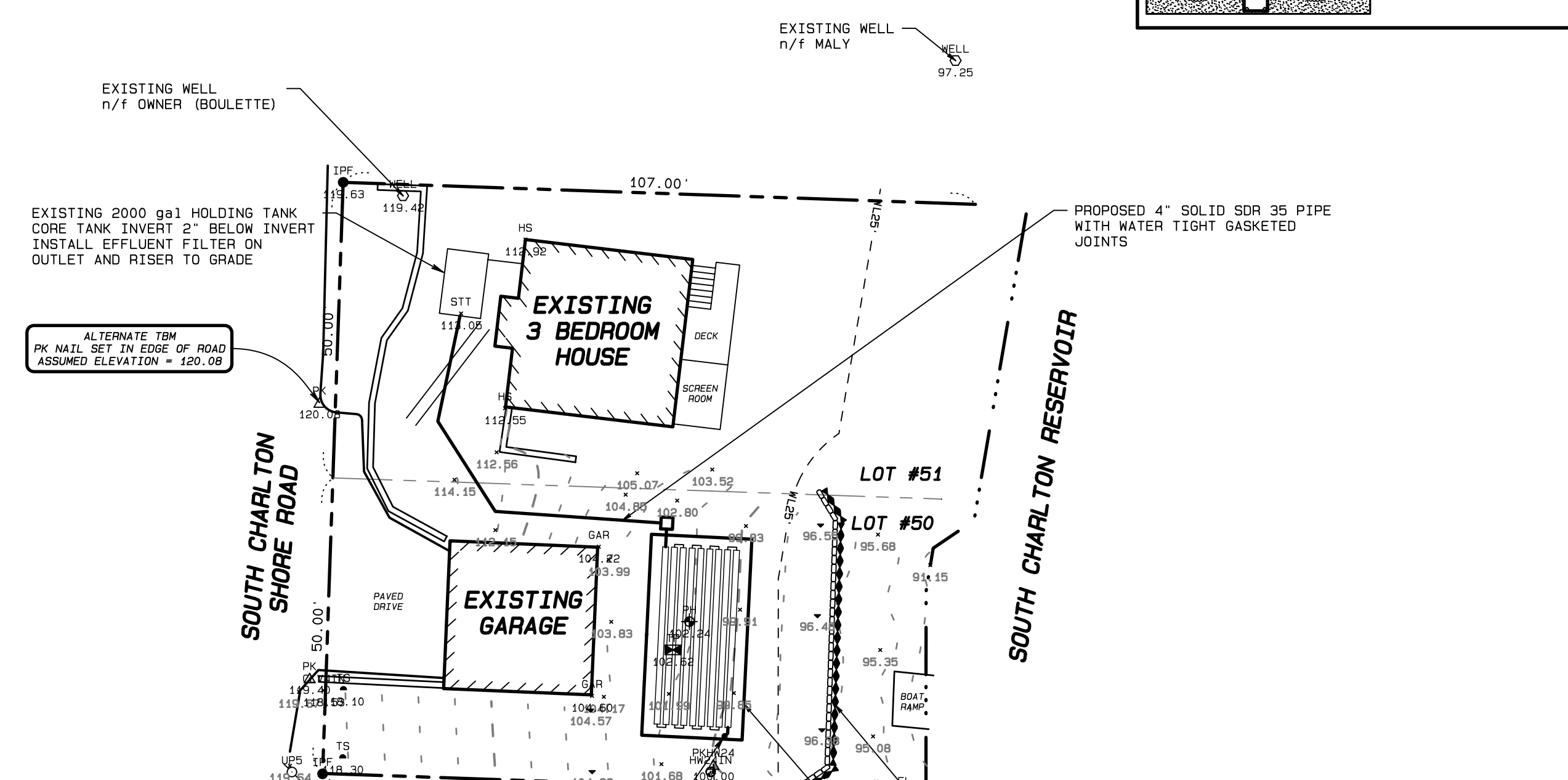
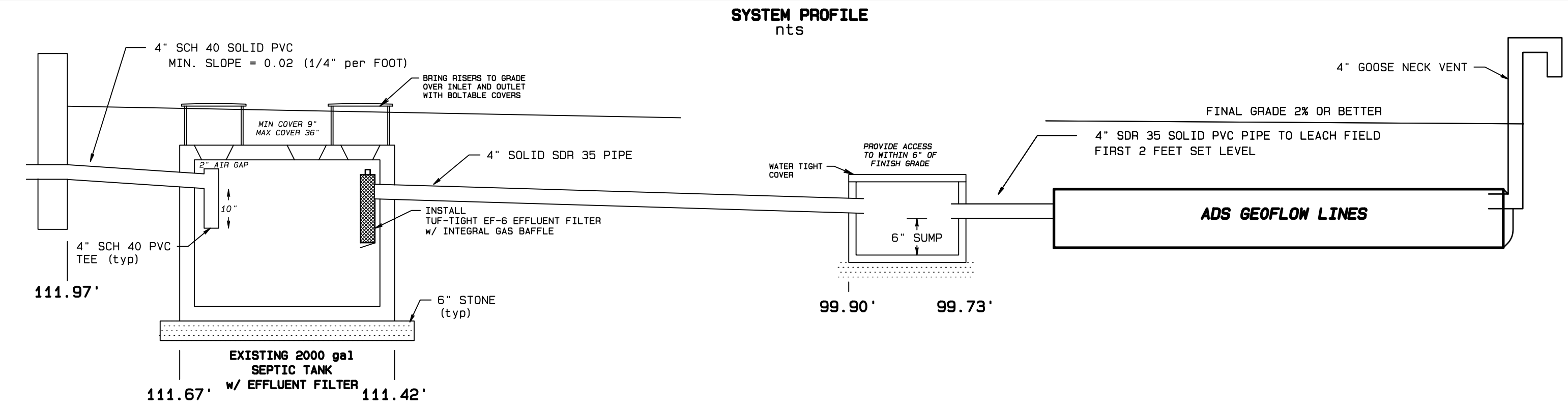
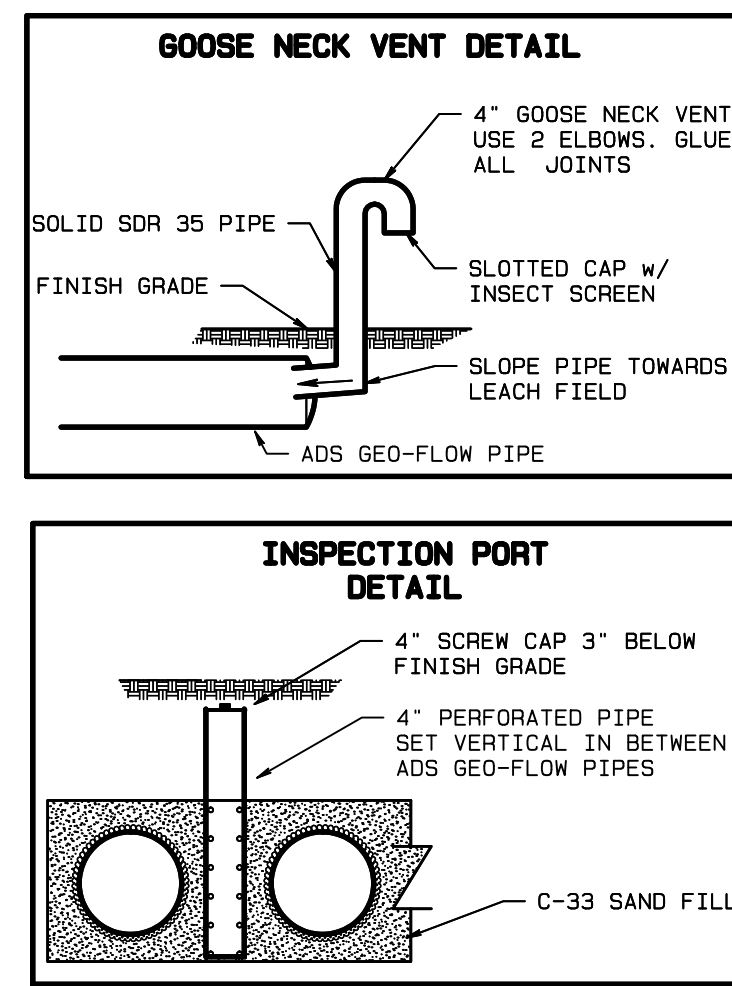
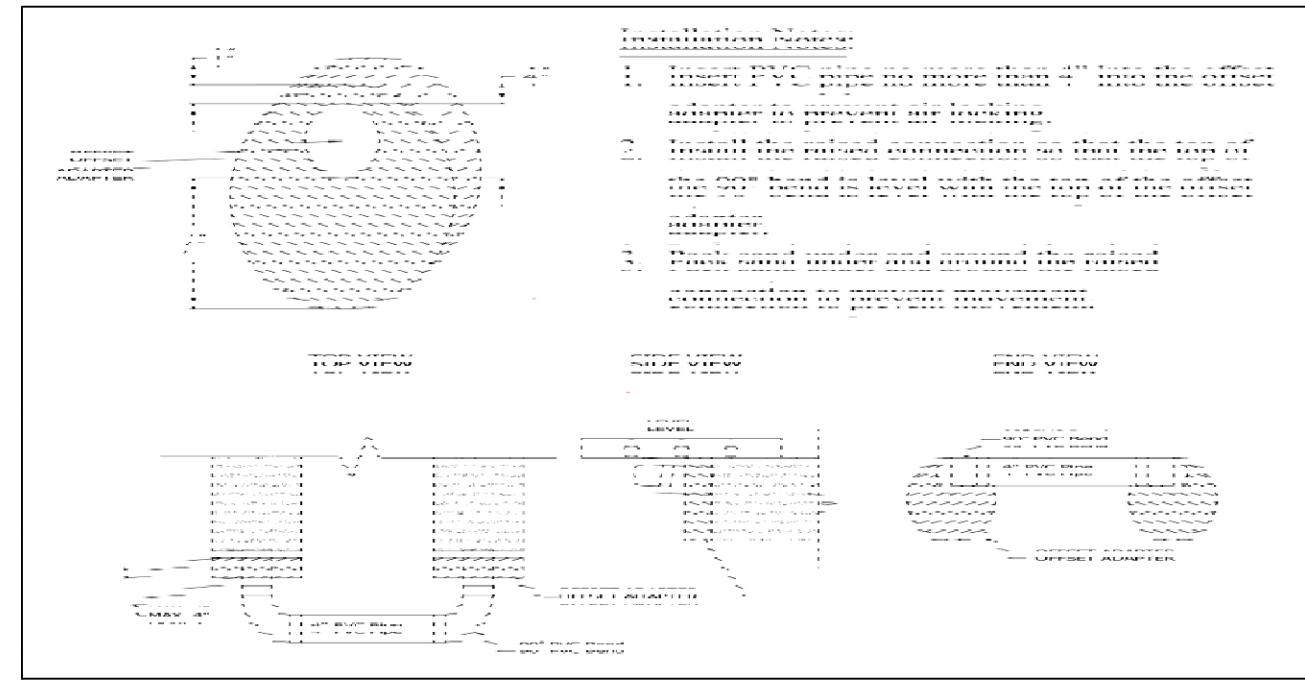


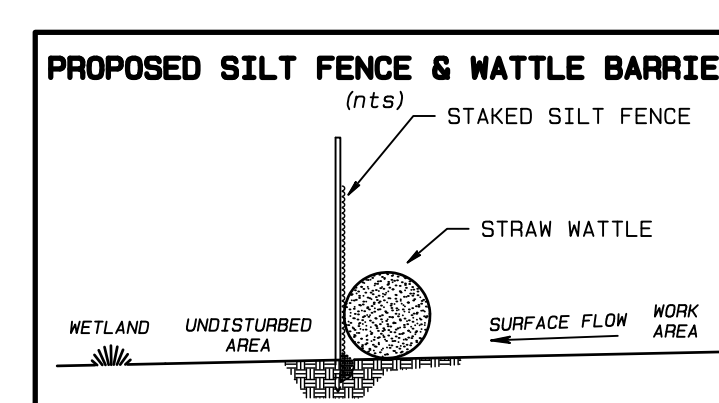


ADS GEO-FLOW INSTALLATION DETAILS



NOTE:
MAGNETIC MARKER TAPE SHALL BE PLACED ON ALL SYSTEM COMPONENTS PRIOR TO BACK FILLING

DESIGN CALCULATIONS:
 DESIGN CRITERIA:
 3 BEDROOMS NO GARBAGE DISPOSAL
 DESIGN PERC RATE: 10 mpi
 LOADING RATE: 0.6 gpd/ft²
 DESIGN FLOW:
 (3 BR) (110 gpd/BR) = 330 gpd
 SEPTIC TANK:
 REQUIRED: 2000 gal PROVIDED: 2000 gal
 SOIL ABSORPTION SYSTEM:
 REQUIRED:
 (330 gpd) / (0.60 gpd/ft²) = 550 ft²
 PROVIDED:
 (1) BED (S) (34 ft) (17 ft) = 578 ft²
 ADS GEO-FLOW MINIMUM = 400 sq ft BED, 1501' OF PIPE
 PROVIDED = 578 sq ft BED, 2701' OF PIPE
SOIL TESTING RESULTS:
 PERCOLATION TEST:
 DATE OF TEST 30 JULY 2014
 SOIL EVALUATOR: MARK FARRELL WITNESS: JIM MALLEY
 PERC RATE #1: 7 mpi PERC RATE #2: - mpi
 SOIL LOGS:
 TP1 ELEVATION: 102.62' GW ELEVATION: 93.62'

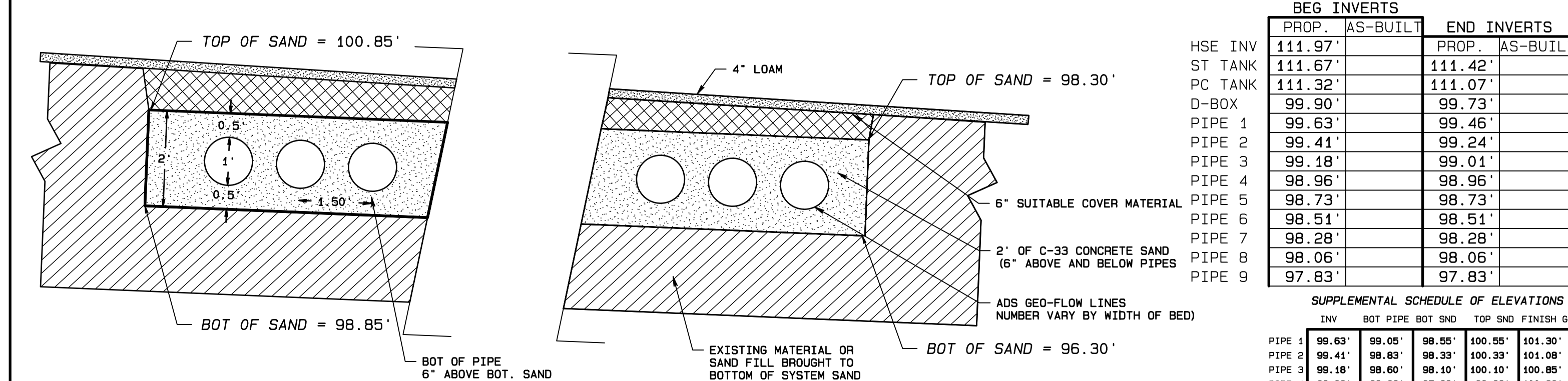


WETLAND PROTECTION MEASURES

- 1) STAKED STRAW WATTLES AND SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLAN. THEY SHALL BE INSPECTED BY THE LOCAL CONSERVATION COMMISSION, IF REQUIRED, BEFORE CONSTRUCTION.
- 2) WITHIN THE 100ft BUFFER ZONE ALL DISTURBING OF SOIL SHALL BE MINIMIZED.
- 3) ALL DISTURBED AREAS SHALL BE LOAMED, SEEDED AND MULCHED AS SOON AS POSSIBLE.
- 4) NO WORK OR STORAGE OF MATERIAL SHALL BE DOWN HILL OF THE STRAW WATTLES OR SILT FENCE.
- 5) ANY DE-WATERING OF EXCAVATIONS, DRILLING OR DIGGING OF WELLS SHALL BE DONE IN A MANNER TO PREVENT SILTY WATER FROM RUNNING INTO THE WETLAND AND/OR THE LAKE.
- 6) ALL NECESSARY PERMITS SHALL BE OBTAINED BEFORE WORK COMMENCES.
- 7) OWNER AND CONTRACTOR SHALL ADHERE TO ANY ORDERS ISSUED BY THE LOCAL CONSERVATION COMMISSION.

CONSERVATION COMMISSION SHALL BE NOTIFIED AFTER EROSION CONTROL IS PUT IN PLACE AND PRIOR TO CONSTRUCTION

ADS GEO-FLOW SYSTEM LEACH FIELD DETAILS



SCHEDULE OF INVERTS

	BEG INVERTS		END INVERTS	
	PROP.	AS-BUILT	PROP.	AS-BUILT
HSE INV	111.97'		111.42'	
ST TANK	111.67'		111.07'	
PC TANK	111.32'		111.07'	
D-BOX	99.90'		99.73'	
PIPE 1	99.63'		99.46'	
PIPE 2	99.41'		99.24'	
PIPE 3	99.18'		99.01'	
PIPE 4	98.96'		98.96'	
PIPE 5	98.73'		98.73'	
PIPE 6	98.51'		98.51'	
PIPE 7	98.28'		98.28'	
PIPE 8	98.06'		98.06'	
PIPE 9	97.83'		97.83'	

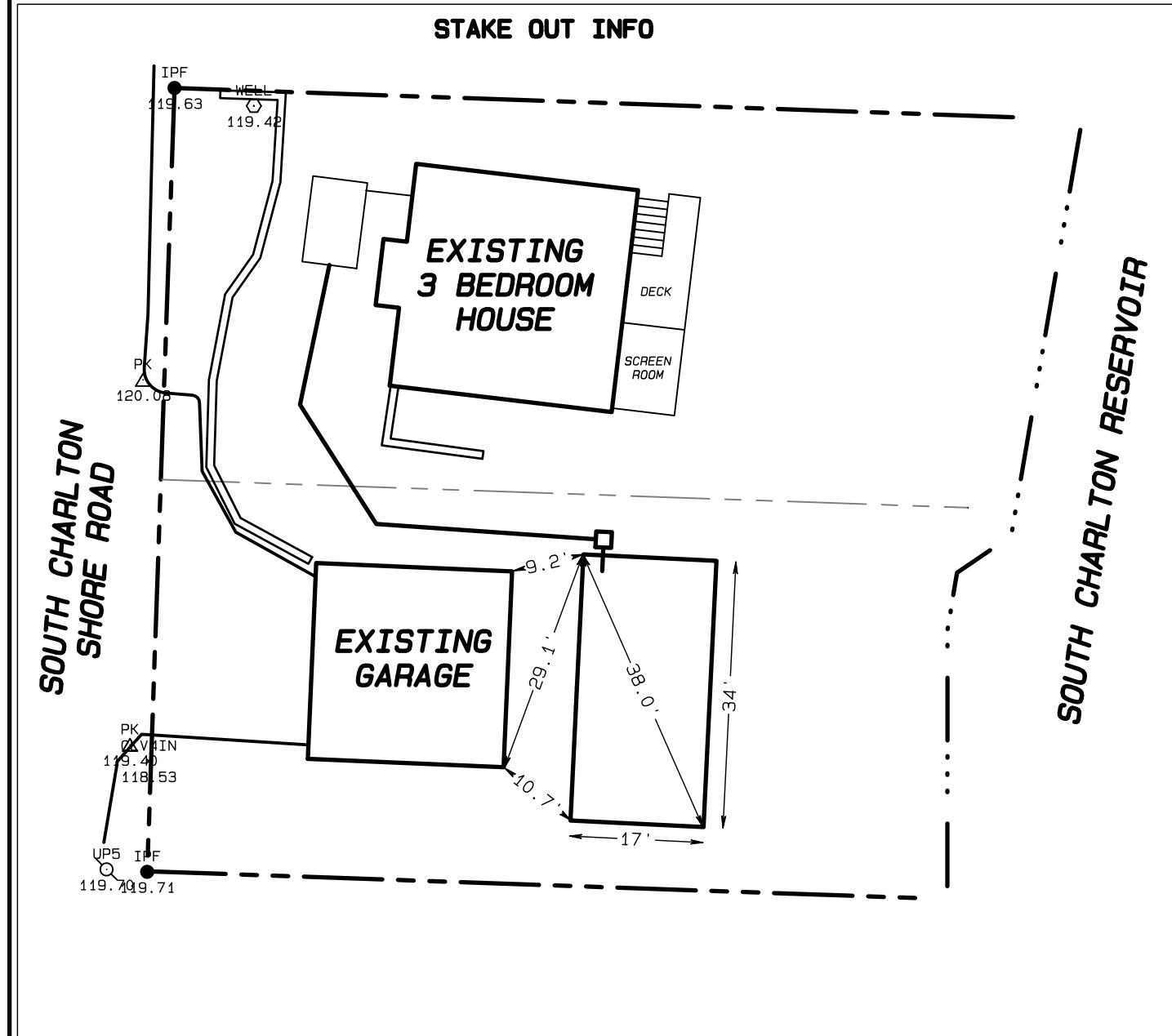
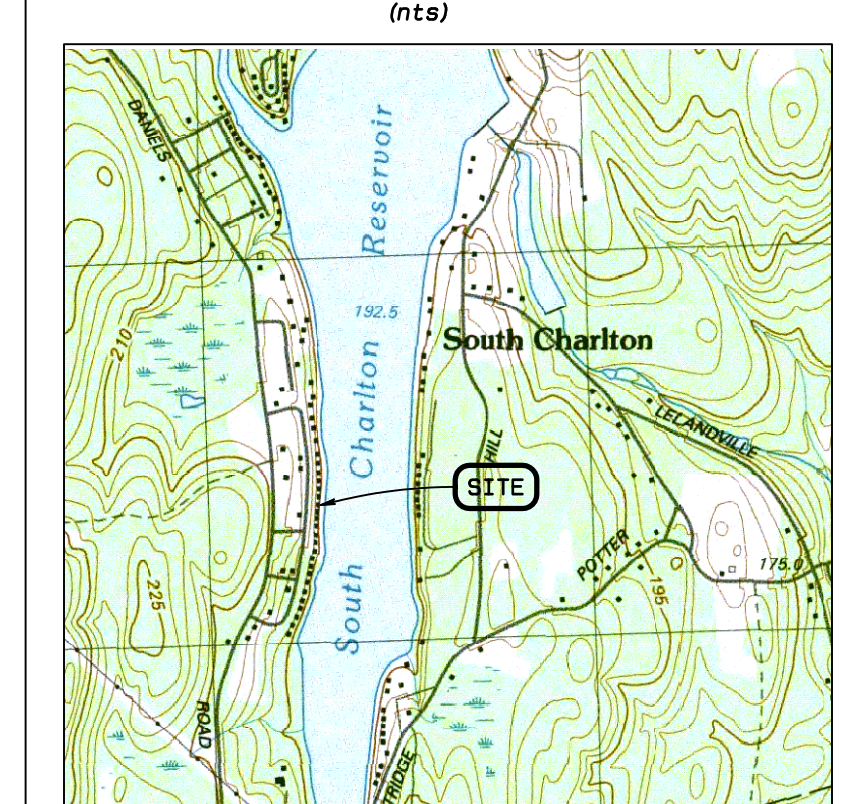
SUPPLEMENTAL SCHEDULE OF ELEVATIONS
NUMBER VARY BY WIDTH OF BED

PIPE	INV	BOT PIPE	BOT SMD	TOP SMD	FINISH G
PIPE 1	99.63	99.05	98.55	100.55	101.30
PIPE 2	99.41	98.83	98.33	100.33	101.08
PIPE 3	99.18	98.60	98.10	100.10	100.85
PIPE 4	98.96	98.38	97.88	99.88	100.63
PIPE 5	98.73	98.15	97.65	99.65	100.40
PIPE 6	98.51	97.93	97.43	99.43	100.18
PIPE 7	98.28	97.70	97.20	99.20	99.95
PIPE 8	98.06	97.48	96.98	98.98	99.73
PIPE 9	97.83	97.25	96.75	98.75	99.50

GENERAL NOTES:

- 1) ALL CONSTRUCTION PRACTICE AND MATERIALS MUST CONFORM TO THE NEW TITLE 5 (EFFECTIVE DATE SOMETIME IN APRIL 2006) AND/OR LOCAL REGULATIONS.
- 2) CONTRACTOR IS RESPONSIBLE FOR VIEWING SITE BEFORE BIDDING JOB TO BECOME FAMILIAR WITH ALL ASPECTS OF THE JOB.
- 3) CONTRACTOR SHALL VERIFY ALL INVERTS AND SETBACKS FROM WELLS, PROPERTY LINES AND WATER BEFORE BEGINNING WORK.
- 4) IF CONDITIONS IN THE FIELD DIFFER THAN THOSE SHOWN ON THE PLAN, WORK SHALL STOP AND THE DESIGN ENGINEER AND THE BOARD OF HEALTH SHALL BE CONSULTED BEFORE WORK CONTINUES.
- 5) CONTACT DESIGN ENGINEER AND BOARD OF HEALTH FOR BOTTOM INSPECTION BEFORE PLACING SAND OR STONE.
- 6) THE CONTRACTOR SHALL ENSURE ALL NECESSARY PERMITS HAVE BEEN OBTAINED BEFORE INSTALLING THE SYSTEM.
- 7) PROPERTY LINES ARE GRAPHIC ONLY AND ARE NOT TO BE USED TO ERECT FENCES OR SHEDS. NO PROPERTY SURVEY WAS DONE.
- 8) THE DESIGN ENGINEERS ONLY WARRANTY IS THE SYSTEM IS DESIGNED ACCORDING TO TITLE V UNLESS OTHERWISE NOTED.

LOCUS MAP



GREEN HILL ENGINEERING

PERC TESTS
SEPTIC PLANS
WETLAND DELINEATION
TOPOGRAPHIC SURVEYS
ENVIRONMENTAL CONSULTING

WORKING TO PROTECT OUR WATER RESOURCES

10 MAIN STREET
STURBRIDGE, MA 01566
508-347-5226

PROPOSED SEPTIC SYSTEM

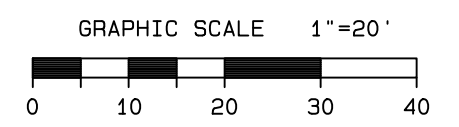
RICHARD & DOLORES BOULETTE
13 SOUTH CHARLTON SHORE RD
CHARLTON MA
19 AUGUST 2014

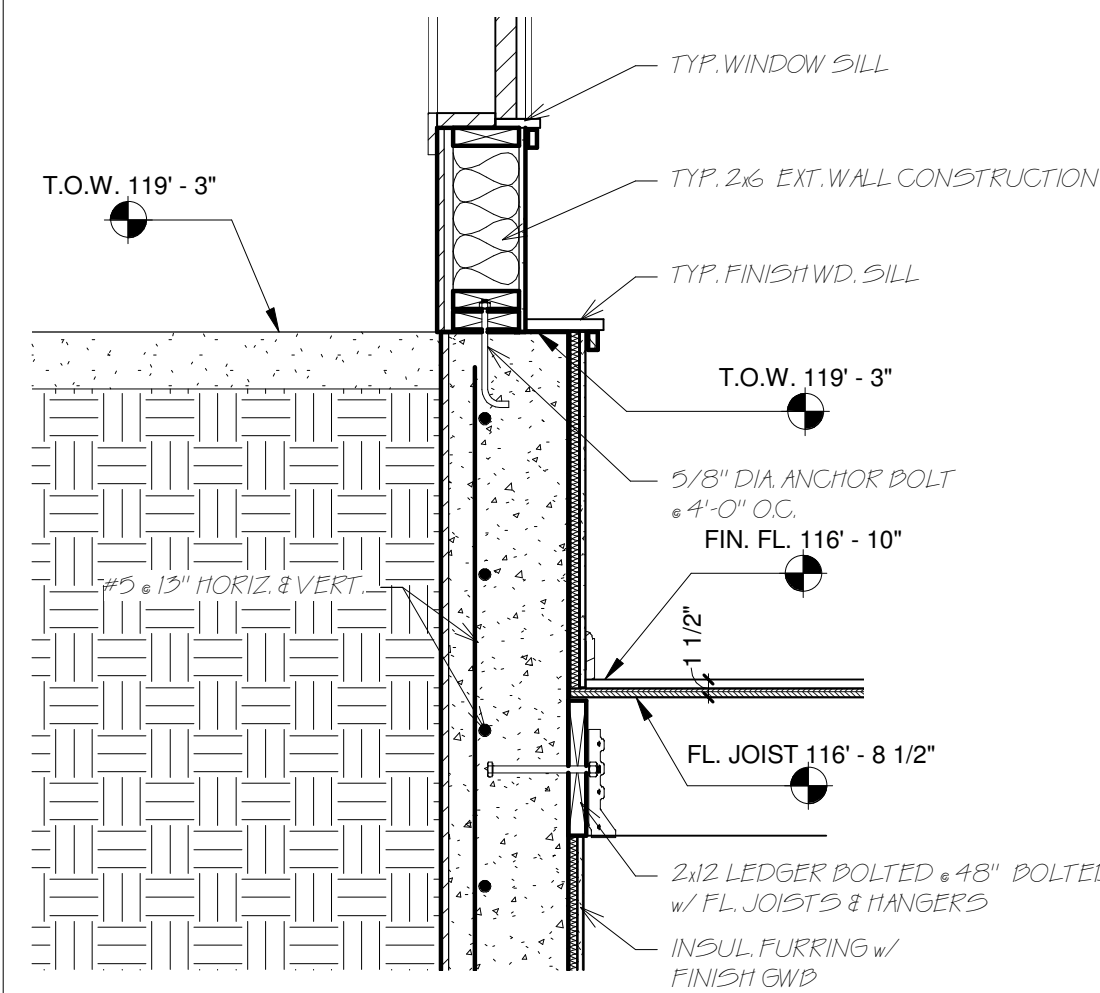
I CERTIFY THAT I AM CURRENTLY APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PURSUANT TO 310 CMR 15.017 TO CONDUCT SOIL EVALUATIONS AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERTISE, AND EXPERIENCE DESCRIBED IN 310 CMR 15.017. I FURTHER CERTIFY THAT THE RESULTS OF MY SOIL EVALUATION, AS INDICATED ON THE ATTACHED SOIL EVALUATION FORM, ARE ACCURATE AND IN ACCORDANCE WITH 310 CMR 15.100 THROUGH 15.107.

Signature _____ Date _____

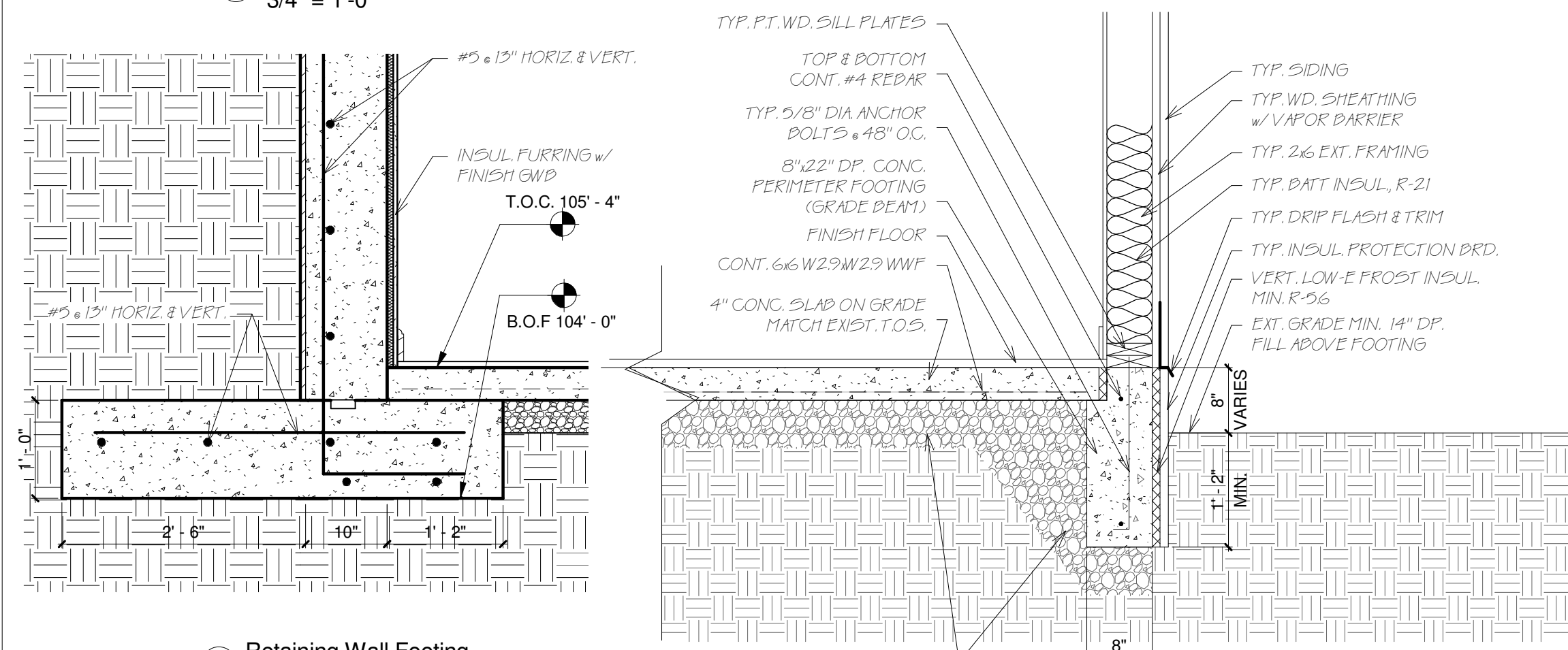
LEGEND

PROPERTY LINE	---
DEEP HOLE TEST	⊠
PERC HOLE TEST	⊡
WELL	⊙
EXISTING CONTOURS	---
PROPOSED CONTOURS	---
EDGE OF WETLAND	---
HAYBALES	---
SILT FENCE	---
WATER LINE	---
WETLAND FLAG	---
TREE, SOFTWOOD	⊠
TREE, HARDWOOD	⊡



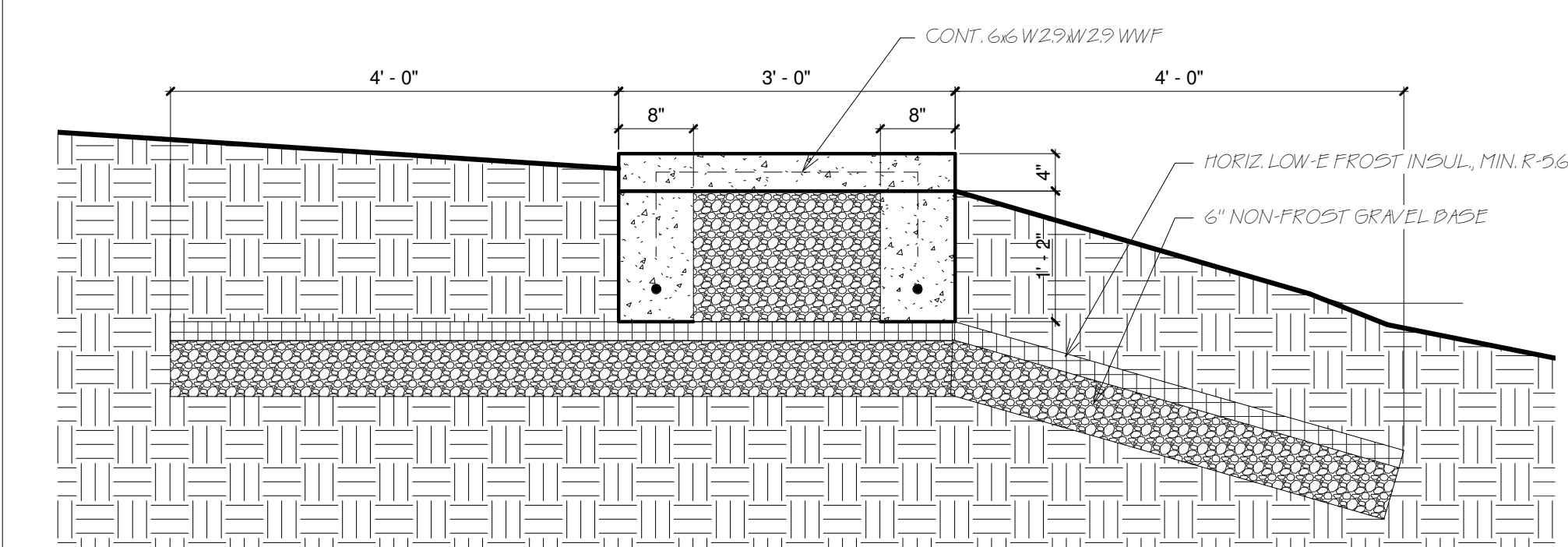


6 Retaining Wall Head
3/4" = 1'-0"

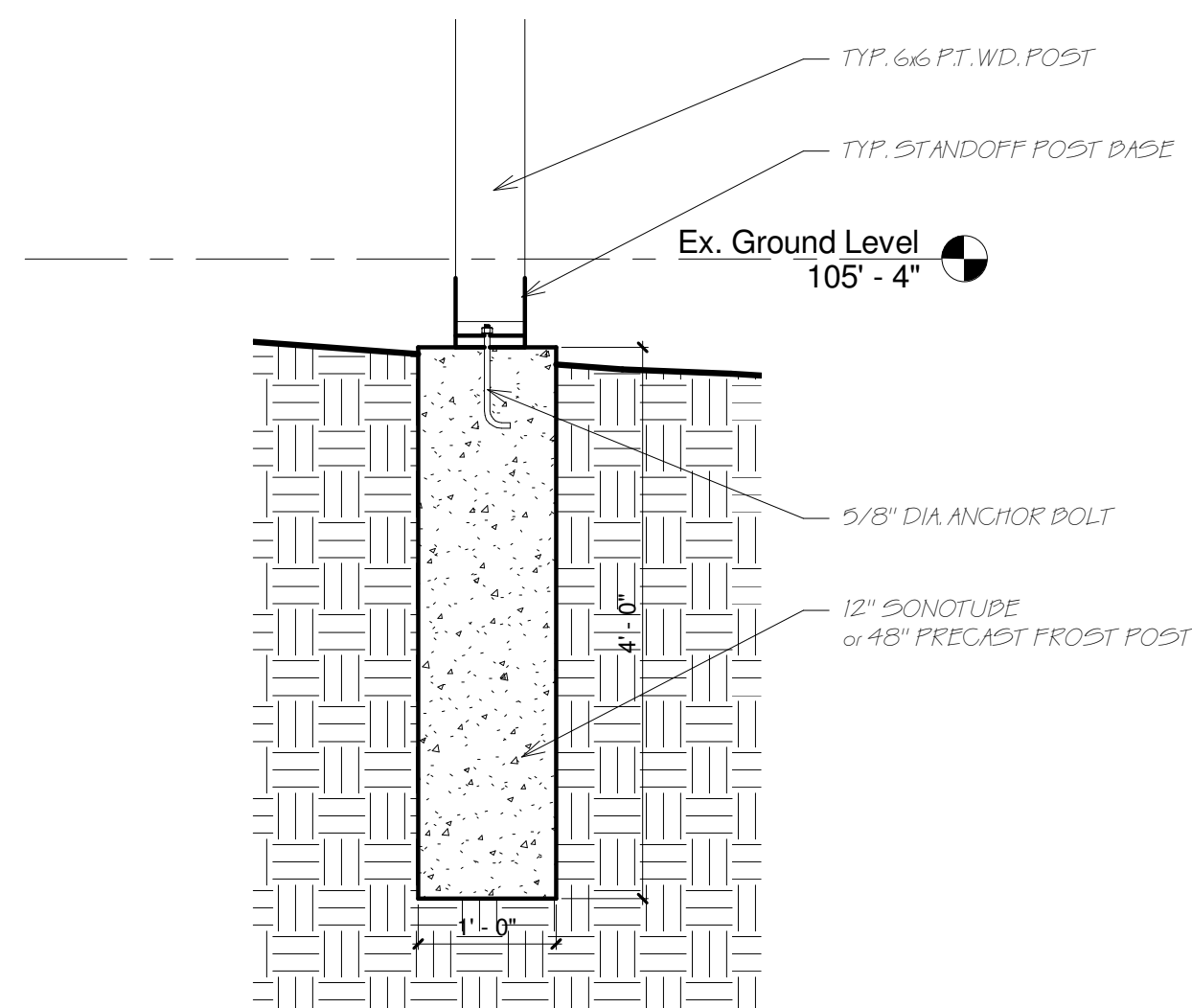


5 Retaining Wall Footing
3/4" = 1'-0"

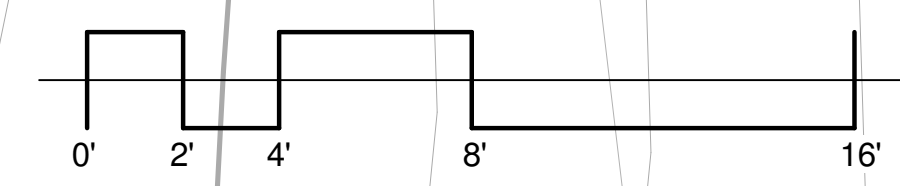
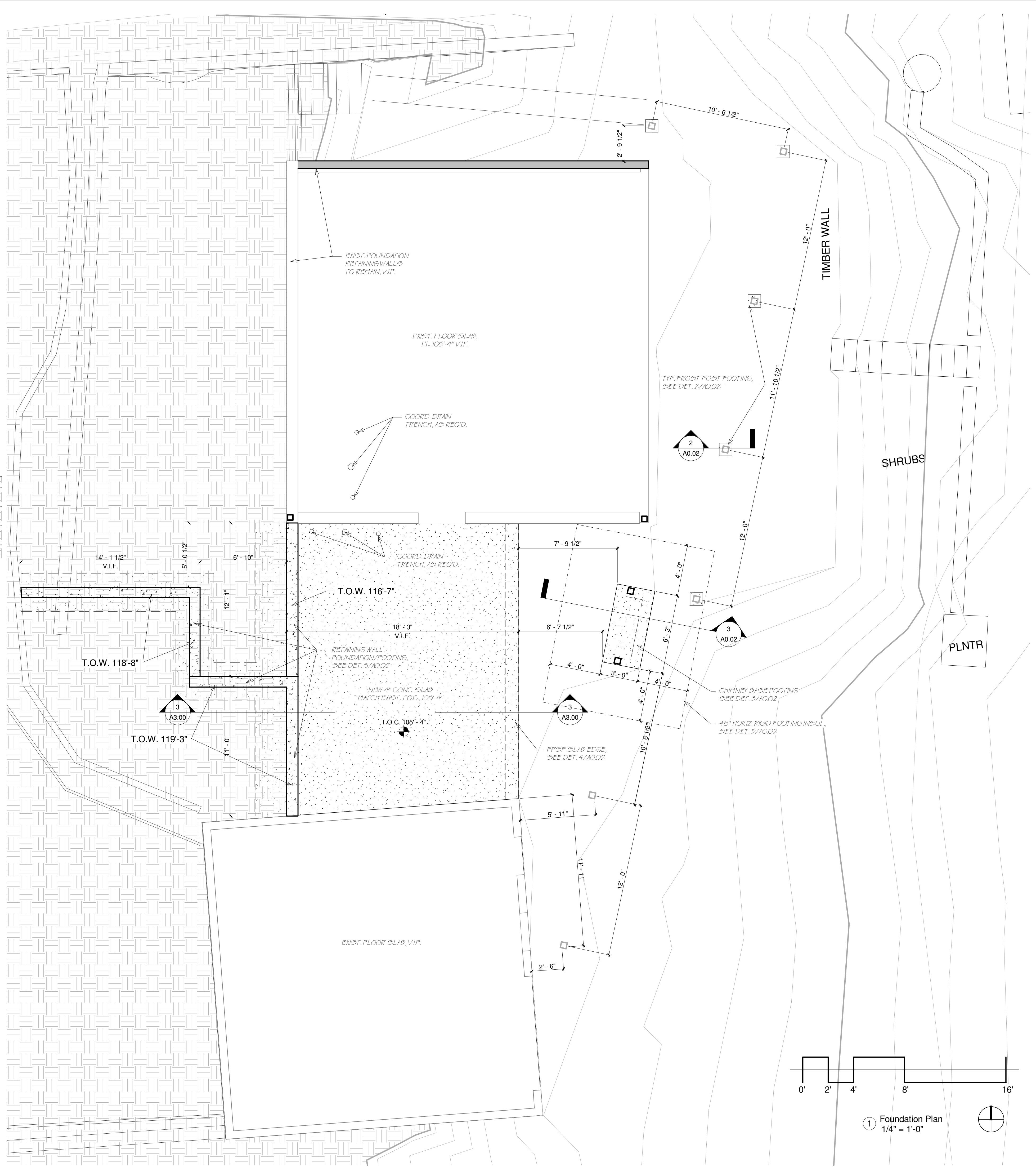
4 Frost Protected Shallow Footing (FPSF)
3/4" = 1'-0"



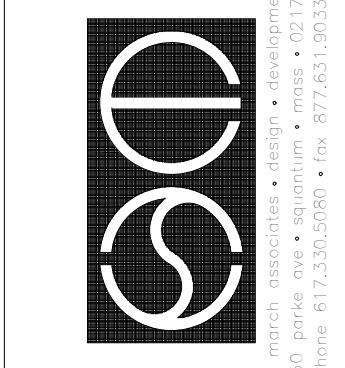
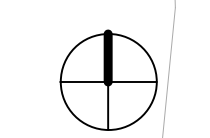
3 Chimney Base (FPSF)
3/4" = 1'-0"



2 Typ. Frost Post Footing
3/4" = 1'-0"



1 Foundation Plan
1/4" = 1'-0"



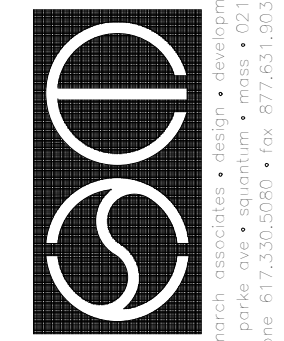
100 State Street, Suite 200, Chariton, MA 01521
Phone: 413.230.0500 • Fax: 413.230.0533

RENOVATIONS & ADDITION
Randy & Sara Garry Residence
13 South Chariton Shore Road, Chariton, Mass.

Foundation Plan
Scale: As indicated
Phase: CD
Date: 2.24.16

A0.02
CD

3/4/2016 5:27:53 PM



100 South Main Street, Suite 200, Charlton, MA 01025
Phone: 413.239.0598 • Fax: 413.239.0533

RENOVATIONS & ADDITION

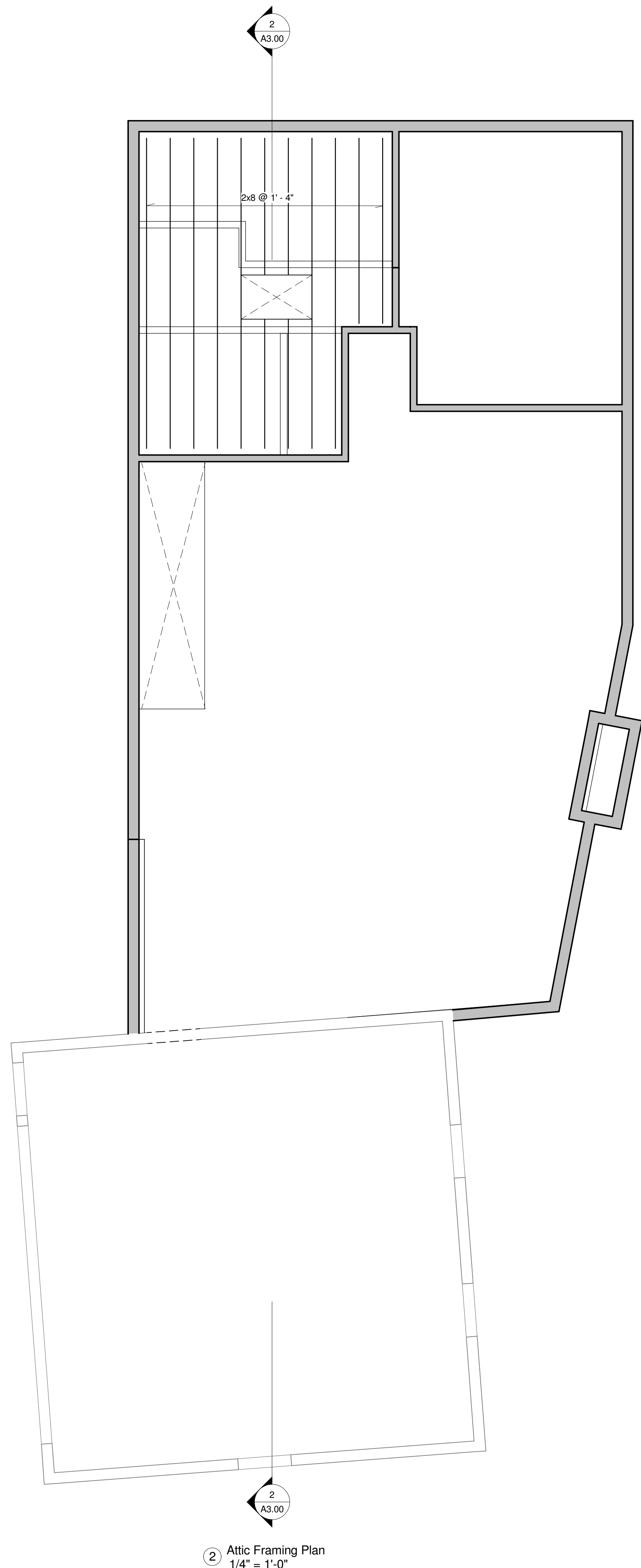
Randy & Sara Garry Residence
13 South Charlton Shore Road, Charlton, Mass.

Framing Plans

Scale: 1/4" = 1'-0"
Phase: CD
Date: 2.24.16

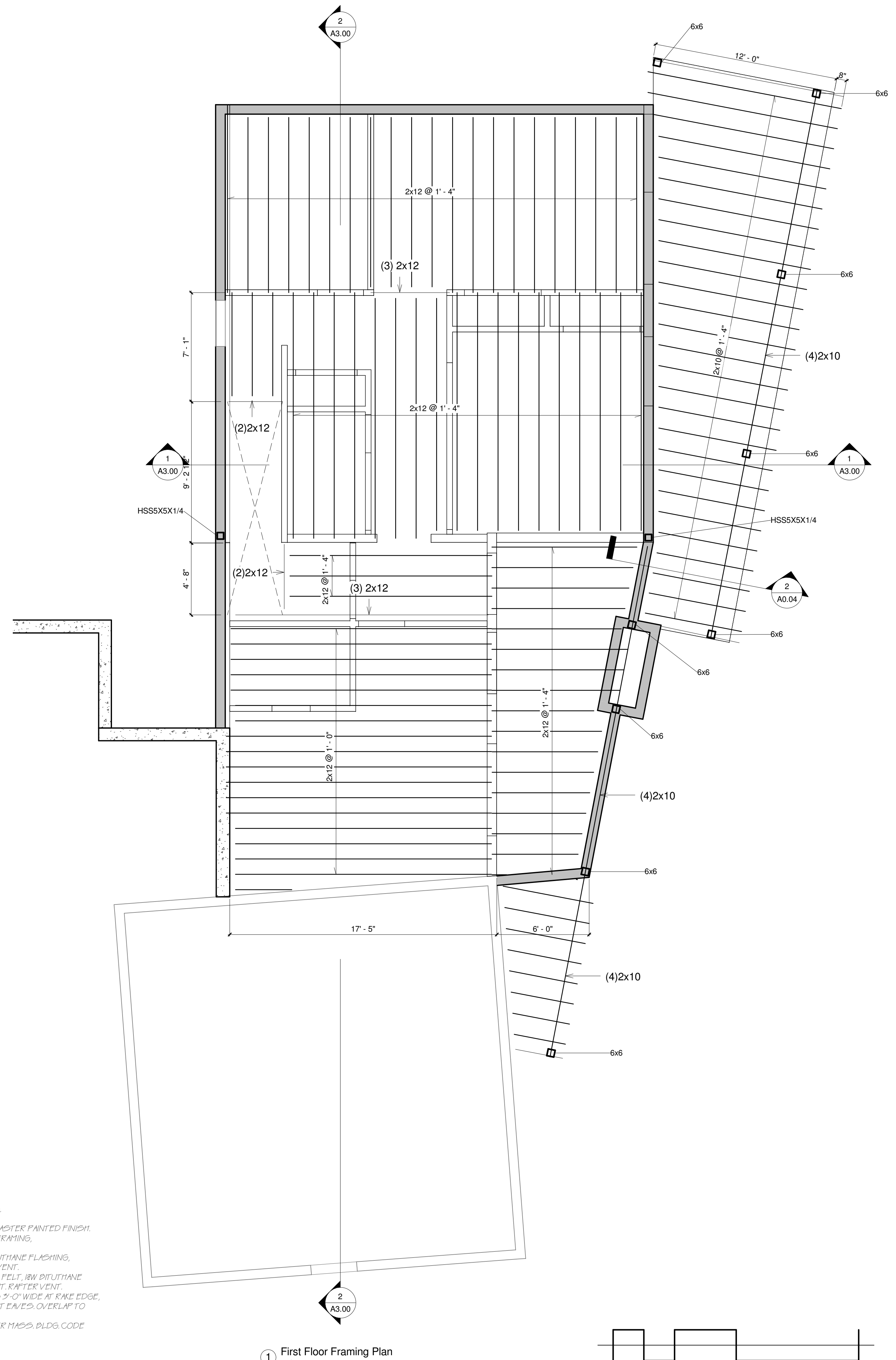
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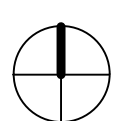
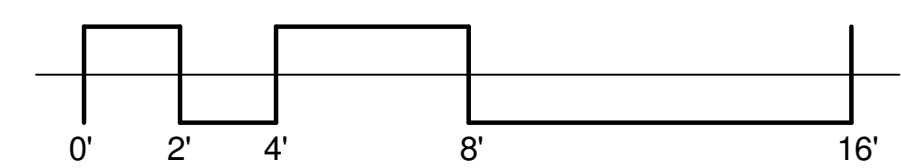


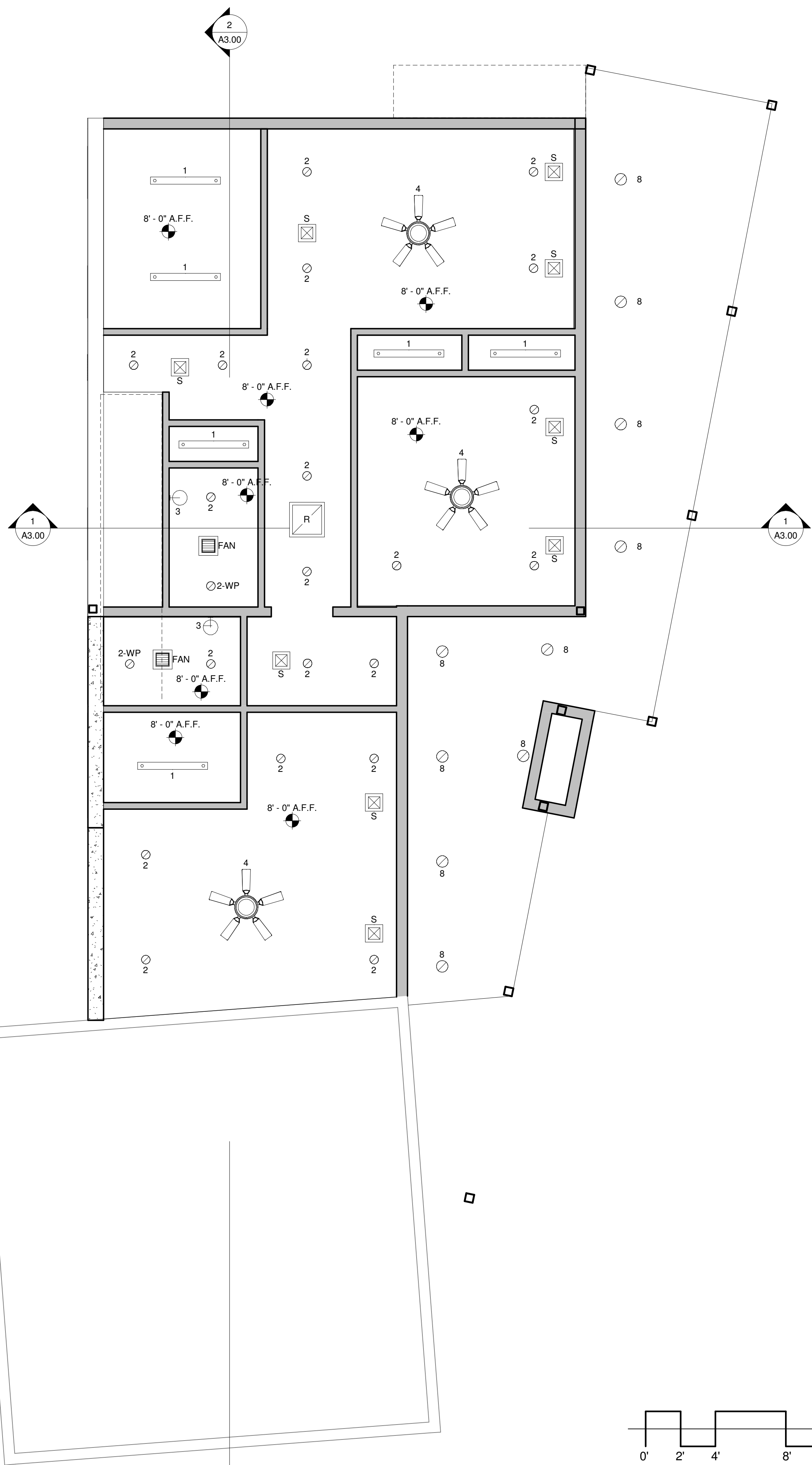
2 Attic Framing Plan
1/4" = 1'-0"

- CONSTRUCTION NOTES:**
1. TYP. DIMENSIONS ARE TO FINISH FACE.
 2. EXTERIOR WALLS: 2x6 W.D. STUD, R21 INSUL., FLUID SHEATHING, VAPOR BARRIER, EXTERIOR SIDING.
 3. INTERIOR WALLS: 2x4 W.D. STUD.
 4. INTERIOR FINISH: GYPSUM WALLBOARD WITH SKIM COAT PLASTER PAINTED FINISH.
 5. ROOF: GROUND SNOW LOAD - 40 psf, MEM-FIR #1 & BETTER FRAMING, HURRICANE TIES @ 6' O.C. RAFTER, A LOW SLOPE .4:12 - FULLY ADHERED EPDM, 1/4" BITUTHANE FLASHING, OVER FLUID SHEATHING, R26 INSUL., CONT. RAFTER VENT.
 6. HIGH SLOPE .8:12 - ARCH. ASPHALT SHINGLES, 1/4" FELT, 1/4" BITUTHANE FLASHING, OVER FLUID SHEATHING, R26 INSUL., CONT. RAFTER VENT.
 7. ICE & WATER SHIELD - APPLY BITUTHANE FLASHING 3'-0" WIDE AT RAKE EDGE, RIDGE AND VALLEYS, APPLY TWO LAYERS 3'-0" WIDE AT EAVES OVERLAP TO SHED WATER.
 8. ALL WORK TO BE EXECUTED ACCORDING TO BIR ED., 780 CHR MASS. PLDG. CODE.

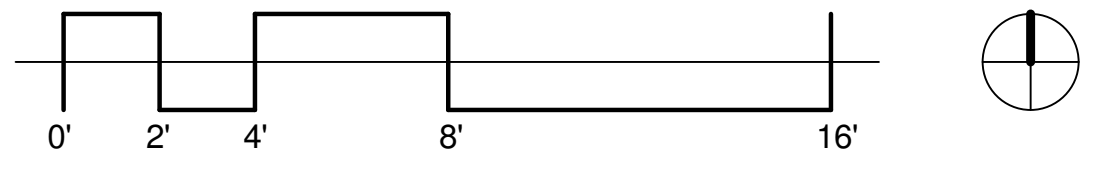


1 First Floor Framing Plan
1/4" = 1'-0"

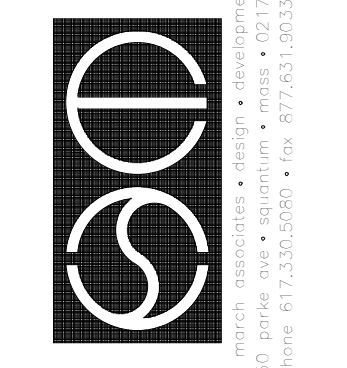
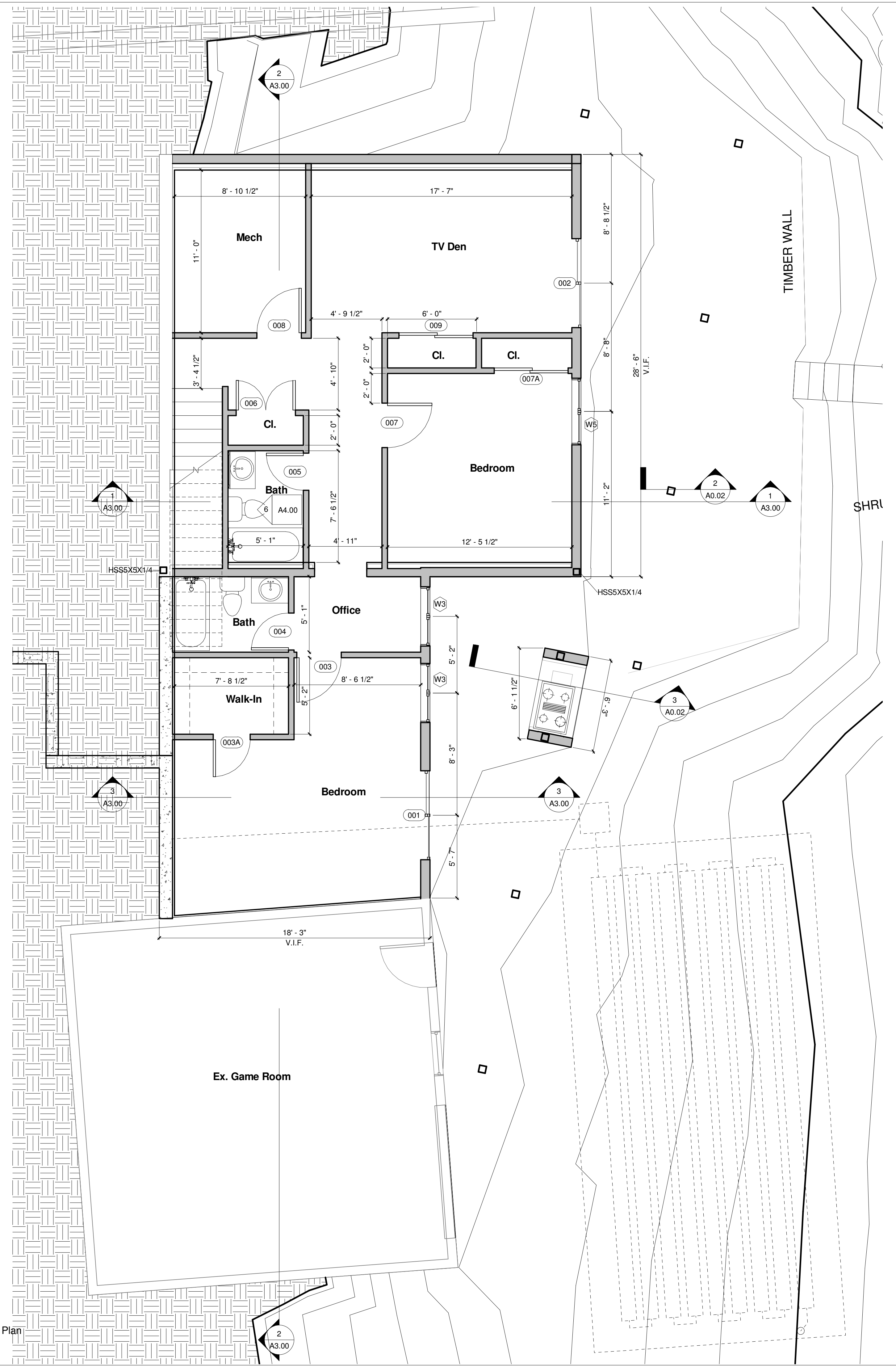




2 Ground Floor Reflected Ceiling Plan
1/4" = 1'-0"



1 Ground Floor Plan
1/4" = 1'-0"



100 South Main Street, Suite 200, Charlton, MA 01019
Phone: 413.235.0588 • Fax: 413.235.0533

RENOVATIONS & ADDITION

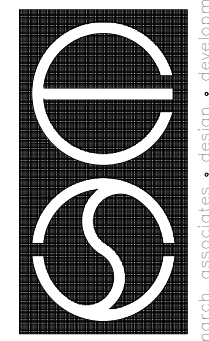
Randy & Sara Garry Residence
13 South Charlton Shore Road, Charlton, Mass.

Ground Floor Plan

Scale: 1/4" = 1'-0"
Phase: CD
Date: 2.24.16

A1.00

CD



100 State Street, Suite 200, Chariton, MA 01021
Phone: 817.330.0588 • Fax: 817.331.0533

RENOVATIONS & ADDITION

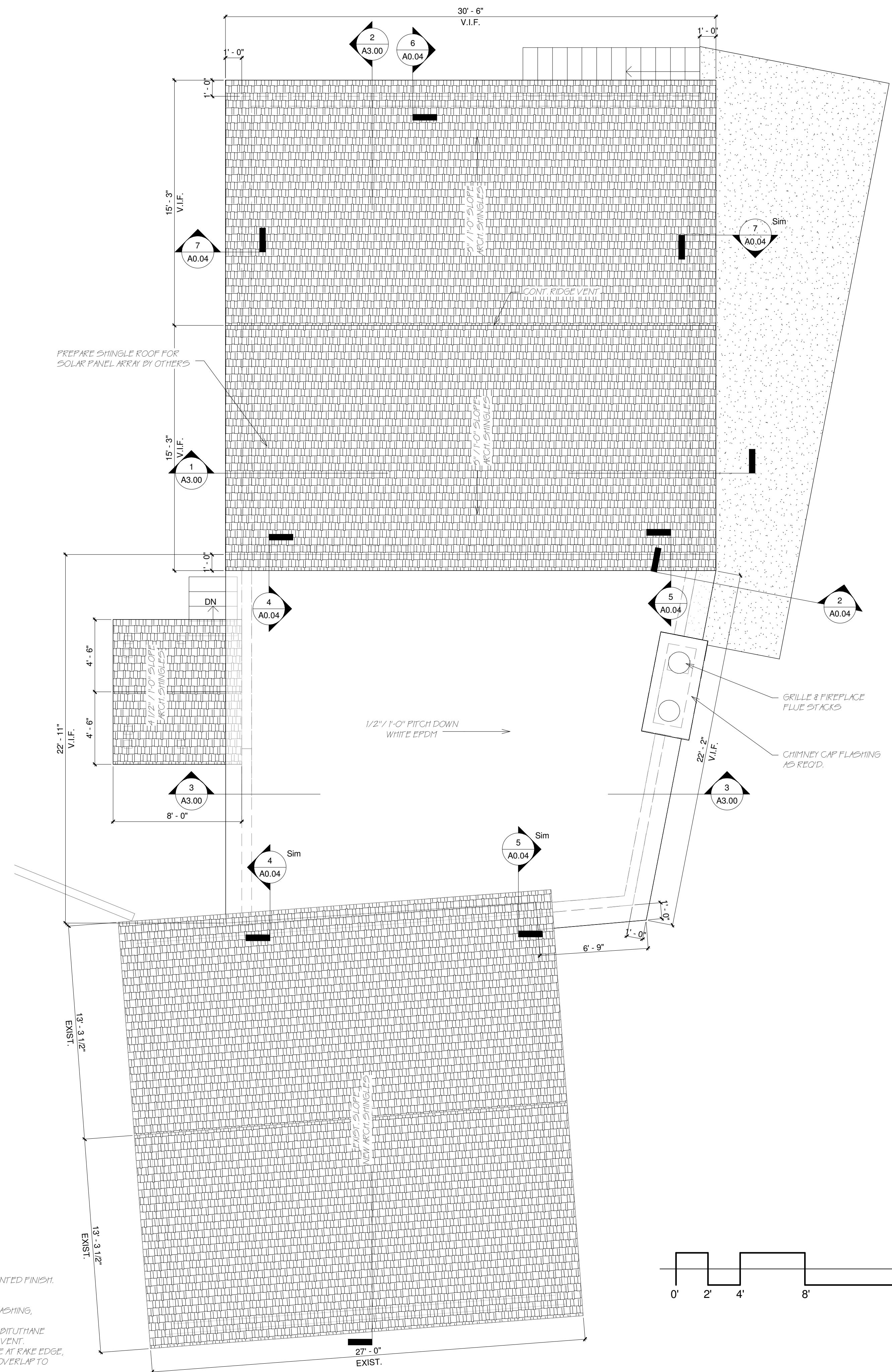
Randy & Sara Garry Residence
13 South Chariton Shore Road, Chariton, Mass.

Roof Plan

Scale: 1/4" = 1'-0"
Phase: CD
Date: 2.24.16

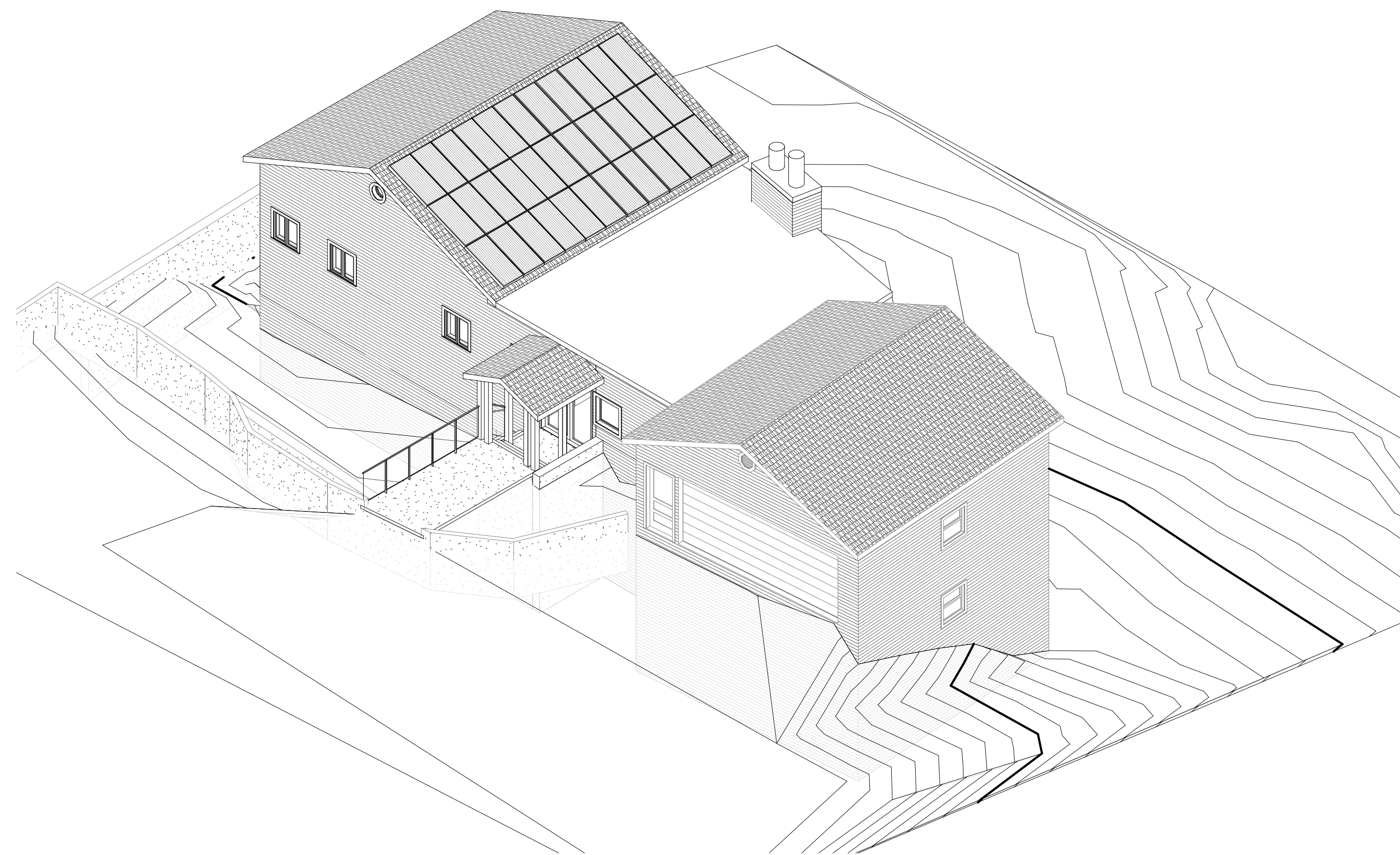
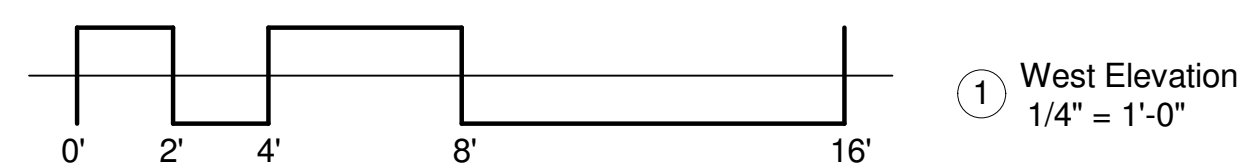
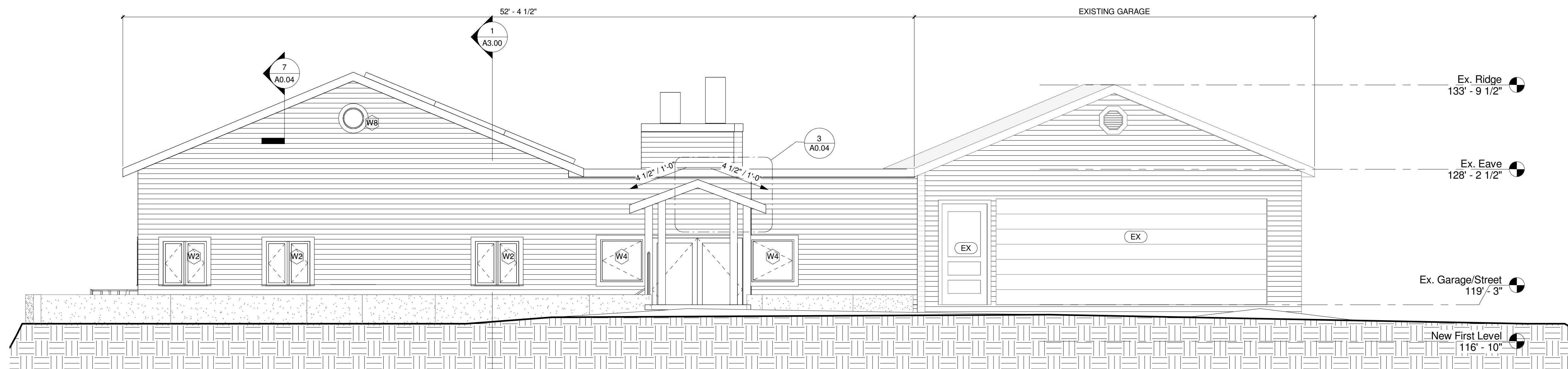
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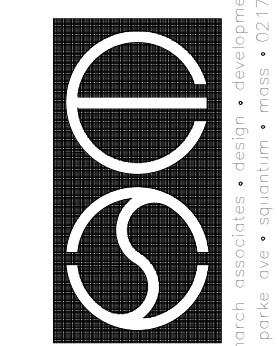


- CONSTRUCTION NOTES:**
1. TYP. DIMENSIONS ARE TO FINISH FACE.
 2. EXTERIOR WALLS: 2x6 WD. STUD, R21 INSUL., PLWD. SHEATHING, VAPOR BARRIER, EXTERIOR SIDING.
 3. INTERIOR WALLS: 2x4 WD. STUD.
 4. INTERIOR FINISH: GYPSUM WALLBOARD WITH SKIM COAT PLASTER PAINTED FINISH.
 5. ROOF: GROUND SNOW LOAD = 40psf, 11/16" FIR #1 & BETTER FRAMING, HURRICANE TIES, REOD & EA RAFTER.
 - A. LOW SLOPE: A-12 = FULLY ADHERED EPDM, 18# BITUTHANE FLASHING, OVER PLWD. SHEATHING, R28 INSUL., CONT. RAFTER VENT.
 - B. HIGH SLOPE: A-12 = ARCH. ASPHALT SHINGLES, 10# FELT, 18# BITUTHANE FLASHING, OVER PLWD. SHEATHING, R28 INSUL., CONT. RAFTER VENT.
 - C. ICE & WATER SHIELD = APPLY BITUTHANE FLASHING 3'-0" WIDE AT RAKE EDGE, RIDGE AND VALLEYS; APPLY TWO LAYERS 3'-0" WIDE AT EAVES; OVERLAP TO SHED WATER.
 6. ALL WORK TO BE EXECUTED ACCORDING TO Bldg. ED., 780 CMR MASS. BLDG. CODE

3/4/2016 5:28:02 PM



2 Southwest



100 State Street, Suite 200, Chariton, MA 01021
 Phone: 413.338.0588 • Fax: 413.338.0533

RENOVATIONS & ADDITION

Randy & Sara Garry Residence
 13 South Chariton Shore Road, Chariton, Mass.

West Elevation

Scale: 1/4" = 1'-0"
 Phase: CD
 Date: 2.24.16

A2.00

CD

● Ex. Ridge
133' - 9 1/2"

● Ex. Eave
128' - 2 1/2"

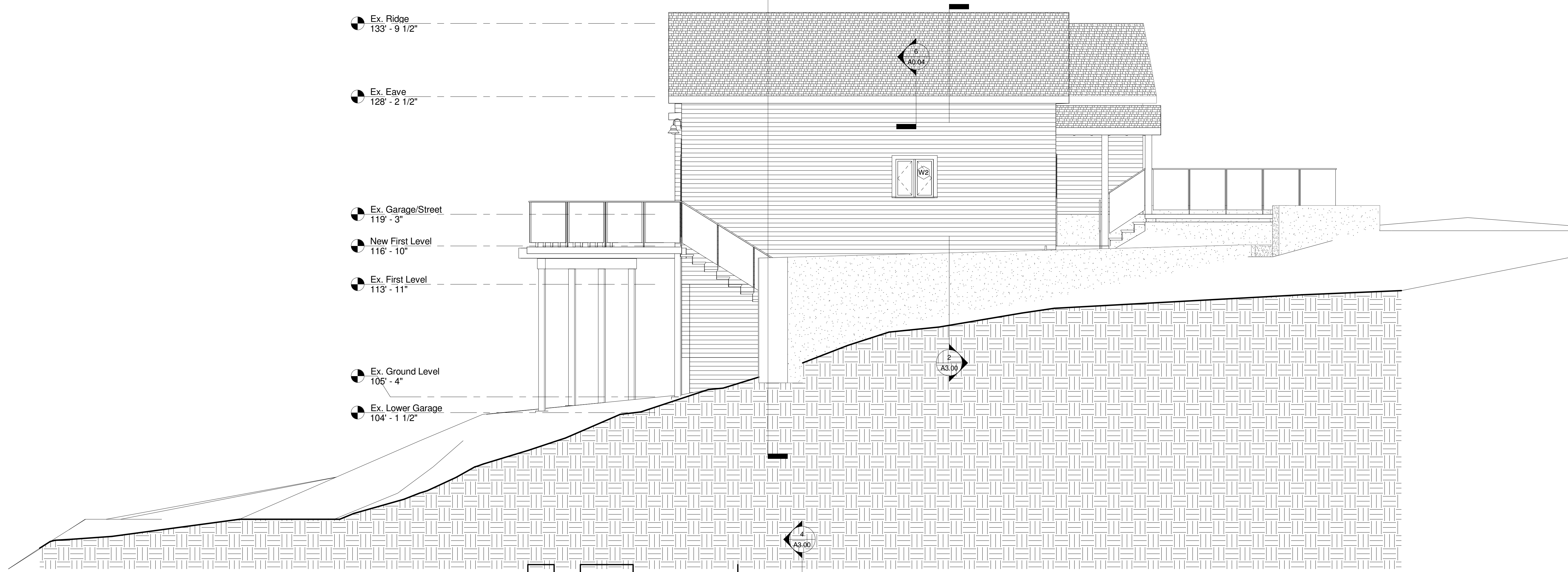
● Ex. Garage/Street
119' - 3"

● New First Level
116' - 10"

● Ex. First Level
113' - 11"

● Ex. Ground Level
105' - 4"

● Ex. Lower Garage
104' - 1 1/2"



① North Elevation
1/4" = 1'-0"

● Ex. Ridge
133' - 9 1/2"

● Ex. Eave
128' - 2 1/2"

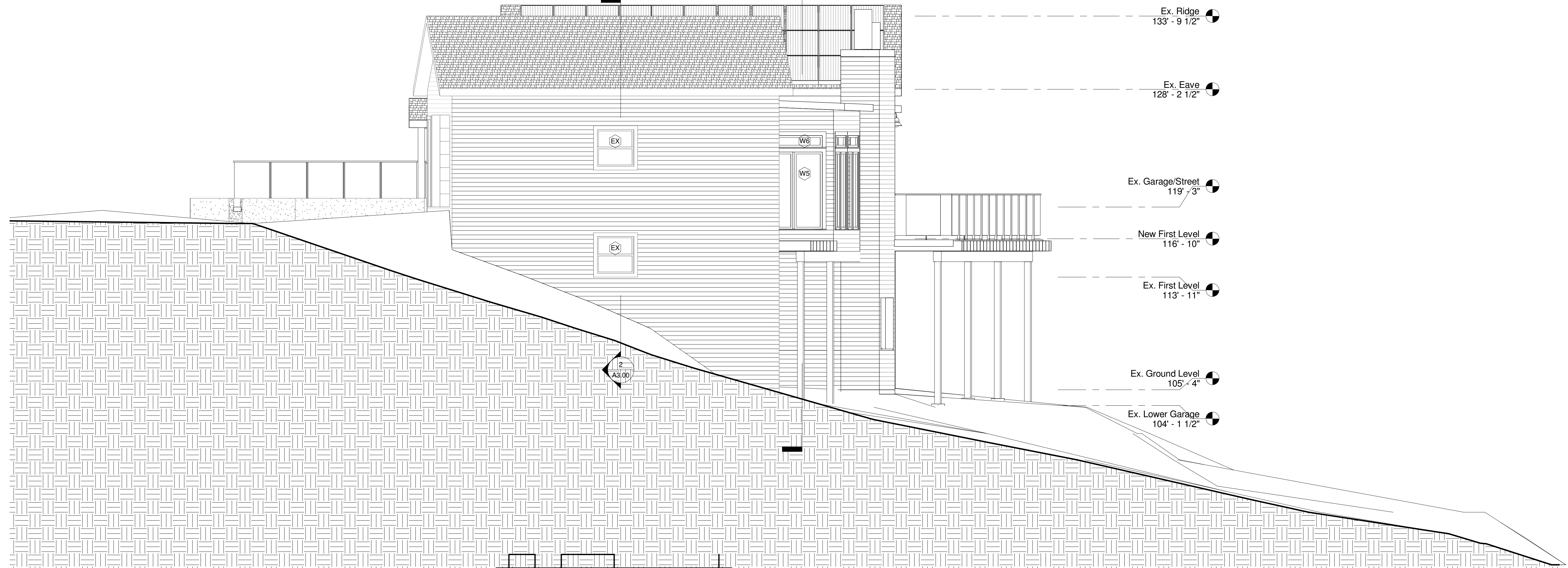
● Ex. Garage/Street
119' - 3"

● New First Level
116' - 10"

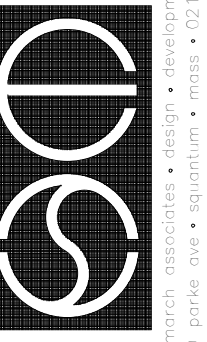
● Ex. First Level
113' - 11"

● Ex. Ground Level
105' - 4"

● Ex. Lower Garage
104' - 1 1/2"



② South Elevation
1/4" = 1'-0"



100 State Street • Suite 200 • Chariton, MA 01821
Phone: 978.235.0588 • Fax: 978.831.9533

RENOVATIONS & ADDITION

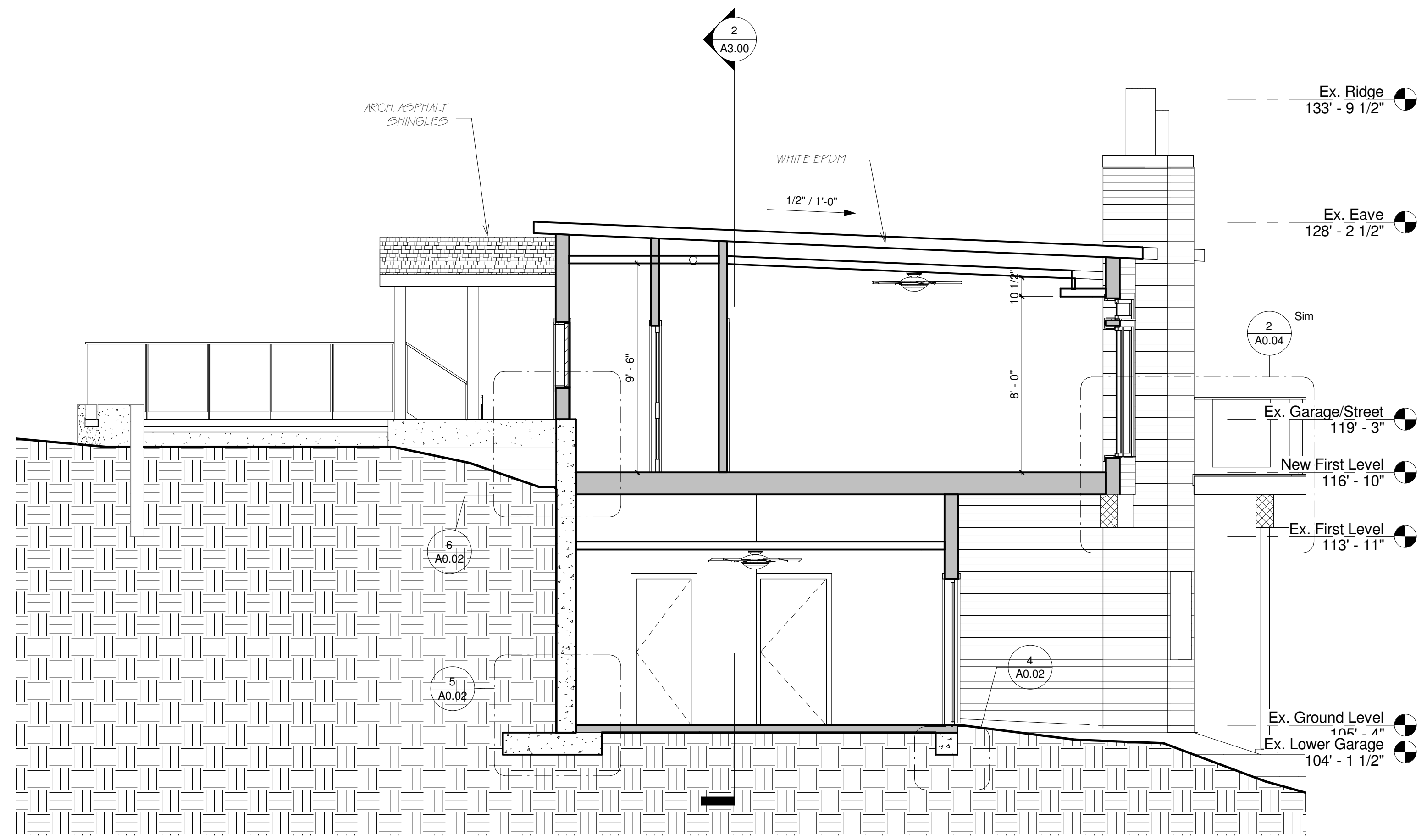
Randy & Sara Garry Residence
13 South Chariton Shore Road, Chariton, Mass.

North and South Elevations

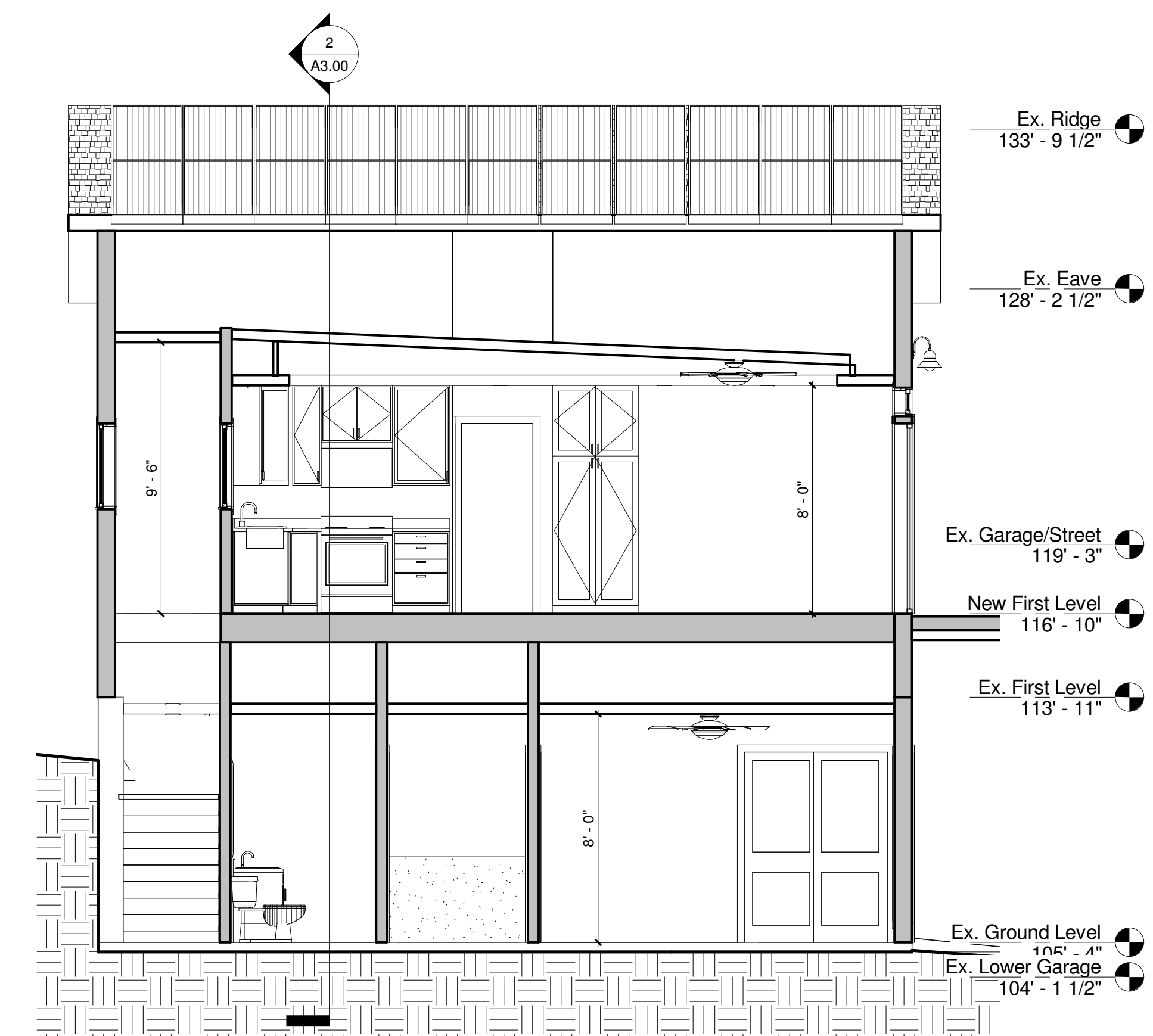
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Date: 2.24.16

A2.02

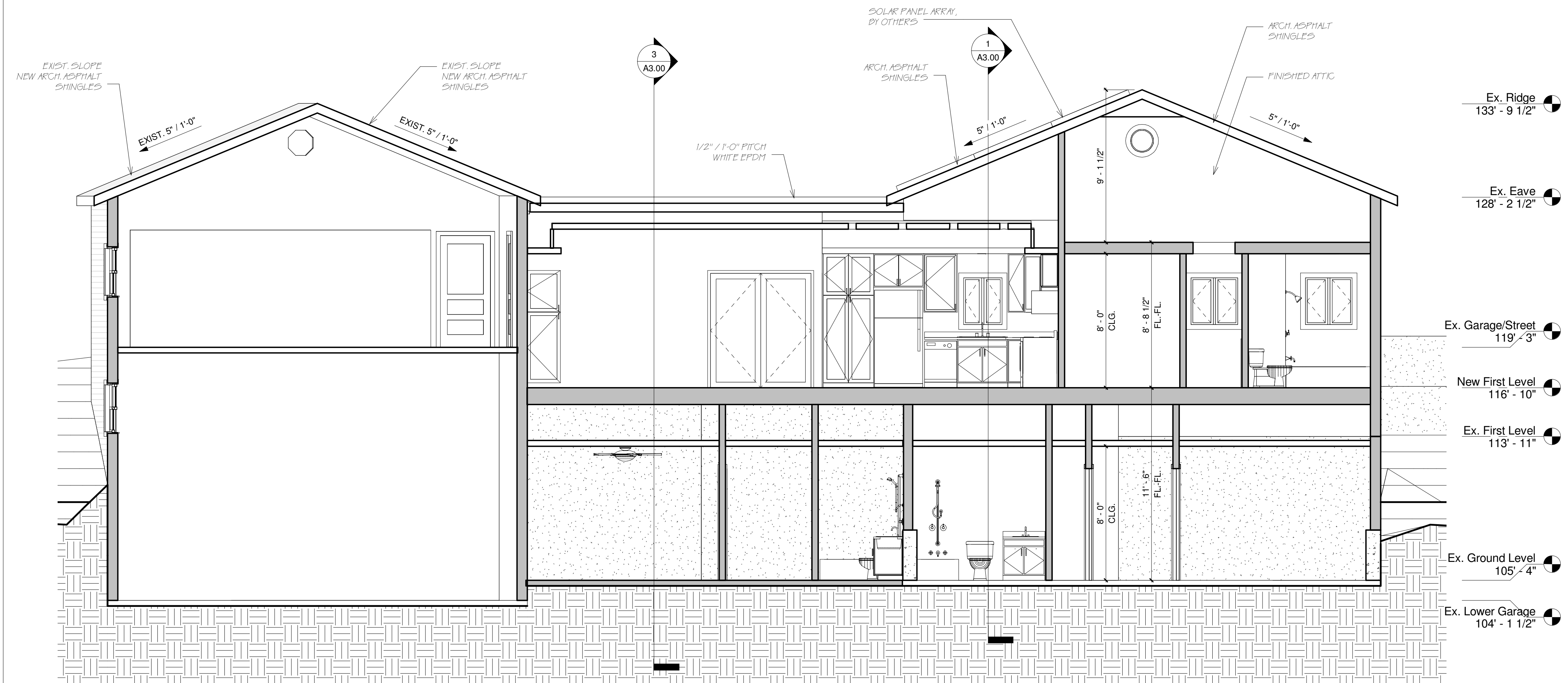
CD



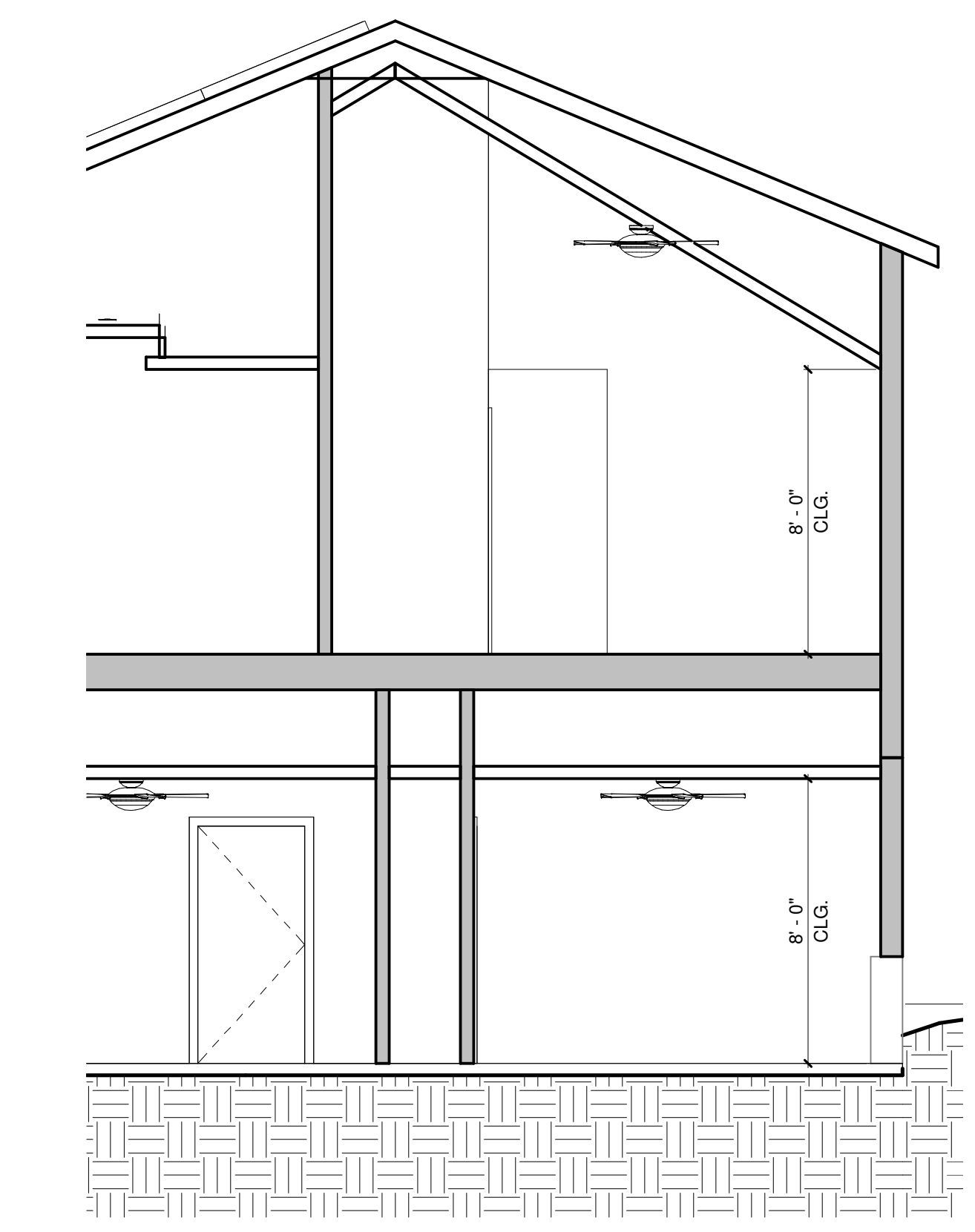
Section 3
1/4" = 1'-0"



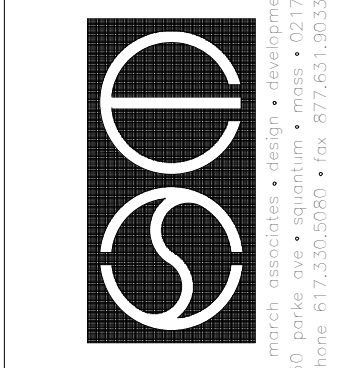
Section 1
1/4" = 1'-0"



Section 2
1/4" = 1'-0"



Master Cathedral Ceiling
1/4" = 1'-0"



RENOVATIONS & ADDITION
Randy & Sara Garry Residence
13 South Charlton Shore Road, Charlton, Mass.

Building Sections
Scale: 1/4" = 1'-0"
Phase: CD
Date: 2.24.16

A3.00
CD

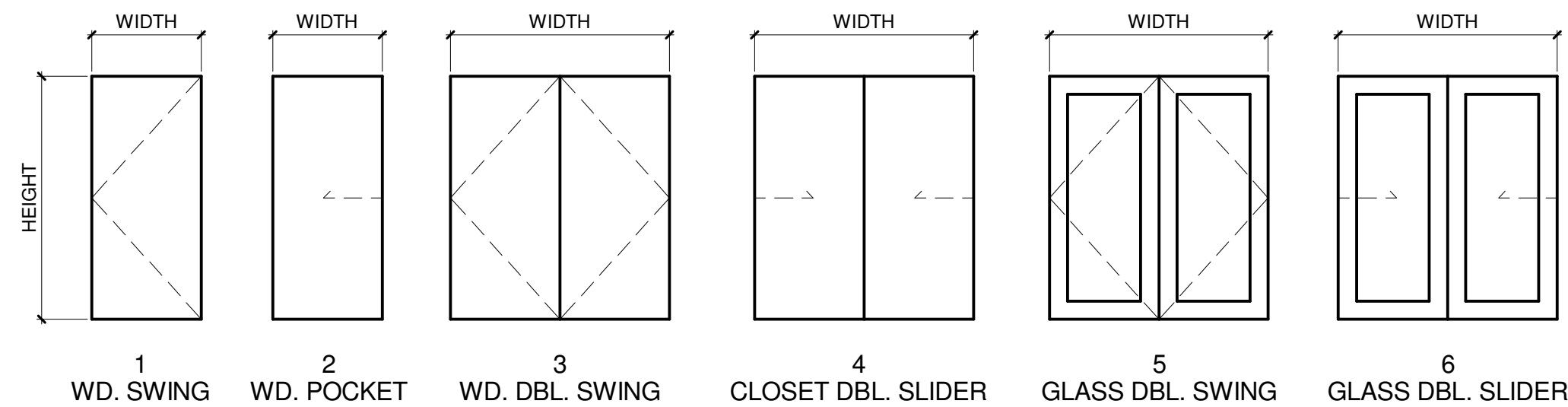
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Lighting Fixture Schedule			
Type	Quantity	Family	Description
1	7	Pendant Light - Linear - 1 Lamp	Closet
2	69	Downlight - Recessed Can	Incandescent
2-WP	4	Downlight - Recessed Can	Waterproof
3	4	Wall Lamp - Bracket	Vanity
4	6	Ceiling_Fan - 52in_Remote_Control_11274	w/ Light
5	5	Downlight - Under Cabinet	Kitchen strip
6	4	Pendant Light - Disk	Kitchen Island
7	3	Wall Lamp - Bracket	Exterior
8	14	Downlight - Recessed Can	Exterior

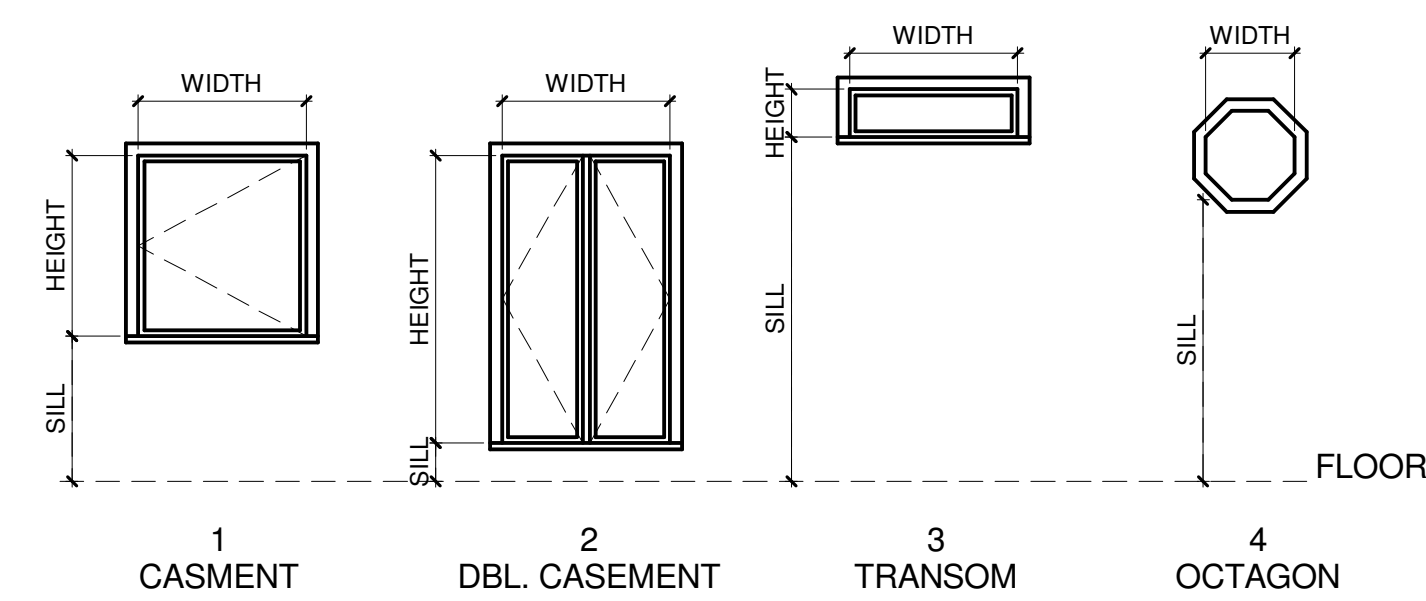
Door Schedule				
Number	Type	Width	Height	Head Height
001	6 - Ext. Glass Dbl. Slider	6'-0"	6'-8"	6'-8"
002	6 - Ext. Glass Dbl. Slider	6'-0"	6'-8"	6'-8"
003	1 - Wd. Swing	3'-0"	6'-8"	6'-8"
003A	1 - Wd. Swing	2'-6"	6'-8"	6'-8"
004	1 - Wd. Swing	2'-6"	6'-8"	6'-8"
005	1 - Wd. Swing	2'-6"	6'-8"	6'-8"
006	3 - Wd. Dbl. Swing	4'-0"	6'-8"	6'-8"
007	1 - Wd. Swing	3'-0"	6'-8"	6'-8"
007A	4 - Closet Dbl. Slider	5'-0"	6'-8"	6'-8"
008	1 - Wd. Swing	3'-0"	6'-8"	6'-8"
009	4 - Closet Dbl. Slider	5'-0"	6'-8"	6'-8"
100	5 - Ext. Glass Dbl. Swing	6'-0"	6'-10"	6'-10"
101	5 - Int. Glass Dbl. Swing	6'-0"	6'-10"	6'-10"
102	6 - Ext. Glass Dbl. Slider	6'-0"	6'-8"	6'-8"
103	6 - Ext. Glass Dbl. Slider	6'-0"	6'-8"	6'-8"
104	1 - Ext. Wd. Swing	3'-0"	6'-8"	9'-1 1/4"
105	4 - Closet Dbl. Slider	6'-0"	6'-8"	6'-8"
106	1 - Wd. Swing	2'-6"	6'-8"	6'-8"
107	2 - Wd. Pocket	2'-6"	6'-8"	6'-8"
108	1 - Wd. Swing	3'-0"	6'-8"	6'-8"

Window Schedule						
Label	Quantity	Type	Width	Height	Head Height	Sill Height
W1	1	2 - Dbl Casement	2'-6"	3'-0"	6'-8"	3'-8"
W2	4	2 - Dbl Casement	3'-0"	3'-0"	6'-8"	3'-8"
W3	2	2 - Dbl Casement	4'-0"	4'-0"	6'-8"	2'-8"
W4	2	1 - Casement	3'-0"	3'-0"	6'-10"	3'-10"
W5	7	2 - Dbl Casement	4'-6"	6'-0"	6'-8"	0'-8"
W6	6	3 - Transom	4'-6"	1'-0"	7'-11"	6'-11"
W7	2	3 - Transom	6'-0"	1'-0"	7'-11"	6'-11"
W8	2	4 - Octagon	1'-6"		14'-0"	14'-0"

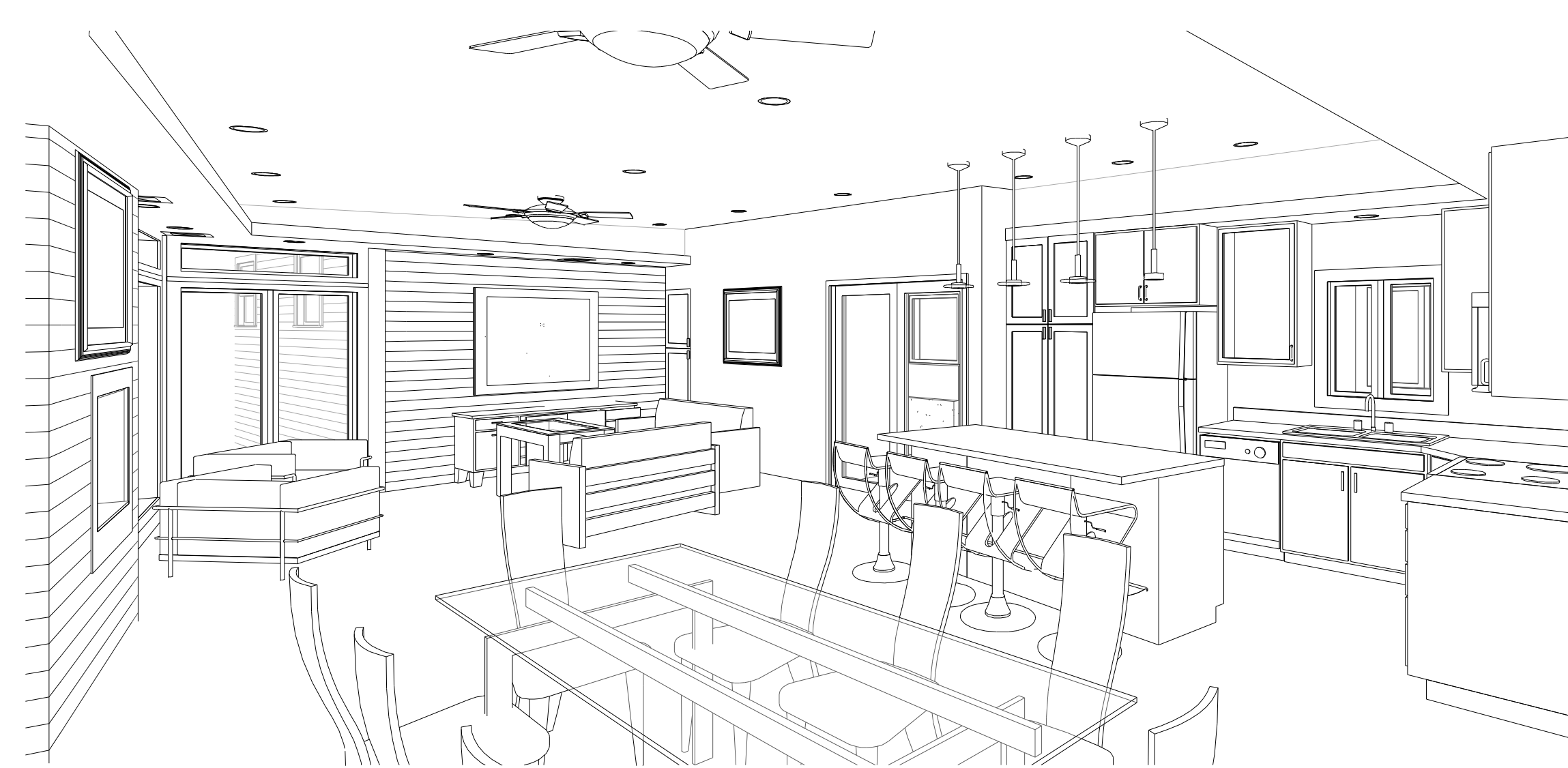
DOOR TYPES



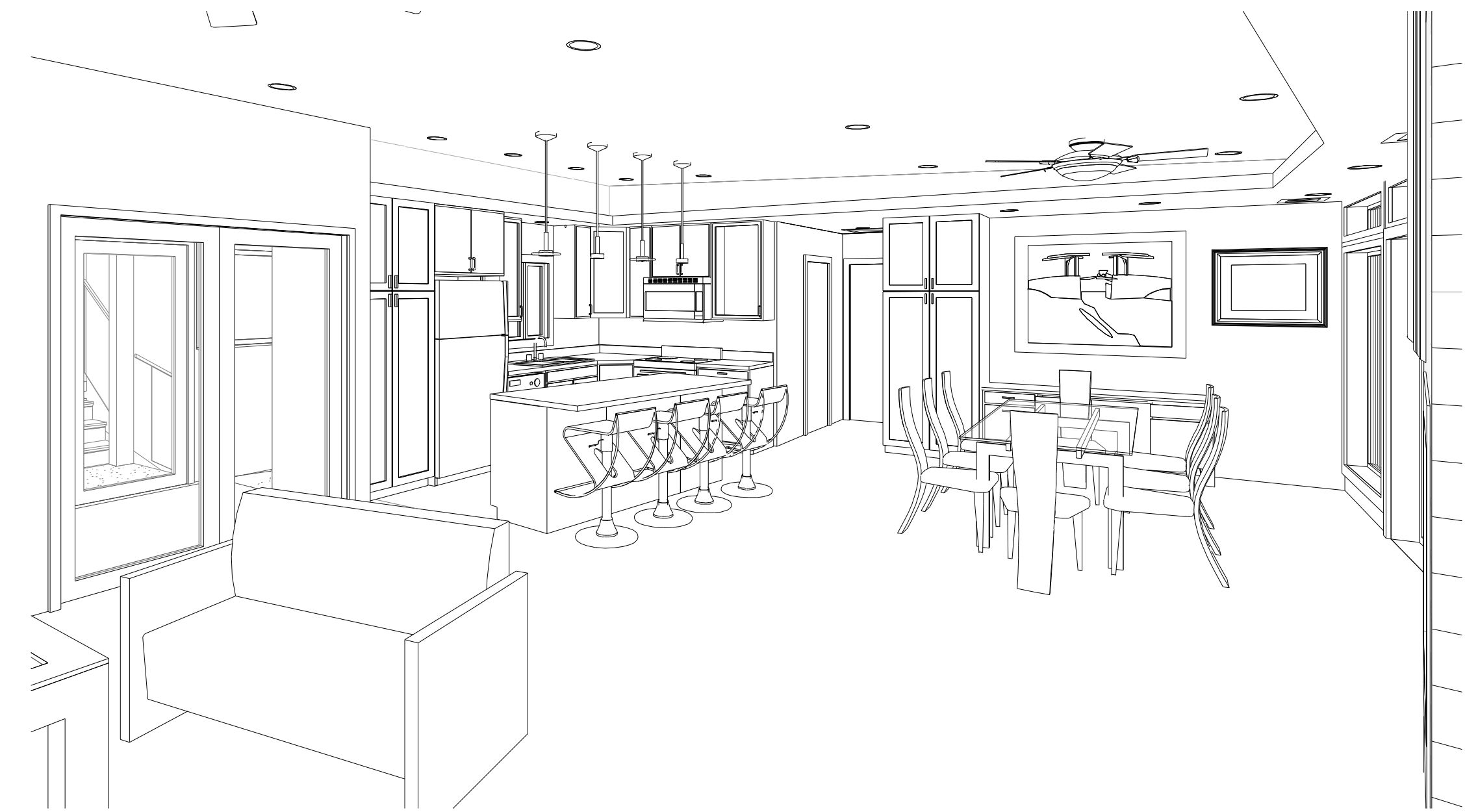
WINDOW TYPES



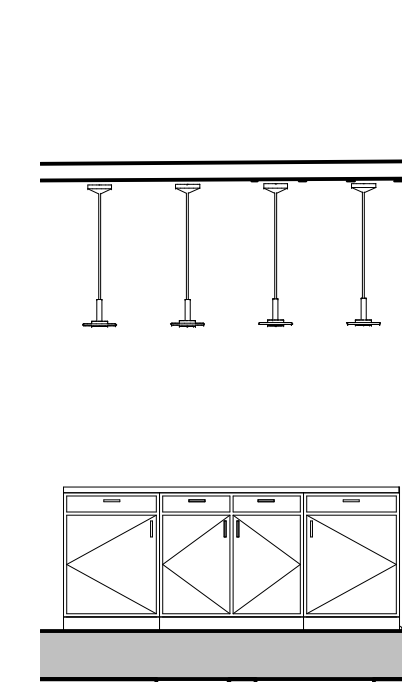
10 Door and Window Types
1/4" = 1'-0"



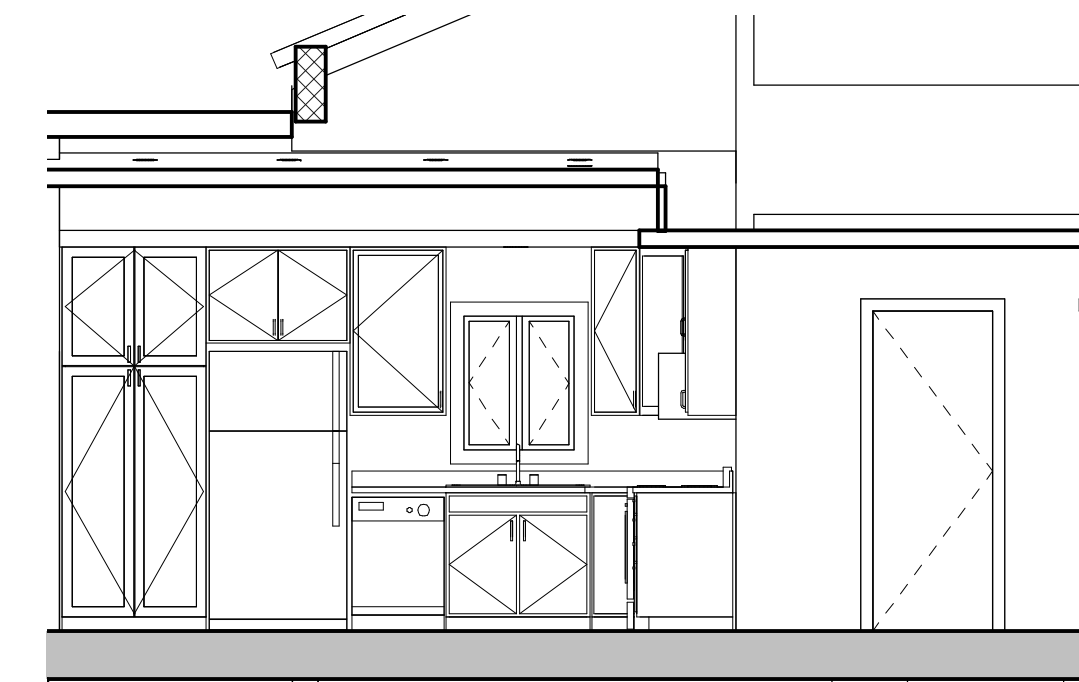
2 Living Room View



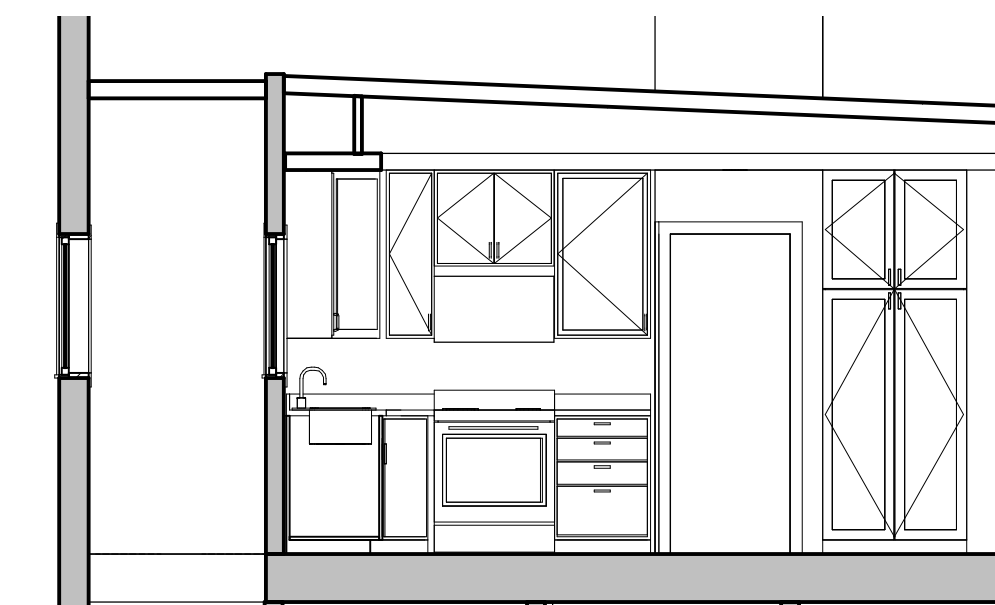
1 Kitchen / Dining View



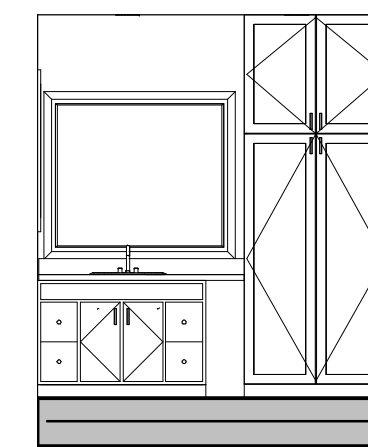
5 Kitchen Island
1/4" = 1'-0"



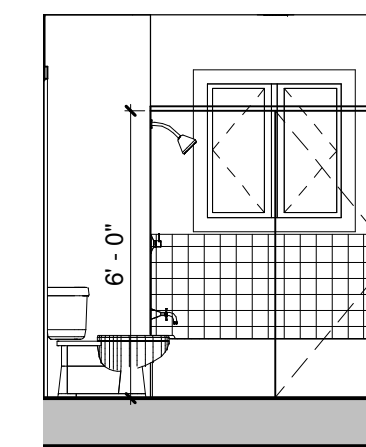
4 Kitchen Sink
1/4" = 1'-0"



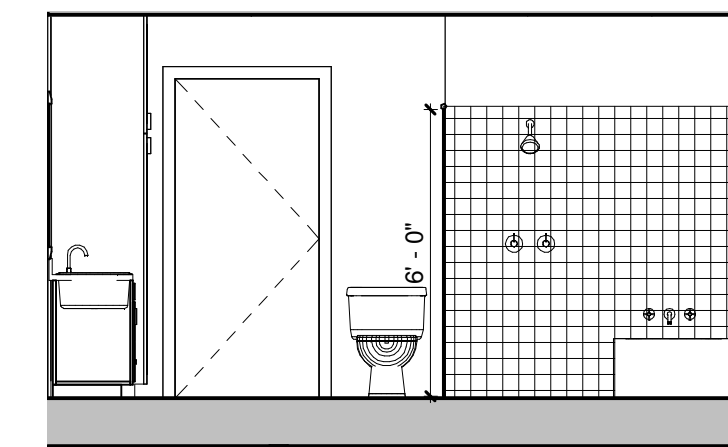
3 Kitchen Range
1/4" = 1'-0"



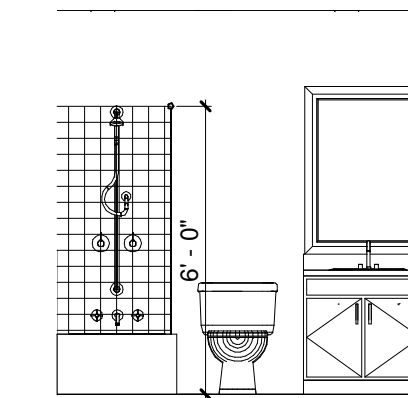
9 Master Bath East
1/4" = 1'-0"



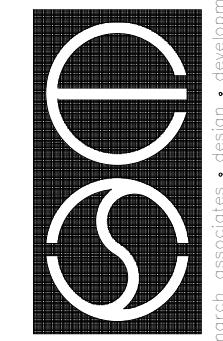
8 Master Bath West
1/4" = 1'-0"



7 Master Bath South
1/4" = 1'-0"



6 Bathroom
1/4" = 1'-0"



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RENOVATIONS & ADDITION

Randy & Sara Garry Residence
13 South Chariton Shore Road, Chariton, Mass.

**Interior Views
Door & Window Schedules**

Scale: 1/4" = 1'-0"
Phase: CD
Date: 2.24.16

A4.00

CD