

FOUNDATION NOTES

1. ALL CONCRETE SHALL BE 3,000 PSI (AT 28 DAYS) AIR ENTRAINED, U.N.O. (REF. DETAIL B/FND FOR WALL REINFORCEMENT SCHEDULE, TYP.)
2. CMU SHALL BE FILLED WITH 3,000 PSI GROUT WHERE INDICATED ON PLANS, MORTAR SHALL BE TYPE "S" FOR ALL BELOW GRADE APPLICATIONS.
3. BACKFILL WALLS IN EQUAL LIFTS, DO NOT BACKFILL WALLS UNTIL BASEMENT SLAB IS POURED AND 1ST FLOOR DECK IS INSTALLED AND FULLY SHEATHED.
4. WATERPROOFING AND DRAINAGE SYSTEM SHALL BE PROVIDED AS INDICATED AND DRAINAGE SHALL TERMINATE AT A SUITABLE SUMP OR DAYLIGHT CONDITION AS REQUIRED PER CODE.
5. DO NOT CUT DRILL OR NOTCH FOUNDATION WALLS WITHOUT APPROVED DETAILS FROM THE ENGINEER OF RECORD.
6. FOUNDATION CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SLOPE CUTS AND SOIL STABILIZATION IN ACCORDANCE WITH COUNTY REQUIREMENTS

FRAMING NOTES

1. FOLLOW MANUFACTURERS' INSTRUCTIONS FOR CUTTING HOLES IN ANY I-JOIST, LVL OR PSL PRODUCTS. DO NOT CUT HOLES OR NOTCH WITHOUT PROPER SIZING AND PLACEMENT.
2. ALL MULTI-PLY MEMBERS SHALL BE ATTACHED WITH 3-ROWS OF 16D NAILS AT 12" O/C (NAILED FROM BOTH SIDES OF BEAM ASSEMBLY FULL LENGTH)(ADD FILLER BETWEEN DOUBLE I-JOISTS PER MANUF. SPECS.)
3. ALL HEADERS SHALL BE HEM FIR #2 & ALL STUDS SPF #2 U.N.O.
4. ALL LUMBER EXPOSED TO ELEMENTS OR IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED (ACQ) SYP #2 OR EQUIVALENT TREATMENT APPROVED FOR GROUND CONTACT
5. USE ONLY APPROVED NON-CORROSIVE FASTENERS AND HARDWARE FOR ALL ATTACHMENTS IN PRESSURE TREATED LUMBER.
6. FOLLOW ALL MANUFACTURERS RECOMMENDATIONS FOR INSTALLED HARDWARE (FILL ALL NAIL HOLES IN STRAPS AND HANGERS)
7. PROVIDE CRUSH BLOCKS UNDER ALL POSTS ABOVE (OF EQUAL WIDTH AND MATERIAL AS POST)
8. ALL INTERIOR 2X BEARING WALLS @ 16" O.C. (U.N.O.).
9. ALL EXTERIOR 2X4 WALLS @ 16" O.C. (U.N.O.)
ALL EXTERIOR 2X6 WALLS @ 24" O.C. (U.N.O.)

WINDBRACING SCHEDULE

115 MPH (3-Second Gust) - Braced Wall Schedule				
BRACED WALL SCHEDULE - SEE ARCHITECTURAL COVERSHEET FOR CODE REFERENCE				
MARK	TYPE	LENGTH	DESCRIPTION	DETAIL
CS-WSP	PREScriptive BRACED WALL (CS-WSP)	LENGTH PER PLAN (EITHER SIDE OF WALL)	7/16" OSB SHEATHING ATTACHED TO STUDS (BLOCKED) WITH 0.131"x2-3/8" NAILS @ 6" O/C INTO 2X SPF#2 FRAMING MEMBERS AT ALL BOUNDARY EDGES.	-
WSP	PREScriptive BRACED WALL (WSP)	LENGTH PER PLAN (EITHER SIDE OF WALL)	7/16" OSB SHEATHING ATTACHED TO STUDS (BLOCKED) WITH 0.131"x2-3/8" NAILS @ 6" O/C INTO 2X SPF#2 FRAMING MEMBERS AT ALL BOUNDARY EDGES.	-
GB	PREScriptive BRACED WALL (GB)	LENGTH PER PLAN (DOUBLE SIDED = ACTUAL LENGTH, SINGLE SIDED = .5 x ACTUAL)	1/2" GYPSUM WALL SHEATHING ATTACHED TO STUDS (BLOCKED) WITH DRYWALL SCREWS (#6x1 1/2" TYPE "S") @ 7" O/C AT EDGES, 12" O/C AT INTERMEDIATE SUPPORTS INTO 2X SPF#2 FRAMING MEMBERS.	-
LIB (ATTACHED UNITS ONLY)	PREScriptive LET-IN-BRACE (LIB)	LOCATION PER PLAN (EITHER SIDE OF WALL)	SIMPSON TIE/R-5/RC/WB DIAGONAL BRACETS LET IN TO THE TOP & BOTTOM PLATES AND STUDS. LET IN BRACING SHALL BE PLACED AT AN ANGLE NOT MORE THAN 60° OR LESS THAN 45° FROM HORIZ. USE 2-16D NAILS TO PLATES & 2-8D NAILS TO STUDS.	-
CS-PF	WOOD PORTAL FRAME (CS-PF)	6:1 HEIGHT TO WIDTH RATIO	PORTAL FRAME	3-WB.01

1. ALL BRACED WALLS AND SHEAR WALLS ASSUME A CONTINUOUSLY SHEATHED STRUCTURE IN ACCORDANCE WITH IRC SECTION 602.10.5
2. ALL VALUES SHOWN HAVE BEEN REDUCED TO REFLECT A S.G. = 0.43 FOR STUD FRAMING
3. ALL HARDWARE SHALL BE INSTALLED INACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS
4. REFERENCE ATTACHED DETAILS FOR PORTAL WALL FRAMING
5. FIELD NAILING SHALL BE AT 12" O/C, U.N.O.
6. BLOCK ALL EDGES AT BRACED WALL PANELS ONLY

MECHANICAL REQUIREMENTS

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH VRC SECTION M1507.3

HANGER SCHEDULE

H

ALL HANGERS SHALL BE AS SPECIFIED BY TRUSS OR JOIST MFG., U.N.O. (ALL HARDWARE SHALL BE AS MANUFACTURED BY SIMPSON STRONG TIE)

DESCRIPTION OF WORK/SITE INFORMATION

NEW SINGLE FAMILY RESIDENCE

REVISION LOG

Revision Date:	Revision Date:	Revision Date:	Revision Date:
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ABBREVIATIONS

A.B. ADJ. A.F.T. ALUM. ANCH. ANGLE ARCH. @ BD. BLDG. BM BTM BLKG. BRG. BRK. BSMT C.J. C.M.U. COL. CONC. COND.	ANCHOR BOLT ABOVE FINISH FLOOR ADJACENT/ADJUSTABLE ABOVE FINISH TREAD ALUMINUM ANCHOR ANGLE ARCHITECTURAL AT BOARD BUILDING BEAM BOTTOM BLOCKING BEARING BRICK BASEMENT CONTROL JOINT CENTER LINE CONCRETE MASONRY UNIT COLUMN CONCRETE CONDITION	CONT. CONST. C.O. CANT. C.T. CLG. C.M. C.R. D DBL. DIA. DIR. DN DR. DW. DWG. D.S. DTL EA. E.J. ELEC.	CONTINUOUS CONSTRUCTION COUNTERSUNK CASED OPENING CANTILEVER CERAMIC TILE CEILING CROWN MOULD CHAIR RAIL DRYER PENNY DOUBLE DIAMETER DIRECTION DOWN DOOR DISH WASHER DRAWING DOWN SPOUT DETAIL EACH EXPANSION JOINT ELECTRICAL	ELEV. EQ. EXP. EXT. EE. F/C F.D. FDN. FLR. FP F.R. FRM FT. FTG. GA. GALV. G.C. GEN. GYP. G.L. HD.WD.	ELEVATION EQUIPMENT EXPANSION EXTERIOR EACH END FLOOR COVERING CHARGE FLOOR DRAIN FOUNDATION FIREPLACE FIRE RATED FRAME LIGHT FOOT / FEET LOUVER LAUNDRY TUB MASONRY MATERIAL MAXIMUM MEDIUM DENSITY OVERLAY GLUE LAM MECHANICAL MINIMUM MASONRY OPENING	HGT. HR. HDR. HB ID. INGR. INSUL. INT. I.S. JT. KSI LT. LT. WT. L.T. LVR. L.T. MAS. MAT. MAX. MDO MECH. MIN. M.O.	HEIGHT HORIZONTAL,HORIZONTALLY HOUR HEADER HOSE BIB INSIDE DIAMETER IN GROUND INSULATION INTERIOR INSIDE CORNER JOINT KIPS PER SQUARE INCH LIGHT MASONRY MATERIAL MAXIMUM MEDIUM DENSITY OVERLAY MECHANICAL MINIMUM MASONRY OPENING	MTL. N.I.C. (NTS) O.C. OPER. OPNG. OPT. O.S.B. OZ. ONE ROD ONE SHELF PRECAST PARTICLE BOARD PLATE PANEL PLYWOOD PREFABRICATED PAIR PROJECT / PROJECTED POUNDS PER SQ. IN. POUNDS PER SQ.FT. PRESSURE TREATED QUAD.	REF. REINF. REQ'D RMS. RNC R.O. R. RND S.C. SCHEM. SHLF SHT. SIM. S.S. STL. STRUCT. SUSP. SGD SQ. TB T & G T.O.S. T.O.W.	REFER TO REFERENCE REINFORCING,REINFORCED REQUIRED ROOMS RANGE ROUGH OPENING RISER ROUND SAWCUT SCHEMATIC SHELF SHEET SIMILAR STAINLESS STEEL STEEL STRUCTURAL SUSPENSION SLIDING GLASS DOOR SQUARE TOWEL BAR TONGUE AND GROVE TOP OF SLAB TOP OF FOUNDATION WALL	TYP T TR TRPL U.N.O. VERT. V.I.F. W W/ WD. W.W.F. WO OR W/O WNDW	TYPICAL TREAD TOWEL ROD TRIPLE UNLESS NOTED OTHERWISE VERIFY IN FIELD WASHER WITH WOOD WELDED WIRE FABRIC WALKOUT WINDOW
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BUILDING DATA

FINISHED Sq. Ft.		GARAGE Sq. Ft.	
ZONE	AREA	ZONE	AREA
Basement	1808 SF	Garage	532 SF
First Floor	2041 SF	Total	532 SF
Second Floor	1938 SF		
Total	5788 SF		

BUILDING ADDRESS

PROPERTY ADDRESS:

CLOUD IX HOMES
313 WINDOVER AVE NW
VIENNA, VA 22180

DRAWN BY:

MCR

DATE:

05/21/25

REV No.

DATE

XXX

XX-XX-XX

SHEET No.

CS.01

DRAWING INDEX

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GN.02 STRUCTURAL GENERAL NOTES
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AD.01 STONE VENEER DETAILS
DD.01 DECK DETAILS

DESIGN DATA

DESIGN CODE

2021 VIRGINIA RESIDENTIAL CODE (VRC)

BUILDING LOADS

SOIL BEARING PRESSURE:
MAX. 1500 PSF FOR ALL FOOTINGS
*ALL FOOTINGS TO BEAR ON VIRGIN SOIL IN ACCORDANCE WITH IRC SOIL CLASSIFICATIONS SW, SP, SM, SC, GM OR GC
FLOOR LOADS: (I-JOISTS)
LIVE LOAD = 40 PSF (TYPICAL)
SLEEPING AREAS = 30 PSF (LIVE LOAD)
DEAD LOAD = 12 PSF (TYPICAL)
ROOF LOADS: (OPEN WEB TRUSSES)
SNOW LOAD = 30 PSF (ROOF)
DEAD LOAD = 10 PSF (TOP CHORD)
DEAD LOAD = 10 PSF (BOTTOM CHORD)
WIND LOADS:
ULTIMATE DESIGN WIND SPEED = 115 MPH (3 SEC. GUST)
WIND LOAD IMPORTANCE FACTOR = 1.0
WIND EXPOSURE = B
COMPONENTS CLADDING:
115 MPH OR LESS (3 SEC. GUST):
MAX. VALUE AT ROOF WILL BE (+18.2, -23.2)
MAX. VALUE AT WALL WILL BE (+19.8, -26.6)
USE GROUP:
R-5 (SINGLE FAMILY RESIDENTIAL)
CONSTRUCTION TYPE:
VB (WOOD FRAMED CONSTRUCTION)
HEIGHT LIMITATION:
35' MAXIMUM HEIGHT TO RIDGE
EMERGENCY ESCAPE:
EGRESS WINDOWS FROM SLEEPING ROOMS SHALL HAVE A MIN. OF 5.7 SQ.FT
GARAGE/HOUSE CLG./WALL ASSEMBLY:
1/2" GYPSUM BOARD OR (1) OR (2) LAYERS OF TYPE "X" GYPSUM BOARD IF REQUIRED BY CODE AT THE WALL & CEILING, W/20 MIN. GARAGE/HOUSE DOOR INTERIOR STAIR PROTECTION:
(1) LAYER OF 1/2" GYPSUM BAORD TO ALL SURFACES IN ACCESSIBLE AREAS

EQUIVALENT FLUID PRESSURE:

BASEMENT WALLS = 60 PCF*
*USE ONLY GRAVEL OR CLEAN FILL IN ACCORDANCE WITH IRC SOIL CLASSIFICATIONS SW, SP, SM, SC, GM OR GC
DEFLECTION LIMITS:
- BEAM SUPPORTING ROOF ONLY:
LIVE LOAD=L/360, TOTAL LOAD=L/240
- TRUSSES SUPPORTING ROOF ONLY:
LIVE LOAD=L/240, W/MAX. DEFLECTION OF 3/4"
TOTAL LOAD=L/180
- TRUSS GIRDERS SUPPORTING ROOF ONLY:
LIVE LOAD=L/360, TOTAL LOAD=L/240
- BEAM SUPPORTING FLOOR LOADS:
LIVE LOAD=L/480, W/MAX. DEFLECTION OF 1/2"
TOTAL LOAD=L/240
- JOIST SUPPORTING FLOOR LOADS:
LIVE LOAD=L/480, W/MAX. DEFLECTION OF 1/2"
TOTAL LOAD=L/240
- BEAM SUPPORTING MASONRY:
LIVE LOAD + MASONRY=1/600, W/MAX. DEFLECTION OF 0.3"
WALL BRACING:
STRUCTURAL SHEATHING ON ALL EXTERIOR WALLS (PREScriptive METHOD CS-WSP, U.N.O.)
WINDOW AND DOOR PERFORMANCE
1. WINDOWS SHALL BE ANDERSON 200 SERIES TILT WASH DOUBLE HUNG, U.N.O.
• U=0.30 (DUAL PANE, LOW E, TEMPERED)
2. GLASS DOORS SHALL BE ANDERSON 200 SERIES HINGED OR GLIDING DOORS, U.N.O.
• U=0.30 (DUAL PANE, LOW E, TEMPERED)
3. GLASS SIDELIGHTS SHALL BE ANDERSON 200 SERIES, U.N.O.
• U=0.30 (DUAL PANE, LOW E, TEMPERED)
MIN. INSULATION REQUIREMENT (REF. SECTIONS)
• 2X4 WALL FINISHED BASEMENT: R-15
• 2X4 WALL EXTERIOR WALL: R-15
• 2X6 WALL EXTERIOR WALL: R-19
• BAND BOARD: R-19
• ATTIC: R-60 OR R-49 IF UNCOMPRESSED TO THE EDGE OF TOP PLATE
• AREA OVER UNCONDITIONED SPACE: R-38 AS REQUIRED BY CODE

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CLOUD IX - 313 WINDOVER AVE NW

GENERAL NOTES & SPECIFICATIONS

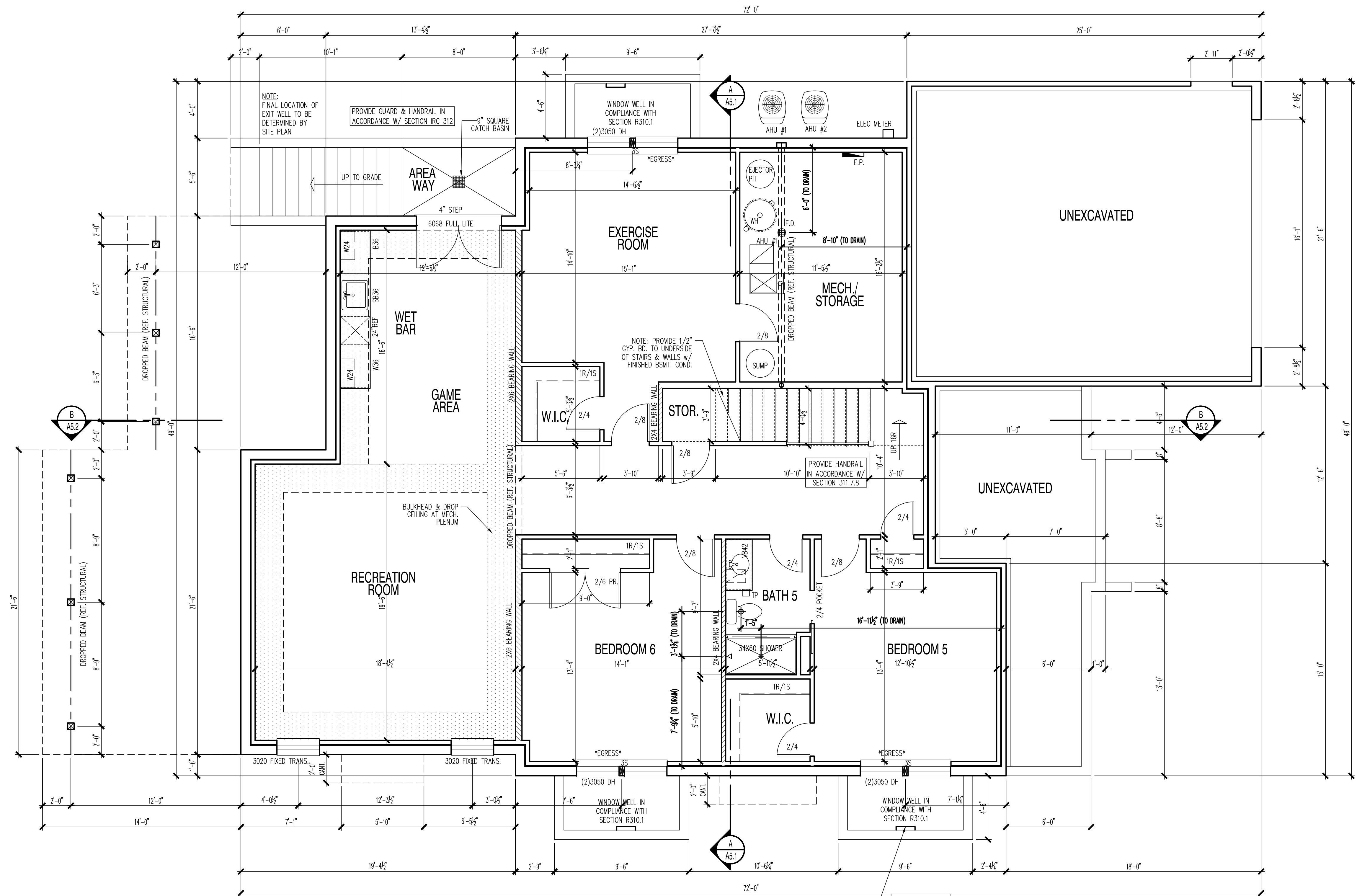
22x34 Plotted at 1/4"=1'-0" - 11x17 Plotted at 1/8" = 1'-0"

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REFERENCE FOUNDATION PLAN SHEET "FND"
FOR ADDITIONAL DIMENSIONS AND
INFORMATION NOT SHOWN

NOTE:
STANDARD DOOR TRIM
RETURN IS 4" U.N.O.

NOTE: ALL DOORS TO
BE 6'-8" TALL U.N.O.



BASEMENT FLOOR PLAN

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

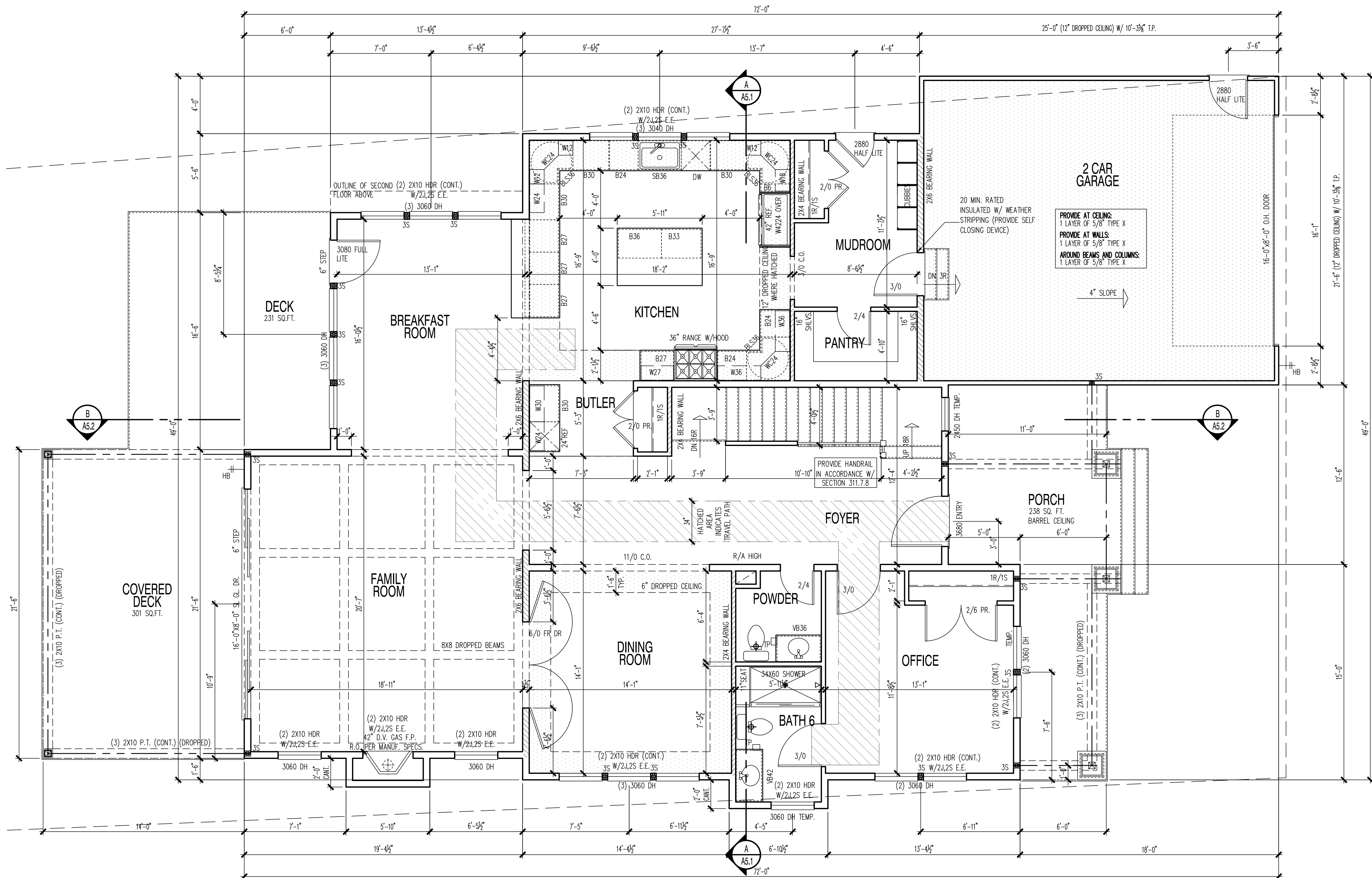
FINISHED 1808 SQ. FT.
STORAGE 214 SQ. FT.

22x34 Plotted at 1/4"=1'-0" - 11x17 Plotted at 1/8" = 1'-0"
CLOUD IX - 313 WINDOVER AVE NW
FINISHED BASEMENT PLAN

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FIRST FLOOR PLAN

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

LIVING AREA: 2041 SQ. FT.
FRONT PORCH: 180 SQ. FT.
GARAGE: 507 SQ. FT.

NOTE:
ALL 4S OR 5S STUD PACKS
TO BE NAILED PER DETAIL
2/SD.03, TYP.

GIRDER TRUSS LOCATIONS ARE FOR
REFERENCE ONLY AND FINAL
LOCATIONS SHOULD BE PER
APPROVED SHOP DRAWING LAYOUT.
ENSURE POSTS ARE LOCATED
ACCORDINGLY UNDER GIRDERS.

REFERENCE WINDBRACING ANALYSIS
SPREADSHEET IN CALC PACKAGE FOR WALL
BRACING DESIGN DATA

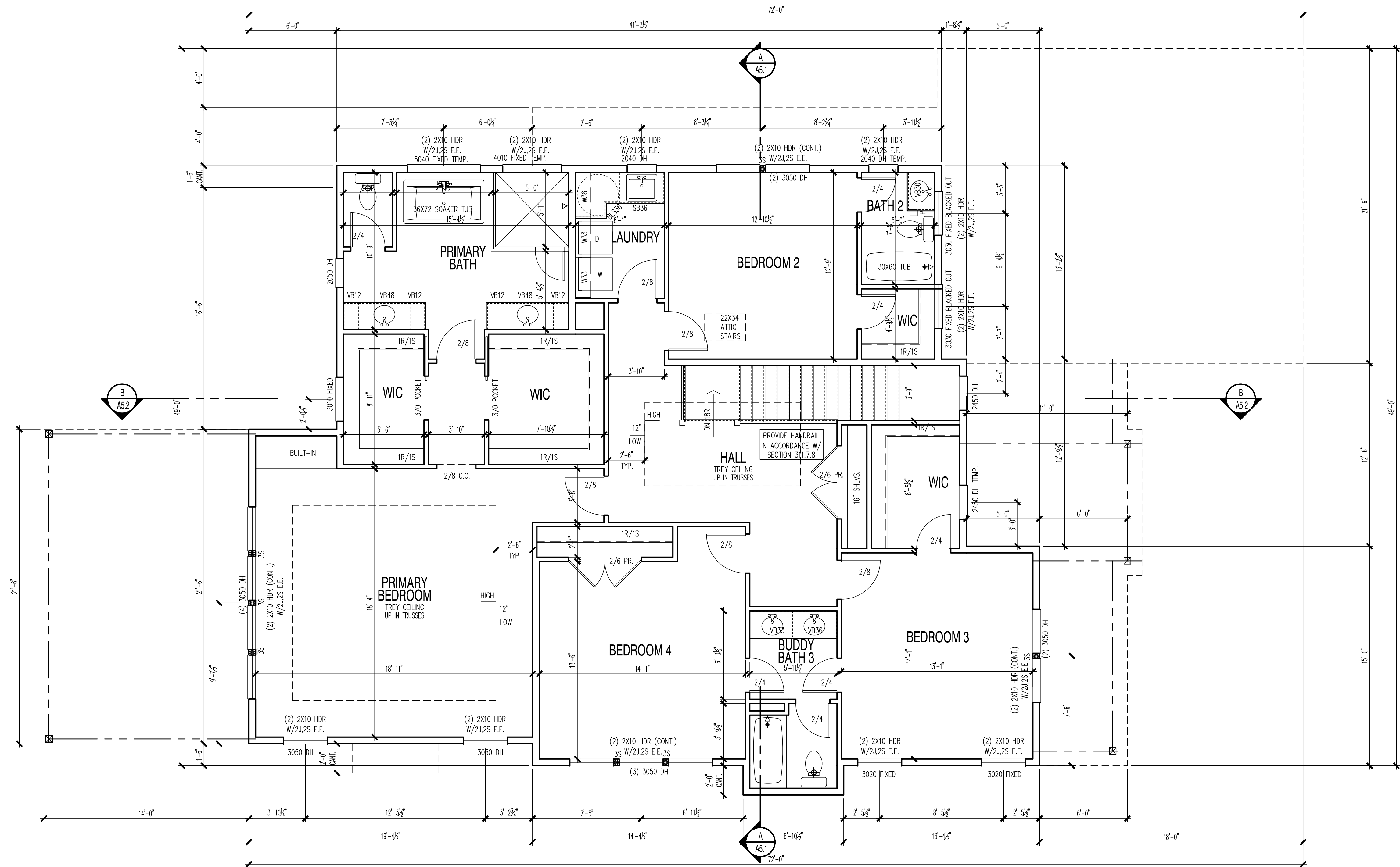
CONTRACTOR TO PROVIDE
FIRE EXTINGUISHER IN
KITCHEN WITH A RATING
OF 2-A:10-B:C

NOTE:
STANDARD DOOR TRIM
RETURN IS 4" U.N.O.

NOTE: ALL DOORS TO
BE 8'-0" TALL U.N.O.

PROVIDE AT CEILING:
1 LAYER OF 5/8" TYPE X
PROVIDE AT WALLS:
1 LAYER OF 5/8" TYPE X
AROUND BEAMS AND COLUMNS:
1 LAYER OF 5/8" TYPE X

FINISHED Sq. Ft.	
ZONE	AREA
Basement	1808 SF
First Floor	2041 SF
Second Floor	1938 SF
Total	5788 SF



SECOND FLOOR PLAN

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

LIVING AREA: 1938 SQ. FT.

REFERENCE WINDBRACING ANALYSIS
SPREADSHEET IN CALC PACKAGE FOR WALL
BRACING DESIGN DATA

GIRDER TRUSS
LOCATIONS ARE FOR
REFERENCE ONLY AND
FINAL LOCATIONS
SHOULD BE PER
APPROVED SHOP
DRAWING LAYOUT:
ENSURE POSTS ARE
LOCATED ACCORDINGLY
UNDER GIRDERS.

NOTE:
STANDARD DOOR TRIM
RETURN IS 4" U.N.O.

NOTE: ALL DOORS TO
BE 6'-8" TALL U.N.O.

NOTE:
INSULATE & THERMO-PLY
BEHIND TUB & SHOWER AT
EXTERIOR WALL LOCATION

22x34 Plotted at 1/4"=1'-0" - 11x17 Plotted at 1/8" = 1'-0"

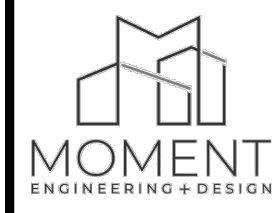
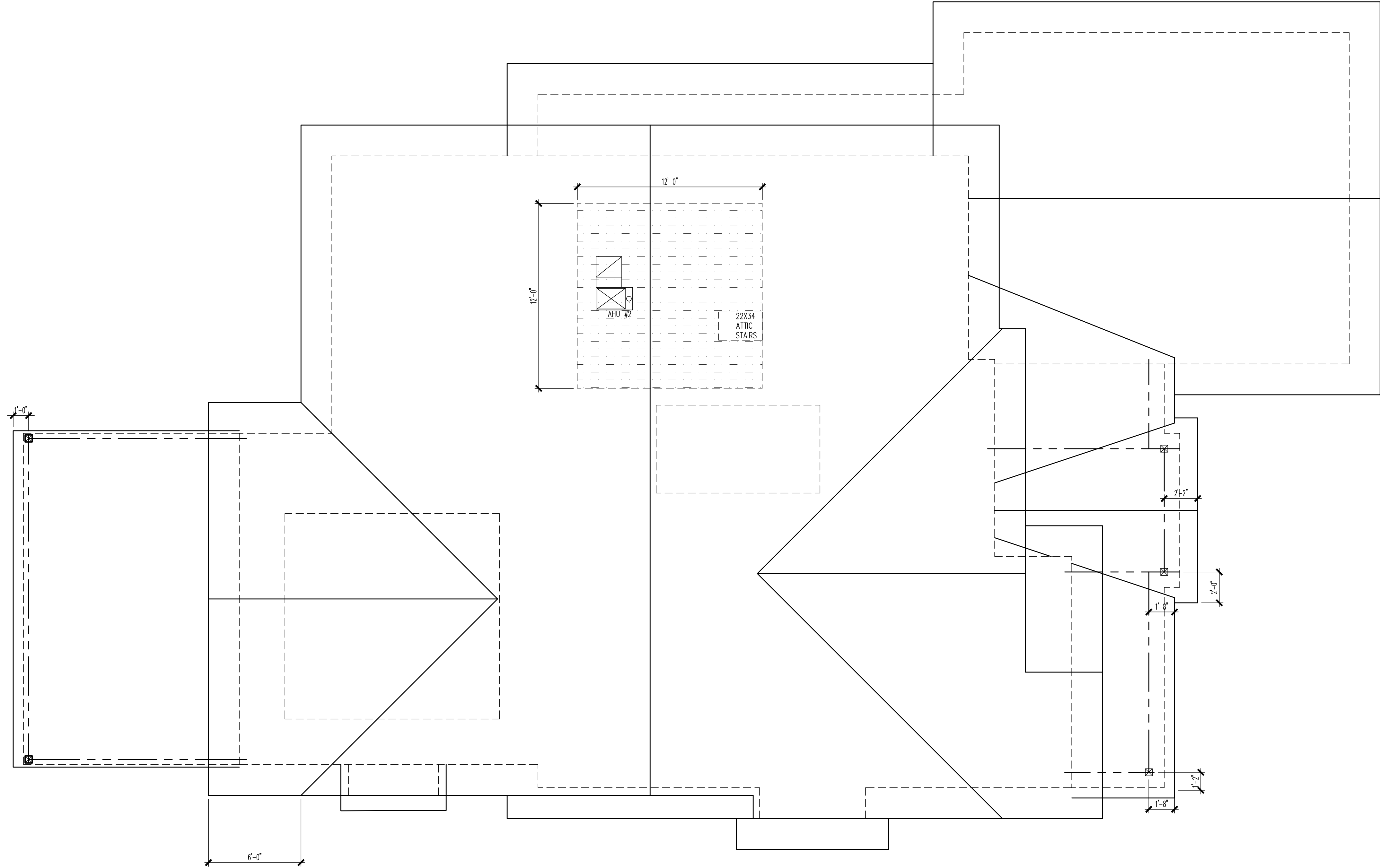
CLOUD IX - 313 WINDOVER AVE NW

SECOND FLOOR PLAN

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A2.1



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CLOUD IX - 313 WINDOVER AVE NW
ROOF PLAN

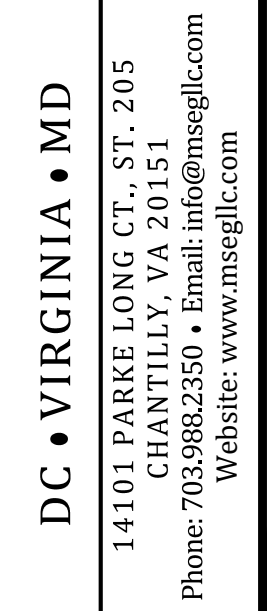
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A3.1



FRONT ELEVATION

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



CLOUD IX - 313 WINDOVER AVE NW
LEFT SIDE ELEVATION

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REV No.	DATE
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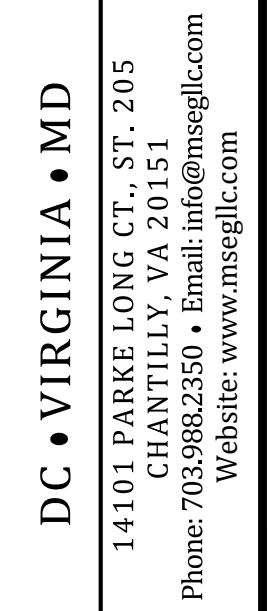
SHEET No.

A4.2



LEFT SIDE ELEVATION

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

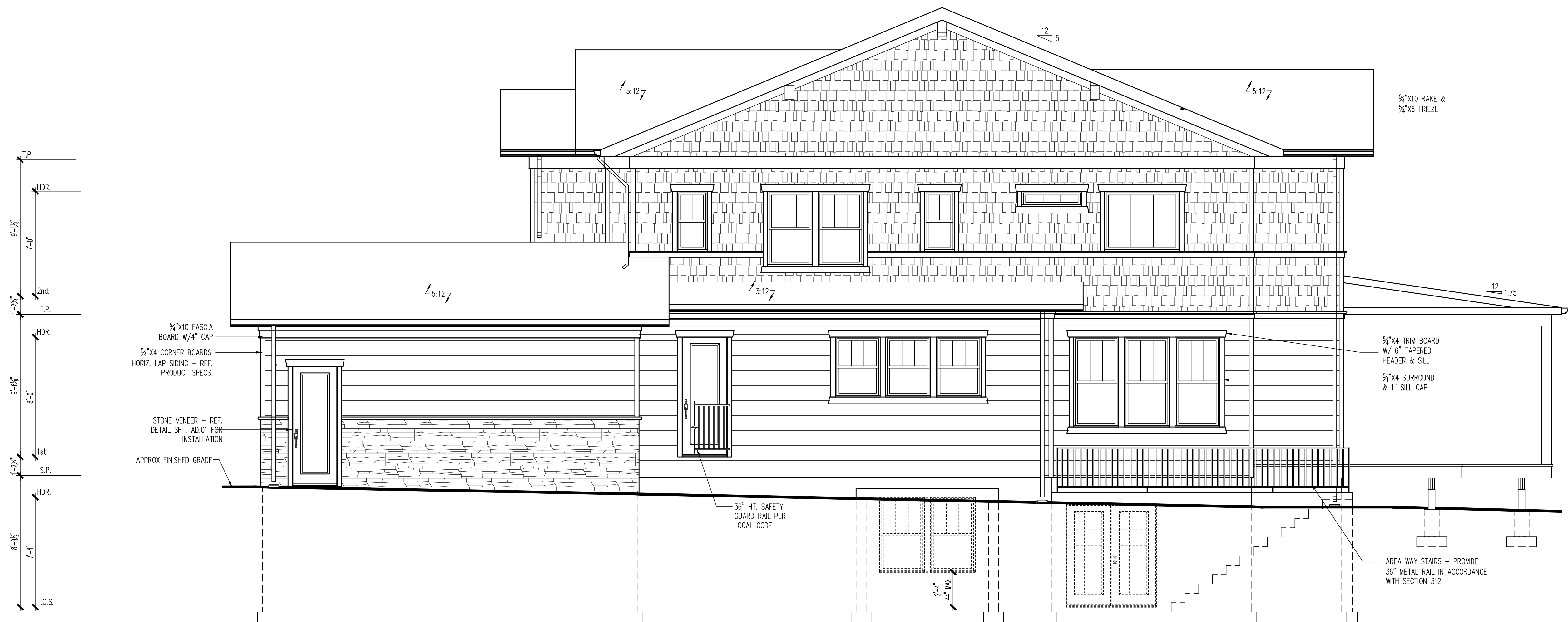


CLOUD IX - 313 WINDOVER AVE NW
RIGHT SIDE ELEVATION

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REV No.	DATE
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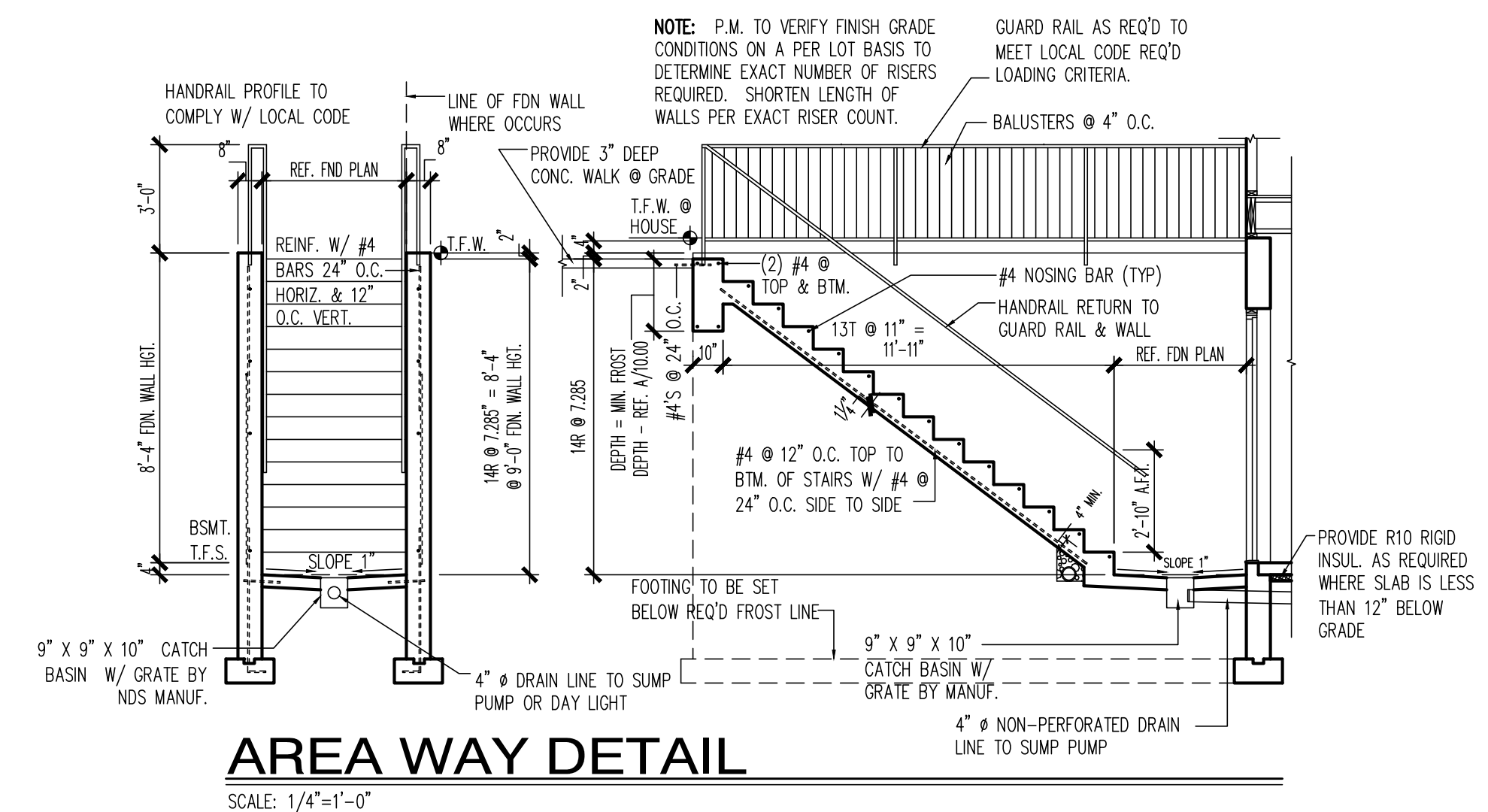
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A4.3



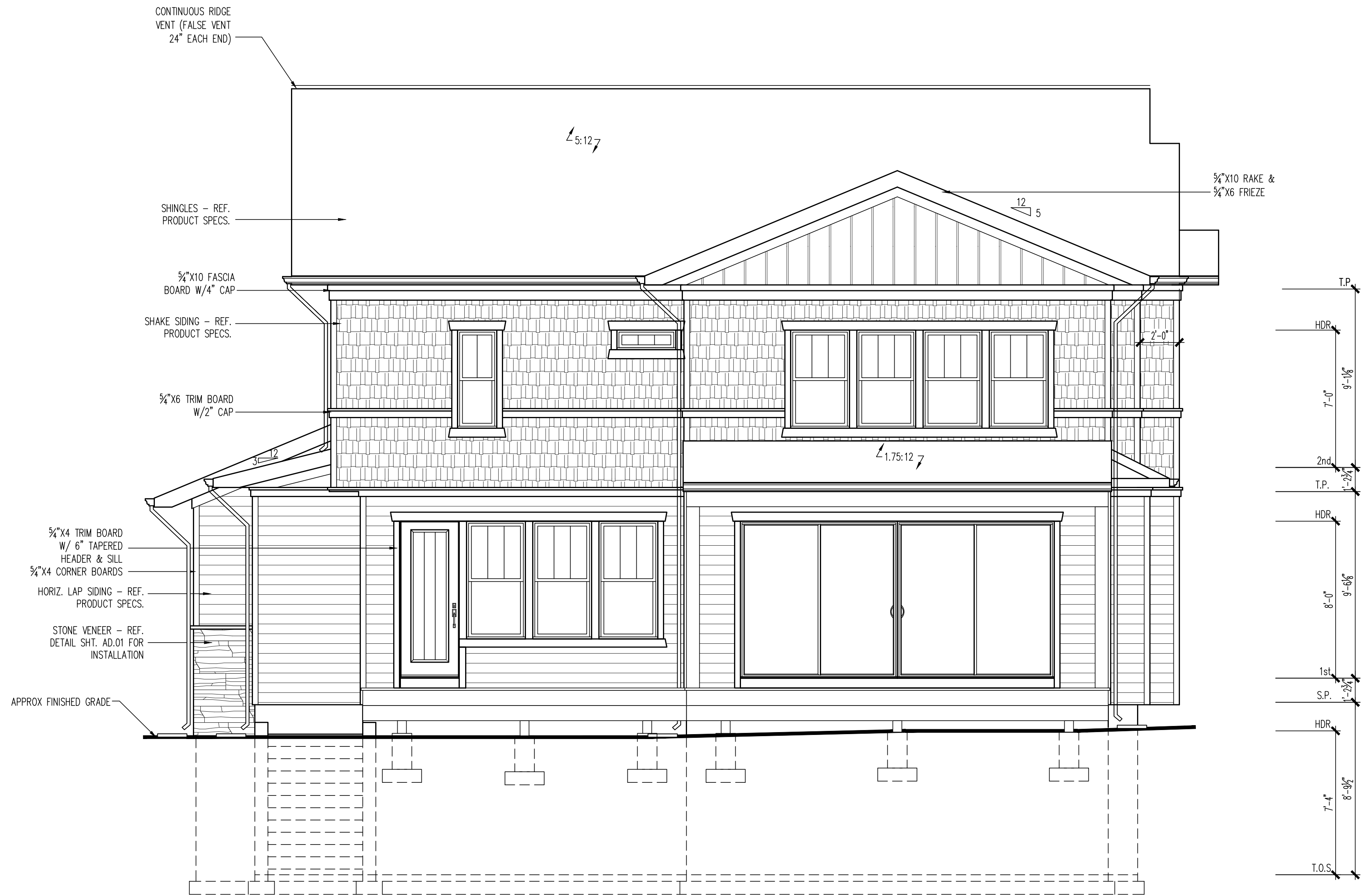
RIGHT SIDE ELEVATION

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



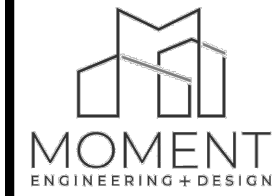
AREA WAY DETAIL

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



REAR ELEVATION

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



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22x34 Plotted at 1/4"=1'-0" - 11x17 Plotted at 1/8" = 1'-0"
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REAR ELEVATION

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SHEET No.
A4.4