

PROPOSED:
ADDITIONS AND ALTERATIONS

DRAWING SHEET LIST

- A.1: COVER SHEET
A.2: FOUNDATION PLAN
A.3: FIRST FLOOR PLAN
A.4: SECOND FLOOR PLAN
A.5: ROOF PLAN
A.6: ELEVATIONS
A.7: ELEVATIONS
A.8: SECTION, PLUM. RISER, DETAILS
A.9: STRAPPING DETAILS
A.10: CONSTRUCTION SCHEDULES
A.11: CONSTRUCTION NOTES
A.12: SEALING DETAILS
A.13: TJI DETAILS

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT,
THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH:

■ THE 2020 RESIDENTIAL CODE OF NYS

■ THE MECHANICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE
REQUIREMENTS OF CHAPTERS 12-25 OF THE 2020 RESIDENTIAL CODE OF NYS

■ THE PLUMBING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE
REQUIREMENTS OF CHAPTERS 25-33 OF THE 2020 RESIDENTIAL CODE OF NYS

■ THE ELECTRICAL SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE
REQUIREMENTS OF CHAPTERS 34-42 OF THE 2020 RESIDENTIAL CODE OF NYS

■ IN ACCORDANCE WITH 2018 IECC RESIDENTIAL ENERGY EFFICIENCY CODE

■ THE PROJECT COMPLIANCE METHOD CHOSEN IS TOTAL UA-ALTERNATIVE AND A
RESCHECK HAS BEEN SUBMITTED WITH THESE DRAWINGS.

FOUNDATIONS CHAPTER 4; DESIGN BASED UPON PRESUMPTIVE LOAD BEARING VALUES
OF SANDY GRAVEL AND/OR GRAVEL AT 2000 LBS PER SQUARE FOOT. CONTRACTOR
TO CONSULT ENGINEER IF DIFFERENT SOIL MATERIALS ARE FOUND UPON EXCAVATION
OR TEST HOLE, FOR ALTERNATIVE FOOTING AND FOUNDATION WALL DESIGN

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA TABLE R301.2(1) 2020 RESIDENTIAL CODE OF NYS	WIND DESIGN		SEISMIC DESIGN CATEGORY		SUBJECT TO DAMAGE FROM		WINTER DESIGN TEMP		ICE BARRIER REQUIRED		FLOOD HAZARDS		AIR FREEZING INDEX		MEAN ANNUAL TEMP	
	GROUND SNOW LOAD	SPEED # (MPH)	TOPOG RAPHIC EFFECTS K	SPECIAL KIND REGION	WIND BORN DEBRIS ZONE #	WEATHERING Q	FROST LINE DEPTH #	TERMITE #	WINTER DESIGN TEMP #	ICE BARRIER REQUIRED	FLOOD HAZARDS #	AIR FREEZING INDEX #	MEAN ANNUAL TEMP #	ICE BARRIER REQUIRED	FLOOD HAZARDS #	AIR FREEZING INDEX #
25	150.0	NO	NO	1 MILE FROM COAST	B	SEVERE	80% 3 FT BFG	MOD TO HEAVY	SEE BELOW	YES	N/A	54.9	51			



HEIGHT/SETBACK RATIO DIAGRAMS

DRAINAGE DESIGN CRITERIA:
1. ROOF & PAVEMENT RUNOFF COEFFICIENT = .167
2. PROVIDE STORAGE FOR 3" RAINFALL
3. 12"Ø PIPE CAPACITY = 0.785 CF/LF
4. ALL ROOF DRAINS SHALL BE A 4"Ø SDR 35 PVC AT
A MIN. SLOPE OF 1.0% UNLESS OTHERWISE NOTED

STORM WATER RUNOFF CALCULATION
DRAINAGE REQUIRED
TOTAL BUILDING AREA: 2500 X 0.167 = 418 CF

12"Ø PIPE 550 LF X 0.785 CF/LF = 432 CF

TOTAL CAPACITY PROVIDED = 432 CF > 418 CF

ZONING INFORMATION
VILLAGE OF WOODSBURGH

SECTION: 41 BLOCK: 45 LOT(S): 22

ZONE: RES. B	REQUIRED	EXISTING	PROPOSED
LOT AREA	14,500 SQ.FT.	12,352.6 SQ.FT.	NO CHANGE
FRONTAGE	100 FT.	119.12 FT.	NO CHANGE
FRONT YARD	35 FT.	34.1 FT.	NO CHANGE
REAR YARD	25 FT.	24.82 FT.	25.16 FT.
SIDE YARD (MIN)	15 FT.	13.2 FT.	NO CHANGE
BUILDING HEIGHT	28 FT./2.5 STRY	-	28 FT.
LOT COVERAGE	15 %	18.3 %	35.9 %
IMPERVIOUS COVERAGE	2495.2 SQ.FT.	2324 SQ.FT.	4184 SQ.FT.
FLOOR AREA	3,041.7 SQ.FT.	3,100 SQ.FT.	4,015 SQ.FT.
HT./STBK. RATIO (FRONT)	0.6	-	0.71
HT./STBK. RATIO (SIDE)	1.4	-	1.42

LOT COVERAGE

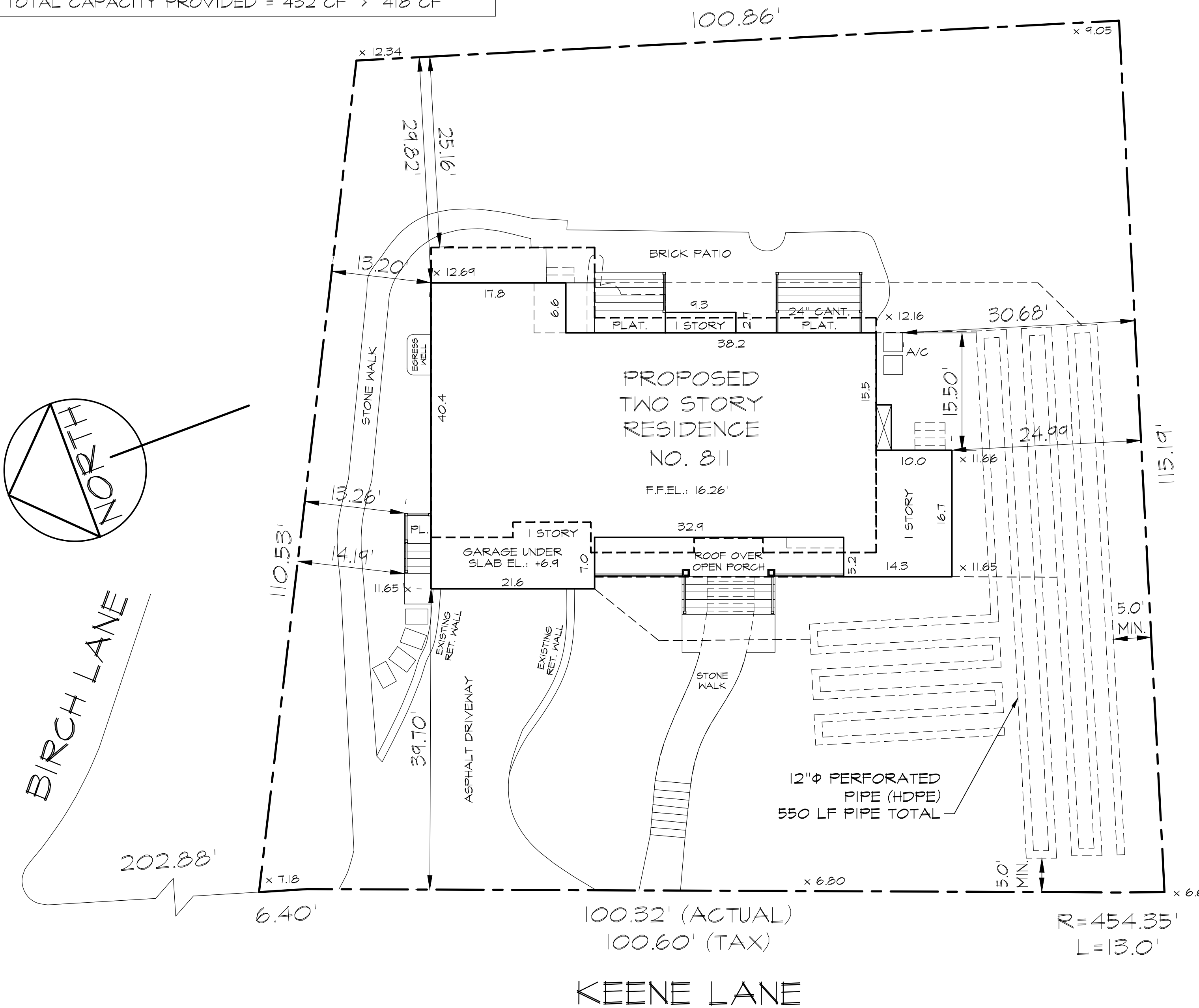
ZONE: RES. B	LOT COV.
LOT AREA	12,352.6 SQ.FT.
PROPOSED 1ST FLOOR	2,072
PROPOSED 2ND FLOOR	1,943
PROPOSED FRONT PORCH	232
SIDE LANDING/STEPS	28
REAR LANDING/STEPS	165
TOTAL	4,440 SQ.FT.
	35.9 %

IMPERVIOUS COVERAGE

ZONE: RES. B	LOT COV.
LOT AREA	12,352.6 SQ.FT.
DRIVEWAY	775
FRONT WALKWAY	225
SIDE WALKWAY	310
BRICK PATIO	348
SIDE LANDING/STEPS	28
SIDE WALKWAY/STEPS (FROM ABOVE LANDING)	34
REAR LANDING/STEPS	165
PROPOSED FRONT PORCH	232
FIRST FLOOR FOOTPRINT	2,072
TOTAL	4,184 SQ.FT.

FLOOR AREA

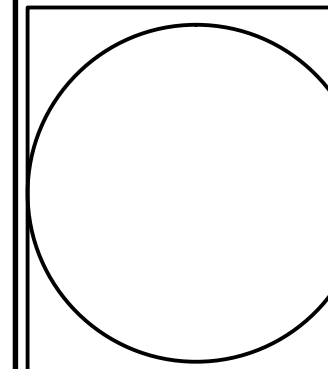
ZONE: RES. B	LOT COV.
LOT AREA	12,352.6 SQ.FT.
PROPOSED 1ST FLOOR	2,072
PROPOSED 2ND FLOOR	1,943
TOTAL	4,015 SQ.FT.



PLOT PLAN

SCALE: 1" = 10'-0"

TODD O'CONNELL ARCHITECTS
TODD O'CONNELL, AIA
1200 Veterans Memorial Highway
Suite 120
Hauppauge, NY 11788
P (631) 650-6666
F (631) 650-6667
C (516) 658-0325
www.tocarchitects.com
todd@tocarchitects.com



CONSULTANTS:
NY'S LIC #021495

THESE DRAWINGS ARE THE PROPERTY OF TODD O'CONNELL ARCHITECTS. ANY REUSE OR REPRODUCTION OF THESE DRAWINGS WITHOUT THE WRITTEN PERMISSION OF TODD O'CONNELL ARCHITECTS IS STRICTLY PROHIBITED. THE ARCHITECT'S SERVICES FOR THIS PROJECT ARE LIMITED TO THE DESIGN AND PREPARATION OF THESE DRAWINGS. THE ARCHITECT DOES NOT WARRANT THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT OR THE RESULTS OF THE DESIGN. THE ARCHITECT'S LIABILITY IS LIMITED TO THE DESIGN AND PREPARATION OF THESE DRAWINGS. THE ARCHITECT'S LIABILITY DOES NOT EXTEND TO THE CONSTRUCTION OF THE PROJECT OR TO THE PERFORMANCE OF THE PROJECT. THE ARCHITECT'S LIABILITY IS LIMITED TO THE DESIGN AND PREPARATION OF THESE DRAWINGS. THE ARCHITECT'S LIABILITY DOES NOT EXTEND TO THE CONSTRUCTION OF THE PROJECT OR TO THE PERFORMANCE OF THE PROJECT.





REV #	DATE	BY	REVISION
1	8-10-21	TC	AMENDMENT #1
2	4-9-21	TC	UPDATED PER EXAMINER COMMENTS
3	3-3-21	TC	CONSTRUCTION DRAWINGS

PROPOSED ADDITION & ALTERATION
FEINER RESIDENCE
811 KEENE LANE
WOODMERE, NY 11598

JOB#: FE-20-522
DATE: 3-3-21
SCALE: AS NOTED
DRAWING NUMBER
A.1

MAINTAIN 6'-8" CLEARANCE OVER STAIR PER
CODE. (NOTE: 6'-4" PROJECTIONS INTO REQUIRED
6'-8" HEIGHT PERMITTED PER CODE)

— — —	EXIST TO BE REMOVED
=====	EXIST TO REMAIN
=====	NEW WOOD FRAME CNS
=====	NEW POURED CONCRETE
☒	4"x4" POST UNLESS OTHER NOTED
■	HOLD DOWN AS NOTED

 HARD WIRED SMOKE DETECTOR W/ BATTERY BACK-UP AS PER SECT. R314 2020 RESIDENTIAL CODE OF NYS AND NFPA 72
 HARD WIRED CARBON MONOXIDE DETECTOR W/ BATTERY BACK-UP MIN 12" A.F.F. AS PER SECT. R315 2020 RESIDENTIAL CODE OF NYS AND SECTION 415 OF 2020 FIRE CODE OF NYS
 80 CFM FAN TO EXTERIOR
 DENOTES EGRESS WINDOW

4. CARBON MONOXIDE ALARMS AND CARBON MONOXIDE DETECTORS SHALL BE INSTALLED IN BUILDINGS AS REQUIRED IN ACCORDANCE WITH SECTION 915.2 OF 2020 FIRE CODE OF NYS (CARBON MONOXIDE DETECTION SYSTEMS) FOR RESIDENTIAL BUILDINGS. INTER-WIRED FIRE/SMOKE AND CARBON MONOXIDE DETECTORS WITH BATTERY BACKUP AS PER FC 912 AND 2020 RESIDENTIAL CODE OF NYS CODE SEC. R314 AND R315 SHALL BE INSTALLED IN DWELLING UNITS OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE VICINITY OF THE BEDROOMS, WHERE A FUEL-BURNING APPLIANCE IS LOCATED WITHIN A BEDROOM OR ITS ATTACHED BATHROOM, CARBON MONOXIDE DETECTION SHALL BE INSTALLED WITHIN THE BEDROOM.

2. ALL ELECTRIC WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE N.E.C.

4. ALL CONDITIONS AND DIMENSIONS TO BE VERIFIED IN FIELD BY THE GENERAL CONTRACTOR AND REPORT ANY DISCREPANCIES TO ARCHITECT PRIOR TO START OR CONTINUATION OF WORK.

5. NO GALV. NAILS OR CONNECTORS IN ACQ LUMBER ARE PERMITTED. ALL CONNECTORS AND FASTENERS FOR ACQ LUMBER MUST BE STAINLESS STEEL OR HOT DIPPED GALVANIZED G-185.

6. AS PER 2020 RESIDENTIAL CODE OF NYS SEC. R310 EACH HABITABLE ROOM SHALL HAVE AT LEAST ONE OPERABLE WINDOW FOR EMERGENCY EGRESS WITH A MINIMUM CLEAR OPENING OF 5.7 SQ. FT. (GRADE FLOOR OPENINGS SHALL HAVE A MINIMUM CLEAR OPENING OF 5.0 SQ. FT.). THE MIN. HT. OF OPENINGS TO BE 24" AND MINIMUM WIDTH TO BE 20" AND THE BOTTOM OF OPENINGS NO HIGHER THAN 3'-8" A.F.F.

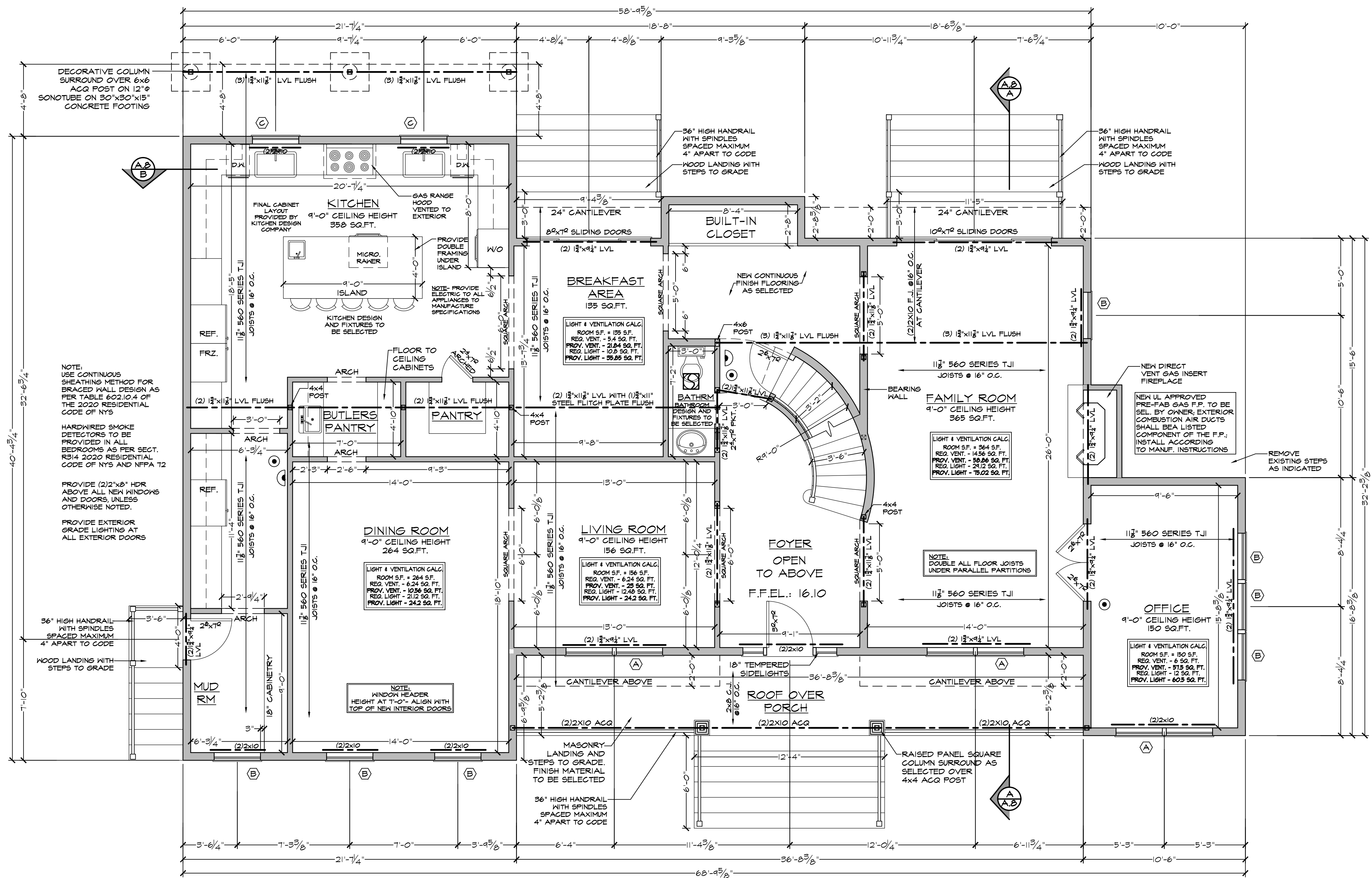
7. ALL WOOD POSTS SHALL BE BUILT UP (2) (2) 2X4'S NAILED TOGETHER W/ 10d NAILS @ 8" O.C. UNLESS OTHERWISE NOTED

8. ALL FRAMING SHALL COMPLY WITH THE 2020 RESIDENTIAL CODE OF NYS

9. ALL EXTERIOR PORCH/DECK/ STAIR FRAMING TO BE ACQ LUMBER-U.O.N.

10. ALL ANCHORS, STRAPPING AND CONNECTORS AND HARDWARE TO BE SIMPSON STRONG TIE OR AN APPROVED MANUFACTURE AND TO BE INSTALLED AS PER MANUFACTURE WRITTEN INSTRUCTIONS- UNLESS OTHERWISE NOTED

11. ALL ENGINEERED LUMBER TO BE CLAPPED AND SEAL AS REQUIRED TO PROTECT AGAINST THE WEATHER ENVIRONMENT



PROPOSED FIRST FLOOR PLAN

WINDOW SCHEDULE									
	MANUFACTURER	WINDOW TYPE	MODEL NUMBER	ROUGH OPENING	UNIT DIMENSION	COMMENTS	QUANTITY	U-FACTOR	SHGC
(A)	ANDERSEN	CASEMENT	CXA25	6'-0" $\frac{1}{8}$ " x 5'-0" $\frac{1}{8}$ "	5'-11" $\frac{3}{8}$ " x 4'-11" $\frac{3}{8}$ "	EGRESS	3	0.24	0.21
(B)	ANDERSEN	CASEMENT	CXA15	5'-0" $\frac{1}{8}$ " x 5'-0" $\frac{1}{8}$ "	2'-0" $\frac{1}{8}$ " x 4'-11" $\frac{3}{8}$ "	EGRESS	13	0.24	0.21
(C)	ANDERSEN	CASEMENT	CXA135	5'-0" $\frac{1}{8}$ " x 5'-0" $\frac{1}{8}$ "	2'-11" $\frac{3}{8}$ " x 4'-11" $\frac{3}{8}$ "		2	0.24	0.21
(D)	ANDERSEN	CASEMENT	CW24	4'-9" x 4'-0" $\frac{1}{8}$ "	4'-8" $\frac{1}{8}$ " x 4'-0" $\frac{1}{8}$ "	EGRESS	2	0.24	0.21
(E)	ANDERSEN	CASEMENT	CW25	4'-9" x 5'-0" $\frac{1}{8}$ "	4'-8" $\frac{1}{8}$ " x 4'-11" $\frac{3}{8}$ "	EGRESS	1	0.24	0.21
(G)	ANDERSEN	CASEMENT	C12	2'-0" $\frac{1}{8}$ " x 2'-0" $\frac{1}{8}$ "	2'-0" $\frac{1}{8}$ " x 2'-0" $\frac{1}{8}$ "	TEMPERED IN NET AREA	1	0.24	0.21
(H)	ANDERSEN	PICTURE	APN4020	4'-0" x 2'-8"	3'-11" x 2'-7" $\frac{1}{8}$ "		1	0.24	0.21

NOTE: VERIFY ROUGH OPENING, AND UNIT DIMENSIONS WITH MANUFACTURE PRIOR TO ORDERING
* THESE UNITS MEET OR EXCEED THE FOLLOWING DIMENSIONS: CLEAR OPENABLE AREA OF
5.7 SQ. FT., CLEAR OPENABLE WIDTH OF 20", AND A CLEAR OPENABLE HEIGHT OF 24";
SILL HEIGHT NOT TO EXCEED 44" A.F.F.

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

CONSULTANTS:

NYS LIC #027935

CHECKED BY:
TAC

DRAWN BY: TC

[illegible]

PROPOSED ADDITION & ALTERATION
FEINER RESIDENCE
811 KEENE LANE
WOODMERE, NY 11598

DRAWING:

JOB#: FE-20-522
DATE: 3-3-21

SCALE: AS NOTED

DRAWING NUMBER

m.

STAIRS & GUARD NOTE:
(TO COMPLY WITH 2020 RESIDENTIAL
CODE OF NYS
-R311 AND R312)
-STAIRWAYS SHALL NOT BE LESS THAN 36" IN
CLEAR WIDTH ABOVE THE PERMITTED
HANDRAIL HEIGHT AND BELOW THE REQUIRED
HEADROOM HEIGHT
-MINIMUM HEADROOM HEIGHT TO BE 6'-8"
-MAX. RISER SHALL NOT EXCEED 8 1/4"
-MIN. TREAD SHALL NOT BE LESS THAN 9"
-STAIR PROFILE: NOSINGS SHALL NOT BE LESS
THAN 3/4" NOT MORE THAN 1 1/4"
-HANDRAILS SHALL BE PROVIDED ON AT
LEAST ONE SIDE OF EACH STAIRWAY WITH
TWO OR MORE RISERS. TOP OF HANDRAIL
SHALL NOT BE LESS THAN 34" AND NOT
MORE THAN 38". ALL REQUIRED HANDRAILS
SHALL BE CONTINUOUS TO THE FULL LENGTH
OF THE STAIRS FROM DIRECTLY ABOVE THE
TOP RISER OF A FLIGHT TO A POINT
DIRECTLY ABOVE THE LOWEST RISER OF THE
FLIGHT. ENDS SHALL BE RETURNED OR SHALL
TERMINATE IN NEWEL POSTS OR SAFETY
TERMINALS. HANDRAILS ADJACENT TO A WALL
SHALL HAVE A SPACE OF NOT LESS THAN 1/2"
BETWEEN THE WALL AND THE HANDRAIL.
HANDRAILS SHALL NOT PROJECT MORE THAN
4 1/2" ON EITHER SIDE OF THE STAIRWAY.
-GUARDS/RAILINGS ARE REQUIRED FOR ANY
SURFACE 30" ABOVE FLOOR OR GRADE.
-GUARDS/RAILINGS SHALL NOT HAVE A GAP
OF PASSAGE OF MORE THAN 4" O.C.
-BOTTOM RAIL TO TREADS SHALL NOT HAVE A
GAP OF PASSAGE OF MORE THAN 6" SPHERE

PROVIDE STAIRWAY LIGHTING AS PER SECTION
R303.1 INTERIOR STAIRWAY ILLUMINATION.
INTERIOR STAIRWAYS SHALL BE PROVIDED WITH
AN ARTIFICIAL LIGHT SOURCE TO ILLUMINATE THE
LANDINGS AND TREADS. THE LIGHT SOURCE SHALL
BE CAPABLE OF ILLUMINATING TREADS AND
LANDINGS TO LEVELS OF NOT LESS THAN 1
FOOT-CANDLE (1 LUX) AS MEASURED AT THE
ENTER OF TREADS AND LANDINGS. THERE SHALL
BE A WALL SWITCH AT EACH FLOOR LEVEL TO
CONTROL THE LIGHT SOURCE WHERE THE STAIRWAY
HAS SIX OR MORE RISERS

R302.1. UNDER STAIR PROTECTION. ENCLOSED
ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE
WALLS, UNDER STAIRS SURFACE AND ANY SOFFITS
PROTECTED ON THE ENCLOSED SIDE WITH 1/2"
GYPSUM BOARD

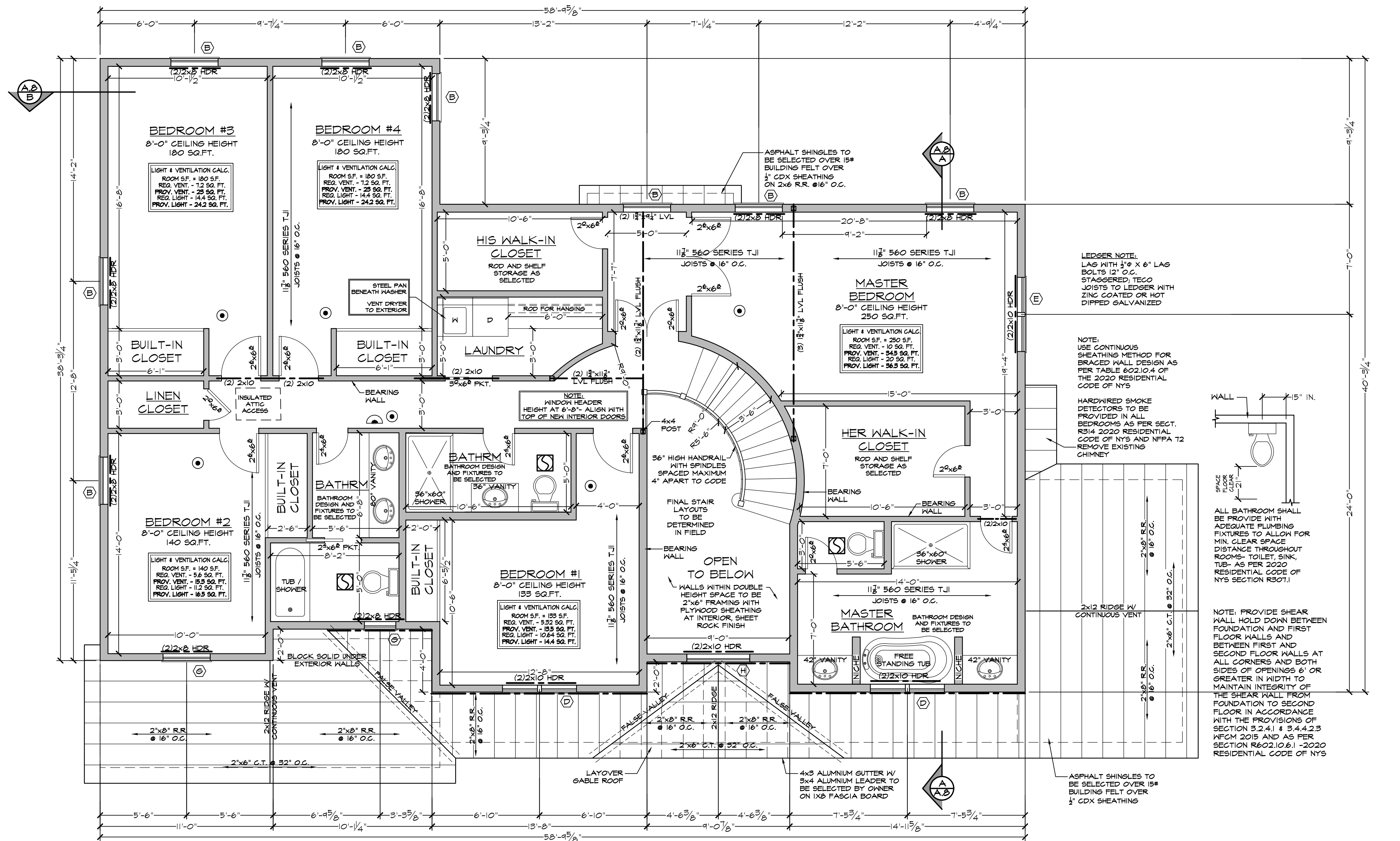
MAINTAIN 6'-8" CLEARANCE OVER STAIR PER
CODE. (NOTE: 6'-4" PROJECTIONS INTO REQUIRED
6'-8" HEIGHT PERMITTED PER CODE)

WALL KEY

- EXIST TO BE REMOVED
--- EXIST TO REMAIN
--- NEW WOOD FRAME CNST
--- NEW POURED CONCRETE
4"x4" POST UNLESS OTHERWISE
NOTED
■ HOLD DOWN AS NOTED
- HARD WIRED SMOKE DETECTOR IV
BATTERY BACK-UP AS PER SECT.
R314 2020 RESIDENTIAL CODE OF
NYS AND NFPA 72
● HARD WIRED CARBON MONOXIDE
DETECTOR IV BATTERY BACK-UP MIN
12" A.F.F. AS PER SECT. R315 2020
RESIDENTIAL CODE OF NYS AND
SECTION 415 OF 2020 FIRE CODE OF
NYS
○ 80 CFM FAN TO EXTERIOR
* DENOTES EGRESS WINDOW

GENERAL NOTES

- CARBON MONOXIDE ALARMS AND
CARBON MONOXIDE DETECTORS SHALL
BE INSTALLED IN BUILDINGS AS
REQUIRED IN ACCORDANCE WITH
SECTION 415.2 OF 2020 FIRE
CODE OF NYS (CARBON MONOXIDE
DETECTION SYSTEMS) FOR
RESIDENTIAL BUILDINGS. INTER-WIRED
FIRE/SMOKE AND CARBON MONOXIDE
DETECTORS WITH BATTERY BACKUP AS
PER NFPA 72 AND 2020 RESIDENTIAL
CODE OF NYS CODE SEC. R314 AND
R315 SHALL BE INSTALLED IN
DWELLING UNITS OUTSIDE OF EACH
SEPARATE SLEEPING AREA IN THE
VICINITY OF THE BEDROOMS, WHERE A
FUEL-BURNING APPLIANCE IS LOCATED
WITHIN A BEDROOM, OR ITS ATTACHED
BATHROOM. CARBON MONOXIDE
DETECTION SHALL BE INSTALLED
WITHIN THE BEDROOM.
- ALL ELECTRIC WORK SHALL BE
PERFORMED IN STRICT ACCORDANCE
WITH THE LATEST EDITION OF THE N.E.C.
- ALL CONDITIONS AND DIMENSIONS
TO BE VERIFIED IN FIELD BY THE
GENERAL CONTRACTOR AND REPORT
ANY DISCREPANCIES TO ARCHITECT
PRIOR TO START OR CONTINUATION
OF WORK
- NO GALV. NAILS OR CONNECTORS IN
ACQ LUMBER ARE PERMITTED. ALL
CONNECTORS AND FASTENERS FOR ACQ
LUMBER MUST BE STAINLESS STEEL OR
HOT DIPPED GALVANIZED G-185.
- AS PER 2020 RESIDENTIAL
CODE OF NYS SEC. R310 EACH
HABITABLE ROOM SHALL HAVE AT
LEAST ONE OPERABLE WINDOW FOR
EMERGENCY EGRESS WITH A MINIMUM
CLEAR OPENING OF 5.7 SQ. FT.
(GRADE FLOOR OPENINGS SHALL
HAVE A MINIMUM CLEAR OPENING OF
5.0 SQ. FT.). THE MIN. HT. OF
OPENINGS TO BE 24" AND MINIMUM
WIDTH TO BE 20" AND THE BOTTOM
OF OPENINGS NO HIGHER THAN 3'-8"
A.F.F.
- ALL WOOD POSTS SHALL BE BUILT
UP WITH (2) 2X4'S NAILED TOGETHER W/
10d NAILS @ 8" O.C. UNLESS OTHERWISE
NOTED
- ALL FRAMING SHALL COMPLY WITH
THE 2020 RESIDENTIAL CODE OF NYS
- ALL EXTERIOR PORCH/DECK/
STAIR FRAMING TO BE ACQ
LUMBER-U.O.N.
- ALL ANCHORS, STRAPPING AND
CONNECTORS AND HARDWARE TO BE
SIMPSON STRONG TIE OR AN APPROVED
MANUFACTURE AND TO BE INSTALLED AS
PER MANUFACTURE WRITTEN
INSTRUCTIONS- UNLESS OTHERWISE NOTED
- ALL ENGINEERED LUMBER TO BE
CLADDED AND SEAL AS REQUIRED
TO PROTECT AGAINST THE
WEATHER ENVIRONMENT



PROPOSED SECOND FLOOR PLAN

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

WINDOW SCHEDULE								
	MANUFACTURER	WINDOW TYPE	MODEL NUMBER	ROUGH OPENING	UNIT DIMENSION	COMMENTS	QUANTITY	U-FACTOR
(A)	ANDERSEN	CASEMENT	CXK25	6'-0" 1/2" x 5'-0" 3/8"	5'-11" 3/8" x 4'-11" 3/8"	EGRESS	3	0.24
(B)	ANDERSEN	CASEMENT	CXK15	5'-0" 1/2" x 5'-0" 3/8"	2'-11" 3/8" x 4'-11" 3/8"	EGRESS	13	0.24
(C)	ANDERSEN	CASEMENT	CXK135	3'-0" 1/2" x 3'-5" 3/8"	2'-11" 3/8" x 3'-4" 3/8"	EGRESS	2	0.24
(D)	ANDERSEN	CASEMENT	CXK24	4'-9" x 4'-0" 1/2"	4'-8" 1/2" x 4'-0" 1/2"	EGRESS	2	0.24
(E)	ANDERSEN	CASEMENT	CXK25	4'-9" x 5'-0" 3/8"	4'-8" 1/2" x 4'-11" 3/8"	EGRESS	1	0.24
(G)	ANDERSEN	CASEMENT	G12	2'-0" 3/8" x 2'-0" 3/8"	2'-0" 1/2" x 2'-0" 1/2"	TEMPERED IN KET AREA	1	0.24
(H)	ANDERSEN	PICTURE	APN402B	4'-0" x 2'-8"	3'-11" 1/2" x 2'-7" 1/2"	TEMPERED IN KET AREA	1	0.24

NOTE: VERIFY ROUGH OPENING AND UNIT DIMENSIONS WITH MANUFACTURE PRIOR TO ORDERING
* THESE UNITS MEET OR EXCEED THE FOLLOWING DIMENSIONS: CLEAR OPENABLE AREA OF
5.7 SQ. FT., CLEAR OPENABLE WIDTH OF 20", AND A CLEAR OPENABLE HEIGHT OF 24";
SILL HEIGHT NOT TO EXCEED 44" A.F.F.

CONSULTANTS:

THESE DRAWINGS ARE THE PROPERTY OF TODD O'CONNELL ARCHITECTS, P.C. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF TODD O'CONNELL ARCHITECTS, P.C. THE ARCHITECT'S SERVICES FOR THIS PROJECT ARE LIMITED TO THE DESIGN AND CONSTRUCTION OF THE BUILDING. THE ARCHITECT DOES NOT WARRANT THE ACCURACY OF ANY INFORMATION PROVIDED BY OTHERS. THE ARCHITECT'S DRAWINGS SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF TODD O'CONNELL ARCHITECTS, P.C.

REV #	DATE	DESCRIPTION	BY	TC
1	8-10-21	AMENDMENT #1	TC	
2	4-9-21	UPDATED PER EXAMINER COMMENTS	TC	
3	3-3-21	CONSTRUCTION DRAWINGS	TC	

PROPOSED ADDITION & ALTERATION
FEINER RESIDENCE
811 KEENE LANE
WOODMERE, NY 11598

JOB#: FE-20-522
DATE: 3-3-21
SCALE: AS NOTED

DRAWING NUMBER
A.4

NY'S LIC #021495

CHECKED BY:
TOC

DRAWN BY: TC

STAIRS & GUARD NOTE:
(TO COMPLY WITH 2020 RESIDENTIAL
CODE OF NYS
-R311 AND R312)
-STAIRWAYS SHALL NOT BE LESS THAN 36" IN
CLEAR WIDTH ABOVE THE PERMITTED
HANDRAIL HEIGHT AND BELOW THE REQUIRED
HEADROOM HEIGHT
-MINIMUM HEADROOM HEIGHT TO BE 6'-8"
-MAX. RISER SHALL NOT EXCEED 8 1/4"
-MIN. TREAD SHALL NOT BE LESS THAN 9"
-STAIR PROFILE: NOSINGS SHALL NOT BE LESS
THAN 3/4" NOT MORE THAN 1 1/4"
-HANDRAILS SHALL BE PROVIDED ON AT
LEAST ONE SIDE OF EACH STAIRWAY WITH
TWO OR MORE RISERS. TOP OF HANDRAIL
SHALL NOT BE LESS THAN 34" AND NOT
MORE THAN 38". ALL REQUIRED HANDRAILS
SHALL BE CONTINUOUS TO THE FULL LENGTH
OF THE STAIRS FROM DIRECTLY ABOVE THE
TOP RISER OF A FLIGHT TO A POINT
DIRECTLY ABOVE THE LOWEST RISER OF THE
FLIGHT. ENDS SHALL BE RETURNED OR SHALL
TERMINATE IN NEWEL POSTS OR SAFETY
TERMINALS. HANDRAILS ADJACENT TO A WALL
SHALL HAVE A SPACE OF NOT LESS THAN 1/2"
BETWEEN THE WALL AND THE HANDRAIL.
HANDRAILS SHALL NOT PROJECT MORE THAN
4 1/2" ON EITHER SIDE OF THE STAIRWAY.
-GUARDS/RAILINGS ARE REQUIRED FOR ANY
SURFACE 30" ABOVE FLOOR OR GRADE.
-GUARDS/RAILINGS SHALL NOT HAVE A GAP
OF PASSAGE OF MORE THAN 4" O.C.
-BOTTOM RAIL TO TREADS SHALL NOT HAVE A
GAP OF PASSAGE OF MORE THAN 6" SPHERE

PROVIDE STAIRWAY LIGHTING AS PER SECTION
R303.1 INTERIOR STAIRWAY ILLUMINATION.
INTERIOR STAIRWAYS SHALL BE PROVIDED WITH
AN ARTIFICIAL LIGHT SOURCE TO ILLUMINATE THE
LANDINGS AND TREADS. THE LIGHT SOURCE SHALL
BE CAPABLE OF ILLUMINATING TREADS AND
LANDINGS TO LEVELS OF NOT LESS THAN 1
FOOT-CANDLE (11 LUX) AS MEASURED AT THE
ENTER OF TREADS AND LANDINGS. THERE SHALL
BE A WALL SWITCH AT EACH FLOOR LEVEL TO
CONTROL THE LIGHT SOURCE WHERE THE STAIRWAY
HAS SIX OR MORE RISERS

R302.1. UNDER STAIR PROTECTION. ENCLOSED
ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE
WALLS, UNDER STAIRS SURFACE AND ANY SOFFITS
PROTECTED ON THE ENCLOSED SIDE WITH 1/2"
GYPSUM BOARD

MAINTAIN 6'-8" CLEARANCE OVER STAIR PER
CODE. (NOTE: 6'-4" PROJECTIONS INTO REQUIRED
6'-8" HEIGHT PERMITTED PER CODE)

WALL KEY

- EXIST TO BE REMOVED
--- EXIST TO REMAIN
--- NEW WOOD FRAME CNST
--- NEW POURED CONCRETE
4"x4" POST UNLESS OTHERWISE
NOTED
■ HOLD DOWN AS NOTED
- HARD WIRED SMOKE DETECTOR IV
BATTERY BACK-UP AS PER SECT.
R314 2020 RESIDENTIAL CODE OF
NYS AND NFPA 12
● HARD WIRED CARBON MONOXIDE
DETECTOR IV BATTERY BACK-UP MIN
12" A.F.F. AS PER SECT. R315 2020
RESIDENTIAL CODE OF NYS AND
SECTION 415 OF 2020 FIRE CODE OF
NYS
● 80 CFM FAN TO EXTERIOR
* DENOTES EGRESS WINDOW

GENERAL NOTES

1. CARBON MONOXIDE ALARMS AND
CARBON MONOXIDE DETECTORS SHALL
BE INSTALLED IN BUILDINGS AS
REQUIRED IN ACCORDANCE WITH
SECTION 415.2 OF 2020 FIRE
CODE OF NYS (CARBON MONOXIDE
DETECTION SYSTEMS) FOR
RESIDENTIAL BUILDINGS. INTER-WIRED
FIRE/SMOKE AND CARBON MONOXIDE
DETECTORS WITH BATTERY BACKUP AS
PER NFPA 12 AND 2020 RESIDENTIAL
CODE OF NYS CODE SEC. R314 AND
R315 SHALL BE INSTALLED IN
DWELLING UNITS OUTSIDE OF EACH
SEPARATE SLEEPING AREA IN THE
VICINITY OF THE BEDROOMS, WHERE A
FUEL-BURNING APPLIANCE IS LOCATED
WITHIN A BEDROOM. OR ITS ATTACHED
BATHROOM. CARBON MONOXIDE
DETECTION SHALL BE INSTALLED
WITHIN THE BEDROOM.

2. ALL ELECTRIC WORK SHALL BE
PERFORMED IN STRICT ACCORDANCE
WITH THE LATEST EDITION OF THE N.E.C.

4. ALL CONDITIONS AND DIMENSIONS
TO BE VERIFIED IN FIELD BY THE
GENERAL CONTRACTOR AND REPORT
ANY DISCREPANCIES TO ARCHITECT
PRIOR TO START OR CONTINUATION
OF WORK

5. NO GALV. NAILS OR CONNECTORS IN
ACQ LUMBER ARE PERMITTED. ALL
CONNECTORS AND FASTENERS FOR ACQ
LUMBER MUST BE STAINLESS STEEL OR
HOT DIPPED GALVANIZED G-185.

6. AS PER 2020 RESIDENTIAL
CODE OF NYS SEC. R310 EACH
HABITABLE ROOM SHALL HAVE AT
LEAST ONE OPERABLE WINDOW FOR
EMERGENCY EGRESS WITH A MINIMUM
CLEAR OPENING OF 5.7 SQ. FT.
(GRADE FLOOR OPENINGS SHALL
HAVE A MINIMUM CLEAR OPENING OF
5.0 SQ. FT.). THE MIN. HT. OF
OPENINGS TO BE 24" AND MINIMUM
WIDTH TO BE 20" AND THE BOTTOM
OF OPENINGS NO HIGHER THAN 3'-8"
A.F.F.

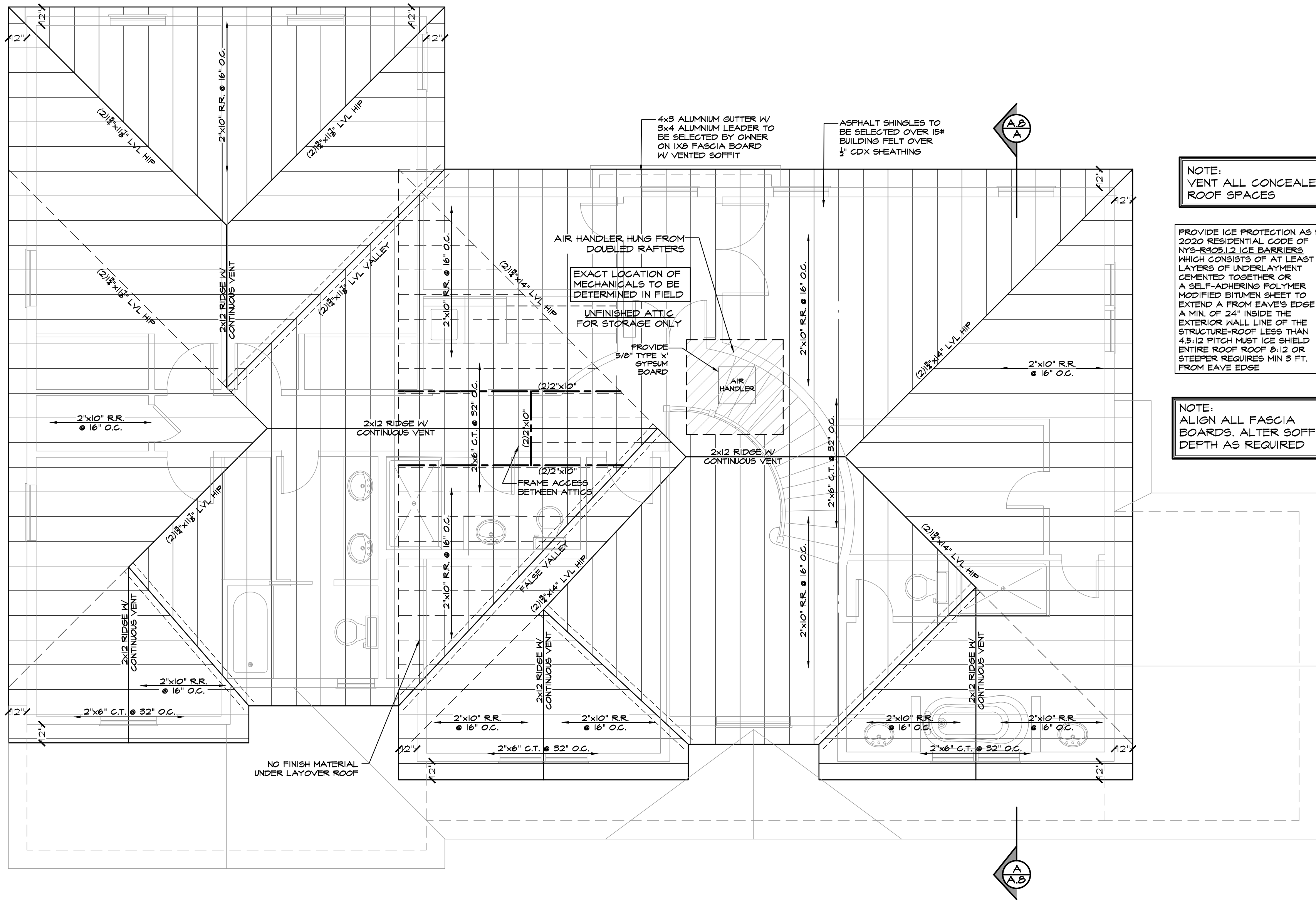
7. ALL WOOD POSTS SHALL BE BUILT
UP WITH (2) 2X4'S NAILED TOGETHER W/
10d NAILS @ 8" O.C. UNLESS OTHERWISE
NOTED

8. ALL FRAMING SHALL COMPLY WITH
THE 2020 RESIDENTIAL CODE OF NYS

9. ALL EXTERIOR PORCH/DECK/
STAIR FRAMING TO BE ACQ
LUMBER-U.O.N.

10. ALL ANCHORS, STRAPPING AND
CONNECTORS AND HARDWARE TO BE
SIMPSON STRONG TIE OR AN APPROVED
MANUFACTURE AND TO BE INSTALLED AS
PER MANUFACTURE WRITTEN
INSTRUCTIONS- UNLESS OTHERWISE NOTED

11. ALL ENGINEERED LUMBER TO BE
CLADDED AND SEAL AS REQUIRED
TO PROTECT AGAINST THE
WEATHER ENVIRONMENT



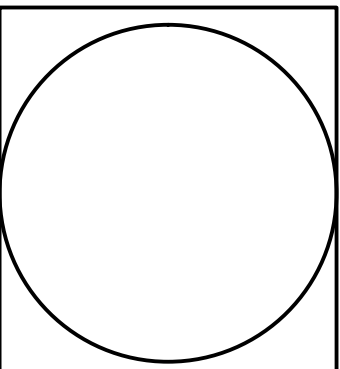
NOTE:
VENT ALL CONCEALED
ROOF SPACES

PROVIDE ICE PROTECTION AS PER
2020 RESIDENTIAL CODE OF
NYS-R302.1.2 ICE BARRIERS
WHICH CONSISTS OF AT LEAST 2
LAYERS OF UNDERLAYMENT
CEMENTED TOGETHER OR
A SELF-ADHERING POLYMER
MODIFIED BITUMEN SHEET TO
EXTEND A FROM EAVES EDGE TO
A MIN. OF 24" INSIDE THE
EXTERIOR WALL LINE OF THE
STRUCTURE-ROOF LESS THAN
4.5/12 PITCH MUST ICE SHIELD
ENTIRE ROOF ROOF 8/12 OR
STEEPER REQUIRES MIN 3 FT.
FROM EAVE EDGE

NOTE:
ALIGN ALL FASCIA
BOARDS. ALTER SOFFIT
DEPTH AS REQUIRED

PROPOSED ROOF PLAN

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



CONSULTANTS:
NY'S LIC #021495

THESE DRAWINGS ARE THE PROPERTY OF TODD O'CONNELL ARCHITECT P.C. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF TODD O'CONNELL ARCHITECT P.C. THE ARCHITECT'S SERVICES FOR THIS PROJECT ARE LIMITED TO THE DESIGN AND DOCUMENTATION OF THE PROJECT. THE ARCHITECT DOES NOT WARRANT THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT OR THE RESULTS OF THE DESIGN. THE ARCHITECT'S DRAWINGS SHALL NOT BE USED FOR ANY OTHER PROJECT OR FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF TODD O'CONNELL ARCHITECT P.C.

CHECKED BY: TC
DRAWN BY: TC
BY:

REV #	DATE	NOTE
1	8-10-21	AMENDMENT #1
2	4-9-21	UPDATED PER EXAMINER COMMENTS
3	3-5-21	CONSTRUCTION DRAWINGS

PROPOSED ADDITION & ALTERATION
FEINER RESIDENCE
811 KEENE LANE
WOODMERE, NY 11798

JOB#: FE-20-522
DATE: 3-5-21
SCALE: AS NOTED
DRAWING NUMBER
A.5



PROPOSED FRONT ELEVATION

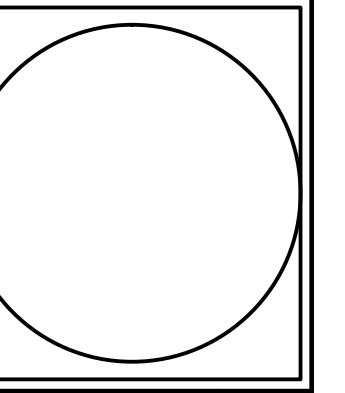
SCALE: 1/4" = 1'-0"



PROPOSED SIDE ELEVATION

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

TOC ARCHITECTS
TODD O'CONNELL ARCHITECT P.C.
TODD O'CONNELL, AIA
1200 Veterans Memorial Highway
Suite 120
Hauppauge, NY 11788
P (631) 650-6666
F (631) 650-6667
C (516) 658-0325
www.tocarchitects.com
todd@tocarchitects.com



CONSULTANTS:
NY'S LIC #021435

CHECKED BY: TOC
DRAWN BY: TC

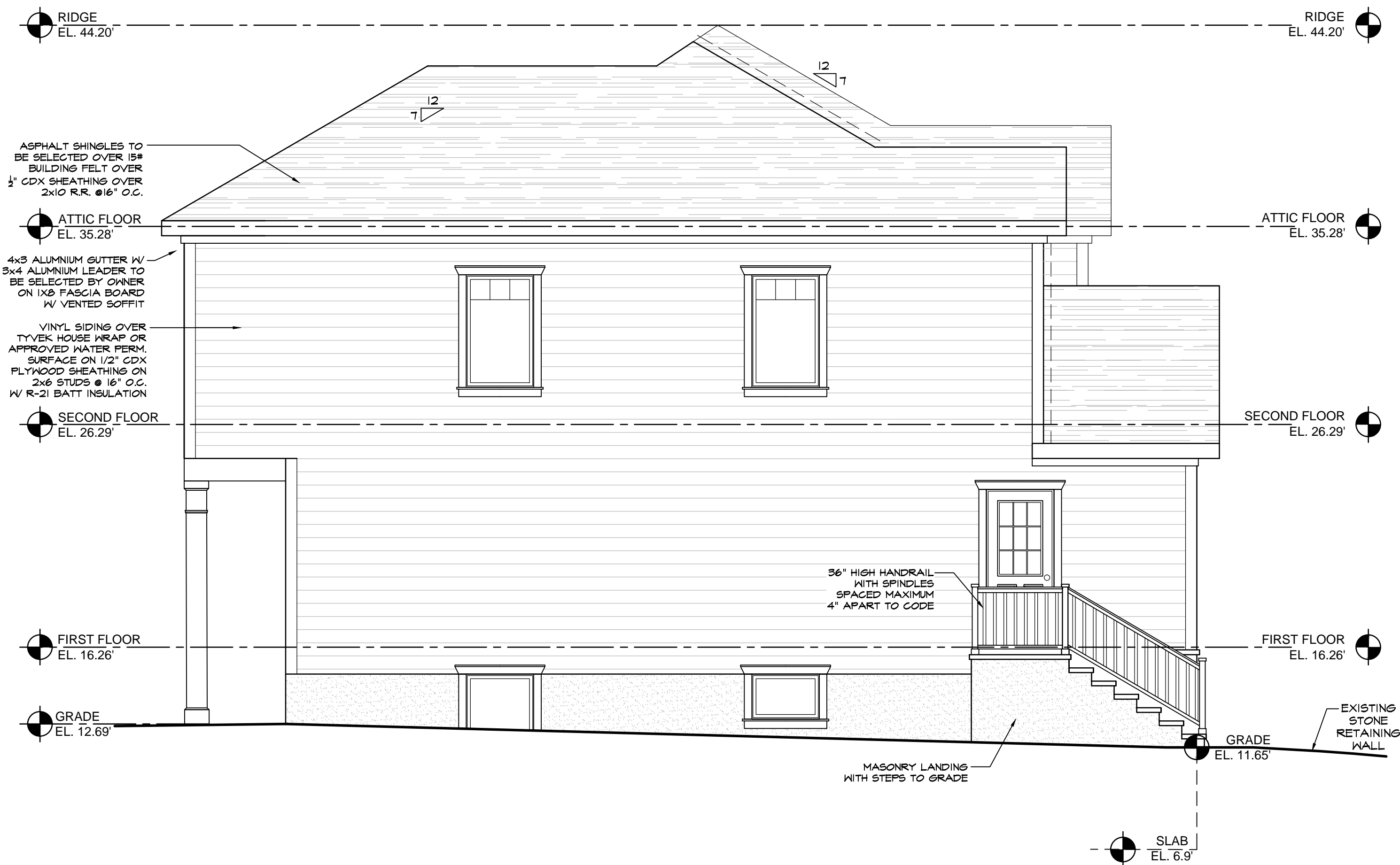
REV.	DATE	NOTE	BY
1	8-10-21	AMENDMENT #1	TC
2	4-9-21	UPDATED PER EXAMINER COMMENTS	TC
3	3-3-21	CONSTRUCTION DRAWINGS	TC

PROPOSED ADDITION & ALTERATION
FEINER RESIDENCE
811 KEENE LANE
WOODMERE, NY 11598
JOB#: FE-20-522
DATE: 3-3-21
SCALE: AS NOTED
DRAWING NUMBER
A.6



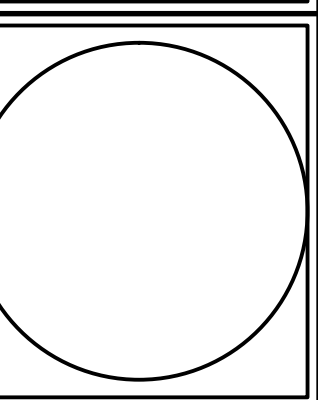
PROPOSED REAR ELEVATION

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



PROPOSED SIDE ELEVATION

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



CONSULTANTS:
NY'S LIC. #021493

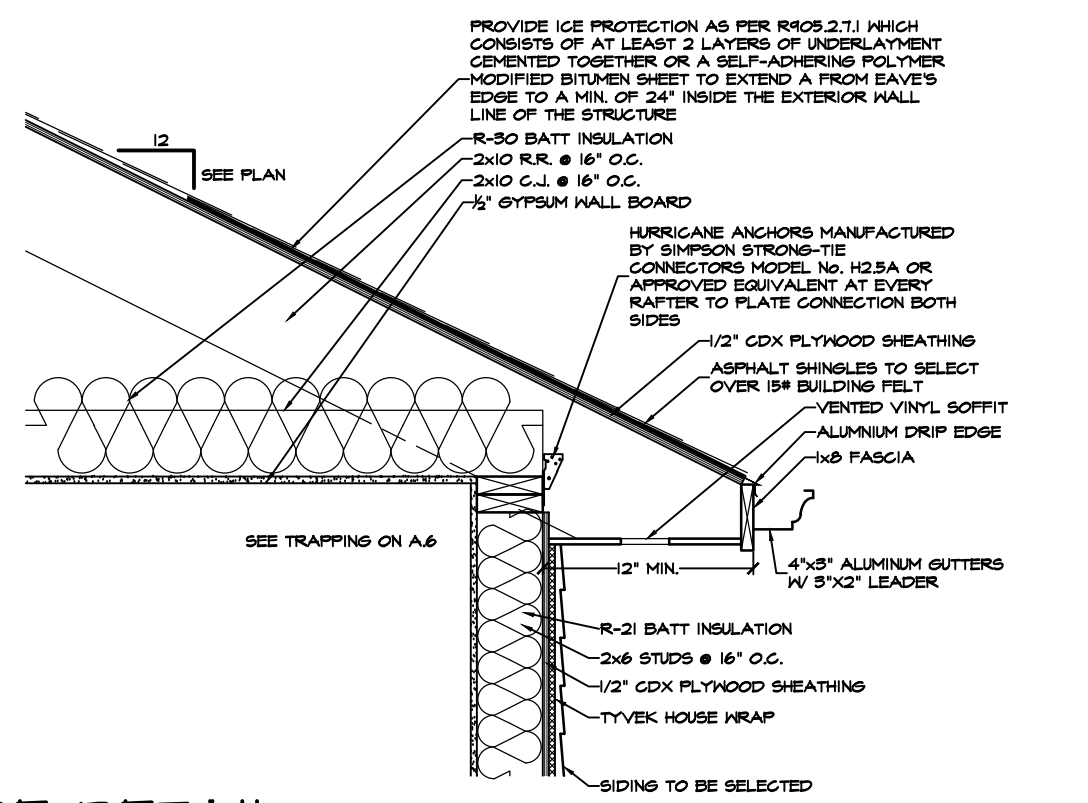
CHECKED BY: TOC
DRAWN BY: TC
BY:

REV. #	DATE	NOTE
1	8-10-21	AMENDMENT #1
2	4-9-21	UPDATED PER EXAMINER COMMENTS
3	3-3-21	CONSTRUCTION DRAWINGS

PROPOSED ADDITION & ALTERATION
FEINER RESIDENCE
811 KEENE LANE
WOODMERE, NY 11598
DRAWING: A.7

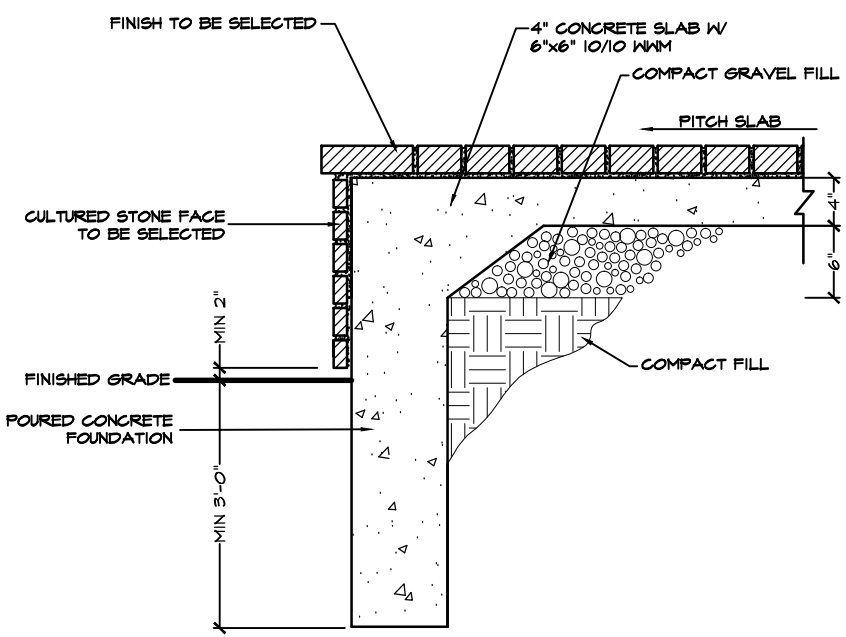
JOB#: FE-20-522
DATE: 3-3-21
SCALE: AS NOTED
DRAWING NUMBER: A.7

ROOF DETAIL

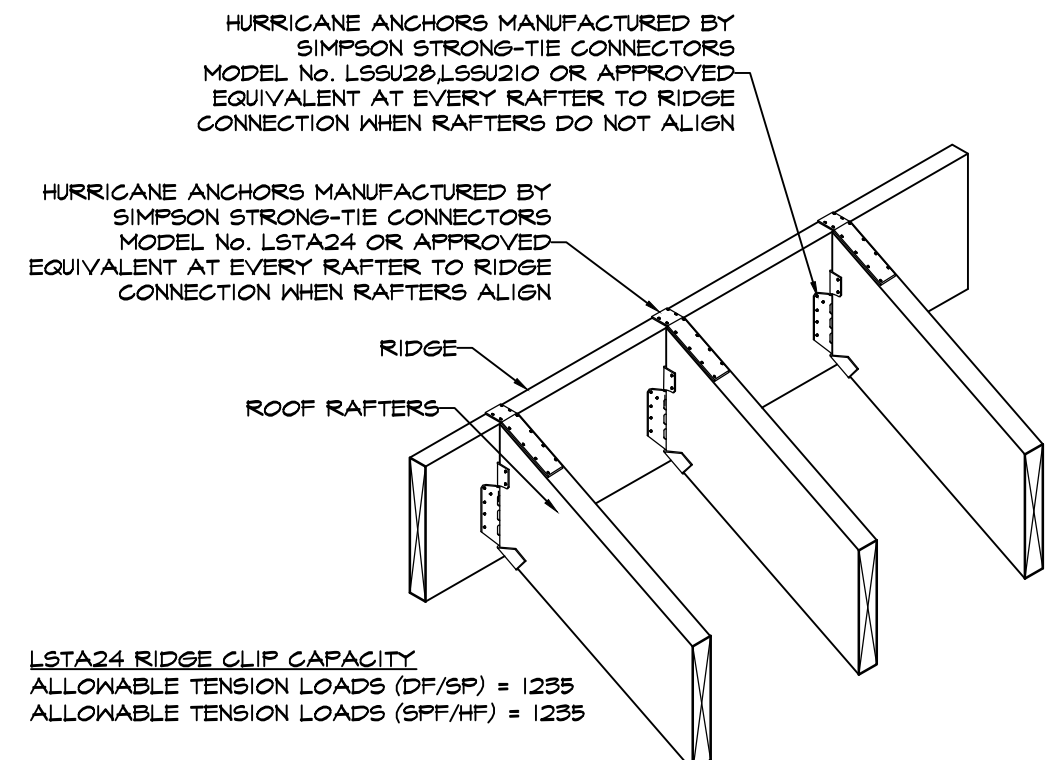


SCALE: 3/4" = 1'-0"

MASONRY PORCH DETAIL



SCALE: 3/4" = 1'-0"



RIDGE STRAPPING DETAIL

SCALE: 3/4" = 1'-0"

FOUNDATION DETAIL

SCALE: 3/4" = 1'-0"

CONNECTION OF MULTIPLE PIECES OF TOP-LOADED BEAMS

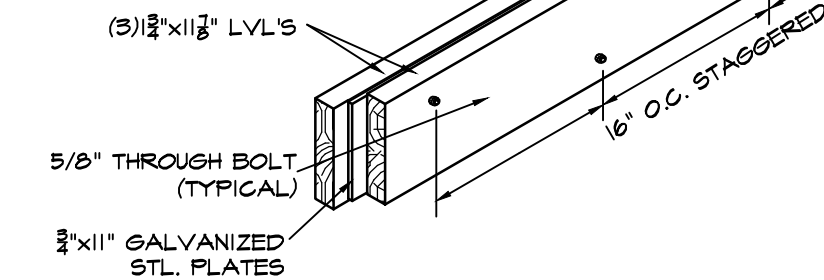
1 3/4" Width Pieces:

- Minimum of 2 rows 16d (3 1/2") nails at 12" o.c.
- Minimum of 3 rows 16d (3 1/2") nails at 12" o.c. for 14" and deeper beams
- Nailed connections require an additional row of nails when nail size is smaller than specified above (minimum 0.131" x 3.25")

3 1/2" Width Pieces:

- Minimum of 2 rows 1/2" bolts at 24" o.c. staggered

Additional nailing or bolting may be required with side-loaded multiple member beams. Refer to current product literature.

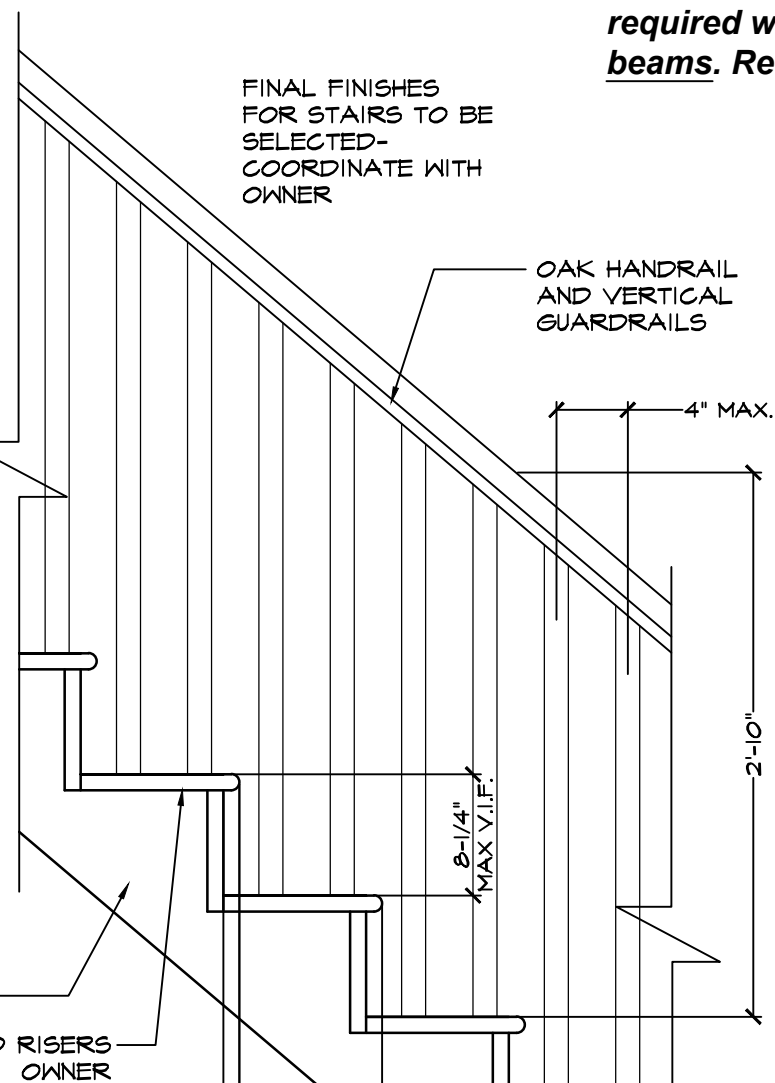


FITCH PLATE BEAMS

SCALE: 3/4" = 1'-0"

STAIR DETAIL

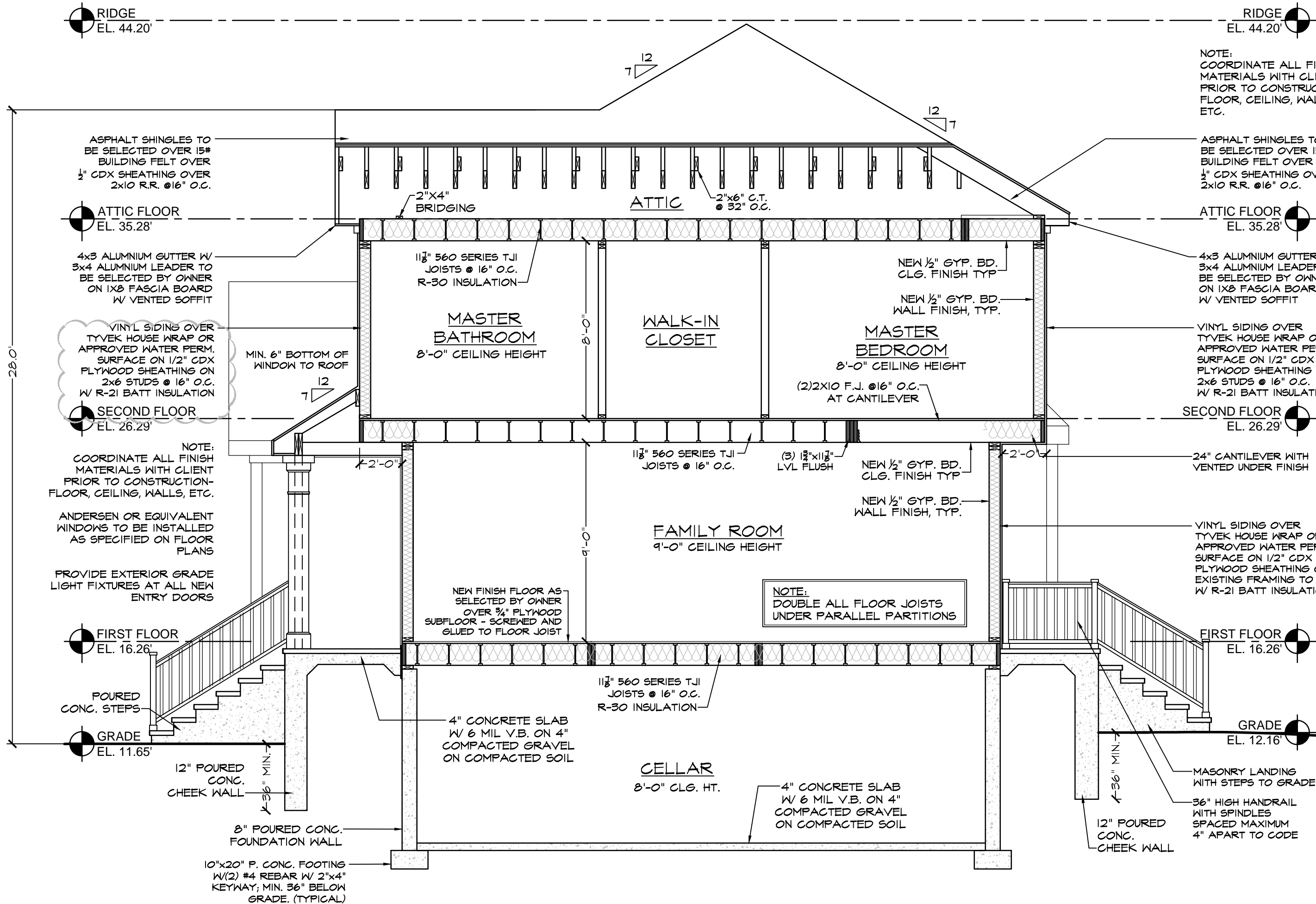
STAIRS & GUARD NOTE:
(TO COMPLY WITH 2020 RESIDENTIAL CODE OF NYS
-R301 AND R302)
-STAIRWAYS SHALL NOT BE LESS THAN 36" IN CLEAR WIDTH ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT
-MINIMUM HEADROOM HEIGHT TO BE 6'-8"
-MAX. RISER SHALL NOT EXCEED 8 1/4"
-MIN. TREAD SHALL NOT BE LESS THAN 4"
-STAIR PROFILE, NOSINGS SHALL NOT BE LESS THAN 3/4" NOT MORE THAN 1/2"
-HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH STAIRWAY WITH TWO OR MORE RISERS. TOP OF HANDRAIL SHALL NOT BE LESS THAN 34" AND NOT MORE THAN 38". ALL REQUIRED HANDRAILS SHALL BE CONTINUOUS TO THE FULL LENGTH OF THE STAIRS FROM DIRECTLY ABOVE THE TOP RISER OF A FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2" BETWEEN THE WALL AND THE HANDRAIL. HANDRAILS SHALL NOT PROJECT MORE THAN 4 1/2" ON EITHER SIDE OF THE STAIRWAY.
-GUARDS/RAILINGS ARE REQUIRED FOR ANY SURFACE 30" ABOVE FLOOR OR GRADE.
-GUARDS/RAILINGS SHALL NOT HAVE A GAP OF PASSAGE OF MORE THAN 4" O.C.
-BOTTOM RAIL TO TREADS SHALL NOT HAVE A GAP OF PASSAGE OF MORE THAN 6" SPHERE



RAFTER HUNG HVAC DETAIL

SCALE: 3/4" = 1'-0"

SECTION A-A



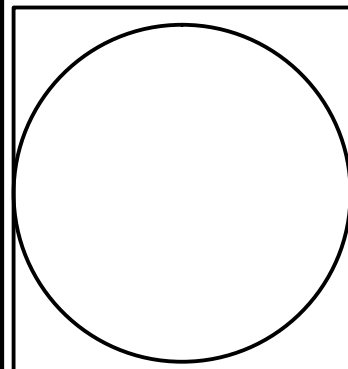
SCALE: 1/4" = 1'-0"

SECTION B-B



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

REV.	DATE	BY	REASON
1	8-10-21	TC	AMENDMENT #1
2	4-9-21	TC	UPDATED PER EXAMINER COMMENTS
3	3-3-21	TC	CONSTRUCTION DRAWINGS



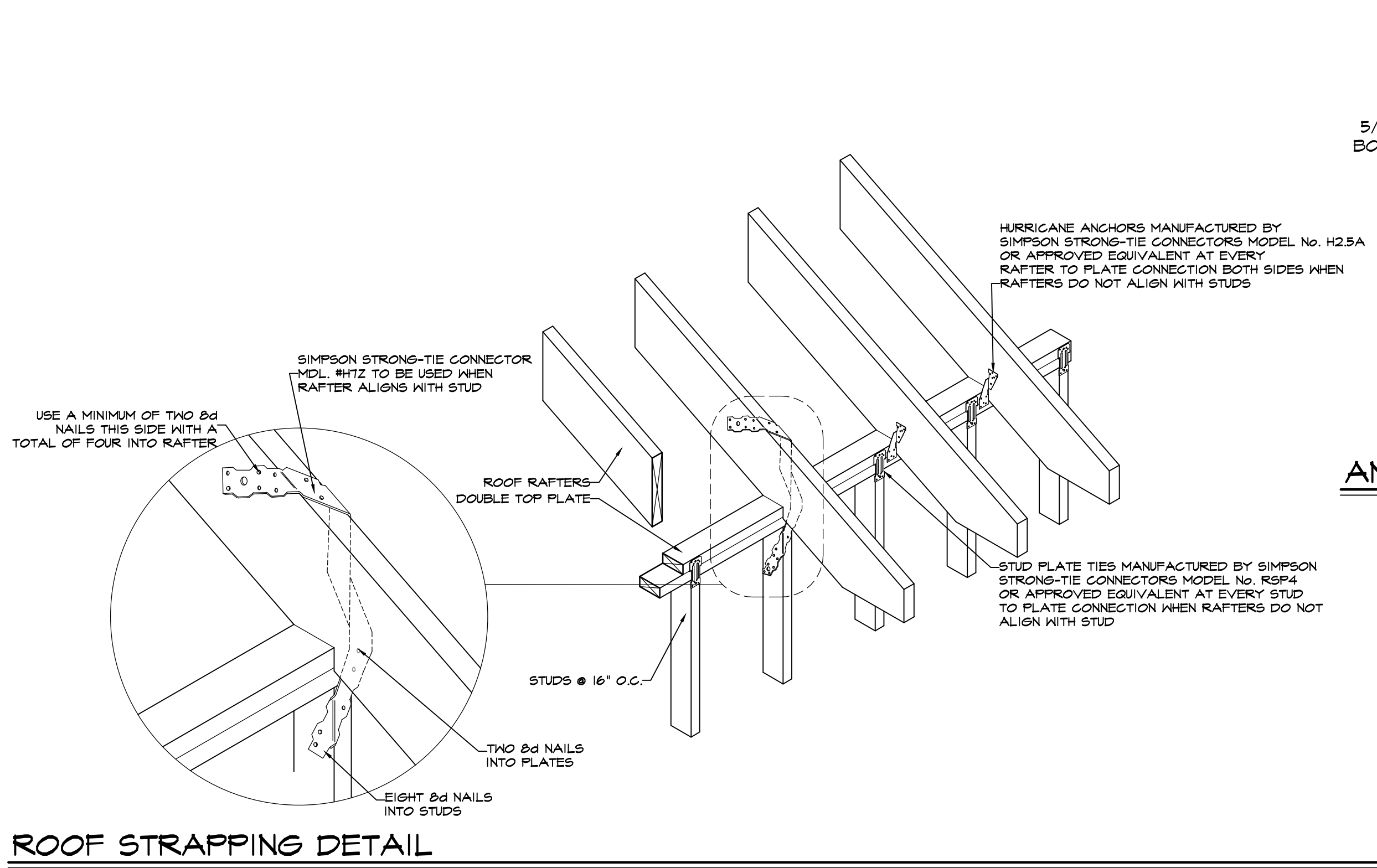
CONSULTANTS:
NY'S LIC #021495

CHECKED BY: TOC
DRAWN BY: TC

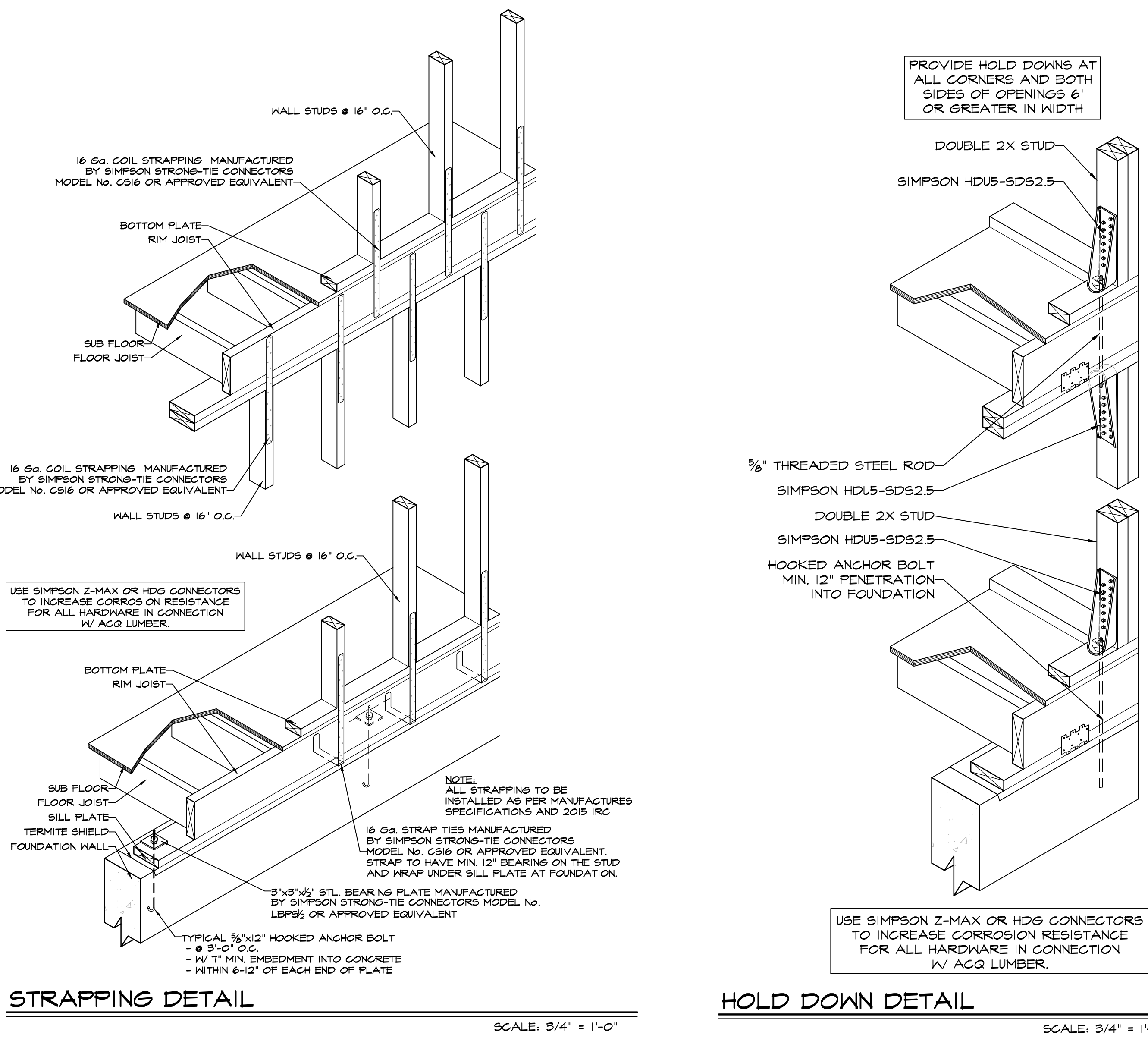
REV #	DATE	CONSTRUCTION DRAWING	BY:
1	8-10-21	AMENDMENT #1	TC
2	4-9-21	UPDATED PER EXAMINER COMMENTS	TC
3	3-5-21	CONSTRUCTION DRAWINGS	TC

PROPOSED ADDITION & ALTERATION
FEINER RESIDENCE
811 KEENE LANE
WOODMERE, NY 11598

JOB#: FE-20-532
DATE: 3-3-21
SCALE: AS NOTED
DRAWING NUMBER
A.9

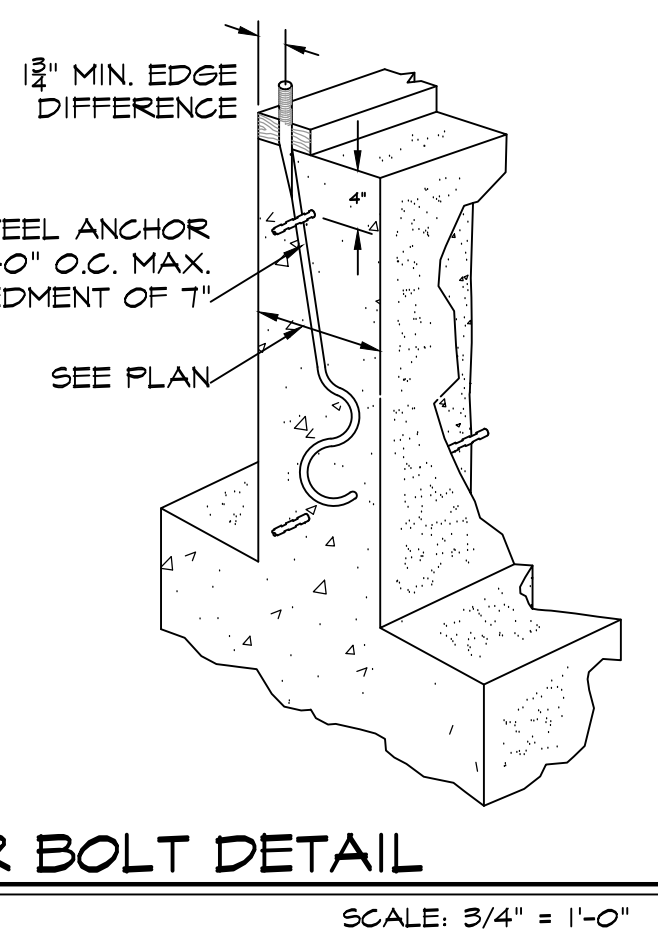


ROOF STRAPPING DETAIL

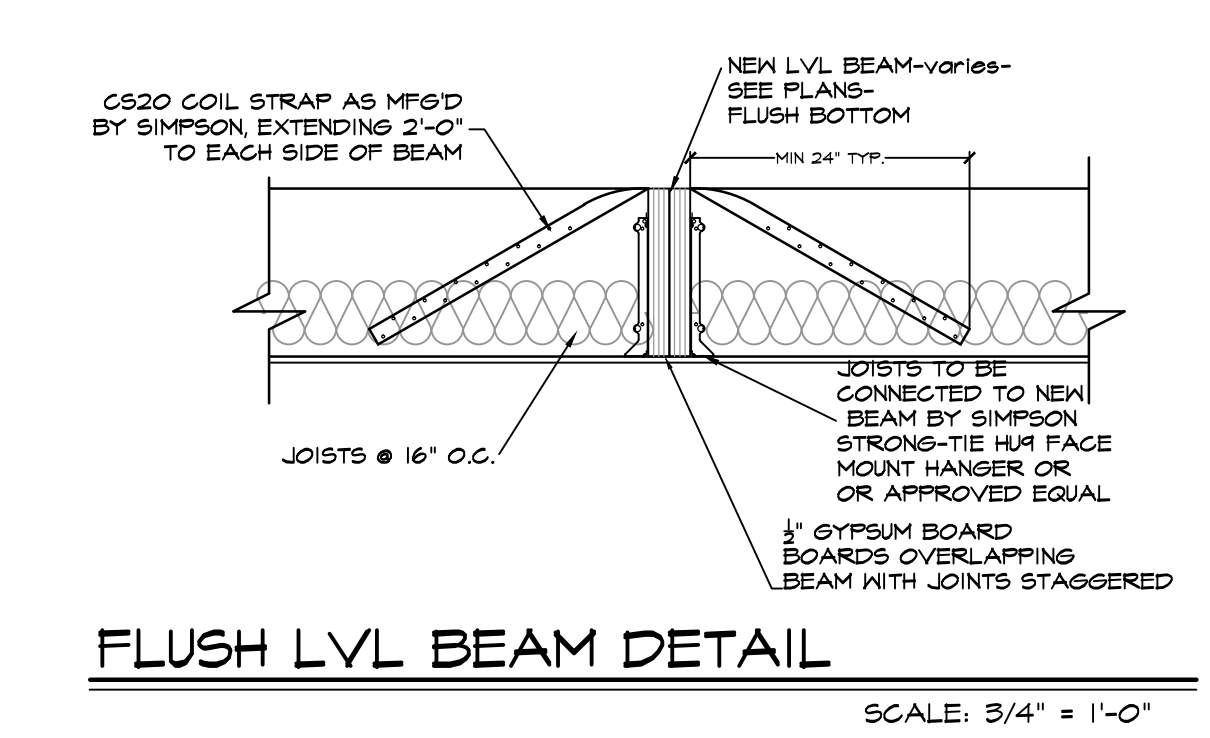


STRAPPING DETAIL

HOLD DOWN DETAIL



ANCHOR BOLT DETAIL



FLUSH LVL BEAM DETAIL

FIGS. 1, ROOF EXTENSION
OPEN VENT PIPES THAT EXTEND THROUGH A ROOF SHALL BE TERMINATED NOT LESS THAN 6 INCHES ABOVE THE ROOF OR 6 INCHES ABOVE THE ANTICIPATED SNOW ACCUMULATION. IF SNOW ACCUMULATION IS GREATER, HEREIN A ROOF IS TO BE USED FOR ASSEMBLY, AS A PROXIMATE OBSERVATION DECK OR SENSATION DECK, OR FOR SIMILAR PURPOSES. OPEN VENT PIPES SHALL TERMINATE NOT LESS THAN 1 FEET ABOVE THE ROOF.

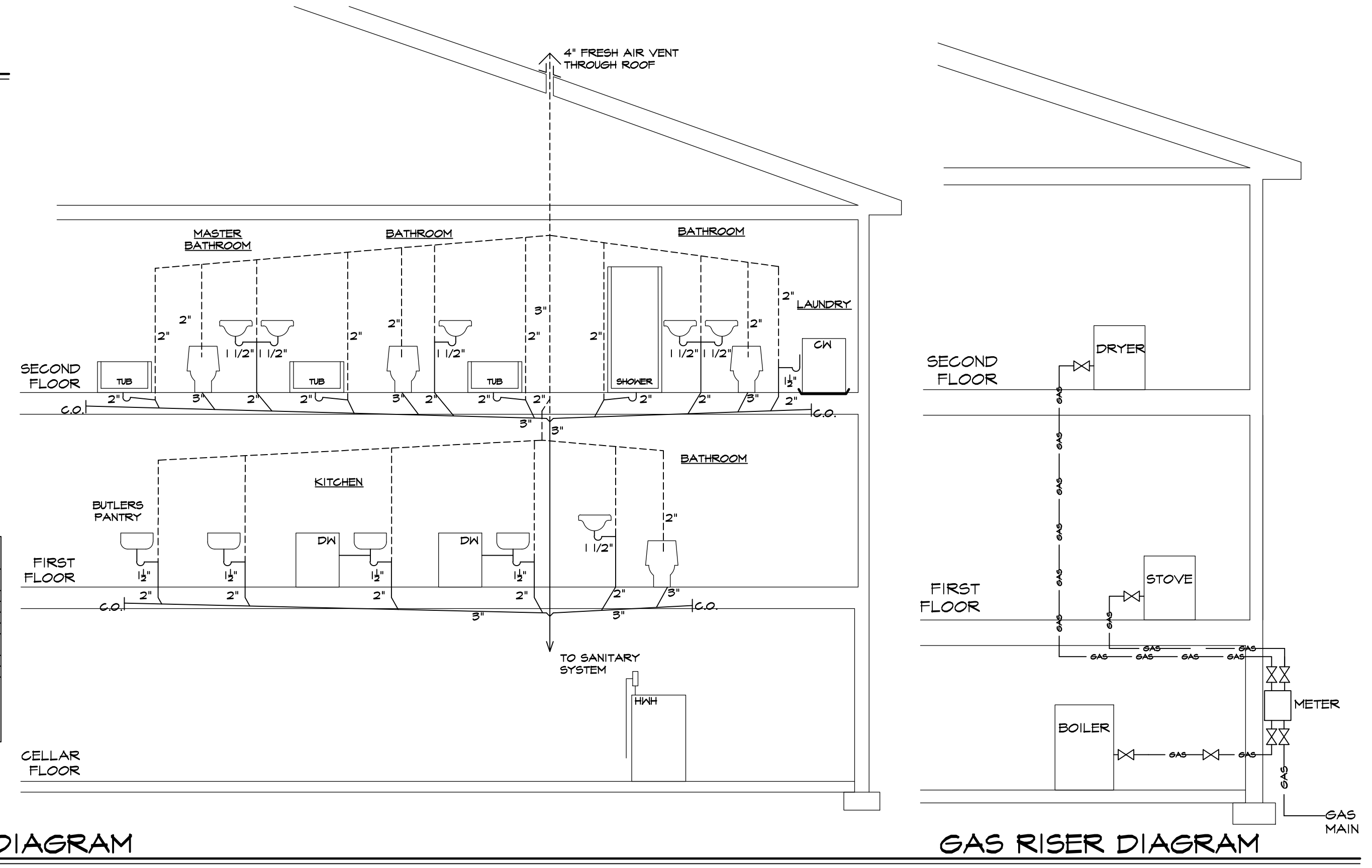
FIGS. 2 FROST CLOSURE
WHERE THE 47.5 PERCENT VALUE FOR OUTSIDE DESIGN TEMPERATURE IS 0°F OR LESS, VENT EXTENDING THROUGH A ROOF OR WALL SHALL BE NOT LESS THAN 8 INCHES IN DIAMETER. ANY INCREASE IN THE SIZE OF THE VENT SHALL BE MADE NOT LESS THAN 1 FOOT INSIDE THE THERMAL ENVELOPE OF THE BUILDING.

TABLE PS201.1, 2020 RESIDENTIAL CODE OF NYS
SIZE OF TRAPS FOR PLUMBING FIXTURES

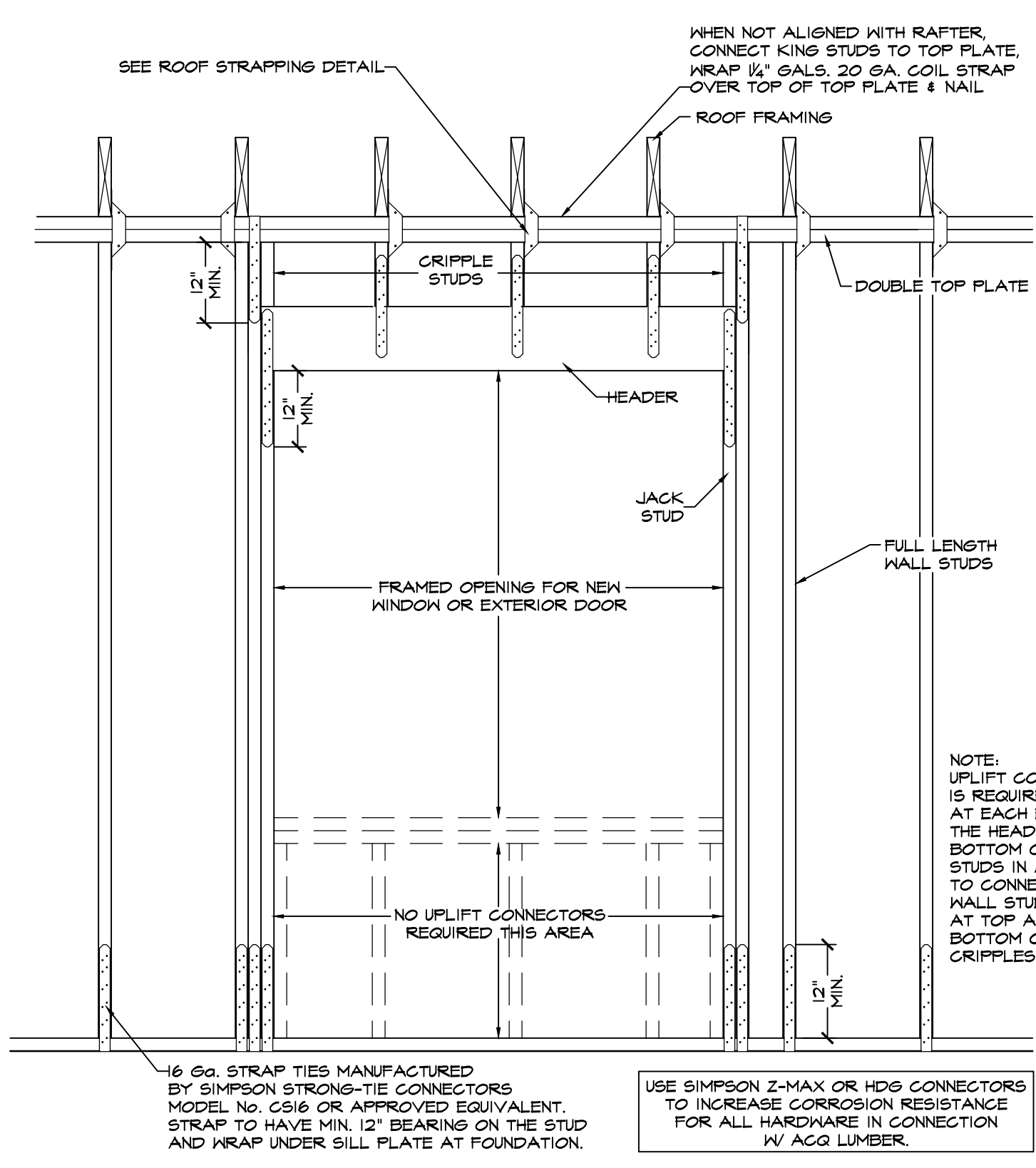
PLUMBING FIXTURE	TRAP SIZE (INCHES)
BATHS (WITH OR WITHOUT SHOWER HEAD AND/OR WHIRLPOOL ATTACHMENTS)	1 1/2
BIDET	1 1/4
CLOTHES WASHER STANDPIPE	2
DISHWASHER (ON SEPARATE TRAP)	1 1/2
FLOOR DRAIN	2
KITCHEN SINK (ONE OR TWO TRAPS WITH OR WITHOUT DISHWASHER AND FOOD WASTE DISPOSER)	1 1/2
LAUNDRY SINK (ONE OR MORE CONNECTIONS)	1 1/4
LAVATORY	1 1/4
SHOWER (BASED ON THE TOTAL FLOW RATE THROUGH SHOWERHEADS AND BODYSPRAYS)	
FLOW RATE:	
6.7 GPM AND LESS	1 1/2
MORE THAN 6.7 GPM UP TO 12.3 GPM	2
MORE THAN 12.3 GPM UP TO 25.6 GPM	2 1/2
MORE THAN 25.6 GPM UP TO 55.6 GPM	4

RELOCATE EXISTING ADEQUATE PLUMBING LINES AS REQUIRED

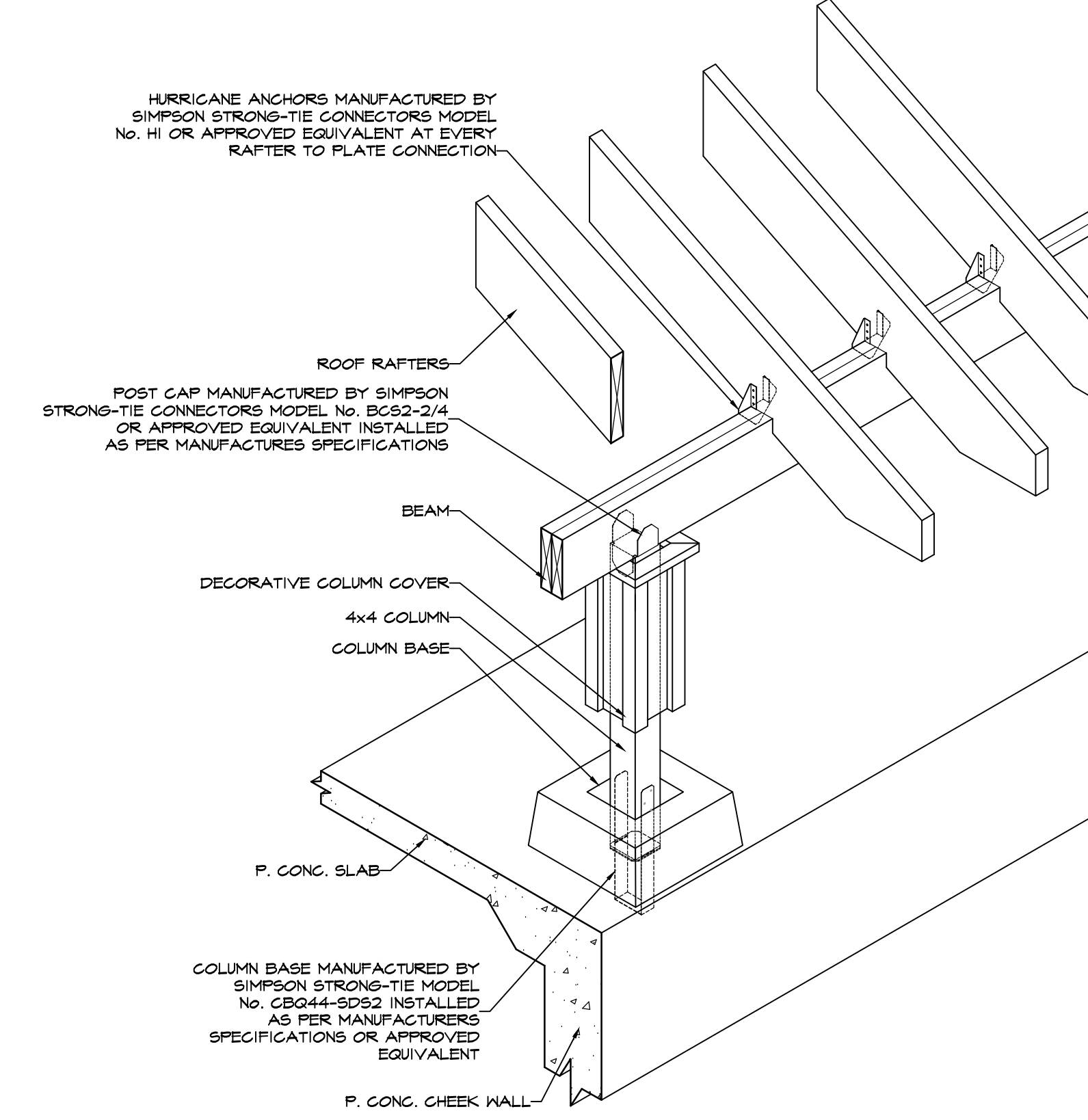
PLUMBING RISER DIAGRAM



GAS RISER DIAGRAM



UPLIFT CONNECTOR DETAIL



PORCH STRAPPING DETAIL

2020 RESIDENTIAL CODE OF NYS - TABLE R602.3(1)
FASTENING SCHEDULE

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{100c}	SPACING AND LOCATION
ROOF			
1	BLOCKING BETWEEN CEILING JOISTS OR RAFTERS TO TOP PLATE	4-8d BOX (2 5/16x18") OR 3-8d COMMON (2 5/16x18") OR 3-10d BOX (2 5/16x128") OR 3-5/16x18" NAILS	TOE NAIL
2	CEILING JOISTS TO TOP PLATE	4-8d BOX (2 5/16x18") OR 3-8d COMMON (2 5/16x18") OR 3-10d BOX (2 5/16x128") OR 3-5/16x18" NAILS	PER JOIST, TOE NAIL
3	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS [see Sections R602.3.1, R602.3.2 and Table R602.3 (1)]	4-10d BOX (5/16x18") OR 3-16d COMMON (5/16x162") OR 4-10d COMMON (5/16x148") OR 4-5/16x18" NAILS	FACE NAIL
4	CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT), [see Sections R602.3.1, R602.3.2 and Table R602.3 (1)]	TABLE R602.3(1)	FACE NAIL
5	COLLAR TIE TO RAFTER, FACE NAIL OR 1 1/4" x 20ga. RIDGE STRAP TO RAFTER	4-10d BOX (5/16x128") OR 3-10d COMMON (5/16x148") OR 4-5/16x18" NAILS	FACE NAIL EACH RAFTER
6	RAFTER OR ROOF TRUSS TO PLATE	3-16d BOX NAILS (5/16x185") OR 3-10d COMMON NAILS (5/16x148") OR 4-10d BOX (5/16x128") OR 4-5/16x18" NAILS	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
7	ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTERS TO MINIMUM 2" RIDGE BEAM	4-16d (5/16x185") OR 3-16d COMMON (5/16x148") OR 4-10d BOX (5/16x128") OR 4-5/16x18" NAILS	TOE NAIL
WALL			
8	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (5/16x162") OR 10d (5/16x128") OR 5/16x18" NAILS	24" O.C. FACE NAIL
9	STUD TO STUD AND BUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d BOX (5/16x185") OR 3-16d COMMON (5/16x148") OR 4-10d BOX (5/16x128") OR 4-5/16x18" NAILS	12" O.C. FACE NAIL
10	BUILT-UP HEADER (2" TO 2" HEADER WITH 1/2" SPACER)	16d COMMON (5/16x162") OR 16d BOX (5/16x185")	16" O.C. EACH EDGE FACE NAIL
11	CONTINUOUS HEADER TO STUD	3-8d BOX (2 5/16x185") OR 4-8d COMMON (2 5/16x185") OR 4-10d BOX (5/16x128")	TOE NAIL
12	TOP PLATE TO TOP PLATE	16d COMMON (5/16x162") OR 10d BOX (5/16x128") OR 5/16x18" NAILS	12" O.C. FACE NAIL
13	DOUBLE TOP PLATE SPLICE FOR SDC's A-D ₂ WITH SEISMIC BRACED WALL LINE SPACING < 2'	8-16d COMMON (5/16x162") OR 12-16d BOX (5/16x185") OR 12-10d BOX (5/16x128") OR 12-5/16x18" NAILS	FACE NAIL ON EACH SIDE OF END JOINT MINIMUM 24" LAP SPLICE WITH EACH SIDE OF END JOINT
14	BOTTOM PLATE TO JOINT, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (5/16x162") OR 16d BOX (5/16x185") OR 5-16d COMMON (5/16x148") OR 4-5/16x18" NAILS	16" O.C. FACE NAIL
15	BOTTOM PLATE TO JOINT, RIM JOIST, BAND JOIST OR BLOCKING (AT BRACED WALL PANELS)	4-8d BOX (2 5/16x185") OR 3-16d COMMON (5/16x148") OR 4-10d BOX (5/16x128") OR 4-5/16x18" NAILS	5 EACH 16" O.C. FACE NAIL 2 EACH 18" O.C. FACE NAIL 4 EACH 16" O.C. FACE NAIL
16	TOP OR BOTTOM PLATE TO STUD	3-16d BOX (5/16x185") OR 2-16d COMMON (5/16x162") OR 3-10d BOX (5/16x128") OR 3-5/16x18" NAILS	TOE NAIL
17	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d BOX (5/16x128") OR 2-16d COMMON (5/16x162") OR 3-5/16x18" NAILS	FACE NAIL
18	1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2 5/16x185") OR 2-16d COMMON (5/16x148") OR 3-10d BOX (5/16x128") OR 4-5/16x18" NAILS	FACE NAIL
19	1" x 6" SHEATHING TO EACH BEARING	3-8d BOX (2 5/16x185") OR 2-16d COMMON (5/16x148") OR 3-10d BOX (5/16x128") OR 4-5/16x18" NAILS	FACE NAIL
20	1" x 6" AND WIDER SHEATHING TO EACH BEARING	3-8d BOX (2 5/16x185") OR 2-16d COMMON (5/16x148") OR 3-10d BOX (5/16x128") OR 4-5/16x18" NAILS	FACE NAIL
FLOOR			
21	JOIST TO SILL, TOP PLATE OR GIRDER	4-8d BOX (2 5/16x185") OR 3-8d COMMON (2 5/16x185") OR 3-10d BOX (5/16x128") OR 3-5/16x18" NAILS	TOE NAIL
22	RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATIONS ALSO)	8d COMMON (2 5/16x185") OR 10d BOX (5/16x128") OR 5/16x18" NAILS	6" O.C. TOE NAIL
23	1" x 6" SUBFLOOR OR LESS TO EACH JOIST	3-8d BOX (2 5/16x185") OR 2-16d COMMON (5/16x148") OR 3-10d BOX (5/16x128") OR 2 STAPLES, 1" CROWN, 16ga. 3/4" LONG	FACE NAIL
24	2" SUBFLOOR TO JOIST OR GIRDER	3-16d BOX (5/16x185") OR 2-16d COMMON (5/16x162")	BLIND AND FACE NAIL
25	2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	3-16d BOX (5/16x185") OR 2-16d COMMON (5/16x162")	AT EACH BEARING, FACE NAIL
26	BAND OR RIM JOIST TO JOIST	3-16d COMMON (5/16x162") 4-10 BOX (5/16x128") OR 4-5/16x18" NAILS OR 4-3" x 14ga. STAPLES, 3" CROWN	END NAIL
27	BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS	20d COMMON (4"x10x142") OR 10d BOX (5/16x128") OR 5/16x18" NAILS	NAIL EACH LAYER AS FOLLOWS: 24" O.C. AT TOP AND BOTTOM AND STAGGERED 24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
28	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	4-16d BOX (5/16x185") OR 3-16d COMMON (5/16x148") OR 4-10d BOX (5/16x128") OR 4-5/16x18" NAILS	AT EACH JOIST OR RAFTER, FACE NAIL
29	BRIDGING TO JOIST	2-10d (5/16x128")	EACH END, TOE NAIL

2020 RESIDENTIAL CODE OF NYS

TABLE R602.3(3)
WOOD PANEL WALL SHEATHING FASTENING SCHEDULE ^{100c}

MINIMUM PANEL SIZE	MINIMUM WOOD STRUCTURAL PANEL RATING	MINIMUM NOMINAL PANEL THICKNESS (INCHES)	MINIMUM WALL STUD SPACING (INCHES)	PANEL NAIL SPACING (INCHES O.C.)	FIELD (INCHES O.C.)	ULTIMATE DESIGN WIND SPEED (MPH)	WIND EXPOSURE CATEGORY
SIZE	PENETRATION (INCHES)						
6d COMMON (2.0"x10")	1.5	24/0	5/8	16	6	12	140
8d COMMON (2.5"x10")	1.75	24/16	7/16	16	6	12	170
				24	6	12	140

FOR SILL: 1 inch = 25.4 mm, 1 FOOT = 304.8 mm

a. PANEL STRENGTH AXIS PARALLEL OR PERPENDICULAR TO SUPPORT. THREE-PLY PLYWOOD SHEATHING WITH STUD SPACING MORE THAN 16" ON CENTER SHALL BE APPLIED WITH PANEL STRENGTH AXIS PERPENDICULAR TO SUPPORT.
b. TABLE BASED ON WIND PRESSURES ACTING TOWARD AND AWAY FROM BUILDING SURFACES IN ACCORDANCE WITH SECTION R301.2.
c. LATERAL BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION R602.10.
d. WOOD STRUCTURAL PANELS WITH SPAN RATINGS OF WALLS OR WALL-TO-WALL SHALL BE PERMITTED AS AN ALTERNATE TO PANELS WITH A 24/0 SPAN RATING. PLYWOOD SIDING RATED 16 O.C. OR 24 O.C. SHALL BE PERMITTED AS AN ALTERNATE TO PANELS WITH A 24/16 SPAN RATING. WALL-TO-WALL PLYWOOD SIDING 16 O.C. SHALL BE USED WITH STUDS SPACED NOT MORE THAN 16" ON CENTER.

2020 RESIDENTIAL CODE OF NEW YORK STATE
TABLE R602.11 RAFTER OR TRUSS UPLIFT CONNECTION FORCES
FROM WIND (ASD) (POUNDS PER CONNECTION) ^{100a,100b,100c}

RAFTER OR TRUSS SPACING	ROOF SPAN (FEET)	EXPOSURE B			
		ULTIMATE DESIGN WIND SPEED Vail (mph)			
		130 mph		140 mph	
		ROOF PITCH	ROOF PITCH	ROOF PITCH	ROOF PITCH
12" O.C.	12	95	23	122	113
	18	122	112	151	146
	24	144	137	182	178
	24	167	158	216	200
	30	185	170	240	222
	36	203	186	264	244
	42	210	193	276	251
	48	230	206	296	271
	12	126	117	162	150
	18	158	142	204	191
16" O.C.	12	112	102	144	137
	18	144	137	182	178
	24	167	158	216	200
	30	185	170	240	222
	36	203	186	264	244
	42	210	193	276	251
	48	230	206	296	271
	12	126	117	162	150
	18	158	142	204	191
	24	185	170	240	222
24" O.C.	12	126	117	162	150
	18	158	142	204	191
	24	185	170	240	222
	30	203	186	264	244
	36	210	193	276	251
	42	230	206	296	271
	48	244	226	318	295
	12	126	117	162	150
	18	158	142	204	191
	24	185	170	240	222

FOR SILL: 1 inch = 25.4 mm, 1 FOOT = 304.8 mm, 1 MILE PER HOUR = 0.447 m/s, 1 POUND = 0.454 kg, 1 POUND PER SQUARE FOOT = 47.9 N/m², 1 pcf = 14.6 N/m³

a. THE UPLIFT CONNECTION FORCES ARE BASED ON A MAXIMUM 33 FOOT MEAN ROOF HEIGHT AND WIND EXPOSURE CATEGORY B OR C. FOR EXPOSURE D, THE UPLIFT CONNECTION FORCE SHALL BE SELECTED FROM THE EXPOSURE C PORTION OF THE TABLE USING THE NEXT HIGHEST TABULATED ULTIMATE DESIGN WIND SPEED. THE ADJUSTMENT COEFFICIENTS IN TABLE R301.2(3) SHALL NOT BE USED TO MULTIPLY THE TABULATED FORCES FOR EXPOSURE C AND D OR FOR THE OTHER MEAN ROOF HEIGHTS.
b. THE UPLIFT CONNECTION FORCES INCLUDE AN ALLOWANCE FOR ROOF AND CEILING ASSEMBLY DEAD LOAD OF 15 PSF.
c. THE TABULATED UPLIFT CONNECTION FORCES ARE LIMITED TO A MAXIMUM ROOF OVERHANG OF 24 INCHES.
d. THE TABULATED UPLIFT CONNECTION FORCES SHALL BE PERMITTED TO BE MULTIPLIED BY 0.75 FOR CONNECTIONS NOT LOCATED WITHIN 8 FEET OF BUILDING CORNERS.
e. FOR BUILDINGS WITH HIP ROOFS WITH 5:12 AND GREATER PITCH, THE TABULATED UPLIFT CONNECTION FORCES SHALL BE PERMITTED TO BE MULTIPLIED BY 0.70. THIS REDUCTION SHALL NOT BE COMBINED WITH ANY OTHER REDUCTION IN TABULATED FORCES.
f. FOR WALL TO WALL AND WALL TO FOUNDATION CONNECTIONS, THE UPLIFT CONNECTION FORCE SHALL BE PERMITTED TO BE REDUCED BY 60 pcf FOR EACH FULL WALL ABOVE.
g. LINEAR INTERPOLATION BETWEEN TABULATED ROOF SPANS AND WIND SPEEDS SHALL BE PERMITTED.
h. THE TABULATED FORCES FOR A 12-INCH ON CENTER SPACING SHALL BE PERMITTED TO BE USED TO DETERMINE THE UPLIFT LOAD IN POUNDS PER LINEAR FOOT.

2020 IRC -
TABLE R602.3(5) SIZE, HEIGHT AND SPACING OF WOOD STUDS ^a

STUD SIZE (INCHES)	BEARING WALLS			NON-BEARING WALLS		
	LATERALLY UNSUPPORTED STUD HEIGHT ^a (FEET)	MAXIMUM SPACING WHEN SUPPORTING A ROOF-CEILING ASSEMBLY OR A HABITABLE ATTIC ASSEMBLY, ONLY (INCHES)	MAXIMUM SPACING WHEN SUPPORTING TWO FLOORS, PLUS A ROOF-CEILING ASSEMBLY OR A HABITABLE ATTIC ASSEMBLY (INCHES)	MAXIMUM SPACING WHEN SUPPORTING TWO FLOORS, PLUS A ROOF-CEILING ASSEMBLY OR A HABITABLE ATTIC ASSEMBLY (INCHES)	MAXIMUM SPACING WHEN SUPPORTING ONE FLOOR (HEIGHT ^a INCHES)	LATERALLY UNSUPPORTED STUD HEIGHT ^a (FEET)
2x4	10	24"	16"	--	24	10
2x6	10	24"	24"	16	24	24

FOR SILL: 1 inch = 25.4 mm, 1 FOOT = 304.8 mm

a. LISTED HEIGHT ARE DISTANCES BETWEEN POINTS LATERAL SUPPORT PLACED PERPENDICULAR TO THE PLANE OF THE WALL. BEARING WALLS SHALL BE SHEATHED ON NOT LESS THAN ONE SIDE OR BRIDGING SHALL BE INSTALLED NOT GREATER THAN 4 FEET APART MEASURED VERTICALLY FROM EITHER END OF THE STUD. INCREASES IN UNSUPPORTED HEIGHT ARE PERMITTED WHERE IN COMPLIANCE WITH EXCEPTION 2 OF SECTION R602.3, OR DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.
b. SHALL NOT BE USED IN EXTERIOR WALLS.
c. A HABITABLE ATTIC ASSEMBLY SUPPORTED BY 2x4 STUDS IS LIMITED TO A ROOF SPAN OF 32 FEET. WHERE THE ROOF SPAN EXCEEDS 32 FEET, THE WALL STUDS SHALL BE INCREASED TO 2x6 OR THE STUDS SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

TABLE R602.10.4- BRACING METHODS

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a	SPACING
CONTINUOUS SHEATHING METHODS	CS-WSP		EXTERIOR SHEATHING PER TABLE R602.3 (5)	6" EDGES 12" FIELD
	CS-6 ^{b,c}		INTERIOR SHEATHING PER TABLE R602.3 (1) or R602.3 (2)	VARIES BY FASTENER
	CS-FF		SEE METHOD CS-WSP	SEE METHOD CS-WSP
CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL ADJACENT TO GARAGE OPENINGS	3/8"		SEE METHOD CS-WSP	SEE METHOD CS-WSP
CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL ADJACENT TO GARAGE OPENINGS	3/8"		SEE METHOD CS-WSP	SEE METHOD CS-WSP
CONTINUOUSLY SHEATHED PORTAL FRAME	7/16"		SEE SECTION R602.10.6.4	SEE SECTION R602.10.6.4
CONTINUOUSLY SHEATHED STRUCTURAL FIBERBOARD	1/2" or 2 3/4" for maximum 16" stud spacing		1 1/2" long X 0.12 dia. (for 1/2" thick sheathing) 1 1/2" long X 0.12 dia. (for 2 3/4" thick sheathing) galvanized steel plate or 8d common (2 1/2" long X 0.131" dia.) nails	5" EDGES 6" FIELD

FOR SILL: 1 inch = 25.4 mm, 1 FOOT = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot=47.9 N/m², 1 mile per hour = 0.447 m/s.

a. Adhesive attachment of wall sheathing including Method GB, shall not be permitted in Seismic Design Categories C, D₁, D₂ and D₃.
b. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D₁, D₂, and D₃ roof covering dead load shall not exceed 5 psf.
c. Garage openings adjacent to a Method CS-6 panel shall be provided with a header in accordance with Table R602.3 (1). A full height clear opening shall not be permitted to a Method CS-6 panel.
d. Method CS-SFB does not apply in Seismic Design Categories D₁, D₂, D₃.
e. Method applies to detached one and two-family dwellings in Seismic Design Categories D₁ through D₂ only.

TABLE R602.3(1)
FASTENING SCHEDULE CONTINUED

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{100c}	EDGES (INCHES)	INTERMEDIATE SUPPORTS ^c (INCHES)
WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLE BOARD WALL SHEATHING TO FRAMING (SEE TABLE R602.3(3) FOR ADDITIONAL FASTENING TO WALL FRAMING)				
30	3/8" - 1"	8d COMMON (2 5/16x18") NAIL (SUBFLOOR NAIL) 8d COMMON (2 5/16x18") NAIL (ROOF)	6	12
31	3/8" - 1"	8d COMMON NAIL (2 5/16x18")	6	12
32	1 1/8" - 1 1/2"	10d COMMON (5/16x18") NAIL OR 8d (2 5/16x18") DEFORMED NAIL	6	12
OTHER WALL SHEATHING				
33	1 1/2" STRUCTURAL CELLULOSE/FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL 3/4" HEAD DIAMETER OR 1" CROWN STAPLE 16 ga.	5	6
34	3/8" STRUCTURAL CELLULOSE/FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL 3/4" HEAD DIAMETER OR 1" CROWN STAPLE 16 ga.	5	6
35	1/2" GYPSUM SHEATHING ^d	1 1/2" GALVANIZED ROOFING NAIL, STAPLE GALVANIZED 1 1/2" LONG 1 1/4" SCREWS, TYPE A308	7	7
36	5/8" GYPSUM SHEATHING ^d	1 1/2" GALVANIZED ROOFING NAIL, STAPLE GALVANIZED 1 1/2" SCREWS, TYPE W OR S	7	7
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING				
37	3/4" AND LESS	8d DEFORMED (2 5/16x120") NAIL OR 8d COMMON (2 5/16x18") NAIL	6	12
38	3/8" - 1"	8d COMMON (2 5/16x18") NAIL OR 8d DEFORMED (2 5/16x120") NAIL	6	12
39	1 1/8" - 1 1/2"	10d COMMON (5/16x18") NAIL OR 8d DEFORMED (2 5/16x120") NAIL	6	12

FOR SILL: 1 inch = 25.4 mm, 1 FOOT = 304.8 mm, 1 MILE PER HOUR = 0.447 m/s, 1 lb = 0.454 kg

a. NAILS ARE SMOOTH-CROWN BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING STRENGTH AS SHOWN: 80 KSI FOR SHANK DIAMETER OF 0.142 INCH (200 COMMON NAIL), 80 KSI FOR SHANK DIAMETERS LARGER THAN 0.142 INCH BUT NOT LARGER THAN 0.171 INCH, AND 100 KSI FOR SHANK DIAMETERS OF 0.142 INCH OR LESS.
b. STAPLES ARE 6 GAGE WIRE AND HAVE A MINIMUM 7/16-INCH ON CENTER DIAMETER CROWN WIDTH.
c. NAILS SHALL BE SPACED AT NOT MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR GREATER.
d. STAPLES SHALL BE SPACED AT NOT MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR GREATER.
e. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3 (2).
f. WHERE THE ULTIMATE DESIGN WIND SPEED IS 180 MPH OR LESS, NAILS FOR ATTACHING WOOD STRUCTURAL PANEL ROOF SHEATHING TO GABLE END WALL FRAMING SHALL BE SPACED 6 INCHES ON CENTER. WHERE THE ULTIMATE DESIGN WIND SPEED IS GREATER THAN 180 MPH, NAILS FOR ATTACHING PANEL ROOF SHEATHING TO INTERMEDIATE SUPPORTS SHALL BE SPACED 6 INCHES ON CENTER FOR MINIMUM 48 INCH DISTANCE FROM RIDGES, EAVES AND GABLE END WALLS AND 4 INCHES ON CENTER TO GABLE END WALL FRAMING.
g. GYPSUM SHEATHING SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 283. FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C 208.
h. SPACING OF FASTENERS ON FLOOR SHEATHING EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING AND AT FLOOR PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS NEED NOT BE PROVIDED EXCEPT AS REQUIRED BY OTHER PROVISIONS OF THIS CODE. FLOOR PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING.
i. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE, PROVIDE TWO TOE NAILS ON ONE SIDE OF THE RAFTER AND TWO NAILS FROM THE CEILING JOIST TO TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE. THE TOE NAIL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQUIRED.

TABLE 1: MINIMUM INSULATION THICKNESS FOR CIRCULATING HOT WATER PIPES				
INSULATION THICKNESS IN INCHES BY PIPE SIZES				
HEATED WATER TEMPERATURE (F)	NON-CIRCULATING RUNOUTS UP TO 1"	CIRCULATING MAINS AND RUNOUTS UP TO 1.25"	1.5" TO 2.0"	OVER 2.0"
170-180	0.5	1.0	1.5	2.0
140-160	0.5	0.5	1.0	1.5
100-130	0.5	0.5	0.5	1.0

TABLE 2: MINIMUM INSULATION THICKNESS FOR HVAC PIPES				
PIPING SYSTEM TYPES				
FLUID TEMP. RANGE (F)	2" RUNOUTS	1" AND LESS	1.25" TO 2' 12.5"	4"
HEATING SYSTEMS				
LOW PRESSURE/TEMPERATURE	201-250	1.0	1.5	2.0
LOW TEMPERATURE	120-200	0.5	1.0	1.5
STEAM CONDENSATE (FEED WATER)	ANY	1.0	1.0	1.5
COOLING SYSTEMS				
CHILLED WATER, REFRIGERANT	201-250	1.0	1.5	2.0
AND BRINE	120-200	0.5	1.0	1.5

GENERAL CONDITIONS
UNLESS OTHERWISE NOTED, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, AIA DOCUMENT-201, 4/87 SHALL APPLY. THE CONTRACTOR SHALL OBTAIN CERTIFICATE OF OCCUPANCY. SUBSTITUTIONS SHOULD NOT BE MADE WITHOUT WRITTEN AUTHORIZATION BY THE ARCHITECT. THE PREMISES SHALL BE KEPT REASONABLY CLEAN AT ALL TIMES. AT THE COMPLETION OF WORK, THE CONTRACTOR SHALL REMOVE ALL WASTE MATERIALS, TOOLS, RUBBISH, ETC., CLEAN GLASS AND LEAVE WORK BROOM CLEAN UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL CARRY WORKMAN'S COMPENSATION AND GENERAL LIABILITY INSURANCE. ALL SHALL COMPLY WITH STATE AND LOCAL CODES AND ORDINANCES. THE CONTRACTOR SHOULD FULLY GUARANTEE HIS WORK AND THE WORK OF HIS SUBCONTRACTORS FOR A PERIOD OF ONE YEAR AFTER COMPLETION OF THE PROJECT UNLESS OTHERWISE SPECIFIED. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH GOOD BUILDING PRACTICES. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER, ARCHITECT, AND THEIR AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEYS FEES ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE WORK PROVIDED THAT ANY SUCH CLAIM, DAMAGE, LOSS OR EXPENSE (A) IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE OR DEATH OR TO INJURY TO OR DESTRUCTION OF TANGIBLE PROPERTY OTHER THAN THE WORK ITSELF INCLUDING THE LOSS OR USE RESULTING THERE FROM), (B) IS CAUSED IN WHOLE OR IN PART BY ANY NEGLIGENCE ACT OR OMISSION OF THE CONTRACTOR OR ANY SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE REGARDLESS OF WHETHER OR NOT IT IS CAUSED IN PART BY A PARTY INDEMNIFIED HEREUNDER, ALL MATERIALS, ASSEMBLIES, AND METHOD OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO FORM-WORK, BLOCK-WORK, FRAMING, NAILING, PLACING OF CONCRETE, ETC., ARE TO BE CAREFULLY SUPERVISED BY THE CONTRACTOR TO BE SURE THEY ARE IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, APPLICABLE CODES AND GOOD PRACTICE. DEVIATIONS FROM THE DRAWINGS AND SPECIFICATIONS WILL NOT BE PERMITTED WITHOUT WRITTEN AUTHORIZATION OF THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SHOP DRAWINGS WHICH MAY BE NEEDED. ALL DIMENSIONS AND CONDITIONS ARE TO BE FIELD VERIFIED. CONTRACTOR TO REMOVE & RELOCATE AS REQUIRED ALL EXISTING WORK WHICH INTERFERES WITH NEW CONSTRUCTION.

SITE WORK
STAKEOUT IS TO BE PERFORMED BY A LICENSED SURVEYOR. STAKING AND LAYOUT ARE TO ESTABLISH ALL LINES AND BENCHMARKS. VERIFY ALL GIVEN DATA ON DRAWINGS. IN CASE OF DISCREPANCY, RECEIVE CLARIFICATION FROM ARCHITECT PRIOR TO PROCEEDING. EXCAVATE AND BACK FILL FOR WORK INDICATED ON DRAWINGS. STOCKPILE TOPSOIL OBTAINED FROM STRIPPING DRIVEWAY AND BUILDING SITE. STOCKPILE ALL EXCAVATED MATERIAL. NEW AND EXISTING BACK FILL MATERIAL AND TOPSOIL ARE TO BE FREE OF WEEDS, TREE ROOTS, ROCKS AND DEBRIS. ALL SURPLUS MATERIAL THAT IS UNSUITABLE FOR BACK FILL MATERIAL SHALL BE REMOVED FROM THE SITE. PROTECT ALL TREES WITHIN EIGHT FEET OF THE BUILDING. PROPER APPROVALS MUST BE OBTAINED BEFORE COVERING ANY EXCAVATED WORK.

CONCRETE BLOCK
ALL CONCRETE BLOCK IS TO HAVE 'DUR-O-WALL' REINFORCING EVERY THIRD COURSE. FILL TOP COURSE SOLID. MORTAR MIX TO BE ONE PART PORTLAND CEMENT, ONE PART LIVE PUTTY, AND SIX PARTS SAND, OR ONE PART MASONRY CEMENT AND THREE PARTS SAND.

CONCRETE
NO CONCRETE OR MASONRY WORK SHALL BE DONE DURING TEMPERATURES OF 40 DEGREES F. AND FALLING. NO CONCRETE SHALL BE PLACED ON FROZEN SURFACES. NO ADDITIVES SHALL BE ALLOWED WITHOUT WRITTEN PERMISSION OF THE ARCHITECT. ALL CONCRETE IS TO BE MIN. 3500 P.S.I. AT 28 DAYS & 4,000 PSI FOR GARAGE SLAB. PROVIDE ALL SLEEVES AND FOUNDATION VENTS AS REQUIRED BY NYS CODE. UNLESS INDICATED, ALL FOUNDATION FOOTINGS ARE TO BE A MIN. 8" DEEP PROJECTING 6" ON EACH SIDE OF THE FOUNDATION WALL. PROVIDE TWO #4 DEFORMED BARS CONTINUOUS IN THE FOOTING. ALL 4" THICK CONCRETE SLABS TO HAVE 6X6 10/10 WELDED WIRE REINFORCING. ANCHOR BOLTS IN CONCRETE SHALL BE HOOKED 5/8" X 12" AT MAX. 3' O.C. PROVIDE BITUMEN EXPANSION JOINTS BETWEEN SLABS AND FOUNDATION WALLS.

FIREPLACE
FIREPLACE OPENING AND FLUE SIZE TO BE AS INDICATED ON DRAWINGS. PROVIDE OUTSIDE COMBUSTION AIR WITH 6" DUCT AND DAMPER EACH SIDE FOR A TOTAL RECOVERY CAPACITY OF 150 CFM MIN. MAINTAIN MAXIMUM 20 CFM INFILTRATION THROUGH THE FLUE WHEN NOT IN USE. PROVIDE FIREPLACE OPENING WITH GLASS DOORS TO CONFORM TO THE 2015 IECC. FIREBOX TO BE COMPLETELY LINED WITH FIREBRICK. PROVIDE MIN. 8" FIREPLACE WALL THICKNESS WITH 4" NON COMBUSTIBLE FIRE STOPPING BETWEEN COMBUSTIBLE WOOD FRAME CONSTRUCTION.

FOUNDATION WATERPROOFING
INSTALL TWO LAYERS OF TONELED ON FIBERGLASS MASTIC, (FED. SPEC. 5.5.C. 153 TYPE-I) MEMBRANE TO BE CONTINUOUS FROM TOP OF FOUNDATION AND EXTEND TO LAP EDGE OF FOOTING.

FIRE BLOCKING
FIRE BLOCKING SHALL BE PROVIDED, AS PER SECTION R502.15 OF THE RESIDENTIAL CODE OF NEW YORK STATE, TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL). PROVIDE FIRE BLOCKING IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AT THE CEILING AND FLOOR LEVELS. CONCEALED HORIZONTAL FURRED SPACES SHALL ALSO BE FIRE BLOCKED AT INTERVALS NOT EXCEEDING 10 FEET.

PLUMBING
CONTRACTOR SHALL INSTALL WATER SUPPLY AND SANITARY SYSTEM AS INDICATED. PROVIDE HOT AND COLD SHUT-OFF VALVES AT ALL FIXTURES. ALL WATER PIPING TO HAVE CLEANOUTS AT ALL CHANGES OF DIRECTION AND AT BASE OF VERTICAL WASTES. USE 4" CAST IRON THROUGH FOUNDATION WALL. PITCHED MIN. 1/8" PER FOOT. TRAP/WASTE SIZES FOR FIXTURES SHALL BE AS FOLLOWS:
DISH WASHER 1 1/2"
KITCHEN SINK 1 1/2"
LAVATORY 1 1/4"
SHOWER 2"
TOILET 3"
ALL SYSTEMS TO HAVE ONE 5" MAIN VENT STACK INCREASED TO 4" THROUGH THE ROOF. PROVIDE FROST PROOF HOSE-BIBS AS INDICATED ON PLANS WITH EASILY ACCESSIBLE DRAIN DRAIN-COCKS. THE WATER SUPPLY AND SEWAGE DISPOSAL SYSTEM SHALL COMPLY TO THE APPLICABLE COUNTY DEPARTMENT OF HEALTH STANDARDS AND REGULATIONS. APPROVAL OF ALL PLUMBING MUST BE OBTAINED FROM APPROPRIATE LOCAL AUTHORITIES PRIOR TO CONCEALMENT. PRIOR TO ORDERING, CONTRACTOR SHALL SUPPLY CUTS OF FIXTURES FOR OWNER'S APPROVAL. IN THE EVENT THAT THE OWNER CHANGES, THE CONTRACTOR SHALL CREDIT THE OWNER FOR THE FULL SUBCONTRACTORS COST FOR THE CHANGED UNIT.

HVAC
SYSTEM TO BE DESIGNED BY OTHERS. PROVIDE PROPER SUPPLY TO ALL ROOMS & CONFORM WITH ALL STATE AND LOCAL CODES.

FRAMING AND ROUGH CARPENTRY
JOISTS RAFTERS AND STUDS SHALL BE CONSTRUCTION GRADE DOUGLAS FIR-SOUTH SELECT STRUCTURAL. ALL WOOD SILLS AND JAGOD IN CONTACT WITH MASONRY SHALL BE ACQ. ALL EXTERIOR SHEATHING SHALL BE 1/2 CDX DOUGLAS FIR PLYWOOD. SUB-FLOORS TO BE 3/4" CDX PLYWOOD. EXTERIOR SHEATHING TO BE COVERED WITH 'TYP-VEK' HOUSE WRAP OR APPROVED EQUAL. BLOCK STUD WALLS AT 1/2 STORY HEIGHTS AND AT ALL UNSUPPORTED EDGES OF PLYWOOD. PROVIDE SOLID BLOCKING AND DIAGONAL BRACING OF FLOOR JOISTS AT 8' O.C. MAXIMUM AND SOLID BLOCKING UNDER ALL UNSUPPORTED EDGES OF PLYWOOD. ALL CAP PLATES TO BE DOUBLED AND NAILED BOTTOM CAP PLATED TO END OF STUDS. LAP CAP PLATES AT CORNERS. WHERE FLUSH FRAMING OCCURS, USE MIN. 1/6GA SHEET METAL JOIST HANGERS BY 'TECO' OR APPROVED EQUAL. ALL CORNERS TO BE MINIMUM 3/2X4 STUDS. HEADERS SHALL BE MINIMUM 2/2X6 UNLESS NOTED ON PLANS. MINIMUM BEARING FOR STUDS, JOISTS AND BEAMS SHALL BE 3 1/2". USE DOUBLE JACK STUDS FOR HEADERS OVER FIVE FEET IN LENGTH.

NOTE: ALL NON-ENGINEERED LUMBER TO BE DOUGLAS FIR #2 OR BETTER

ASPHALT ROOF SHINGLES
INSTALLED AS PER SECTION R905.2 OF THE INTERNATIONAL RESIDENTIAL CODE. ALL SLOPED ROOF SHINGLES SHALL BE GAF-CLASS-A ASPHALT ROOF SHINGLES OR APPROVED EQUAL. SHINGLES SHALL BE APPLIED OVER 1# ASPHALT FELT WITH GAF-WEATHER-WATCH ICE AND WATER BARRIER APPLIES AT EAVES, VALLEYS AND FLASHING. ROOFING CONTRACTOR TO PROVIDE ALL FLASHING NECESSARY FOR A WATERTIGHT, WEATHERPROOF JOB. ROOFING IS TO BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS. CONTRACTOR SHALL SUPPLY COLOR SAMPLES OF THE SHINGLES FOR OWNER'S APPROVAL, PRIOR TO INSTALLATION.

INSULATION
ALL EXTERIOR WALLS AND ROOFS SHALL BE INSULATED WITH FOIL FACED FIBERGLASS BATT INSULATION BY JOHN MANVILLE OR APPROVED EQUAL. FOIL TO BE PLACED TOWARD WARM SIDE. PROVIDE 1/2" RIGID FOAM INSULATION ON ALL EXTERIOR FOUNDATION WALLS FROM FOOTING TO 6" BELOW FINISHED GRADE UNLESS OTHERWISE SPECIFIED. CARE SHOULD BE TAKEN NOT TO DAMAGE FOUNDATION WATERPROOFING.

GLASS WINDOWS AND DOORS
TO BE INSTALLED AS PER SECTION R508 OF THE RESIDENTIAL CODE OF N.Y.S. ALL GLASS IS TO BE INSULATED LOW-E UNLESS OTHERWISE SPECIFIED. GLASS SUBCONTRACTOR SHALL NOT INSTALL GLASS UNTIL PROPER CLEARANCES ARE PROVIDED. ALL SLIDING GLASS DOORS, SKYLIGHTS AND/OR WINDOWS AS REQUIRED BY CODE, SHALL BE INSULATED TEMPERED GLASS. ALL GLASS DOORS AND WINDOWS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS. ALL WINDOWS ARE TO BE CAULKED AND SEALED AS PER 2015 IECC REQUIREMENTS. PROVIDE FLASHING FANS UNDER ALL SLIDER DOORS, AND WINDOWS WITHIN A 6" OF AN EXTERIOR SURFACE. ALL EXTERIOR DOORS ARE TO BE FULLY WEATHER-STRIPPED. PROVIDE ALL SCREENS AND HARDWARE AS REQUIRED. ALL GLASS IS TO BE FREE OF SCRATCHES AND IMPERFECTIONS AND GUARANTEED BY THE MANUFACTURER FOR A PERIOD OF NO LESS THAN 5 YEARS. ALL WINDOWS TO BE ANDERSEN UNLESS INDICATED OTHERWISE.

PAINTING AND STAINING
THE FOLLOWING IS INCLUDED FOR THE CONVENIENCE OF THE PAINTING CONTRACTORS AND ONLY AS AN INDICATION OF THE TYPES OF PAINTS REQUIRED FOR VARIOUS SURFACES. IT IS THE INTENT OF THESE SPECIFICATIONS TO PROVIDE A COMPLETE FINISH. ALL PAINTED SURFACES MUST BE FULLY COVERED IN A UNIFORM MANNER TO BE ACCEPTABLE. INTERIOR WOOD SURFACES-APPLY TO LIGHTLY SANDED SURFACES, WALLS, DOORS, FRAMES, TRIM, AND BASES. ONE COAT WOOD FILLER OR STAIN AND TWO COATS MCKLUSKEYS EGG-SHELL FINISH NON-YELLOWING POLYURETHANE. GYPSUM BOARD- MINIMUM ONE COAT PRIMER AND TWO COATS FLAT PAINT. EXTERIOR WOOD SURFACES- TWO COATS EXTERIOR GRADE STAIN. EXTERIOR EXPOSED METAL- MINIMUM ONE COAT ZINC CHROMATE AND TWO COATS EXTERIOR ENAMEL. ALL MATERIAL SHALL BE OF BEST QUALITY. PITTSBURGH, FRATT & LAMBERT, DUTCHMAN, MCKLUSKEYS, OR APPROVED EQUAL. CONTRACTOR IS TO PROVIDE SAMPLES OF ALL PAINTS AND STAINS FOR ARCHITECT'S AND/OR OWNERS APPROVAL.

GYPSUM WALL BOARD
INSTALLED AS PER SECTION R702.3.2. THROUGH R702.3.6 OF THE INTERNATIONAL RESIDENTIAL CODE. GYPSUM WALLBOARD APPLICATION SHALL BE TAPE JOINT SYSTEM. ALL GYPSUM BOARD TO BE 1/2" ON WALLS AND 1/2" ON CEILINGS UNLESS OTHERWISE INDICATED. FINISH JOINTS, J-BEADS, NAIL DIMPLES, CORNERS AND EDGES SHALL BE TAPED AND RECEIVE THREE COATS OF JOINT COMPOUND. ALLOW 24 HOURS TO DRY BETWEEN COATS. FINAL COAT TO BE SANDED SMOOTH. METAL CORNER BEAD TO BE USED ON ALL OUTSIDE CORNERS AND AROUND ALL OPENINGS.

ELECTRICAL
ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE AND ALL STATE, LOCAL, AND UTILITY COMPANY CODES AND REGULATIONS. ALL CIRCUITS SHALL BE MINIMUM 15 AMP. POWER WIRING SHALL BE MINIMUM 14 AWG. CONVENIENCE OUTLETS SHALL BE LOCATED 12" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED. SUPPLY RECOMMENDED LAMPS IN ALL FIXTURES.

2020 IECC OF NEW YORK STATE (2018 IECC)
-AIR LEAKAGE:
-JOINTS, PENETRATIONS, AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE THAT ARE SOURCES OF AIR LEAKAGE MUST BE SEALED.
-RECESSED LIGHTS MUST BE TYPE IC RATED AND INSTALLED WITH NO PENETRATIONS, OR TYPE IC OR NON-IC RATED. CONTRACTOR TO PROVIDE ALL APPROPRIATE AIR-TIGHT ASSEMBLY WITH 0.5" CLEARANCE FROM COMBUSTIBLE MATERIALS AND 3" CLEARANCE FROM INSULATION

VAPOR RETARDER:
-REQUIRED ON THE WARM-IN-WINTER SIDE OF ALL NON-VENTED FRAMED CEILINGS, WALLS, AND FLOORS.
MATERIALS IDENTIFICATION:
-MATERIALS AND EQUIPMENT MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
-MATERIALS AND EQUIPMENT MUST IDENTIFIED SO THAT THE COMPLIANCE CAN BE DETERMINED.
-MANUFACTURER MANUALS FOR ALL INSTALLED HEATING AND COOLING EQUIPMENT AND SERVICE WATER HEATING EQUIPMENT MUST BE PROVIDED.
-INSULATION R-VALUES AND GLAZING U-FACTORS MUST BE CLEARLY MARKED ON THE BUILDING PLANS OR SPECIFICATIONS.

DUCT INSULATION:
-SUPPLY DUCTS IN UNCONDITIONED ATTICS OR OUTSIDE THE BUILDING MUST BE INSULATED TO R-8.
-RETURN DUCTS IN UNCONDITIONED ATTICS OR OUTSIDE THE BUILDING MUST BE INSULATED TO R-4.
-SUPPLY DUCTS IN UNCONDITIONED SPACES MUST BE INSULATED TO R-8.
-RETURN DUCTS IN UNCONDITIONED SPACES (EXCEPT BASEMENTS) MUST BE INSULATED TO R-2.
-INSULATION IS NOT REQUIRED ON RETURN DUCTS IN BASEMENTS.

DUCT CONSTRUCTION:
-ALL JOINTS, SEAMS, AND CONNECTIONS MUST BE SECURELY FASTENED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS-EMBEDDED-FABRIC, OR TAPES. DUCT TAPE IS NOT PERMITTED.
-EXCEPTION: CONTINUOUSLY WELDED AND LOCKING-TYPE LONGITUDINAL JOINTS AND SEAMS ON DUCTS OPERATING AT LESS THAN 2" W.G. (500 P.S.F.)
-DUCTS SHALL BE SUPPORTED EVERY 10 FEET OR IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
-COOLING DUCTS WITH EXTERIOR INSULATION MUST BE COVERED WITH A VAPOR RETARDER.
-AIR FILTERS ARE REQUIRED IN THE RETURN AIR SYSTEM.
-THE HVAC SYSTEM MUST PROVIDE A MEANS FOR BALANCING AIR AND WATER SYSTEMS.

TEMPERATURE CONTROLS:
-EACH DWELLING UNIT HAS AT LEAST ONE THERMOSTAT CAPABLE OF AUTOMATICALLY ADJUSTING THE SPACE TEMPERATURE SET POINT OF THE LARGEST ZONE.
ELECTRIC SYSTEMS:
-SEPARATE ELECTRIC METERS ARE REQUIRED FOR EACH DWELLING UNIT.

FIREPLACES:
-FIREPLACES MUST BE INSTALLED WITH TIGHT FITTING NON-COMBUSTABLE FIREPLACE DOORS
-FIREPLACES MUST BE PROVIDED WITH A SOURCE OR COMBUSTION AIR. LAYERS MUST BE THE FIREPLACE CONSTRUCTION PROVISIONS OF THE BUILDING CODE OF NEW YORK STATE, THE RESIDENTIAL CODE OF NEW YORK STATE OR THE NEW YORK CITY BUILDING CODE, AS APPLICABLE.

SERVICE WATER HEATING:
-WATER HEATERS WITH VERTICAL PIPE RISERS MUST HAVE A HEAT TRAP ON BOTH THE INLET AND THE OUTLET UNLESS THE WATER HEATER HAS AN INTEGRAL HEAT TRAP OR IS PART OF A CIRCULATING SYSTEM.
-INSULATE CIRCULATING HOT WATER PIPES TO THE LEVELS ON TABLE 1.

CIRCULATING HOT WATER SYSTEMS:
-INSULATE CIRCULATING HOT WATER PIPES TO THE LEVELS ON TABLE 1.

HEATING AND COOLING PIPING INSULATION:
-HVAC PIPING CONVEYING FLUIDS ABOVE 105°F OR CHILLED FLUIDS BELOW 55°F MUST BE INSULATED TO THE LEVELS ON TABLE 2.

NOTES:
1. OBTAIN ALL PERMITS PRIOR TO THE START OF WORK.
2. ALL BEDROOM TO BE PROVIDED WITH ROD & SHELF. ALL LINEN CLOSETS TO BE PROVIDED WITH 5 ROWS OF SHELVES.
3. DOOR TRIM AND BASE MOLDING TO BE SELECTED
4. ALL BATHROOM FIXTURES AND FAUCETS TO BE SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR
5. FINISHES TO BE SUPPLIED BY OWNER

MINIMUM DESIGN DEAD LOADS* AS PER ASCE 7-05

COMPONENT	LOAD (psf)
C E I L I N G S	
GYPSUM BOARD (1/2-in.)	7.0
GYPSUM BOARD (5/8-in.)	9.0
SUSPENDED STEEL CHANNEL SYSTEM	2.0
C O V E R I N G S , R O O F , A N D W A L L	
ASPHALT SHINGLES	2.0
GYPSUM SHEATHING, 1/2-in.	2.0
PLYWOOD (per 1/2-in.)	1.6
RIGID INSULATION, 1/2-in.	0.75
SINGLE-PLY SHEET WATERPROOFING MEMBRANE	0.7
F L O O R S A N D F L O O R F I N I S H E S	
CERAMIC OR QUARRY TILE (3/4-in.) ON 1/2-in. MORTAR BED	16.0
HARDWOOD FLOORING, 7/8-in.	4.0
LINOLEUM OR ASPHALT TILE, 1/4-in.	1.0
SUBFLOORING, 3/4-in.	3.0
FLOORS, WOOD JOIST (no plaster) JOIST SIZES (in.)	12-in. O.C. 16-in. O.C.
2x6	6 5
2x8	6 6
2x10	7 6
2x12	8 7
F R A M E P A R T I T I O N S	
WOOD OR STEEL STUDS, 1/2-in. GYP. BOTH SIDES	8.0
F R A M E W A L L S	
EXTERIOR STUD WALLS:	
2x4 @ 16-in., 5/8-in. GYPSUM, INSULATED, 3/8-in. SIDING	11.0
2x6 @ 16-in., 5/8-in. GYPSUM, INSULATED, 3/8-in. SIDING	12.0
EXTERIOR STUD WALLS WITH BRICK VENEER	48.0

* HEIGHTS OF MASONRY INCLUDE MORTAR BUT NOT PLASTER. FOR PLASTER, ADD 5 lb/ft² FOR EACH FACE PLASTERED. VALUES GIVEN REPRESENT AVERAGES. IN SOME CASES THERE IS A CONSIDERABLE RANGE OF HEIGHT FOR THE SAME CONSTRUCTION.

2020 IECC OF NEW YORK STATE (2018 IECC):
R401.3: PERMANENT CERTIFICATE - SHALL BE COMPLETED BY THE BUILDER OR REGISTERED DESIGN PROFESSIONAL AND POSTED IN THE UTILITY ROOM OR OTHER APPROVED LOCATION INSIDE THE BUILDING.

R402.2.4: ATTIC OR CRAWL SPACE ACCESS - SHALL BE WEATHER-STRIPPED AND INSULATED TO A LEVEL EQUIVALENT TO THE INSULATION ON THE SURROUNDING SURFACES.

R402.4: AIR LEAKAGE - BUILDING THERMAL ENVELOPE SHALL BE CONSTRUCTED TO LIMIT AIR LEAKAGE TO ≤ 3 AIR CHANGES PER HOUR.

R402.4.1.1: INSTALLATION - THE COMPONENTS OF THE BUILDING THERMAL ENVELOPE SHALL BE INSTALLED IN ACCORDANCE WITH THE CRITERIA LISTED IN TABLE 402.4.1.1. WHERE REQUIRED BY CODE OFFICIAL, AN APPROVED THIRD PARTY SHALL INSPECT ALL COMPONENTS AND VERIFY COMPLIANCE.

R402.4.1.2: TESTING - BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING ≤ 3 ACH50 IN CZ4A, 5, A6A. TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY.

R402.4.4: COMBUSTION CLOSETS - ROOMS CONTAINING FUEL-BURNING APPLIANCES REQUIRE SPECIAL CARE. EXCEPTION: DIRECT VENT APPLIANCES WITH BOTH INTAKE AND EXHAUST PIPES INSTALLED CONTINUOUS TO THE OUTSIDE

R403.3.2: DUCT SEALING - DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED.

R403.3.3: DUCT TESTING - DUCTS SHALL BE PRESSURE TESTED TO DETERMINE AIR LEAKAGE. EXCEPTION: DUCT LEAKAGE TEST IS NOT REQUIRED WHERE THE DUCTS AND AIR HANDLERS ARE LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.

R403.3.5: BUILDING CAVITIES - SHALL NOT BE USED AS DUCTS OR PLENUMS

R403.4: MECHANICAL SYSTEM PIPING INSULATION - CARRYING FLUIDS ≥105°F OR ≤55°F, INSULATE TO R-3 MIN.

R403.6: MECHANICAL VENTILATION - THE BUILDING SHALL BE PROVIDED WITH VENTILATION THAT MEETS THE REQUIREMENTS OF IRC/IMC. THE MECHANICAL VENTILATION RATE SHALL BE NO GREATER THAN 0.01 X CFA + 7.5 X (# OF BEDROOMS + 1) *CFA = CONDITIONED FLOOR AREA

R403.7: EQUIPMENT SIZING - PER ACCA MANUEL S, BASED ON LOADS CALCULATED PER ACQA MANUEL J.

R404.1: LIGHTING - A MINIMUM OF 90% OF PERMANENTLY INSTALLED FIXTURES MUST HAVE HIGH-EFFICANCY LAMPS. LOW-VOLTAGE LIGHTING EXEMPT

TCC

ARCHITECTS

TODD O'CONNELL

ARCHITECT P.C.

TODD O'CONNELL, AIA

1200 Veterans Memorial Highway

Suite 120

Hauppauge, NY 11788

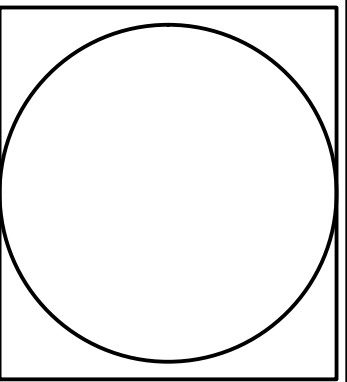
P (631) 650-6666

F (631) 650-6667

C (516) 658-0325

www.tocarchitects.com

todd@tocarchitects.com



CONSULTANTS:

NY'S LIC #021495

CHECKED BY: TOC

DRAWN BY: TC

		TC	TC	BY:
		AMENDMENT #1	UPDATED PER EXAMINER COMMENTS	CONSTRUCTION DRAWINGS
		8-10-21	4-9-21	3-5-21
				DATE:
				REV #:

PROPOSED ADDITION & ALTERATION

FEINER RESIDENCE

811 KEENE LANE

WOODMERE, NY 11598

JOB#: FE-20-532

DATE: 3-3-21

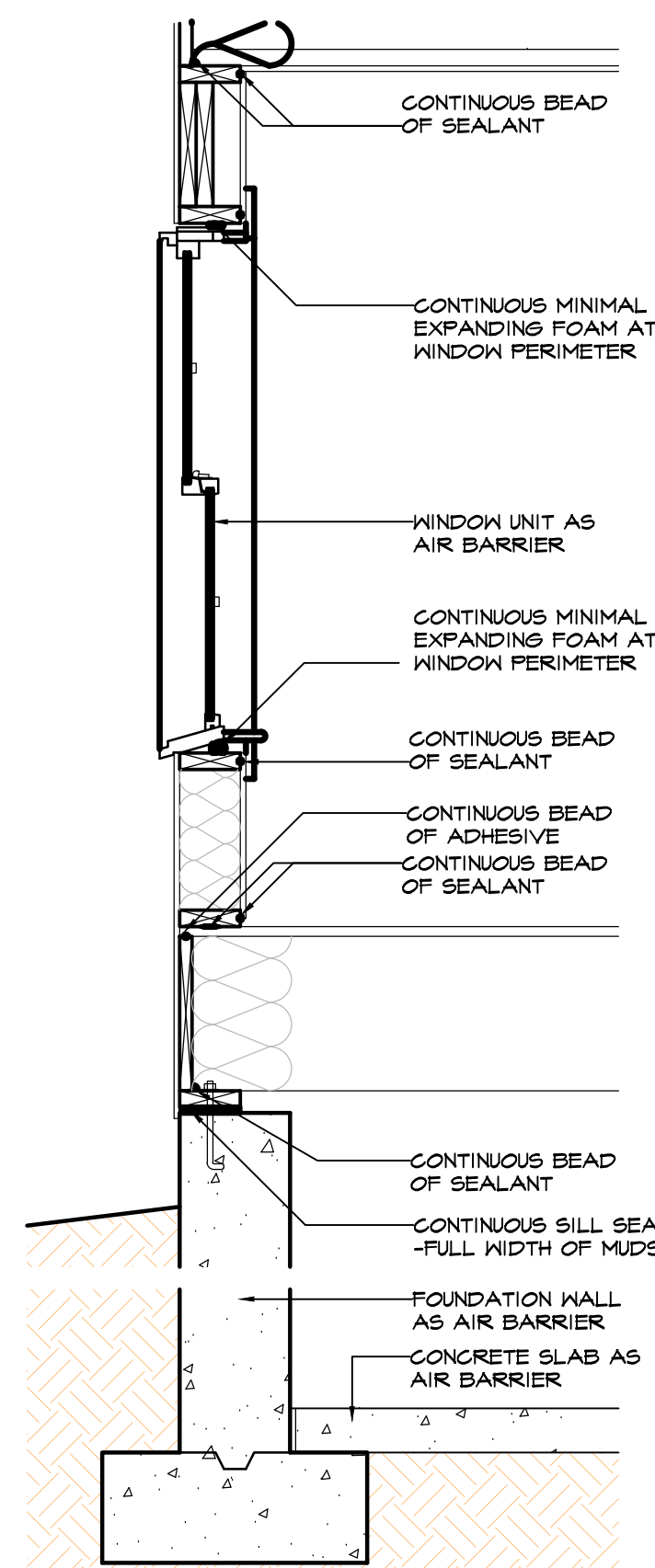
SCALE: AS NOTED

DRAWING NUMBER

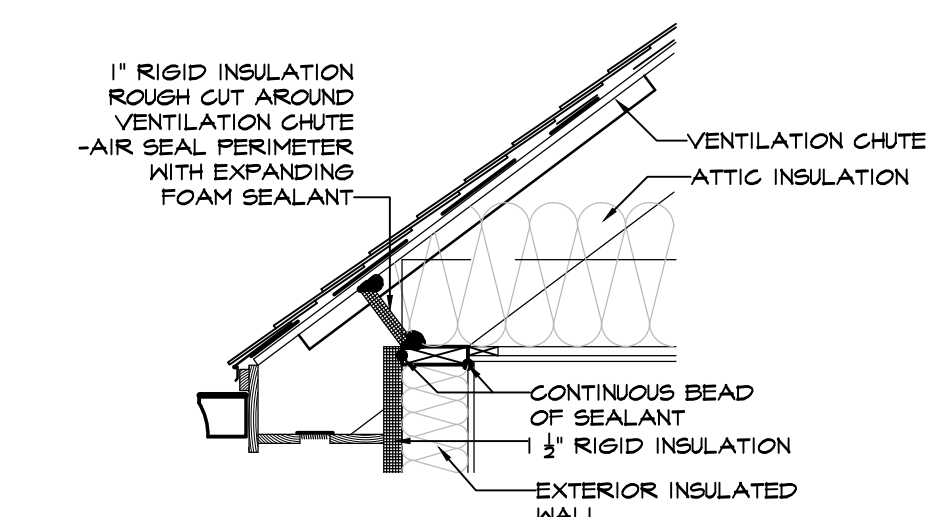
A.11

DATE: 3-3-21

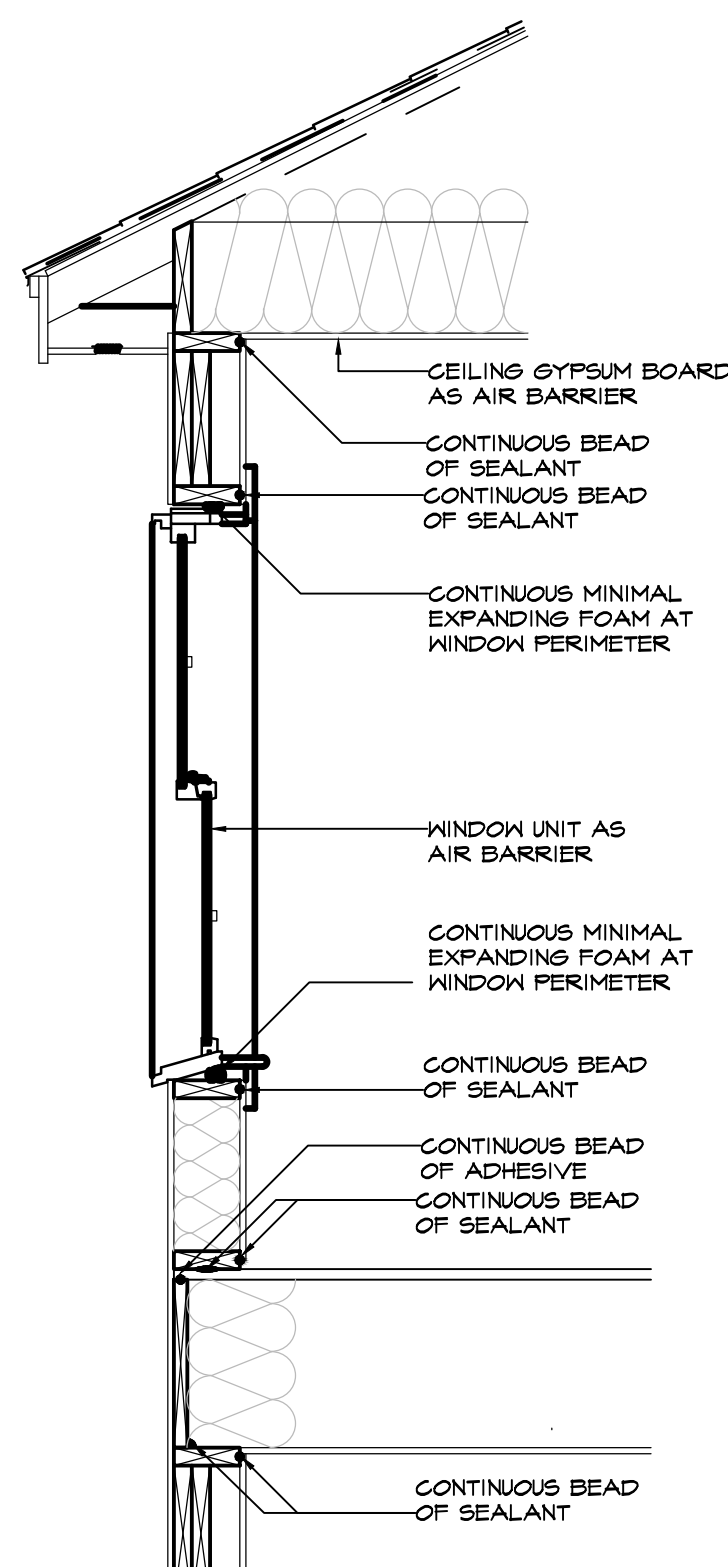
SCALE: AS NOTED



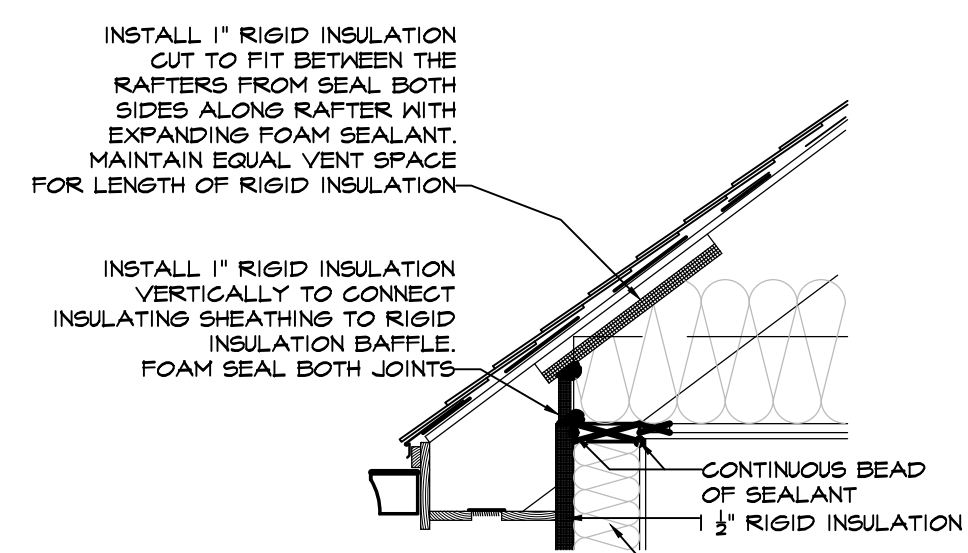
CONCEPTUAL AIR SEALING STRATEGY // LOWER WALL SECTION
5-02002 Scale: 3/4" = 1'-0"



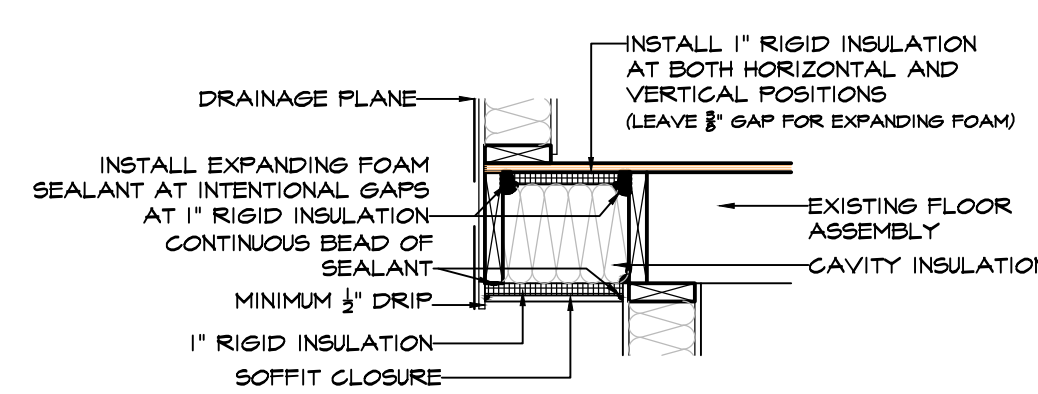
1" RIGID INSULATION AS ATTIC EAVE BAFFLE CUT AROUND MANUFACTURED VENT
5-01006 Scale: 3/4" = 1'-0"



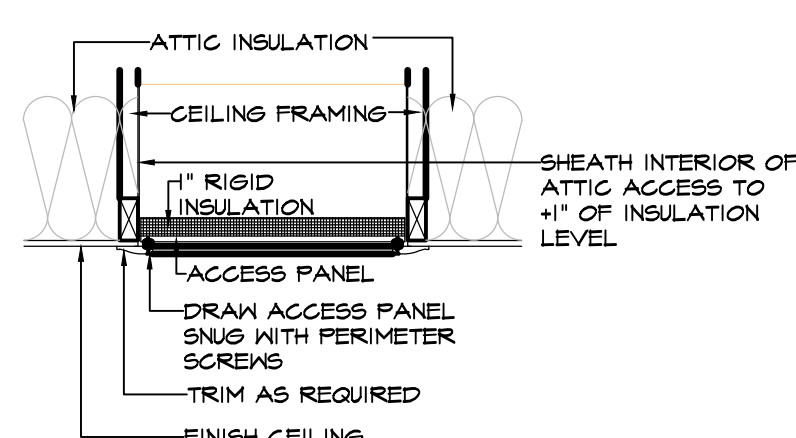
CONCEPTUAL AIR SEALING STRATEGY // UPPER WALL SECTION
5-02003 Scale: 3/4" = 1'-0"



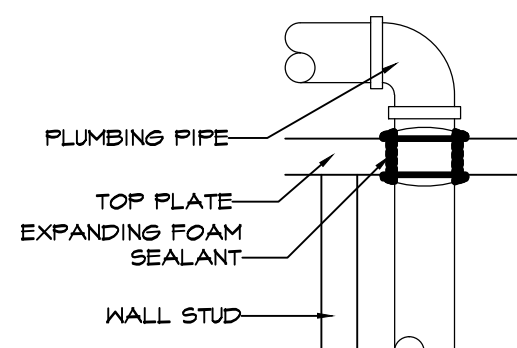
1" RIGID INSULATION CUT TO FIT BETWEEN THE RAFTERS FROM SEAL BOTH SIDES ALONG RAFTER WITH EXPANDING FOAM SEALANT. MAINTAIN EQUAL VENT SPACE FOR LENGTH OF RIGID INSULATION
5-01008 Scale: 3/4" = 1'-0"



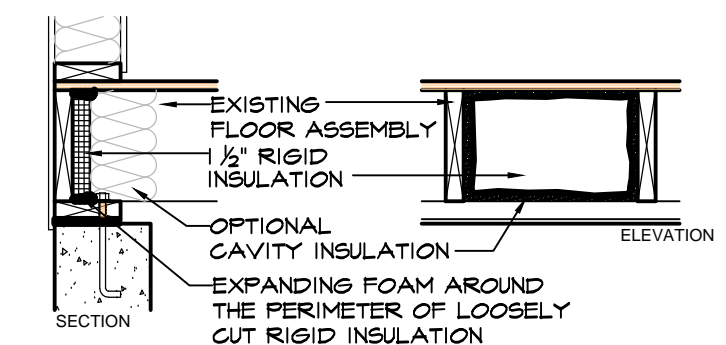
INSTALL 1" RIGID INSULATION AT BOTH HORIZONTAL AND VERTICAL POSITIONS (LEAVE 1/2" GAP FOR EXPANDING FOAM)
5-01019 Scale: 3/4" = 1'-0"



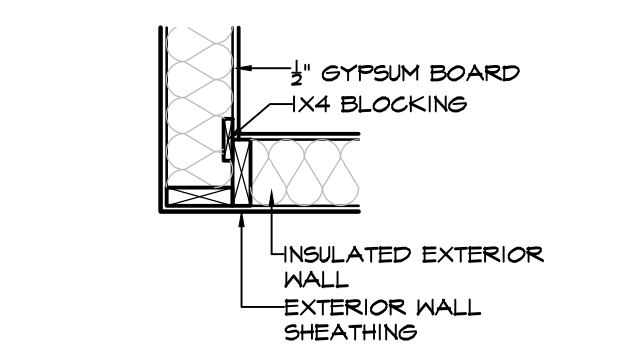
AIR SEALING AT ATTIC HATCH // FINISH SCREWS
5-02022 Scale: 3/4" = 1'-0"



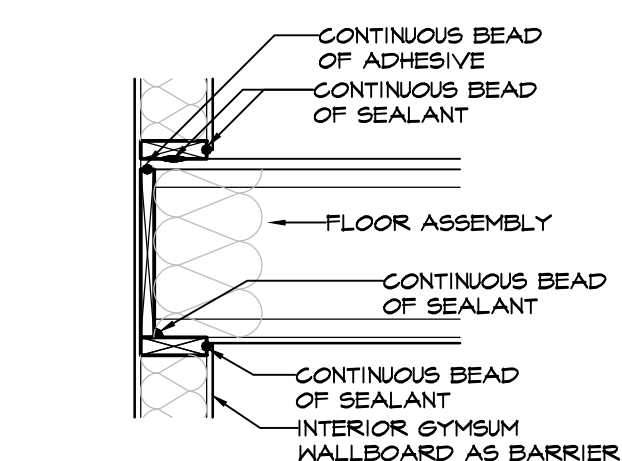
AIR SEAL AT TOP PLATE PIPE PENETRATION
5-01023 Scale: 3/4" = 1'-0"



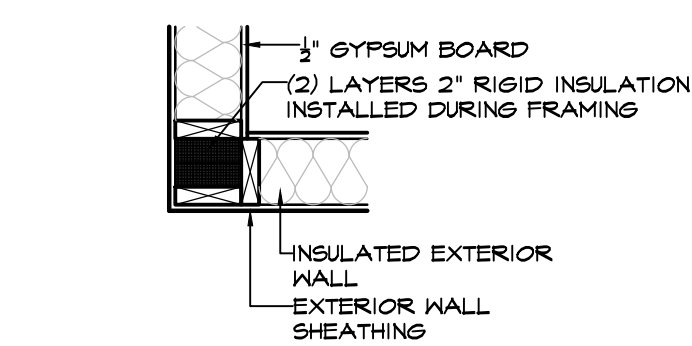
EXISTING BAND JOIST INSULATION RETROFIT WITH 1/2" RIGID INSULATION
4-00000 Scale: 3/4" = 1'-0"



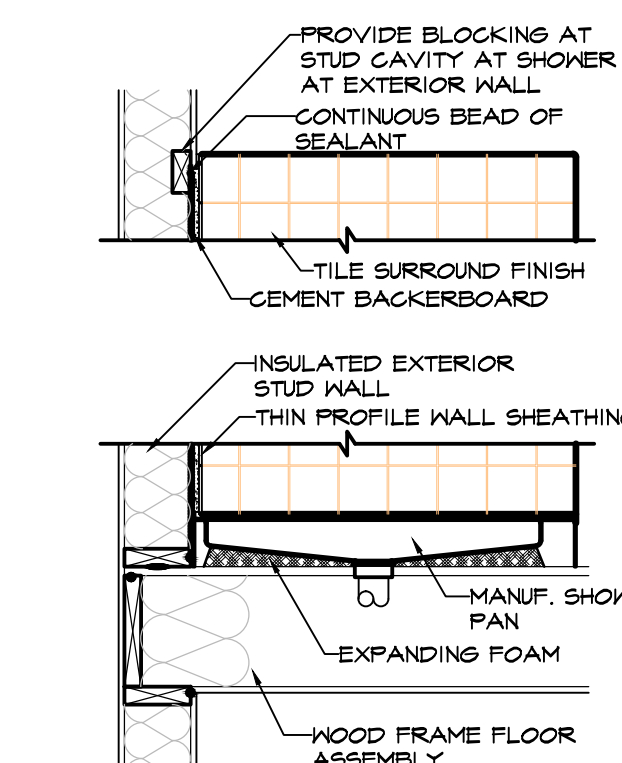
1/2" GYPSUM BOARD BLOCKING INSULATED EXTERIOR WALL SHEATHING
5-00006 Scale: 3/4" = 1'-0"



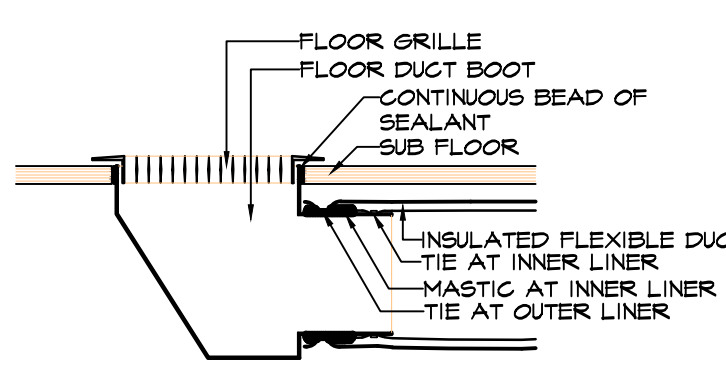
CONCEPTUAL AIR SEALING STRATEGY AT UPPER FLOOR BAND JOIST
5-02001 Scale: 3/4" = 1'-0"



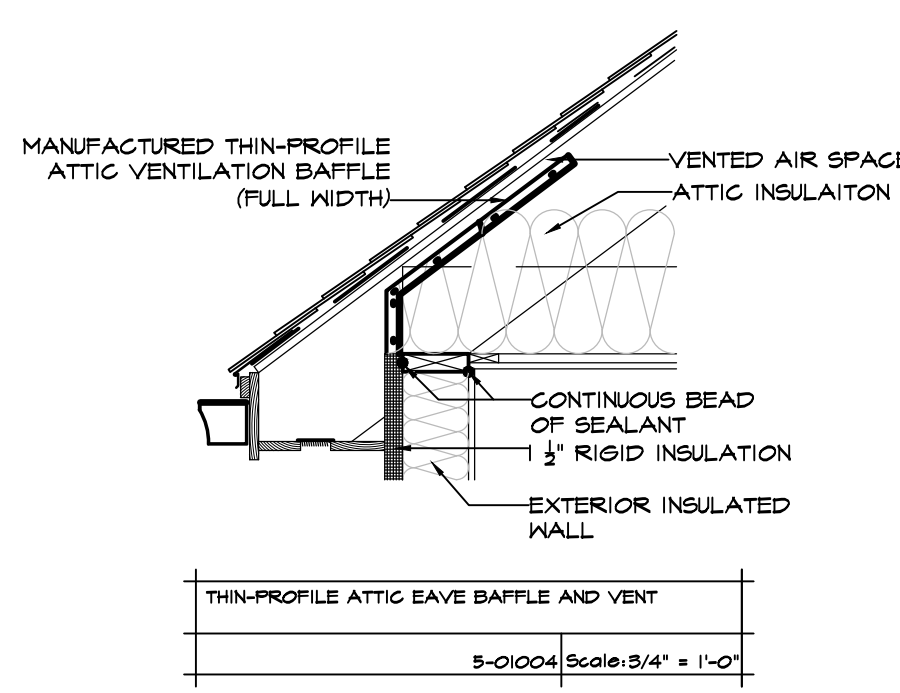
1/2" GYPSUM BOARD (2) LAYERS 2" RIGID INSULATION INSTALLED DURING FRAMING
5-00007 Scale: 3/4" = 1'-0"



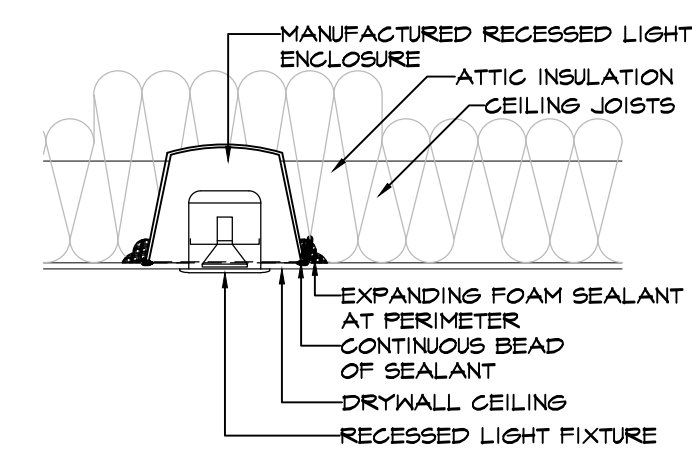
PROVIDE BLOCKING AT STUD CAVITY AT SHOWER AND EXTERIOR WALL CONTINUOUS BEAD OF SEALANT TILE SURROUND FINISH CEMENT BACKERBOARD INSULATED EXTERIOR STUD WALL THIN PROFILE WALL SHEATHING MANUF. SHOWER PAN EXPANDING FOAM WOOD FRAME FLOOR ASSEMBLY
5-01007 Scale: 3/4" = 1'-0"



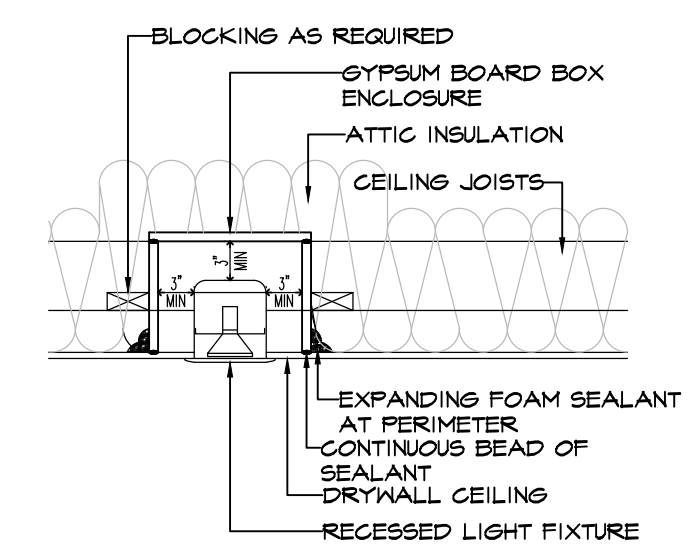
AIR SEAL AT DUCT BOOT
5-01033 Scale: 3/4" = 1'-0"



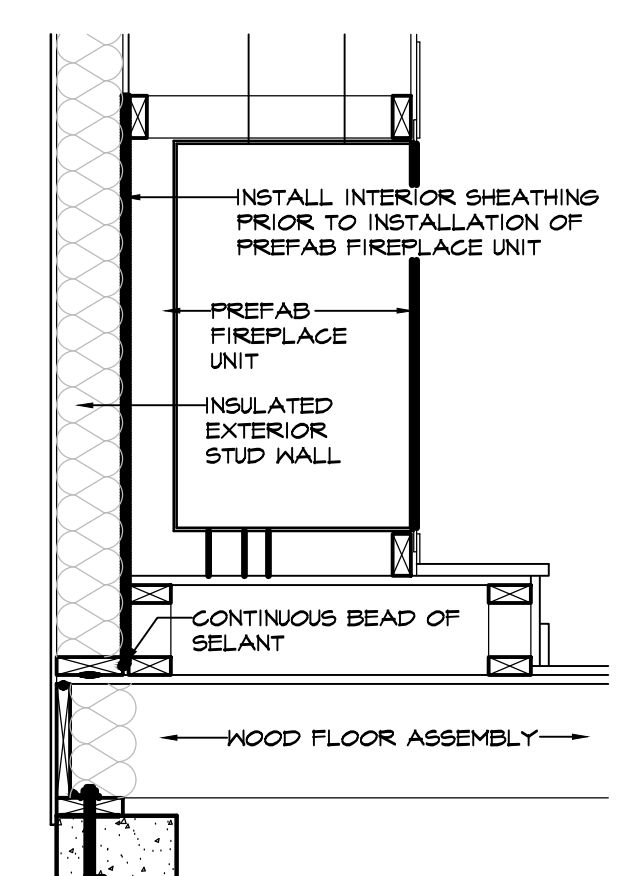
THIN-PROFILE ATTIC EAVE BAFFLE AND VENT
5-01004 Scale: 3/4" = 1'-0"



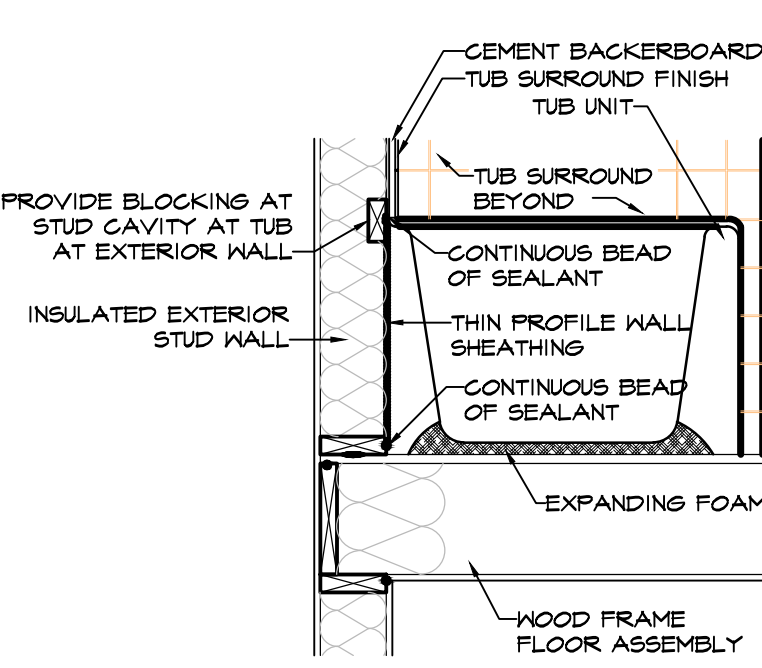
AIR SEALING AT RECESSED LIGHTING IN ATTIC
5-02004 Scale: 3/4" = 1'-0"



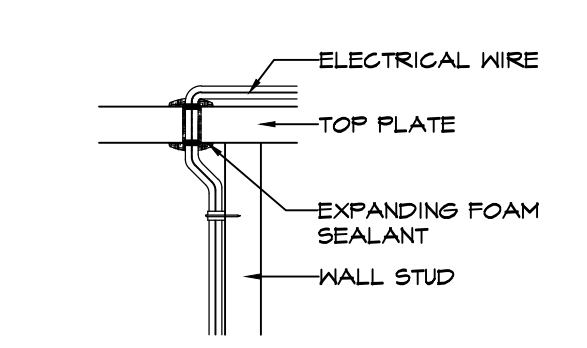
AIR SEALING AT RECESSED LIGHTING IN ATTIC
5-02040 Scale: 3/4" = 1'-0"



AIR SEALING AT PLATFORM FOR MANUFACTURED FIREPLACE ASSEMBLY
5-01012 Scale: 3/4" = 1'-0"



AIR SEALING BEHIND TUB WITH THIN-PROFILE SHEATHING // SECTION
5-01001 Scale: 3/4" = 1'-0"



AIR SEAL AT TOP PLATE ELECTRICAL PENETRATION
5-01024 Scale: 3/4" = 1'-0"

2020 RESIDENTIAL CODE OF NYS - TABLE N102.4.1 (2020 ECG OF NYS - R402.4.1.1) - AIR BARRIER AND INSULATION INSTALLATION

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
GENERAL REQUIREMENTS	AIR BARRIER CRITERIA A CONTINUOUS AIR BARRIER SHALL BE INSTALLED IN THE BUILDING ENVELOPE. THE EXTERIOR THERMAL ENVELOPE CONTAINS A CONTINUOUS AIR BARRIER BREAKS OR JOINTS IN THE AIR BARRIER SHALL BE SEALED	INSULATION INSTALLATION CRITERIA AIR- PERMEABLE INSULATION SHALL NOT BE USED AS A SEALING MATERIAL
CEILING / ATTIC	THE AIR BARRIER IN ANY DROPPED CEILING/SOFFIT SHALL BE ALIGNED WITH THE INSULATION AND ANY GAPS IN THE AIR BARRIER SHALL BE SEALED ACCESS OPENINGS, DROP DOWN STAIRS OR KNEE WALL DOORS TO UNCONDITIONED ATTICS SPACES SHALL BE SEALED	THE INSULATION IN ANY DROPPED CEILING/SOFFIT SHALL BE ALIGNED WITH THE AIR BARRIER
WALLS	THE JUNCTION OF FOUNDATION AND SILL PLATE TO BE SEALED. THE JUNCTION OF TOP PLATE AND THE TOP OF EXTERIOR THERMAL ENVELOPE INSULATION FOR FRAMED WALLS SHALL BE SEALED	CAVITIES WITHIN CORNERS AND HEADERS OF FRAME WALLS SHALL BE INSULATED BY COMPLETELY FILING THE CAVITY WITH A MATERIAL HAVING A THERMAL RESISTANCE OF R-3 PER INCH MINIMUM EXTERIOR THERMAL ENVELOPE INSULATION FOR FRAMED WALLS SHALL BE INSTALLED IN SUBSTANTIAL CONTACT AND CONTINUOUS ALIGNMENT WITH THE AIR BARRIER
WINDOWS, SKYLIGHTS, AND DOORS	THE SPACE BETWEEN WINDOW/DOOR JAMBS AND FRAMING, AND SKYLIGHTS AND FRAMING SHALL BE SEALED	
RIM JOIST	RIM JOIST SHALL INCLUDE THE AIR BARRIER	RIM JOIST SHALL BE INSULATED
FLOORS (INCLUDING ABOVE GARAGES & CANTILEVERED FLOORS)	THE AIR BARRIER SHALL BE INSTALLED AT ANY EXPOSED EDGE OF INSULATION	FLOOR FRAMING CAVITY INSULATION SHALL BE INSTALLED TO MAINTAIN PERMANENT CONTACT WITH THE UNDERSIDE OF SUBFLOOR DECKING, OR FLOOR FRAMING CAVITY INSULATION SHALL BE PERMITTED TO BE IN CONTACT WITH THE TOP SIDE OF SHEATHING, OR CONTINUOUS INSULATION INSTALLED ON THE UNDERSIDE OF FLOOR FRAMING AND EXTENDS FROM THE BOTTOM TO THE TOP OF ALL PERIMETER FLOOR FRAMING MEMBERS
CRAWL SPACE WALLS	EXPOSED EARTH IN UNVENTED CRAWL SPACES TO BE COVERED WITH A CLASS I VAPOR RETARDER WITH OVERLAPPING JOINTS TAPED	WHERE PROVIDED INSTEAD OF FLOOR INSULATION, INSULATION SHALL BE PERMANENTLY ATTACHED TO THE CRAWL SPACE WALLS
SHAFTS / PENETRATIONS	DUCT SHAFTS, UTILITY PENETRATIONS, AND FLUE SHAFTS OPENING TO EXTERIOR OR UNCONDITIONED SPACE TO BE SEALED	
NARROW CAVITIES		BATTS IN NARROW CAVITIES SHALL BE CUT TO FIT, OR NARROW CAVITIES SHALL BE FILLED BY INSULATION THAT ON INSTALLATION READILY CONFORMS TO THE AVAILABLE CAVITY SPACE
GARAGE SEPARATION	AIR SEAL BETWEEN GARAGE AND CONDITIONED SPACE	
RECESSED LIGHTING	RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE DRYWALL	RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED AIR TIGHT AND IC RATED
PLUMBING AND WIRING		BATT INSULATION SHALL BE CUT NEATLY TO FIT AROUND WIRING AND PLUMBING IN EXTERIOR WALLS, OR INSULATION THAT ON INSTALLATION READILY CONFORMS TO AVAILABLE SPACE SHALL EXTEND BEHIND PIPING AND WIRING
SHOWER/TUB ON EXTERIOR WALL	THE AIR BARRIER INSTALLED AT EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL SEPARATE THEM FROM THE SHOWERS AND TUBS	EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL BE INSULATED
ELECTRICAL/ PHONE BOX ON EXTERIOR WALLS	THE AIR BARRIER SHALL BE INSTALLED BEHIND ELECTRICAL OR COMMUNICATION BOXES OR AIR-SEAL BOXES SHALL BE INSTALLED	
HVAC REGISTER BOOTS	HVAC REGISTER BOOTS THAT PENETRATE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE SUBFLOOR OR DRYWALL	
CONCEALED SPRINKLERS	WHEN REQUIRED TO BE SEALED, CONCEALED FIRE SPRINKLERS SHALL ONLY BE SEALED IN A MANNER THAT IS RECOMMENDED BY THE MANUFACTURER. CAULKING OR OTHER ADHESIVE SEALANTS SHALL NOT BE USED TO FILL VOIDS BETWEEN FIRE SPRINKLER COVER PLATES AND WALLS OR CEILINGS	

MATERIALS R-VALUES

MATERIAL	R-VALUE
BUILDING BOARD	
GYPSUM WALL BOARD (1/2")	0.45
GYPSUM WALL BOARD (5/8")	0.5625
PLYWOOD (1/2")	0.62
PLYWOOD (3/4")	0.94
SIDING	
ALUMINUM/ VINYL SIDING (NOT INSULATED)	0.61
ALUMINUM/ VINYL SIDING (1/2" INSULATION)	1.80
FLOORING	
HARDWOOD FLOORING (3/4")	0.68
TILE	0.05
CARPET WITH FIBER PAD	2.08
CARPET WITH RUBBER PAD	1.23
AIR SPACE (1/2" UP TO 4")	1.00
ROOFING	
ASPHALT SHINGLES	0.44
WOOD SHINGLES	0.97
DOORS	
WOOD, SOLID CORE (1 3/4")	2.17
INSULATED METAL DOOR (2")	15.00
POURED CONCRETE PER 1"	0.08

TODD O'CONNELL, AIA
1200 Veterans Memorial Highway
Suite 120
Hauppauge, NY 11788
P (631) 650-6666
F (631) 650-6667
C (516) 658-0325
www.tocarchitects.com
todd@tocarchitects.com

CONSULTANTS:

THESE DRAWINGS ARE THE PROPERTY OF TODD O'CONNELL ARCHITECTS P.C. AND ARE NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TODD O'CONNELL ARCHITECTS P.C. THE ARCHITECT'S SERVICES FOR THIS PROJECT ARE LIMITED TO THE DESIGN AND CONSTRUCTION OF THE PROJECT. THE ARCHITECT IS NOT RESPONSIBLE FOR ANY OTHER WORK OR FOR ANY OTHER WORK DONE BY OTHERS. THE ARCHITECT'S DRAWINGS SHALL NOT BE USED FOR ANY OTHER PROJECT OR FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF TODD O'CONNELL ARCHITECTS P.C.

NY'S LIC #021495

CHECKED BY: TOC

DRAWN BY: TC

BY: TC

REV #1

DATE:

CONSTRUCTION DRAWINGS

AMENDMENT #1

8-10-21

4-9-21

3-5-21

1

UPDATED PER EXAMINER COMMENTS

TC

TC

PROPOSED ADDITION & ALTERATION

FEINER RESIDENCE

811 KEENE LANE

WOODMERE, NY 11598

JOB#: FE-20-522

DATE: 3-3-21

SCALE: AS NOTED

DRAWING NUMBER

A.12

