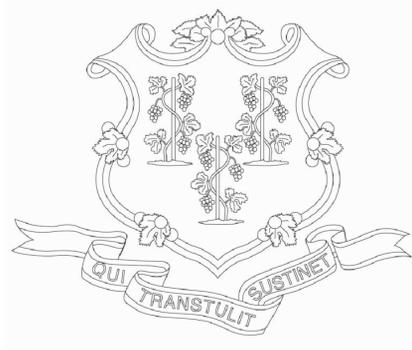


# STATE OF CONNECTICUT DEPARTMENT OF HOUSING CDBG–COMMUNITY DEVELOPMENT BLOCK GRANT SUPERSTORM SANDY DISASTER RECOVERY PROGRAM



**SPONSOR**  
State of Connecticut  
Department of Housing  
505 Hudson Street  
Hartford, Connecticut 06106

**OWNER**  
Application No. 5053  
Wladyslaw Gebuza  
39 Cooper Avenue  
Milford, Connecticut 06460

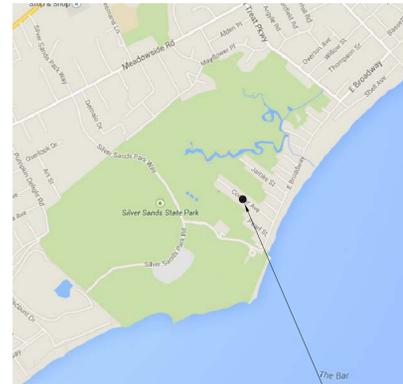
**ARCHITECT:**  
**Lothrop Associates LLP**  
333 Westchester Avenue, White Plains, New York 10604  
510 Clinton Square, Rochester, New York 14620  
125 Half Mile Road, Suite 200, Red Bank, New Jersey 07701  
100 Pearl Street, 14th Floor, Hartford, Connecticut 06103

**ENVIRONMENTAL ENGINEER:**  
**Fuss & O'Neill EnviroScience, LLC**  
146 Hartford Road, Manchester, Connecticut 06040  
56 Quarry Rd, Trumbull, Connecticut 06611

**STRUCTURAL ENGINEER:**  
**Cuoco Structural Engineers, LLC**  
60 Katona Drive, Fairfield, Connecticut 06824

**SURVEYOR:**  
**Freeman Companies, LLC**  
36 John Street, Hartford, Connecticut 06106

## AREA MAP



PROJECT SITE

## GENERAL NOTES

- DO NOT OBSTRUCT ACCESS TO THE SITE.
- PROTECT ALL AREAS FROM FALLING DEBRIS.
- MAINTAIN ALL EXISTING SITE ELEMENTS (PAVING, FENCES, BUILDINGS, ETC.) AND PLANTINGS & LAWNS. CONTRACTOR SHALL REPLACE OR REPAIR ALL DAMAGE.
- MAINTAIN A SECURED AREA FOR ALL CONSTRUCTION MATERIALS & EQUIPMENT STORED ON SITE.
- PROVIDE TARPED DUMPSTER FOR REMOVAL OF ALL RUBBISH AND CONSTRUCTION DEBRIS. DUMPSTER SHOULD BE ADEQUATELY PROTECTED DURING PROJECT. CONTRACTOR IS RESPONSIBLE FOR ALL TRASH PLACED IN AND AROUND DUMPSTER. DUMPSTER PERMIT COSTS TO BE INCLUDED IN THE BASE BID.
- WORK SHALL COMPLY WITH ALL STATE & LOCAL CODES, REGULATIONS AND ORDINANCES.
- AT PROJECT COMPLETION, REMOVE ALL CONSTRUCTION DEBRIS AND PATCH/REPAIR ALL SURFACES DAMAGED BY CONSTRUCTION. THOROUGHLY CLEAN ALL WORK AREAS OF ALL DEBRIS RESULTING FROM WORK OF THIS CONTRACT.
- DISCONNECT AND RECONNECT ALL UTILITIES AS REQUIRED. COORDINATE WITH UTILITY COMPANIES AND AUTHORITIES HAVING JURISDICTION. EXTEND UTILITIES TO NEW CONNECTION LOCATIONS.
- THE SPECIFICATION MANUAL IS AN INTEGRAL PART OF THESE DOCUMENTS AND SHALL BE CONSIDERED A COMPONENT OF THESE DOCUMENTS AS IF INCLUDED HEREIN.
- DO NOT SCALE DRAWINGS
- ALL DIMENSIONS TAKEN TO FACE OF FRAMING AND FACE OF CONCRETE/CONCRETE MASONRY UNIT

## DRAWING LIST

### ARCHITECTURAL

- G-001 COVER SHEET
- G-002 SITE PLAN, ZONING DATA AND NOTES
- AD-101 DEMOLITION PLAN AND ELEVATIONS
- A-101 FOUNDATION AND FIRST FLOOR PLANS
- A-201 BUILDING ELEVATIONS
- A-301 DETAILS

### STORM WATER

- SW-101 STORM WATER MANAGEMENT PLAN

### STRUCTURAL

- S-101 FOUNDATION PLAN, FIRST FLOOR FRAMING PLAN, PILE PLAN
- S-102 STRUCTURAL SECTIONS
- S-103 STRUCTURAL SECTIONS AND DETAILS
- S-104 STRUCTURAL NOTES AND SOIL BORING LOGS

## ABBREVIATIONS

AFF	ABOVE FINISH FLOOR	HM	HOLLOW METAL
ADJ	ADJACENT	HORIZ	HORIZONTAL
ALUM	ALUMINUM	HWH	HOT WATER HEATER
APPROX	APPROXIMATE	JB	JUNCTION BOX
ARCH	ARCHITECTURAL	LDR	LEADER
BTM	BOTTOM	LO	LINE OF
B.O.	BOTTOM OF	LVL	LAMINATE VENEER LUMBER
CJ	CEILING JOISTS	MAX	MAXIMUM
CL	CENTERLINE	MC	MEDICINE CABINET
CLOS	CLOSET	MI	MIRRORED MEDICINE CABINET
CMU	CONCRETE MASONRY UNIT	MIN	MINIMUM
COL	COLUMN	MO	MASONRY OPENING
CONC	CONCRETE	MV	MICROWAVE
CONT	CONTINUOUS	NIC	NOT INCLUDED IN CONTRACT
COORD	COORDINATE	OA	OVERALL
CT	CERAMIC TILE	OC	ON CENTER
DW	DISHWASHER	OPP	OPPOSITE
DWG	DRAWING	PSL	PARALLEL STRAND LUMBER
E/F	EXHAUST FAN	PT	PRESSURE TREATED
EX	EXISTING	REF	REFRIGERATOR
EL	ELEVATION	REINF	REINFORCED
EP	ELECTRICAL PANEL	RO	ROUGH OPENING
EQ	EQUAL	RM	ROOM
EQUIP	EQUIPMENT	RR	ROOF RAFTERS
EQUIV	EQUIVALENT	SD	SMOKE DETECTOR
F/D	FLOOR DRAIN	SIM	SIMILAR
FIN	FINISH	SPEC	SPECIFICATIONS
FDN	FOUNDATION	STD	STANDARD
FJ	FLOOR JOISTS	STL	STEEL
FLR	FLOOR	STRUCT	STRUCTURAL
FLHB	FROST PROOF HOSE BIB	T.O.	TOP OF
FV	FLOOD VENT	TYP	TYPICAL
GALV	GALVANIZED	VCT	VINYL COMPOSITE TILE
GB1	GRADE BEAM 1	VERT	VERTICAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	VIF	VERIFY IN FIELD
GWB	GYPSON WALL BOARD	W/D	WASHER/ DRYER COMBO
GYP	GYPSON	WD	WOOD
HDWD	HARDWOOD FLOORING	WP	WEATHERPROOF
		WWF	WELDED WIRE FABRIC
		U/C	UNDER CABINET (LIGHTING)

## SYMBOLS LEGEND

	EXISTING PARTITION/ WALL TO REMAIN		DETAIL TAG: SECTION NUMBER DRAWING NUMBER
	NEW PARTITION/ WALL		SECTION KEY: SECTION NUMBER DRAWING NUMBER
	NEW FOUNDATION WALL AND FOOTINGS		ELEVATION KEY: ELEVATION NUMBER DRAWING NUMBER
	EXISTING TO BE REMOVED		KEYED NOTE TAG
	EXISTING ITEM ABOVE		ROOF SLOPE
	EXISTING WINDOW TO REMAIN		REVISION
	NEW WINDOW		SETBACK LINE
	NEW DOOR		SILT BARRIER
	EXISTING DOOR TO REMAIN		CONSTRUCTION FENCE
	NEW "SMART VENT" FLOOD VENT		PROPERTY LINE
	PLYWOOD		GRAVEL
	CONCRETE		WOOD DECKING
	RIGID INSULATION		NEW GAS METER
	NEW WATER METER		

## ELEC./ UTILITY LEGEND

	ELECTRICAL PANEL		CEILING MOUNTED EXHAUST FAN WITH LIGHT
	DUPLEX OUTLET		UNDER CABINET TASK LIGHTING
	DUPLEX OUTLET - GROUND FAULT CIRCUIT INTERRUPTER		RECESSED DOWN LIGHT
	DUPLEX OUTLET - STOVE		WALL MOUNTED LIGHT SCONCE
	DUPLEX OUTLET - DISHWASHER		WALL MOUNTED EXTERIOR LIGHT FIXTURE
	DUPLEX OUTLET - MICROWAVE		CEILING MOUNTED FAN WITH LIGHT
	DUPLEX OUTLET - WEATHER PROOF		
	TV/ CABLE JACK		
	TELEPHONE/ DATA JACK		
	GAS CONNECTION		
	SWITCH		
	3 WAY SWITCH		
	WIRING		
	SMOKE DETECTOR, HARDWIRED, INTERCONNECTED		
	CARBON MONOXIDE DETECTOR		

# 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:



1	29 JULY 2015	ISSUED FOR BID
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ISSUE NO.	ISSUE DATE	DESCRIPTION
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State Of Connecticut  
Department Of Housing  
505 Hudson Street  
Hartford, Connecticut 06106

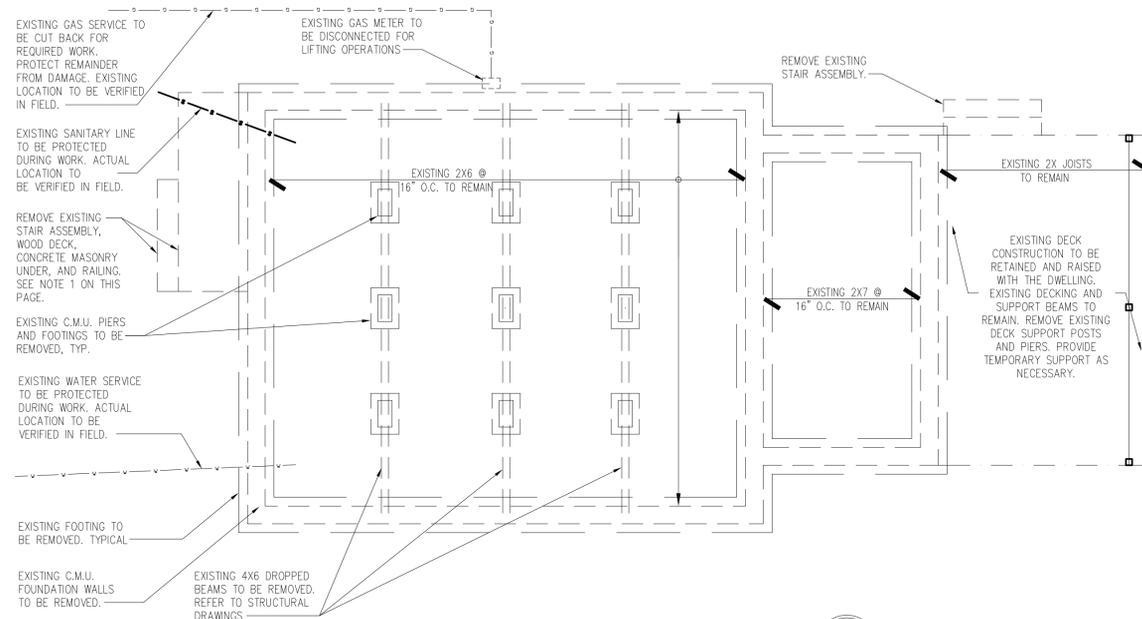
Construction of New Foundation  
and Elevate Existing Residence  
for  
Wladyslaw Gebuza  
Application No. 5053  
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Milford, Connecticut 06460

## COVER SHEET

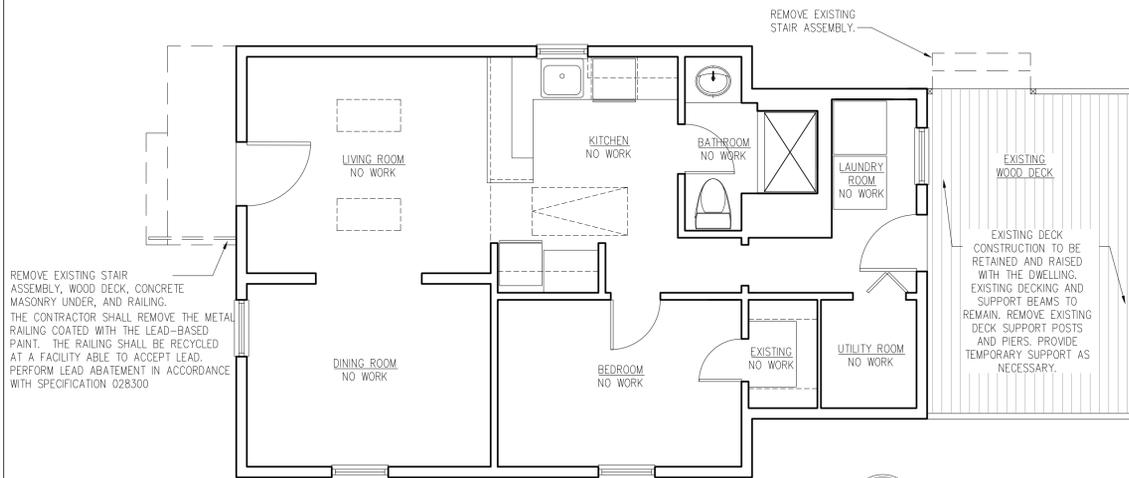
PROJECT NO.: 1524-42 SCALE AS NOTED

DRAWING NO.:  
**G-001**



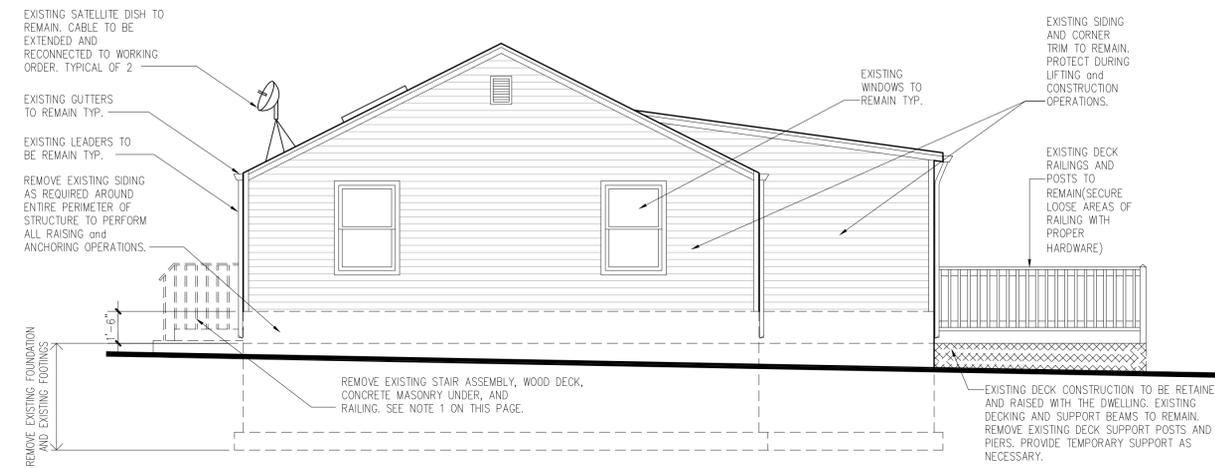


**1** FOUNDATION DEMOLITION PLAN  
1/4" = 1'-0"

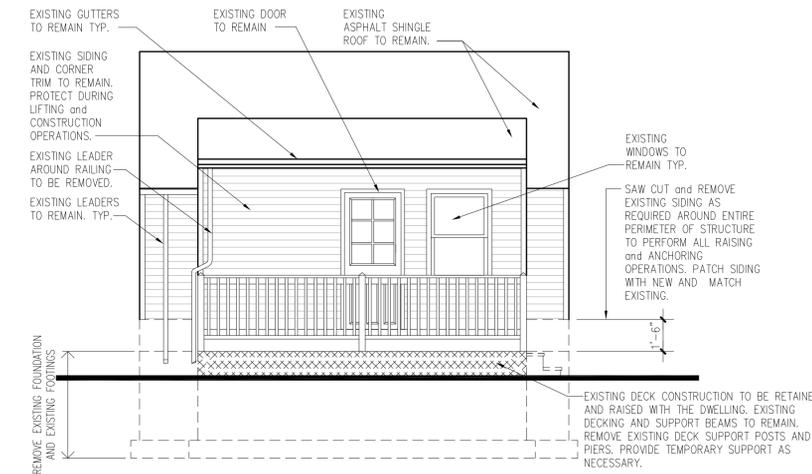


**3** FIRST FLOOR DEMOLITION PLAN  
1/4" = 1'-0"

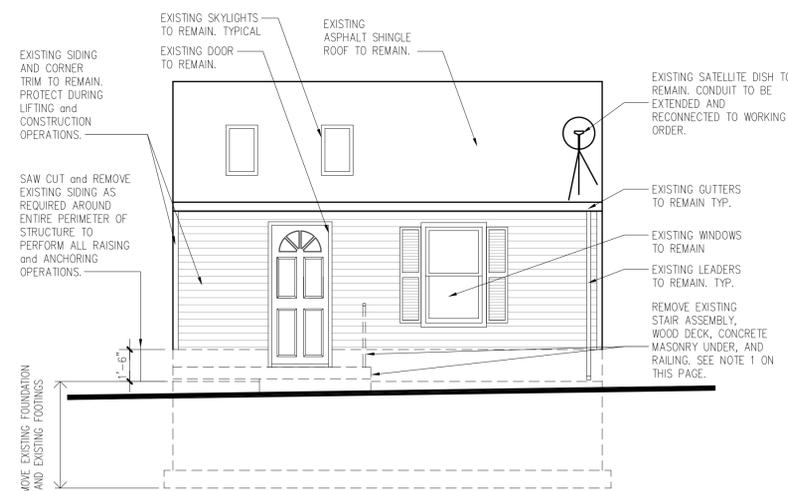
EXISTING F.F. EL: +5.84'



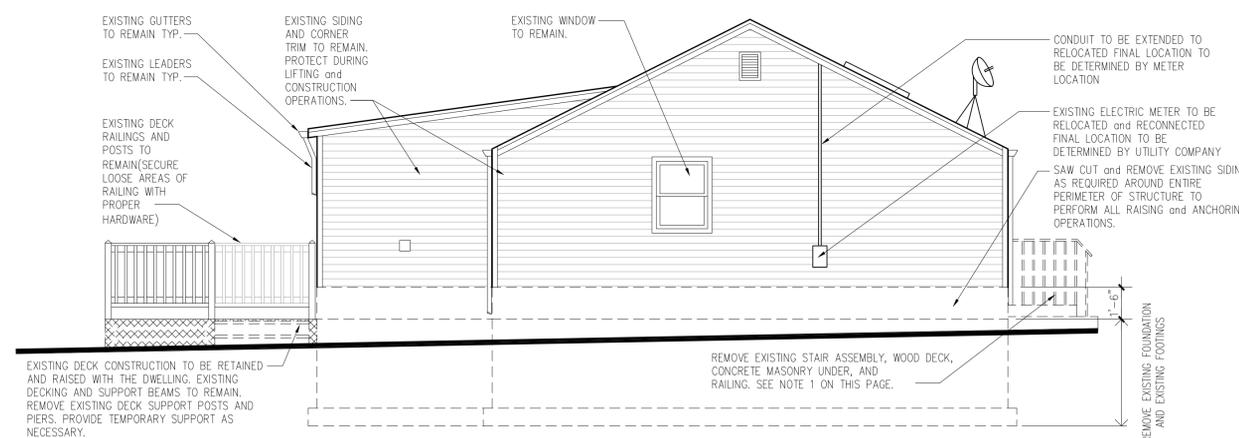
**2** NORTH ELEVATION DEMOLITION  
1/4" = 1'-0"



**4** EAST ELEVATION DEMOLITION  
1/4" = 1'-0"



**5** WEST ELEVATION DEMOLITION  
1/4" = 1'-0"



**6** SOUTH ELEVATION DEMOLITION  
1/4" = 1'-0"

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Application No. 5053  
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## DEMOLITION PLAN AND ELEVATIONS

PROJECT NO.: 1524-42 SCALE AS NOTED

DRAWING NO.:

# AD-101



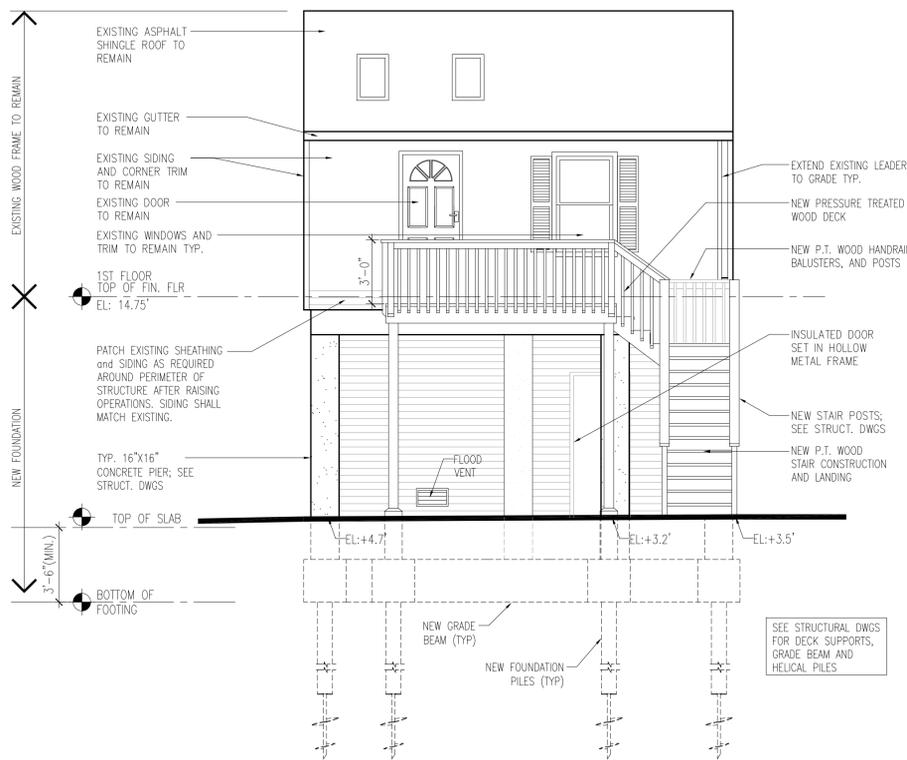
**STRUCTURAL ENGINEER:**



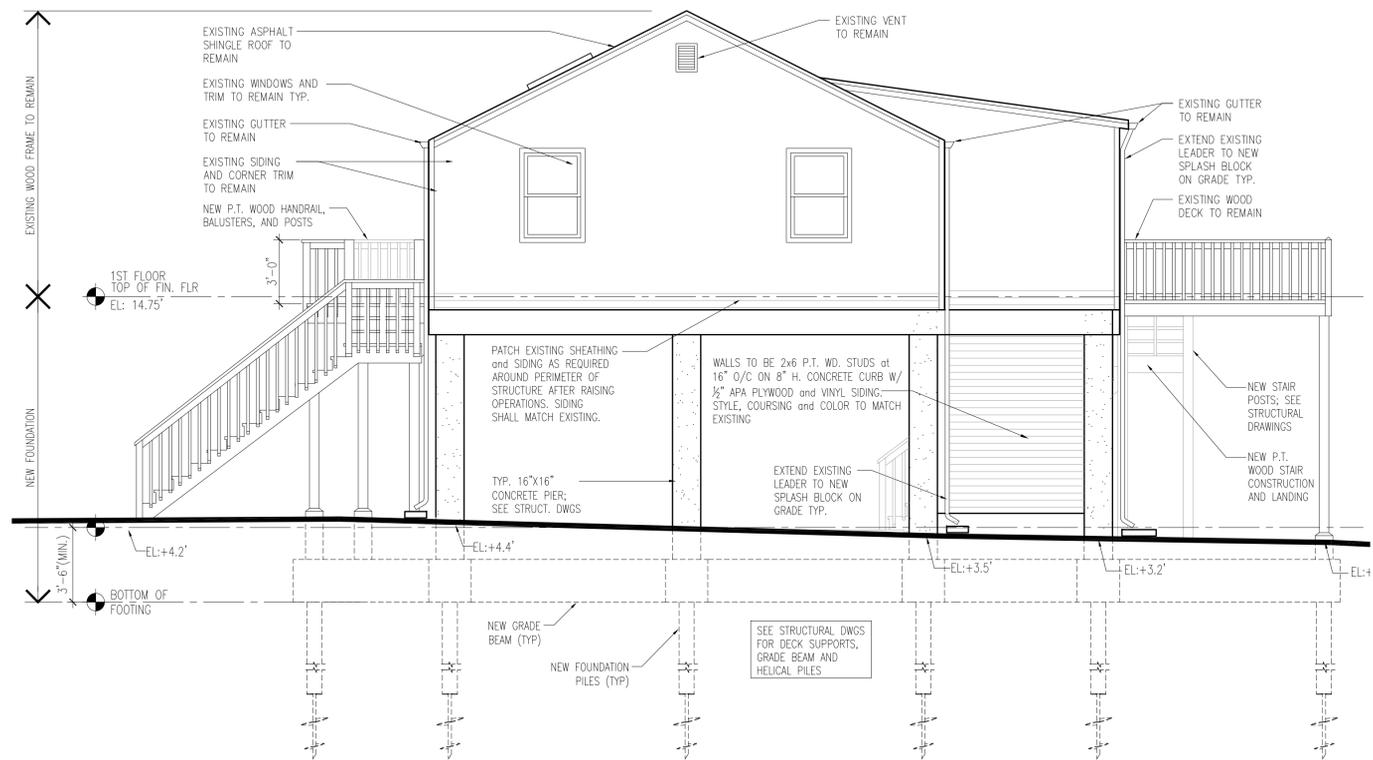
**SURVEYOR:**



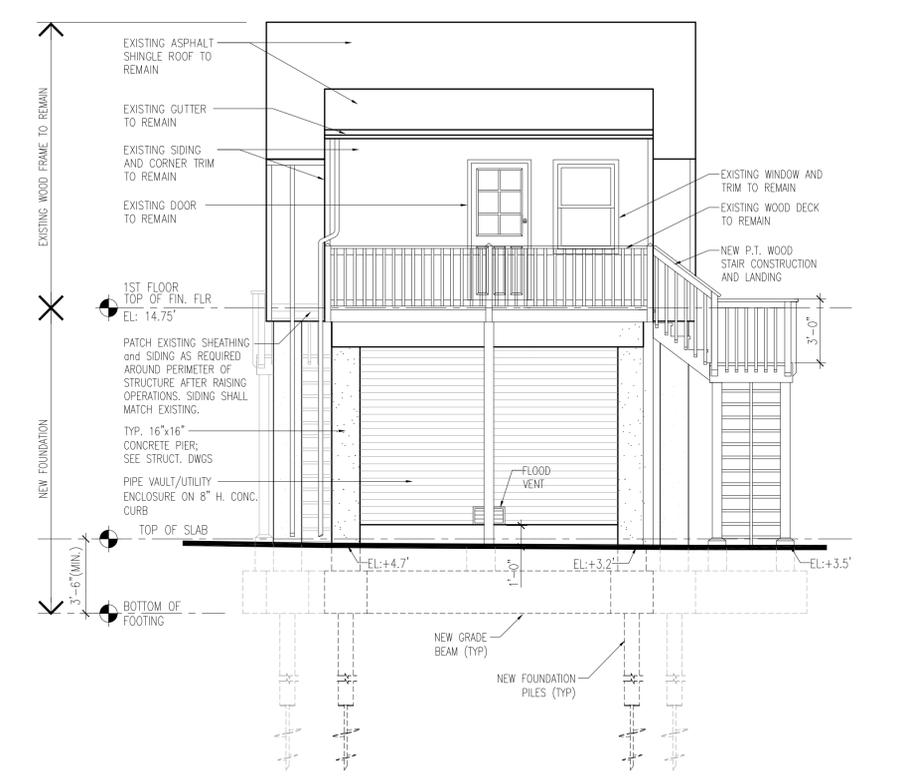
**ENVIRONMENTAL ENGINEER:**



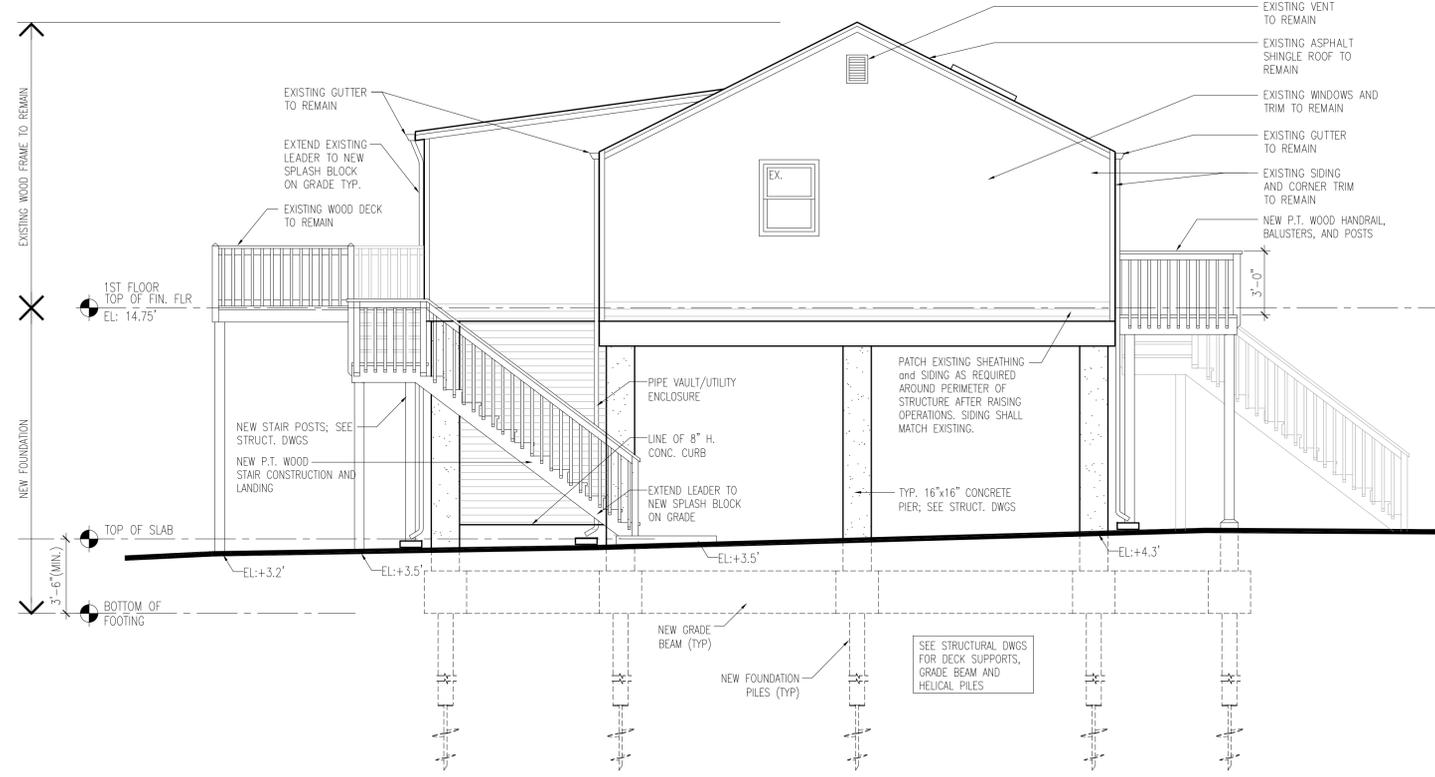
**1 WEST ELEVATION**  
 1/4" = 1'-0"



**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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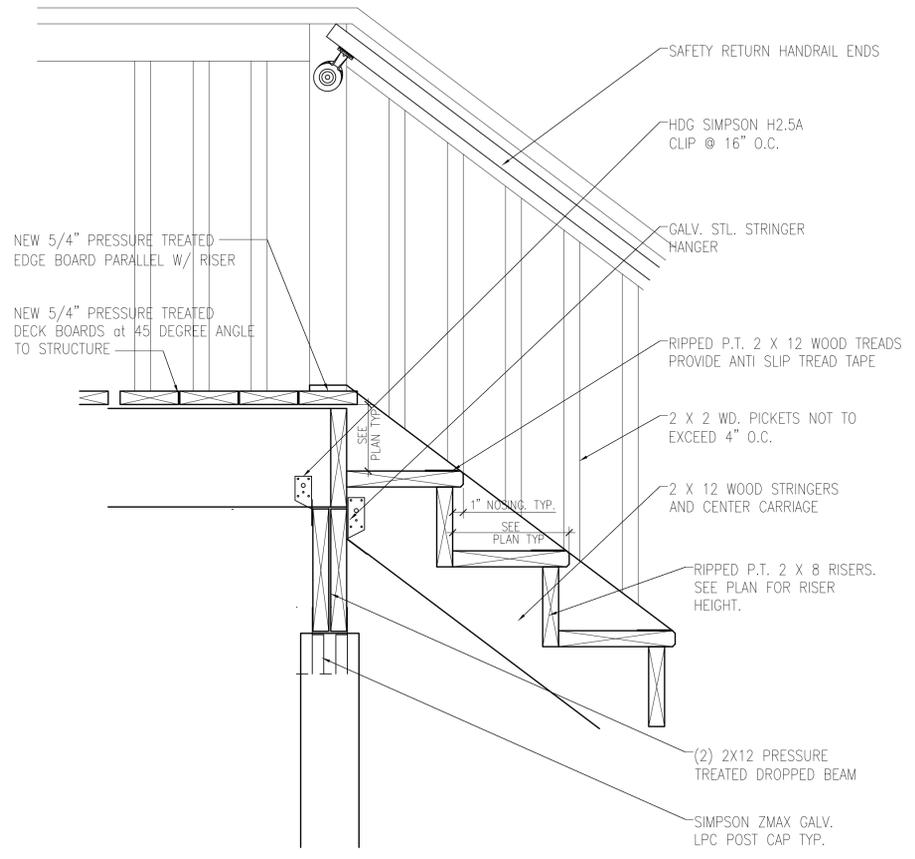
Construction of New Foundation  
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**BUILDING ELEVATIONS**

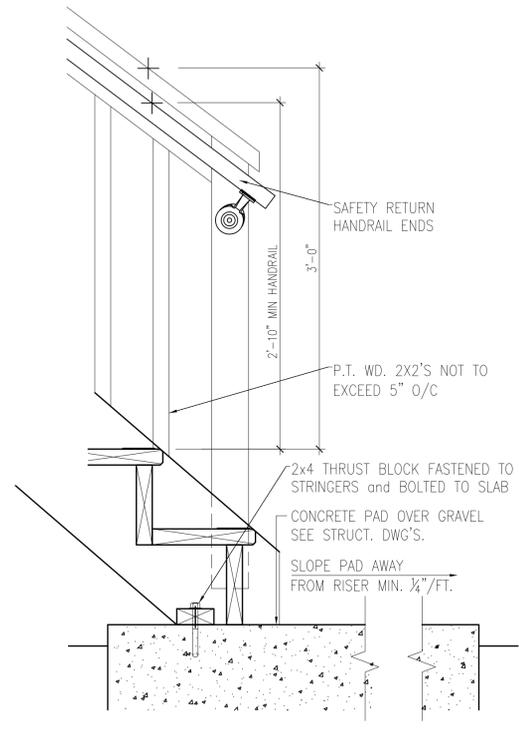
PROJECT NO.: 1524-42      SCALE      AS NOTED

DRAWING NO.:

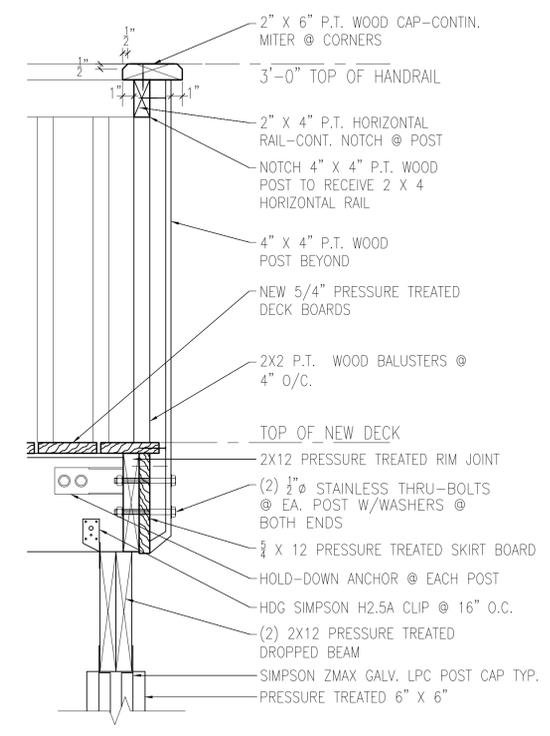
**A-201**



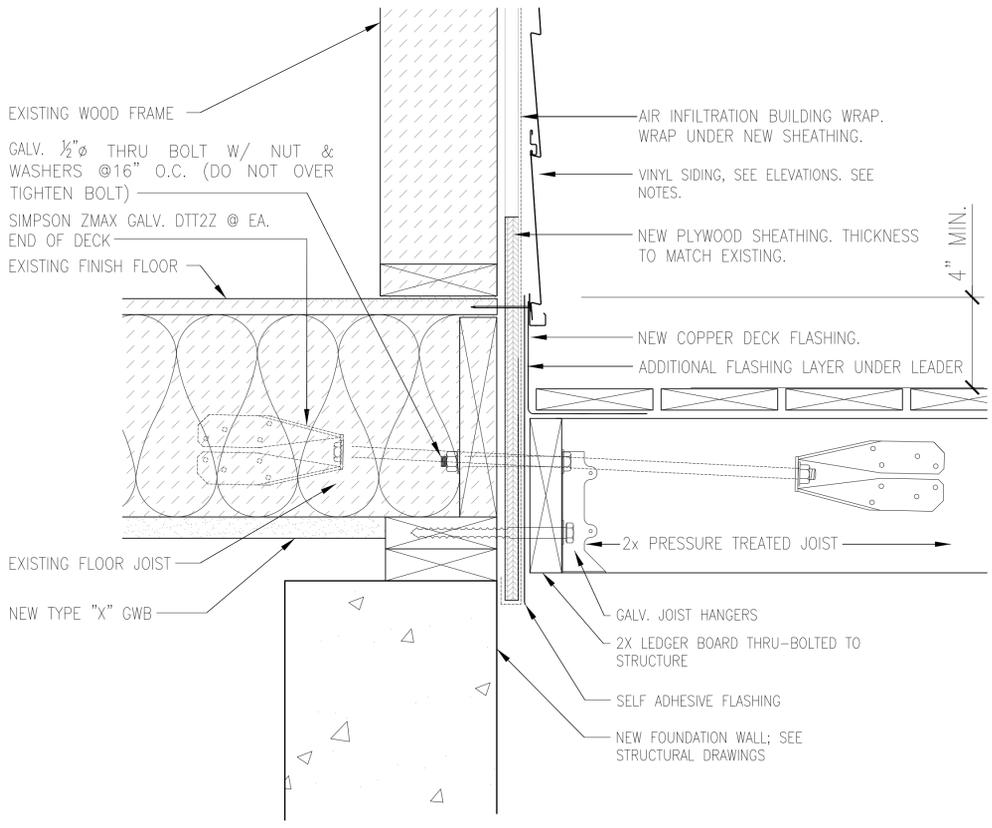
1 EXTERIOR STAIR DETAIL AT TOP  
1 1/2" = 1'-0"



2 EXTERIOR STAIR DETAIL AT BOTTOM  
1 1/2" = 1'-0"



3 DECK RAILING DETAIL AT DECK  
1 1/2" = 1'-0"

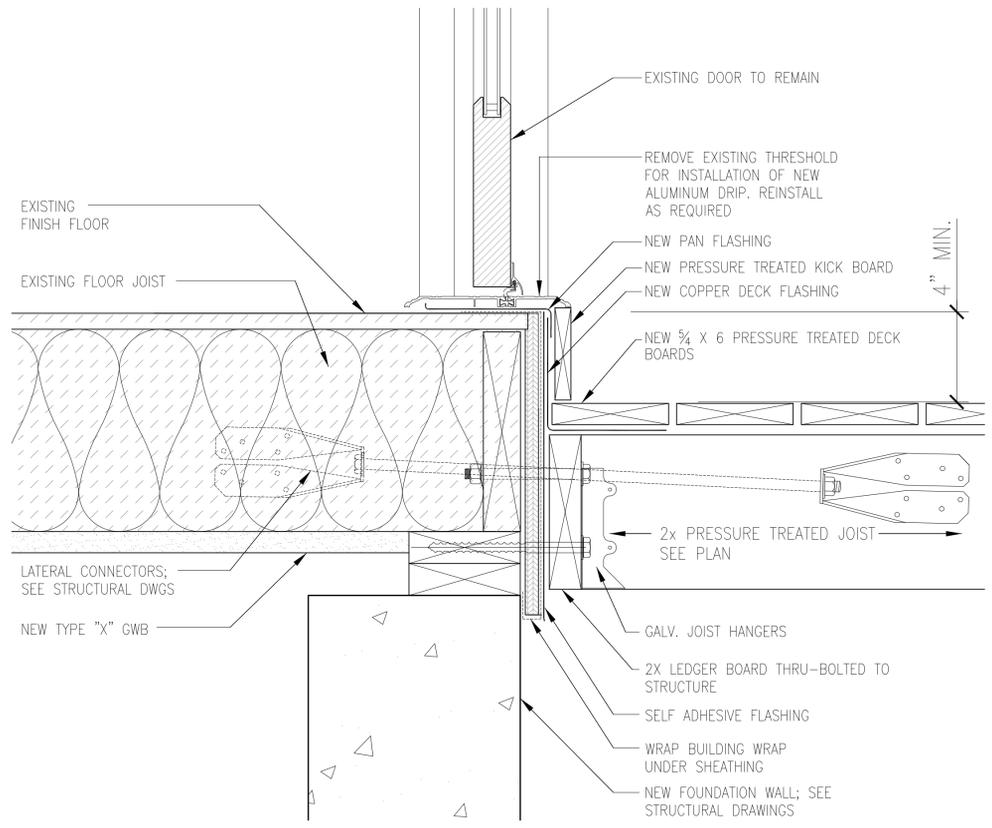


4 DECK LEDGER DETAIL  
3" = 1'-0"

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



5 DECK LEDGER DETAIL AT DOOR  
3" = 1'-0"

STRUCTURAL ENGINEER:



SURVEYOR:



ENVIRONMENTAL ENGINEER:



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Department Of Housing  
505 Hudson Street  
Hartford, Connecticut 06106

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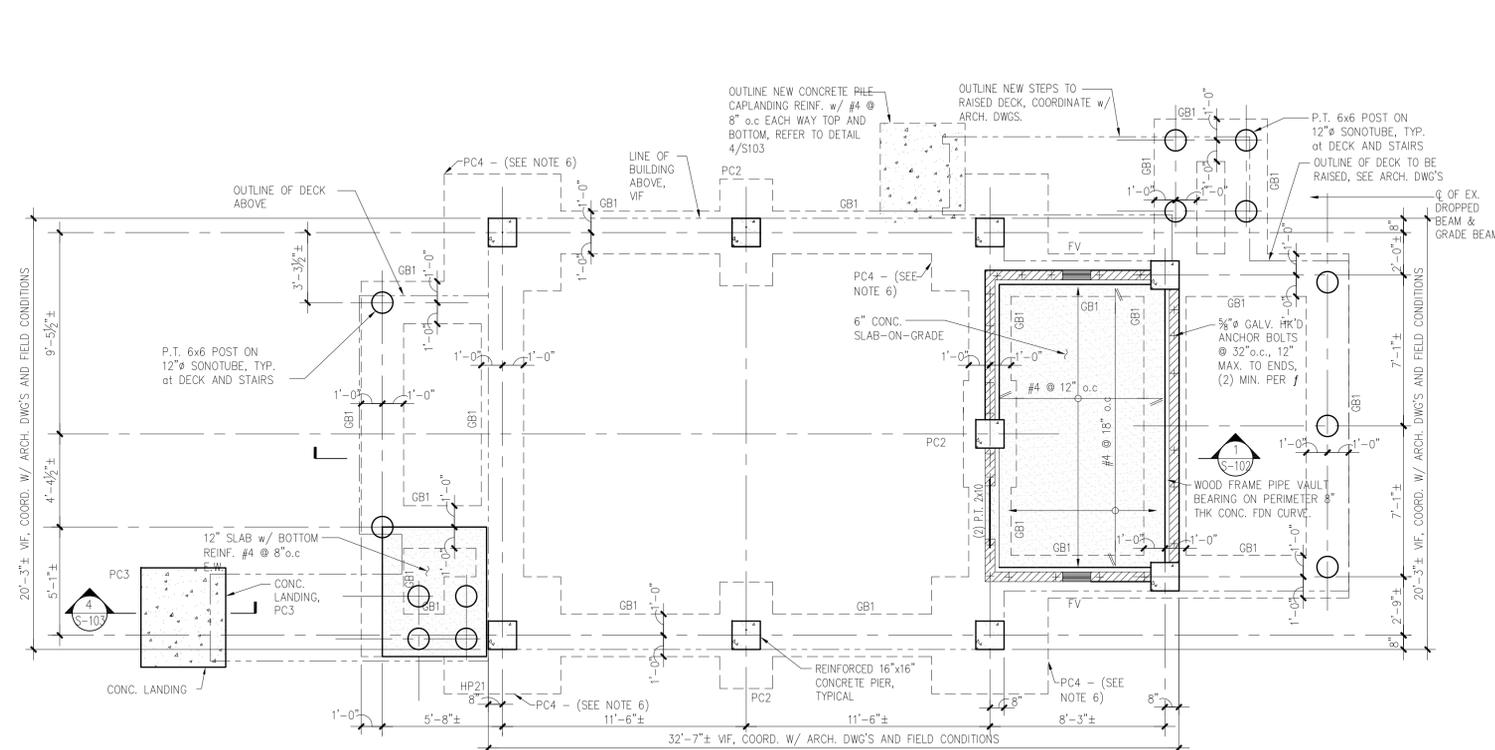
DETAILS

PROJECT NO.: 1524-42	SCALE	AS NOTED
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DRAWING NO.:

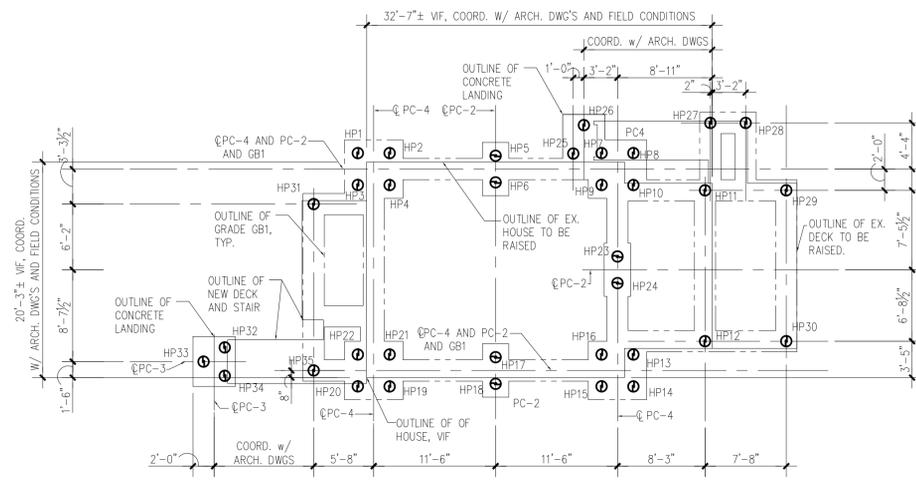
A-301





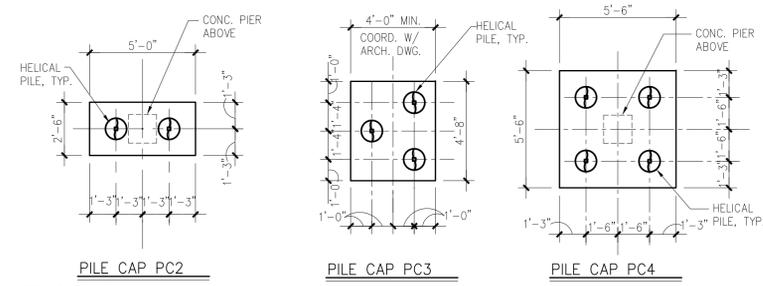
- NOTES:**
- B-# DESIGNATES SOIL BORING LOCATION, REFER TO SOIL BORING LOG, DRAWING S-104.
  - COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND SITE CONDITIONS.
  - GB1 DENOTES 2'-0"x2'-0" GRADE BEAM REINFORCED WITH (3)-#5 TOP AND BOTTOM CONTINUOUS- SEE DETAIL.
  - COORDINATE SONOTUBE PIER LOCATIONS WITH ARCHITECTURAL DRAWINGS.
  - FV DENOTES FLOOD VENT, SEE ARCH. DWG'S.
  - PILES SUPPORTING PILE CAP "PC4" SHALL HAVE A PILE CAPACITY=20 kips COMPRESSION, 10 Kips UPLIFT.

**SMART VENT CALCULATION:**  
 (1) 8"x16" SMART VENT REQUIRED PER 200 SF OF BUILDING AREA  
 AREA TO BE DRAINED = 131 SF  
 131 SF / 200 SF PER VENT = .67 VENTS  
 (1) VENT REQUIRED, (2) VENTS PROVIDED

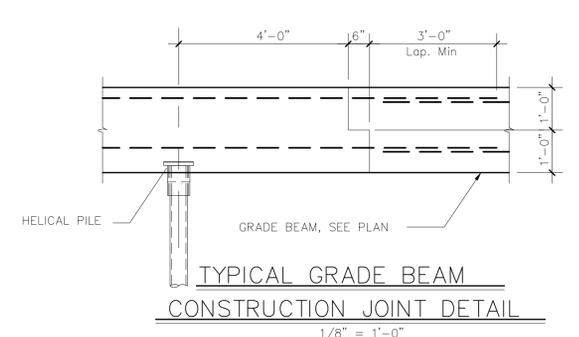


- NOTES:**
- HP-# DESIGNATES 20,000# ALLOWABLE COMPRESSION LOAD HELICAL PILE.
  - PC-# DENOTES PILE CAP.

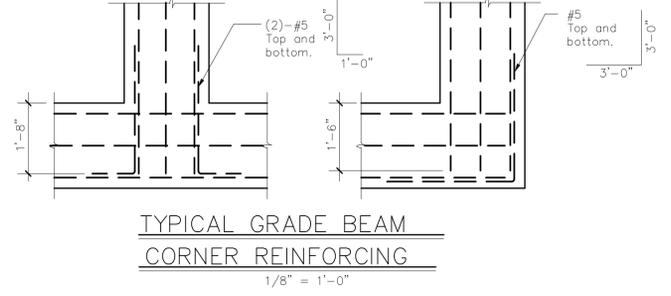
MARK	THICKNESS	REINFORCING	LOCATION
PC2	24"	(6)-#6 L.W. (5)-#6 S.W.	BOTTOM
PC3	24"	#4 @ 8" o.c EA. WAY	TOP AND BOTTOM
PC4	24"	(10)-#6 EA. WAY	TOP AND BOTTOM



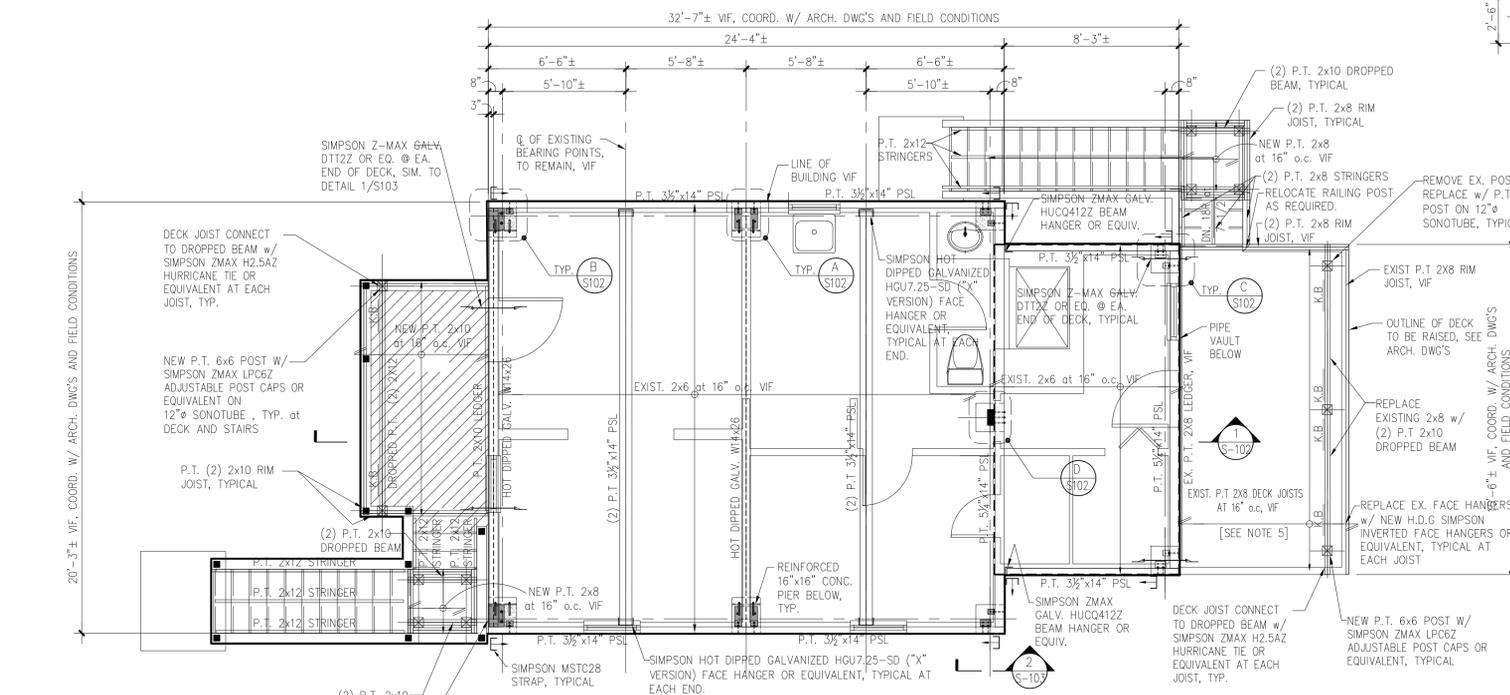
PILE CAP DETAILS  
 1/8" = 1'-0"



TYPICAL GRADE BEAM  
 CONSTRUCTION JOINT DETAIL  
 1/8" = 1'-0"



TYPICAL GRADE BEAM  
 CORNER REINFORCING  
 1/8" = 1'-0"



- NOTES:**
- COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND SITE CONDITIONS.
  - "K.B." DENOTES P.T. 3X4 KNEE BRACES. SEE SECTION ON SHEET S103.
  - "E" DESIGNATES NEW SIMPSON MSTC28 HOLD DOWN STRAP. MIN. (2) 2x... G.C TO VIF. ADD STUDS AS REQUIRED. SEE DETAIL 2 ON SHEET S103.
  - G.C TO VERIFY BOTTOM ELEVATION OF EXISTING FLOOR JOIST AND NOTIFY ENGINEER OF ANY DISCREPANCY.
  - G.C TO VERIFY EXISTING DECK FRAMING AND NOTIFY ARCH./DESIGN ENGINEER OF ANY DISCREPANCIES.

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 39 Cooper Avenue  
 Milford, Connecticut 06460

## FOUNDATION PLAN, FIRST FLOOR FRAMING PLAN, PILE PLAN

PROJECT NO.:	1524-42	SCALE	AS NOTED
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DRAWING NO.:

STRUCTURAL ENGINEER:



SURVEYOR:



ENVIRONMENTAL ENGINEER:



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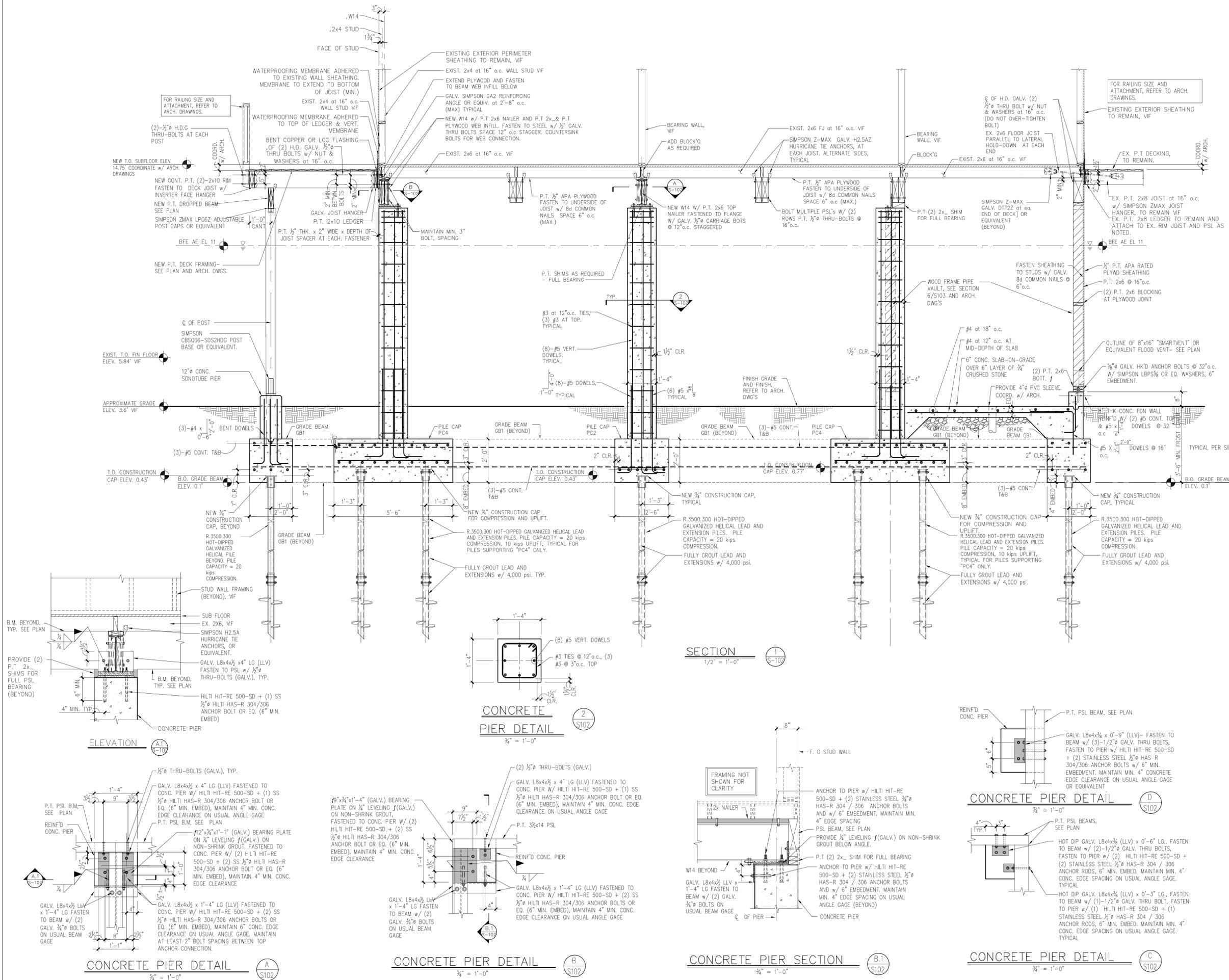
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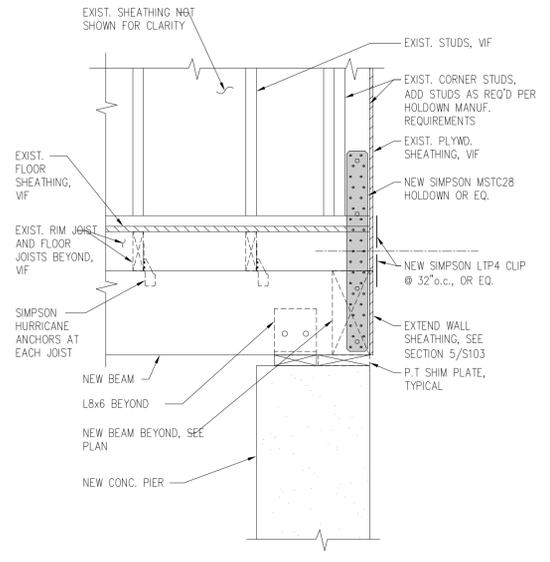
STRUCTURAL SECTIONS

PROJECT NO.: 1524-42 SCALE AS NOTED

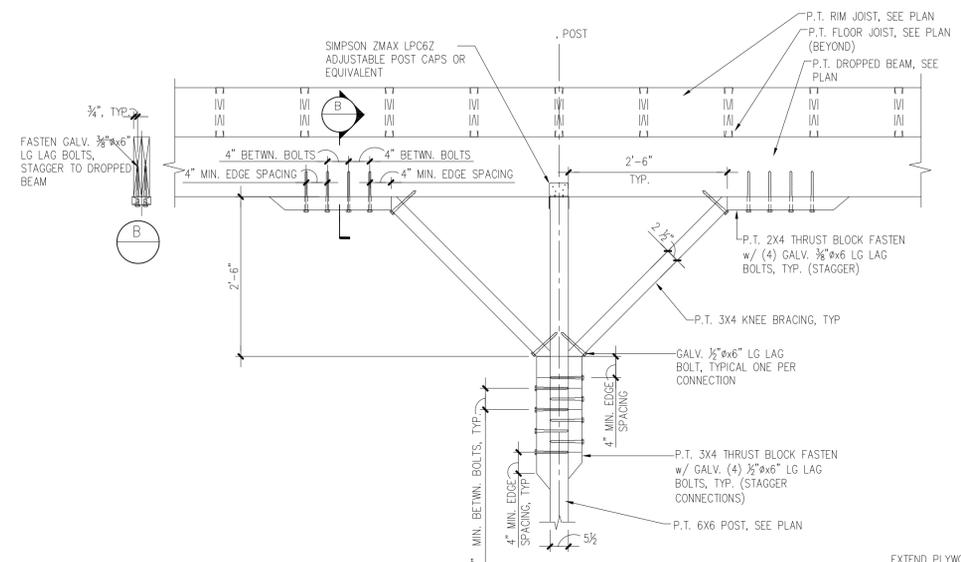
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S-102

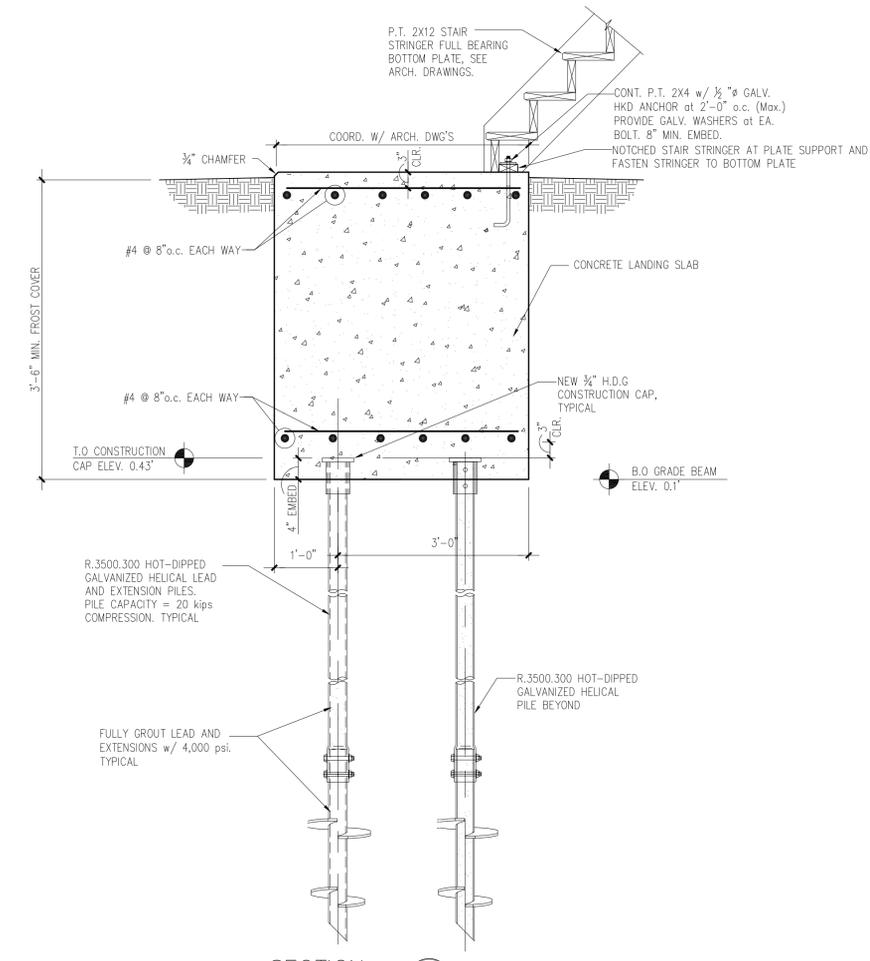




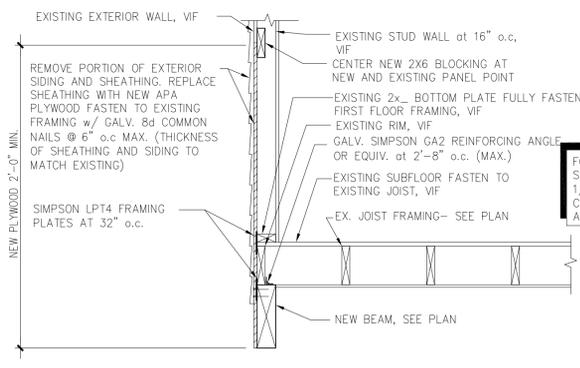
**HOLDOWN DETAIL** 2  
1" = 1'-0" S103



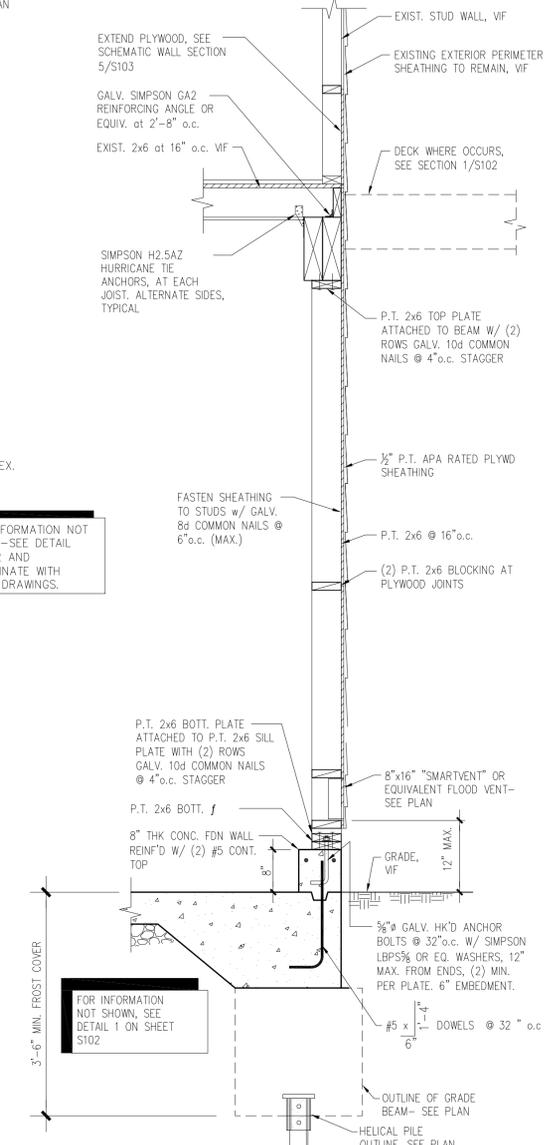
**TYPICAL KNEE BRACING** 3  
N.T.S. S103



**SECTION** 4  
3/4" = 1'-0" S103



**SCHEMATIC WALL SECTION** 5  
3/4" = 1'-0" S103



**PARTIAL WALL SECTION** 6  
3/4" = 1'-0" S103



**ENVIRONMENTAL ENGINEER:**



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**STRUCTURAL  
SECTIONS AND DETAILS**

PROJECT NO.: 1524-42 SCALE AS NOTED

DRAWING NO.:

## S-103

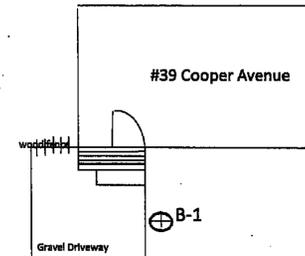
STRUCTURAL ENGINEER:



SURVEYOR:



ENVIRONMENTAL ENGINEER:



Cooper Avenue  
BORING LOCATION PLAN  
NTS

SOIL BORING LOG

SOILTESTING, INC. 90 DONOVAN RD. OXFORD, CT 06478 CT (203) 282-9328 NY (914) 948-4850		CLIENT: Lothrop Associates LLP Architects	SHEET 1 OF 1 HOLE NO. B-1								
FOREMAN - DRILLER BDmc		PROJECT NO. G80-9881-15	BORING LOCATIONS per Sketch								
INSPECTOR		PROJECT NAME: <b>Gebuzza Residence</b>									
GROUND WATER OBSERVATIONS AT_A_FT AFTER_HOURS		LOCATION: <b>39 Cooper Avenue Milford, CT</b>									
AT_FT AFTER_HOURS		TYPE: HSA	SAMPLER: SS								
		SIZE I.D.: 3 3/8"	BIT: 1 1/2"								
		HAMMER WT.: 140#	GROUND WATER ELEV.:								
		HAMMER FALL: 30"									
DEPTH @ BOT	CASING NO	Type	PEN	REC	BLOWS PER 6 IN ON SAMPLER (FORCE ON TUBE) 0 - 6 6 - 12 12 - 18	CORE TIME PER FT (MIN)	DENSITY OR CONSIST	STRATA CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL REMARKS INCL. COLOR, LOSS OF WASH WATER, SEAMS IN ROCK, ETC.	SAMPLE	
										NO	DEPTH
0	1	ss	24"	10'	5	5	moist	4'	#1 TOPSOIL	DATE START: 3/21/15	
5	2	ss	24"	12'	10	15	compact	4'	Bm FMC SAND & SILT, sm F gravel (Fill)	DATE FINISH: 3/21/15	
10	3	ss	24"	12'	1	1	wet	9'	Dk Bm Organic SILT & ORGANICS (peat)		
15	4	ss	24"	0'	1	1	v soft				
20	5	ss	24"	24'	15	16	v loose				
25	6	ss	24"	18'	13	14	wet		Gry FMC SAND		
30					25	27	dense		Gry MC SAND, sm F sand, F gravel		
35	7	ss	24"	17'	15	13	wet		Gry FM SAND, sm C sand, tr silt		
40					12	10	compact				
45	8	ss	24"	17'	25	20	wet		Bm FM SAND, sm VF sand		
50					18	22	dense				
55	9	ss	24"	0'	27	20	wet		No Recovery		
60					17	25	dense	27'			
65									E.O.B. 37'0"		

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 \_\_\_\_\_ THEN \_\_\_\_\_ CASING TO \_\_\_\_\_ FT. HOLE NO. B-1

A = AUGER UP = UNDISTURBED PISTON T = THINWALL V = VANE TEST  
 WGR = WEIGHT OF RODS WGRH = 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 to 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: 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 = 0.91
  - Wind Directionality Factor, Kd = 0.85
  - 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, qz = 0.00256 x Kz x Kzt x Kd x V<sup>2</sup> x I = 20 psf
  - Design Wind Pressure, p = q x (G x Cp) - qi x (GCpI) use 15 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**

- The Contractor shall be responsible for all dewatering, shoring, sheeting, or bracing required to maintain a safe, dry, and stable excavation.
- No pile caps 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 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 #20 sieve. If on-site soil does not meet this specification, the Contractor shall bring in soil from off-site at his own expense.

**CAST-IN-PLACE CONCRETE**

- Coordinate with Project Specifications section 033000 "CAST-IN-PLACE CONCRETE"

**STRUCTURAL STEEL:**

- Coordinate with Project Specifications section 051200 "STRUCTURAL STEEL FRAMING"

**ROUGH CARPENTRY**

- Coordinate with Project Specifications section 061000 "ROUGH CARPENTRY"

**SHEATHING**

- Coordinate with Project Specifications section 061600 "SHEATHING"

**ENGINEERED LUMBER NOTES:**

- Coordinate with Project Specifications section 061000 "ROUGH CARPENTRY: ENGINEERED WOOD PRODUCTS"
- Unless otherwise noted on drawings, multiple plies 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. Bolt holes 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 16d common wire nails at 12" on center.

**HELICAL PILES:**

- All piles shall be patented helical piles and appurtenances as manufactured by A.B. Chance or an approved equal.
- Project is located in the vicinity of Long Island Sound, ground water elevation is tidal. Schedule pile installation during periods of low tide.
- All helical piles shall be installed by factory certified installers.
- All helical pile installations operations shall be supervised by a professional Engineer (Geotechnical Engineer), licensed in the State of Connecticut, and hired by architect.
- The helical piles shall be installed to achieve an ultimate bearing capacity of 40 kips compression. The design capacity of the piles is 20 kips providing a safety factor of 2. The pile contractor shall submit, for review, calculations indicating the minimum pile depth, helix diameter and required torque to achieve the required load based upon the soil boring.
- If the minimum torque has not been achieved at the depth level, the contractor shall have the following options:
  - Install the pile deeper, using additional extensions until the specified torque has been obtained.
  - Remove the existing pile and install a pile with a larger and/or more helices. The revised pile shall be installed beyond the termination depth of the original pile, as directed by the engineer.
  - Add additional piles as recommended by the engineer.
- Helical piles leads shall have a RS3500.300 inch shaft with two helices. The lower helix shall have a minimum diameter of 8 inches; the upper helix shall be 10 inches in diameter. Minimum embedment = 10 feet.
- The helical piles, extensions, and appurtenances shall be hot dipped galvanized in accordance with ASTM A153.
- Helical piles shall be installed as shown on the drawings. All changes to the pile locations must be approved by the engineer.
- If underground obstructions are encountered during the installation, the contractor shall have the option of removing the obstruction if possible, or relocating the pile with the engineer's approval. The latter option may require the relocation of adjacent piles or the installation of additional piles.
- Pipe columns should be fully grouted during pile installation.
- The grout columns shall have a minimum compressive strength of 4,000 psi.
- Written installation records shall be obtained for each helical pile. The records shall include, but are not limited to, the following:
  - Project name and location
  - Name of contractor's foreman and representative who witnessed the installation.
  - Date and time of installation.
  - Location and/or reference number of each pile.
  - Description of lead section and extensions installed.
  - Overall depth of installation referenced from bottom of existing pile.
  - Torque reading for the last three feet of installation.
  - Any other relevant information relation the installation, such as but not limited to, depth of any obstructions encountered, sudden loss of torque, offset from plan location.

**FOR ESTIMATE PURPOSE:**

- All piles shall be installed to a depth of 21 feet below elevation + 0.1 ft. The exact embedment lengths shall be verified and recorded in the field by Pile Engineer. Final payment for installation length shall be determined using a constant unit price.

**SUGGESTED SEQUENCE FOR HOME LIFTING:**

- Install cribbing and temporary bracing to support framing to elevate structure.
- Raise structure to required elevation to provide clearance for installation of new foundation.
- Demolish and remove existing interior slab, foundation walls and footings.
- Excavate to approximate bottom of existing grade beam elevation and install new Helical Piles. Maintain grade beam excavation away from cribbing support as to not to undermine the soil.
- Install new grade beams, pile caps, foundation walls, and first floor framing.
- Lower structure onto new foundation, fasten as indicated.

STRUCTURAL NOTES AND  
SOIL BORING LOGS

PROJECT NO.: 1524-42 SCALE AS NOTED

DRAWING NO.: