STRUCTURAL DESIGN PARAMETERS

CODE:	IBC 2015, AMENDED BY THE VT. 2015 FIRE BUILDING SAFETY CODE
TOWN:	SOUTH HERO, 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	SLAB ON GRADE
ROOF LOAD:	
GROUND SNOW LOAD(Pg):	40 PSF
FLAT ROOF SNOW LOAD(Pf):	40 PSF
SOLAR LOAD ALLOWANCE:	5 PSF
TRUSS DESIGN LOADS	SEE ROOF FRAMING PLAN
EXPOSURE FACTOR(Ce):	1.0
THERMAL FACTOR (Ct):	1.1
ROOF DEFLECTION CRITERIA:	
INDIVIDUAL ROOF MEMBERS-LIVE LOAD	L/360 MAXIMUM
WIND LOAD:	
ULTIMATE DESIGN WIND SPEED (Vult):	115 MPH
NOMINAL DESIGN WIND SPEED (Vasd):	90 MPH
EXPOSURE CATEGORY:	C
SEISMIC LOAD:	
MAPPED SPECTRAL RESPONSE COEFFICIENTS:	Ss = 0.398, S1=0.093
SITE CLASS:	D
DESIGN SPECTRAL RESPONSE ACC PARAMETERS:	Sds = 0.393, Sd1=0.148
SEISMIC DESIGN CATEGORY:	C
SEISMIC FORCE RESISTING SYSTEM:	LT FRAME WOOD WITH STRUCT PANELS
DESIGN BASE SHEAR:	V= CsW
RESPONSE MODIFICATION COEFFICIENT:	R = 6.5
SEISMIC RESPONSE COEFFICIENT(CS):	0.0173
ANALYSIS PROCEDURE:	EQUIVALENT LATERAL FORCE
GEOTECHNICAL:	
DESIGN SOIL BEARING CAPACITY:	1,500 PSF
DESIGN METHODOLOGY:	ALLOWABLE STRESS DESIGN

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
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		✓

STRUCTURAL DRAWING LEGEND

NOT ALL MAY APPLY
DATUM OF 0'-0" MAY ALSO BE USED

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

	STRUCTURAL FILL
	CRUSHED STONE
	GRANULAR BACKFILL
	CAST IN PLACE CONCRETE
	EARTH -GENERAL
	EXISTING SOIL- UNDISTURBED
F-1 [100'-0"]	FOOTING MARK [TOP OF FOOTING ELEVATION]
WF-1 [100'-0"]	WALL FOOTING MARK [TOP OF FOOTING ELEVATION]
SOG-1	SLAB ON GRADE TAG
RT-1	ROOF TRUSS TAG
CW-1	FOUNDATION WALL TAG
BW-1	BEARING WALL TAG
SW-1	SHEAR WALL TAG
H-X	HEADER TAG
	SLAB JOINT
(X)	EXISTING
BOF	BOTTOM OF FOOTING
℄	CENTERLINE
CL	CLEAR
NTS	NOT TO SCALE
OHD	OVERHEAD DOOR
PED	PEDESTRIAN DOOR
RO	ROUGH OPENING
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
FOF	FACE OF FOUNDATION
TOS	TOP OF STEEL
TOW	TOP OF WALL
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
WJ	FOUNDATION WALL CRACK CONTROL JOINT
FFE	FINISH FLOOR ELEVATION
WS	WALL STEP
WD	WOOD
T&B	TOP & BOTTOM
OC	ON CENTER
EW	EACH WAY
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
RS	ROUGH SAWN

STRUCTURAL SHEET LIST

NORTHEAST STRUCTURAL ENGINEERING
N E S
4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

STATE OF VERMONT
BRIAN DONAHUE
NO. 7473
STRUCTURAL
LICENSED PROFESSIONAL ENGINEER

Town of South Hero

South Hero Municipal Salt Shed

286 US Route 2
South Hero, VT

Rev. No.	Date	Description

Title:

General Notes

NES PROJECT NO: 23074
DATE: AUGUST 8, 2023
DESIGNED BY: AD/BD

S 0.1

PROJECT NOTES

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

THIS PLAN SET IS FOR PRIMARY STRUCTURAL COMPONENETS ONLY. MECHANICAL, FINISHES, ROOFING, ETC. TO BE SPECIFIED BY OTHERS.

NES HAS NOT PERFORMED A LIFE SAFETY REVIEW OF THIS STRUCTURE.

THIS SALT SHED, INCLUDING THE GARAGE, IS UNHEATED. THEREFORE NO INSULATION IS INCLUDED

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.

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

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.

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

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

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- ROOF
- SUBMIT TRUSS DESIGN DRAWINGS PREPARED BY THE TRUSS MANUFACTURER INDICATING:
  1. TRUSS FABRICATION COMPANY AND NAME OF PROJECT
  2. TRUSS PLACEMENT DIAGRAMS
  3. ALL DIMENSIONS SHOWING SHAPE, SLOPE, SPANS, MEMBER SIZES, & CHORD CONFIGURATION
  4. INDIVIDUAL TRUSS MEMBER MATERIAL SPECIFICATIONS
  5. DESIGN LOADS
  6. MEMBER FORCES
  7. HANGAR SCHEDULE/SPECIFICATION
  8. MINIMUM BEARING REQUIRED
  9. FABRICATOR CERTIFICATION FOR IBC CHAPTER 17 SPECIAL INSPECTIONS.
  10. 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.
  11. OTHER INFORMATION REQUIRED BY IBC CODE AND SPECIAL INSPECTIONS

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

- *GRANULAR BACKFILL:* WELL GRADED GRANULAR MATERIAL

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

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.

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

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

WALL SEALER:
ON STORAGE SIDE OF SALT/SAND STORAGE, APPLY TWO COATS OF PENETRATING SEALER PER MANUFACTURER RECOMMENDATIONS.
PRODUCT: KLERESEAL 940-S BY PECORA CORPORATION, HARLESVILLE, PA OR APPROVED EQUAL

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.
- 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:
  1. 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 SPECCHEM.
- 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

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 ASTMC172

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

ROUGH CARPENTRY

MATERIALS

DIMENSIONAL LUMBER
- SPF (SPRUCE-PINE-FIR) #2 OR BETTER
- PRESSURE TREATED LUMBER: SOUTHERN YELLOW PINE #2 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
  1. LSL BEAMS: 1.55E, MINIMUM
  2. LSL COLUMNS: 1.3E, MINIMUM

WOOD SHEATHING: SEE ALSO PROJECT SPECIFIC DIAPHRAGM/SHEARWALL REQUIREMENTS ON PLANS
- 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
- 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 UNLESS NOTED OTHERWISE

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.
- 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
  1. ROOF: L/360 MAXIMUM WITH 3/4" MAX.
- PRESS PLATE STEEL CONNECTORS- TYPICAL: ASTM A446 GRADE B HOT DIPPED GALVANIZED (G60), SIZE BY THE MANUFACTURER.
- PRESS PLATE STEEL CONNECTORS- STORAGE: ASTM A446 GRADE B HOT DIPPED GALVANIZED (G185), SIZE BY THE MANUFACTURER AND RECEIVE EPOXY COATING APPLIED IN THE FIELD
- 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
- ALL FASTENERS MUST BE COMPATIBLE WITH PRESERVATIVE TREATED WOOD CHEMICALS.
- MINIMUM FRAMING FASTENERS: SEE IBC 2015 CHAPTER 2304.10.1 FASTENER REQUIREMENTS
- STORE ENGINEERED LUMBER IN A MANNER PROTECTED FROM THE WEATHER
- USE AND INSTALL ONLY INTACT, UNDAMAGED WOOD PRODUCTS

NORTHEAST STRUCTURAL ENGINEERING
NES
4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

STATE OF VERMONT
BRIAN DOUGLAS
NO. 7533
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

Town of South Hero

South Hero Municipal Salt Shed

286 US Route 2
South Hero, VT

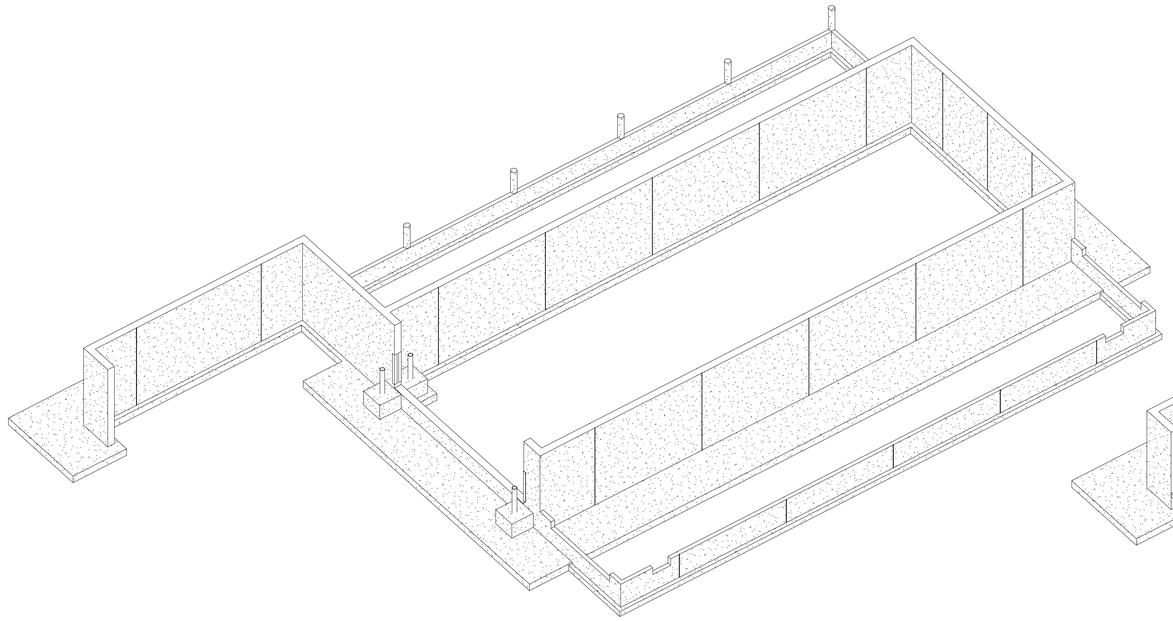
Rev. No.	Date	Description

Title:

General Notes

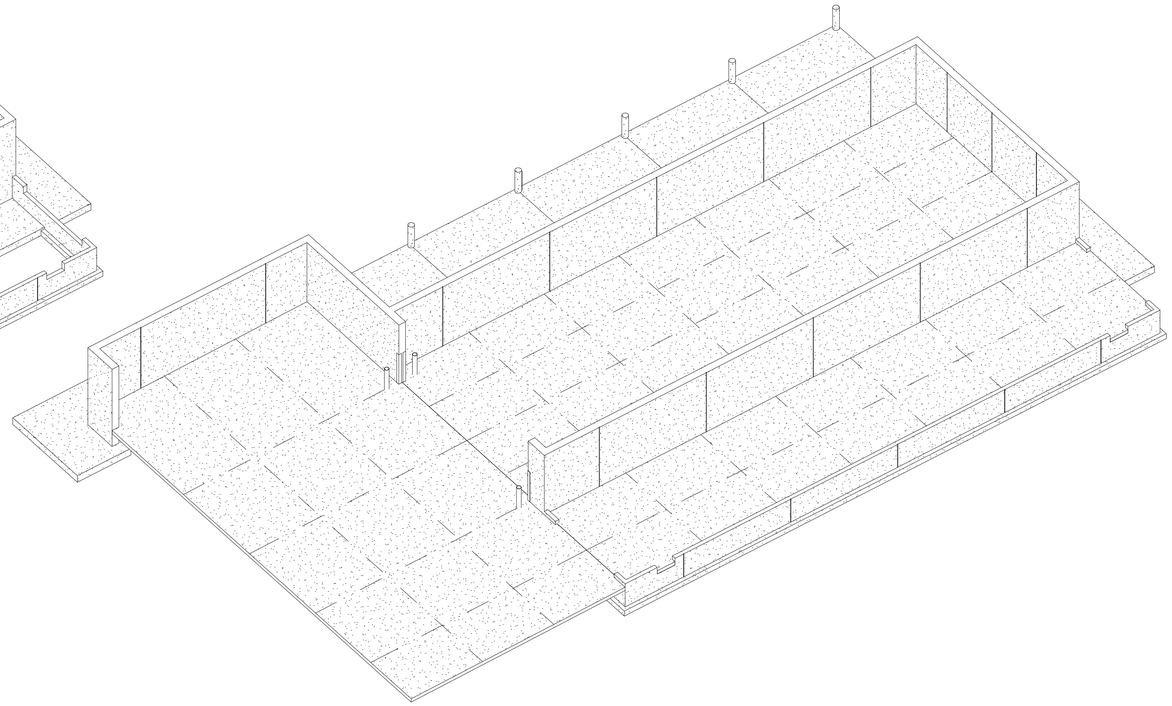
NES PROJECT NO: 23074
DATE: AUGUST 8, 2023
DESIGNED BY: AD/BD

S 0.2



Foundation Isometric

Not To Scale



Concrete Isometric

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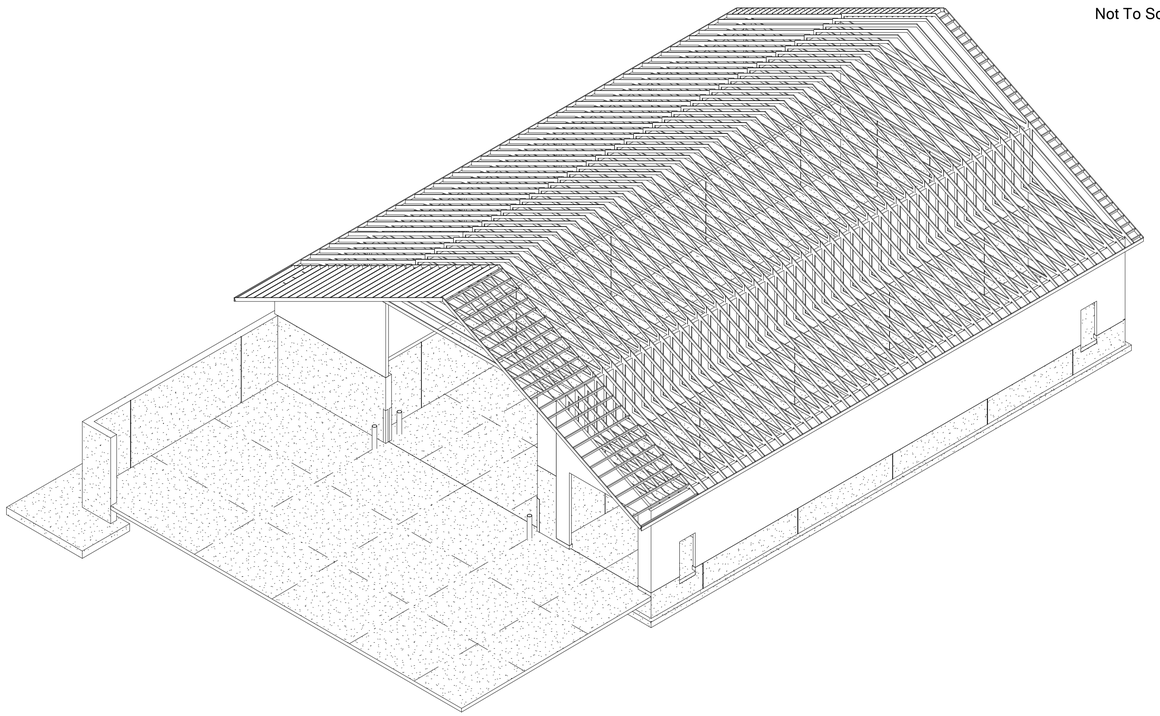

Full Structure Isometric

Not To Scale

NORTHEAST STRUCTURAL ENGINEERING

4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

STATE OF VERMONT
BRIAN DONALDSON
NO. 7473
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

Town of South Hero

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Title:

Isometrics

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S 0.3

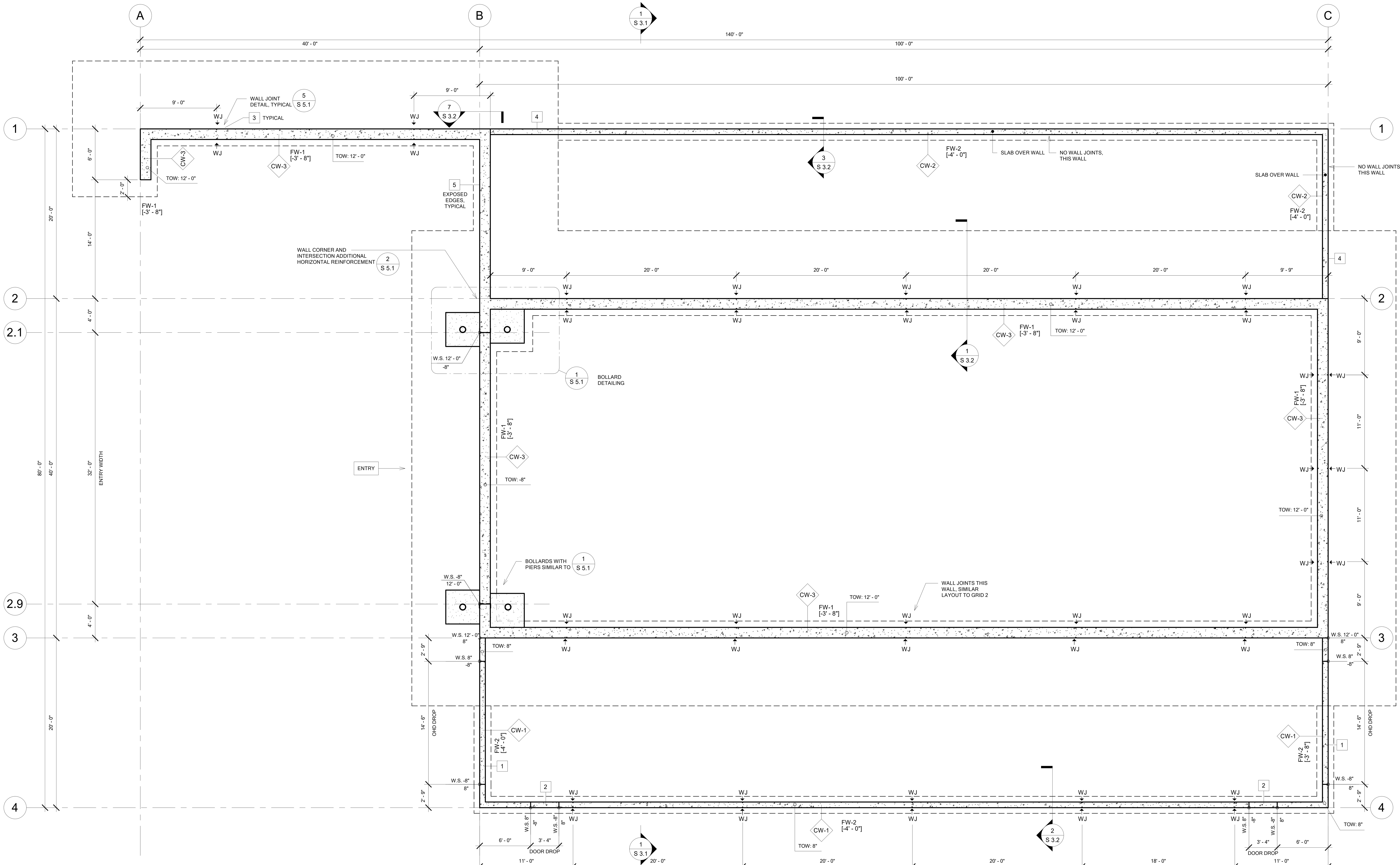
KEYNOTE LEGEND-FOUNDATION PLAN	
KEYNOTE NO.	KEYNOTE
1	DOOR DROP FOR OVERHEAD DOOR: WIDTH IS SET TO BE DOOR NOMINAL WIDTH +3" ON EACH SIDE, ALLOWING TWO STUDS TO GO TO SLAB LEVEL. CONTRACTOR TO VERIFY DOOR DROP WIDTH WITH OVERHEAD DOOR AND JAMB REQUIREMENTS PRIOR TO CONCRETE POUR
2	DOOR DROP FOR PED DOOR: CONTRACTOR TO VERIFY DOOR DROP WIDTH WITH DOOR AND JAMB REQUIREMENTS PRIOR TO CONCRETE PLACEMENT
3	CONCRETE WALL CRACK CONTROL JOINTS OR CONSTRUCTION JOINTS' HORIZONTAL LOCATION CAN VARY SLIGHTLY AT CONTRACTOR'S OPTION TO FACILITATE INSTALLATION AWAY FROM FORM JOINTS OR OTHER CONSIDERATIONS
4	DRILL AND GROUT VERTICAL REBAR 6" EMBED TO FOOTING BELOW RATHER THAN CAST IN PLACE VERTICAL WALL DOWELS
5	1" CHAMFER ON ALL EXPOSED VERTICAL AND HORIZONTAL CONCRETE WALL EDGES (NOT ILLUSTRATED IN PLAN SHEET VIEWS)

FOUNDATION WALL SCHEDULE				
TAG	CONC. SPEC.	WIDTH	REINFORCEMENT	COMMENTS
CW-1	3,000 PSI, AIR ENTRAINED	8"	HORIZ: #5 REBAR @ 16" O.C., VERT: #4 REBAR @ 24" O.C.	GARAGE FROST WALL
CW-2	3,000 PSI	8"	#4 REBAR @ 24" O.C., E.W.	LEAN TO FROST WALL
CW-3	4,000 PSI, AIR ENTRAINED	1' - 3"	HORIZONTAL: #5 REBAR @ 16", EACH FACE, STORAGE SIDE VERT: #8 @9"(DOWELS), THEN #7 @ 18", OUTSIDE VERT: #5 @ 18"	STORAGE WALL: APPLY TWO COATS OF SEALER TO STORAGE SIDE OF WALL ABOVE GRADE

WALL FOOTING SCHEDULE					
TAG	CONC. SPEC.	THICKNESS	WIDTH	REINFORCEMENT	COMMENTS
FW-1	3,000 PSI	1' - 4"	10' - 0"	LONG: (5) #5 REBAR, CON'T, T&B SHORT: #8 REBAR @12" BOTTOM, #6 @ 24" TOP	N/A
FW-2	3,000 PSI	1' - 0"	2' - 0"	(2) #4 REBAR, CONT.	N/A

FOUNDATION NOTES:
1.) EXTERIOR GRADE: THIS DESIGN REQUIRES GRADE TO BE AT OR ABOVE THE INTERIOR SLAB ELEVATION AT ALL WALLS TO MAINTAIN 5'-0" BOTTOM OF FOOTING DEPTH

WALL CONSTRUCTION JOINTS 4 / S 5.1
WALL CONTROL JOINTS 5 / S 5.1
CONCRETE WALL FINISH 7 / S 5.1



1 / S 1.1 **Foundation Plan**
Scale: 3/16" = 1'-0"

4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

Town of South Hero

South Hero Municipal Salt Shed

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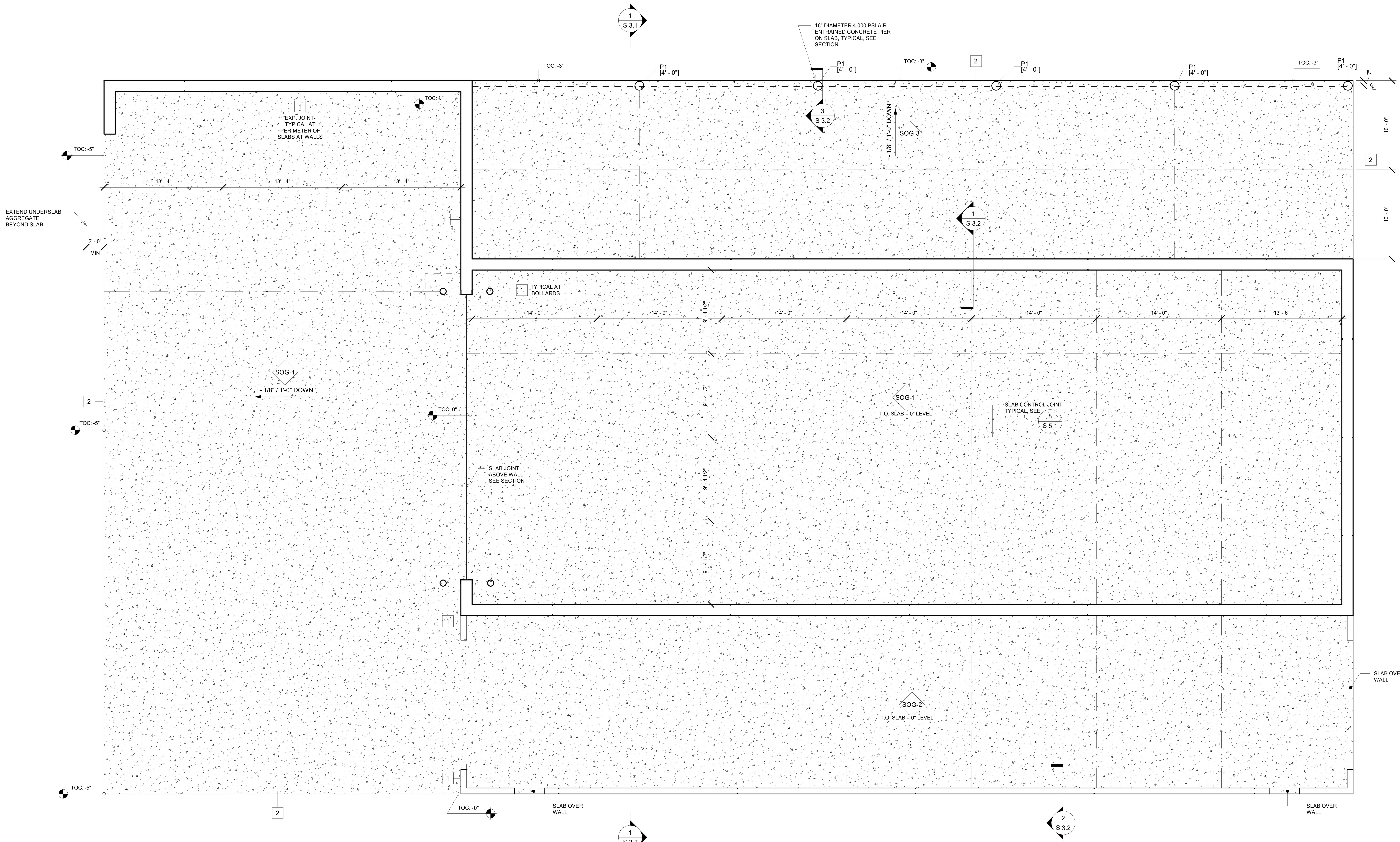
SLAB ON GRADE SCHEDULE								
TAG	SLAB THICKNESS	CONC. SPEC.	FINISH	CONSTRUCTION DETAILS	SAWCUT DEPTH	FLOOR SEALER	JOINT FILLER	COMMENTS
SOG-1	8"	3,000 PSI	MACHINE TROWEL	#6 REBAR @ 16" O.C.E.W., CENTERED, 12" MINIMUM THICKNESS STRUCTURAL FILL	2"	YES	NO	STORAGE SLAB, INTERIOR & EXTERIOR
SOG-2	8"	3,000 PSI	STEEL TROWEL	#6 REBAR @ 16" O.C.E.W., CENTERED, VAPOR BARRIER, 12" MINIMUM THICKNESS STRUCTURAL FILL	2"	YES	NO	GARAGE SLAB
SOG-3	6"	3,000 PSI	MACHINE TROWEL	#5 REBAR # 18" O.C.E.W., CENTERED, 12" MINIMUM THICKNESS STRUCTURAL FILL	1 1/2"	YES	NO	LEAN TO SLAB



1 S 1.2
Slab Plan
Scale: 3/16" = 1'-0"

4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

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Slab Plan

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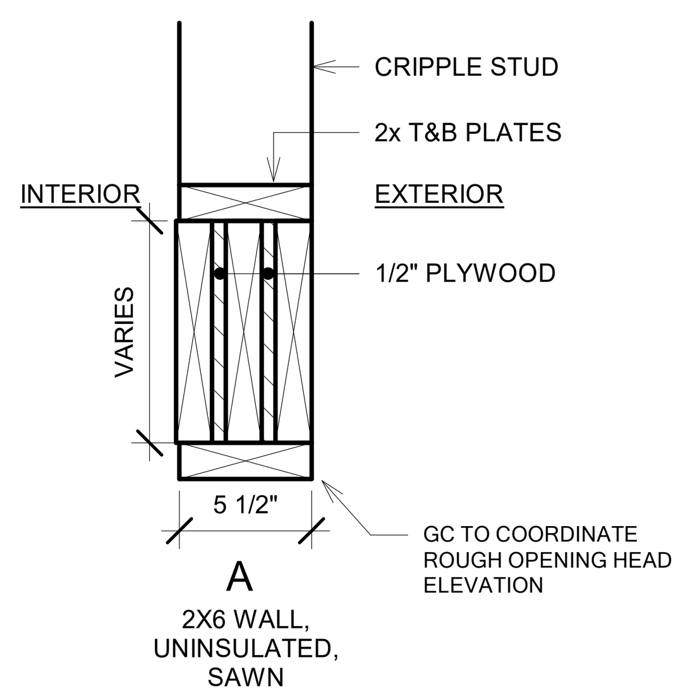
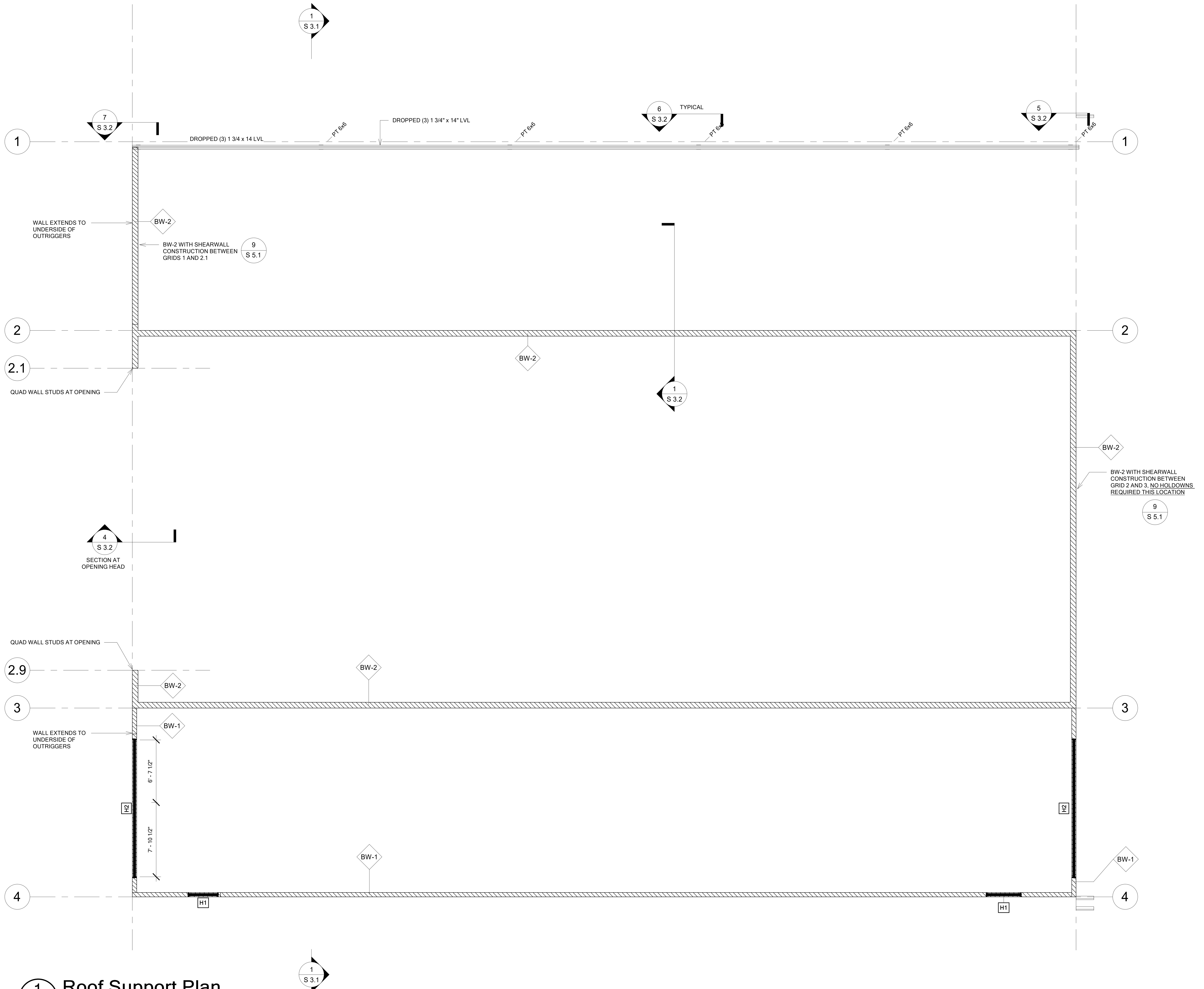
BEARING WALL SCHEDULE				
TAG	CONSTRUCTION	TOP PLATE	BOTTOM PLATE	USE
BW-1	2x6 @ 24" o.c., STUDS ALIGNED WITH TRUSSES, 1/2" NOMINAL SHEATHING ON EXTERIOR	(2) 2x6	PT (1) 2x6	BEARING WALL
BW-2	2x8 @ 24" o.c., STUDS ALIGNED WITH TRUSSES,1/2" NOMINAL SHEATHING EXTERIOR, 3/4" SHEATHING INTERIOR	(2) 2x8	PT (1) 2x8	BEARING WALL

HEADER SCHEDULE				
TAG	HEADER SIZE	JACK STUD(s) EACH END	KING STUDS(s)	HEADER TYPE
H1	(3) 2x8 VERTICAL	SINGLE 2x	SINGLE 2x	A
H2	(3) 2x12 VERTICAL	DOUBLE 2x	TRIPLE 2x	A



2 S 1.3 Wood Header Details
Scale: 1 1/2" = 1'-0"



1 S 1.3 Roof Support Plan
Scale: 3/16" = 1'-0"

4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

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Roof Support Plan

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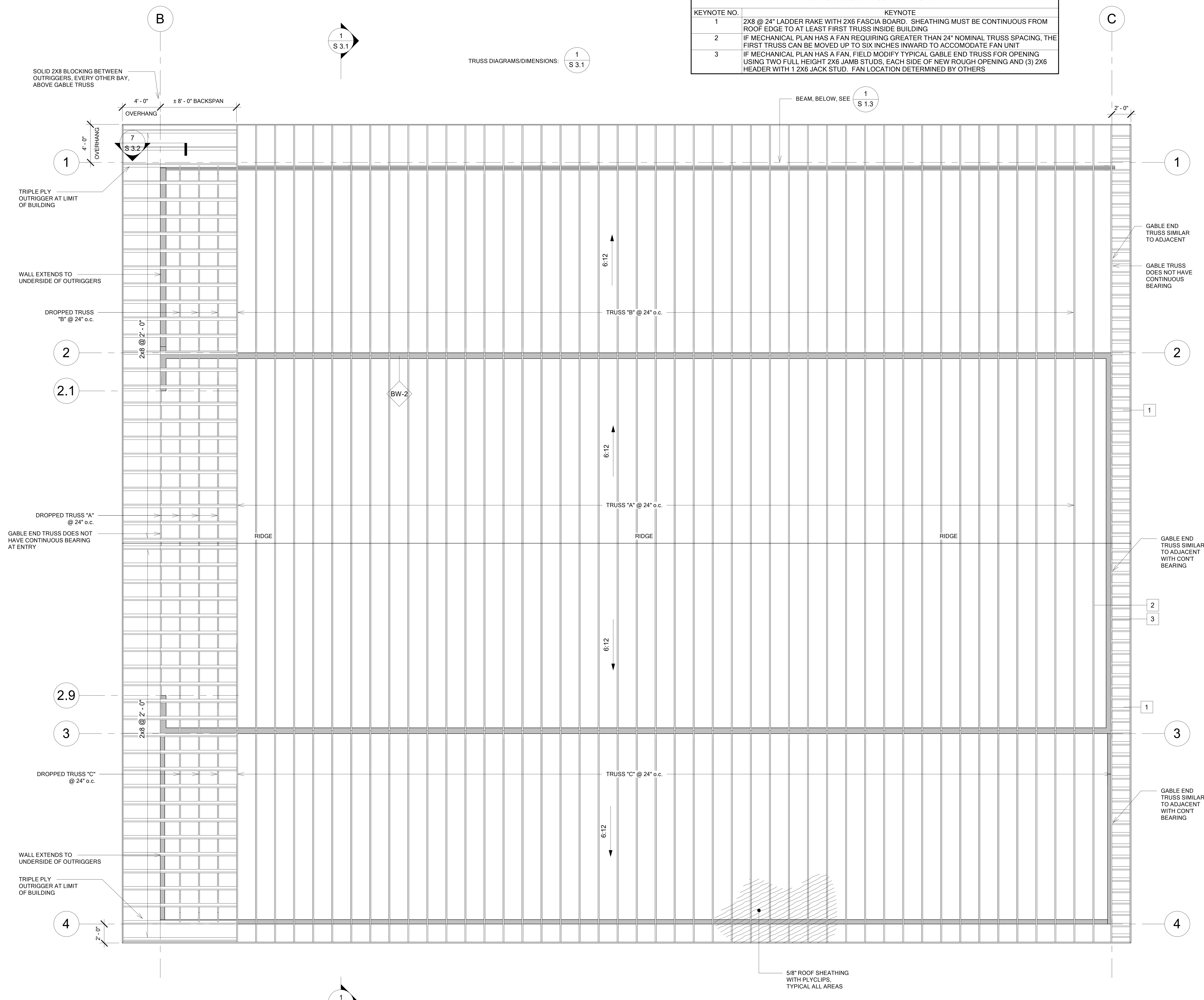
S 1.3

KEYNOTE LEGEND- ROOF FRAMING PLAN	
KEYNOTE NO.	KEYNOTE
1	2X8 @ 24" LADDER RAKE WITH 2X6 FASCIA BOARD. SHEATHING MUST BE CONTINUOUS FROM ROOF EDGE TO AT LEAST FIRST TRUSS INSIDE BUILDING
2	IF MECHANICAL PLAN HAS A FAN REQUIRING GREATER THAN 24" NOMINAL TRUSS SPACING, THE FIRST TRUSS CAN BE MOVED UP TO SIX INCHES INWARD TO ACCOMODATE FAN UNIT
3	IF MECHANICAL PLAN HAS A FAN, FIELD MODIFY TYPICAL GABLE END TRUSS FOR OPENING USING TWO FULL HEIGHT 2X6 JAMB STUDS, EACH SIDE OF NEW ROUGH OPENING AND (3) 2X6 HEADER WITH 1 2X6 JACK STUD. FAN LOCATION DETERMINED BY OTHERS



1
S 1.4

Roof Framing Plan

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

NES
4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

STATE OF VERMONT
BRIAN DOUGLAS
NO. 7633
STRUCTURAL
LICENSED
PROFESSIONAL ENGINEER

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Roof Framing Plan

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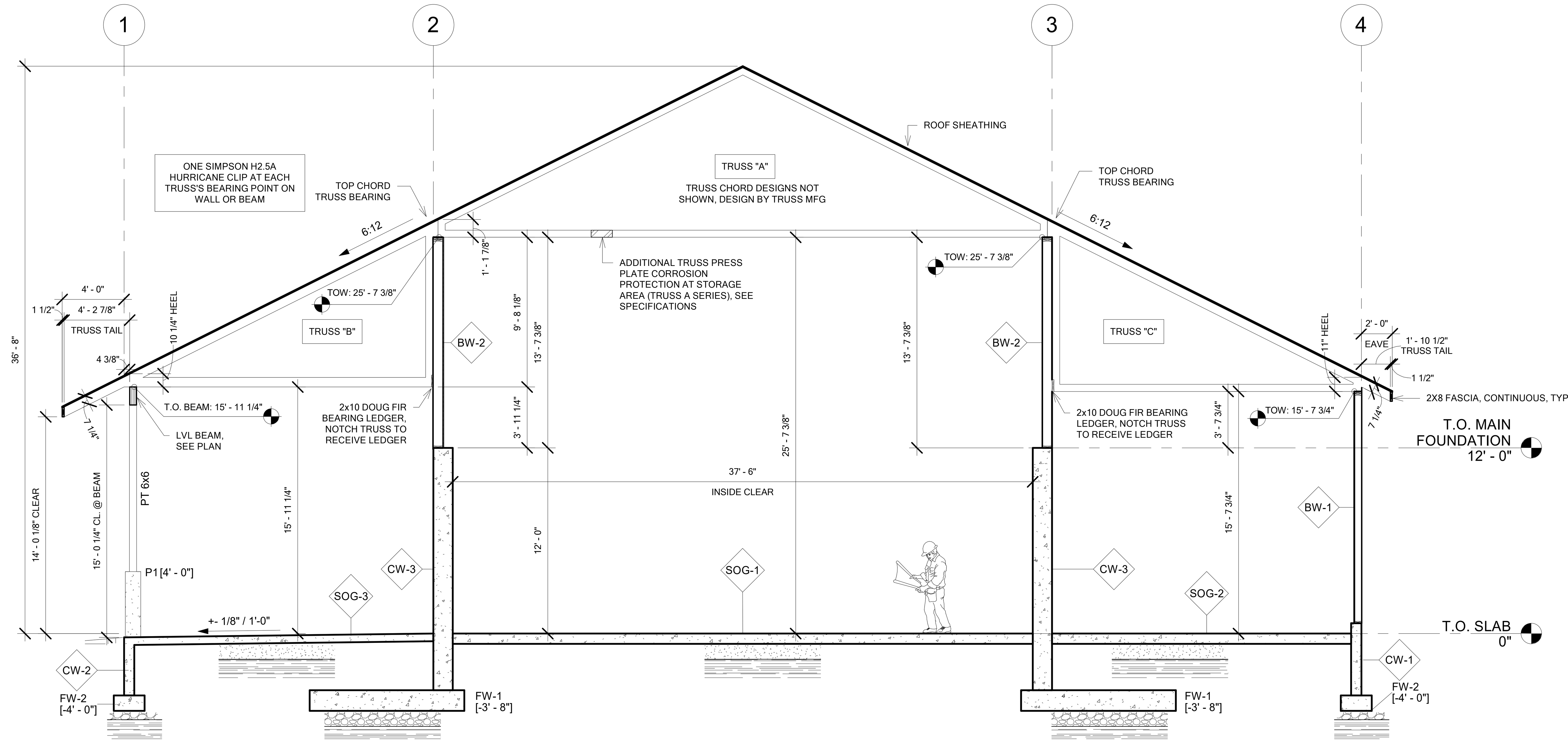
S 1.4



1 S 3.1 **Longitudinal Section**
Scale: 3/16" = 1'-0"

4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

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Sections

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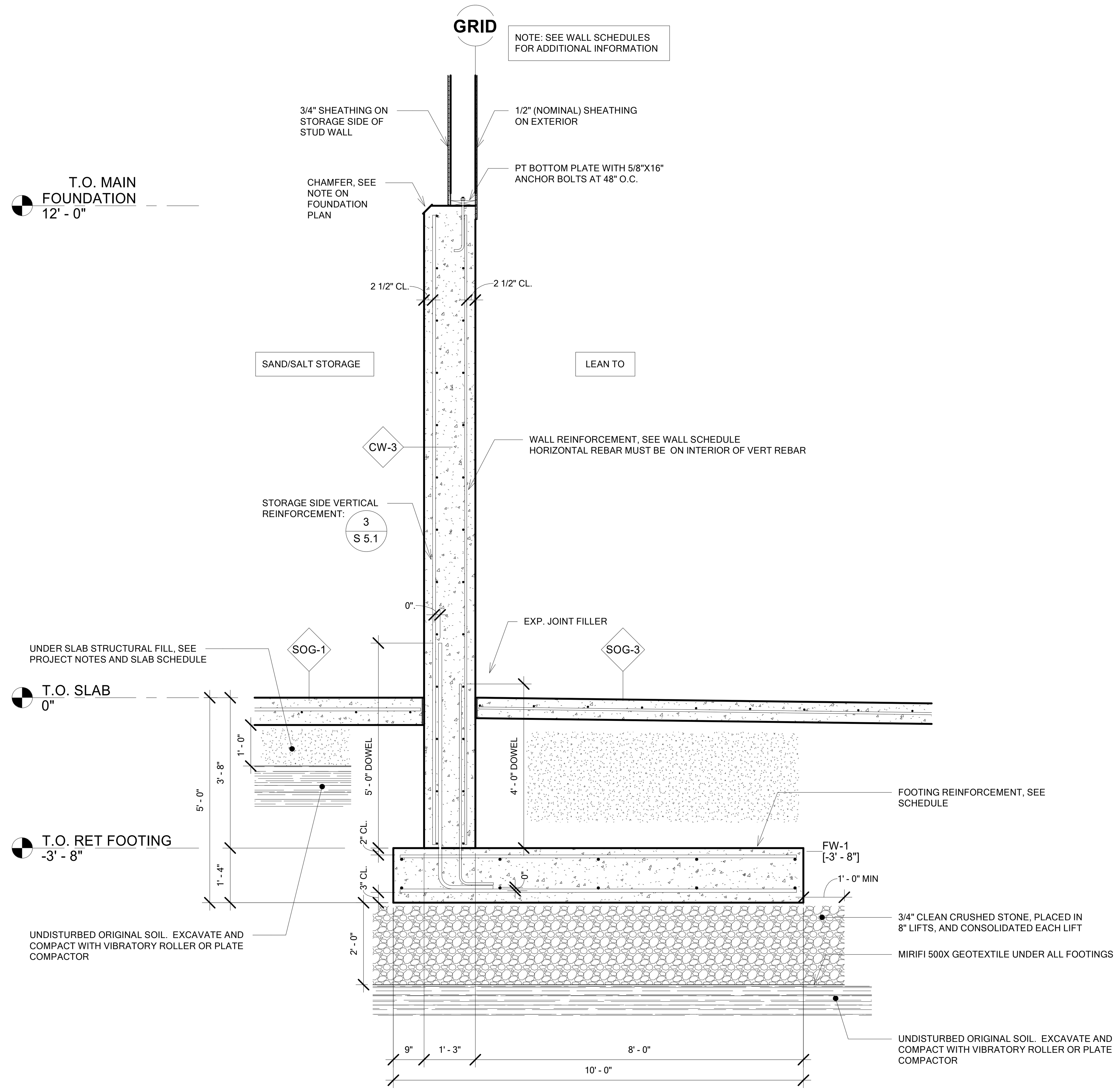
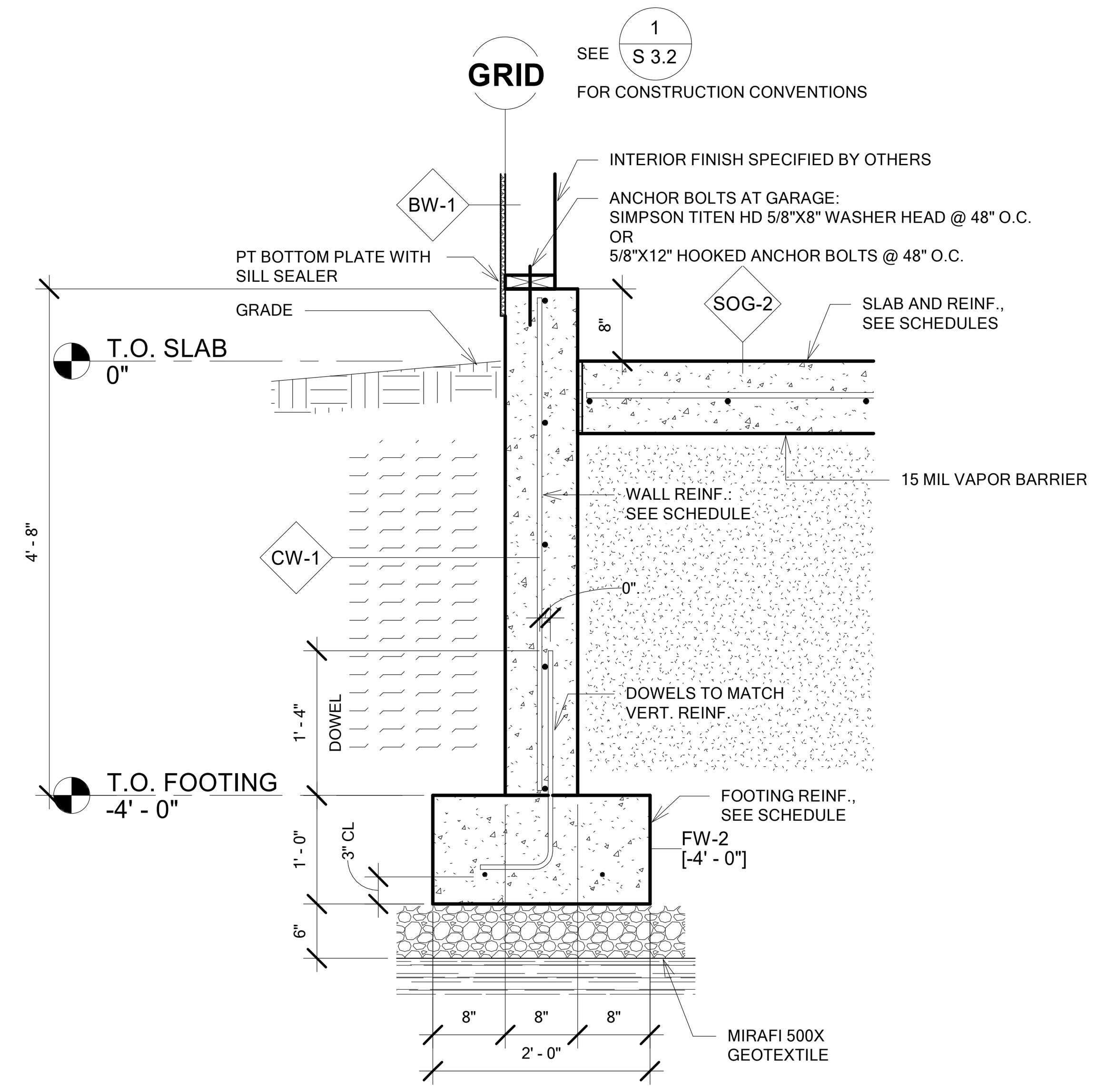
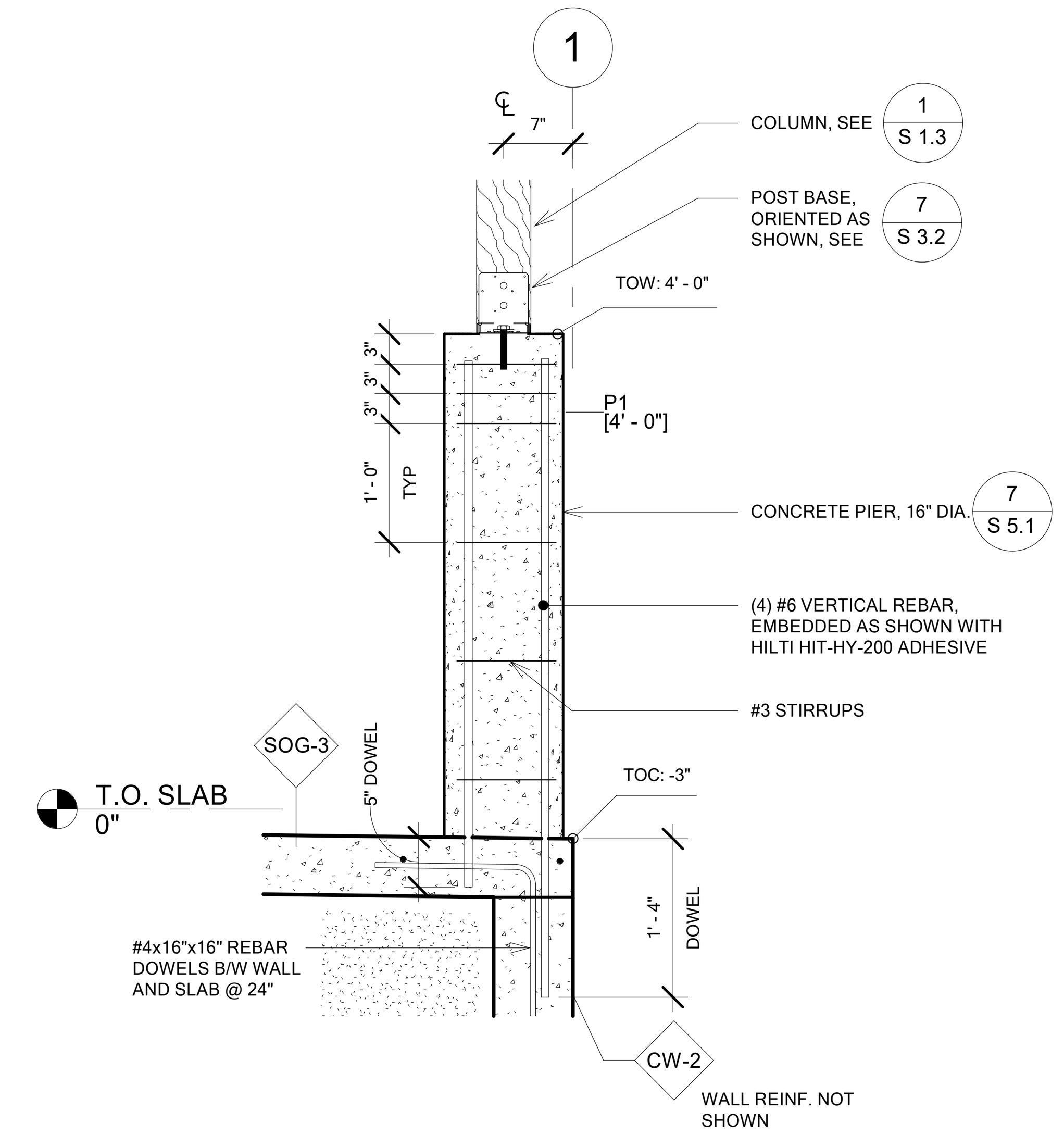


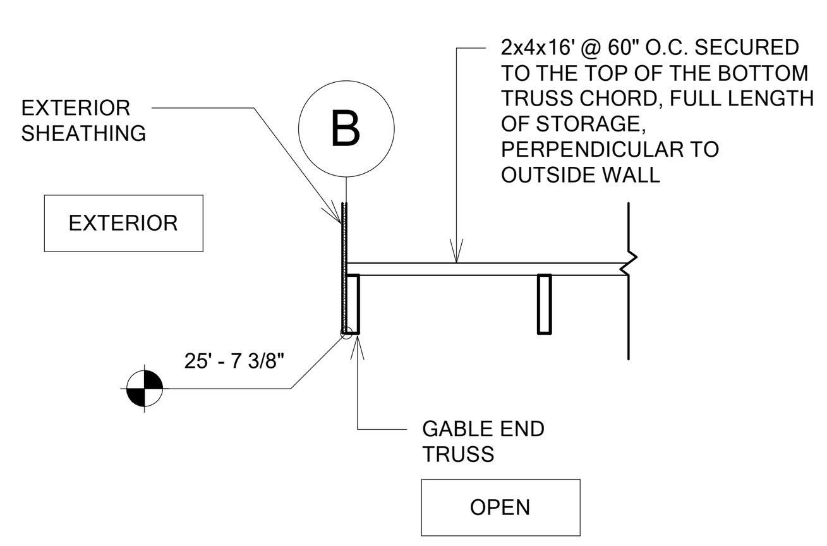
1 S 3.2 **Storage Foundation Wall, Typical**
Scale: 1/2" = 1'-0"



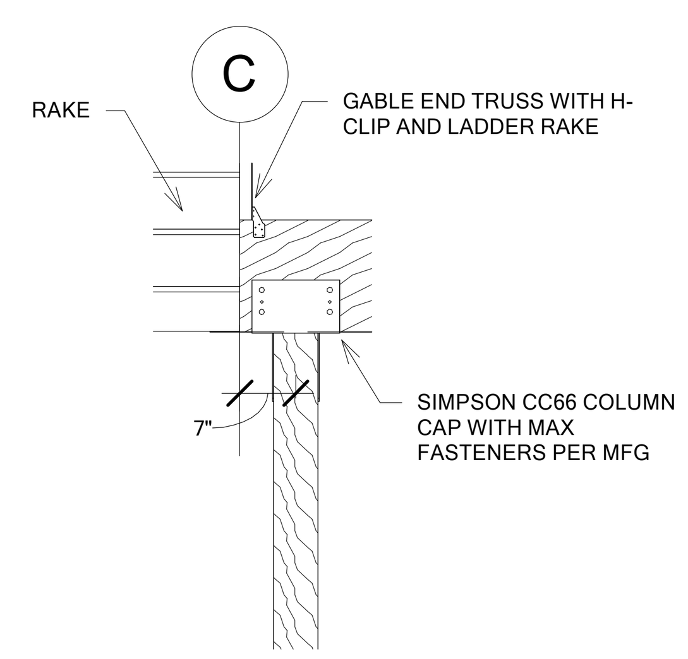
2 S 3.2 **Garage Foundation Wall, Typical**
Scale: 3/4" = 1'-0"



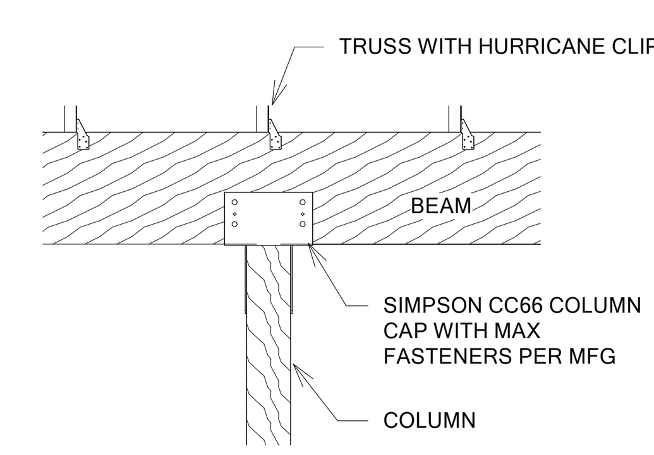
3 S 3.2 **Lean To Pier Section**
Scale: 3/4" = 1'-0"



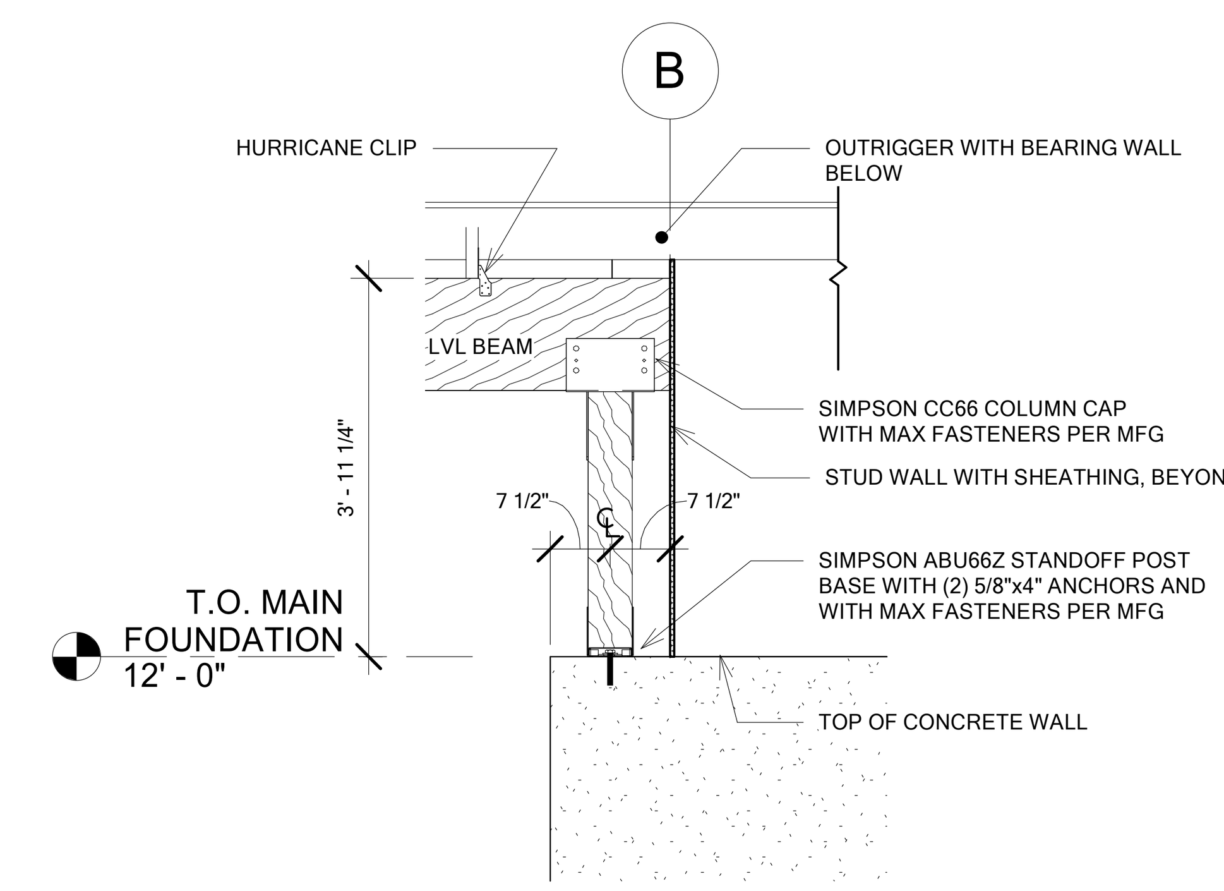
4 S 3.2 **Entry Head Section**
Scale: 1/2" = 1'-0"



5 S 3.2 **Lean-To End Post Section**
Scale: 1/2" = 1'-0"



6 S 3.2 **Lean-To- Mid-Post Section**
Scale: 1/2" = 1'-0"



7 S 3.2 **Beam End at Grid B Section**
Scale: 1/2" = 1'-0"

NORTHEAST STRUCTURAL ENGINEERING
4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

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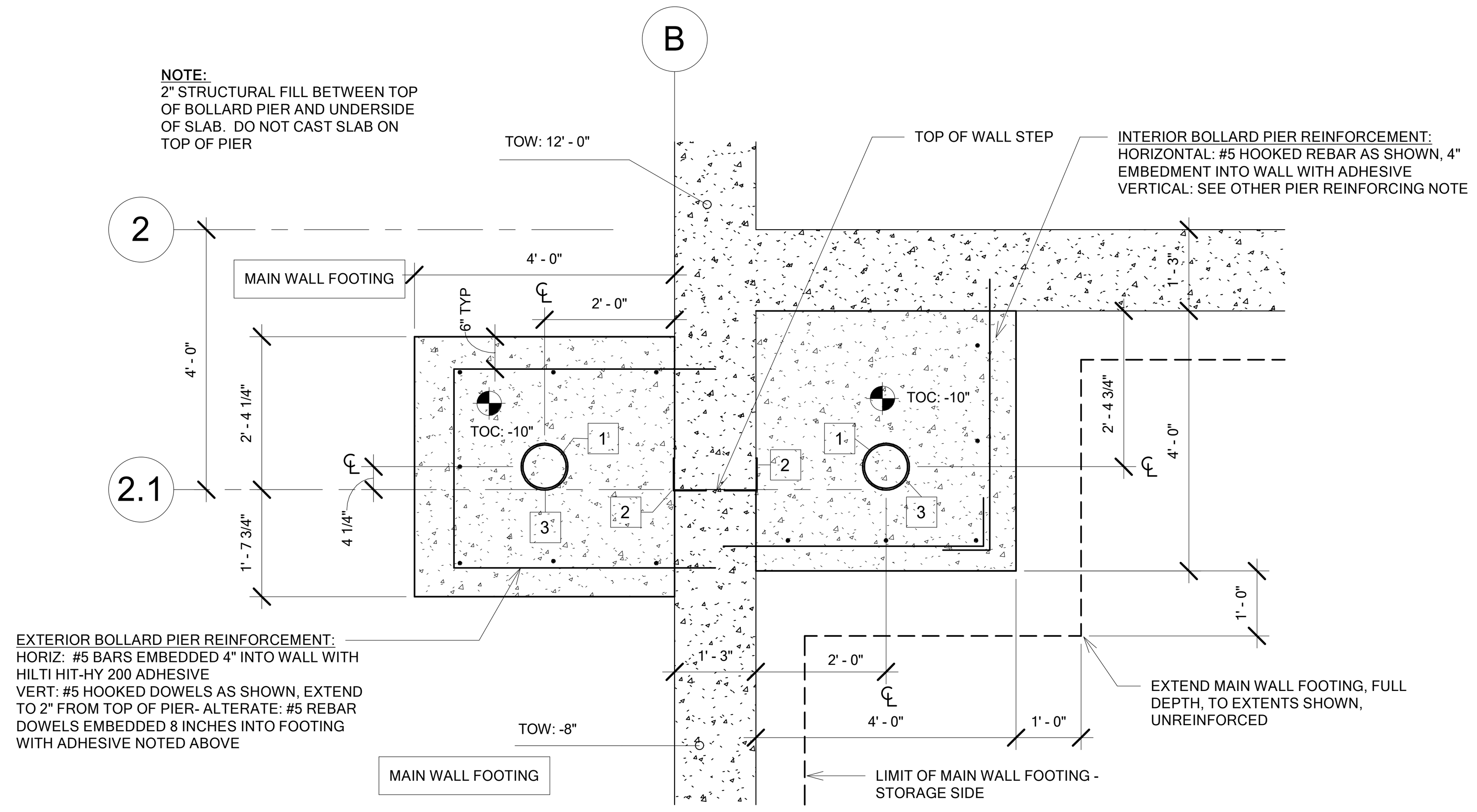
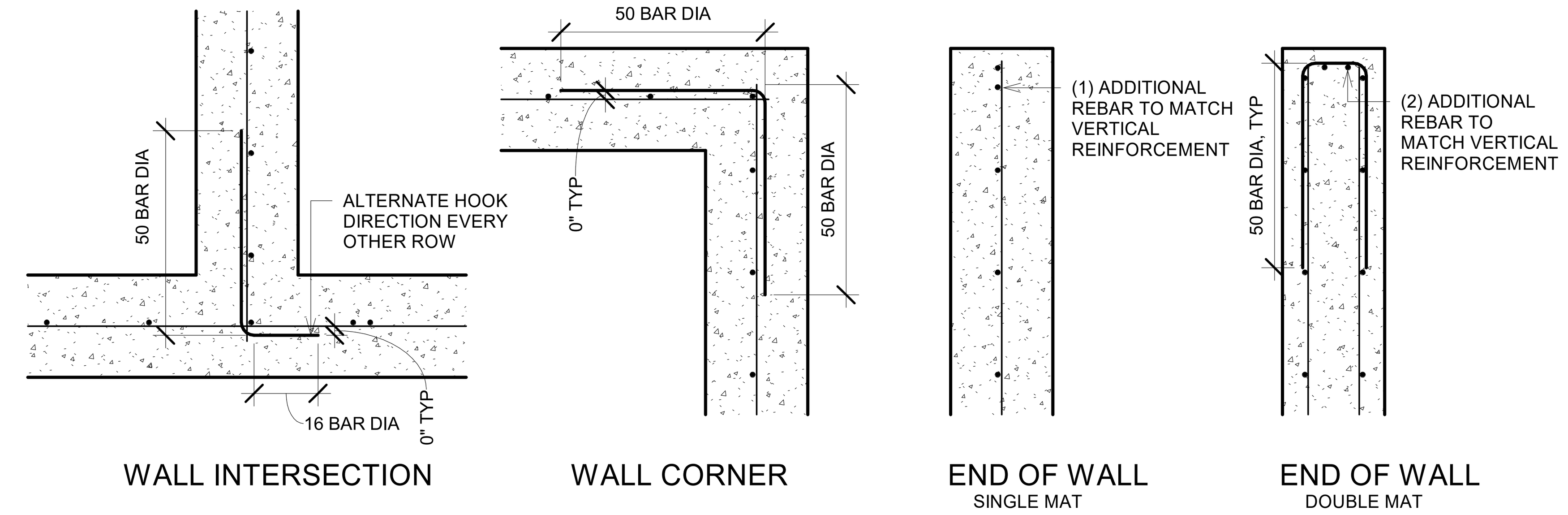
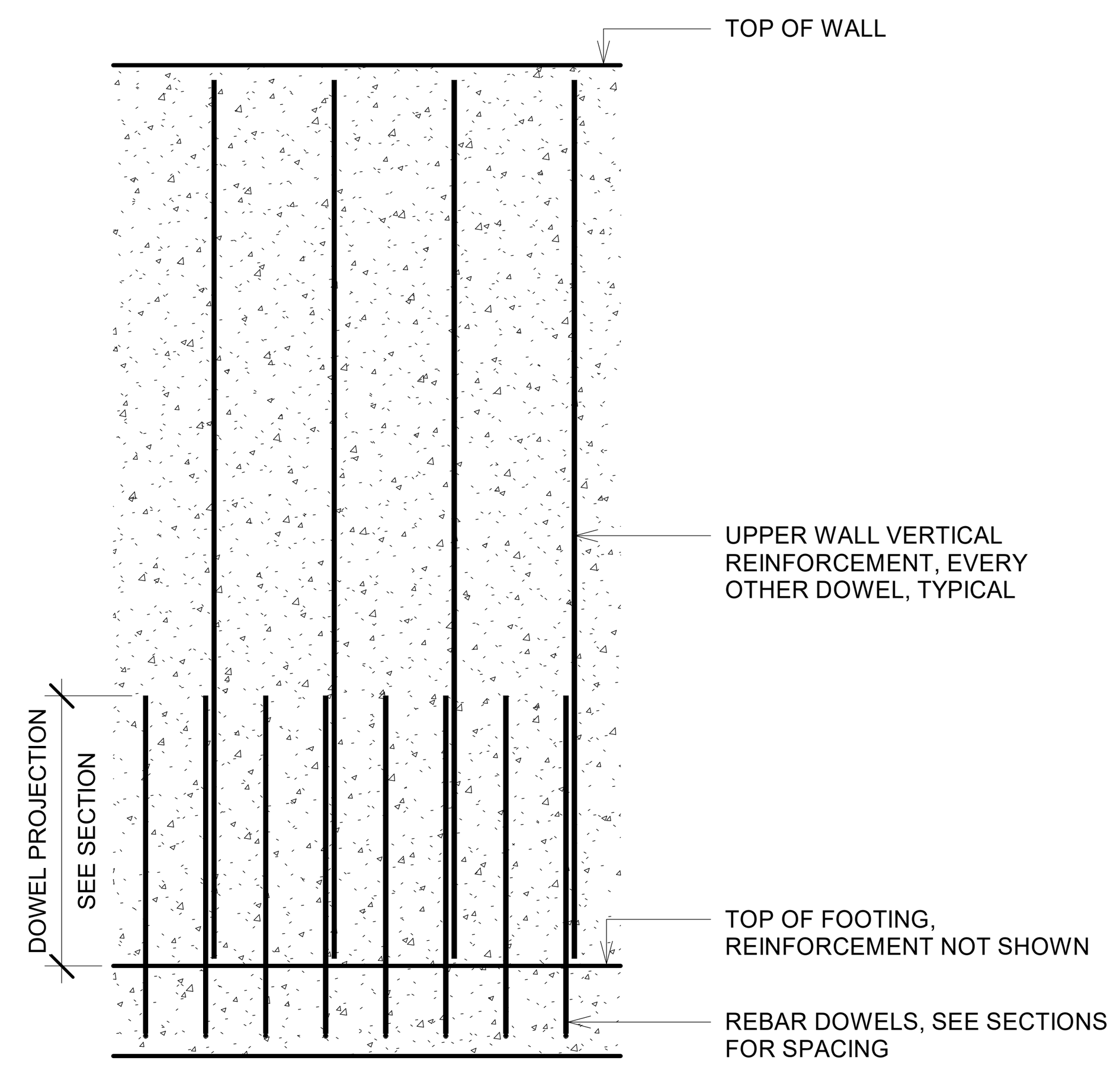
KEYNOTE LEGEND-FOUNDATION DETAILS	
KEYNOTE NO.	KEYNOTE
1	8" DIAMETER EXTRA STRONG STEEL PIPE BOLLARD, SHOP PRIME PAINTED AT OWNER'S OPTION. EXTEND FROM TOP OF FOOTING TO 48" ABOVE SLAB. SET PLUMB, FILL WITH CONCRETE, STRIKE CONCRETE SMOOTH ON TOP. DESIGN LOCATION INTENT: ALIGN FACE OF BOLLARD WITH WALL OPENING
2	L6x6x7/16" X 6'-0" LONG CORNER PROTECTION EMBEDDED IN CONCRETE WALL. OUTSIDE FACE OF COLUMN FLUSH WITH FACES OF CONCRETE. 1/2"x4" SHEAR STUDS AT 12" O.C. AND 6" FROM ENDS, WELDED TO INSIDE OF ANGLE AT 45 DEGREES. GALVANIZED FINISH. BOTTOM OF ANGLE = SLAB ELEVATION
3	1/2" EXPANSION JOINT FILLER



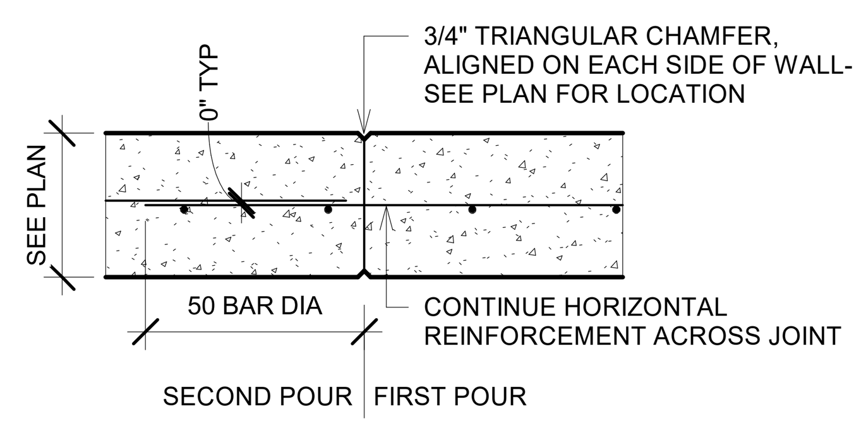
1 S 5.1 **Bollard Detail Plan**
Scale: 1/2" = 1'-0"



2 S 5.1 **Additional Concrete Wall Horizontal Reinforcing**
Not To Scale

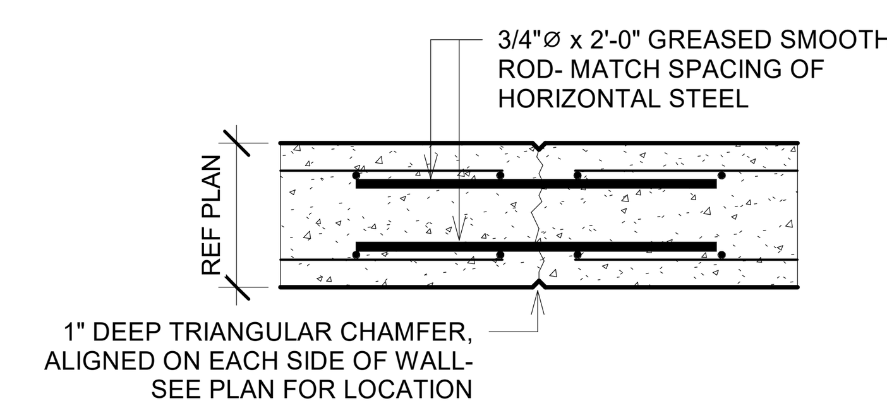


3 S 5.1 **Storage Wall Reinf.- Elevation**
Not To Scale



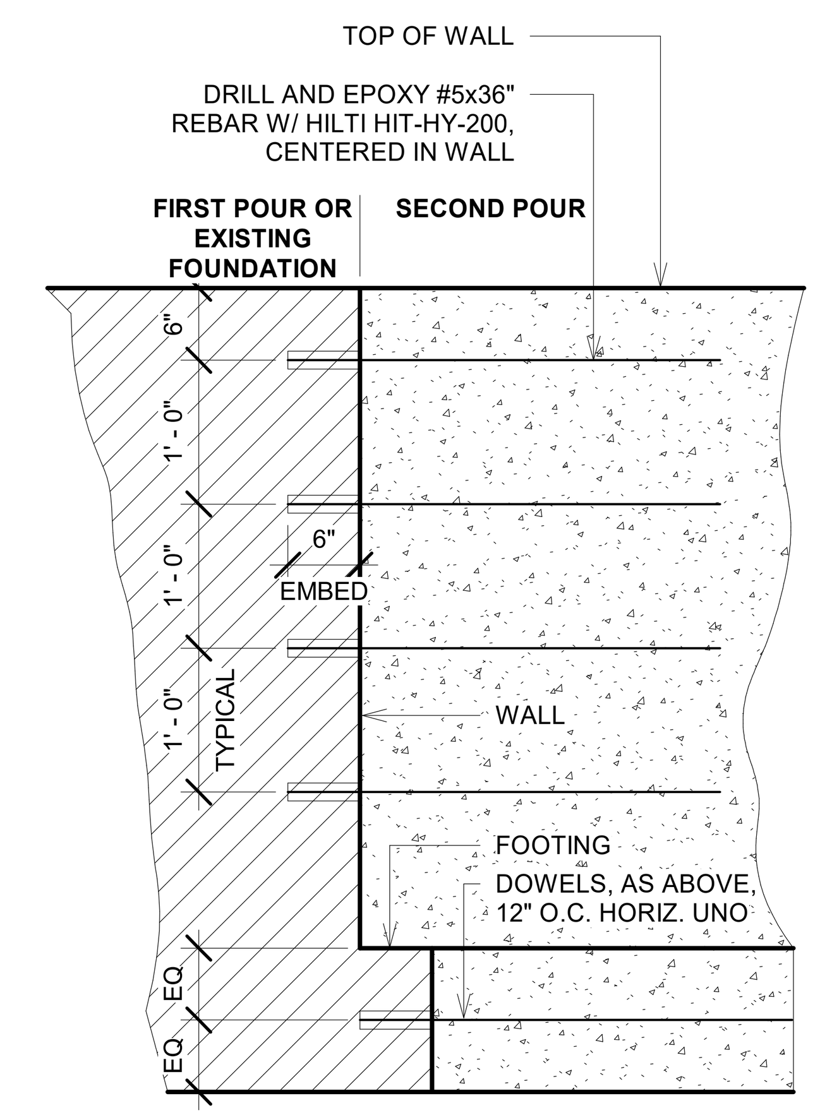
NOTES:
1. ALLOW 5 DAYS BETWEEN POURS
2. DETAIL SIMILAR FOR TWO MATS OF REINFORCEMENT

4 S 5.1 **Conc. Wall Construction Joint**
Not To Scale



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

5 S 5.1 **Conc. Wall Crack Control Joint**
Not To Scale



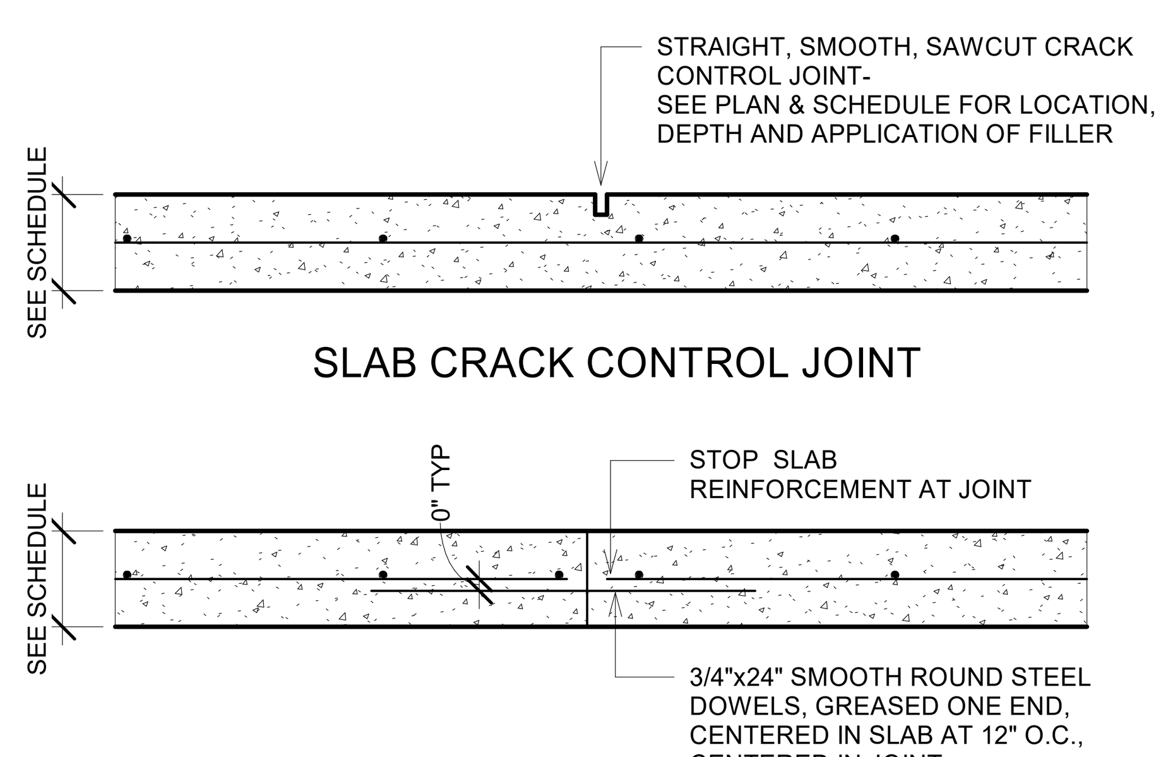
6 S 5.1 **Concrete Wall Pinning**
Not To Scale

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.

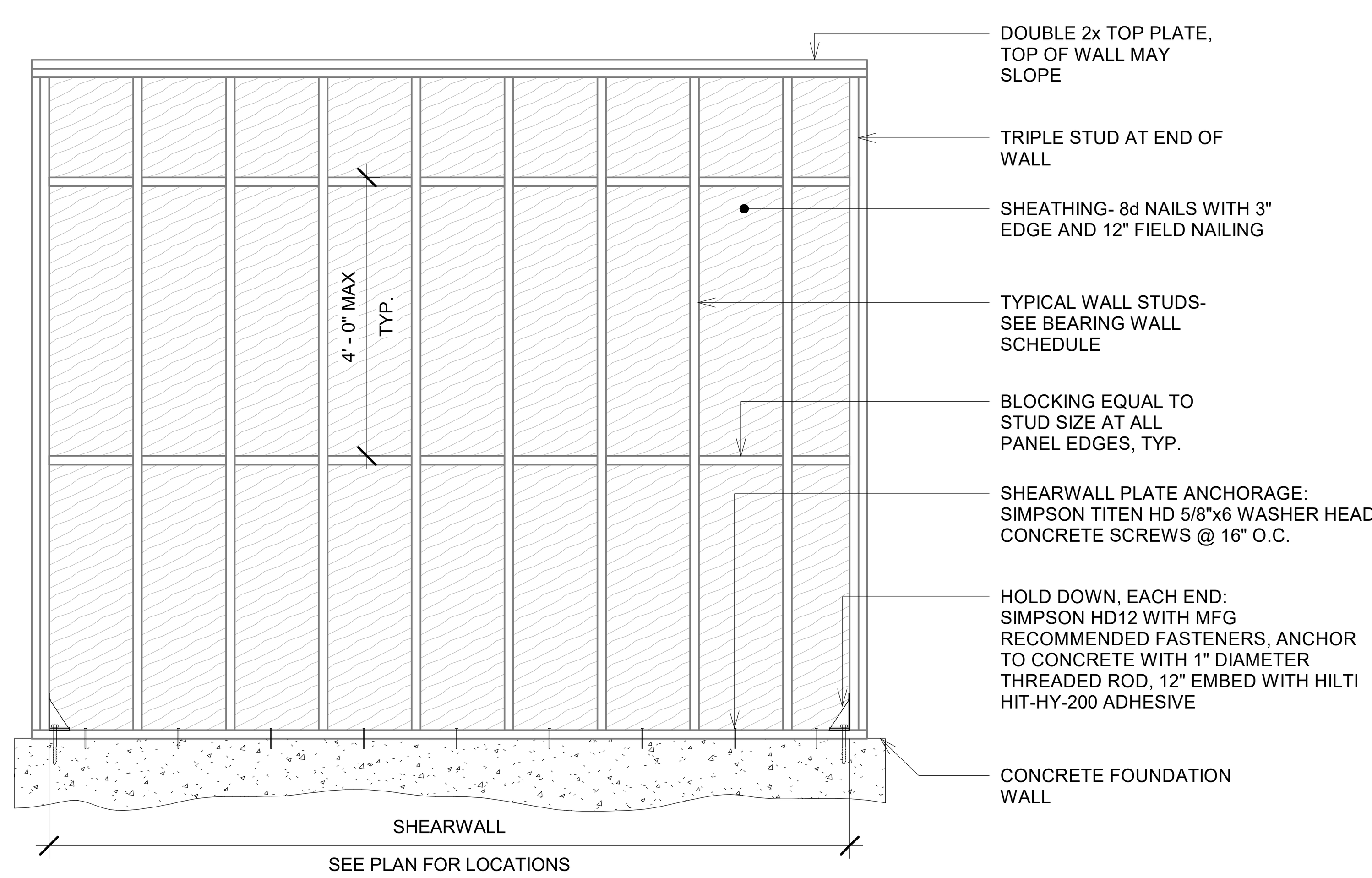
7 S 5.1 **Concrete Wall Finish**
Not To Scale



NOTE:
1. ALLOW 5 DAYS BETWEEN ADJACENT SLAB POURS

SLAB CONSTRUCTION JOINT

8 S 5.1 **Concrete Slab Joints**
Scale: 1" = 1'-0"



9 S 5.1 **Wood Shearwall Detail**
Scale: 1/2" = 1'-0"

4025 ROLLO ROAD
SWANTON, VERMONT 05488
BRIAN@NESTRUCTURAL.COM
NESTRUCTURAL.COM
802-782-0342

Town of South Hero

South Hero Municipal Salt Shed

286 US Route 2
South Hero, VT

Rev. No.	Date	Description

Title:

Details

NES PROJECT NO: 23074
DATE: AUGUST 8, 2023
DESIGNED BY: AD/BD

S 5.1