SMOKE DETECTOR

CO DETECTOR

SMOKE/CO COMBINATION

HEAT DETECTOR

SMOKE DETECTOR REQUIRED LOCATIONS, R314.3

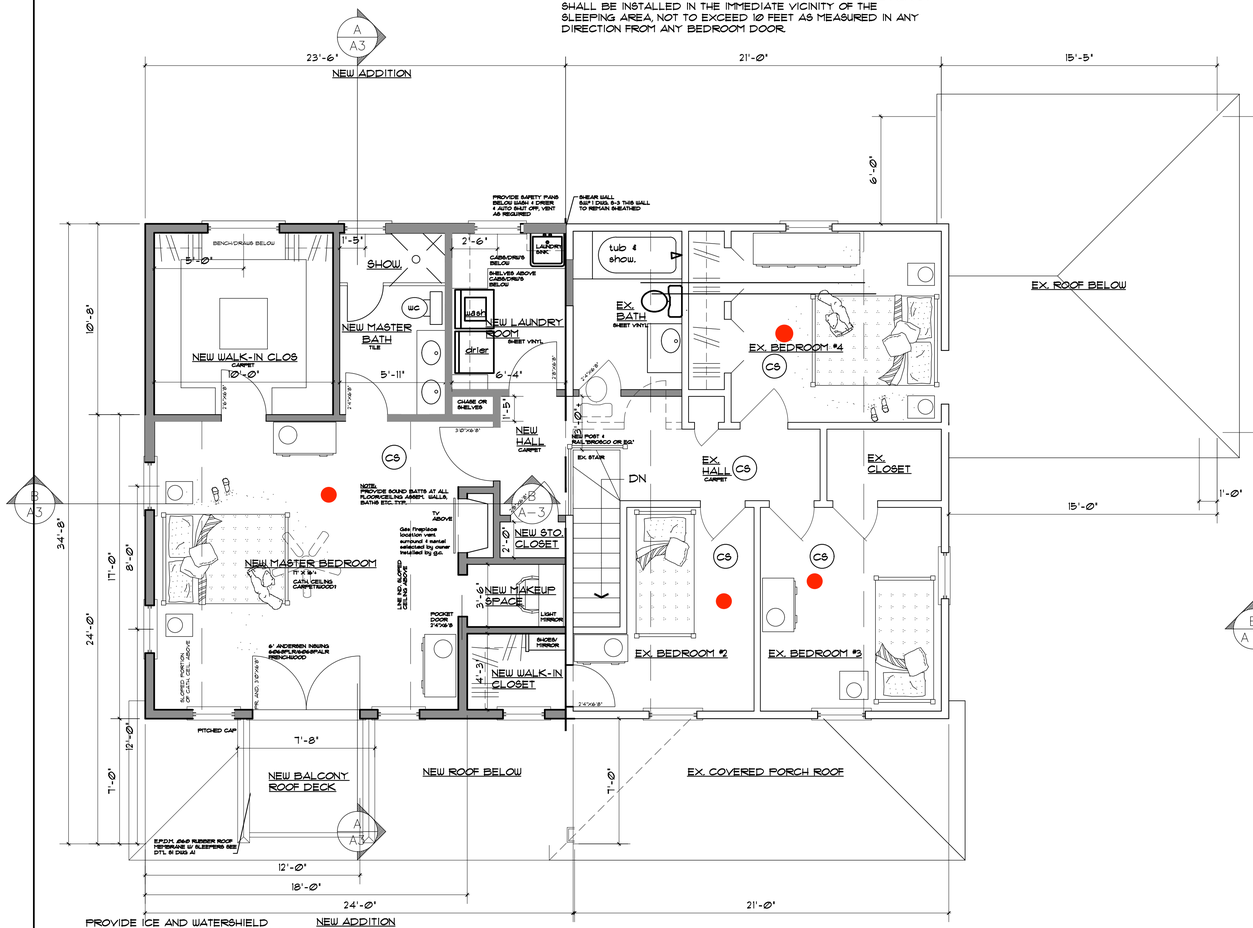
SMOKE DETECTOR SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS
1. IN ALL BEDROOMS..
2. IN THE IMMEDIATE VICINITY OF BEDROOMS.
3. IN EACH STORY OF A DWELLING UNIT, INCLUDING BASEMENTS AND CELLARS BUT NOT INCLUDING CRAWL SPACES AND UNHABITABLE ATTICS.
4. FIXED TEMPERATURE HEAT DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF R314.5

CARBON MONOXIDE DETECTOR SPECIFIC INSTALATION PROVISIONS R315.2

EVERY RESIDENTIAL STRUCTURE THAT PRESENTLY OR IN THE FUTURE CONTAINS FOSSIL FUEL BURNING EQUIPMENT OR HAS ENCLOSED PARKING SHALL BE EQUIPED, BY THE OWNER, LANDLORD OR SUPERINTENDENT, WITH WORKING AND LISTED CARBON MONOXIDE ALARM PROTECTION.

(A) CARBON MONOXIDE ALARM PROTECTION SHALL BE LOCATED IN EACH LEVEL OF EACH DWELLING UNIT INCLUDING HABITABLE PORTIONS OF BASEMENTS, CELLARS AND ATTICS, BUT NOT INCL. CRAWL SPACES.

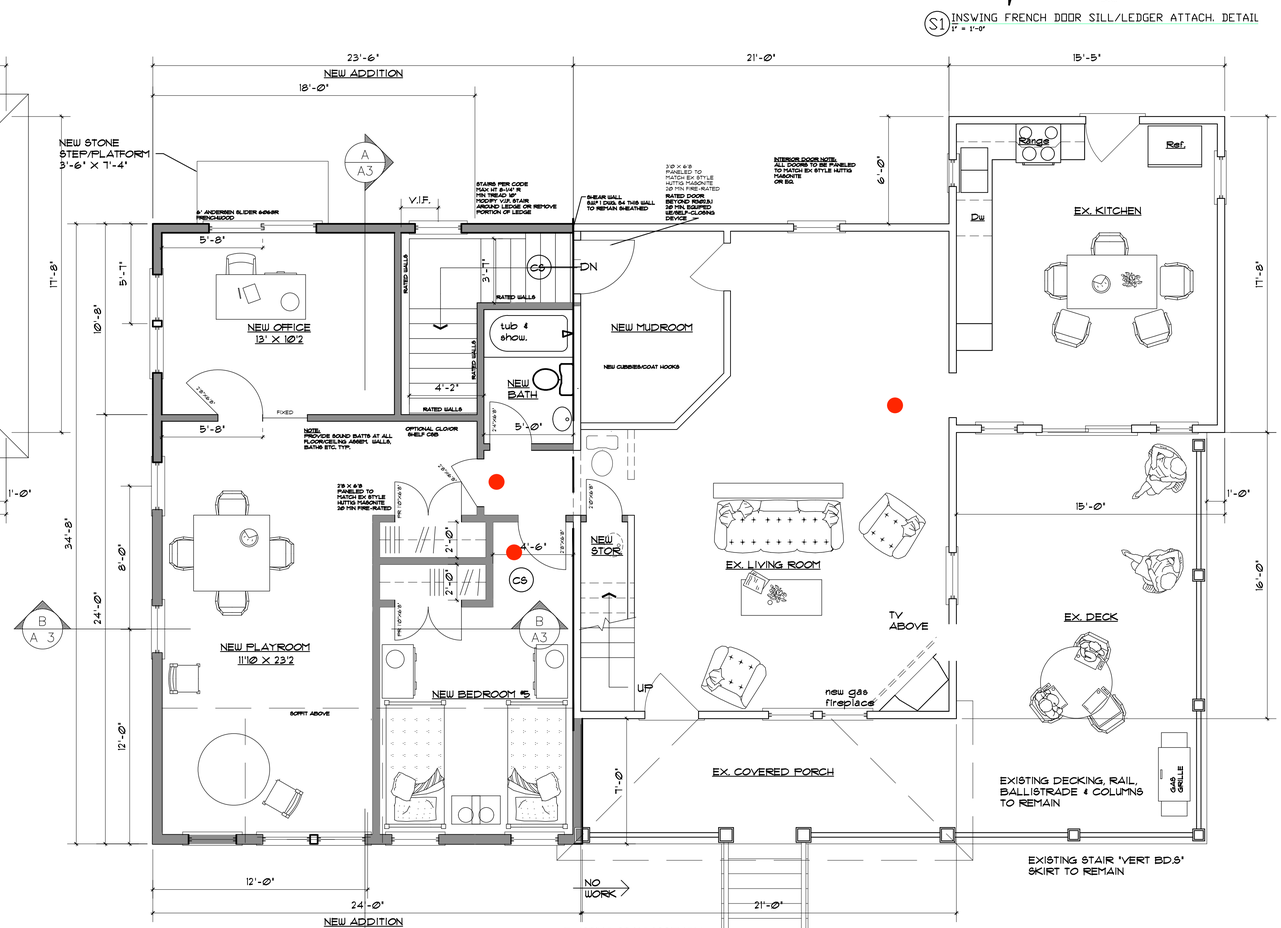
(B) WHEN MOUNTING CARBON MONOXIDE ALARM PROTECTION ON A LEVEL OF A DWELLING UNIT WITH A SLEEPING AREA, THE ALARM SHALL BE INSTALLED IN THE IMMEDIATE VICINITY OF THE SLEEPING AREA, NOT TO EXCEED 10 FEET AS MEASURED IN ANY DIRECTION FROM ANY BEDROOM DOOR.



PROVIDE ICE AND WATERSHIELD UNDERLAYMENT OVER NEW SHEATHING, APPLY AT ALL EAVES, RAKES, VALLEYS AND ROOF TO SIDE WALL CONNECTIONS.

ARCHITECTURAL STYLE FIBERGLASS ASPHALT ROOF SHINGLES TO MATCH EXISTING

B/A1 SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

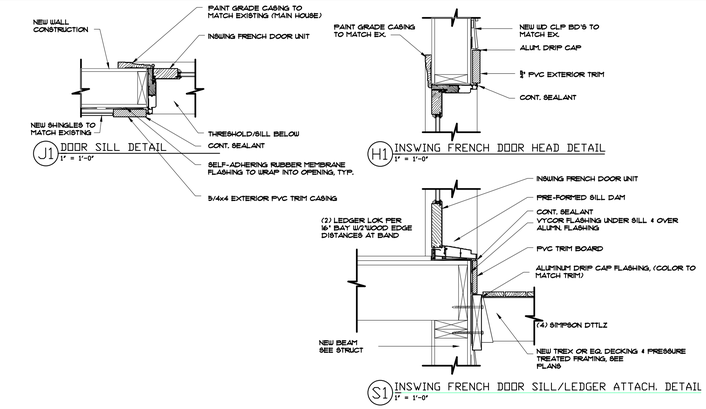


NOTES:
1. INSTALL ELEC. OUTLETS PER MASS CODE & OWNERS PREFERANCE.
2. PROVIDE DEDICATED CIRCUIT FOR COMPUTER.
3. INSTALL TELEPHONE & FAX LINE PER OWNER.

MECHANICAL NOTES:

TIE INTO EXISTING HEATING & AIR CONDITIONING VERIFY CONDITIONS EXPAND AS REQ'D

A/A1 FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



EXISTING WALLS

NEW WALLS

EXISTING WALLS TO BE REMOVED

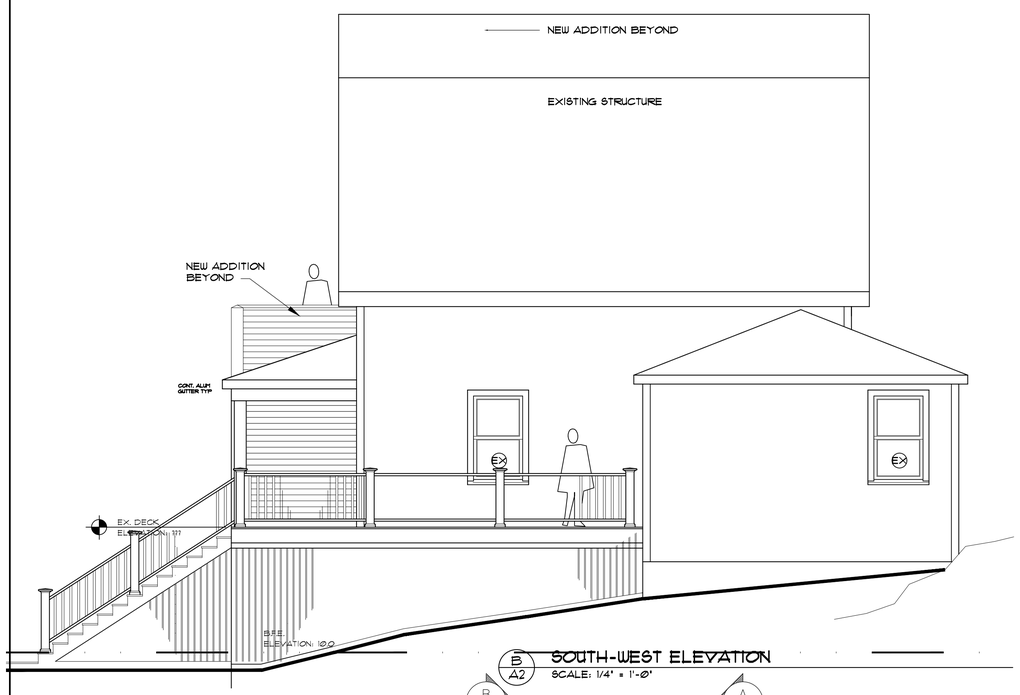
MICHELE CUDILO No. 34774 STRUCTURAL COMMONWEALTH OF MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER

2/21/20 FOR STRUCT. ONLY

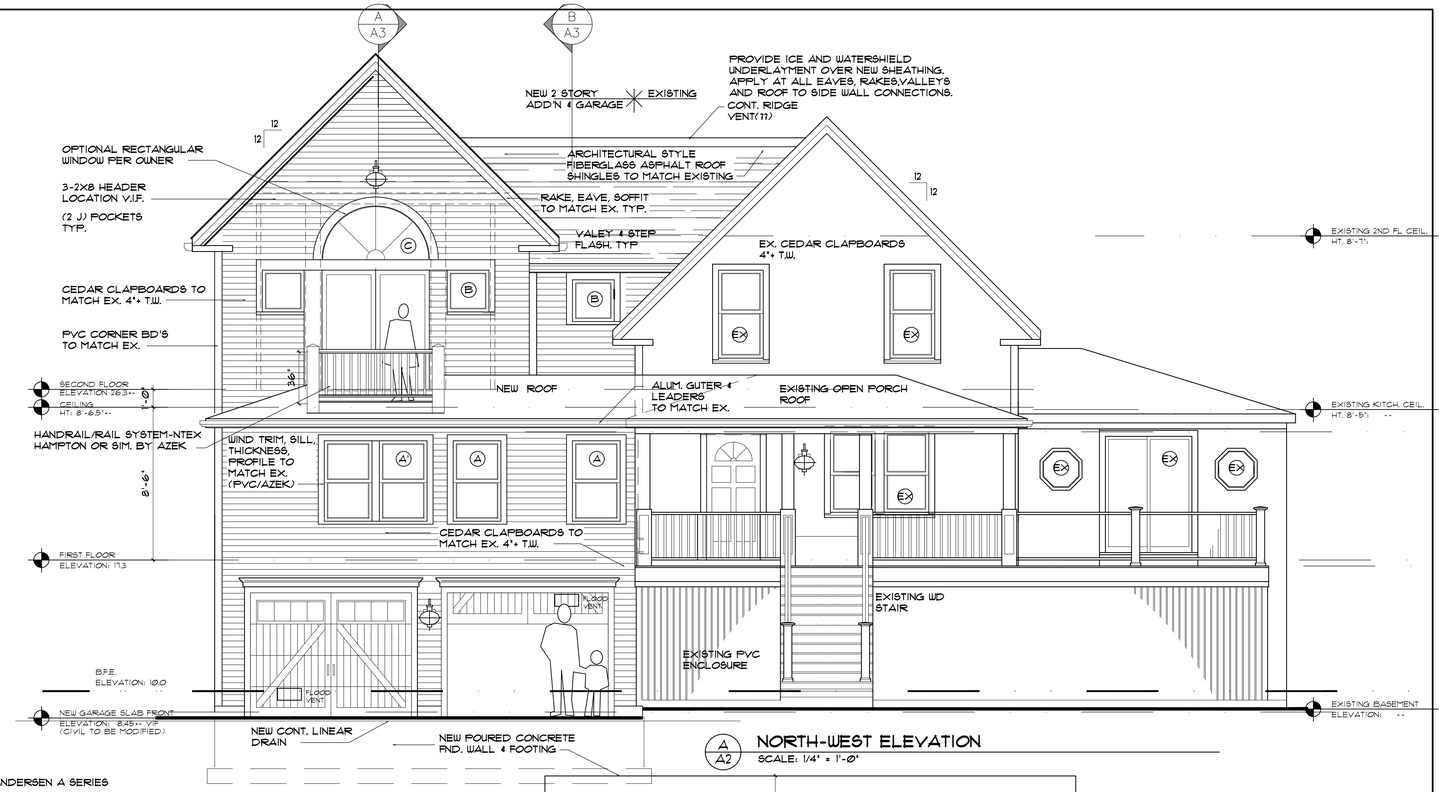
0 2 4 8 12
SCALE IN FEET

FOR CONSTRUCTION
PROGRESS 2-20-20

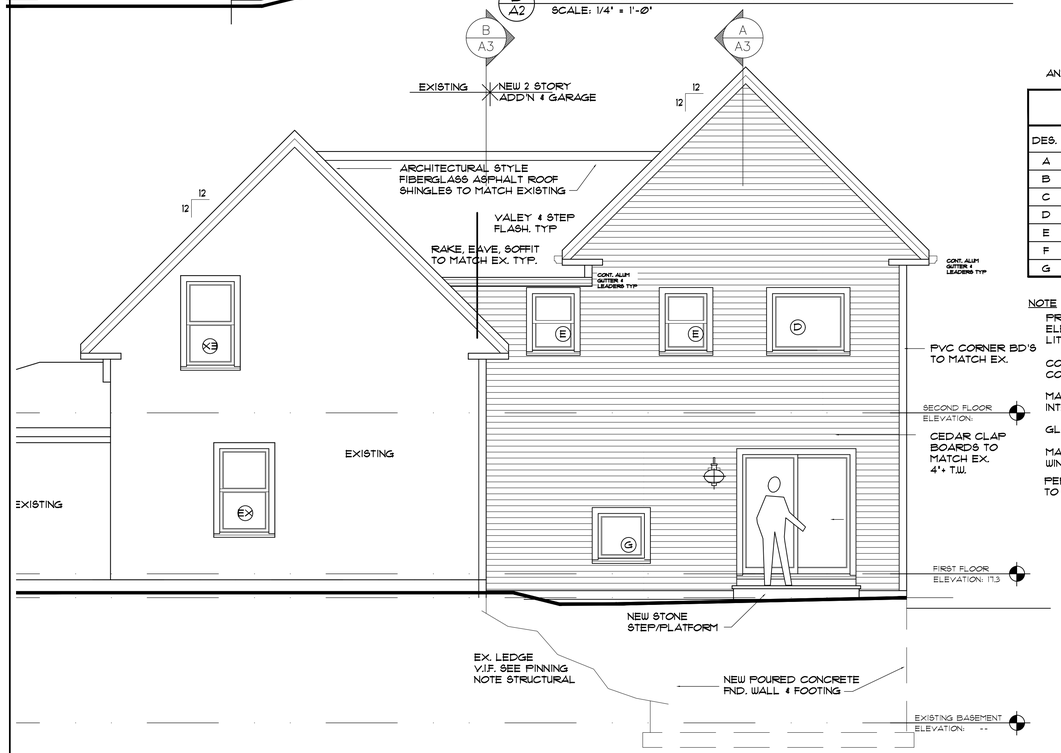
ADDITION/ RENOV. REPLACEMENT TO THE GOVONI RESIDENCE ROCKLAND STREET HINGHAM, MASSACHUSETTS	ROBERT S. ROSE ARCHITECTS P.O. BOX 761 HINGHAM, MA 02043 (781) 749-0060 NAN. (508) 228-5081
PROPOSED FLOOR PLANS	A-1
SCALE: 1/4"=1'0" Feb. 20 , 2020	



B A2 SOUTH-WEST ELEVATION
SCALE: 1/4" = 1'-0"



A A2 NORTH-WEST ELEVATION
SCALE: 1/4" = 1'-0"



C A2 SOUTH-EAST ELEVATION
SCALE: 1/4" = 1'-0"

ANDERSEN A SERIES

WINDOW SCHEDULE

DES.	M.F.G	MODEL	DIMENSION R.O.	REMARKS
A	ANDERSEN	ADH 2848	2'-8" X4'-8"H	A' STUD PK'T DOUBLE HUNG
B	ANDERSEN	ATV 2424	2'-4" X2'-4"H	TRANSOM
C	ANDERSEN	ATCTD60	6'-0" X3'-0-3/8"H	DIRECT SET HALF CIRCLE
D	ANDERSEN	APW 4034	4'-0" X3'-4"H	
E	ANDERSEN	ADH 2434	2'-4" X3'-4"H	
F	ANDERSEN	ATV 2824	2'-8" X2'-4"H	TRANSOM
G	ANDERSEN	ATV V.I.F.	V.I.F.	TEMPERED TRANSOM

NOTE

PROVIDE ALL WINDOWS WITH MULLION PATTERNS AS SHOWN ON ELEVATIONS, CUSTOMIZE AS REQUIRED, 7/8" SIMULATED DIVIDED LITES WITH SPACER BARS

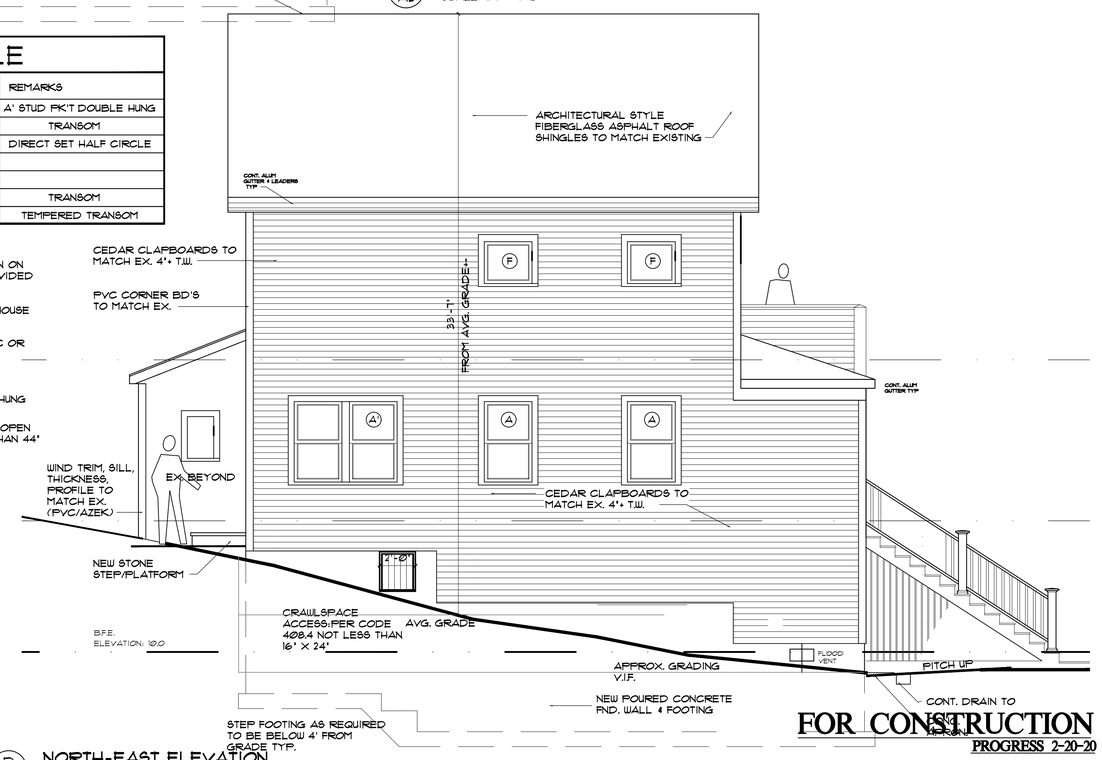
COORDINATE FINAL COLOR SELECTION WITH CLIENT AND HOUSE COLOR SCHEME PRIOR TO ORDERING.

MANUFACTURER TO PROVIDE: EXTERIOR TRIM 5/4"X4+-PVC OR INTEX 2" SILL. OR G.C.INSTALL OPTION

GLAZING TO BE LOW E ARGON

MANUFACTURE TO PROVIDE 1/2 SCREENS AT ALL DOUBLE HUNG WINDOWS, FULL AT CASEMENTS.

PER MASS CODE-BEDROOM EGRESS WINDOW WHEN FULLY OPEN TO BE 20"X24" IN EITHER DIRECTION. SILL HT. NOT MORE THAN 44"



D A2 NORTH-EAST ELEVATION
SCALE: 1/4" = 1'-0"

0 2 4 8 12
SCALE IN FEET

FOR CONSTRUCTION
PROGRESS 2-20-20

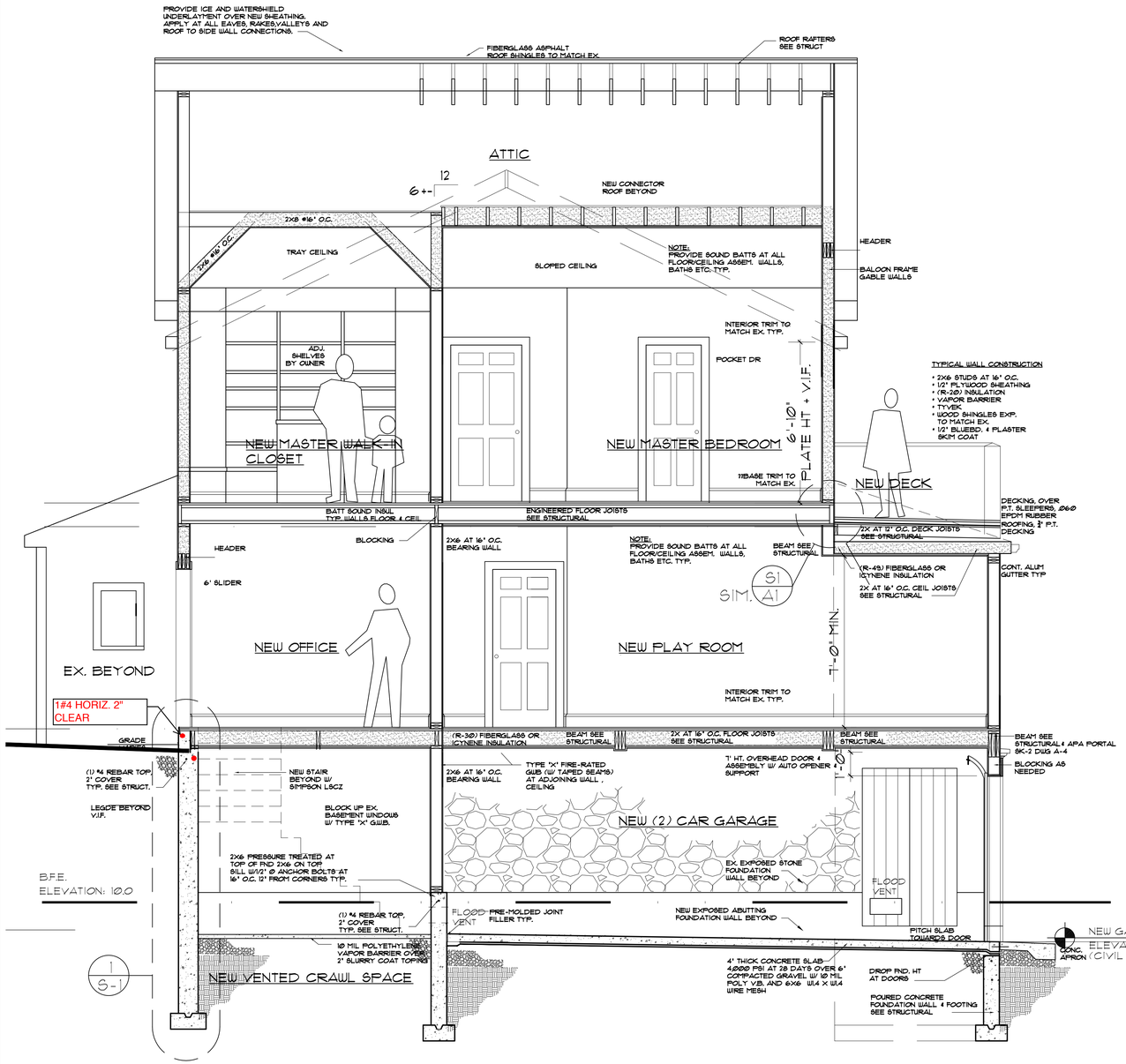
ADDITION/ RENOV. REPLACEMENT
TO THE GOVONI RESIDENCE
ROCKLAND STREET
HINGHAM, MASSACHUSETTS

PROPOSED EXTERIOR ELEVATIONS

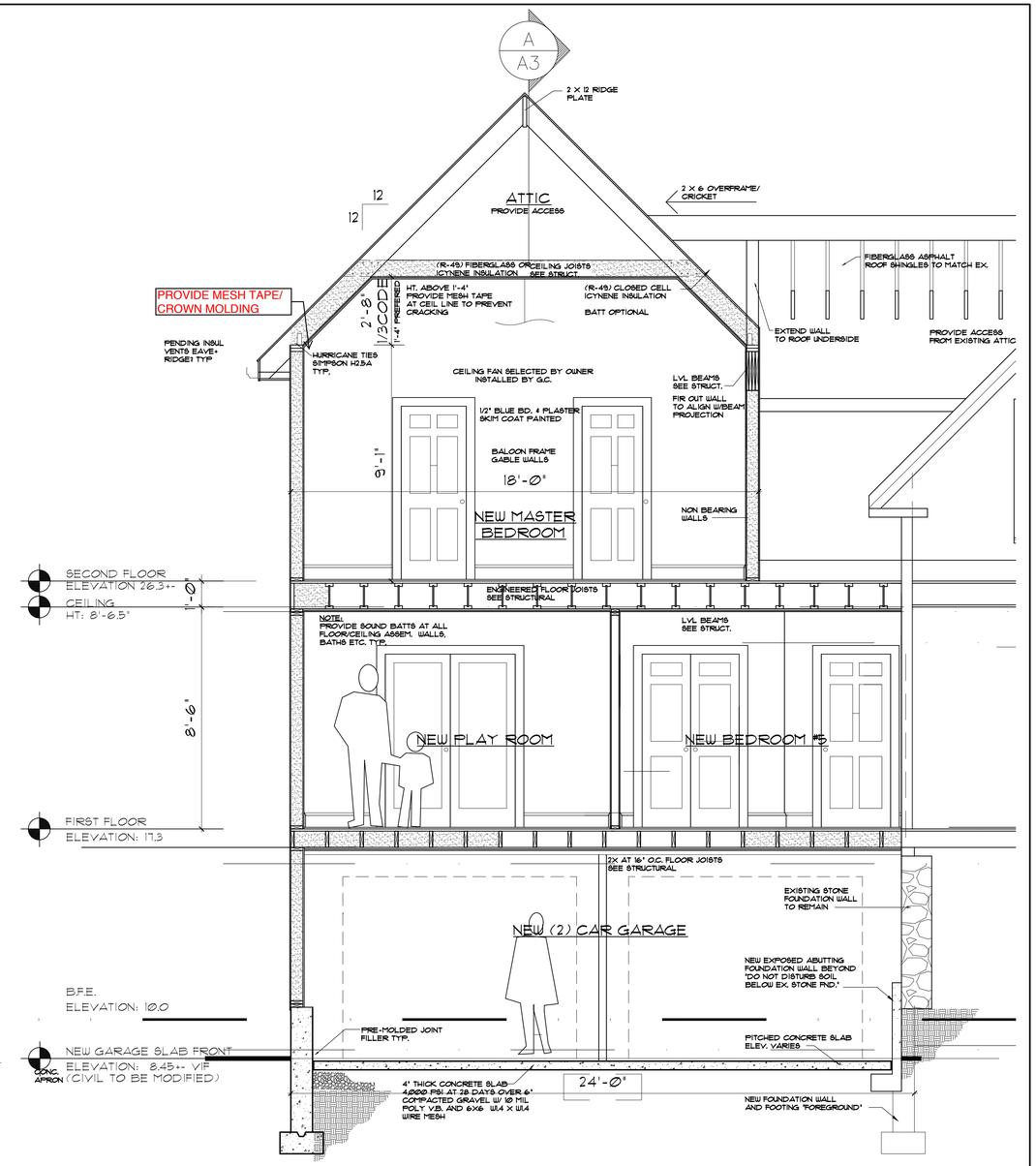
SCALE: 1/4"=1'0" FEB. 20 , 2020

ROBERT S. ROSE ARCHITECTS
P.O. BOX 761
HINGHAM, MA 02043
(781) 749-0060 NAN. (508) 228-5081

A-2



A A3 BUILDING SECTION
SCALE: 3/8" = 1'-0"



B A3 BUILDING SECTION
SCALE: 3/8" = 1'-0"

MICHELE CUDILO No. 34774 STRUCTURAL
COMMONWEALTH OF MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER

2/21/20 FOR STRUCT. ONLY

FOR CONSTRUCTION

PROGRESS 2-20-20

ADDITION/ RENOV. REPLACEMENT
TO THE GOVONI RESIDENCE
ROCKLAND STREET
HINGHAM, MASSACHUSETTS

PROPOSED BUILDING SECTIONS

SCALE: AS NOTED FEB. 20, , 2020

ROBERT S. ROSE ARCHITECTS
P.O. BOX 761
HINGHAM, MA 02043
(781) 749-0060 NAN. (508) 228-5081

A-3

NOTES:

GENERAL
1. The Contractor shall verify all existing and new dimensions and conditions at the site and report any discrepancies to the Architect before ordering material and proceeding with the work.
2. All work shall conform to the requirements of the 2015 International Residential Code with Massachusetts Amendments.
3. All sections, details, notes, methods, or materials shown and/or noted on any plan, section or elevation shall apply to all other similar locations unless otherwise noted.
4. All work shall be controlled. Testing and inspection agencies selected by the Owner and approved by the Commonwealth of Massachusetts Materials Safety Board. All work shall require adherence to the requirements of ASTM designation E–329 entitled "Recommended Practice for Inspection and Testing Agencies for Concrete and Steel Used in Construction".
5. Design Live Loads:

Roof	35 psf + Drift
Floor	40 psf
Bedrooms	30 psf
Wind	130 mph

6. Structural drawings shall be used in conjunction with Architectural, Heating and Ventilating, Plumbing, Electrical and Mechanical drawings and specifications and these drawings shall be referred to for size and location of openings, vents, pipes, inserts, hangers, etc.
7. Existing structural members shall not be cut, removed or altered unless the Contractor has verified existing/new support conditions for adequacy and has notified the Architect of any discrepancy.
8. The Contractor shall shore and/or underpin existing work as required to safely install new work. This work shall be the full responsibility of the Contractor and no act direction or review of any system or method by the Architect shall change or effect the Contractor's responsibility.

FOUNDATION
1. Footings shall rest on firm, undisturbed material capable of sustaining a bearing pressure of one (1) ton/sq. ft.
2. The Contractor shall retain a professional soils engineer to verify soil bearing pressure.
3. All granular fill material under slabs shall be placed to 95% relative density.
4. All footing excavations to be finished by hand and inspected and approved by the testing engineer before any concrete is placed.
5. Backfill shall be placed to equal elevations on both sides of foundation walls. Where backfill is on one side only work shall be shored or have permanent adjacent construction in place before backfilling.
6. The sides of all beams, walls, footings, etc. shall be formed and concrete shall not be placed against earth cuts.
7. Footings shall not bear on frozen soil and all exterior footings shall be not less than 4'–0" below adjacent finish grade.

CONCRETE
1. All concrete shall have an ultimate compressive strength of 3,000#/sq. in. at 28 days. Maximum 3/4" aggregate, air entrained. Submit mix design for review by the Architect.
2. Reinforcing steel shall comply with the requirements of ASTM–A615 Grade 60 billet steel. ASTM–A185 for wire mesh. Bars shall be deformed to ASTM–A305.
3. Concrete cover: footings and walls – Bottom 3", Sides 2".
4. All concrete work shall conform to the requirements of the American Concrete Institute Specification ACI–latest issue
5. All reinforcing to be supported in forms with necessary accessories and securely wired together in accordance with CRSI Recommended Practice for Placing Reinforcing Bars.
6. All reinforcing shall be lapped 40 bar diameters (1'–0" min.) except as otherwise noted.

STRUCTURAL STEEL

1. Structural steel (as Req'd.) shall conform to the requirements of the American Institute of Steel Construction. Material ASTM–A992 or steel pipe ASTM–A50, Type S, seamless (Fy=35ksi), as noted on plans. Submit shop drawings for review by the Architect.
2. Welding shall comply with the requirements of the American Welding Society AWS D1.1. Use E70 series electrodes.
3. Shop connections high strength bolted. Field connections high strength bolted unless noted to be welded. Bolts 3/4" diameter round high strength with one washer. (A325–N)
4. Provide temporary bracing to hold steel in place during erection.
5. All steel shall receive one shop coat of rust inhibitive paint, gray oxide.
6. Bolts for wood nailers shall be 1/2" diameter in 9/16" diameter holes at 2'–0" o.c.
7. Provide stiff. plate each side of beam when column occurs above or below beams.
8. For structural beam over column use 1/2" cap plate + 4–3/4" diameter high strength bolts.

BCI, AJS, LVL, PSL, LSL NOTES
1. BCI and AJS joists, LVL beams, PSL columns and LSL rimboard shall be designed, fabricated, stored and erected in accordance with Boise Engineered Wood Products "Specifier's Guide and "Installation Guide" and "All Joist Specifier Guide, USA". Except as noted.
2. Install temporary bracing as required.
3. No splices allowed.
4. No field modifications allowed without written authorization from the Architect.
5. Holes thru the webs of AJS members must be no larger than half the depth and be centered at mid–depth and no closer than 14 times the hole diameter to a support edge. Spacing between holes must not be closer than 3 times the hole diameter.
6. Laminated veneer lumber (LVL) min. design values Fb = 2400 lb/sq. in., E = 2,000,000#/sq. in., (Fv = 250 #/sq. in) (Versa–lam LVL or equal.)
7. Multiple LVL members shall be bolted together with 1/2" diameter bolts at 12"o.c., top and bottom. (2 rows).
8. Parallel Strand Lumber (PSL) min. design values Fcll =2,500 lb/sq. in., E = 1,800,000 lb/sq. in. (Parallam PSL or equal.)

LUMBER

1. Lumber shall be in accordance with National Forest Products Association "National Design Specifications for Wood Construction," latest edition.
2. Framing lumber shall be Spruce–Pine–Fir No.1/2, Fb = 875 #/sq.in. (single member uses), E=1,400,000 #/sq. in.
3. In general, members shall be doubled at all floor, wall and roof openings.
4. Provide steel saddles for members framed flush top.
5. Provide temporary erection bracing for roof and floor members.
6. Partitions and exterior stud walls shall be bridged with 2x6 blocking at intervals not exceeding 4'–0".
7. All joist shall be bridged with 1x3 double cross bridging at intervals not exceeding 8'–0".
8. Nailing shall be in accordance with Massachusetts State Building Code "Fastener Schedule."
9. Provide pressure treated lumber for wood in contact with concrete or masonry.

TYPICAL WALL FRAMING
Interior and exterior bearing stud walls:

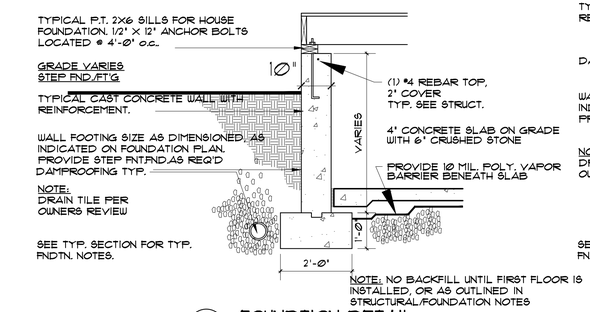
	Exterior (Typical)
Sills, plates, caps	2–2x6
Studs	2x6@16 w/ mid–Ht. blocking >8.00' length
Headers	3–2x8 unless otherwise noted.

Double studs at all openings.

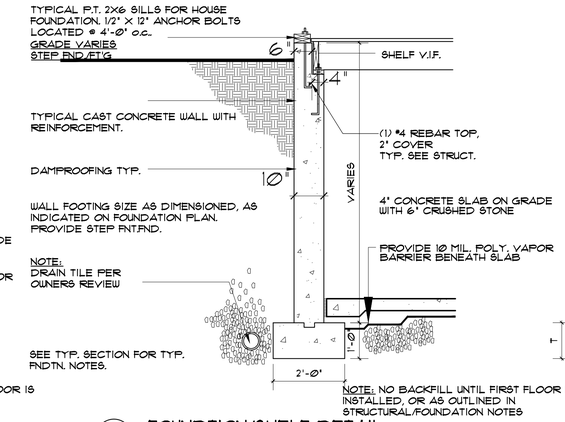
Minimum size of miscellaneous framing members required to complete work shall be 2x8 @ 16".

Install minimum 6x6 wood post at ends of all beams.

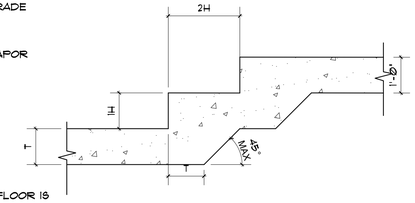
Exterior vertical wall sheathing: 15/32" Plywood Structural I sheathing nailed to supports with 8d nails at 6"o.c. around panel edge and at 12"o.c. ton interior supports.



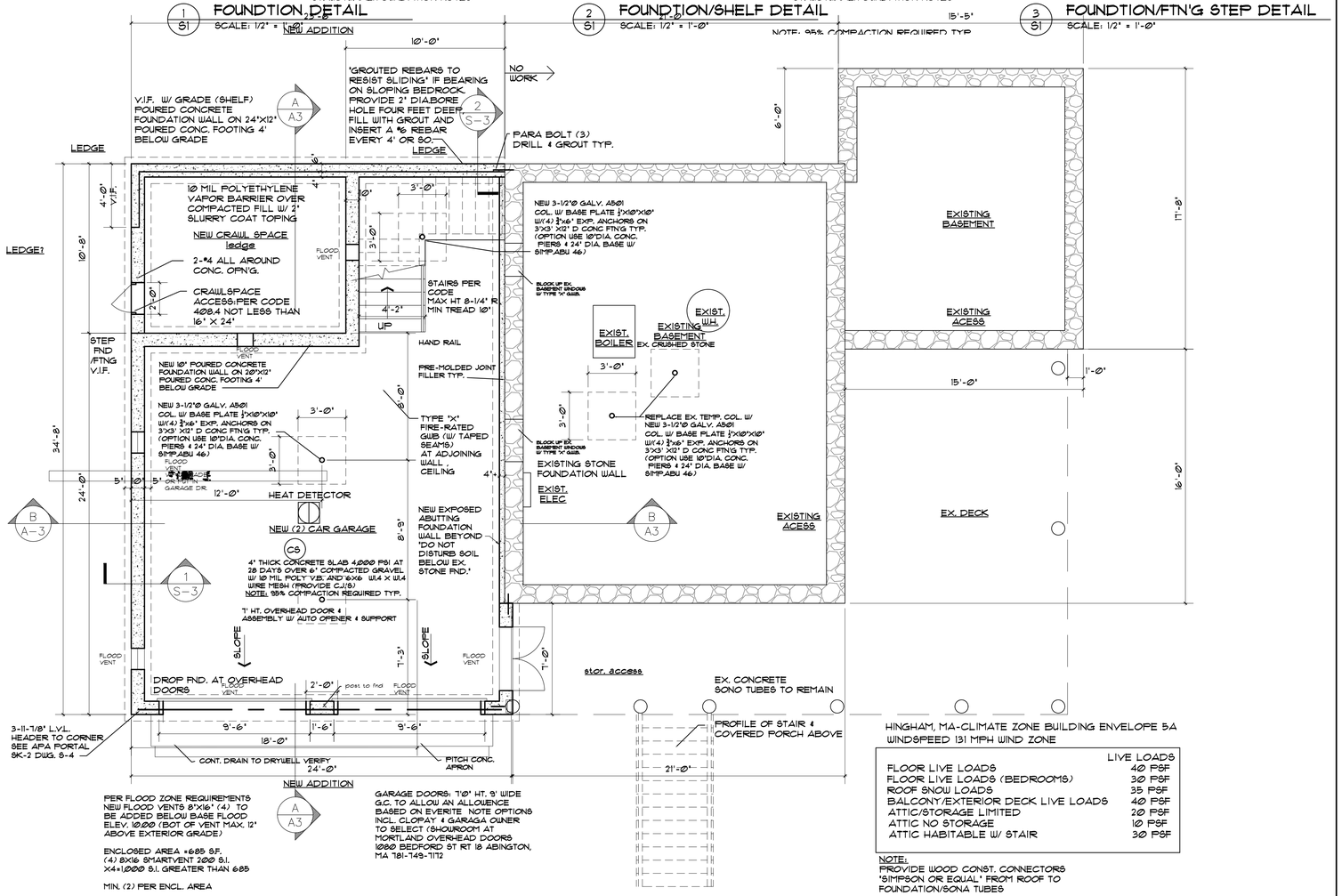
1 S1 FOUNDTION DETAIL
SCALE: 1/2" = 1'-0"



2 S1 FOUNDTION/SHELF DETAIL
SCALE: 1/2" = 1'-0"



3 S1 FOUNDTION/FTN'G STEP DETAIL
SCALE: 1/2" = 1'-0"



PER FLOOD ZONE REQUIREMENTS NEW FLOOD VENTS 8"X16" (4) TO BE ADDED BELOW BASE FLOOD ELEV. 10.00 (BOT OF VENT MAX. 12" ABOVE EXTERIOR GRADE)

ENCLOSED AREA =685 S.F.
(4) 8X16 SMARTVENT 200 S.I.
X4=1,000 S.I. GREATER THAN 685

MIN. (2) PER ENCL. AREA

A A3

GARAGE DOORS: 7'0" HT. 9' WIDE G.C. TO ALLOW AN ALLOWENCE BASED ON EVERITE NOTE OPTIONS INCL. CLOPAY & GARAGA OWNER TO SELECT (SHOWROOM AT MORTLAND OVERHEAD DOORS 1080 BEDFORD ST RT 18 ABINGTON, MA 781-749-7112

HINGHAM, MA-CLIMATE ZONE BUILDING ENVELOPE 5A
WINDSPEED 131 MPH WIND ZONE

	LIVE LOADS
FLOOR LIVE LOADS	40 PSF
FLOOR LIVE LOADS (BEDROOMS)	30 PSF
ROOF SNOW LOADS	35 PSF
BALCONY/EXTERIOR DECK LIVE LOADS	40 PSF
ATTIC/STORAGE LIMITED	20 PSF
ATTIC NO STORAGE	10 PSF
ATTIC HABITABLE W/ STAIR	30 PSF

NOTE:
PROVIDE WOOD CONST. CONNECTORS 'SIMPSON OR EQUAL' FROM ROOF TO FOUNDATION/SONA TUBES

A S1 GARAGE/BASEMENT FND. PLAN
SCALE: 1/4" = 1'-0"

COMMONWEALTH OF MASSACHUSETTS
MICHELE CUDILO
No. 34774
STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER

2/21/20 FOR STRUCT. ONLY

0 2 4 8 12
SCALE IN FEET

FOR CONSTRUCTION
NOT FOR CONSTRUCTION
PROGRESS 2-20-2020

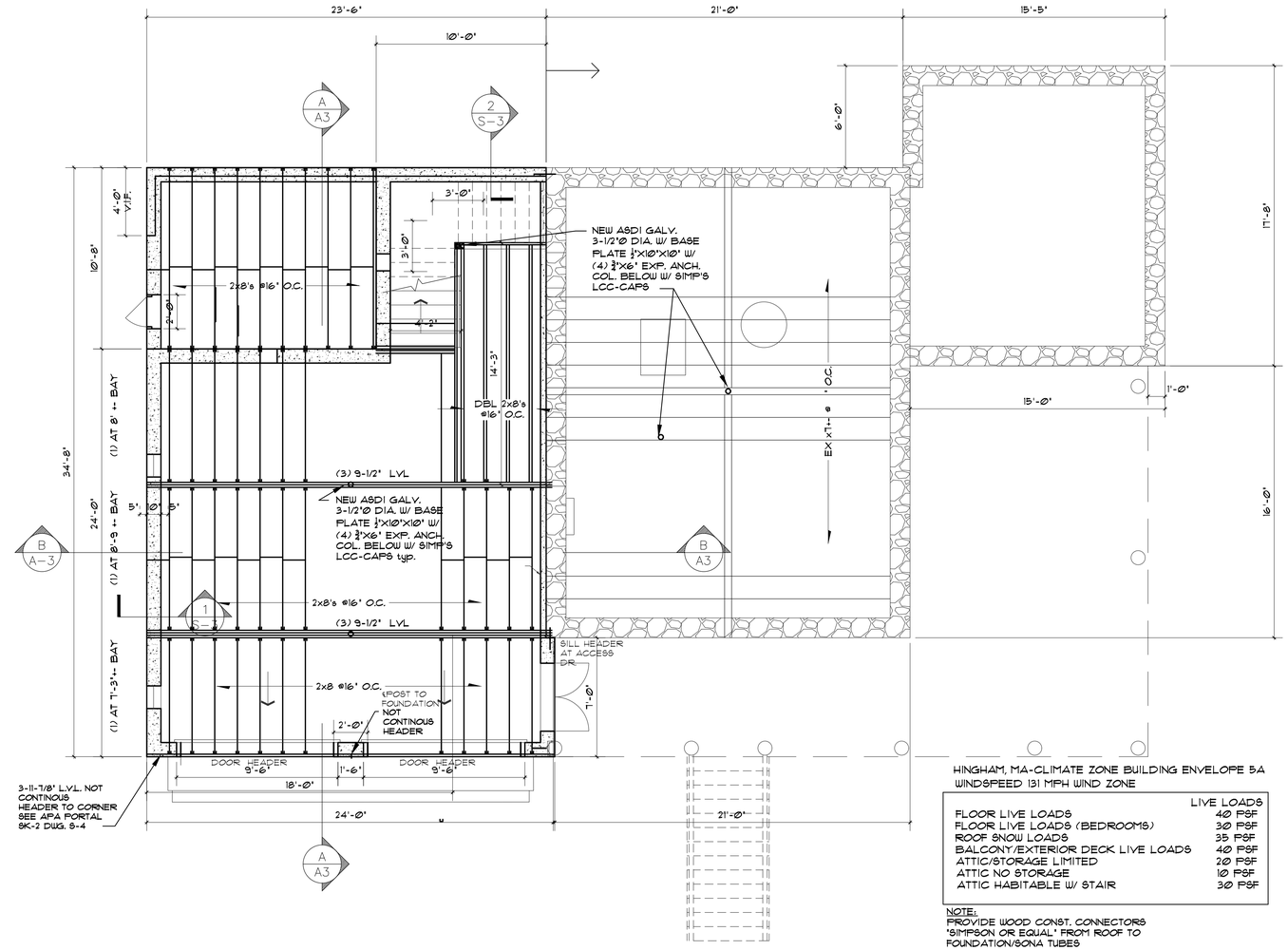
ADDITION/ RENOV. REPLACEMENT
TO THE GOVONI RESIDENCE
ROCKLAND STREET
HINGHAM, MASSACHUSETTS

PROPOSED FOUNDATION/GARAGE PLAN

SCALE:1/4"=1'0" Feb. 20, 2020

ROBERT S. ROSE ARCHITECTS
P.O. BOX 761
HINGHAM, MA 02043
(781) 749-0060 NAN. (508) 228-5081

S-1



HINGHAM, MA-CLIMATE ZONE BUILDING ENVELOPE 5A
WINDSPEED 131 MPH WIND ZONE

	LIVE LOADS
FLOOR LIVE LOADS	40 PSF
FLOOR LIVE LOADS (BEDROOMS)	30 PSF
ROOF SNOW LOADS	35 PSF
BALCONY/EXTERIOR DECK LIVE LOADS	40 PSF
ATTIC/STORAGE LIMITED	20 PSF
ATTIC NO STORAGE	10 PSF
ATTIC HABITABLE W/ STAIR	30 PSF

NOTE:
PROVIDE WOOD CONST. CONNECTORS "SIMPSON OR EQUAL" FROM ROOF TO FOUNDATION/SONA TUBES

FIRST FLOOR FRAMING PLAN

COMMONWEALTH OF MASSACHUSETTS
MICHELE CUDILO
No. 34774
STRUCTURAL
REGISTERED PROFESSIONAL ENGINEER

2/21/20 FOR STRUCT. ONLY

0 2 4 8 12
SCALE IN FEET

FOR CONSTRUCTION
PROGRESS 2-20-20

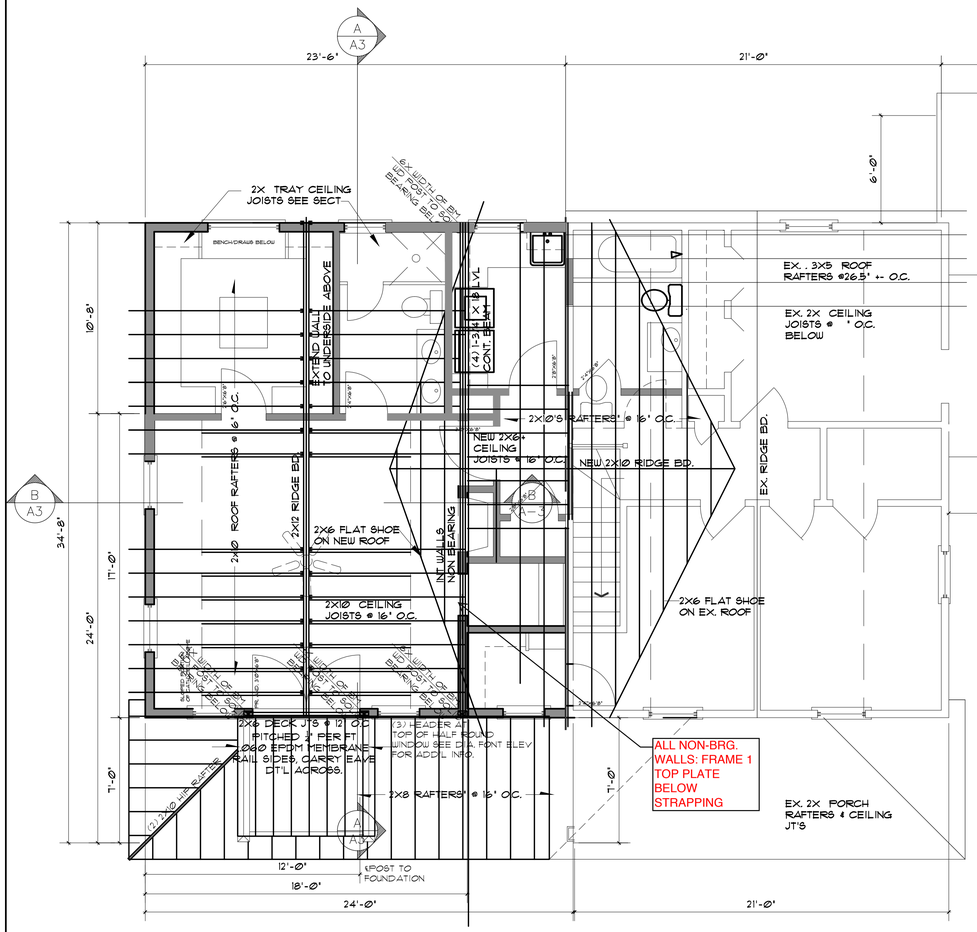
ADDITION/ RENOV. REPLACEMENT
TO THE GOVONI RESIDENCE
ROCKLAND STREET
HINGHAM, MASSACHUSETTS

1ST FLOOR FRAMING PLAN

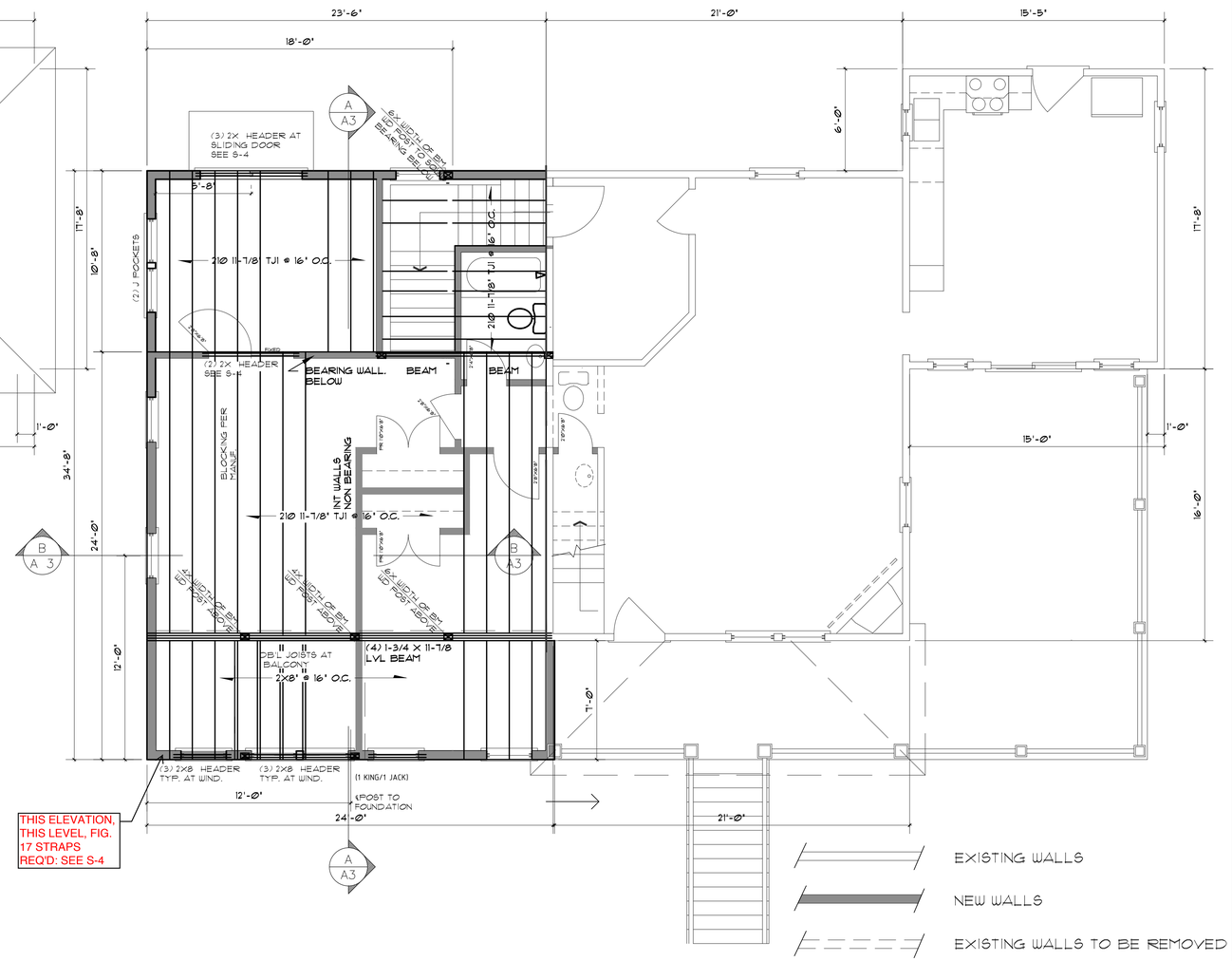
SCALE: 1/4"=1'0" | Feb. 20,, 2020

ROBERT S. ROSE ARCHITECTS
P.O. BOX 761
HINGHAM, MA 02043
(781) 749-0060 NAN. (508) 228-5081

S-2



ROOF FRAMING PLAN



2ND FLOOR FRAMING PLAN

MICHELE CUDILO No. 34774 STRUCTURAL REGISTERED PROFESSIONAL COMMONWEALTH OF MASSACHUSETTS

2/21/20 FOR STRUCT. ONLY

0 2 4 8 12
SCALE IN FEET

FOR CONSTRUCTION
PROGRESS 2-20-20

ADDITION/ RENOV. REPLACEMENT TO THE GOVONI RESIDENCE
ROCKLAND STREET
HINGHAM, MASSACHUSETTS

PROPOSED FLOOR PLANS

SCALE: 1/4"=1'0" | Feb. 20, 2020

ROBERT S. ROSE ARCHITECTS
P.O. BOX 761
HINGHAM, MA 02043
(781) 749-0060 NAN. (508) 228-5081

S-3

GOVONI ADDN. @ 249 ROCKLAND ST., HINGHAM, MA

WFCM* AWC Guide to Wood Construction in High Wind Areas: 110 mph Wind Zone

Massachusetts Checklist for Compliance (780 CMR 5301.2.1.1)[1]

☑ Check Compliance

1.1 SCOPE
- Wind Speed (3-sec. gust) ..... 110 mph
- Wind Exposure Category ..... C *

1.2 APPLICABILITY
- Number of Stories ..... (Fig 2) ..... 2 stories ≤ 2 stories
- Roof Pitch ..... (Fig 2) ..... 6/12 if ≤ 12:12
- Mean Roof Height ..... (Fig 2) ..... 33 ft ≤ 33'
- Building Width, W ..... (Fig 3) ..... 24 ft ≤ 80'
- Building Length, L ..... (Fig 3) ..... 32 ft ≤ 80'
- Building Aspect Ratio (L/W) ..... (Fig 4) ..... 1.0 ≤ 3:1
- Nominal Height of Tallest Opening[2] ..... (Fig 4) ..... 7'-0" ≤ 6'8" ≤ 6'8"

1.3 FRAMING CONNECTIONS
- General compliance with framing connections ..... (Table 2)

2.1 FOUNDATION
- Foundation Walls meeting requirements of 780 CMR 5404.1
  - Concrete
  - Concrete Masonry

GARAGE S-0-6 PONY WALL OR LOW SHELF

2.2 ANCHORAGE TO FOUNDATION[1,3]

5/8" Anchor Bolts imbedded or 5/8" Proprietary Mechanical Anchors as an alternative in concrete only
- Bolt Spacing – general ..... (Table 4) ..... 32 in.
- Bolt Spacing from end/joint of plate ..... (Fig 5) ..... 6-12 in. ≤ 6" – 12"
- Bolt Embedment – concrete ..... (Fig 5) ..... 7 in. ≥ 7"
- Bolt Embedment – masonry ..... (Fig 5) ..... – in. ≥ 16"
- Plate Washer ..... (Fig 5) ..... ≥ 3" x 3" x ¼"

3.1 FLOORS
- Floor framing member spans checked ..... (per 780 CMR Chapter 55)
- Maximum Floor Opening Dimension ..... (Fig 6) ..... 6/12 ft ≤ 12' or L/2 or W/2
- Full Height Wall Studs at Floor Openings less than 2' from Exterior Wall (Fig 6)
- Maximum Floor Joist Setbacks
  - Supporting Loadbearing Walls or Shearwall ..... (Fig 7) ..... ___ ft ≤ d
- Maximum Cantilevered Floor Joists
  - Supporting Loadbearing Walls or Shearwall ..... (Fig 8) ..... ___ ft ≤ d
- Floor Bracing at Endwalls ..... (Fig 9)
- Floor Sheathing Type ..... (per 780 CMR Chapter 55)
- Floor Sheathing Thickness ..... (per 780 CMR Chapter 55) ..... 3/4 in.
- Floor Sheathing Fastening ..... (Table 2) ..... 8 d nails at 6 in edge / 12 in field

4.1 WALLS
- Wall Height
  - Loadbearing walls ..... (Fig 10 and Table 5) ..... 8/10 ft ≤ 10'
  - Non-Loadbearing walls ..... (Fig 10 and Table 5) ..... 8/12 ft ≤ 20'
- Wall Stud Spacing ..... (Fig 10 and Table 5) ..... 16 in. ≤ 24" o.c.
- Wall Story Offsets ..... (Figs 7 & 8) ..... ___ ft ≤ d

4.2 EXTERIOR WALLS[3]
- Wood Studs
  - Loadbearing walls ..... (Table 5) ..... 2x 6 x 10 in. – in.
  - Non-Loadbearing walls ..... (Table 5) ..... 2x 6 x 12 ft 5 in.
- Gable End Wall Bracing
  - Full Height Endwall Studs ..... (Fig 10)
  - WSP Attic Floor Length ..... (Fig 11) ..... EXTENDED ONE ..... ___ ft ≥ W/3
  - Gypsum Ceiling Length (if WSP not used) ..... (Fig 11) ..... ___ ft ≥ 0.9W
  - 2 x 4 Continuous Lateral Brace @ 6 ft. o.c. ..... (Fig 11)
- Double Top Plate
  - Splice Length ..... (Fig 13 and Table 5) ..... 3x 8' WALL: 4 FT. (14)
  - Splice Connection (no. of 16d common nails) ..... (Table 5)

COMMONWEALTH OF MASSACHUSETTS MICHELE CUDILO STRUCTURAL No. 34774 REGISTERED PROFESSIONAL ENGINEER

Michele Cudilo P.E. 1/17/20

1/2019 - 208

GOVONI ADDN. @ 249 ROCKLAND ST., HINGHAM, MA

WFCM* AWC Guide to Wood Construction in High Wind Areas: 110 mph Wind Zone

Massachusetts Checklist for Compliance (780 CMR 5301.2.1.1)[1]

- Loadbearing Wall Connections
  - Lateral (no. of endnailed 16d common nails) ..... (Table 7) 2
- Non-Loadbearing Wall Connections
  - Lateral (no. of endnailed 16d common nails) ..... (Table 8) 2
- Load Bearing Wall Openings (record largest opening but check all openings for compliance to Table 9)
  - Header Spans ..... (Table 9) ..... 24 ft — in. ≤ 11'
  - Sill Plate Spans ..... (Table 9) ..... 24 ft — in. ≤ 11'
  - Full Height Studs (no. of studs) ..... (Table 9) ..... (1)
- Non-Load Bearing Wall Openings (record largest opening but check all openings for compliance to Table 9)
  - Header Spans ..... (Table 9) ..... 6 ft — in. ≤ 12' (3)
  - Sill Plate Spans ..... (Table 9) ..... 24 ft — in. ≤ 12'
  - Full Height Studs (no. of studs) ..... (Table 9) ..... (1)
- Exterior Wall Sheathing to Resist Uplift and Shear Simultaneously
  - Minimum Building Dimension, W ..... 32 ft
  - Nominal Height of Tallest Opening[2] ..... 6'8" ≤ 6'8"
  - Sheathing Type ..... (note 4) ..... WSP
  - Edge Nail Spacing ..... (Table 10 or note 4 if less) ..... 6 in.
  - Field Nail Spacing ..... (Table 10) ..... 12 in.
  - Shear Connection (no. of 16d common nails) ..... (Table 10) 3/FT
  - Percent Full-Height Sheathing ..... (Table 10) ..... 2ND 74% 1ST 74% LIN.FT. OK
  - 5% Additional Sheathing for Wall with Opening > 6'8" (Design Concepts) ..... SEE AF&PA SDP-2 SECT. 4.3.6.1 ..... NLG - SK-2 **
  - Maximum Building Dimension, L ..... 32 ft
  - Nominal Height of Tallest Opening[2] ..... 6'8" ≤ 6'8"
  - Sheathing Type ..... (note 4) ..... WSP
  - Edge Nail Spacing ..... (Table 11 or note 4 if less) ..... 6 in.
  - Field Nail Spacing ..... (Table 11) ..... 12 in.
  - Shear Connection (no. of 16d common nails) ..... (Table 11) 3/FT
  - Percent Full-Height Sheathing ..... (Table 11) ..... 2ND 45% 1ST 41% LIN.FT. OK
  - 5% Additional Sheathing for Wall with Opening > 6'8" (Design Concepts)
- Wall Cladding
  - Rated for Wind Speed?

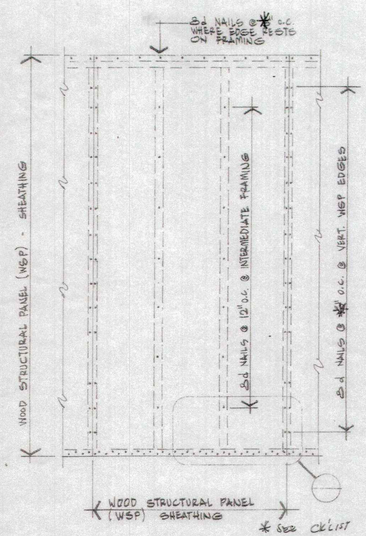
5.1 ROOFS
- Roof framing member spans checked? ..... (For Rafters use AWC Span Tool, see BBRS Website)
- Roof Overhang ..... (Figure 19) ..... 2 ft ≤ smaller of 2' or L/3
- Truss or Rafter Connections at Loadbearing Walls ..... * 3, MAX. SPAN = 18'
  - Proprietary Connectors
    - Uplift ..... (Table 12) ..... U= 361 ..... SIMPSON
    - Lateral ..... (Table 12) ..... L= 245 ..... H2.5A
    - Shear ..... (Table 12) ..... S= 171 ..... 105 X R
  - Ridge Strap Connections, (if collar ties not used) per page 21 ..... (Table 13) ..... T= –
  - Gable Rake Outlooker ..... (Figure 20) ..... N/A ft ≤ smaller of 2' or L/2 ..... L-STA18
- Truss or Rafter Connections at Non-Loadbearing Walls
  - Proprietary Connectors
    - Uplift ..... (Table 14) ..... U= – lb.
    - Lateral (no. of 16d common nails) ..... (Table 14) ..... L= – lb.
- Roof Sheathing Type ..... (per 780 CMR Chapters 58 and 59)
- Roof Sheathing Thickness
- Roof Sheathing Fastening ..... (Table 2) ..... 8d @ 6" o/c EDGE & 12" FIELD

Notes:
1. This checklist must be met in its entirety, excluding the specific exception noted in 2, to comply with the requirements of 780 CMR 5301.2.1.1 Item 1. If the checklist is met in its entirety then the following metal straps and hold downs are not required per the WFCM 110 mph Guide:
   a. Steel Straps per Figure 5
   b. 20 Gage Straps per Figure 11
   c. Uplift Straps per Figure 14
   d. All Straps per Figure 17
   e. Corner Stud Hold Downs per Figure 18a
   ** ALL REQ'D FRONT & REAR 1ST FL. ONLY
2. Exception: Opening heights of up to 8 ft. shall be permitted when 5% is added to the percent full-height sheathing requirements shown in Tables 10 and 11.
3. The bottom sill plate in exterior walls shall be a minimum 2 in. nominal thickness. pressure treated #2-grade.

1/2019 - 208

Michele Cudilo P.E. 1/17/20

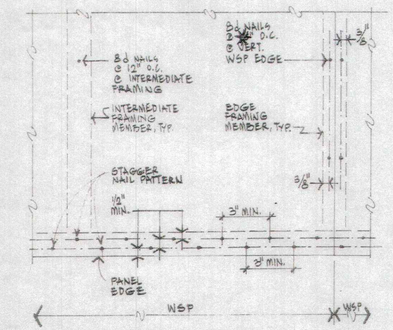
COMMONWEALTH OF MASSACHUSETTS MICHELE CUDILO STRUCTURAL No. 34774 REGISTERED PROFESSIONAL ENGINEER



WSP ATTACHMENT

NOT TO SCALE

FOR VERTICAL AND HORIZONTAL ATTACHMENT



WSP ATTACHMENT

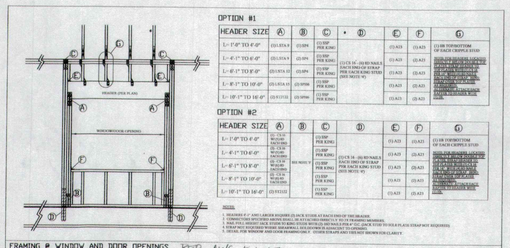
NOT TO SCALE

FOR VERT. AND HORIZ. ATTACHMENT

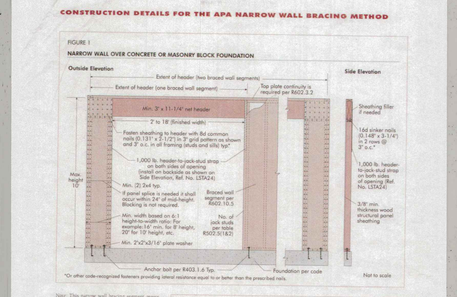
* PER CK'LIST

NOTES:

Wood Structural Panels shall be minimum thickness of 7/16" and be installed as follows:
- i. Panels shall be installed with strength axis parallel to studs.
- ii. All horizontal joints shall occur over and be nailed to framing.
- iii. On single story construction, panels shall be attached to bottom plates and top member of the double top plate.
- iv. On two story construction, upper panels shall be attached to the top member of the upper double top plate and to band joist at bottom of panel. Upper attachment of lower panel shall be made to band joist and lower attachment made to lowest plate at first floor framing.
- v. Horizontal nail spacing at double top plates, band joists, and girders shall be a double row of 8d staggered at 3 inches on center per figures below . Vertical and Horizontal Nailing for Panel Attachment



Michele Cudilo P.E. APPROVED



2006 SK-2

GENERAL NOTES AND MATERIAL SPECIFICATIONS: (Residential IRC Construction) SK-1

FOUNDATIONS
1. All workmanship to conform to the requirements of the Massachusetts State Building Code, latest edition.
2. For site location and grading information, see Site Plan, by others.
3. Assumed net allowable soil bearing capacity, σ= 3000 psf, for a medium sand/gravel composition. Other soils encountered, contact the Engineer of Record.
4. Concrete: Minimum 28 day strength, f'c = 3000 psi, 3/4" aggregate, designed per American Concrete Institute Code, latest issue, maximum slump = 4".
   a.) Anchor bolts ASTM A307 galvanized, min. 5/8" diameter, 12" long, w/ 2-1/2" hook spaced per Code Checklist, or in concrete piers w/ Simpson ABL-series base; SPACED 2' o/c for slab-on-grade construction (i.e. Garage, Basement, etc.).
   b.) All walls to have min. 24# top horizontal, 2" clear, to prevent shrinkage
   c.) All walls longer than 25' shall have vertical control joint with waterstopping between wall joint.

FRAMING
1. All workmanship to conform to the requirements of the Massachusetts State Building Code, latest edition.
2. Structural Design Loads:
   Dead Loads: Actual Weight of Building Components
   Live Loads: Snow Load = 30 psf (plus drift) with applicable reduction
   ATTIC Storage = 20 psf
   Living Floor = 40 psf
   Sleeping Floor = 30 psf
   Decks and Balconies = 40 psf
   Wind Load : Criteria used for 110 MPH Exposure B or C as noted per plans
3. Structural Steel: (as required)
   a. ASTM A572 Grade 50; shop paint with rust inhibitive paint. Thru-Bolts: ASTM A307, 1/2" diameter; punched holes: 9/16" diameter.
   b. Welds: Shop weld cap and base plates to columns; shop weld bearing plates to beams; use E70xx electrodes. Alternatively, field weld by certified welders.
   c. Deflection Criteria: L/360 total load deflection.
4. Timber Framing:
   a. All new timber framing: Spruce-Pine-Fir No. 2 with Fb=1000psi, E=1,300,000 psi, or better.
   b. Pressure treated timber (P.T.): Southern Pine with Fb=1300 psi, E=1,600,000 psi, or better.
   c. Laminated Veneer Lumber: All L.V.L. shall be 1.9E L.V.L. with Fb=2925 psi, E=1,900 ksi, Fv=285 psi, Fc_par =750 psi, Fc_per =1035 psi. Parallam (PSL): All PSL shall be min. 1.9E ES with Fb=2900 psi, E=1,900 ksi, Fv=285 psi, Fc_par=750 psi, Fc_par=2900 psi. Note that Microllam and Parallam may be used interchangeably.
      1. Deflection Criteria: L/480 Live Load, L/360 Total Load
      2. Optional: Provide shop drawing submittal of engineered lumber systems for approval prior to materials purchasing.
5. Metal Connectors:
   As manufactured by Simpson Strong-Tie Co. shall be handled and installed per manufacturer requirements, with all nail holes filled, with the size nail as specified by mfgr. or hereon.
   a. Rafter to Ridge Beam: Simpson LSS-series, or Simpson Straps over top of plywood, spaced 16" o/c.
   b. Rafter to Ridge Plate: Collar ties min. 1x6@ 16" o/c at top or Simpson Straps over top of plywood spaced 16" o/c
   b. Rafter ends to top plate: Simpson H2.5A
   c. Band Joist: Simpson straps at 4' o/c: CS-14R-48" centered at band joist
6. Bolts:
   Bolts in wood framing shall be standard machine bolts unless noted otherwise. Bolt holes in wood shall be 1/32" larger than bolt diameter. Bolt heads and nuts shall bear on standard malleable iron washers, or square plate washers. All nuts shall be retightened at completion of job.
7. Blocking:
   a. Blocking shall be solid blocking, 2x minimum, and full depth of member.
   b. Stud Walls: provide blocking at 8'-0" o/c, maximum height. Corners to be blocked at 48" o/c with plywood edge nailing to this blocking for the first 48" of these building corners.
   c. Nailing Schedule:
      Solid Blocking to Bearing — 2-8d toenails ea. side
      Blocking Between Studs — 2-10d toenails ea. end, or 2-16d end-nails ea. End
   d. Rafter Framing: Provide 2x blocking for 2 joist/rafter bays and spaced 48" o/c in joist and rafter plane at all edges; attach plywood edges to this blocking
8. Nailing Schedule:
   All nailing shall be in accordance with the WFCM Table 3.1 unless noted herein specifically.
   Multiple Studs — 16d @ 12" staggered
   a. All nails shall be common wire nails.
   b. Sub-bore where; nails tend to split wood.
9. Headers less than 4'-0", use 2-2x6; all others per MA State Building Code.

FOR CONSTRUCTION

PROGRESS 2-20-2020

ADDITION/ RENOV. REPLACEMENT TO THE GOVONI RESIDENCE ROCKLAND STREET HINGHAM, MASSACHUSETTS	ROBERT S. ROSE ARCHITECTS P.O. BOX 761 HINGHAM, MA 02043 (781) 749-0060 NAN. (508) 228-5081	S-4
STRUCTURAL NOTES & DETAILS		
SCALE: N.T.S. Feb 20, 2020		