

LOCATION MAP

NOT TO SCALE

NOTES

THIS SITE PLAN IS BASED ON A SURVEY PREPARED BY FREEMAN COMPANIES, LLC. IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

THE TYPE OF SURVEY IS A BOUNDARY AND TOPOGRAPHIC SURVEY. IT IS DEPENDENT IN NATURE AND BASED UPON MAP REFERENCE NUMBER ONE.

THE SURVEY ACCURACY CONFORMS TO HORIZONTAL CLASS "D", TOPOGRAPHIC ACCURACY CLASS T-2.

HORIZONTAL CONTROL AND MAP BEARINGS ARE BASED ON ASSUMED HORIZONTAL DATUM. VERTICAL CONTROL AND ELEVATIONS ARE BASED ON NAVD83 DATUM.

THE SUBJECT PROPERTY IS CURRENTLY OWNED BY BRIAN R. HEALY, SEE EAST HAVEN LAND RECORDS VOLUME 2059 AT PAGE 149, AND IS LOCATED IN AN R3 ZONE.

THE PROPERTY DEPICTED HEREON IS LOCATED IN FLOOD ZONE AE [BASE FLOOD ELEVATIONS DETERMINED] (ELEVATION 12') BASED ON A VISUAL INSPECTION OF "FIRM FLOOD INSURANCE RATE MAP NEW HAVEN COUNTY, CONNECTICUT PANEL 557 OF 635 MAP NUMBER 09000057J1 MAP REVISED JULY 8, 2013 BY: FEDERAL EMERGENCY MANAGEMENT AGENCY."

A 5' SIDE YARD VARIANCE WAS GRANTED ON 6/24/69 IN ORDER TO CONSTRUCT AN ADDITION TO THE SOUTH SIDE OF THE DWELLING.

THE EXISTING LOT IS NON CONFORMING TO THE CURRENT ZONING REGULATIONS FOR LOT AREA, WIDTH AND FRONTAGE. THE BUILDING IS NON CONFORMING TO REQUIRED SETBACKS AND COVERAGE. ITS USE IS DECLARED TO BE NONCONFORMING BUT NOT IN VIOLATION SINCE THE LOT EXISTED OF RECORD PRIOR TO MARCH 15, 1997. SEE SECTION 8-13a OF THE CONNECTICUT GENERAL STATUTES LISTED HERE FOR REFERENCE.

"SEC. 8-13a. NONCONFORMING BUILDINGS AND LAND USES. (A) WHEN A BUILDING IS SO SITUATED ON A LOT THAT IT VIOLATES A ZONING REGULATION OF A MUNICIPALITY WHICH PRESCRIBES THE LOCATION OF SUCH A BUILDING IN RELATION TO THE BOUNDARIES OF THE LOT OR WHEN A BUILDING IS SITUATED ON A LOT THAT VIOLATES A ZONING REGULATION OF A MUNICIPALITY WHICH PRESCRIBES THE MINIMUM AREA OF THE LOT, AND WHEN SUCH BUILDING HAS BEEN SO SITUATED FOR THREE YEARS WITHOUT THE INSTITUTION OF AN ACTION TO ENFORCE SUCH REGULATION, SUCH BUILDING SHALL BE DEEMED A NONCONFORMING BUILDING IN RELATION TO SUCH BOUNDARIES OR TO THE AREA OF SUCH LOT, AS THE CASE MAY BE."

THE UNDERGROUND FEATURES DEPICTED HEREON ARE THE RESULT OF COMPILATION OF EXISTING MAPPING AND LOCATION OF UTILITY PAINT. ACTUAL LOCATION OF UNDERGROUND UTILITIES IS TO BE CONSIDERED TO BE APPROXIMATE AT BEST. OTHER UTILITIES MAY EXIST WHICH FREEMAN COMPANIES ARE UNAWARE OF. VERIFY INFORMATION IN THE FIELD, BEFORE ANY DIGGING OR SITE EXCAVATION CALL "CALL BEFORE YOU DIG" 1-800-922-4455.

DUO TO THE SMALL SIZE OF THE SITE, EXCAVATED MATERIAL SHALL BE REMOVED AND STORED OFF SITE. EXCAVATED MATERIAL AND/OR SUITABLE FILL/TOP SOIL MATERIAL WILL BE BROUGHT TO THE SITE AS REQUIRED.

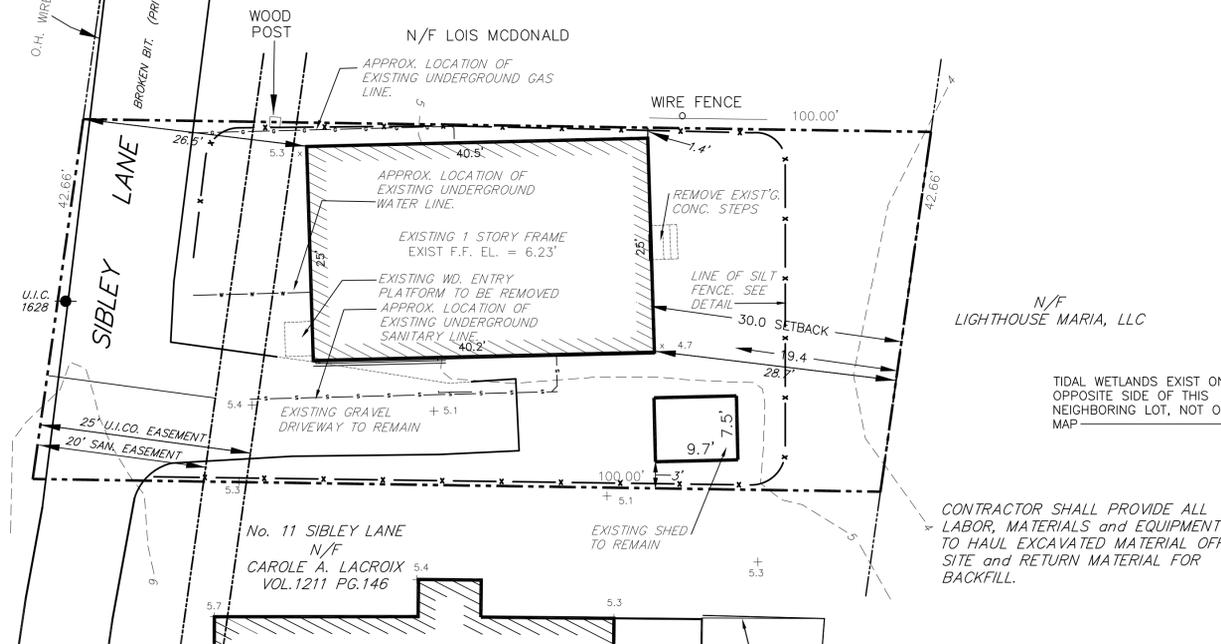
MAP REFERENCES

- "MAP OF MEADOWS GROVE, OLD TOWN HIGHWAY, EAST HAVEN, CONNECTICUT, JAN. 4, 1972 SCALE 1"=20", REVISED JULY 21, 1972 ARTHUR W. SEOGEN, REGISTERED LAND SURVEYOR".
- "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR LOTHROP ASSOCIATES, LLP #11 SIBLEY LANE E. HAVEN, CONNECTICUT 9/19/14 SCALE: 1"=10" BY FREEMAN COMPANIES, LLC.

SITE PLAN LEGEND

---	PROPERTY LINE
---	SANITARY EASEMENT
---	ELECTRIC UTILITY EASEMENT
---	WIRE FENCE
□	FENCE POST
---	OVERHEAD WIRES
•	UTILITY POLE
---	EDGE OF BITUMINOUS ROAD/STONE DRIVE
---	STOOP
X 4.7	SPOT ELEVATION
---	EXISTING CONTOUR
VOL.	VOLUME
PG.	PAGE
---	UNDERGROUND SANITARY SEWER PIPE
---	UNDERGROUND WATER PIPE
---	UNDERGROUND GAS PIPE
---	SILT BARRIER

R-3 ZONE	ZONING DATA		
	REQUIRED	EXISTING	PROPOSED
MIN LOT AREA	20,000 SF	4,233 SF, EXISTING NONCONFORMANCE	4,233 SF EXISTING NONCONFORMANCE
MIN LOT AREA PER DWELLING UNIT	20,000 SF	4,233 SF, EXISTING NONCONFORMANCE	4,233 SF EXISTING NONCONFORMANCE
MIN DIM OF SQUARE ON SITE	100 Ft	42.68, EXISTING NONCONFORMANCE	42.68 Ft EXISTING NONCONFORMANCE
MIN LOT FRONTAGE	100 Ft	42.68, EXISTING NONCONFORMANCE	42.68 Ft EXISTING NONCONFORMANCE
MAX NO. OF STORIES PER BUILDING	3	1	2
MAX HEIGHT OF A BUILDING	30 Ft	13.72 Ft	23.80 Ft
MIN SETBACK FROM STREET	25 Ft	26.50 Ft	25.70 Ft
MIN SETBACK FROM REAR PROP LINE	30 Ft	28.7 Ft, EXISTING NONCONFORMANCE	19.4 Ft VARIANCE REQUIRED
MIN SETBACK FROM SIDE PROP LINE	20 Ft	14.5 Ft South, 1.4 Ft North	10.3 Ft South, 1.4 Ft North VARIANCE REQUIRED
MAX LOT COVERAGE AS % OF LOT AREA	20%	23% EXISTING NONCONFORMANCE	23% EXISTING NONCONFORMANCE
MAX FLOOR AREA AS % OF LOT AREA	40%	23%	23%
MIN FLOOR AREA PER DWELLING UNIT	900 SF	1011.7 SF	1011.7 SF



CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS and EQUIPMENT TO HAUL EXCAVATED MATERIAL OFF SITE and RETURN MATERIAL FOR BACKFILL.

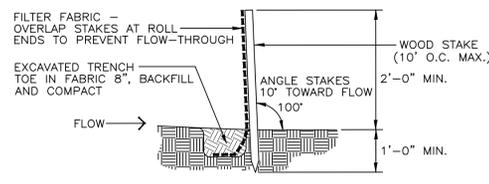
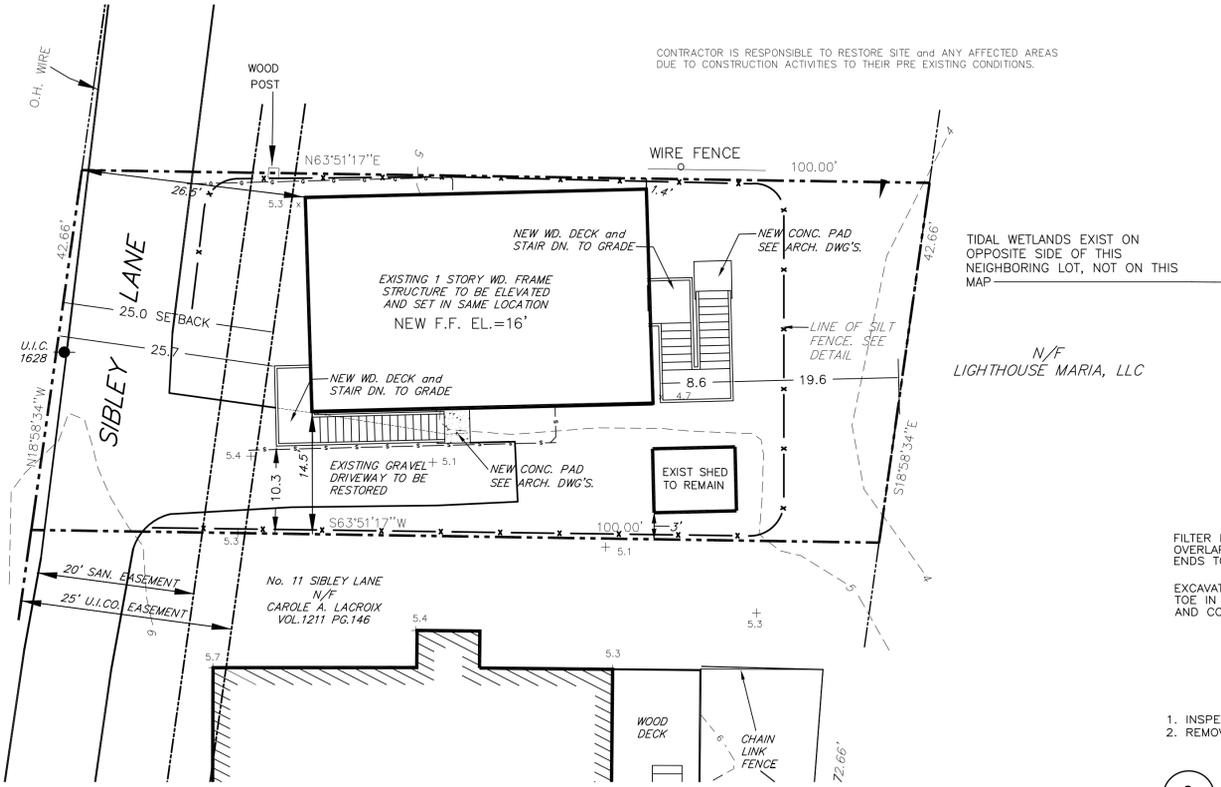
TIDAL WETLANDS EXIST ON OPPOSITE SIDE OF THIS NEIGHBORING LOT, NOT ON MAP

1 SITE /DEMOLITION PLAN

SCALE: 1" = 10"

SITE PLAN INFORMATION TAKEN FROM A SURVEY PREPARED BY FREEMAN COMPANIES, LLC  
MAP, BLOCK AND LOT: 010-0302-014

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL LABOR, MATERIALS and EQUIPMENT TO REMOVE EXCAVATED MATERIAL OFF SITE and RETURN EXCAVATED MATERIAL FOR BACKFILL.



- INSPECT BARRIER AFTER EACH STORM EVENT AND DAILY DURING PROLONGED RAINFALL.
- REMOVE SEDIMENT WHEN IT REACHES APPROXIMATELY ONE-HALF THE BARRIER HEIGHT.

3 SILT BARRIER DETAIL

N.T.S.

1 PROPOSED SITE PLAN

SCALE: 1" = 10"

State Of Connecticut  
Department Of Housing  
505 Hudson Street  
Hartford, Connecticut 06106

Application No. 2088  
CONSTRUCTION OF NEW FOUNDATIONS AND  
RAISING EXISTING RESIDENCE  
FOR  
BRIAN R. HEALY  
15 SIBLEY LANE  
East Haven, Connecticut 06512

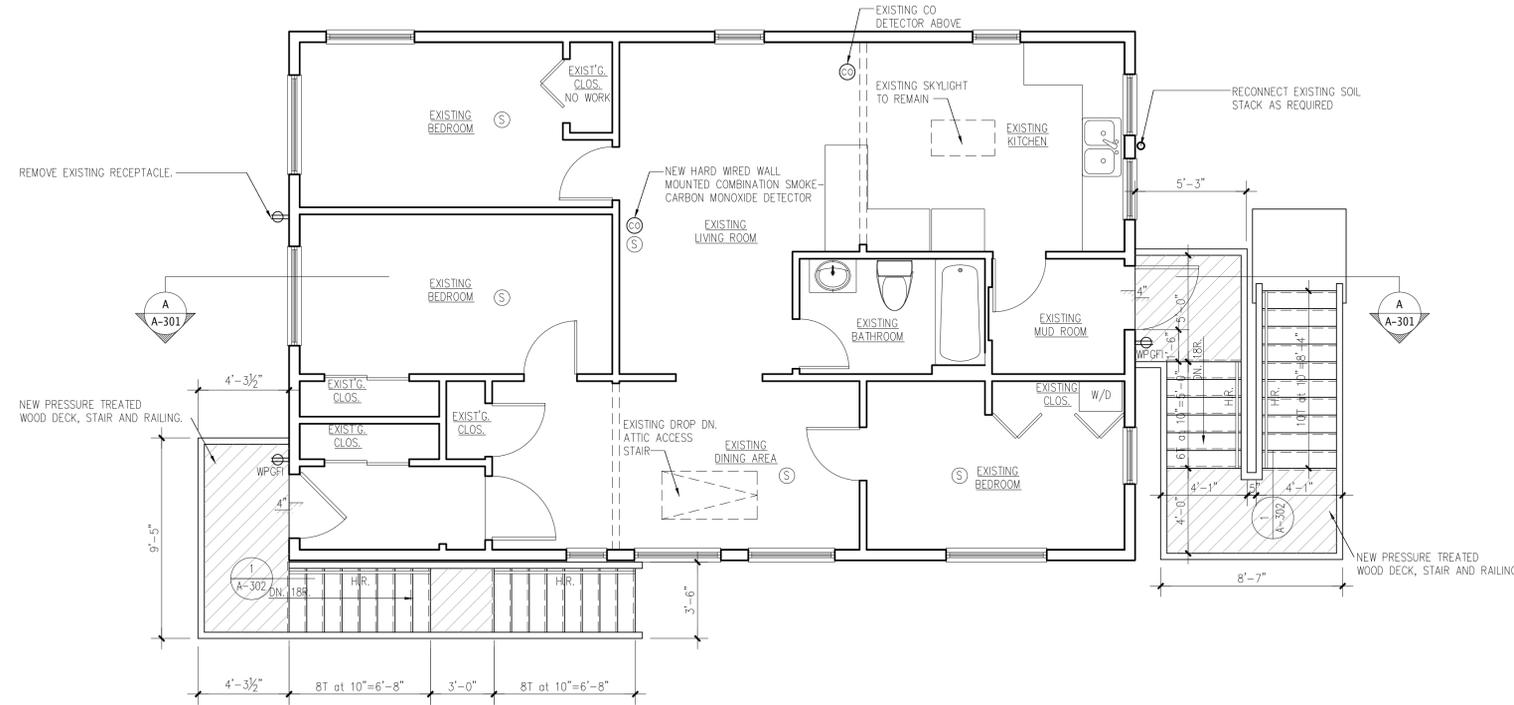
SITE/DEMOLITION and  
PROPOSED SITE PLAN &  
ZONING DATA

PROJECT NO.: 1524-44 SCALE AS NOTED

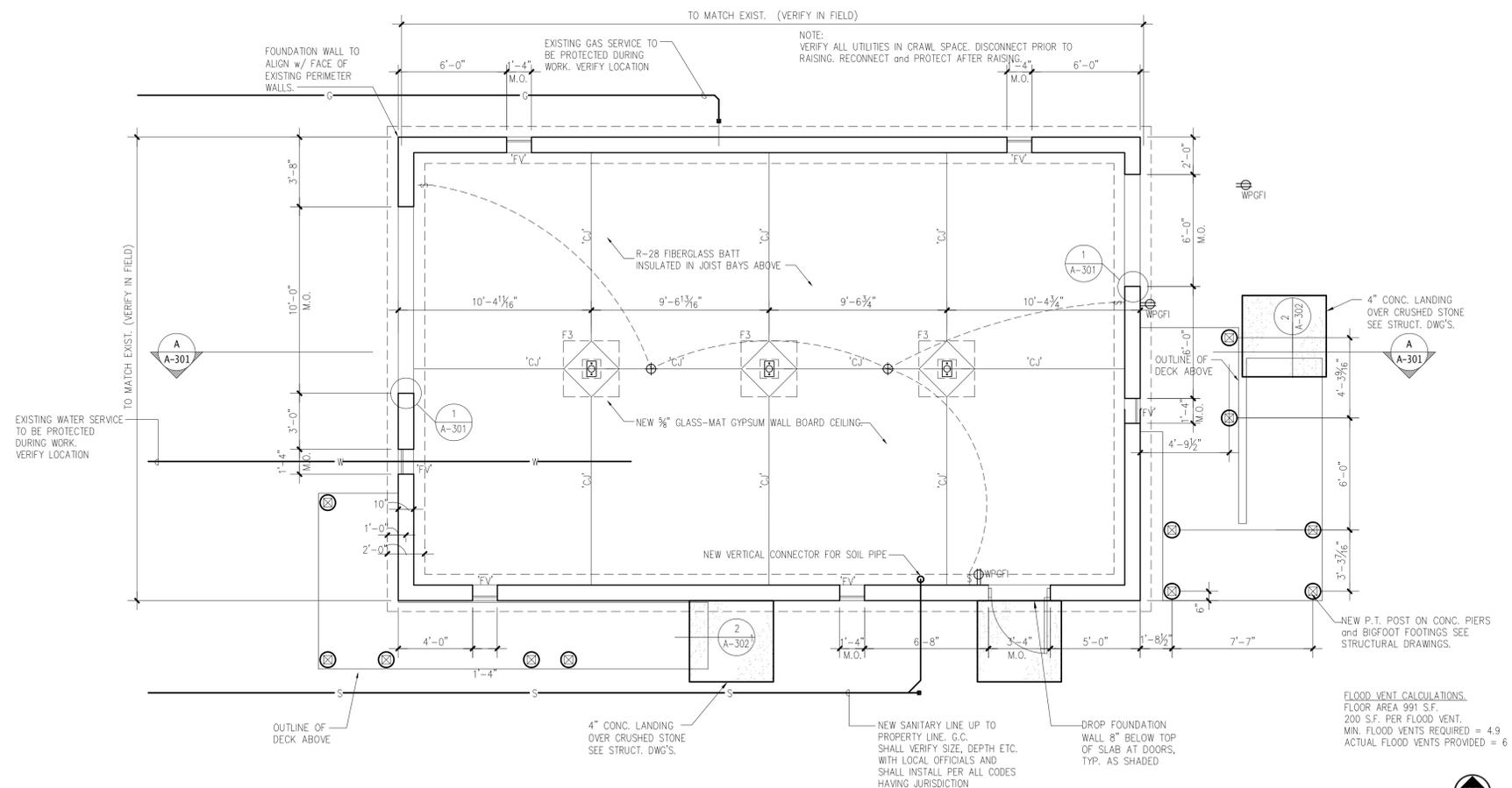
DRAWING NO.:

G-002





**2** FIRST FLOOR PLAN  
 1/4" = 1'-0"



**1** LOWER LEVEL AND FIRST FLOOR PLAN  
 1/4" = 1'-0"



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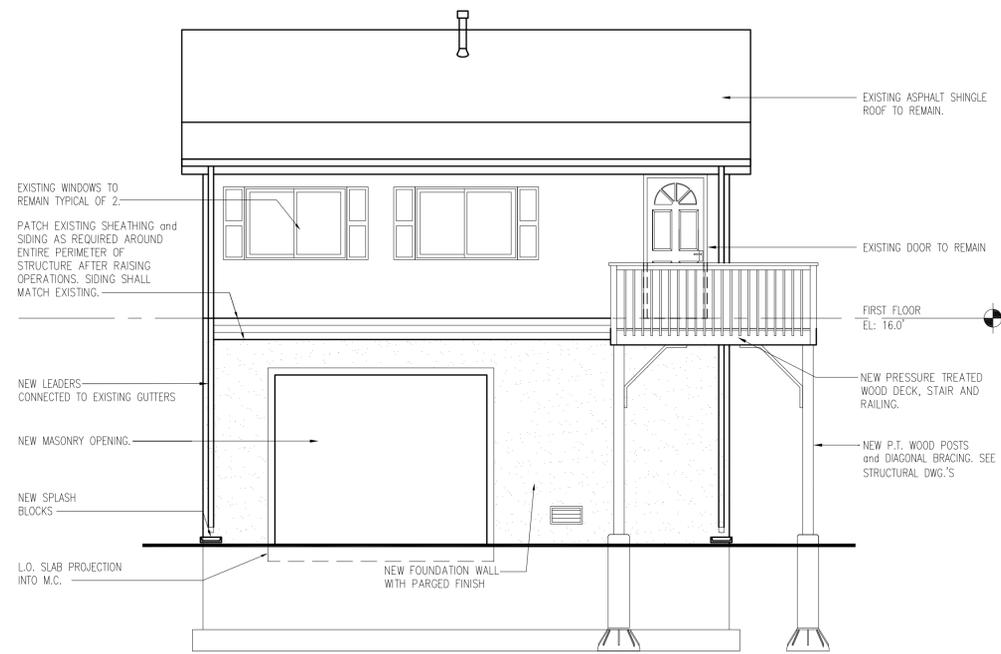
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## LOWER LEVEL AND FIRST FLOOR PLAN

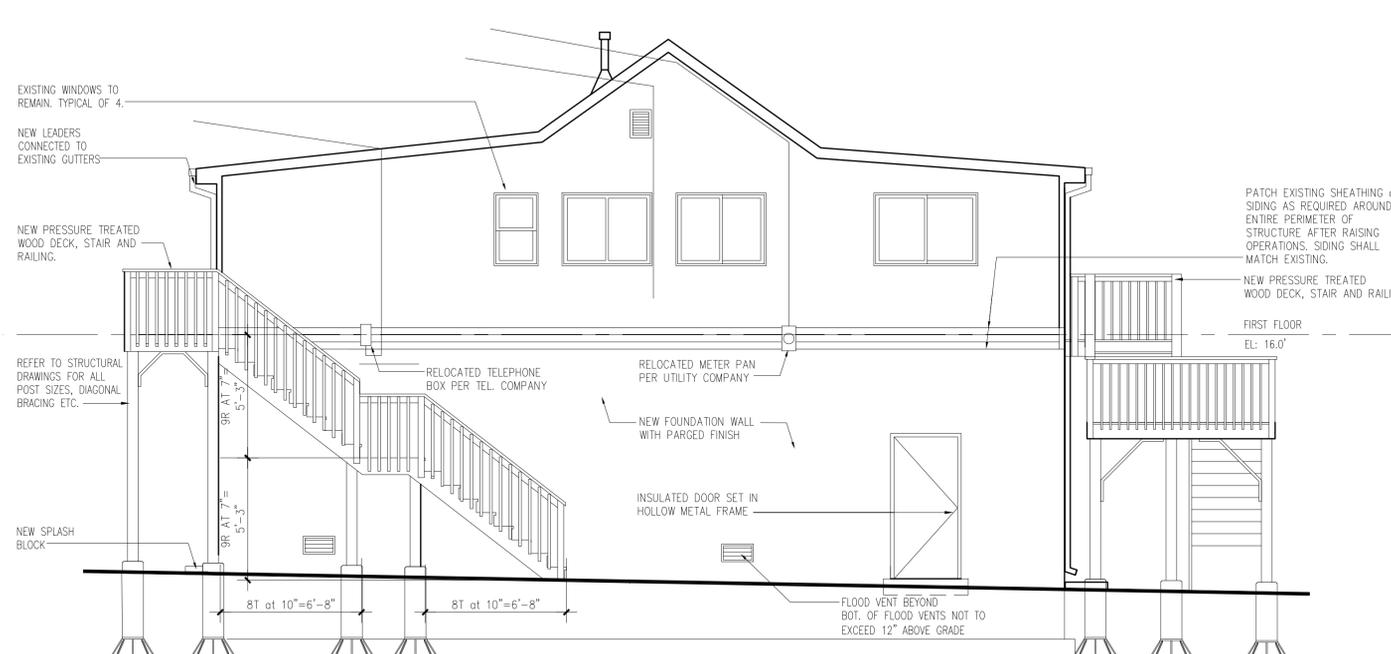
PROJECT NO.: 1524-44      SCALE      AS NOTED

DRAWING NO.:

# A-101



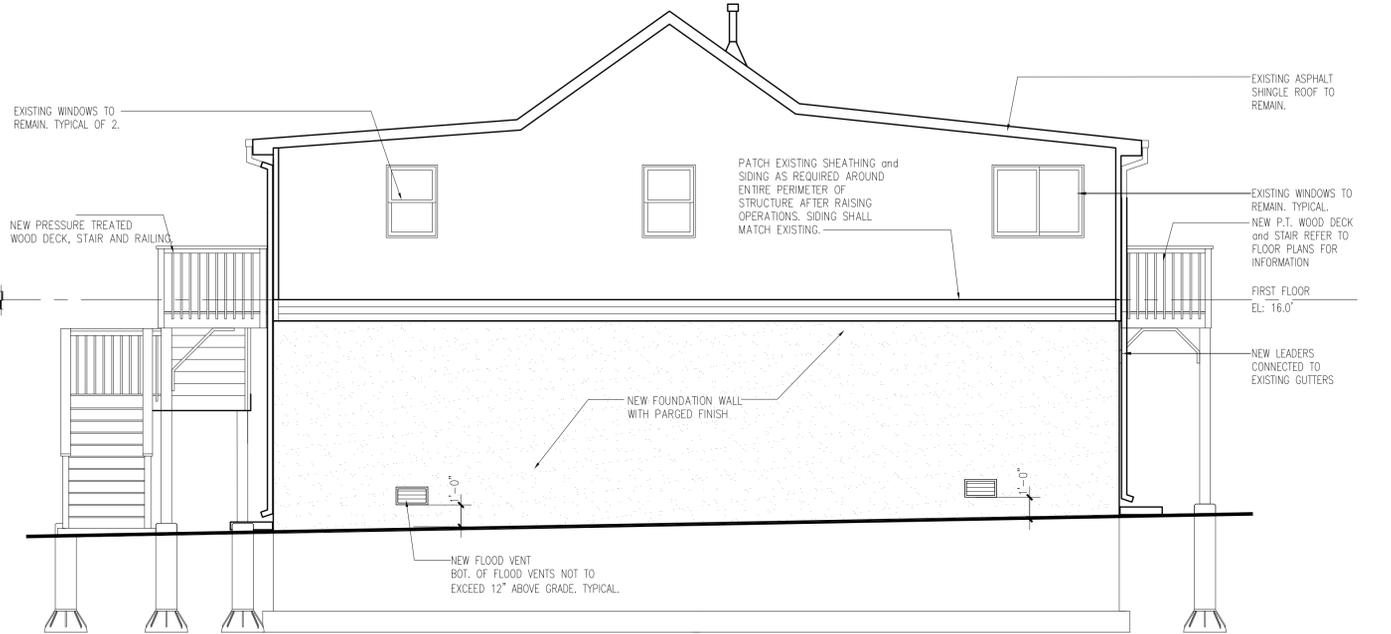
1 WEST ELEVATION  
 1/4" = 1'-0"



2 SOUTH ELEVATION  
 1/4" = 1'-0"



3 EAST ELEVATION  
 1/4" = 1'-0"



4 NORTH ELEVATION  
 1/4" = 1'-0"

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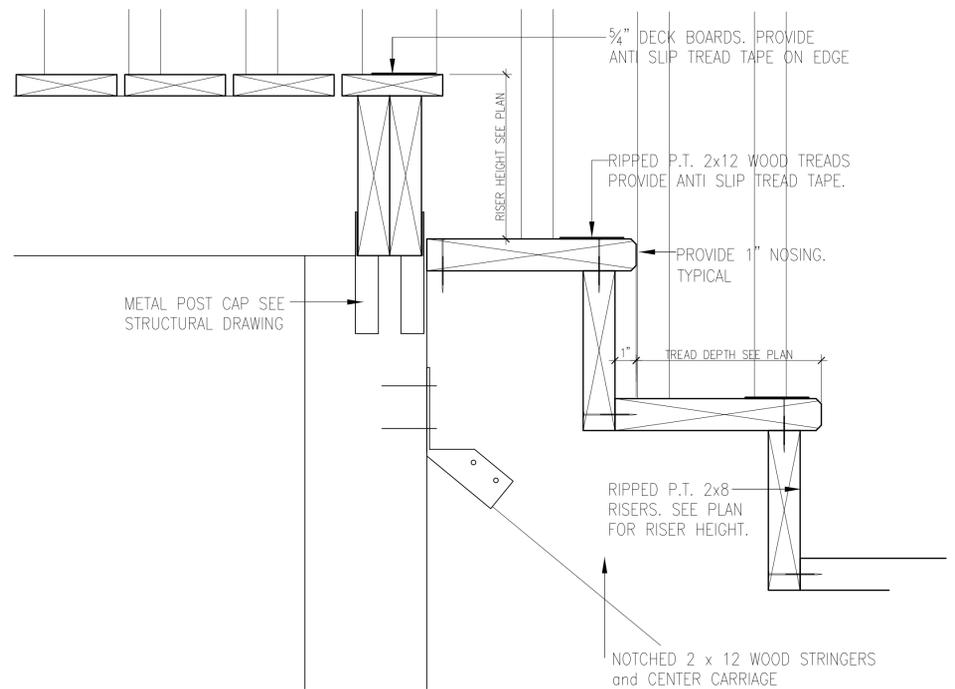
## BUILDING ELEVATIONS

PROJECT NO.: 1524-44 SCALE AS NOTED

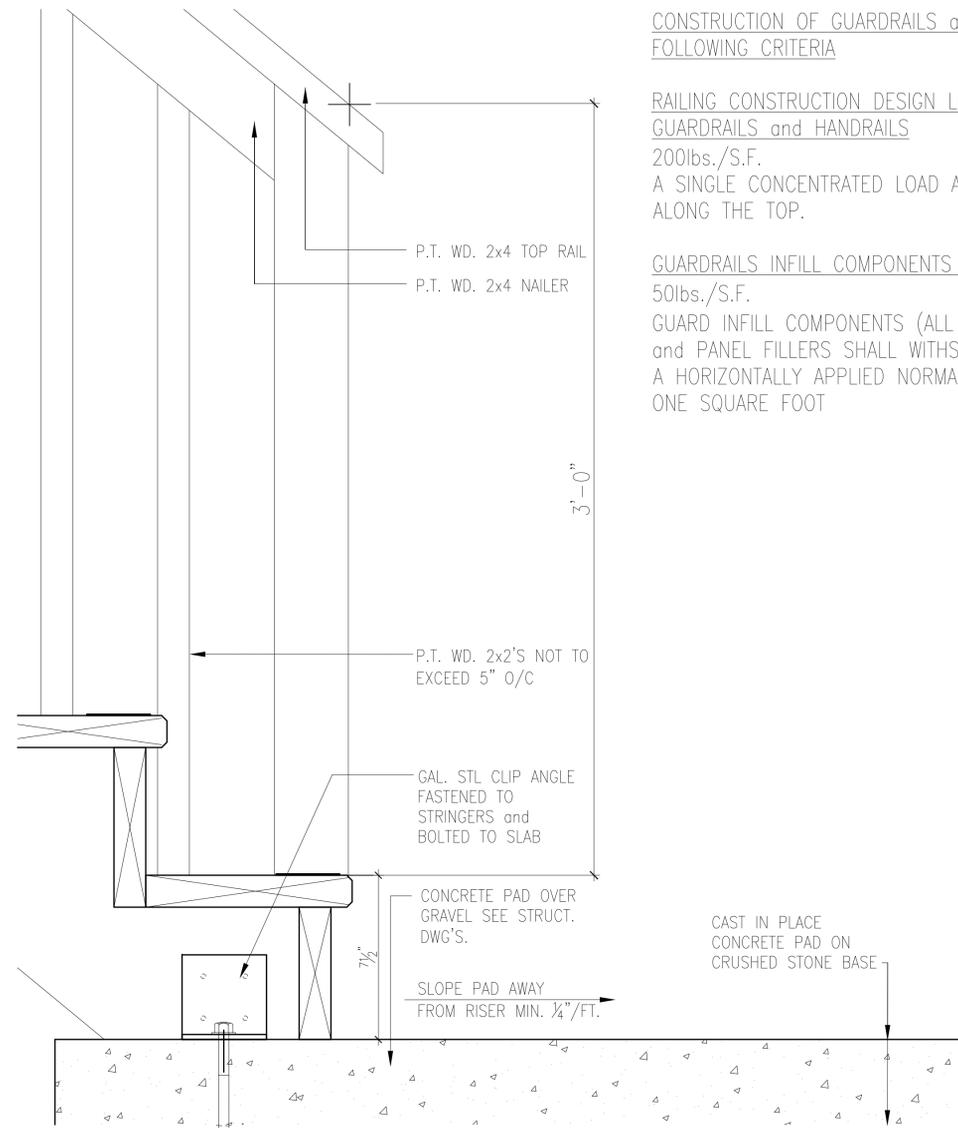
DRAWING NO.:

# A-201





1 RISER and TREAD DETAIL  
3" = 1'-0"



2 STRINGER ANCHORING DETAIL  
3" = 1'-0"

CONSTRUCTION OF GUARDRAILS and INFILLS SHALL COMPLY WITH THE FOLLOWING CRITERIA

RAILING CONSTRUCTION DESIGN LOADS  
GUARDRAILS and HANDRAILS

200lbs./S.F.  
A SINGLE CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP.

GUARDRAILS INFILL COMPONENTS DESIGN LOADS

50lbs./S.F.  
GUARD INFILL COMPONENTS (ALL THOSE EXCEPT HANDRAIL) BALLUSTERS and PANEL FILLERS SHALL WITHSTAND A HORIZONTALLY APPLIED NORMAL LOAD OF 50lbs. ON AN AREA EQUAL TO ONE SQUARE FOOT

# Lothrop

**Lothrop Associates LLP Architects**  
100 Pearl Street  
14th Floor  
Hartford, Connecticut 06103  
860-249-7251

White Plains Rochester Red Bank Hartford

**STRUCTURAL ENGINEER:**



**SURVEYOR:**



**ENVIRONMENTAL ENGINEER:**



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**DETAILS**

PROJECT NO.: 1524-44 SCALE AS NOTED

DRAWING NO.:

# A-302

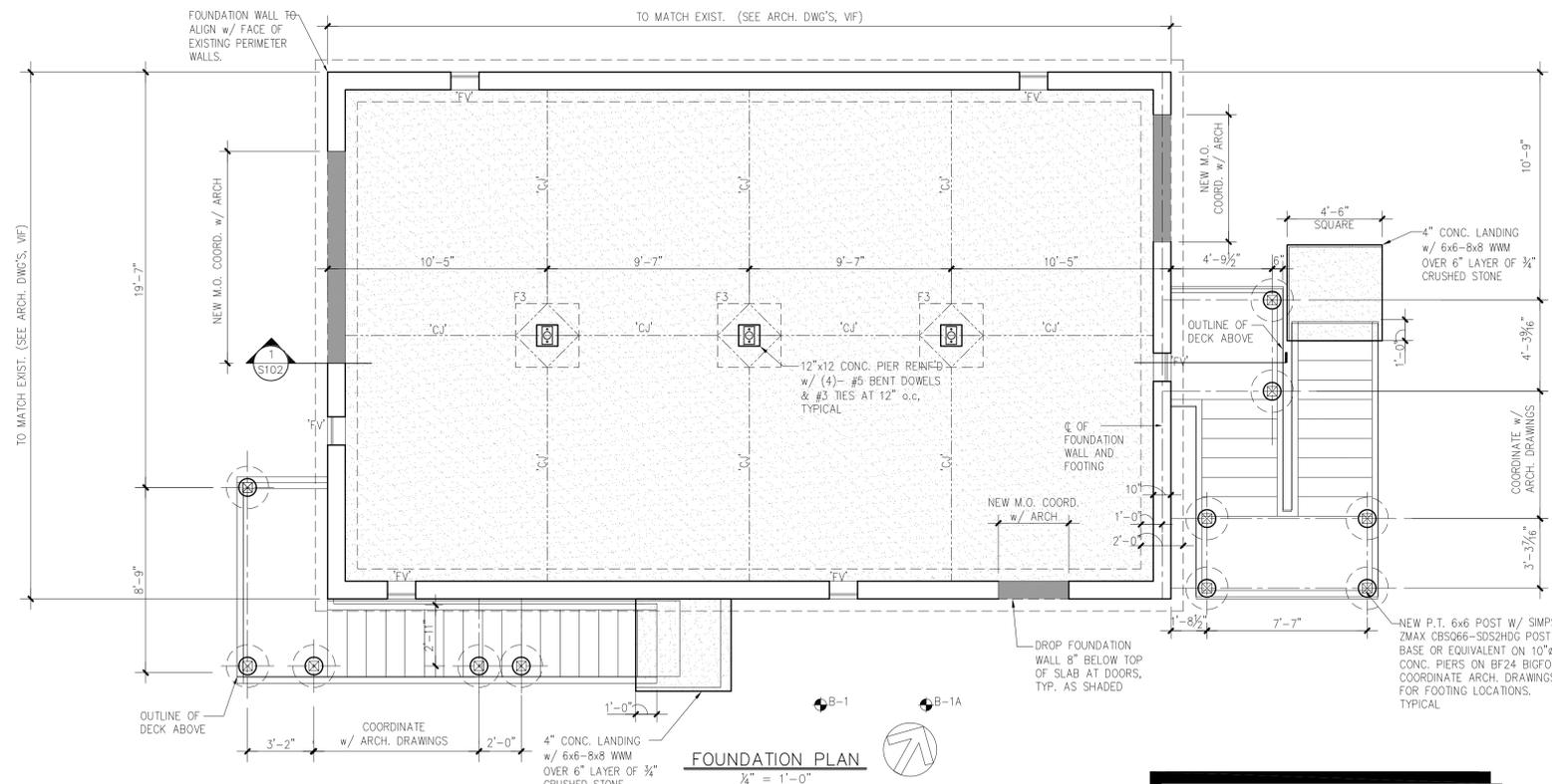
**STRUCTURAL ENGINEER:**



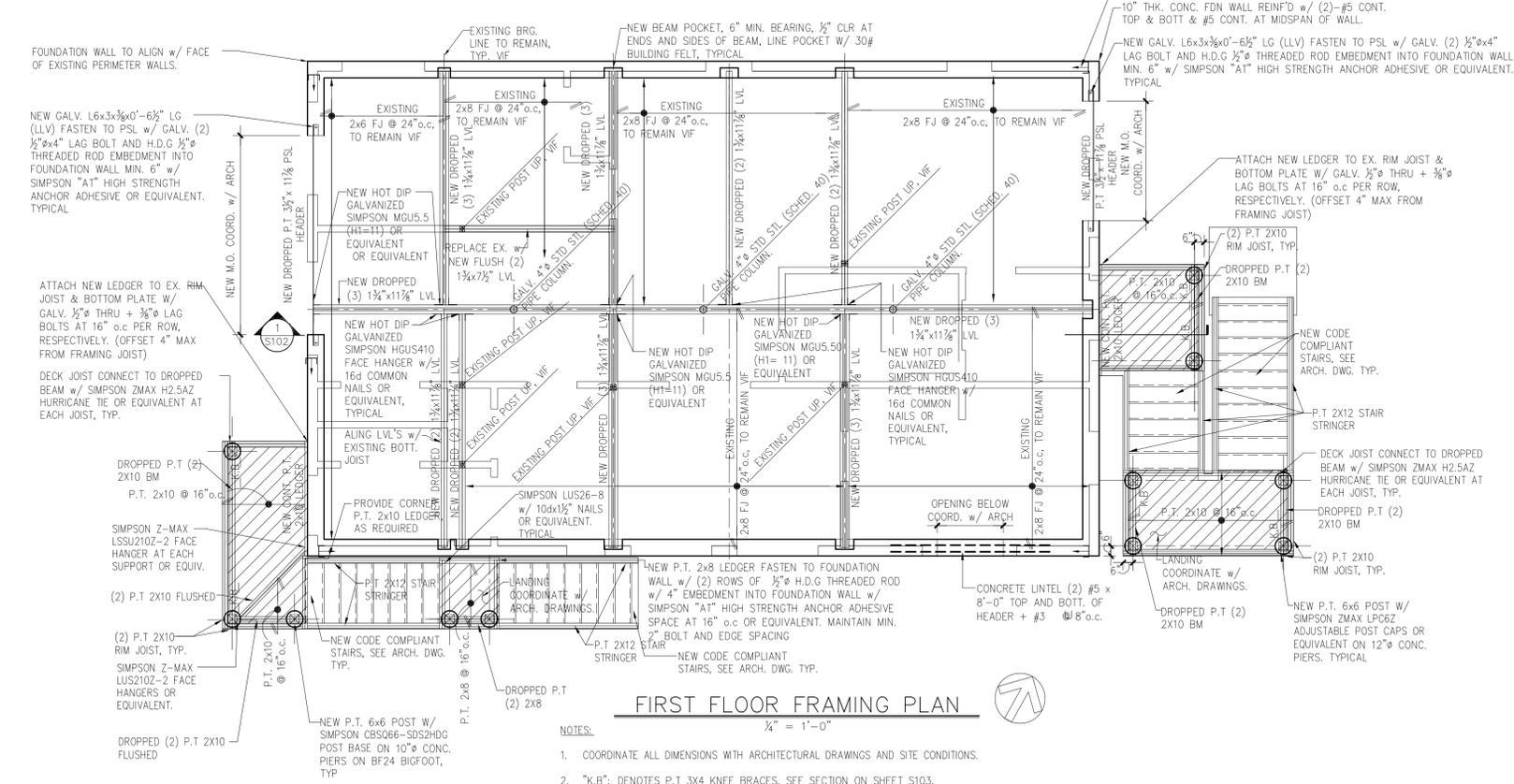
**SURVEYOR:**



**ENVIRONMENTAL ENGINEER:**



**SMART VENT CALCULATION - HOUSE:**  
 (1) 8"x16" SMART VENT REQUIRED PER 200 SF OF BUILDING AREA  
 OVERALL FOUNDATION WALL FOOTPRINT AREA = 1000 SF  
 1000 SF / 200 SF PER VENT = 5 VENTS  
 USE (6) VENTS



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## FOUNDATION AND FIRST FLOOR FRAMING

PROJECT NO.: 1524-44 SCALE AS NOTED

DRAWING NO.:

# S-101

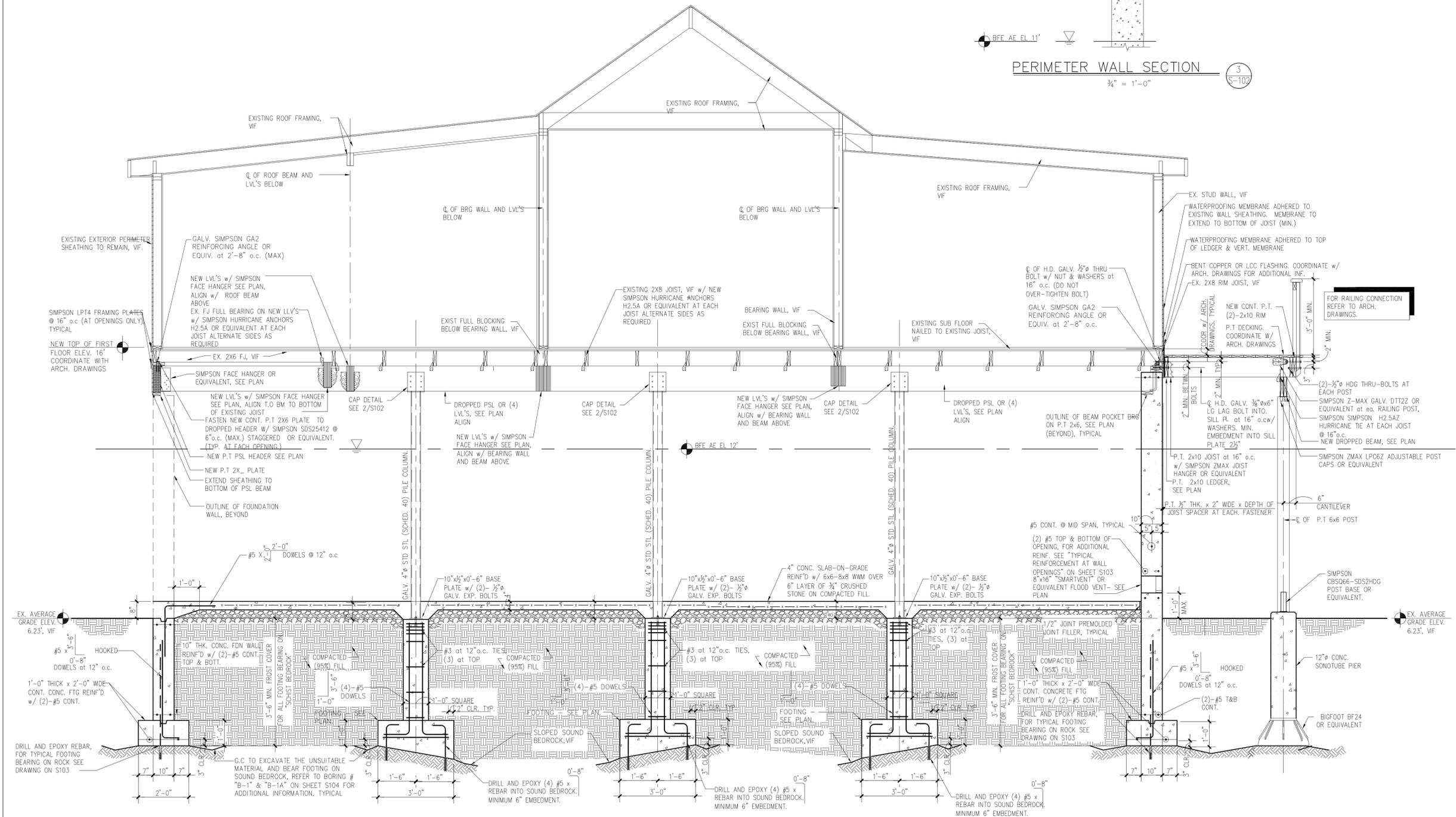
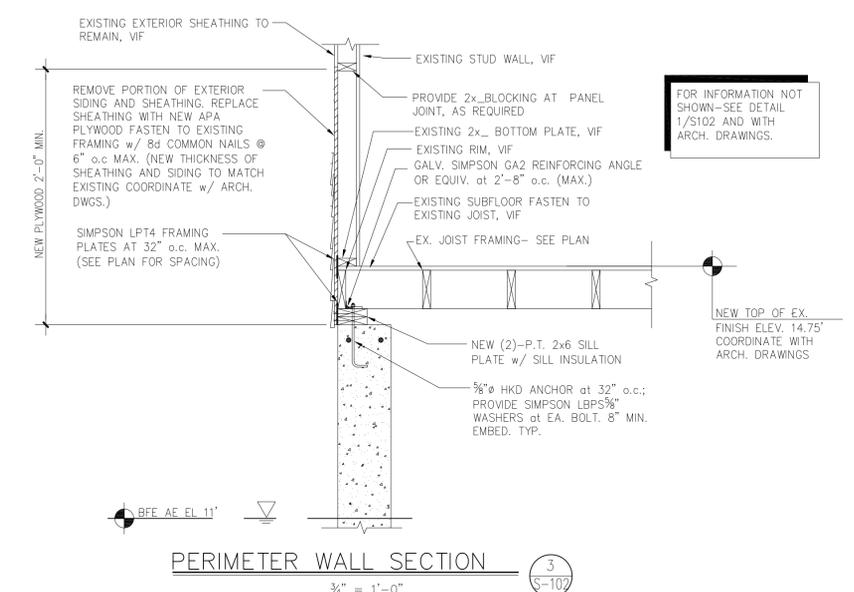
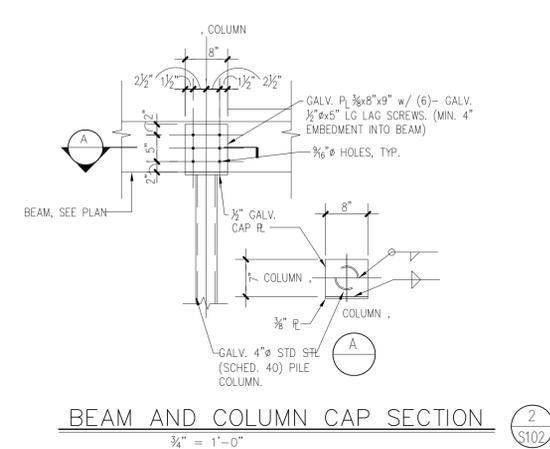
STRUCTURAL ENGINEER:



SURVEYOR:



ENVIRONMENTAL ENGINEER:



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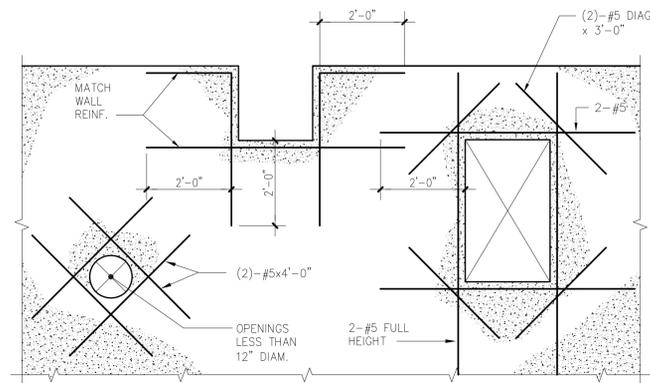
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## STRUCTURAL BUILDING SECTION

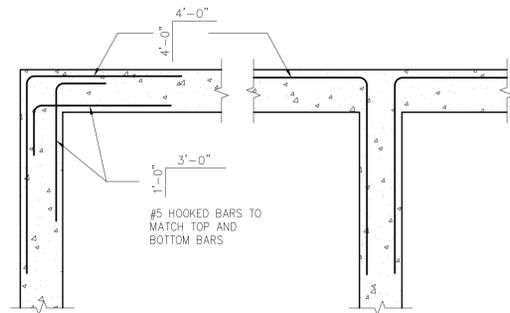
PROJECT NO.: 1524-44 SCALE AS NOTED

DRAWING NO. S-102



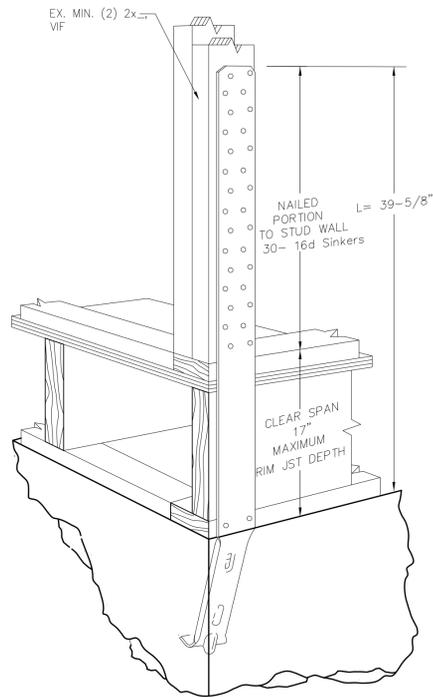
**TYPICAL REINFORCING AT WALL OPENINGS**

NO SCALE



**CORNER WALL REINFORCING DETAIL**

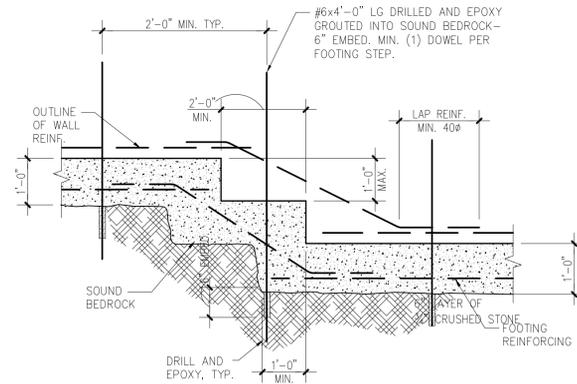
3/4" = 1'-0"



**SIMPSON STHD14RJ DETAIL**

NOT TO SCALE

INSTALL STRAP PER MANUFACTURE SPECIFICATIONS. REMOVE EXISTING WALL SIDING AND INSTALL STRAP DIRECTLY TO FRAMING. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING STUDS AND ADD STUDS AS REQUIRED.



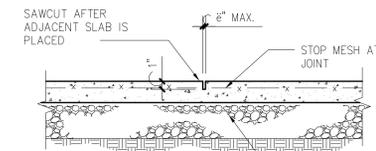
**TYPICAL FOOTING ON ROCK DETAIL**

NO SCALE

NOTE:

DETAIL APPLIES FOR NEW FOOTINGS BELOW ROCK WHERE BEDROCK SLOPE IS 10 DEGREES OR GREATER.

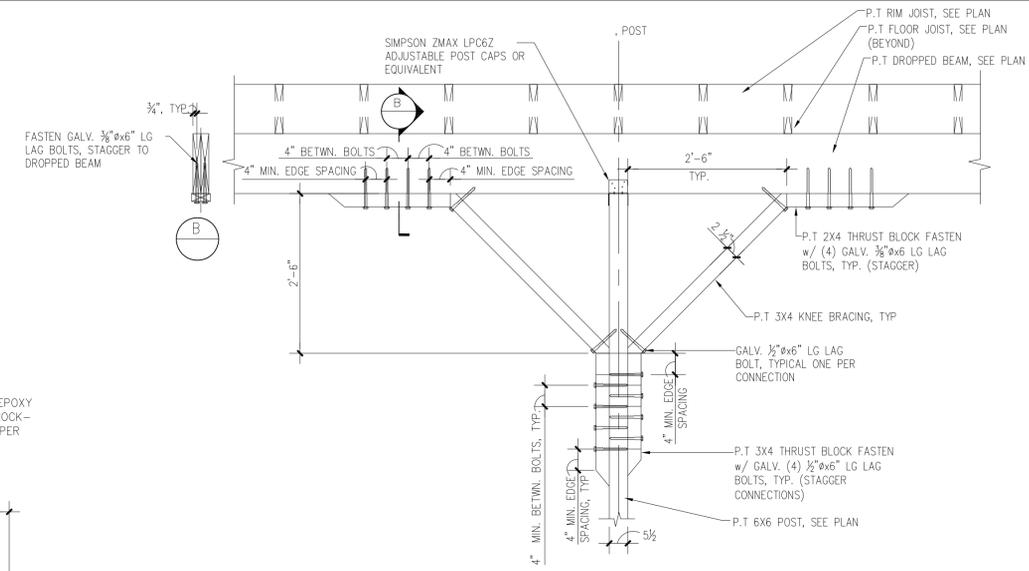
NOTE:  
W/M SHALL BE SUPPLIED IN SHEETS. ROLLS ARE NOT ACCEPTABLE. LAP MESH MIN OF 6" AND TIE ALL JOINTS.



**CONTROL JOINT**

**SLAB-ON-GRADE DETAILS**

3/4" = 1'-0"

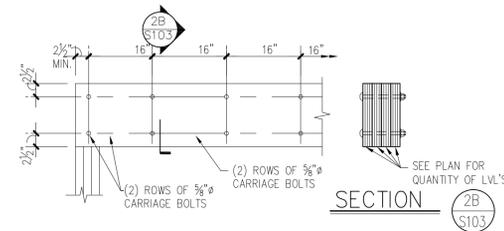


**TYPICAL KNEE BRACING**

N.T.S

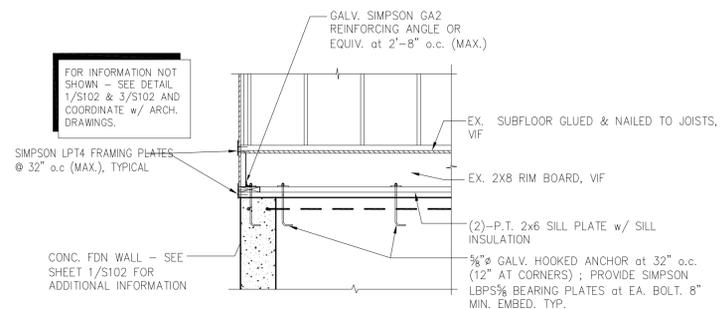
NOTE:

NOT ALL ITEMS SHOWN FOR CLARIFY. COORDINATE W/ PLAN FOR LOCATION OF BRACE.



**MULTIPLE LVL'S BOLTING DETAIL**

N.T.S



**FOUNDATION ANCHORAGE**

**DETAIL**

1/2" = 1'-0"

FOR INFORMATION NOT SHOWN - SEE DETAIL 1/S102 & 3/S102 AND COORDINATE W/ ARCH. DRAWINGS.

SIMPSON LPT4 FRAMING PLATES @ 32" o.c. (MAX.), TYPICAL

CONC. FDN WALL - SEE SHEET 1/S102 FOR ADDITIONAL INFORMATION

GALV. SIMPSON GA2 REINFORCING ANGLE OR EQUIV. AT 2'-8" o.c. (MAX.)

EX. SUBFLOOR GLUED & NAILED TO JOISTS.

EX. 2X8 RIM BOARD, VIF

(2)-P.T. 2x6 SILL PLATE w/ SILL INSULATION

3/8" GALV. HOOKED ANCHOR AT 32" o.c. (12" AT CORNERS); PROVIDE SIMPSON LBPS% BEARING PLATES AT EA. BOLT. 8" MIN. EMBED. TYP.

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## STRUCTURAL DETAILS

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DRAWING NO.:

# S-103

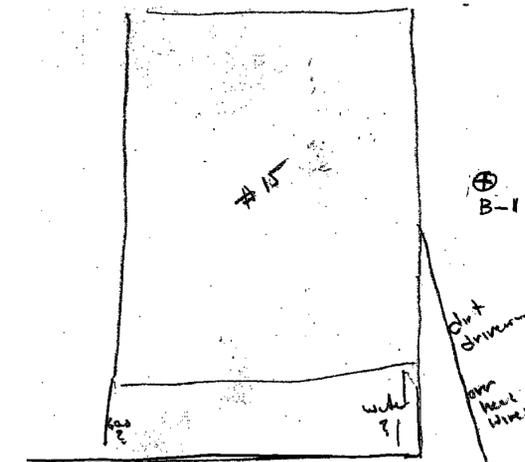
STRUCTURAL ENGINEER:



SURVEYOR:



ENVIRONMENTAL ENGINEER:



Sibley Lane dirt driveway

BORING PLAN  
N.T.S.

SOILTESTING, INC. 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 282-9328 NY (914) 946-4850		CLIENT: Lothrop Associates LLP		SHEET 1 OF 1 HOLE NO. B-1, B-1A							
PROJECT NO. G55-9996-15		PROJECT NAME Healy Residence		BORING LOCATIONS per Plan							
FOREMAN - DRILLER PD/jb		LOCATION 15 Sibley Lane ( aka #2 ) East Haven, CT									
INSPECTOR		CASING	SAMPLER	CORE BAR	OFFSET						
GROUND WATER OBSERVATIONS		TYPE	HSA	SS	NWD4						
AT _____ FT AFTER _____ HOURS	SIZE I.D.	4 1/2"	1 3/8"	2 1/2"	DATE START 3/30/15						
AT _____ FT AFTER _____ HOURS	HAMMER WT.	140#	BIT		DATE FINISH 3/30/15						
		HAMMER FALL	30"	dia	GROUND WATER ELEV.						
DEPTH (FEET)	SAMPLE				FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.						
	CASING BLOWS PER FOOT	NO	Type	REC							
0	1	ss	15"	12"	13"	8	12	100%	moist v dense	11"	drk bn SILT & FMC SAND, sm F-C gravel red FMC SAND & F-C GRAVEL, sm silt, lit cobbles
5										21"	fractured BEDROCK AUGER REFUSAL
5											E.O.B. 21"
GROUND WATER OBSERVATIONS		B-1A		B-1A (5' North of B-1)							
AT _____ FT AFTER _____ HOURS	AT _____ FT AFTER _____ HOURS										
0	1	g	36"	32"	50"	ROD = 28%	2.0	moist	21"	AUGER REFUSAL	
							2.5			BEDROCK (Schist)	
							2.5			E.O.B. 50"	

NOTE: Subsoil conditions revealed by this investigation represent conditions at specific locations and may not represent conditions at other locations or times.

GROUND SURFACE TO \_\_\_\_\_ FT. USED \_\_\_\_\_ CASING THREN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. HOLE NO. B-1, B-1A

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST

WOR = WEIGHT OF RODS WOI = WEIGHT OF HAMMER & RODS C = COARSE

SS = SPLIT TUBE SAMPLER H.S.A. = HOLLOW STEM AUGER M = MEDIUM

PROPORTIONS USED: TRACE = 0 - 10% LITTLE = 10 - 20% SOME = 20 - 35% AND = 35 - 50% F = FINE

STRUCTURAL NOTES

GENERAL:

- All details shall be considered typical and shall apply at all same and similar conditions.
- The Contractor shall field measure and verify all dimensions of the existing building and all dimensions related thereto.
- The Contractor shall be responsible for all temporary shoring and bracing required to maintain the structural stability of the building during construction.
- All work shall be in accordance with Connecticut state residential code (CSRC) which includes the 2009 International Residential Code, and the Connecticut 2013 amendments.
- The Contractor shall be solely responsible for construction site safety.

DESIGN LOADS:

- The foundation structure have been engineered to resist the following design loads in accordance with 2009 IRC chapter 3 and the Connecticut 2013 Amendments.
- Floor live loads:
  - First Floor: 40 psf
  - Deck: 40 psf
- Snow load:
  - Ground Snow Load - Pg = 30 psf

The roof structure was engineered for a minimum snow load of 30 psf in accordance with CSRC Chapter 3, Snow Loads.
- Wind load:
  - Main Wind Force - Resisting System
  - Basic Wind Speed, (3 sec gust), V = 100 mph
  - Exposure Classification - C
  - Importance Factor - I = 1.00
  - Velocity Pressure Exposure Coefficient, Kz = 0.70
  - Wind Directionality Factor, Kd = 0.98
  - Topographical Factor, Kzt = 1.00
  - Product of Internal Pressure Coefficient and Gust Factor, GCpI = ±0.18
  - Gust Effect Factor, G = 0.85
  - External Pressure Coefficient, Cp = varies
  - Windward Wall, Cp = 0.85
  - Leeward Wall, Cp = -0.50
  - Side Wall, Cp = -0.70
  - Velocity Pressure, qp = 0.00256 x Kz x Kzt x Kd x V2 x I = 21 psf
  - Design Wind Pressure, p = q x (G x Cp) - qi x (GCpI) use 16 psf
- Earthquake load:
  - Site classification - C
  - Occupancy Category, General Building - I
  - Seismic Use Group, I
  - Occupancy Importance Factor, I = 1.0
  - Seismic Design Category = B

Earthquake loads for single-family residences are exempt for SDc = B

FOUNDATION

- Footings shall bear on sound bedrock, undisturbed virgin soil, free of frost, mud, or ice, or controlled fill.
- The Building Official shall inspect and approve the soil below all footings. Inspections shall be made prior to tamping the soil or setting footing forms.
- Footing sub-grade shall be compacted using a vibratory tamper or a jumping soil rammer after the soil has been inspected and approved.
- The Contractor shall be responsible for all dewatering, shoring, sheeting, or bracing required to maintain a safe, dry, and stable excavation.
- No footings shall be placed in water.
- Soil adjacent to and below footings shall be kept from freezing at all times.
- Provide a granular sub-base under all slabs on grade. Where slab is within a heated space, the sub-base shall be 6 inches of compacted 3/4" crushed stone or bank run gravel with a maximum size of 2 inches. Where the slab is exposed to frost, the sub-base shall be 6 inches of 3/4 inch crushed stone.
- The Contractor shall verify the location of all underground utility lines, sewers, and fuel storage tanks to avoid any damage to these. Contractor shall contact "Call Before You Dig" prior to any excavation.
- Backfill for foundation walls and retaining walls shall be compacted granular soil with not more than 10% passing the #200 sieve. If on-site soil does not meet this specification, the Contractor shall bring in soil from off-site at his own expense.
- Where footings are below the groundwater elevation, place 6 inches of crushed stone under footings. Crushed stone shall be placed after the subsoil has been inspected, approved, and tamped.

CAST-IN-PLACE CONCRETE

- Concrete strength at 28 days:
  - 3,000 psi for foundation footings and walls
  - 3,500 psi for concrete slabs-on-grade.
- All-entrain all concrete, except for concrete for interior slabs-on-grade.
- Reinforcing steel: ASTM A615 grade 60.
- Concrete work shall be in accordance with ACI 301-99 and ACI 318-02.
- Maximum slump:
  - 4 inches for slabs
  - 5 inches for all other concrete.
- Minimum cover on reinforcing steel:
  - concrete cast against the earth 3"
  - concrete exposed to earth or weather #6 and larger 2"
  - #5 and smaller 1 1/2"
  - interior slabs and walls 3/4"
- Saw cut control joints in slabs on grade at 30'-0" on center maximum. Joints shall be cut within 24 hours of slab pour. Stop reinforcing mesh 6" on either side of joints. Location of joints shall be approved by the architect.
- Interior floor slab shall receive a steel trowel finish. Exterior slabs and sidewalks shall receive a coarse broom finish. Coordinate with architect.
- Grout and rub all exposed surfaces of foundation walls within 48 hours of pour.
- Admixtures containing calcium chloride shall not be used.
- Apply curing compound to slabs immediately following final troweling.
- The testing laboratory shall cast 4 test cylinders for each 50 yards or each day's pour. Slump tests shall be performed when cylinders are cast. Test 1 cylinder at 7 days and 3 cylinders at 28 days.

STRUCTURAL STEEL:

- ASTM A36 for angles, channels, plates, and miscellaneous sections
- ASTM A500 GRADE B For tube shapes
- ASTM A501 OR A53 For structural pipe
- Anchor rods: astm F1554, 3/4-inch diameter
- Shop primer: One coat of red oxide rust inhibitive primer, except for members which are to be encased in concrete, spray fireproofed, or within 2 inches of field welds.
- Steel work shall be in accordance with AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
- Welders shall be certified in accordance with aws standard qualification procedures.
- Welding electrodes: ASTM A233, E70xx series for all structural connections.

ENGINEERED LUMBER

- Laminated veneer lumber, LVL, shall be Microllam as manufactured by Weyerhaeuser or Equivalent.
  - LVL material shall have the following minimum allowable stresses:
    - Flexural stress, Fb = 2,600 psi.
    - Modulus of elasticity, E = 1,900,000 psi.
    - Compression perpendicular to grain, Fc⊥ = 750 psi
    - Compression parallel to grain, Fc|| = 2,510 psi
    - Horizontal shear, Fv = 285 psi.
    - Tension Street, Ft = 1,555 psi
- Parallel strand lumber, PSL, by Weyerhaeuser or Equivalent
  - PSL material shall have the following minimum allowable stresses:
    - Flexural stress, Fb = 2,900 psi.
    - Modulus of elasticity, E = 2,00,000 psi.
    - Compression perpendicular to grain, Fc⊥ = 750 psi
    - Compression parallel to grain, Fc|| = 2,900 psi
    - Horizontal shear, Fv = 290 psi.
    - Tension Street, Ft = 2,025psi
- P.T Parallel strand lumber, PSL shall be Wolmanized Parallam as manufacture by Weyerhaeuser, service level 2 or equivalent
  - PSL material shall have the following minimum allowable stresses:
    - Flexural stress, Fb = 1,827 psi.
    - Modulus of elasticity, E = 1,460,000 psi.
    - Compression perpendicular to grain, Fc⊥ = 368 psi
    - Compression parallel to grain, Fc|| = 1,508 psi
    - Horizontal shear, Fv = 197 psi.
    - Tension Street, Ft = 1,397 psi
- Unless otherwise noted on drawings, multiple piles of flush LVL or PSL material shall be bolted together with (2) rows of 5/8 inch diameter, A307 thru-bolts, spaced at 16 inches on center. Boltholes are to be the same diameter as the bolt, and be located 2 1/2 inches from the top and bottom of the member. Washers should be used under the head and nut of the bolts. Do not tighten bolts to the point of crushing wood fibers. Bolts are to be snug tight. Members noted as dropped shall be connected with (3) rows of 1/8d common wire nails at 12" on center.

ROUGH CARPENTRY

- All framing lumber and plywood shall be clearly marked with a grade stamp.
- All wood framing in contact with concrete or masonry shall be ACQ preservative treated in accordance with AWPA Standards.
- Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber and plywood and other panels; provide air circulation within and around stacks and under temporary coverings including polyethylene and similar material.
- Provide lumber with 19% maximum moisture content at time of enclosure for sizes 2" or less in nominal thickness, unless otherwise indicated.
- Wall studs: use (2x6's, 10' and shorter) provide Douglas Fir-Larch, "Stud" grade lumber or better, unless otherwise indicated.
- For structural framing (2" to 4" thick, 5" and wider), provide Douglas Fir-Larch No. 2 grade or better, except preservative treated lumber shall be Southern Pine No. 2 or better.
- All plywood shall be manufactured from a Group 1 or Group 2 species.
- Combination Subfloor-Underlayment: APA RATED STURD-I-FLOOR.
- Exposure Durability Classification: EXPOSURE 1.
- Span Rating: As required to suit joist spacing indicated or as noted on drawings.
- Edge Detail: Tongue and groove.
- Wall Sheathing: APA RATED SHEATHING.
- Exposure Durability Classification: EXTERIOR.
- Span Rating: 12/0, 16/0, 20/0 for stud spacing of 16" or less.
- Roof Sheathing: APA RATED SHEATHING.
- Exposure Durability Classification: EXTERIOR.
- Span Rating: 24/0.

- Fasteners and Anchorages: Provide size, type, material and finish as indicated and as recommended by applicable standards, complying with applicable Federal Specifications for nails, staples, screws, bolts, nuts, washers and anchoring devices. Provide metal hangers and framing anchors of the size and type recommended by the manufacturer for each use including recommended nails.

- Where rough carpentry work is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners and anchorages with a hot-dip zinc coating (ASTM A 153).

- Sill Sealer Gaskets: Glass fiber resilient insulation fabricated in strip form for use as a sill sealer; 1" nominal thickness compressible to 1/32"; selected from manufacturer's standard widths to suit width of sill members indicated.

ROUGH CARPENTRY CONT.

- Carefully select all members. Select individual pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing or making connections.
- Cut out and discard all defects which will render a piece unable to serve its intended function. Lumber may be rejected by the Engineer, whether or not it has been installed, for excessive warp, twist, bow, crook, mildew, fungus, or mold, as well as for improper cutting and fitting.
- Do not shim sills, joists, studs, or other framing members.
- Set carpentry work to required levels and lines, with members plumb and true and cut and fitted.
- Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by recognized standards.
- Countersink nail heads on exposed carpentry work and fill holes.
- Use common wire nails or spikes of the dimensions shown on the nailing schedule, except as otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; pre-drill as required.
- Drill bolt holes 1/16 inch larger in diameter than the bolts being used. Drill straight and true from one side only. Use washers under head and nut. Do not tighten nut to the point of crushing wood fibers.
- Lag bolts and wood screws shall be screwed into place and not driven with a hammer.

STUD FRAMING

- Make all studs single length, unspliced, and platform framed, unless notes to be balloon framed on plan.
- Unless otherwise shown, use 2x6 studs on exterior walls spaced 16" o.c..
- Provide single bottom plate and double-top plates at all walls.
- Construct corners and intersections with not less than 3 studs. Provide miscellaneous blocking and framing as shown and as required for support of facing materials, fixtures, specialty items and trim.
- Provide continuous horizontal blocking row at mid-height of single-story partitions over 8' high, at midpoint of multi-story partitions, and at all horizontal plywood joints.

- Plywood Installation
  - Place all plywood with face grain perpendicular to supports and continuous over at least two supports. Center joints accurately over supports and stagger the end joints. Install horizontal 2x blocking, to match wall framing at all horizontal plywood joints
  - Fill and sand edge joints of subflooring-underlayment receiving resilient flooring.
  - Allow 1/8" spacing at panel ends and 1/4" at panel edges for square edge panels. Allow 1/8" spacing at panel ends and edges for tongue and groove edge panels.

State Of Connecticut  
Department Of Housing  
505 Hudson Street  
Hartford, Connecticut 06106

Application No. 2088  
CONSTRUCTION OF NEW FOUNDATIONS AND  
RAISING EXISTING RESIDENCE  
FOR  
BRIAN R. HEALY  
15 SIBLEY LANE  
East Haven, Connecticut 06512

STRUCTURAL NOTES  
AND  
SOIL BORING LOGS

PROJECT NO.: 1524-44 SCALE AS NOTED

DRAWING NO.: