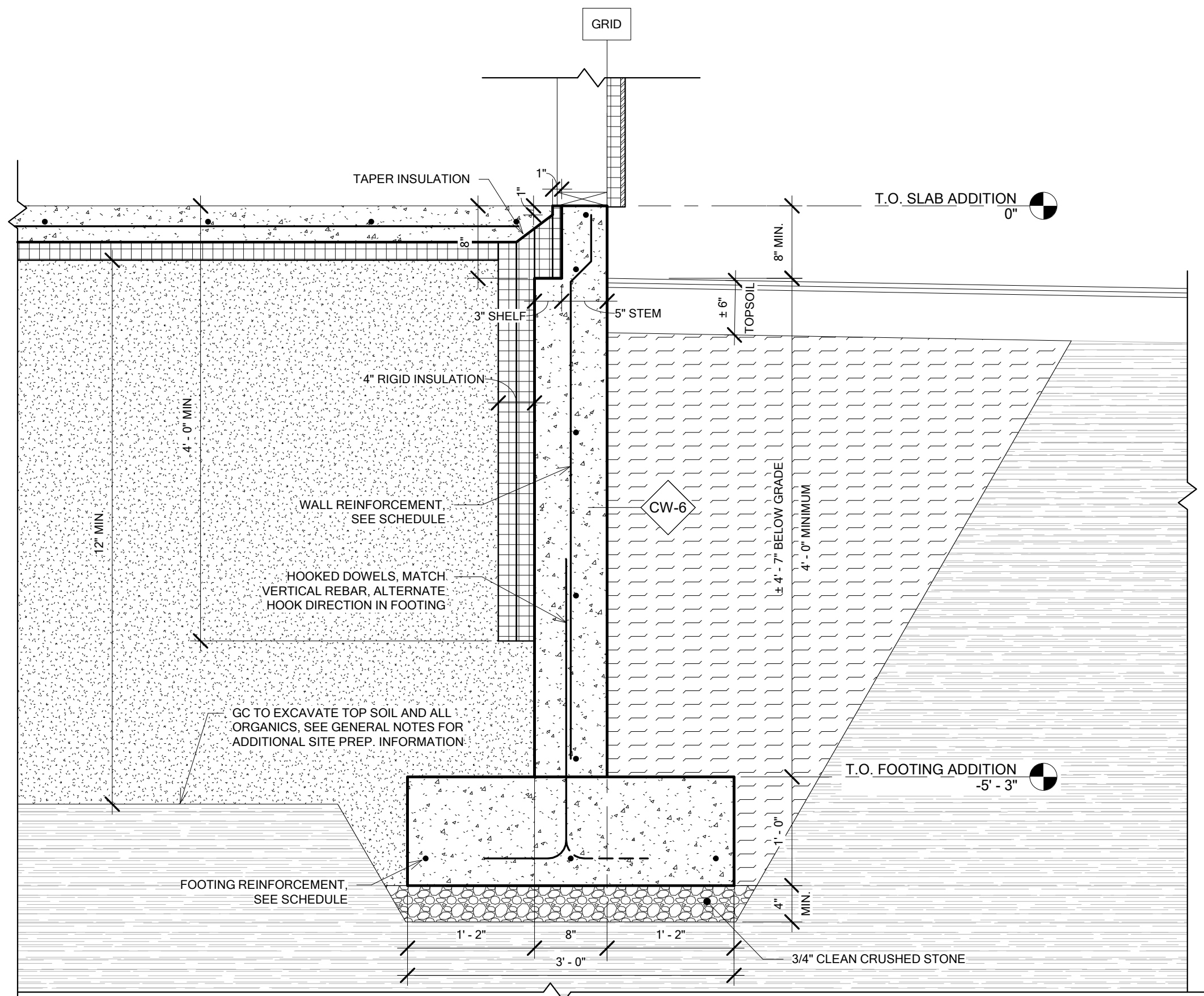
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Section/Truss
Profiles

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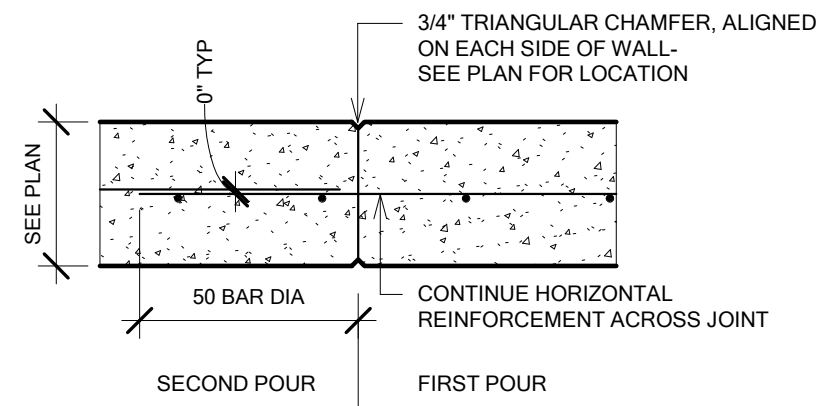
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S 2.3C

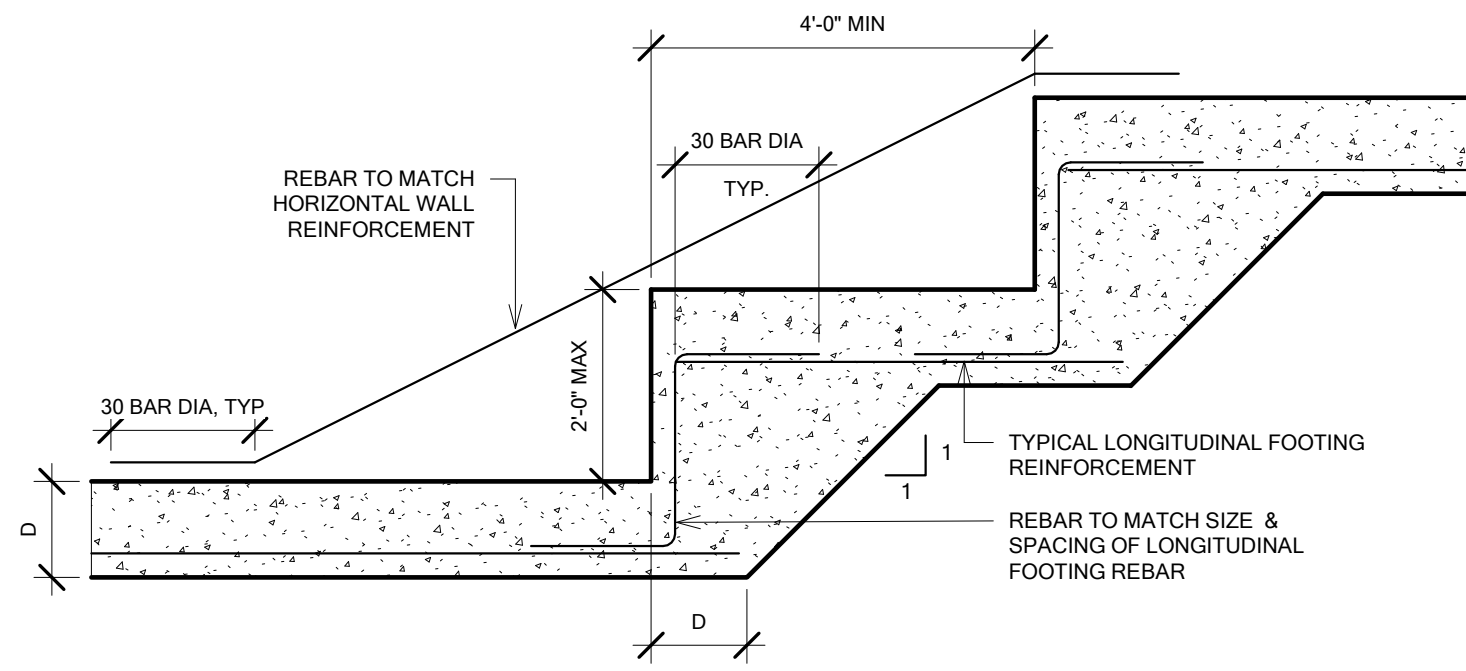


NOTE:
1. UNLESS OTHERWISE SHOWN SPECIFICALLY ON THE PLANS, PROVIDE JOINTS 8'-0" TO 10'-0" FROM EACH CORNER AND A MAXIMUM OF 20'-0" BETWEEN CONTROL JOINTS OR CONSTRUCTION JOINTS

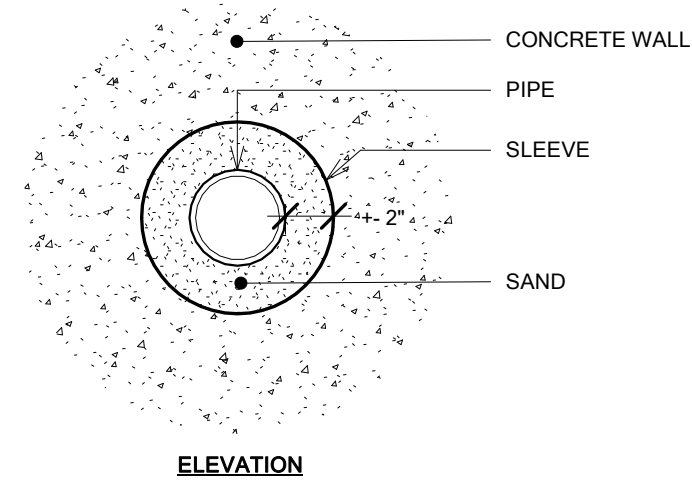
2
S 4.0C
Conc. Wall Control Joint
Scale: 3/4" = 1'-0"



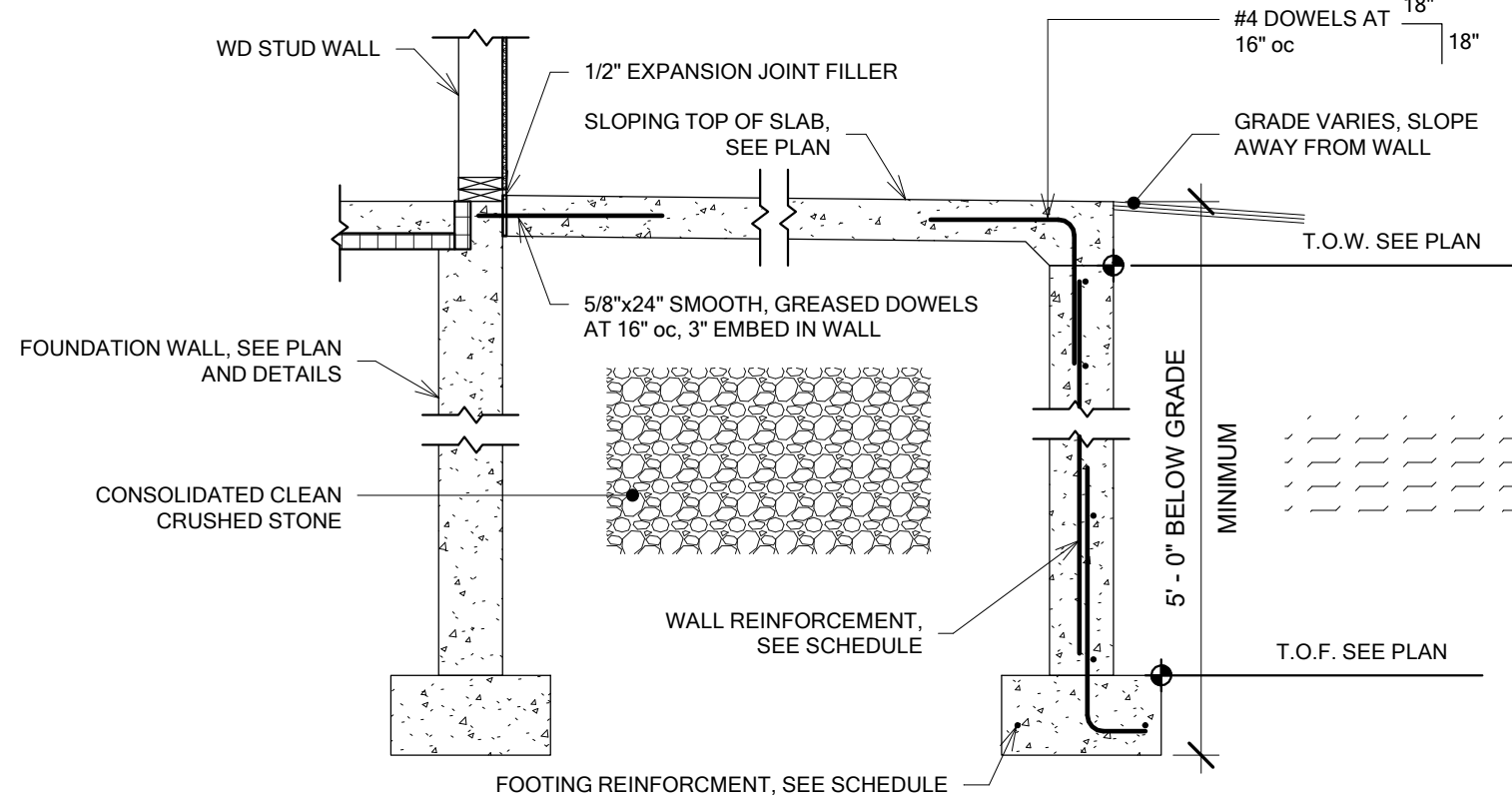
NOTES:
1. ALLOW 5 DAYS BETWEEN POURS
2. DETAIL SIMILAR FOR TWO MATS OF REINFORCEMENT



NOTE:
1. PROVIDE FOUNDATION WALL CRACK CONTROL JOINT AT EACH FOOTING STEP



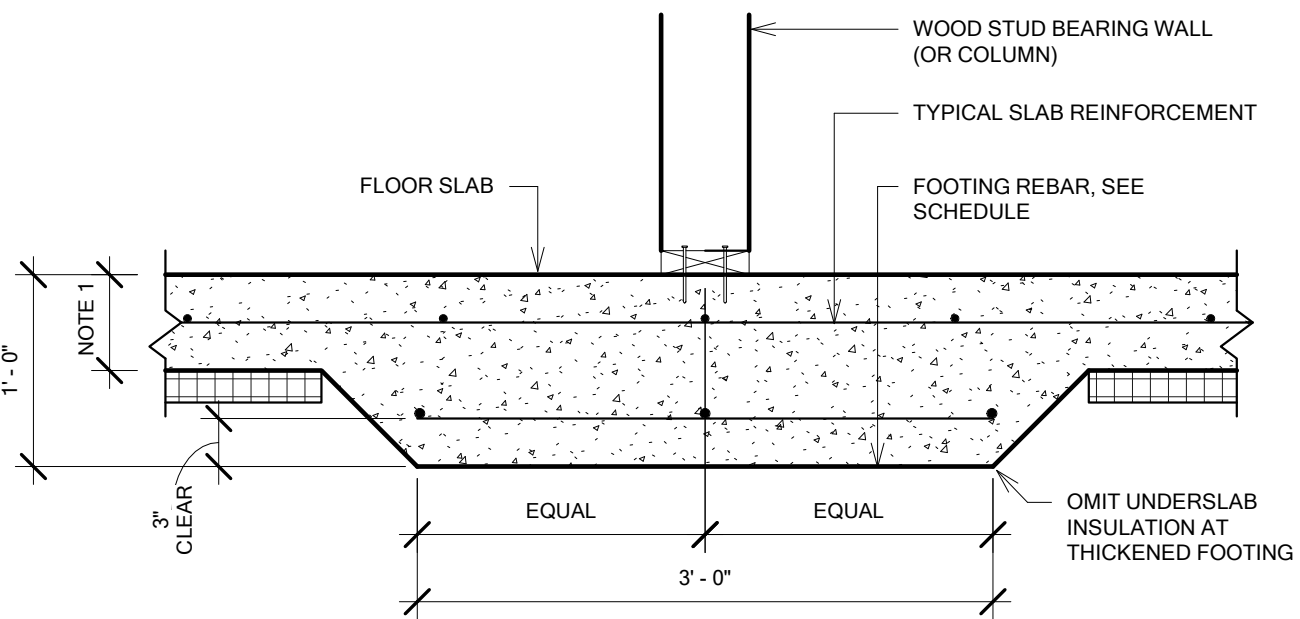
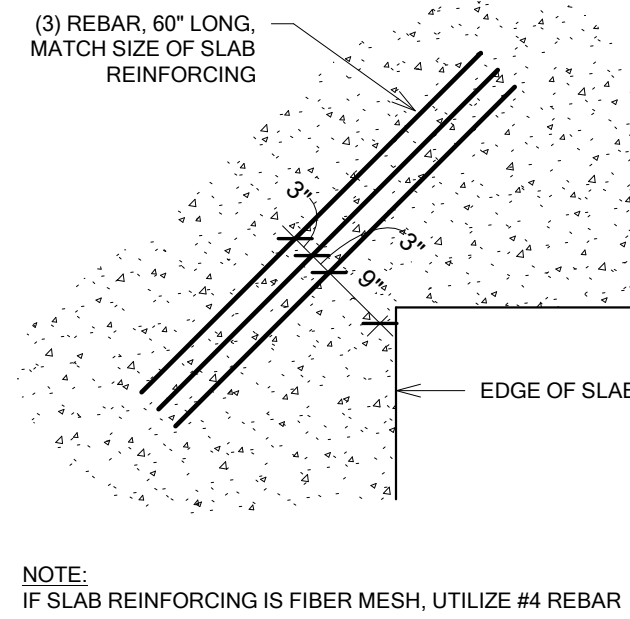
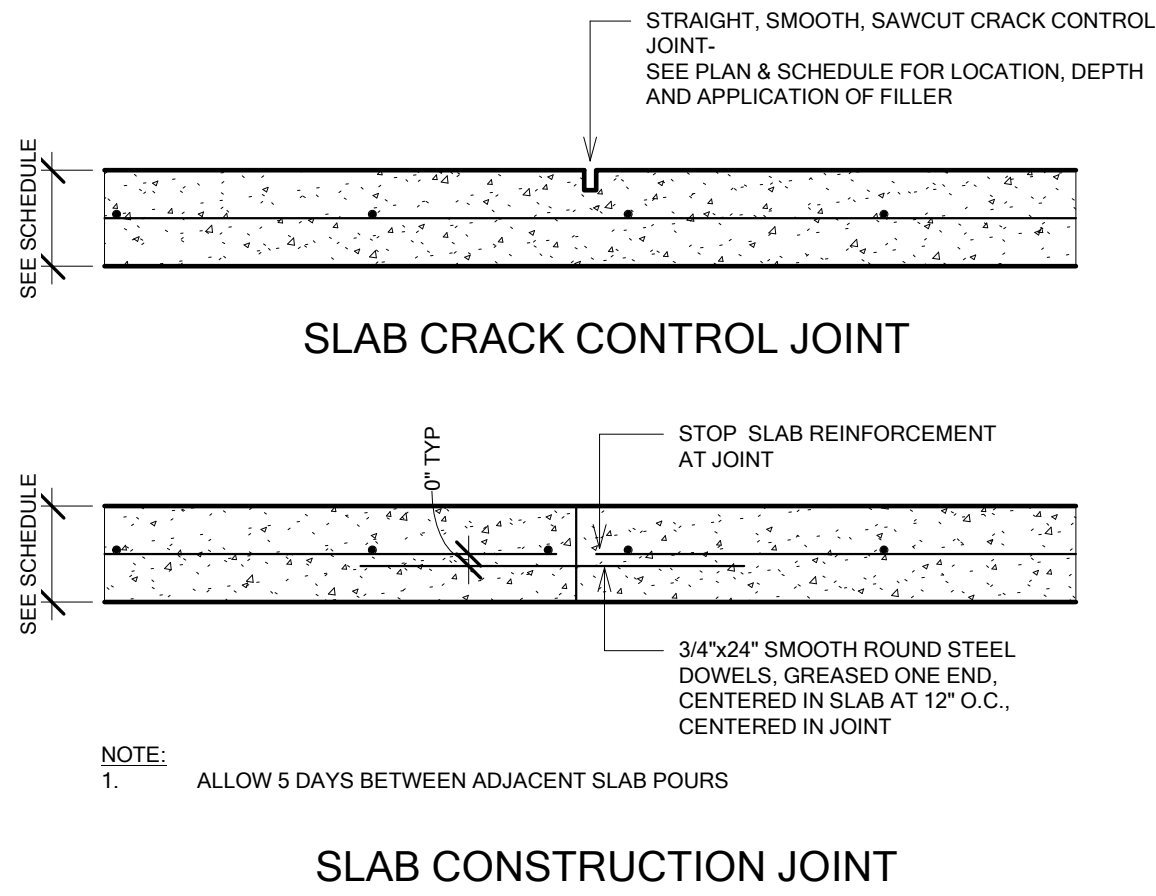
1
S 4.0C
Typical Addition Wall
Scale: 1" = 1'-0"



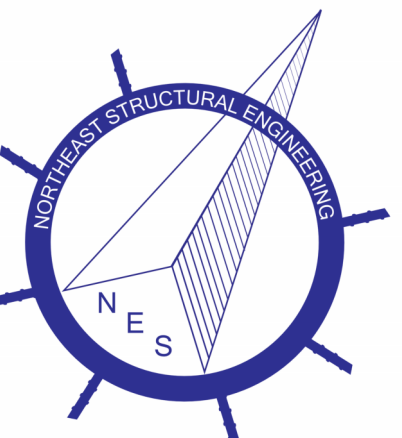
ON CONCRETE WALL AREAS THAT WILL REMAIN EXPOSED, PROVIDE A SMOOTH, ATTRACTIVE, UNIFORM CONCRETE WALL FINISH SIMILAR TO THE PHOTOGRAPH. WALL SURFACE SHALL HAVE A MINIMUM OF SMALL BUBBLES AND BE FREE OF ANY VOIDS.

PRIMARY EFFORTS:
* VIBRATE CONCRETE AND FORMWORK TO MINIMIZE OR ELIMINATE BUBBLES AND VOIDS. EMPLOY OTHER INDUSTRY MEASURES FOR THIS EFFORT, AS APPLICABLE

SECONDARY EFFORTS:
* FILL ANY RESULTING VOIDS 1/4" OR LARGER SMOOTH TO FACE OF WALL USING HYDRAULIC CEMENT PER THE SPECIFICATIONS.
* FILL FORM TIE BREAKBACK HOLES WITH HYDRAULIC CEMENT IN THE SAME MANNER.



NOTES:
1. SEE SLAB SCHEDULE FOR SLAB THICKNESS



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Johnson Public
Library Relocation
& Addition

Corner of School St and
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Johnson, VT

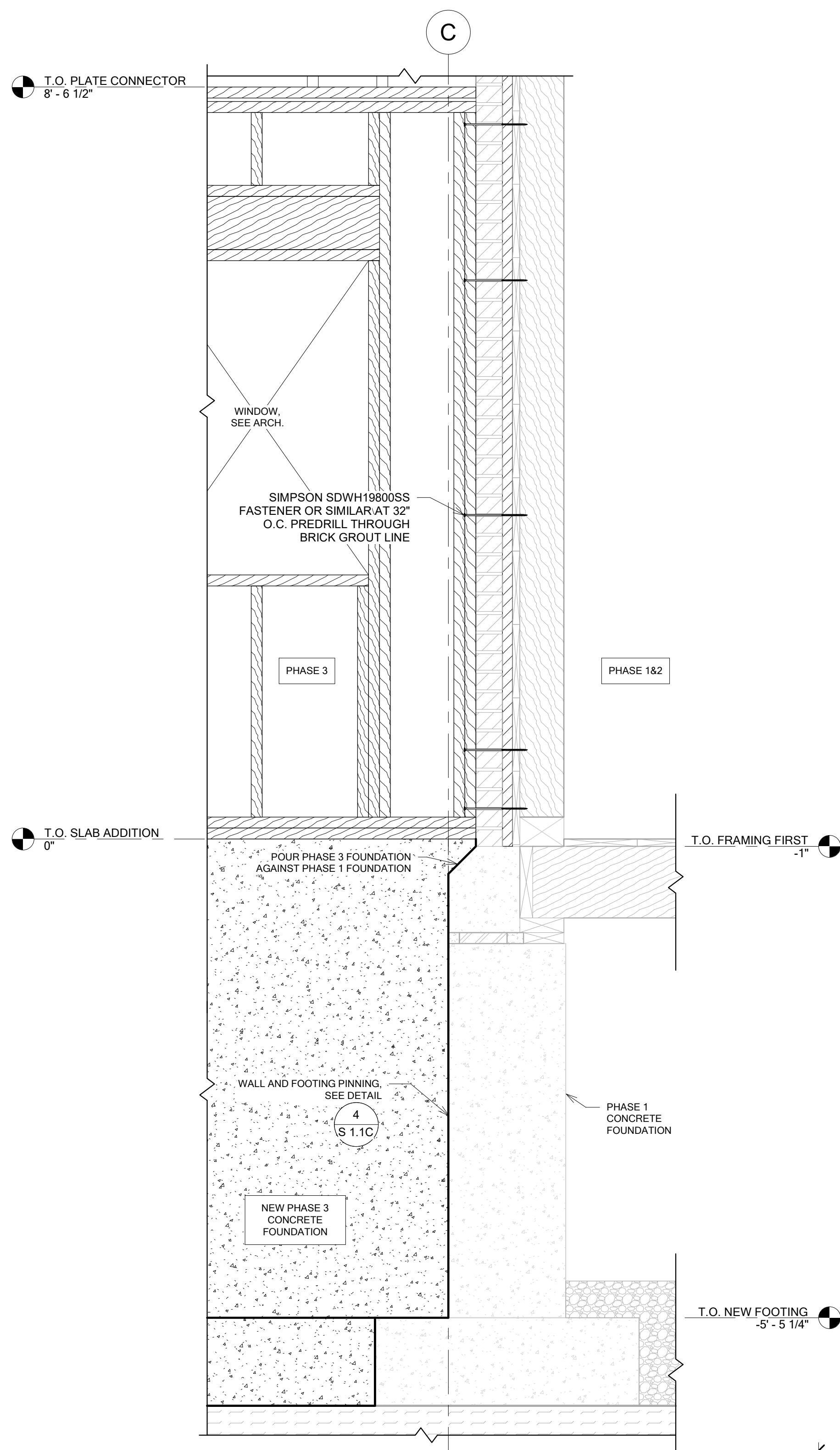
Rev. No.	Date	Description

Title:
Phase 3 -
Foundation
Details

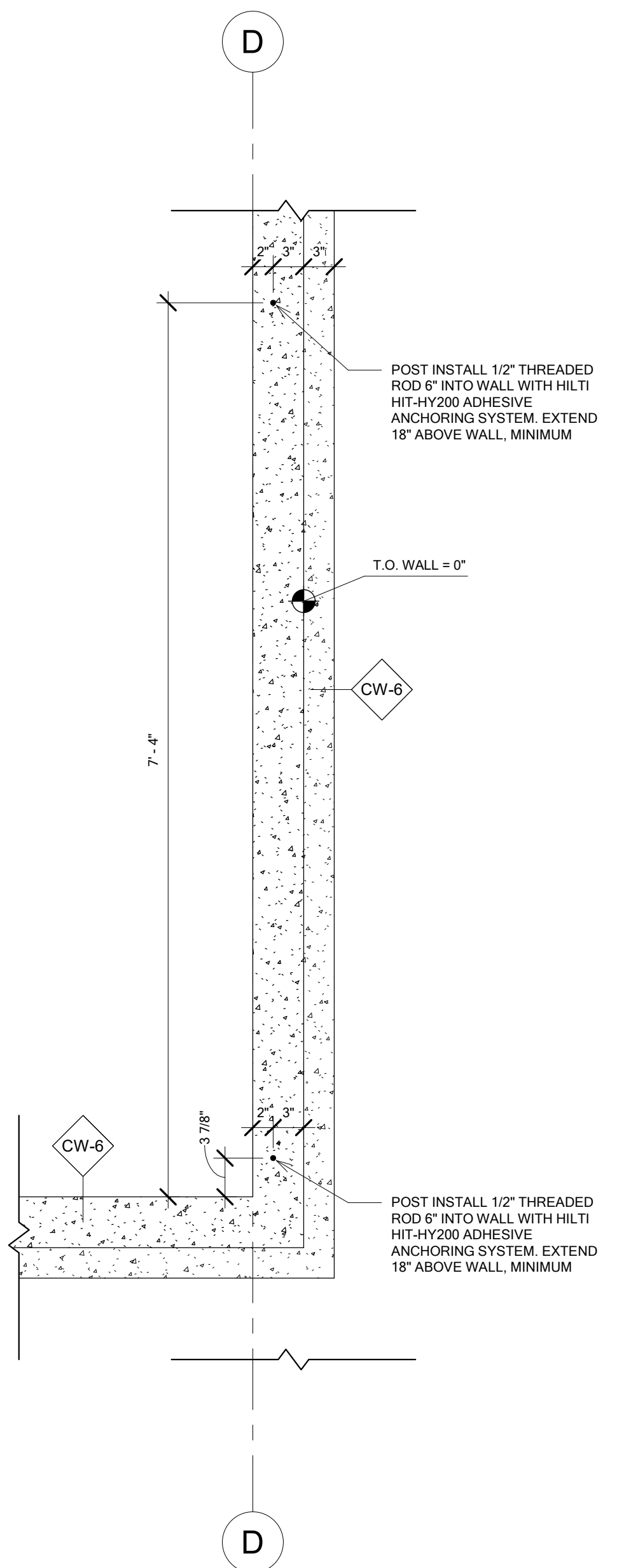
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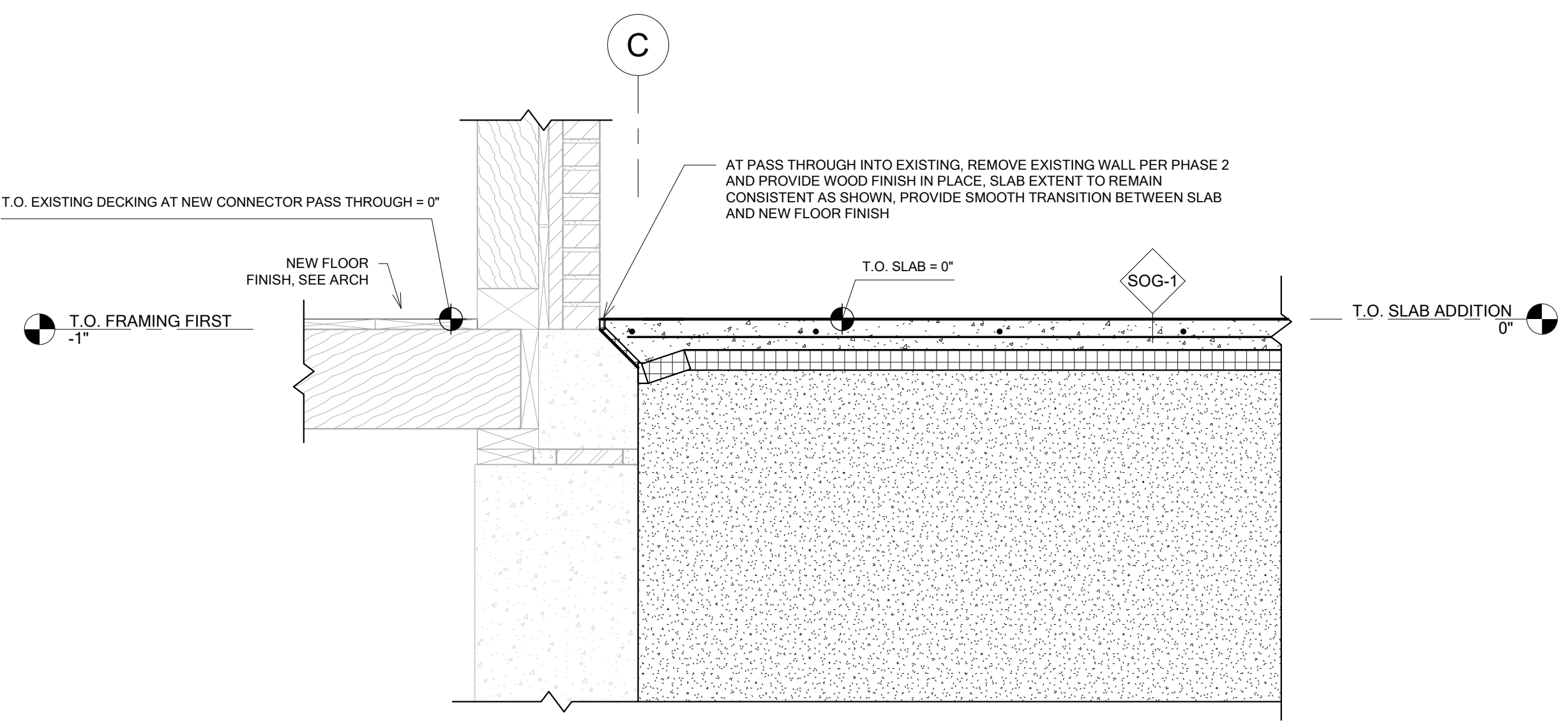
S 4.0C



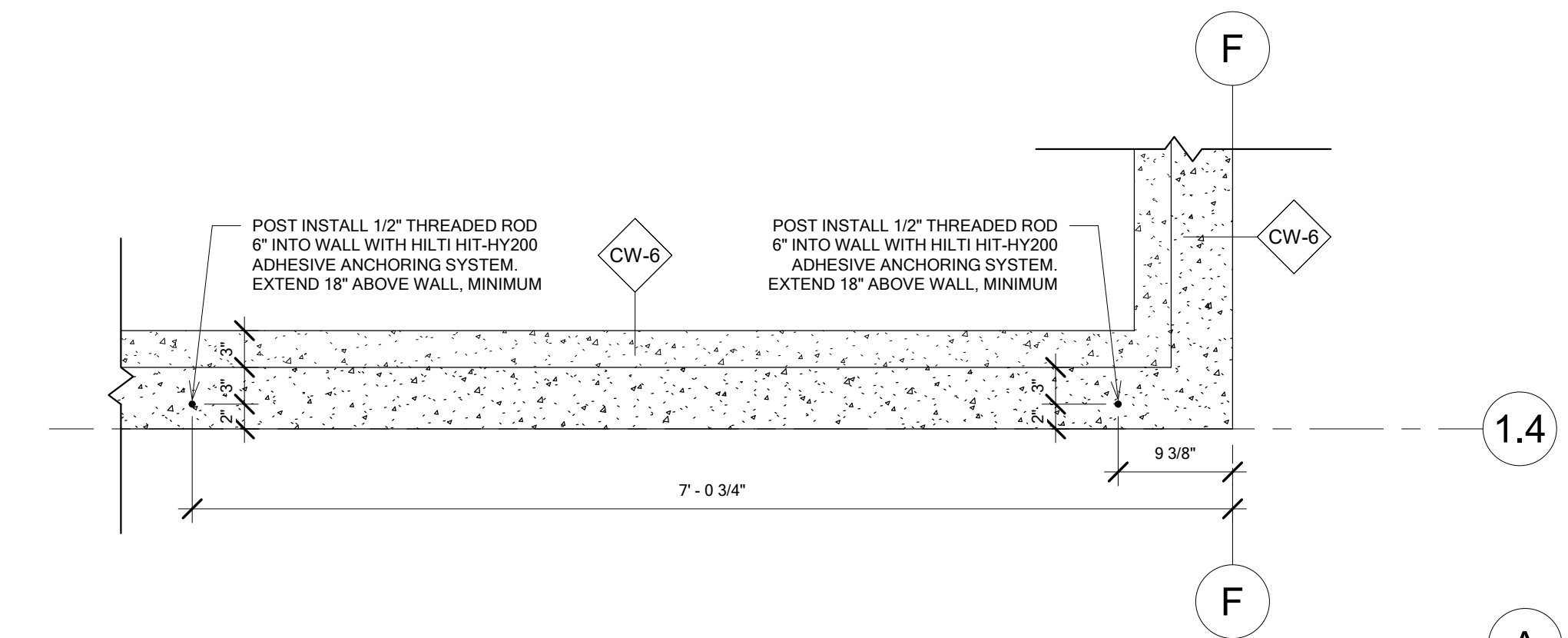
4 Phase 3 Connection to Phase 1 at Grid "C"
S 4.1C Scale: 1" = 1'-0"



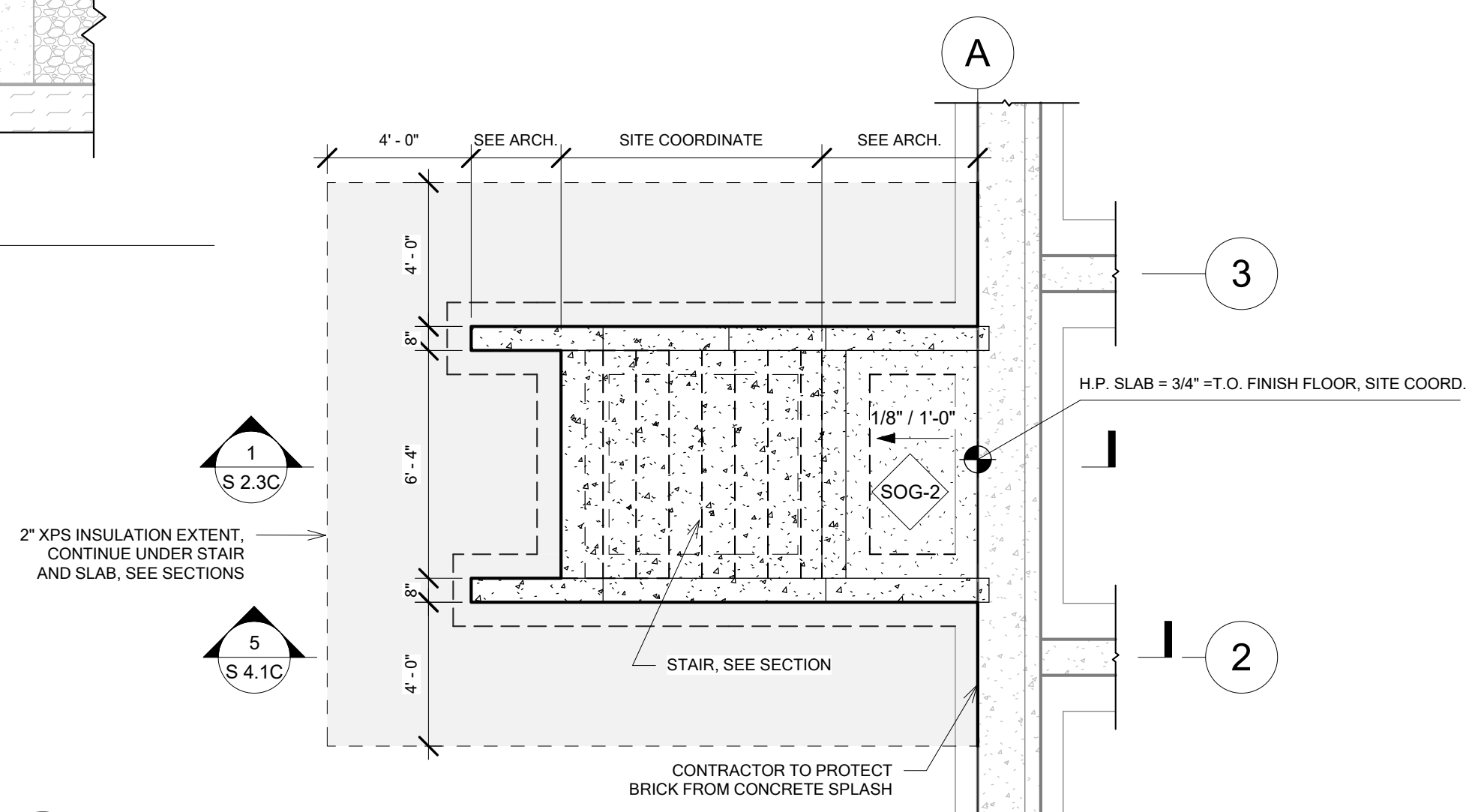
2 Grid "D" Hold Down Plan
S 4.1C Scale: 1" = 1'-0"



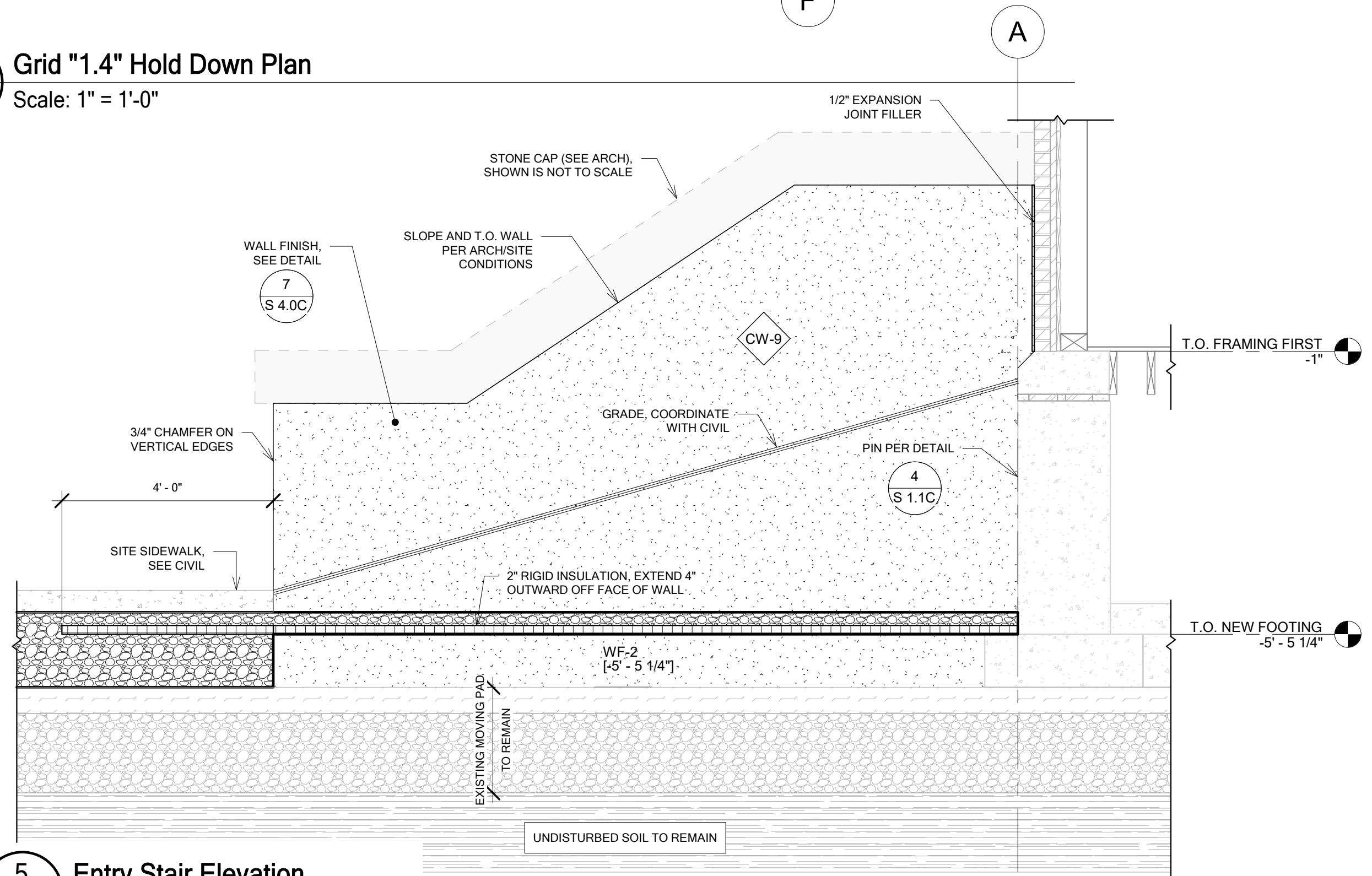
1 Slab Connection at Grid "C"
S 4.1C Scale: 1" = 1'-0"



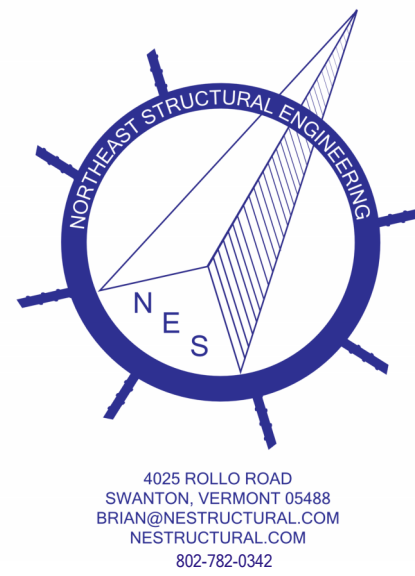
3 Grid "1.4" Hold Down Plan
S 4.1C Scale: 1" = 1'-0"



6 Phase 3 - Front Stair Plan
S 4.1C Scale: 1/4" = 1'-0"



5 Entry Stair Elevation
S 4.1C Scale: 1/2" = 1'-0"



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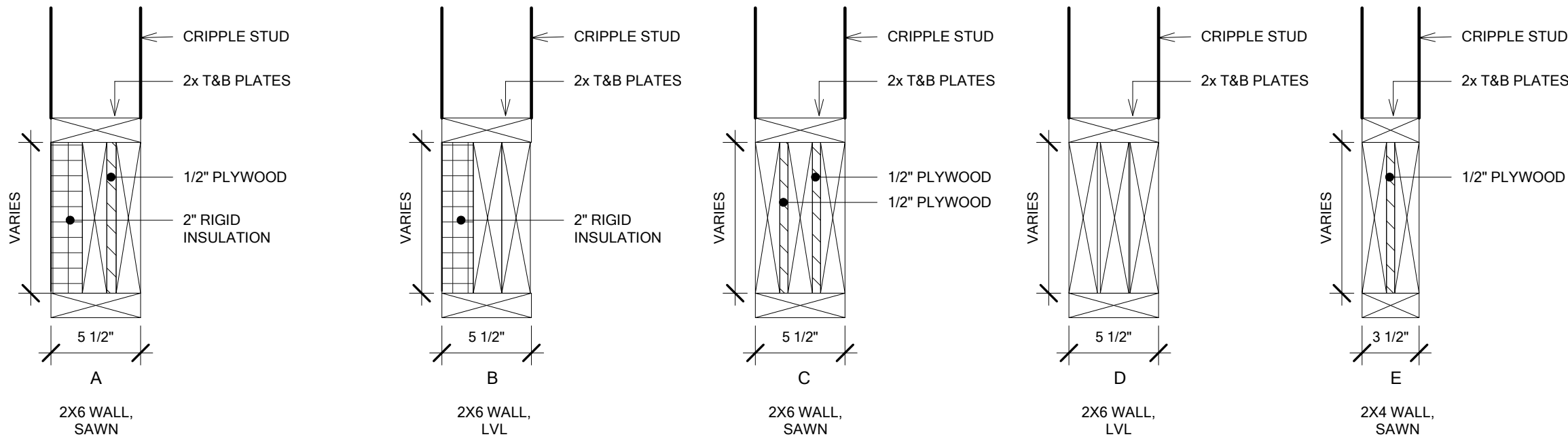
Rev. No.	Date	Description

Title:
**Phase 3 -
Foundation
Details**

NES PROJECT NO: 25016
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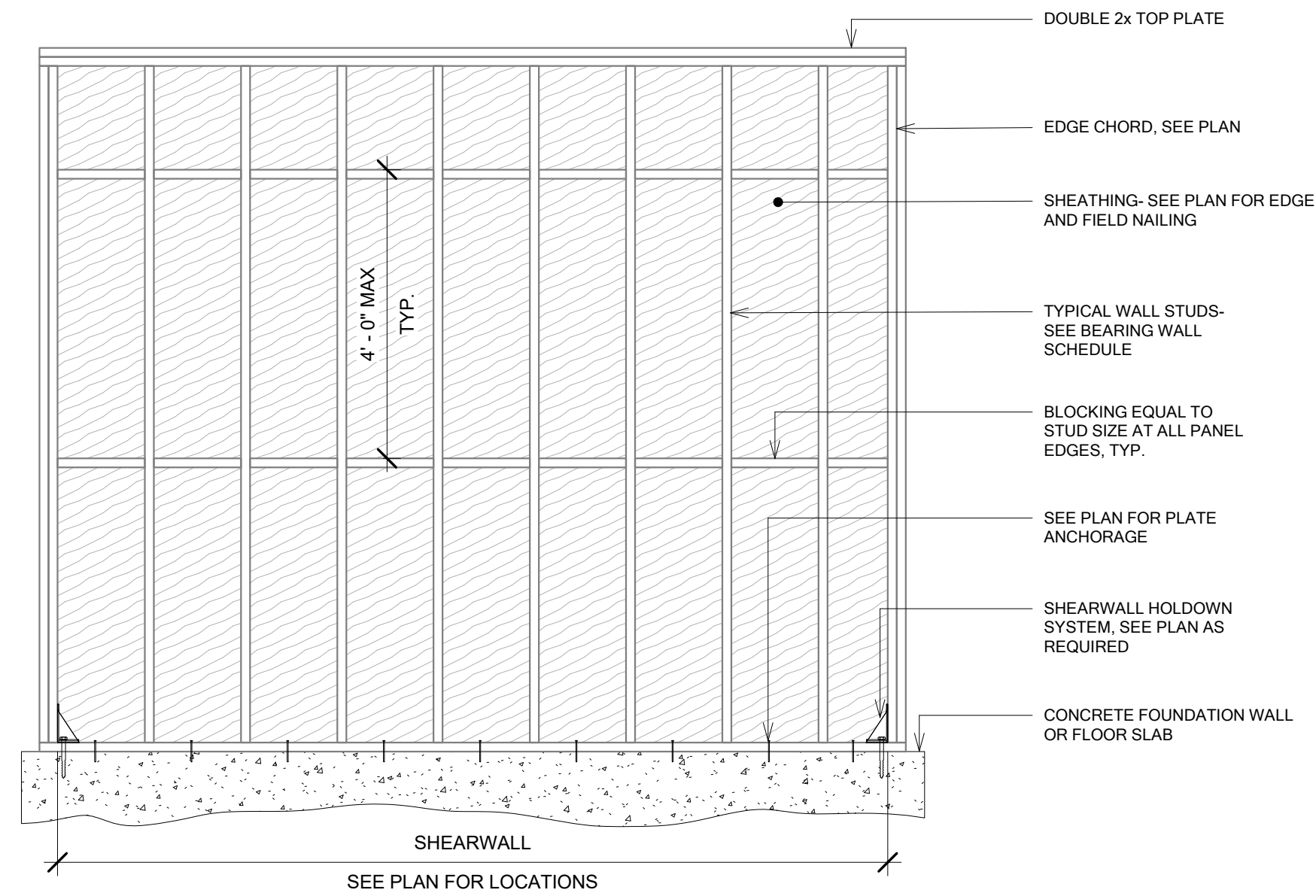
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S 4.1C

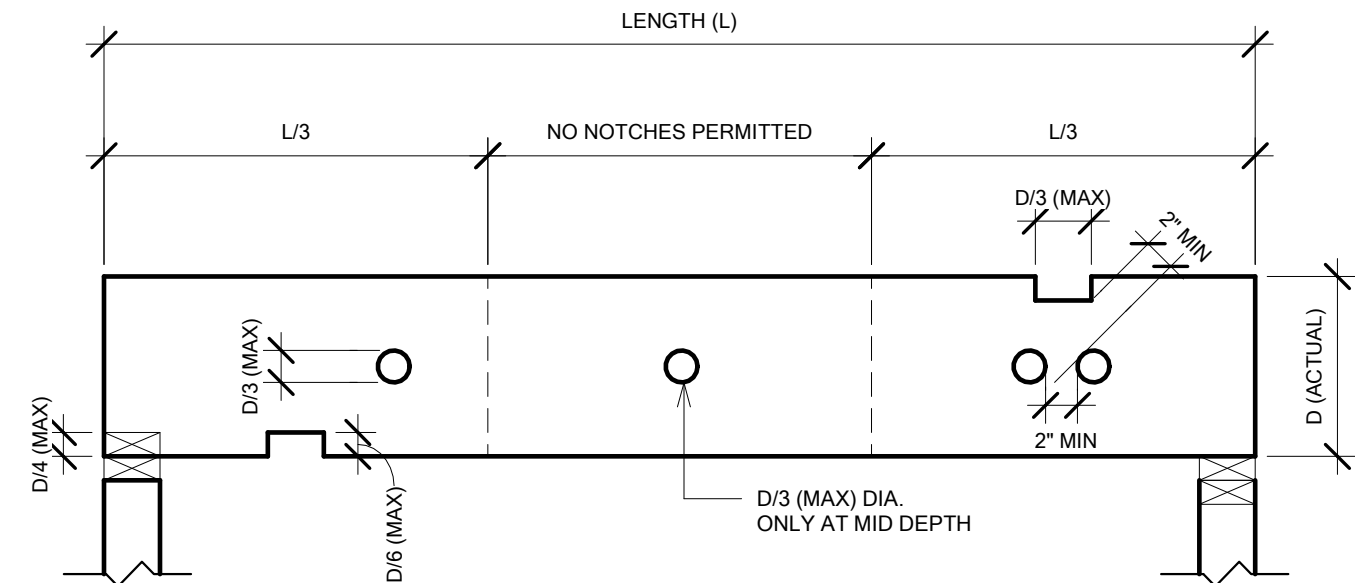


NOTE: RIGID INSULATION IS NOT A STRUCTURAL COMPONENT AND IS NOT REQUIRED FOR STRUCTURAL STABILITY AND IS NOT REQUIRED AT INTERIOR BEARING WALLS U.N.O. BY OWNER OR ARCH.

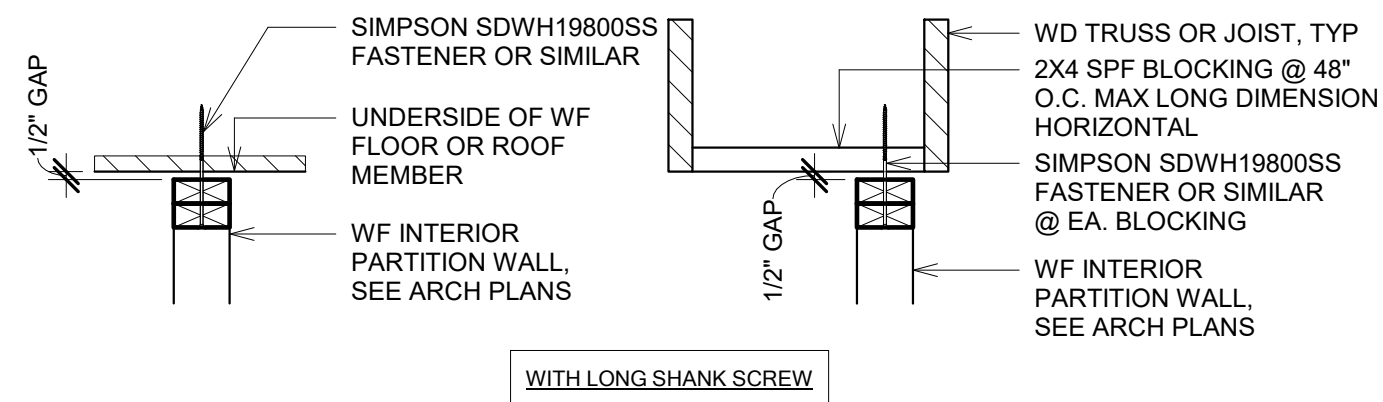
1 Wood Header Details
S 5.0 Scale: 1 1/2" = 1'-0"



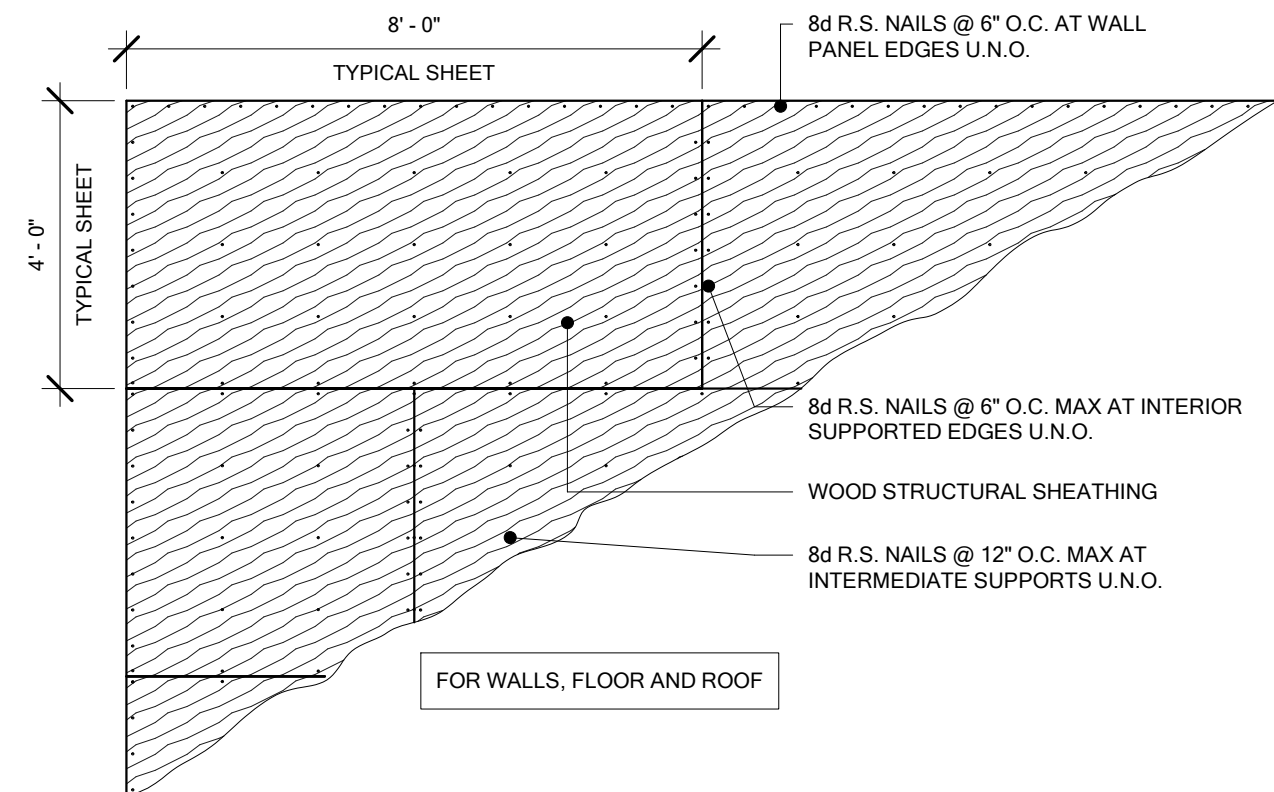
4 Wood Shearwall Detail
S 5.0 Scale: 1/2" = 1'-0"



5 Cutting, Notching & Drilling
S 5.0 Scale: 1" = 1'-0"



2 WD Partition Support
S 5.0 Scale: 1" = 1'-0"



3 Sheathing Nailing Pattern
S 5.0 Scale: 3/8" = 1'-0"

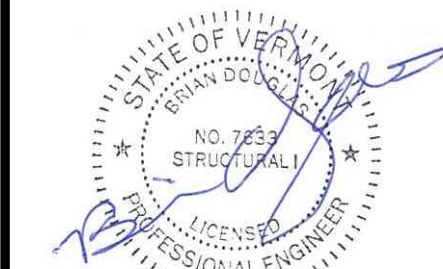
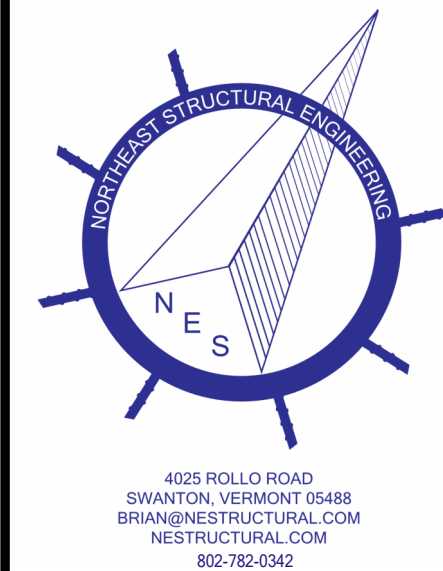
2x SIMPSON HANGER SCHEDULE			
1. TYPICAL HANGERS, UNLESS NOTED OTHERWISE 2. SEE SIMPSON FOR INSTALLATION DETAILS, FASTENERS, USE STANDARD FASTENING U.N.O. 3. USE GALVANIZED HANGERS AND FASTENERS WHEN EXPOSED TO WEATHER OR MOISTURE			
MEMBER	PLY	FACE-MOUNT	TOP-FLANGE
2x8	1	LUS28	LB28
	2	LUS28-2	WP28-2
	3	LUS28-3	-
2x10	1	LUS210	LB210AZ
	2	LUS210-2	WP210-2
	3	LUS210-3	HU210-3TF
2x12	1	LUS210	LB212AZ
	2	LUS210-2	WP212-2
	3	LUS210-3	HU212-3TF

<u>1 3/4" LVL SIMPSON HANGER SCHEDULE</u>							
1.		TYPICAL HANGERS, UNLESS NOTED OTHERWISE					
2.		SEE SIMPSON FOR INSTALLATION DETAILS, FASTENERS, USE STANDARD FASTENING U.N.O.					
3.		USE GALVANIZED HANGERS AND FASTENERS WHEN EXPOSED TO WEATHER OR MOISTURE					
MEMBER	PLY	FACE-MOUNT	TOP-FLANGE	MEMBER	PLY	FACE-MOUNT	TOP-FLANGE
7 1/4	2	HGUS48	-	14	2	HGUS414	HGLTV3.514
	3	HU68	-		3	HGUS5.50/14	HGLTV5.37 H=14
9 1/4	2	HU410	HB3.56/9.25	16	2	HGUS414	HGLTV3.516
	3	HU610	HGLTV5.37 H=9.25		3	HGUS5.50/14	HGLTV5.37 H=16
11 1/4	2	HU412	HB3.56/11.25	18	2	HGUS414	HGLTV3.518
	3	HU612	HGLTV5.37 H=11.25		3	HGUS5.50/14	HGLTV5.37 H=18
11 7/8	2	HU412	HGLTV3.511	20	2	MIU3.56/20	HGLTV4 H=20
	3	HU612	HGLTV5.37 H=11.8.75		3	HGUS5.50-SDS	HGLTV5.37 H=20

TJI SIMPSON HANGER SCHEDULE			
1. TYPICAL HANGERS, UNLESS NOTED OTHERWISE 2. SEE SIMPSON FOR INSTALLATION DETAILS, FASTENERS, USE STANDARD FASTENING U.N.O. 3. USE GALVANIZED HANGERS AND FASTENERS WHEN EXPOSED TO WEATHER OR MOISTURE			
DEPTH	SERIES	FACE-MOUNT	TOP-FLANGE
9 1/2"	230	MIU2.37/9	BA2.37/9.5
	230	MIU2.37/11	BA2.37/11.88
	360	MIU2.37/11	BA2.37/11.88
11 7/8"	560	MIU3.56/11	BA3.56/11.88
	230	MIU2.37/14	BA2.37/14
	360	MIU2.37/14	BA2.37/14
14"	230	MIU2.37/14	BA2.37/14
	560	MIU3.56/14	BA3.56/14
	360	MIU2.37/16	BA2.37/16
16"	230	MIU2.37/16	BA2.37/16
	360	MIU2.37/16	BA2.37/16
	560	MIU3.56/16	BA3.56/16

BEARING WALL SCHEDULE				
TAG	CONSTRUCTION	TOP PLATE	BOTTOM PLATE	USE
BW-1	2x6 @ 16" o.c.	(2) 2x6	(1) 2x6	BEARING WALL
BW-2	2x6 @ 16" o.c.	(2) 2x6	(1) 2x6	BEARING/SHEAR WALL
BW-3	2x6 @ 16" o.c.	(2) 2x6	(1) 2x6	BEARING/SHEAR WALL

HEADER SCHEDULE				
* = DIFFERING HEADER TYPE AND/OR JACK AND KING STUD CONFIGURATION			SEE WOOD HEADER DETAIL FOR HEADER TYPE	
TAG	HEADER SIZE	JACK STUD(s) EACH END	KING STUD(s)	HEADER TYPE
EX	EXISTING TO REMAIN U.N.O.	EXISTING TO REMAIN U.N.O.	EXISTING TO REMAIN U.N.O.	EX. U.N.O.
H1	(2) 2x6	SINGLE 2x	SINGLE 2x	"A"
H1*	(2) 2x8	DOUBLE 2x	SINGLE 2x	"A"
H2	(3) 2x8	DOUBLE 2x	SINGLE 2x OPENINGS < 5' DOUBLE 2x OPENINGS > 5'	"C"
H3	(2) 2x10	SINGLE 2x	SINGLE 2x OPENINGS < 5' DOUBLE 2x OPENINGS > 5'	"A"
H4	(3) 1 3/4"x7 1/4" 2.0E LVL	DOUBLE 2x	SINGLE 2x6	"D"
H5	(2) 1 3/4"x11 1/4" 2.0E LVL	DOUBLE 2x	DOUBLE 2x	"B"
H6	(3) 1 3/4"x11 1/4" 2.0E LVL	DOUBLE 2x	(2)2x6	"D"
H6*	(3) 1 3/4"x11 1/4" 2.0E LVL	DOUBLE 2x	(3)2x6	"D"



FOR ALL PHASES
CONSTRUCTION

Town Of Johnson
293 Lower Main St W,
Johnson, VT 05656

Johnson Public
Library Relocation
& Addition

Corner of School St and
George Hill Rd,
Johnson, VT

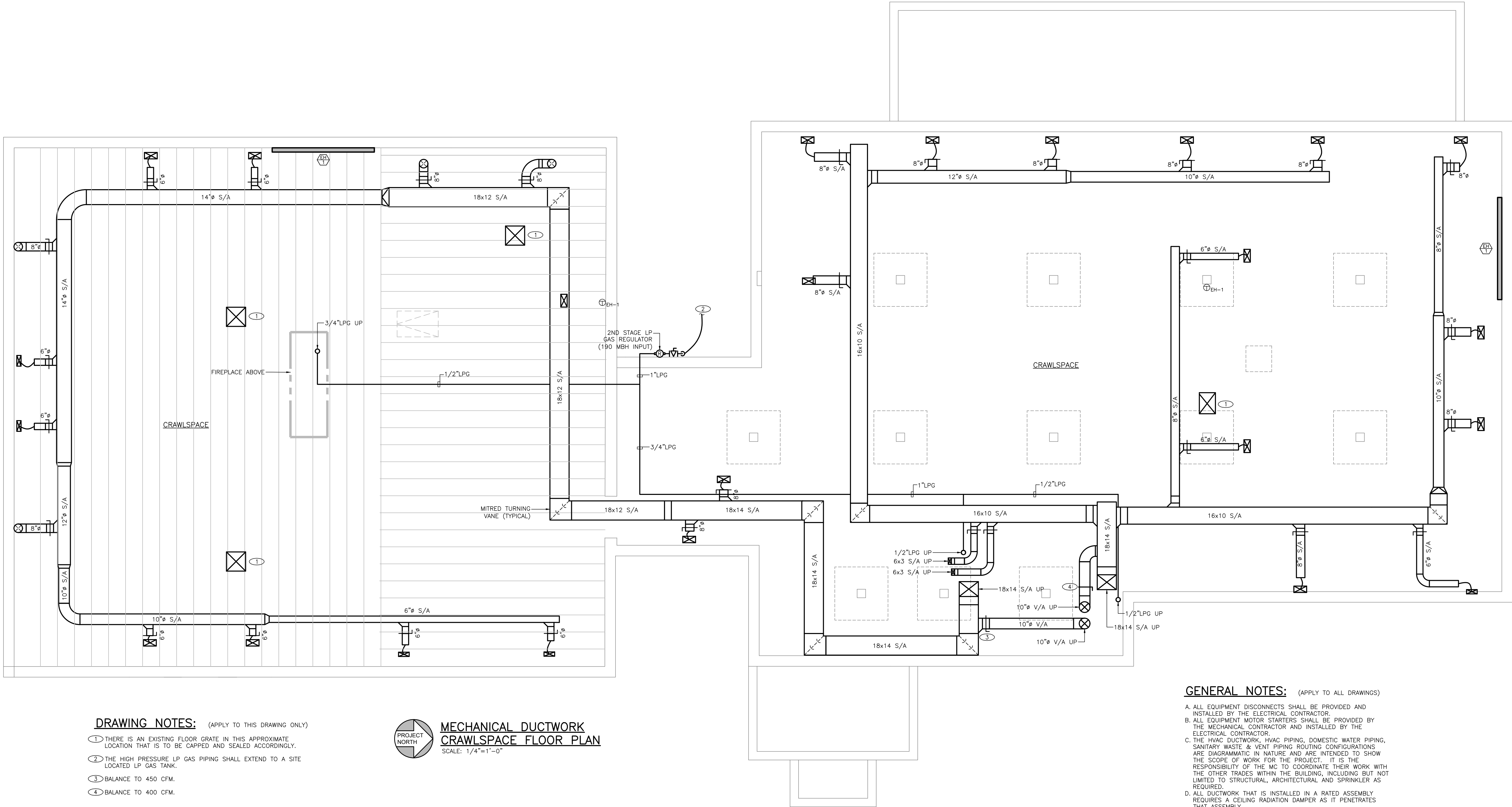
Rev. No.	Date	Description

Title:
Framing Details

NES PROJECT NO: 25016
DATE: 05/30/2025
DESIGNED BY: AD/BD

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- DRAWING NOTES:** (APPLY TO THIS DRAWING ONLY)
- ① THERE IS AN EXISTING FLOOR GRATE IN THIS APPROXIMATE LOCATION THAT IS TO BE CAPPED AND SEALED ACCORDINGLY.
- ② THE HIGH PRESSURE LP GAS PIPING SHALL EXTEND TO A SITE LOCATED LP GAS TANK.
- ③ BALANCE TO 450 CFM.
- ④ BALANCE TO 400 CFM.



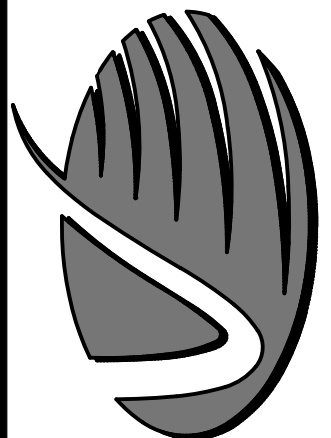
**MECHANICAL DUCTWORK
CRAWLSPACE FLOOR PLAN**
SCALE: 1/4"=1'-0"

- GENERAL NOTES:** (APPLY TO ALL DRAWINGS)
- A. ALL EQUIPMENT DISCONNECTS SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- B. ALL EQUIPMENT MOTOR STARTERS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- C. THE HVAC DUCTWORK, HVAC PIPING, DOMESTIC WATER PIPING, SANITARY WASTE & VENT PIPING ROUTING CONFIGURATIONS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO SHOW THE SCOPE OF WORK FOR THE PROJECT. IT IS THE RESPONSIBILITY OF THE MC TO COORDINATE THEIR WORK WITH THE OTHER TRADES WITHIN THE BUILDING, INCLUDING BUT NOT LIMITED TO STRUCTURAL, ARCHITECTURAL AND SPRINKLER AS REQUIRED.
- D. ALL DUCTWORK THAT IS INSTALLED IN A RATED ASSEMBLY REQUIRES A CEILING RADIATION DAMPER AS IT PENETRATES THAT ASSEMBLY.
- E. ANY CEILING SUSPENDED MECHANICAL OR PLUMBING EQUIPMENT SHALL BE PROVIDED WITH PROPER SPRING VIBRATION ISOLATORS.
- F. ALL DUCTED HVAC EQUIPMENT SHALL BE PROVIDED WITH THE NECESSARY SHEETMETAL TRANSITIONS FROM DUCTWORK SIZE TO UNIT EQUIPMENT CONNECTION SIZE & THE EQUIPMENT FLEX CONNECTIONS.
- G. EXACT INSTALLATION LOCATION OF CEILING/WALL GRILLES, REGISTERS AND DIFFUSERS SHALL BE CLOSELY COORDINATED WITH LIGHTING, ELECTRICAL DEVICES AND ARCHITECTURAL DETAILING IN THESE AREAS.
- H. QUADRANT LOCKING VOLUME DAMPERS SHALL BE SHOWN AT EACH SECTION OF DUCTWORK SERVING REGISTERS, GRILLES DIFFUSERS FOR AIR BALANCING PURPOSES. IF A VOLUME DAMPER IS LOCATED ABOVE AN ENCLOSED SHEETROCK CEILING, THE REQUIRED RATED ACCESS PANEL SHALL BE INSTALLED.



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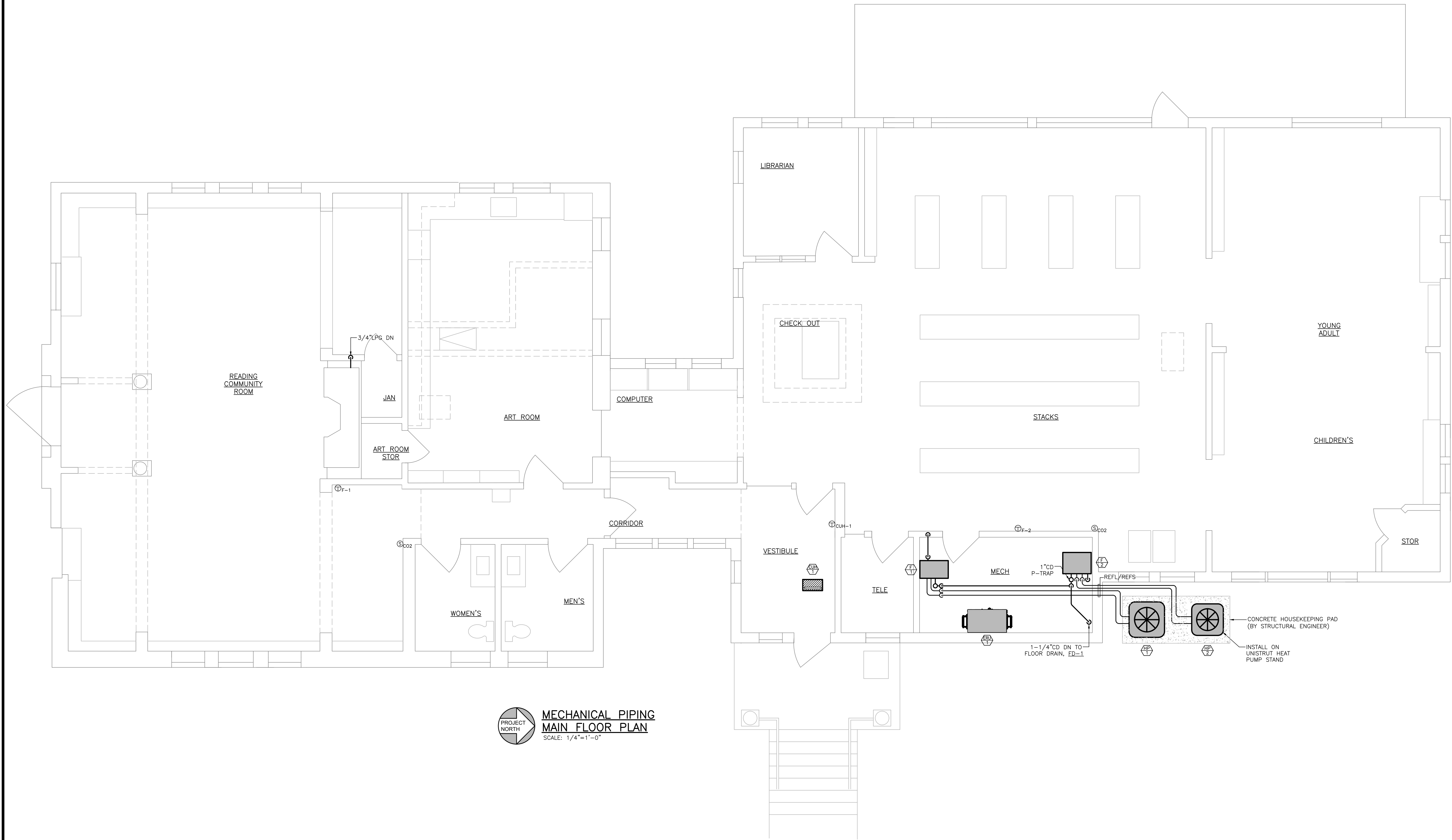
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SCHOOL STREET, JOHNSON, VT**

**LIBRARY RENOVATIONS & ADDITIONS
MECHANICAL DUCTWORK
CRAWLSPACE FLOOR PLAN**

PROJ NO: 25037W
DRAWN: JLM
DATE: 09/23/2025

M1





**MECHANICAL PIPING
MAIN FLOOR PLAN**
SCALE: 1/4"=1'-0"



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CONSULTING ENGINEERS
MECHANICAL - ELECTRICAL

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**MECHANICAL PIPING
MAIN FLOOR PLAN**

PROJ NO: 25037W

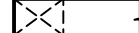
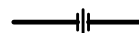
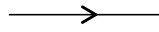
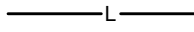
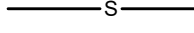
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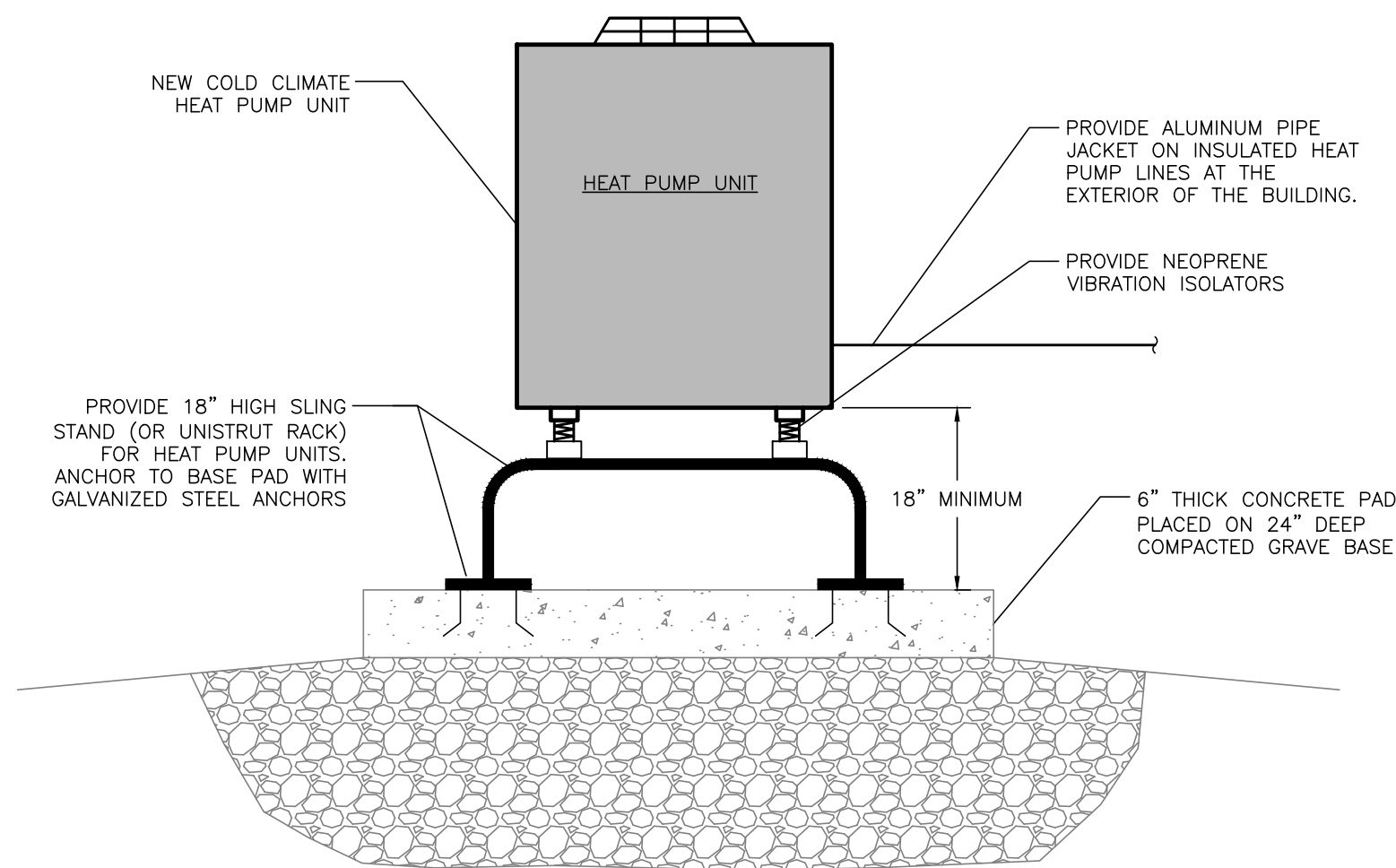
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M3

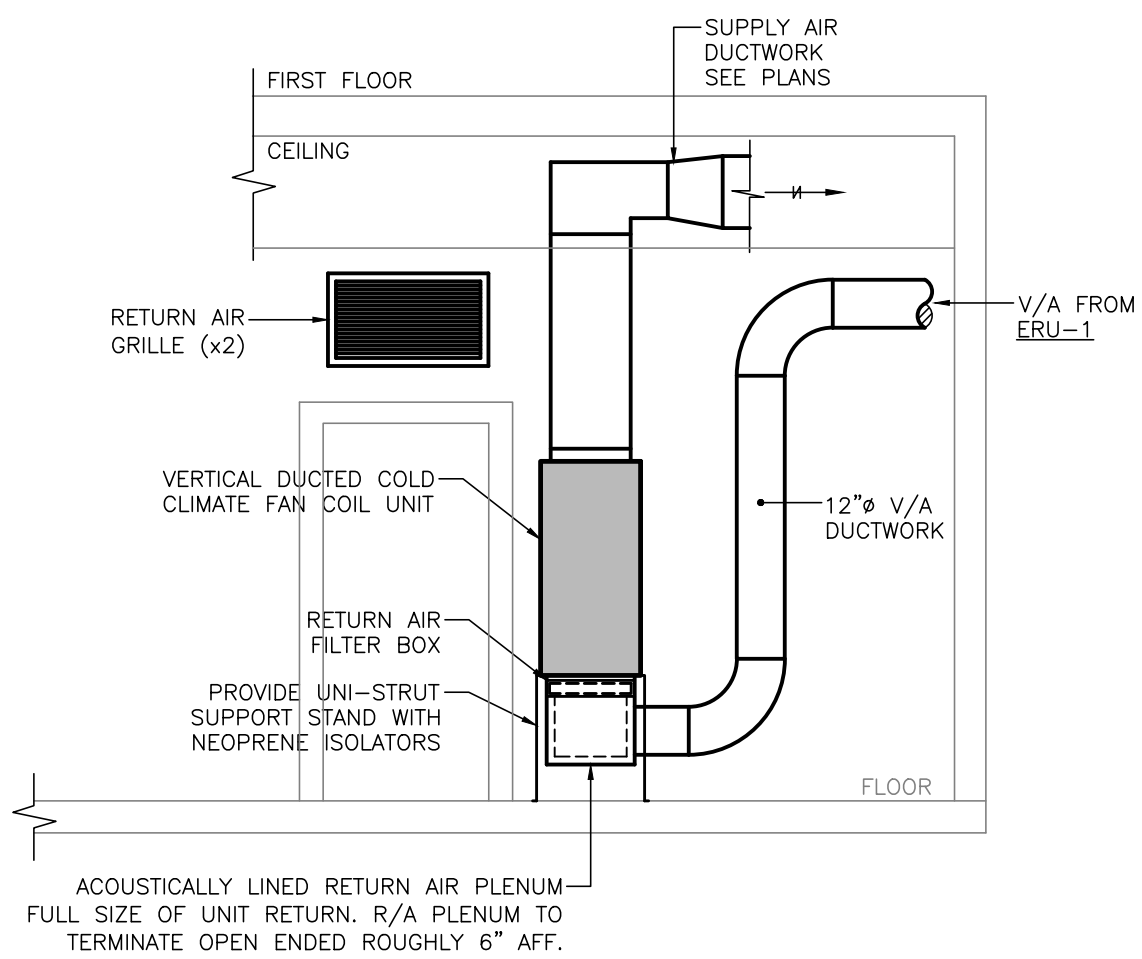
MECHANICAL EQUIPMENT SCHEDULE				
No.	TYPE	MANUFACTURER & MODEL	NOTES	ELECTRICAL
CUH-1	FAN-FORCED CEILING ELECTRIC UNIT HEATER	MARLEY EFF1500	CEILING MOUNTED UNIT, 1.5KW, 5,120 BTU/HR. PROVIDE WITH MODEL EFF1T SINGLE POLE THERMOSTAT (FIELD INSTALLED). IF ARCHITECT DESIRES SURFACE MOUNT APPLICATION THEN PROVIDE EFFSM SURFACE MOUNTING SLEEVE.	120V/1PH/60HZ, 1.5KW
EF-1	INLINE EXHAUST FAN	GREENHECK MODEL SQ-97-VG	150 CFM @ 0.5"ESP. PROVIDED WITH VG MOTOR AND REMOTE DIAL INSTALLED IN THE MECHANICAL ROOM). 80-330 -PB-12x12 GRAVITY BACKDRAFT DAMPER AND SPRING HANGING ISOLATORS PN 850343.	120V/1PH/60HZ, 1/4HP, 2.85 FLA, 4 MCA, 15 MOCP
EF-2	INLINE EXHAUST FAN	GREENHECK MODEL SQ-97-VG	200 CFM @ 0.5"ESP. PROVIDED WITH VG MOTOR AND REMOTE DIAL INSTALLED IN THE MECHANICAL ROOM). 80-330 -PB-12x12 GRAVITY BACKDRAFT DAMPER AND SPRING HANGING ISOLATORS PN 850343.	120V/1PH/60HZ, 1/4HP, 2.85 FLA, 4 MCA, 15 MOCP
EH-1	BASEBOARD ELECTRIC HEATER - CRAWLSPACE	BERKO MODEL 25408NW	8'-0" LONG, 2,500 WATTS. PROVIDED WITH DP THERMOSTAT, RATED 22A	240V/1PH/60HZ, 10.5 AMPS, 2.5kW
ERU-1	OUTDOOR ENERGY RECOVERY UNIT	RENEWAIRE MODEL HE101N-ECM	BALANCE TO 850 CFM FOR BOTH AIRSTREAMS, ADVANCED EC MOTOR, PROVIDE WITH MERV 13 "F" FILTERS (SHIPPED LOOSE), STANDARD 14" ROOF CURB (AS REQUIRED), DIGITAL WALL MOUNTED TIMELOCK MODEL TC70-W, WALL MOUNTED CARBON DIOXIDE SENSOR (x2) MODEL CO2-W.	120V/1PH/60HZ, 6.5 FLA PER MOTOR, 14.6 MCA, 20 MOCP
ET-1	DIAPHRAGM TYPE EXPANSION TANK	THERM-X-TROL MODEL ST-5	EXPANSION TANK SHALL BE SUITABLE FOR DOMESTIC WATER USE	-
F-1	INDOOR TWO-STAGE VARIABLE SPEED GAS FURNACE (DOWNFLOW)	DUCANE MODEL 97C2DF070BV16	1,600 CFM AIRFLOW, 64 MBH OUTPUT 2ND STAGE, 42 MBH OUTPUT 1ST STAGE, NOMINAL 4-TON COOLING CAPACITY, 1/2"PLG CONNECTION. PROVIDE WITH LP GAS CONVERSION KIT, CONCENTRIC VENT KIT, BOSCH BIVA A-COIL SHALL MOUNT BELOW THE UNIT ON THE DISCHARGE SIDE.	120V/1PH/60HZ, 3/4HP MOTOR, 10.1FLA, 15 MOCP
F-2	INDOOR TWO-STAGE VARIABLE SPEED GAS FURNACE (DOWNFLOW)	DUCANE MODEL 97C2DF090CV20	1,600 CFM AIRFLOW, 86 MBH OUTPUT 2ND STAGE, 56 MBH OUTPUT 1ST STAGE, NOMINAL 5-TON COOLING CAPACITY, 1/2"PLG CONNECTION. PROVIDE WITH LP GAS CONVERSION KIT, CONCENTRIC VENT KIT, BOSCH BIVA A-COIL SHALL MOUNT BELOW THE UNIT ON THE DISCHARGE SIDE.	120V/1PH/60HZ, 12.8FLA, 20 MOCP
HP-1	OUTDOOR COLD CLIMATE HEAT PUMP	BOSCH BOVA-60RXN-M20S	52MBH COOLING CAPACITY, 15.8 SEER2, 10 EER2, 54MBH HEATING CAPACITY AT AHRI CONDITIONS, 27MBH HEATING CAPACITY AT -22°F OAT.	240V/1PH/60HZ, 38.5 MCA, 45 MOCP
HP-2	OUTDOOR COLD CLIMATE HEAT PUMP	BOSCH BOVA-48RXN-M20S	54MBH COOLING CAPACITY, 15.8 SEER2, 10 EER2, 54MBH HEATING CAPACITY AT AHRI CONDITIONS.	240V/1PH/60HZ, 38.5 MCA, 45 MOCP
LV-1	EXTRUDED STATIONARY BLADE LOUVER	GREENHECK ESD-635	18"x12", FLANGED, 3-COAT 70% KYMAR FINISH, INSECT SCREEN, LOUVER COLOR BY ARCHITECT	-
LV-2	EXTRUDED STATIONARY BLADE LOUVER	GREENHECK ESD-635	18"x12", FLANGED, 3-COAT 70% KYMAR FINISH, INSECT SCREEN, LOUVER COLOR BY ARCHITECT	-
LV-3	EXTRUDED STATIONARY BLADE LOUVER - ERU OUTDOOR AIR	GREENHECK ESD-635	30"x24", FLANGED, 3-COAT 70% KYMAR FINISH, INSECT SCREEN, LOUVER COLOR BY ARCHITECT	-
LV-4	EXTRUDED STATIONARY BLADE LOUVER - ERU EXHAUST AIR	GREENHECK ESD-635	30"x24", FLANGED, 3-COAT 70% KYMAR FINISH, INSECT SCREEN, LOUVER COLOR BY ARCHITECT	-
WH-1	POINT OF USE ELECTRIC WATER HEATER	BOSCH TRONIC 3000 MODEL US9-2R	1 GPM @ 65°F TEMPERATURE RISE, 0.7 GPM ACTIVATION FLOW RATE, 9,521 WATTS	240V/1PH/60HZ, 40A MOCP
WH-2	POINT OF USE ELECTRIC WATER HEATER	BOSCH MODEL ES8	7.1 GALLONS 1,440 WATTS, 6.8 GPH @ 90°F RISE	120V/1PH/60HZ, 12 AMPS

DIFFUSER – GRILLE – REGISTER SCHEDULE				
No.	MANUFACTURER	MODEL	SIZE	NOTES
ER-1	PRICE	8"x8"/530/F/L/A/B12	8x8	–
ER-2	PRICE	10"x10"/530/F/L/A/B12	10x10	–
FR-1	PRICE	12x36/LBP/16A/750/ PC12/VCS2	12X36	PROVIDE WITH ACCESSORY BLADE TYPE DAMPER, PRIME COAT FINISH FOR FIELD PAINTING.
FR-2	PRICE	12x6/LBP/16A/750/PC12/VCS2	12x6	PROVIDE WITH ACCESSORY BLADE TYPE DAMPER, PRIME COAT FINISH FOR FIELD PAINTING.
RR-1	PRICE	18"x12"/530/F/L/A/B12	18x12	–
RR-2	PRICE	36"x18"/530/F/L/A/B12	36x18	–
RR-3	PRICE	24"x36"/530/F/L/A/B12	24x36	–
SD-1	PRICE	6"x6"/SMDA/1/4A/B12	6x6	4-WAY AIRFLOW
SD-2	PRICE	9"x9"/SMDA/1/4A/B12	9x9	4-WAY AIRFLOW
SR-1	PRICE	12"x4"/520/F/L/A/PC	12x4	PROVIDE PRIME COAT FINISH FOR FIELD PAINTING

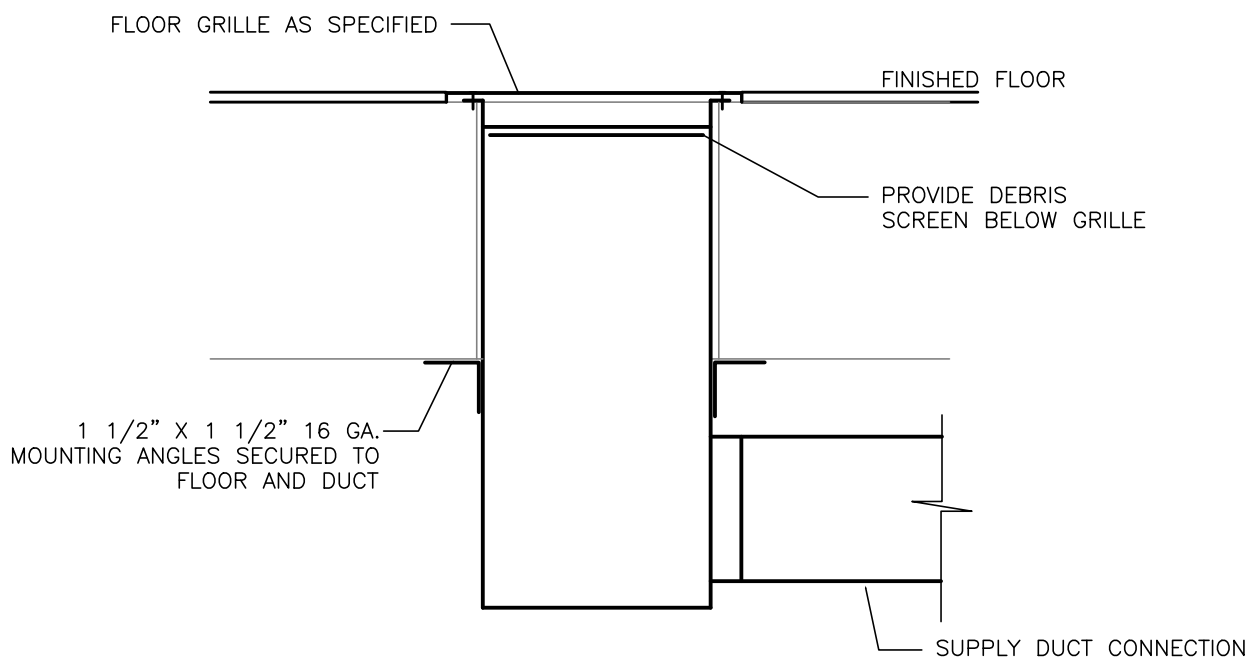
	PIPE RISER		NEW DUCTWORK
	PIPE DROP		ACOUSTICALLY LINED DUCTWORK
	PIPE CAP		SUPPLY DUCT DOWN
	PIPE UNION		SUPPLY DUCT UP
	FLOW DIRECTION INDICATOR		RETURN DUCT DOWN
	CLEANOUT		RETURN DUCT UP
	AIR FLOW INDICATOR		SQUARE TO ROUND TRANSITION
	CARBON DIOXIDE SENSOR		SQUARE ELBOW WITH TURNING VANES
	LOW VOLTAGE THERMOSTAT		FLEXIBLE DUCT CONNECTOR
	LINE VOLTAGE THERMOSTAT		ACCESS PANEL
	LIQUID REFRIGERANT PIPING		NEW FLEXIBLE DUCTWORK
	SUCTION REFRIGERANT PIPING		NEW SUPPLY DIFFUSER
	NEW CONDENSATE DRAIN PIPING		NEW RETURN GRILLE
A.P.	ACCESS PANEL		VOLUME DAMPER
A.F.F.	ABOVE FINISHED FLOOR		CEILING EXHAUST FAN
B.D.D.	BACK DRAFT DAMPER		DUCTED FURNACE
M.C.	MECHANICAL CONTRACTOR		COLD CLIMATE HEAT PUMP
P.C.	PLUMBING CONTRACTOR		ELECTRIC CABINET UNIT HEATER
E.C.	ELECTRICAL CONTRACTOR		BASEBOARD ELECTRIC HEATER
G.C.	GENERAL CONTRACTOR		ENERGY RECOVERY UNIT
	DRAWING NOTE TAG		SUPPLY DIFFUSER
			RETURN GRILLE
			EXHAUST GRILLE
			FLOOR REGISTER



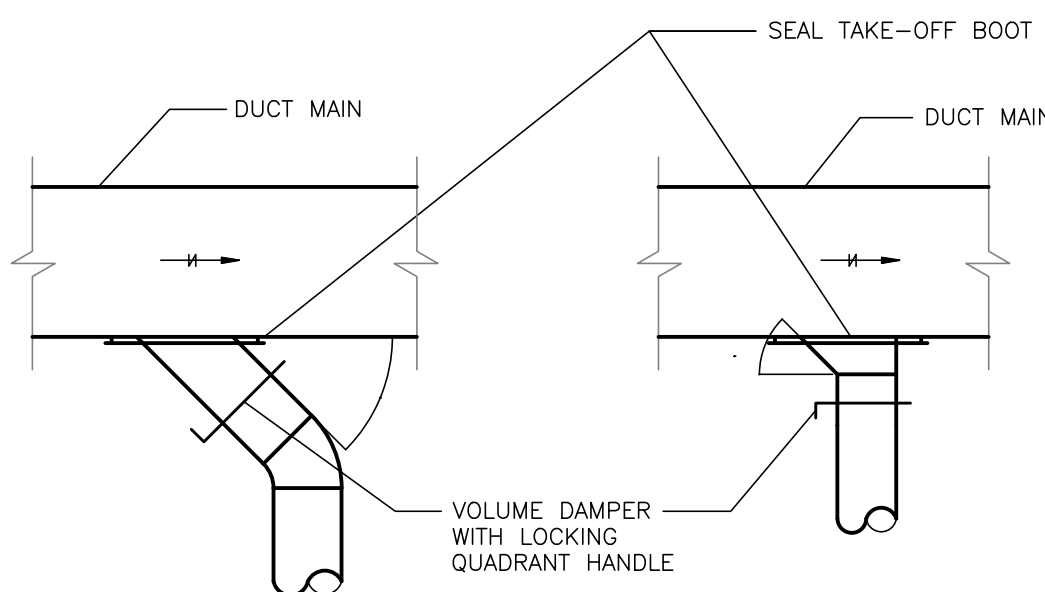
HEAT PUMP UNIT DETAIL
NOT TO SCALE



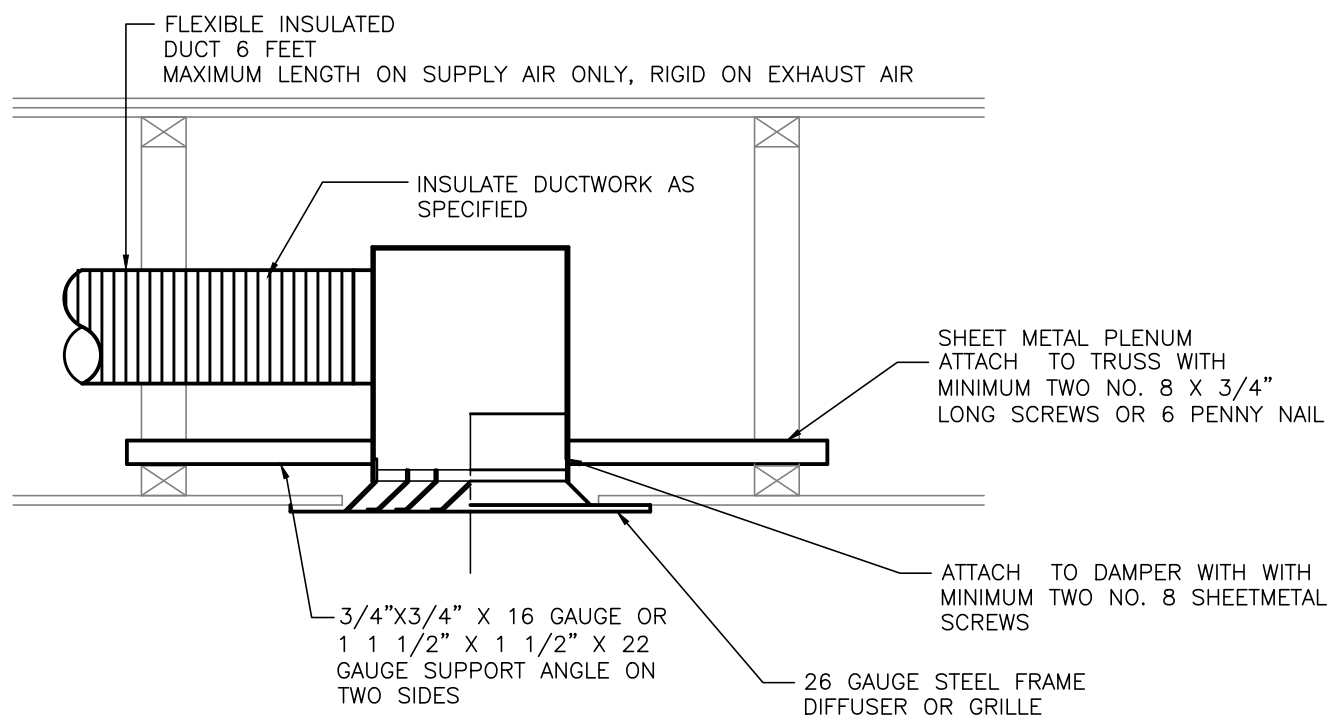
VERTICAL FAN COIL UNIT DETAIL
NOT TO SCALE



FLOOR GRILLE DETAIL
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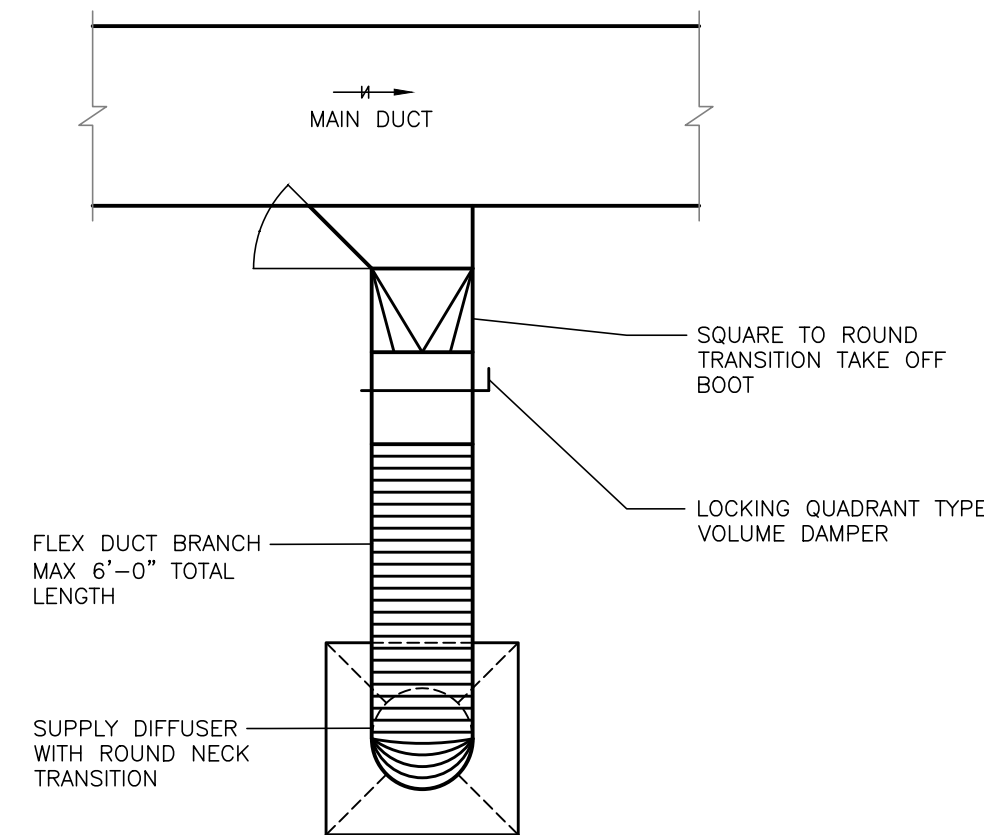


TYPICAL DUCT TAKE-OFF DETAILS
NOT TO SCALE

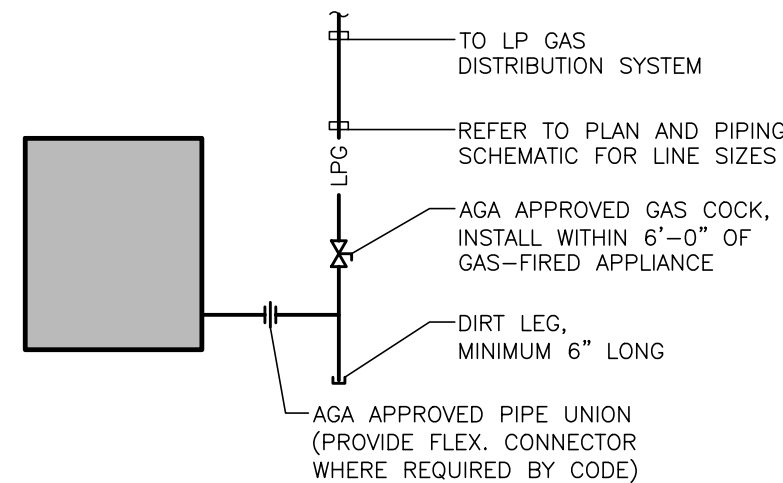


- NOTES:**
1. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND WITH THE U.L. LISTING.
 2. INSTALL EXHAUST GRILLES IN SIMILAR MANNER.
 3. DO NOT USE FLEXIBLE DUCT TO FORM ELBOWS. ELBOWS SHALL BE SMOOTH METAL DUCT.

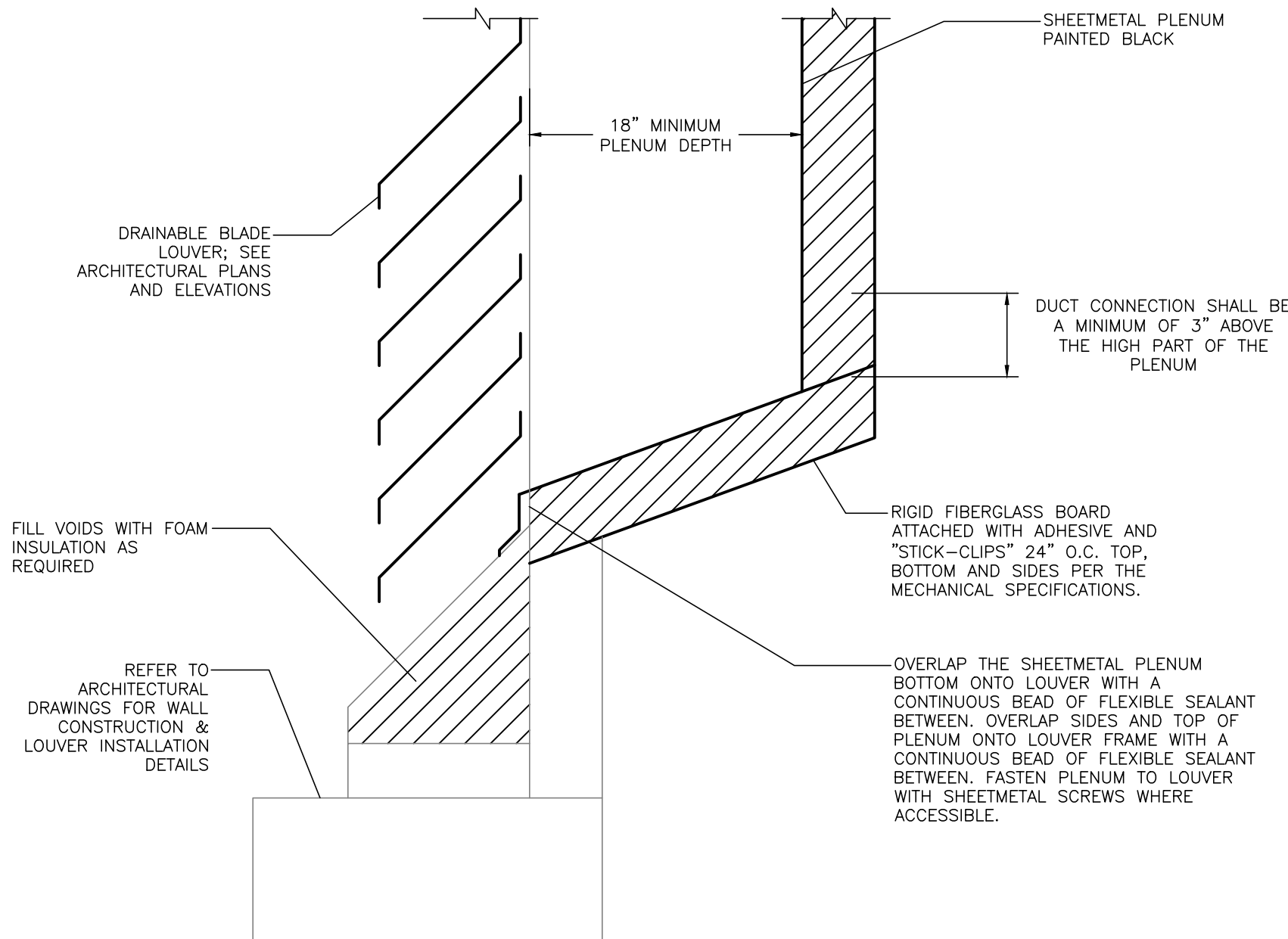
CEILING GRILLE DETAIL
NOT TO SCALE



TYPICAL DIFFUSER FLEXIBLE DUCT DETAIL
NOT TO SCALE



GAS EQUIPMENT CONNECTION DETAIL
NOT TO SCALE

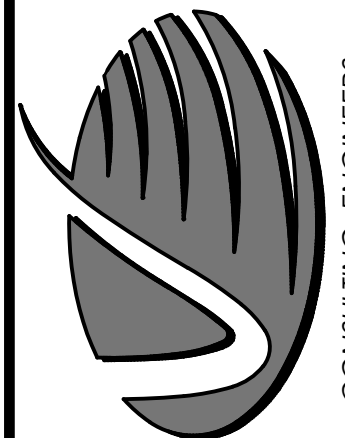


- NOTES:**
1. SHEETMETAL CONSTRUCTION SHALL BE PROVIDED PER SMACNA STANDARDS.
 2. SUPPORT AND PLENUM FROM THE STRUCTURE ABOVE WITH GALVANIZED STEEL ANGLES AND CHANNELS AS REQUIRED. CROSS BREAK ALL PANELS FOR RIGIDITY.
 3. INSULATE ALL BLANKOFF PANELS SIMILAR TO PLENUM.

LOUVER PLENUM DETAIL
NOT TO SCALE



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CONSULTING ENGINEERS
MECHANICAL - ELECTRICAL

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SCHOOL STREET, JOHNSON, VT

LIBRARY RENOVATIONS & ADDITIONS

MECHANICAL DETAILS

PROJ NO: 25037W

DRAWN: JLM

DATE: 09/23/2025

M5

ELECTRICAL LEGEND:

	SEE LUMINAIRE SCHEDULE FOR LUMINAIRE TYPES
PH	OCCUPANCY SENSOR LIGHTING CONTROL DEVICE; REFER TO SCHEDULE
\$	MANUAL SINGLE POLE LIGHTING SWITCH; 3 = 3 WAY; PIR = PASSIVE INFRARED; DT = DUEL TECHNOLOGY; D = DIMMING; LV = LOW VOLTAGE; P = SWITCH WITH PILOT DD = DIMMER/DRIVER
PS	PHOTOELECTRIC CONTROL SWITCH
TC	TIMECLOCK
TC _M	TIMECLOCK (MECHANICAL, AT ERU-T1, T2)
Φ	DUPLEX RECEPTACLE OUTLET
Φ	GROUND FAULT PROTECTION RECEPTACLE OUTLET
⦿	SPECIAL OUTLET (AS NOTED ON PLANS)
⊙	JUNCTION BOX
\$ _M	MOTOR SWITCH
⏏	SAFETY/DISCONNECT SWITCH; PROVIDE RATINGS AND FUSES AS PER SCHEDULES
RH	RANGE HOOD
CP	EQUIPMENT CONTROL PACKAGE; FURNISHED INTEGRAL TO THE EQUIPMENT
Q	MOTOR

→	HOMERUN TO PANEL INDICATED
—	BRANCH CIRCUIT OR FEEDER WIRING
- - -	UNDERGROUND WIRING
⬢	PHOTOELECTRIC SMOKE DETECTOR
⬢	HEAT DETECTOR
▽ _{MAP}	CEILING MOUNTED DATA (LAN) WIRELESS ACCESS POINT, NUMBER INDICATES NUMBER OF CABLES
▽ ₂	DATA (LAN) DEVICE OUTLET, NUMBER INDICATES NUMBER OF CABLES
⬢ _{MECH}	MECHANICAL EQUIPMENT CONNECTION
⬢ _{BP}	BUILDING EQUIPMENT CONNECTION

ABBREVIATIONS:

OHE	OVERHEAD ELECTRICAL LINES
AFF, AFG, AFR	ABOVE FINISH FLOOR, GRADE, ROOF
WP	WEATHERPROOF WITH COVER "CLOSED" FOR RECEPTACLES; NEMA 3R FOR ENCLOSURES
AC	ABOVE COUNTER
CM	CEILING MOUNTED
DW	DISH WASHER, RECEPTACLE LOCATED READILY ACCESSIBLE UNDER SINK.
TYP	TYPICAL
NTS	NOT TO SCALE
UON	UNLESS OTHERWISE NOTED

GENERAL NOTES:

THESE GENERAL NOTES APPLY TO ALL ELECTRICAL DRAWINGS. REFER TO DRAWING E8 FOR ELECTRICAL SPECIFICATION.

- FOLLOW ALL APPLICABLE CODES AND USE GOOD ELECTRICAL CONSTRUCTION PRACTICES WHEN DETERMINING TYPES OF WIRING METHODS AND SIZING OF CONDUCTORS AND CONDUIT. INSTALL ALL POWER, CONTROL AND SIGNAL WIRING USING METHODS AS FOLLOWS:
 - UNDERGROUND: INDIVIDUAL CONDUCTORS INSTALLED IN SCHEDULE 40 PVC RIGID NON-METALLIC CONDUIT (RNC) FOR CONCRETE ENCASEMENT OR DIRECT BURIAL; TRANSITION TO SCHEDULE 80 PVC RNC FOR CONDUIT SWEEPS AND BENDS AND WHERE CONDUIT RISES TO BE EXPOSED ABOVE GRADE, FROM A MINIMUM 24" BELOW TOP OF FINISHED GRADE. TRANSITION TO GALVANIZED STEEL RIGID METALLIC CONDUIT (RMC) 6" ABOVE FINISHED GRADE.
 - EXPOSED, EXTERIOR LOCATIONS: INDIVIDUAL CONDUCTORS IN SCHEDULE 80 PVC RNC; FINAL CONNECTIONS TO MOTORIZED (VIBRATING) EQUIPMENT SHALL BE LIQUID TIGHT FLEXIBLE METALLIC CONDUIT (LFMC), MAXIMUM 3' LENGTH.
 - EXPOSED WIRING IN UTILITY AREAS (MECHANICAL, ELECTRICAL ROOMS, ETC.): INDIVIDUAL CONDUCTORS IN ELECTRICAL METALLIC TUBING (EMT) WITH SET SCREW FITTINGS.
 - CONCEALED WIRING ABOVE ACCESSIBLE CEILINGS: INDIVIDUAL CONDUCTORS IN ELECTRICAL METALLIC TUBING (EMT) WITH SET SCREW FITTINGS, METAL CLAD (TYPE MC) CABLE FIXTURE WHIPS (6' MAX).
 - CONCEALED WIRING IN INACCESSIBLE WALLS AND CEILINGS: INDIVIDUAL CONDUCTORS IN ELECTRICAL METALLIC TUBING (EMT) WITH SET SCREW FITTINGS AND MULTI-CONDUCTOR FITTINGS AND MULTI-CONDUCTOR MEATL CLAD (TYPE MC) CABLE.
 - FINAL CONNECTIONS TO MECHANICAL/VIBRATING EQUIPMENT WILL BE MAXIMUM 4' FLEXIBLE METALLIC CONDUIT (FMC) IN DRY AREAS AND LIQUID TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) IN DAMP/WET AREAS.
- MINIMUM CONDUCTOR SIZE SHALL BE 12 AWG. PROVIDE AN INSULATED GROUND CONDUCTOR WITHIN ALL CABLES AND RACEWAYS. ALL CONDUCTORS SHALL BE COPPER, UNLESS OTHERWISE NOTED.

- CIRCUITS SHALL BE 20A1P, (2#12, 1#12G) 1/2"C. OR CABLE, UNLESS INDICATED OTHERWISE.
- MINIMUM 1" CONDUIT UNDERGROUND IN SITE.
- ALL WIRING SHALL BE ROUTED CONCEALED AND DEVICES SHALL BE FLUSH/RECESSED MOUNTED TO THE GREATEST EXTENT POSSIBLE. WIRING IN THE UTILITY SPACES SHALL BE PERMITTED TO BE EXPOSED WHERE NO WALL FINISH EXISTS. WIRING ROUTED EXPOSED ON VERTICAL SURFACES SHALL BE ROUTED VERTICALLY; HORIZONTAL WIRING SHALL BE ROUTED AT THE CEILING LEVEL OF THESE SPACES, NOT ON THE WALLS.
- ALL LIGHTING LAYOUTS SHALL BE COORDINATED WITH ARCHITECT'S REFLECTED CEILING PLANS AND EXACT LOCATION OF LUMINAIRES SHALL BE CHECKED AT CONSTRUCTION TIME AND PRIOR TO INSTALLATION WITH OTHER TRADE'S LATEST DRAWINGS AND EQUIPMENT LAYOUTS. COORDINATE LUMINAIRE TRIMS AND MOUNTING WITH CEILING CONSTRUCTION. FINAL LOCATION OF LUMINAIRES SHALL BE REASONABLY CONDUIVE TO ACCESS BY THE OWNER FOR ROUTINE MAINTENANCE.
- MOUNT LIGHTING CONTROL SWITCHES 44" ABOVE FINISHED FLOOR TO CENTER, WITHIN 6" OF THE LATCH SIDE OF THE DOOR, UNLESS OTHERWISE INDICATED. "AC" INDICATES MOUNTING 8" ABOVE COUNTER BACK SPLASH, APPROXIMATELY 44" ABOVE FINISHED FLOOR.
- LIFE SAFETY LUMINAIRES (EXIT SIGNS, EMERGENCY BATTERY UNITS) SHALL BE CONNECTED TO THE UNSWITCHED PORTION OF THE LIGHTING CIRCUIT SERVING THE AREA. AHEAD OF ANY SWITCHING OR AUTOMATIC CONTROLS. LIFE SAFETY LUMINAIRES ARE INDICATED ON THESE DRAWINGS, BUT ARE TO BE SELECTED BY THE THE ELECTRICAL CONTRACTOR'S LIGHTING SUPPLIER.
- UL924 RELAYS SHALL BE PROVIDED AHEAD OF ALL AUTOMATIC LIGHTING CONTROLS SERVING LIGHTING SERVING MEANS OF EGRESS PATHWAYS, WITH INTERFACE WITH FIRE ALARM SYSTEM.
- MOUNT RECEPTACLE DEVICES 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. MOUNT RECEPTACLE DEVICES SUCH THAT THEY ARE ORIENTED SO THE GROUND IS IN THE "UP" POSITION. "AC" INDICATES MOUNTING 8" OVER COUNTER BACK SPLASH, APPROXIMATELY 44" ABOVE FINISHED FLOOR. **ALL RECEPTACLES SHALL BE TAMPER RESISTANT STYLE.**
- PROVIDE MEMBRANE PROTECTION FOR ALL DEVICE BOXES

PENETRATING FIRE RATED WALLS.

- 11.1. BASIS OF DESIGN PRODUCT IS 3M FIRE BARRIER MOLDABLE PUTTY PADS MPPH+. PROVIDE A SUBMITTAL PRODUCT INFORMATION FOR REVIEW AND APPROVAL.
12. AIR AND VAPOR TIGHT BOXES SHALL BE USED AT EXTERIOR WALLS AND CEILINGS, BELOW ATTIC SPACES, AND ADJACENT TO UNCONDITIONED SPACES. THIS INCLUDES ALL ELECTRICAL BOXES, CABLE BOXES, FIRE SAFETY SYSTEM BOXES, ETC.

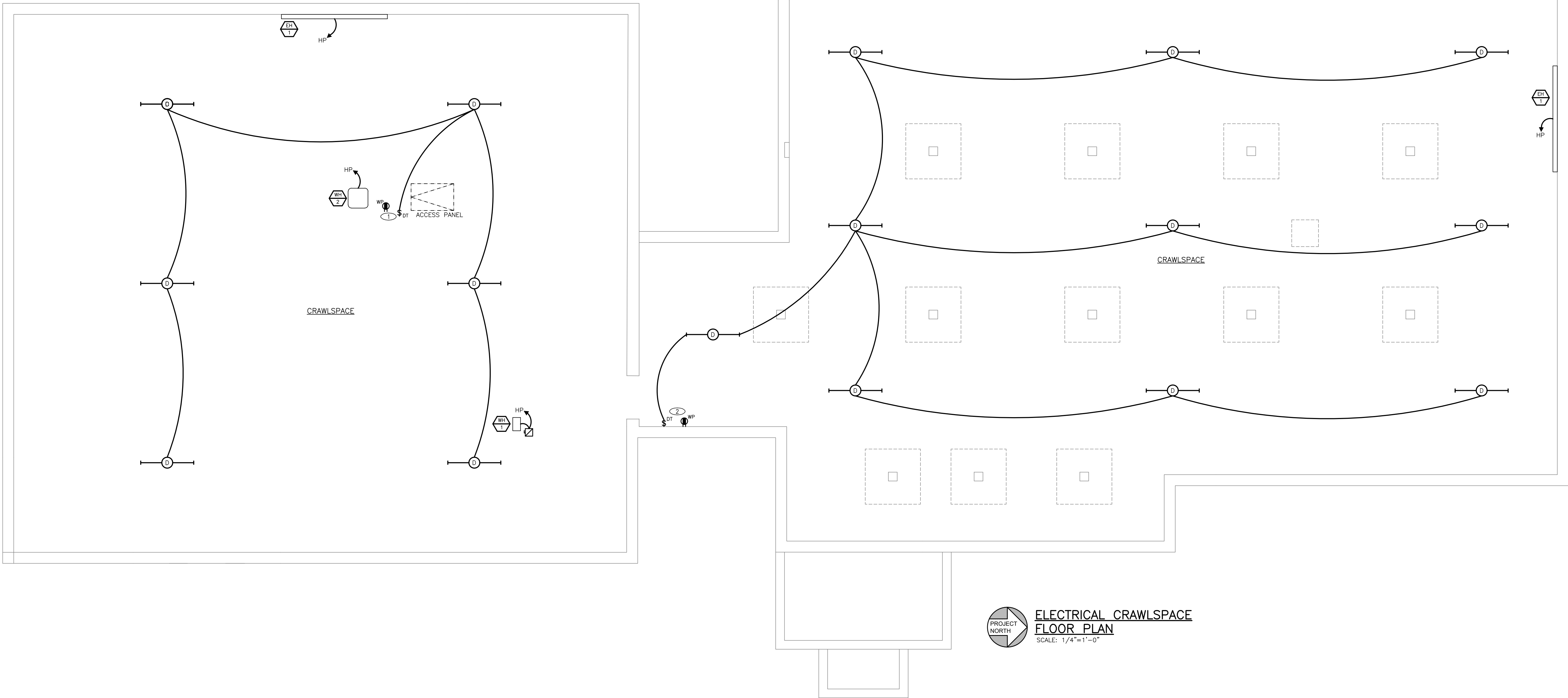
GENERAL NOTES:

REFER TO GENERAL NOTES ON DRAWING E1 WHICH APPLY TO THIS DRAWING AS WELL AS ANY NOTES WHICH FOLLOW.

DRAWING NOTES:

THESE DRAWING NOTES APPLY TO THIS DRAWING, ONLY.

- PROVIDE A TYPE 'C' STRIP LIGHT IN THE CRAWL SPACE, MOUNTED ON THE BUILDING STRUCTURE. PROVIDE A DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH AT HATCHWAY ACCESS LOCATION. PROVIDE A GFCI DUPLEX RECEPTACLE ADJACENT TO THE LIGHT SWITCH. CONNECT LIGHTING AND GENERAL USE RECEPTACLE CIRCUIT FROM THE 'HP' HOUSE PANEL.
- PROVIDE A TYPE 'C' STRIP LIGHT IN THE CRAWL SPACE, MOUNTED ON THE BUILDING STRUCTURE. PROVIDE A DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH AT ENTRANCE LOCATION. PROVIDE A GFCI DUPLEX RECEPTACLE ADJACENT TO THE LIGHT SWITCH. CONNECT LIGHTING AND GENERAL USE RECEPTACLE CIRCUIT FROM THE 'HP' HOUSE PANEL.



ELECTRICAL CRAWLSPACE
FLOOR PLAN
SCALE: 1/4"=1'-0"



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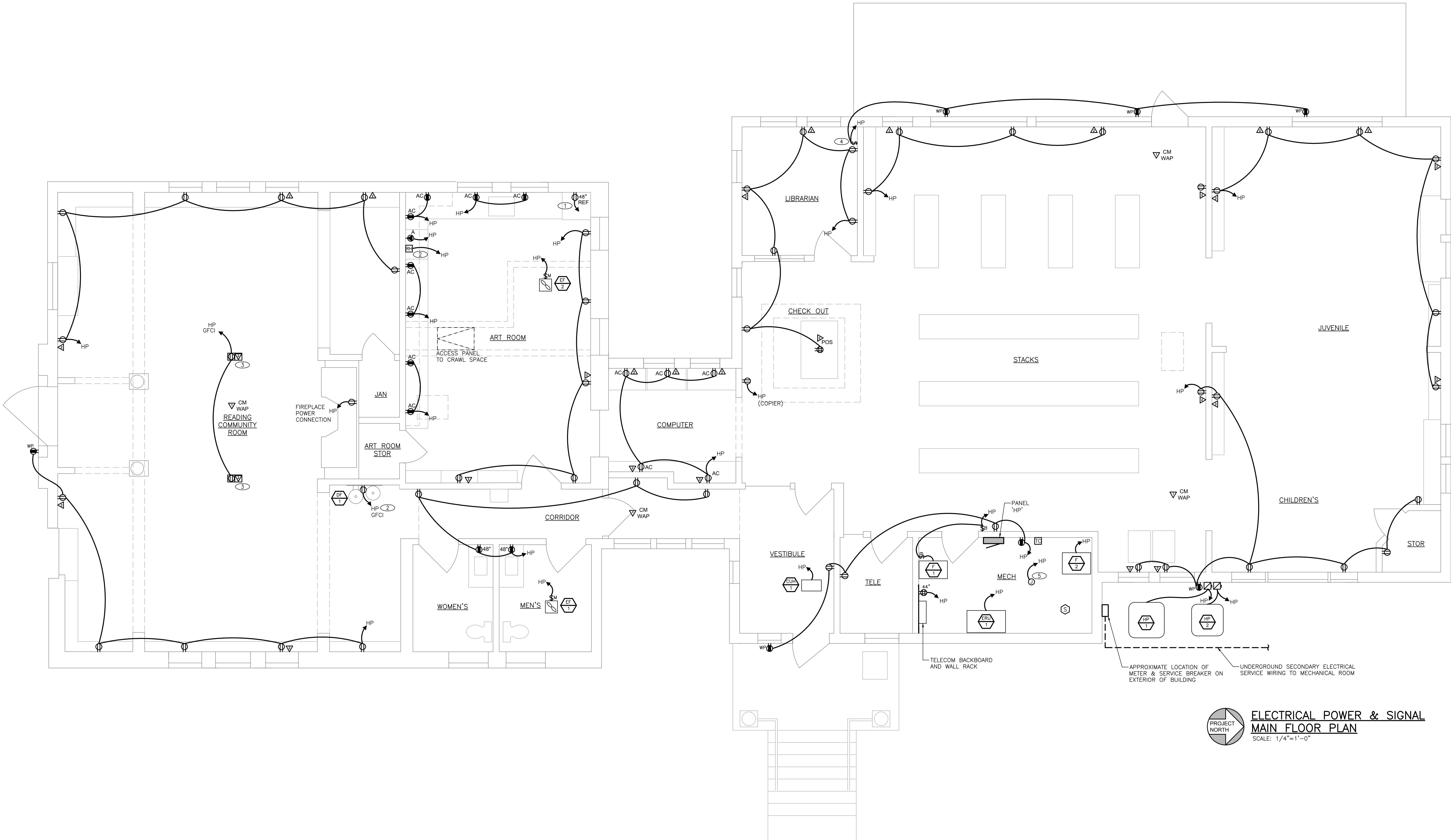
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JOHNSON LIBRARY SCHOOL STREET, JOHNSON, VT	LIBRARY RENOVATIONS & ADDITIONS ELECTRICAL CRAWLSPACE FLOOR PLAN
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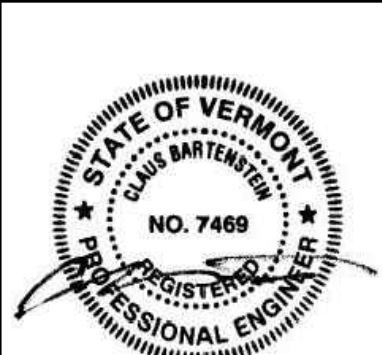
PROJ NO:	25037W
DRAWN:	CLD
DATE:	09/23/2025

E1

- GENERAL NOTES:**
- REFER TO GENERAL NOTES ON ELECTRICAL PLAN DRAWING E1 WHICH APPLY TO THE WORK ON THIS DRAWING AS WELL AS ANY NOTES WHICH FOLLOW.
- DRAWING NOTES:**
- THESE DRAWING NOTES APPLY TO THIS DRAWING, ONLY.
- 1 PROVIDE DEDICATED REFRIGERATOR CIRCUIT ON GFCI PROTECTED CIRCUIT BREAKER.
 - 2 RANGE HOOD CONNECTION ON GFCI CIRCUIT. PROVIDE 7 WATT A-STYLE LED LAMP IN RANGE HOOD.
 - 3 FLOOR BOX WITH DEVICES INDICATED, FLUSH ACTIVATION TYPE FOR WOOD FLOORS, ALUM COVER WITH CABLE GROMMETS BASIS OF DESIGN IS LEGRAND 880W SERIES. COVER FINISH AS SELECTED BY ARCHITECT.
 - 4 MANUAL SWITCH FOR TURNING ON & OFF POWER TO EXTERIOR OUTLETS.
 - 5 TERMINATE 20A1P CIRCUIT IN JUNCTION BOX FOR USE AS MECHANICAL CONTROL POWER. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.



**ELECTRICAL POWER & SIGNAL
MAIN FLOOR PLAN**
SCALE: 1/4"=1'-0"



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ELECTRICAL POWER & SIGNAL
MAIN FLOOR PLAN**

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DATE:	09/23/2025

GENERAL NOTES:

REFER TO GENERAL NOTES ON ELECTRICAL PLAN DRAWING E1 WHICH APPLY TO THE WORK ON THIS DRAWING AS WELL AS ANY NOTES WHICH FOLLOW.

DRAWING NOTES:

THESE DRAWING NOTES APPLY TO THIS DRAWING, ONLY.

1 TYPE 'C2','CH' AND 'S1'(AT CUPOLA) LUMINAIRES ON COMMON HOUSE EXTERIOR LIGHTING CIRCUIT CONTROLLED VIA A PHOTOCELL. HEIGHT OF LUMINAIRE TO BE FINALIZED BY ARCHITECT AND OWNER.

2 TYPE 'B' LUMINAIRES ON COMMON HOUSE EXTERIOR LIGHTING CIRCUIT CONTROLLED VIA A PHOTOCELL. MOUNT ON GRANITE CAP. ENTRANCE STAIRWAY. REFER TO ARCHITECTURAL DRAWINGS.

3 EXISTING LUMINAIRES TO BE REINSTALLED AND CIRCUITED TO NEW PANEL 'HP'.



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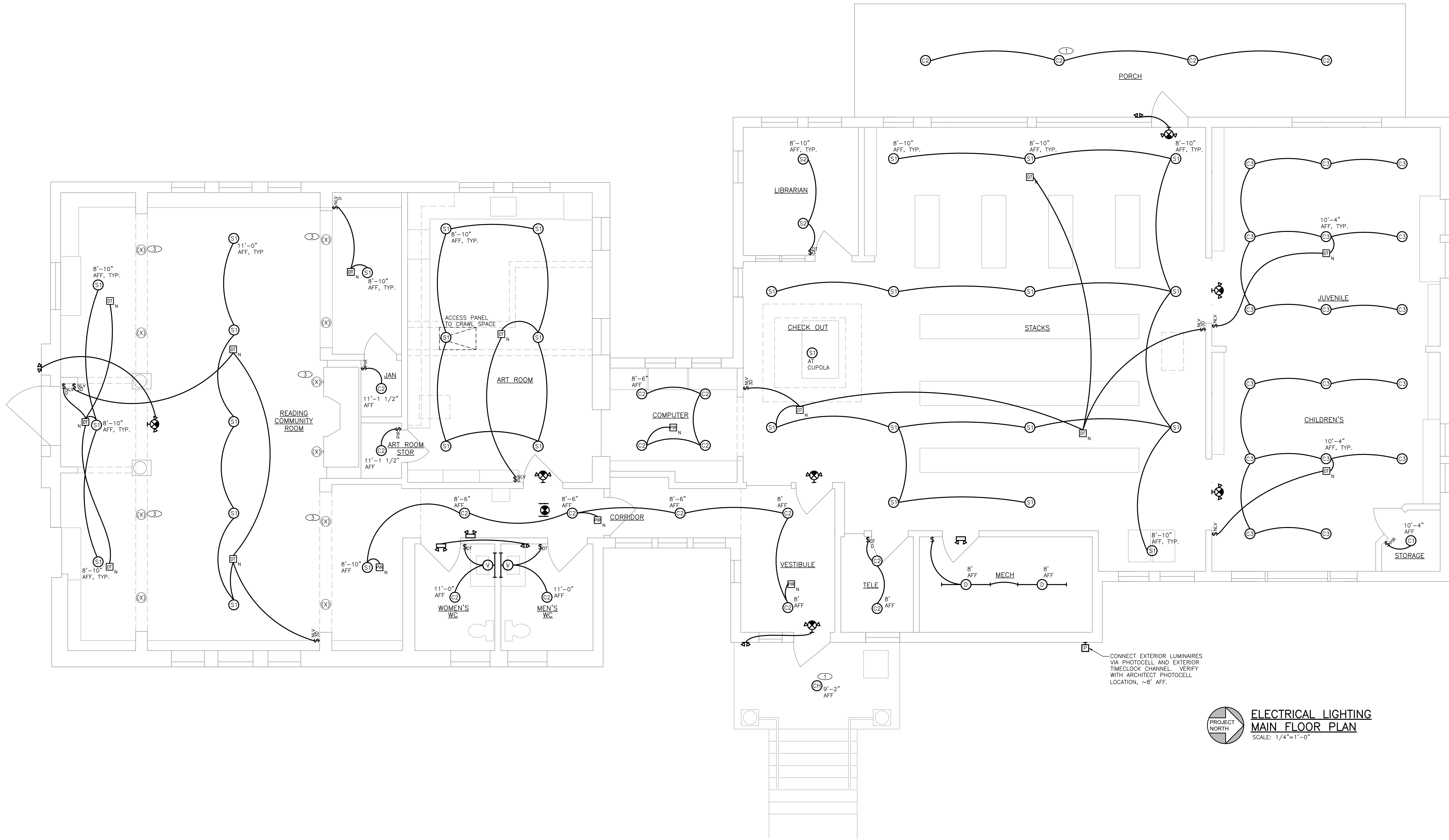
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LIBRARY RENOVATIONS & ADDITIONS
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MAIN FLOOR PLAN

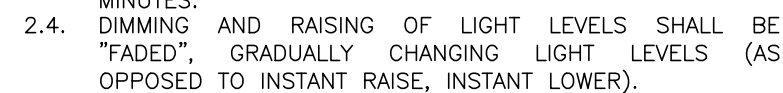
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DATE: 09/23/2025

E3



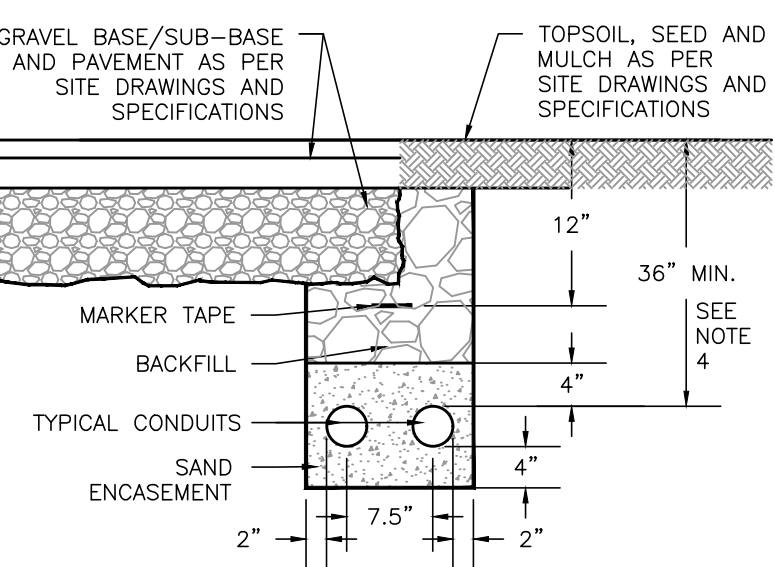
**ELECTRICAL LIGHTING
MAIN FLOOR PLAN**

SCALE: 1/4"=1'-0"



6. ALL CONTROL COMPONENTS SHALL BE DABA PRODUCTS.

PAVED AREAS

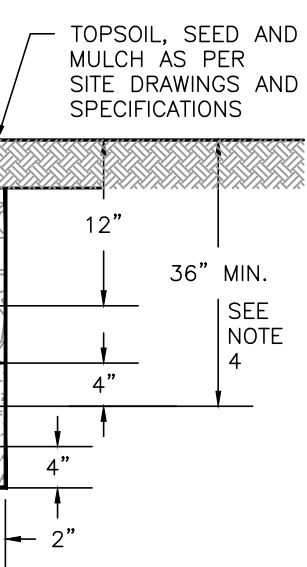


- NOTES:**
- DETAIL IS TYPICAL FOR ALL WIRING THAT IS NOT ELECTRICAL SERVICE POWER WIRING. REFER TO VEC STANDARD TRENCH DETAIL FOR UNDERGROUND SECONDARY ELECTRIC SERVICE TRENCH.
 - COMPLY WITH OSHA TRENCH PROTECTION REQUIREMENTS.
 - PROVIDE CONDUIT SPACERS/SADDLES EVERY 6 FEET.
 - BURIAL DEPTH IS SHOWN FOR DIRECT BURIAL PVC RIGID NON-METALLIC CONDUIT. WHERE SPECIFIED BURIAL DEPTH IS NOT POSSIBLE, UTILIZE GALVANIZED STEEL RIGID METALLIC CONDUIT. NOTIFY ENGINEER PRIOR TO ANY CHANGE OF WIRING METHODS.
 - DETAIL IS TYPICAL INSTALLATION; PROVIDE QUANTITY OF CONDUITS AS REQUIRED FOR THE INSTALLATION AND AS DIRECTED IN THE PLANS AND DETAILS.

TYPICAL ELECTRICAL DUCTBANK DETAIL
NO SCALE

NO SCALE

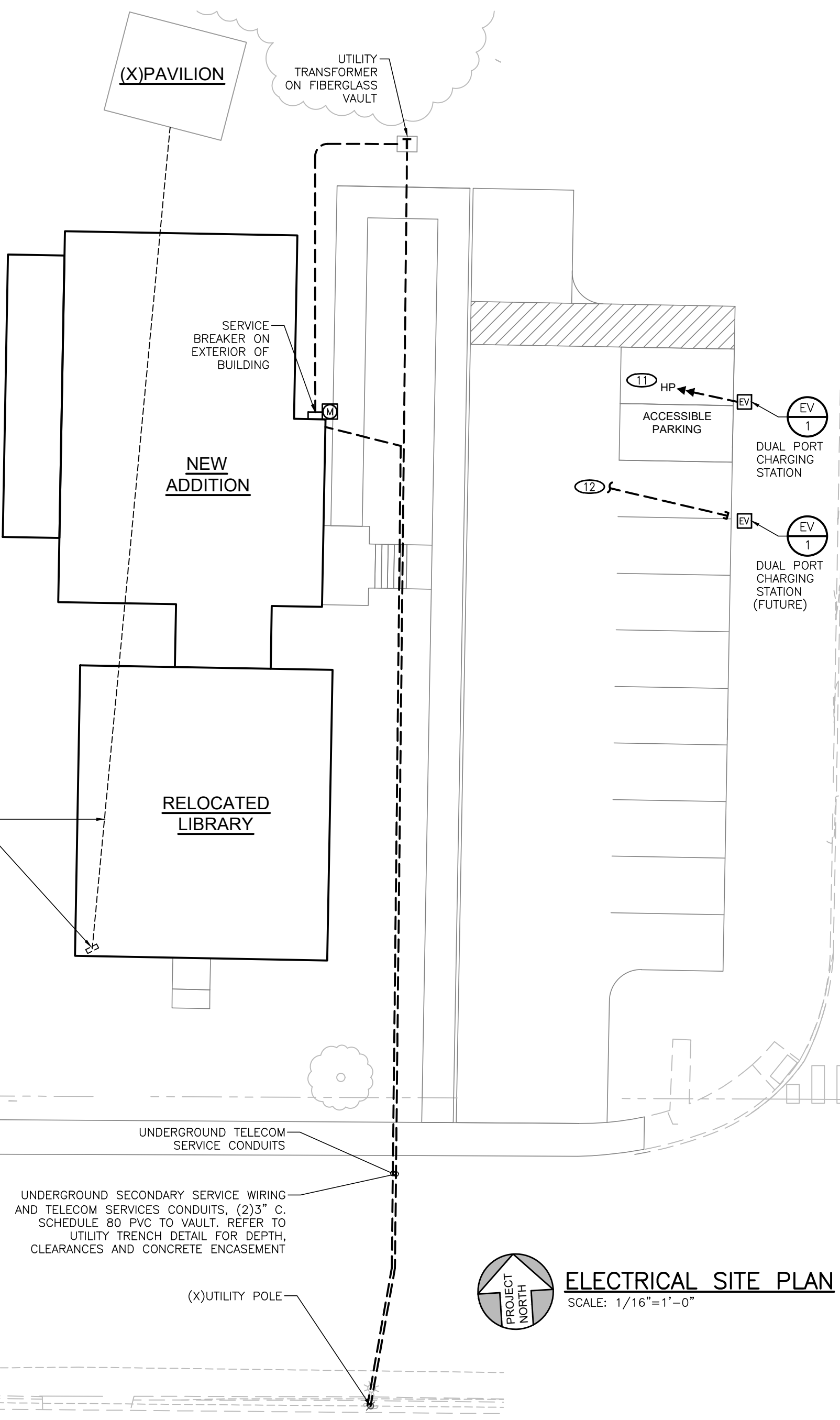
LAWNED AREAS



- NOTES:**
- DETAIL IS TYPICAL FOR ALL WIRING THAT IS NOT ELECTRICAL SERVICE POWER WIRING. REFER TO VEC STANDARD TRENCH DETAIL FOR UNDERGROUND SECONDARY ELECTRIC SERVICE TRENCH.
 - COMPLY WITH OSHA TRENCH PROTECTION REQUIREMENTS.
 - PROVIDE CONDUIT SPACERS/SADDLES EVERY 6 FEET.
 - BURIAL DEPTH IS SHOWN FOR DIRECT BURIAL PVC RIGID NON-METALLIC CONDUIT. WHERE SPECIFIED BURIAL DEPTH IS NOT POSSIBLE, UTILIZE GALVANIZED STEEL RIGID METALLIC CONDUIT. NOTIFY ENGINEER PRIOR TO ANY CHANGE OF WIRING METHODS.
 - DETAIL IS TYPICAL INSTALLATION; PROVIDE QUANTITY OF CONDUITS AS REQUIRED FOR THE INSTALLATION AND AS DIRECTED IN THE PLANS AND DETAILS.

TYPICAL ELECTRICAL DUCTBANK DETAIL
NO SCALE

NO SCALE

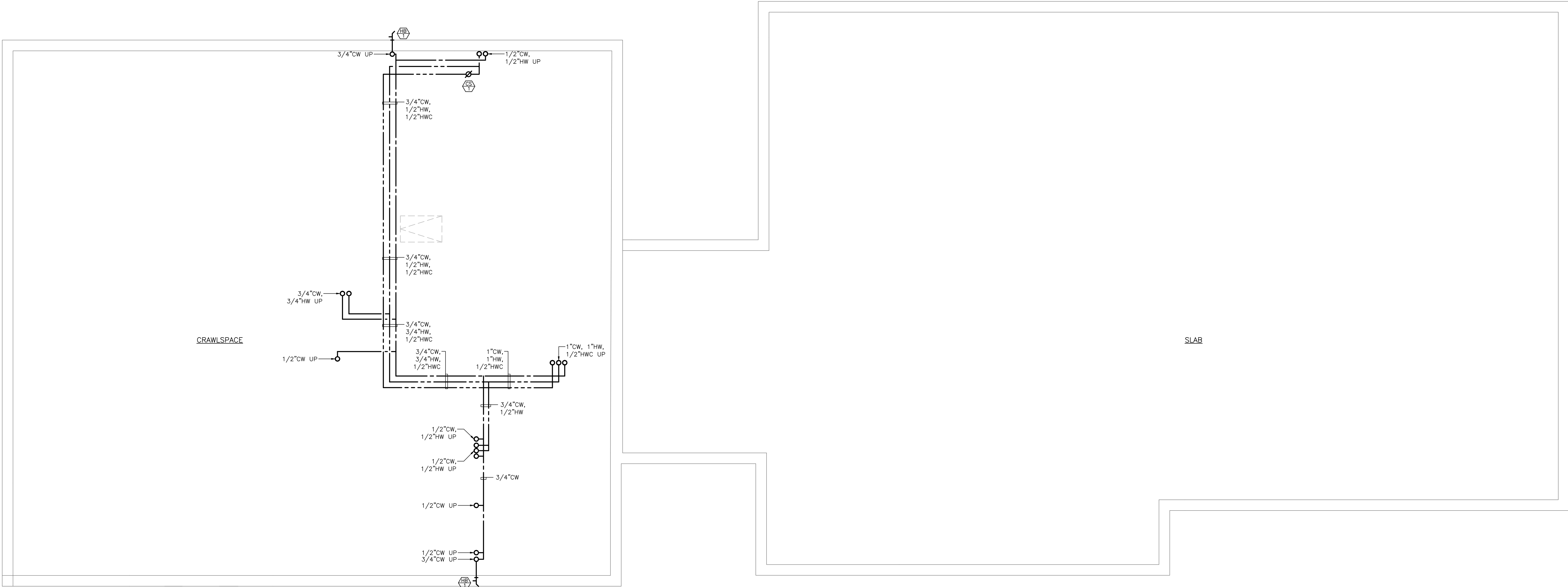


ELECTRICAL SITE PLAN
SCALE: 1/16"=1'-0"

TYPE : SQUARE D NO.				DIMENSIONS : 20"W x 5.75"D x 50"H				MOUNTING : SURFACE				VOLTAGE : 120/240V, 1Ø, 3W				MAINS : 400A MLO				A.I.C. RATING : 22,000				LUGS SIZE : SEE ONE LINE DIAGRAM			
PANEL FEED : BOTTOM																											
SINGLE PHASE PANEL																											
DESCRIPTION		CONNECTED LOAD (VA)				PHASE				CONNECTED LOAD (VA)				DESCRIPTION													
		A		B		BKR		A		B		BKR															
RCPT - READING/COMMUNITY ROOM		1080		201/	1	●	2	201/	1500			RCPT - KITCHEN COUNTER															
RCPT - READING/COMMUNITY ROOM			1080	201/	3	●	4	201/ G		900		RCPT - REFRIGERATOR															
RCPT - CORRIDOR/BATHROOMS		900		201/	5	●	6	201/	1500			RCPT - KITCHEN COUNTER															
RCPT - READING ROOM FLOOR BOXES			1260	201/	7	●	8	201/		1500		RCPT - KITCHEN COUNTER															
RCPT - ART ROOM		900		201/	9	●	10	201/	1500			RCPT - KITCHEN COUNTER															
RCPT - COMPUTER			900	201/	11	●	12	201/ G		105		RANGE HOOD															
RCPT - COPIER		900		201/	13	●	14	50/2	4800		4800	ELECTRIC RANGE															
RCPT - AT WATER COOLER			360	201/ G	15	●	16																				
RCPT - LIBRARIAN		1260		201/	17	●	18	15/1	1212			F-1 INDOOR GAS FURNACE															
RCPT - OUTDOOR PORCH			540	201/	19	●	20	201/		1536		F-2 INDOOR GAS FURNACE															
RCPT - JUVENILE		1080		201/	21	●	22	LO 15/2	1250			EH1 - BASEBOARD ELECTRIC HEATER															
RCPT - CHILDRENS			1620	201/	23	●	24			1250																	
RCPT - MECH ROOM		900		201/	25	●	26	LO 20/1	1752			ERU-1 ENERGY RECOVERY UNIT															
RCPT - TELECOM			360	201/	27	●	28	LO 20/1		1500		CUH-1 UNIT HEATER															
EF1 - EXHAUST FAN		480		15/1	29	●	30	LO 50/2	4750			WH1 - WATER HEATER															
EF2 - EXHAUST FAN			480	15/1	31	●	32			4750																	
HP-1 OUTDOOR HEAT PUMP		4620		45/2	33	●	34	201/	-			SPARE															
			4620		35	●	36	201/		710		INTERIOR LIGHTING															
HP-2 OUTDOOR HEAT PUMPS		4620		45/2	37	●	38	201/	420			EXTERIOR LIGHTING															
			4620		39	●	40	201/		240		EXTERIOR LIGHTING/TIMECLOCK															
WH2 - WATER HEATER		1440		LO 20/1	41	●	42	LO 15/2	1250			EH1 - BASEBOARD ELECTRIC HEATER															
EV1 - EV CHARGING STATION			3700	LO 40/2	43	●	44			1250																	
		3700		45	●	46	LO 40/2	-				EV1 - EV CHARGING STATION (FUTURE)															
EV1 - EV CHARGING STATION			3700	LO 40/2	47	●	48			-		EV1 - EV CHARGING STATION (FUTURE)															
		3700		49	●	50	LO 40/2	-																			
SPARE		-	-	201/	51	●	52		-																		
SPARE		-	-	201/	53	●	54	201/	-			SPARE															
SPARE		-	-	201/	55	●	56	201/	-			SPARE															
SPARE		-	-	201/	57	●	58	201/	-			SPARE															
SPARE		-	-	201/	59	●	60	201/	-			SPARE															
SPARE		-	-	201/	61	●	62	201/	-			SPARE															
SPARE		-	-	201/	63	●	64	201/	-			SPARE															
SPARE		-	-	201/	65	●	66	201/	-			SPARE															
SPARE		-	-	201/	67	●	68	201/	-			SPARE															
SPARE		-	-	201/	69	●	70	201/	-			SPARE															
SPARE		-	-	201/	71	●	72	201/	-			SPARE															
SPARE		-	-	201/	73	●	74	201/	-			SPARE															
SPARE		-	-	201/	75	●	76	201/	-			SPARE															
SPARE		-	-	201/	77	●	78	201/	-			SPARE															
SPARE		-	-	201/	79	●	80	201/	-			SPARE															
SPARE		-	-	201/	81	●	82	40/2	-			SPD - SURGE PROTECTIVE DEVICE															
SPARE		-	-	201/	83	●	84																				
TOTALS:		24680	23240						18434	18541																	
MAXIMUM PANEL CAPACITY:		144 KVA	400 AMPS	G = 5mA GFCI GROUND FAULT PROTECTION INTEGRAL TO THE CIRCUIT BREAKER																							
ESTIMATED CONNECTED LOAD:		85 KVA	354 AMPS	A = ARC FAULT PROTECTION INTEGRAL TO THE CIRCUIT BREAKER																							
CALCULATED NEC DEMAND LOAD:		77 KVA	319 AMPS	LO = PROVIDE LOCK OPEN (OFF) CLIP FOR THIS CIRCUIT BREAKER																							
				LC = PROVIDE LOCK CLOSED (ON) CLIP FOR THIS CIRCUIT BREAKER																							

MECHANICAL EQUIPMENT SCHEDULE

⚡	DESCRIPTION	LOAD	VOLTAGE SYSTEM	CONDUCTORS AND CONDUIT	CIRCUIT PROTECT	CONTACTOR OR STARTER	LOCAL DISCONNECT	REMARKS
CUH1	FAN FORCED CEILING ELECTRIC UNIT HEATER	1.5 KW	120V, 1ø	(2#12, 1#12G) 1/2".	20A1P	PROVIDED BY M.C.	(3)	(1)
EF1, EF2	IN-LINE EXHAUST FAN	1/4 HP	120V 1ø	(2#12, 1#12G) 1/2".	15A1P	BY MECHANICAL	MOTOR SWITCH	(1)
EH1	BASEBOARD ELECTRIC HEAT	2.5 KW	240V, 1ø	(2#12, 1#12G) 1/2".	15A2P	PROVIDED BY M.C.	(3)	(1)
ERU1	ENERGY RECOVERY VENTILATOR	14.6 MCA	120V, 1ø	(2#12, 1#12G) 1/2".	20A1P	BY MECHANICAL	(3)	(1)
F1	INDOOR GAS FURNACE	10.1 FLA	120V, 1ø	(2#12, 1#12G) 1/2".	15A1P	PROVIDED BY M.C.	(13)	(1)
F2	INDOOR GAS FURNACE	12.8 FLA	120V, 1ø	(2#12, 1#12G) 1/2".	20A1P	PROVIDED BY M.C.	(13)	(1)
HP1	OUTDOOR HEAT PUMP	38.5 MCA	240V, 1ø	(2#6, 1#10G) 3/4".	45A2P MOC	INTEGRAL TO EQUIPMENT	60A2P NON-FUSED NEMA 3R	(1)
HP2	OUTDOOR HEAT PUMP	38.5 MCA	240V, 1ø	(2#6, 1#10G) 3/4".	45A2P MOC	INTEGRAL TO EQUIPMENT	60A2P NON-FUSED NEMA 3R	(1)
WH1	POINT OF USE ELECTRIC WATER HEATER	9500 WAITS	240V, 1ø	(2#6, 1#10G) 3/4".	50A2P MOC	INTEGRAL TO EQUIPMENT	60A2P NON-FUSED NEMA 3R	(1)
WH2	POINT OF USE ELECTRIC WATER HEATER	12 AMPS	120V, 1ø	(2#12, 1#12G) 1/2".	20A1P	INTEGRAL TO EQUIPMENT	(3)	(1)



**DOMESTIC WATER
CRAWLSPACE FLOOR PLAN**

SCALE: 1/4"=1'-0"

- GENERAL NOTES:** (APPLY TO ALL SHEETS)
- A. THE DOMESTIC WATER PIPING, SANITARY WASTE & VENT PIPING ROUTING CONFIGURATIONS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO SHOW THE SCOPE OF WORK FOR THE PROJECT. IT IS THE RESPONSIBILITY OF THE MC TO COORDINATE THEIR WORK WITH THE OTHER TRADES WITHIN THE BUILDING, INCLUDING BUT NOT LIMITED TO STRUCTURAL, ARCHITECTURAL AND SPRINKLER AS REQUIRED.
- B. ANY CEILING SUSPENDED PLUMBING EQUIPMENT SHALL BE PROVIDED WITH PROPER SPRING VIBRATION ISOLATORS.



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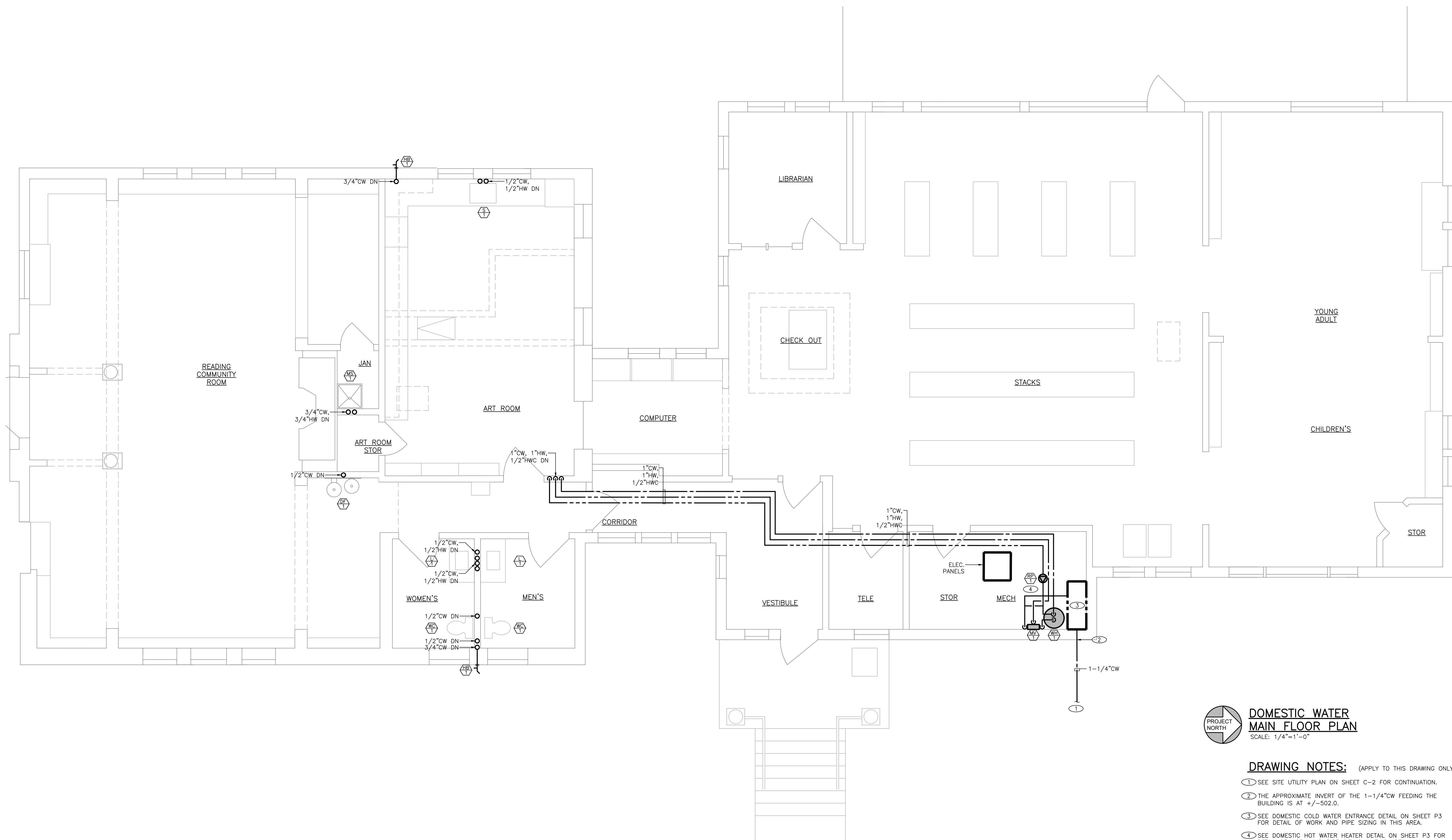
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LIBRARY RENOVATIONS & ADDITIONS
DOMESTIC WATER PLUMBING
CRAWLSPACE FLOOR PLAN

PROJ NO: 25037W

DRAWN: JLM

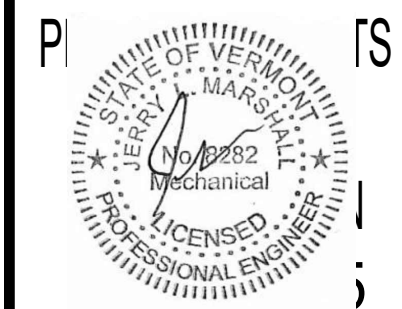
DATE: 05/19/2025



**DOMESTIC WATER
MAIN FLOOR PLAN**
SCALE: 1/4"=1'-0"

DRAWING NOTES: (APPLY TO THIS DRAWING ONLY)

- SEE SITE UTILITY PLAN ON SHEET C-2 FOR CONTINUATION.
- THE APPROXIMATE INVERT OF THE 1-1/4"CW FEEDING THE BUILDING IS AT +/-502.0.
- SEE DOMESTIC COLD WATER ENTRANCE DETAIL ON SHEET P3 FOR DETAIL OF WORK AND PIPE SIZING IN THIS AREA.
- SEE DOMESTIC HOT WATER HEATER DETAIL ON SHEET P3 FOR DETAIL OF WORK AND PIPE SIZING IN THIS AREA.



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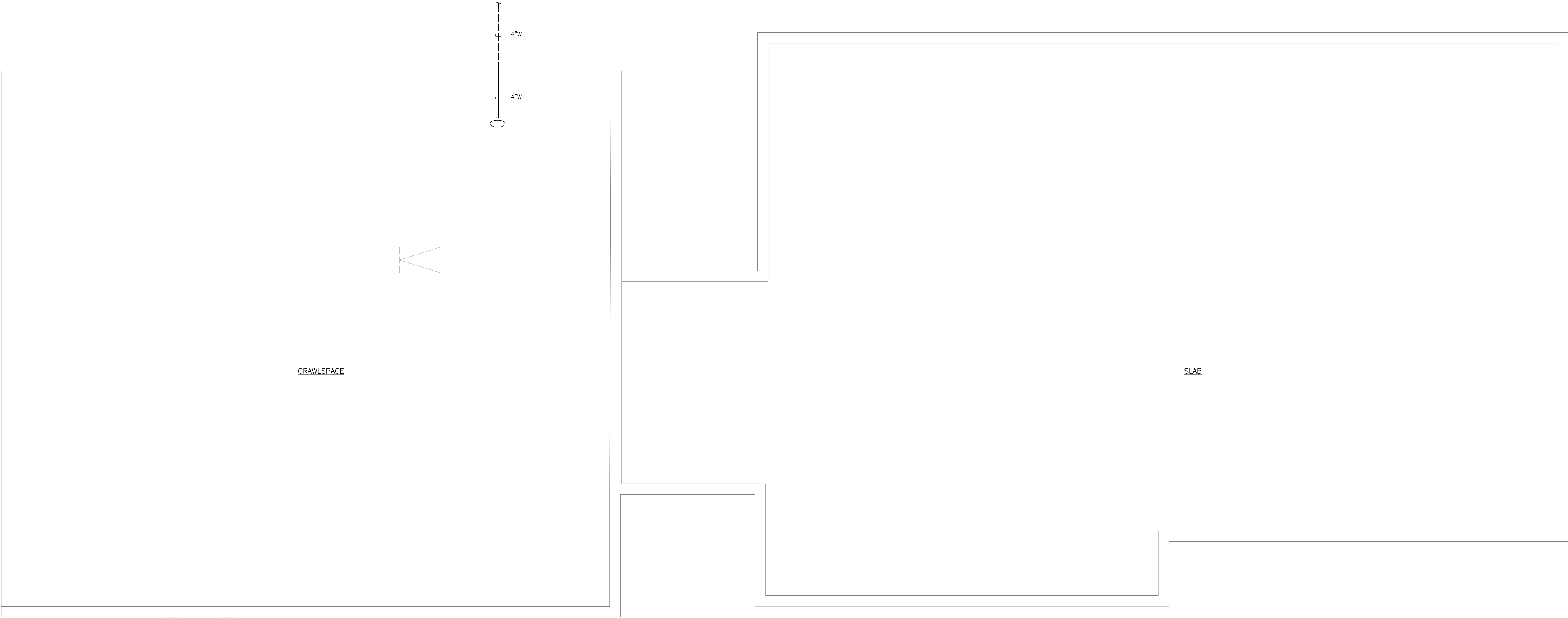
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**LIBRARY RENOVATIONS & ADDITIONS
DOMESTIC WATER PLUMBING
MAIN LEVEL PLAN**

PROJ NO:	25037W
DRAWN:	JLM
DATE:	05/19/2025

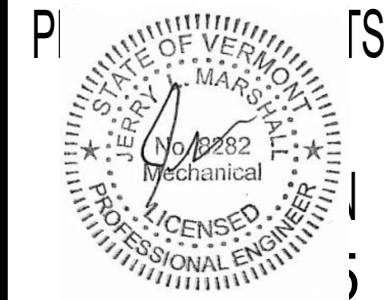


**SANITARY WASTE & VENT
CRAWLSPACE FLOOR PLAN**

SCALE: 1/4"=1'-0"

DRAWING NOTES: (APPLY TO THIS DRAWING ONLY)

- ① SEE SHEET PXX FOR DETAIL OF SANITARY WASTE PIPING
RUNNING WITHIN THE CRAWLSPACE.



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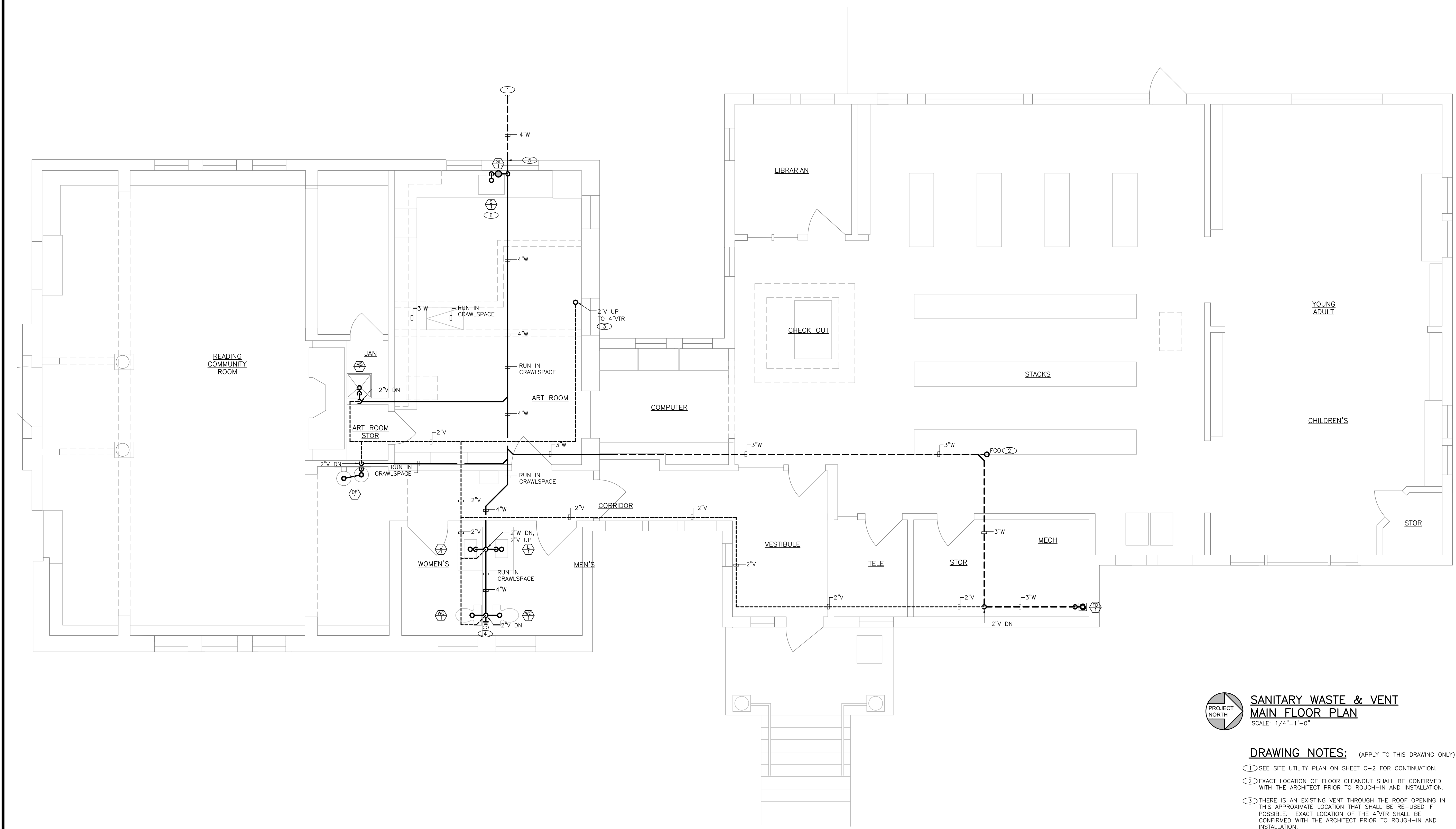
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LIBRARY RENOVATIONS & ADDITIONS

**SANITARY WASTE & VENT PLUMBING
CRAWLSPACE FLOOR PLAN**

PROJ NO:	25037W
DRAWN:	JLM
DATE:	05/19/2025

P3

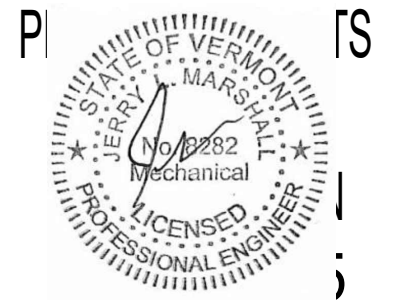


**SANITARY WASTE & VENT
MAIN FLOOR PLAN**

SCALE: 1/4"=1'-0"

DRAWING NOTES: (APPLY TO THIS DRAWING ONLY)

- ① SEE SITE UTILITY PLAN ON SHEET C-2 FOR CONTINUATION.
- ② EXACT LOCATION OF FLOOR CLEANOUT SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGH-IN AND INSTALLATION.
- ③ THERE IS AN EXISTING VENT THROUGH THE ROOF OPENING IN THIS APPROXIMATE LOCATION THAT SHALL BE RE-USED IF POSSIBLE. EXACT LOCATION OF THE 4\"/>
- ④ CLEANOUT ACCESS SHALL BE FROM CRAWLSPACE BELOW.
- ⑤ THE APPROXIMATE INVERT OF THE NEW 4\"/>
- ⑥ PROVIDE AN AIR ADMITTANCE VALVE PER IPC CODE REQUIREMENTS.



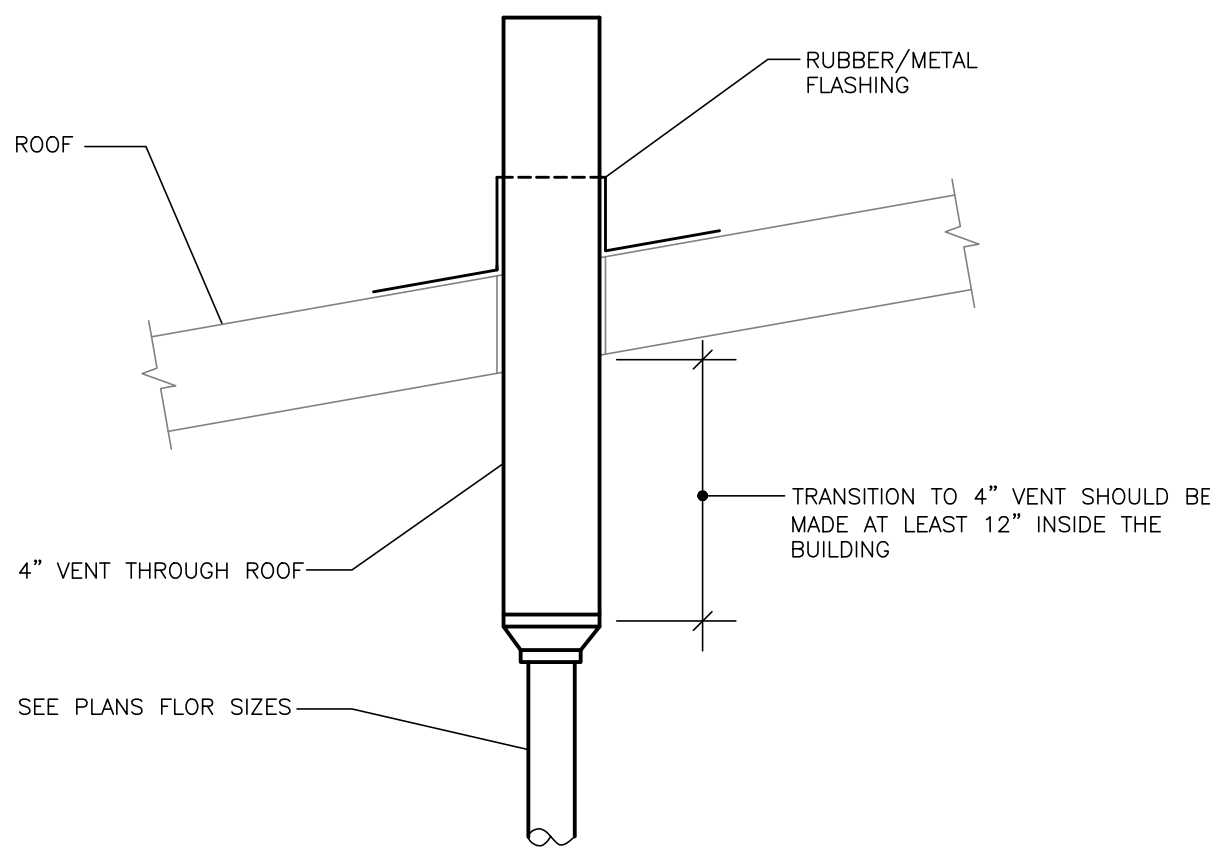
**Engineering Services
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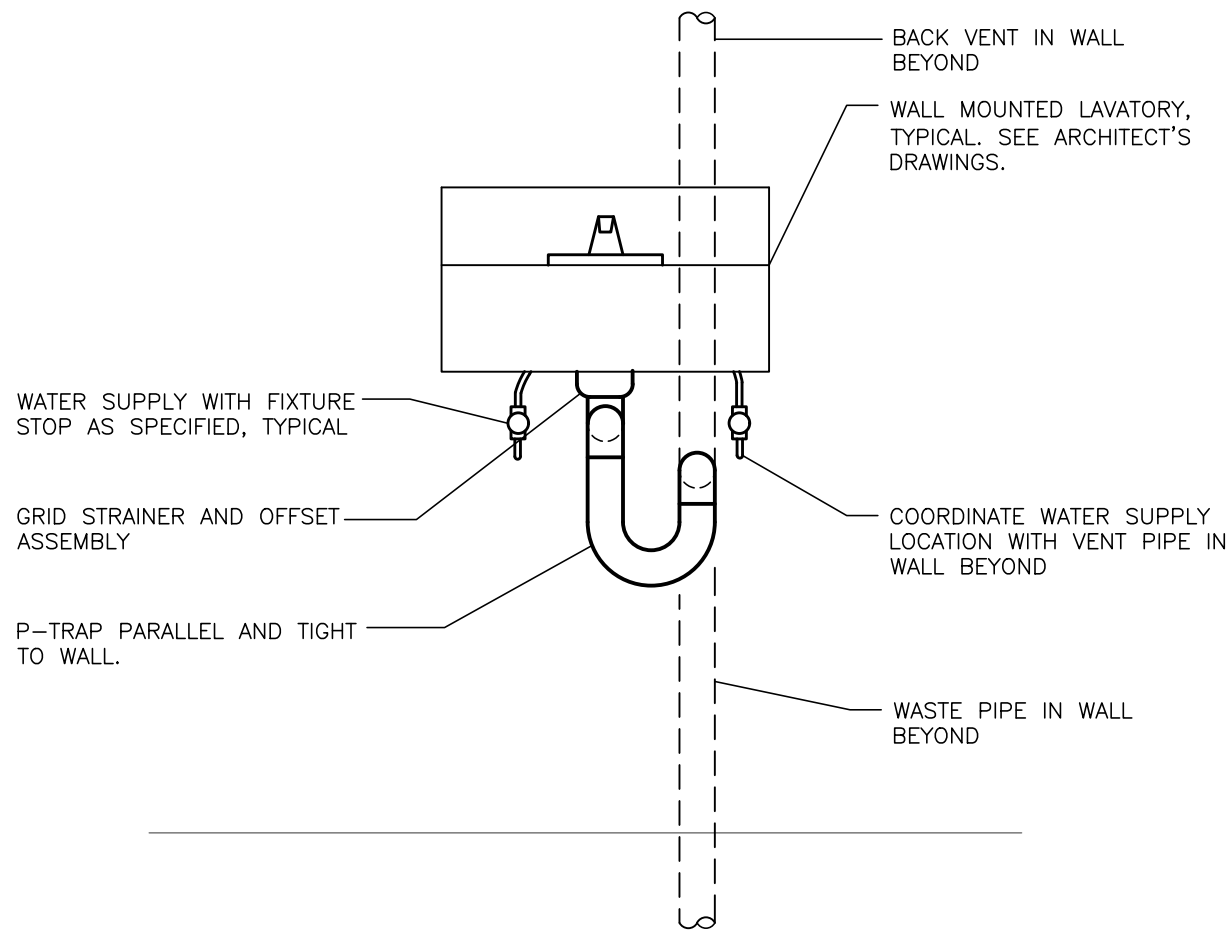
NO.	ISSUED FOR	DATE

**JOHNSON LIBRARY
SCHOOL STREET, JOHNSON, VT**
LIBRARY RENOVATIONS & ADDITIONS
**SANITARY WASTE & VENT PLUMBING
MAIN LEVEL PLAN**

PROJ NO: 25037W
DRAWN: JLM
DATE: 05/19/2025

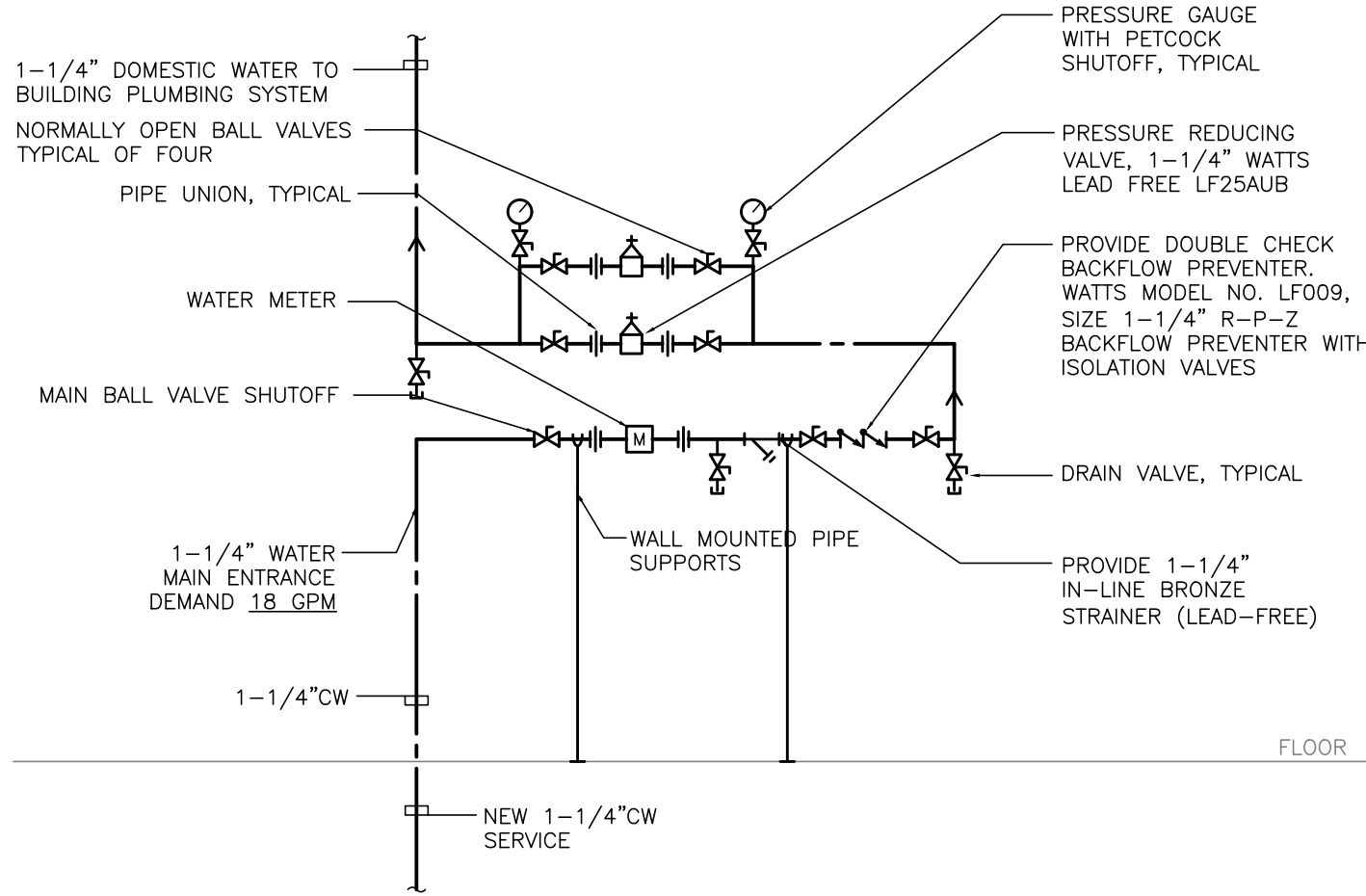


TYPICAL PLUMBING VENT THRU ROOF DETAIL
NOT TO SCALE

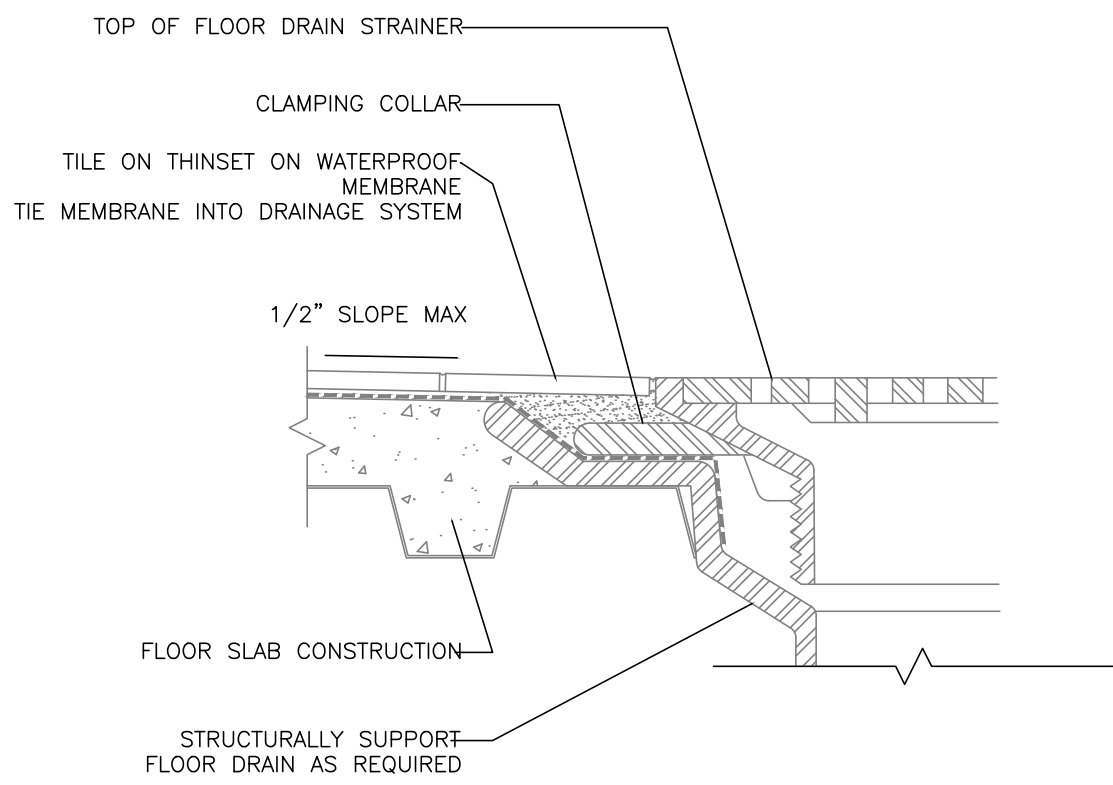


ACCESSIBLE LAVATORY PIPING DETAIL
NOT TO SCALE

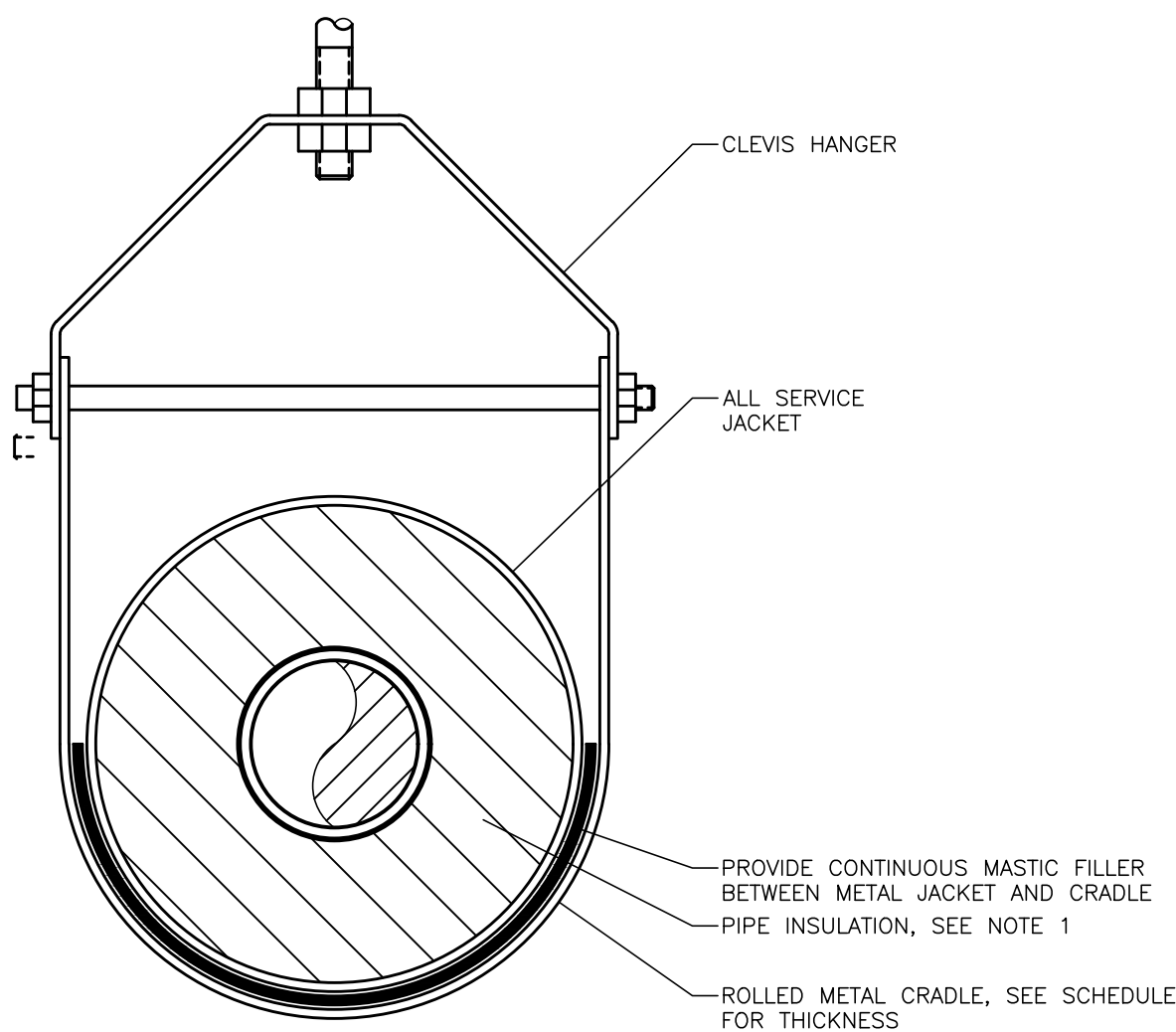
- NOTES:
1. ALL ACCESSIBLE LAVATORIES TO BE PIPED AS DETAILED, SAME FOR DROP IN OR INTEGRAL TO COUNTERTOP LAVATORIES.
 2. PROVIDE VINYL TRAP AND WATER SUPPLY COVERS KIT AS SPECIFIED ON ALL EXPOSED PIPING TO MEET A.D.A. REQUIREMENTS.



DOMESTIC WATER MAIN ENTRANCE DETAIL
NOT TO SCALE



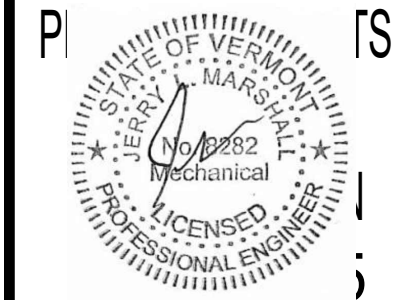
TYPICAL FLOOR DRAIN
NOT TO SCALE



PIPE INSULATION - CLEVIS HANGER DETAIL
NOT TO SCALE

- NOTES:
- 1) INSULATION SHALL BE CONTINUOUS THROUGH THE PIPE CRADLE. DO NOT LOCATE CIRCUMFERENTIAL INSULATION JOINTS AT CRADLE.
 - 2) PROVIDE CONTINUOUS VAPOR BARRIER FOR COLD WATER PIPING AS SPECIFIED.
 - 3) REFER TO SPECIFICATIONS FOR JACKETING REQUIREMENTS AND COATINGS.

INSULATION CRADLE SCHEDULE					
NOMINAL PIPE O.D. (IN)	INSULATION THICKNESS (IN)	CRADLE THICKNESS FOR CLEVIS HANGERS (IN)	CRADLE THICKNESS FOR ROLLERS (IN)	CRADLE LENGTH (IN)	SPAN (FT)
1/2 TO 1	1 1/2 TO 3	14 GA./0.0747	1/4	12	7
1 1/2 TO 2	1 1/2 TO 3	14 GA./0.0747	1/4	12	10
2 1/2 TO 3	1 1/2 TO 4	12 GA./0.1046	1/4	12	12
3 1/2 & 4	1 1/2 TO 4 1/2	12 GA./0.1046	1/4	12	14
5 & 6	1 1/2 TO 4 1/2	10 GA./0.1344	1/4	12	17



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PLUMBING DETAILS

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