

PROJECT DIRECTORY

OWNER:

TIM BELLANCENU

DESIGN PROFESSIONAL:

MACLEOD STRUCTURAL ENGINEERS, PA
90 BRIDGE STREET
WESTBROOK, MAINE 04092
TEL. 207-839-0980

GENERAL CONTRACTOR:

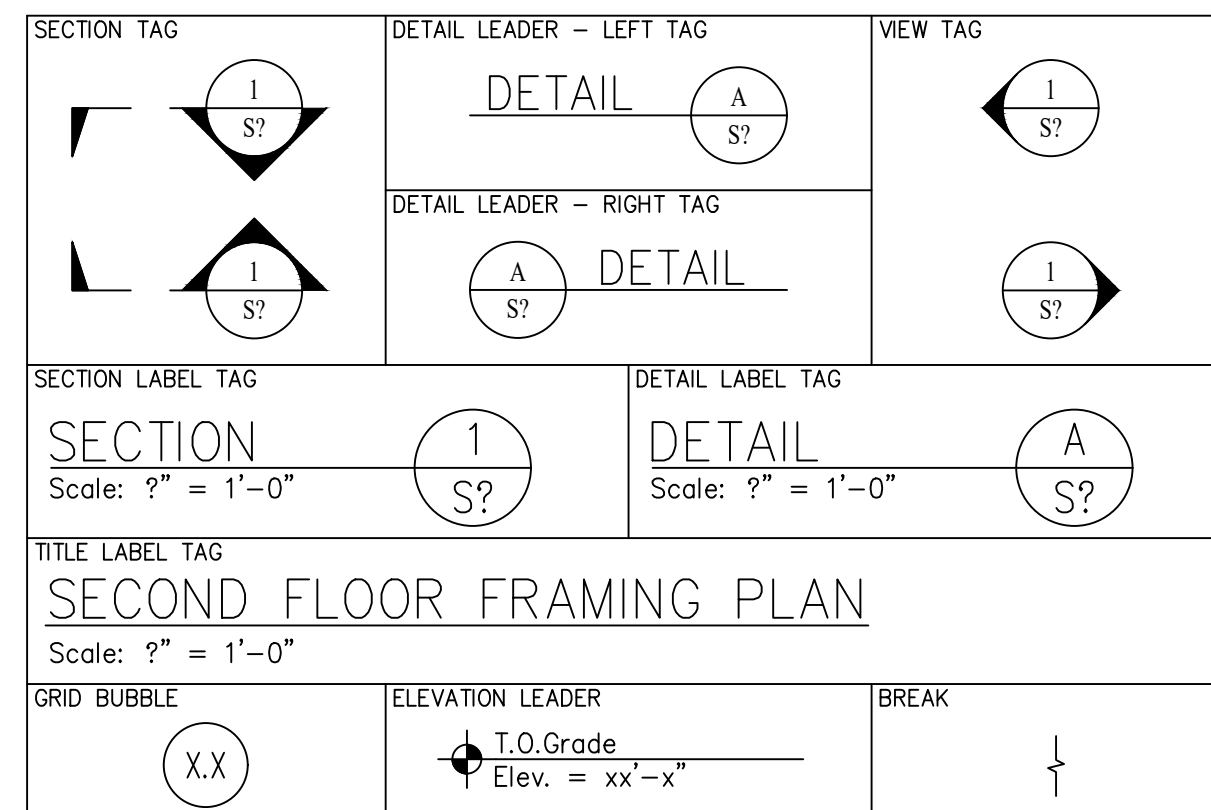
CHRISTIAN DARLING, BUILDER
PORTLAND, MAINE
TEL. 207-409-7048

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF -
1. ADDING A SECOND FLOOR IN-LAW APARTMENT OVER THE EXISTING GARAGE AND KITCHEN/LIVING ROOM OF THE HOUSE.
2. THE FOOTPRINT OF THE BUILDING IS UNCHANGED
3. EXISTING COMPONENTS TO REMAIN EXCEPT AS NOTED HEREIN

SYMBOLS

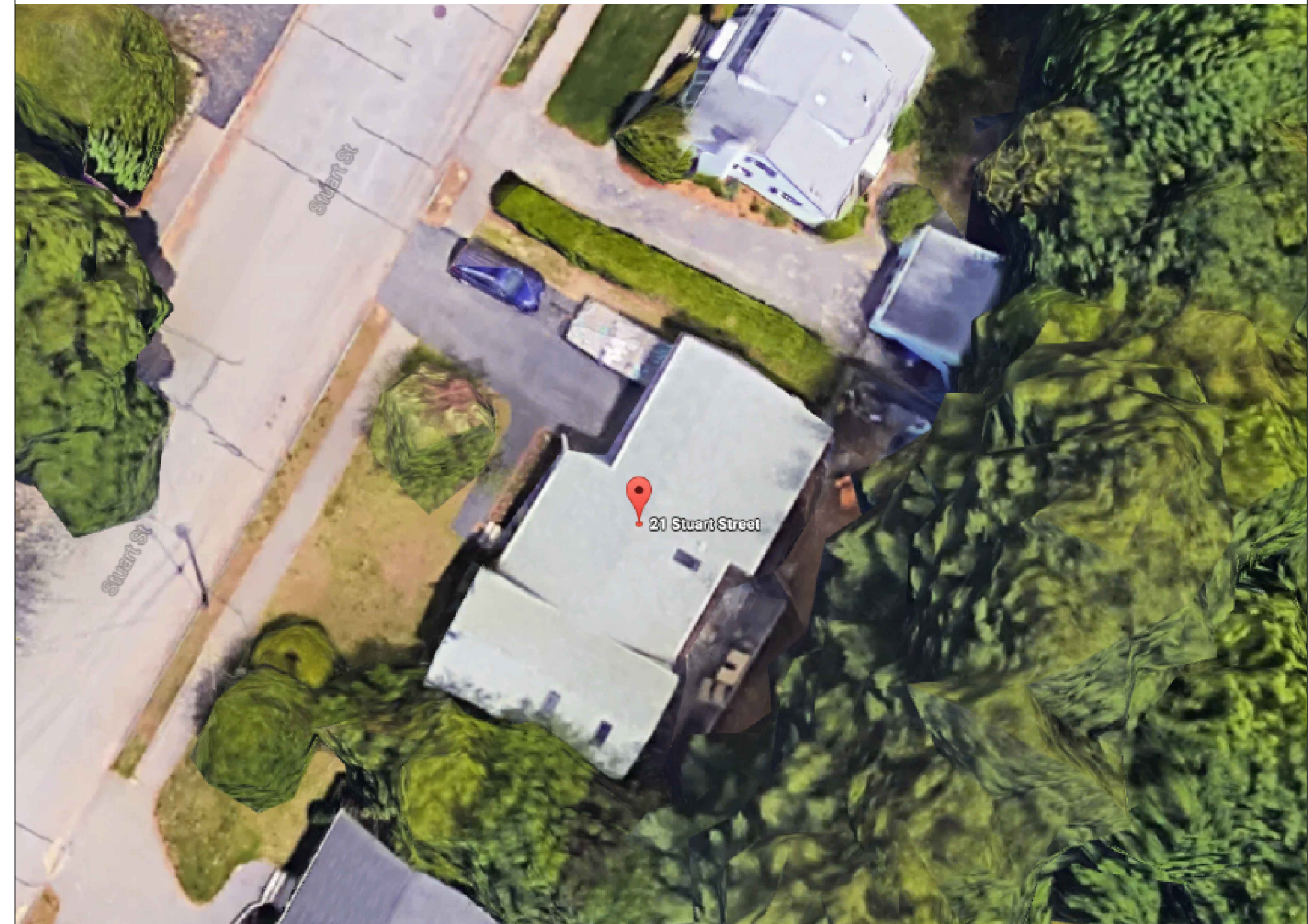
- 102 ROOM NUMBER/NAME
- 2 DOOR NUMBER
- 2 WINDOW NUMBER
- 2 REVISION NUMBER
- 2 WALL TYPE



MATERIALS

- EARTH
- CONCRETE
- BRICK
- WOOD
- BATT INSULATION
- RIGID INSULATION

21 STUART STREET
Portland, Maine



PLOT PLAN

GENERAL NOTES:

- THIS PLAN IS DESIGNED TO COMPLY WITH MAINE BUILDING AND ENERGY CODE, 2009 IRC, AND 2009 IECC
- ALL OTHER CODES SHALL BE THE RESPONSIBILITY OF THE OWNER/CONTRACTOR
- ALL MECHANICAL/PLUMBING/ELEVATORIAL DESIGN BY OTHERS
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO BEGINNING WORK

ENERGY CODE STANDARDS: ZONE 6

- FENESTRATIONS - Windows u-0.35, shg-0.38
-Doors u-0.25
- ROOF -R49 (R30 at Sloping Ceiling Areas)
- EXTERIOR WALLS -R19 (at New Construction)
- BASEMENT CONC. WALLS (Exist to Remain)

ENERGY CODE NOTES:

- ALL JOINTS AND PENETRATIONS SHALL BE CAULKED, GASKETED, OR COVERED WITH MOISTURE VAPOR-PERMEABLE WRAPPING MATERIAL COMPONENT R-VALUES & U-FACTORS SHALL BE LABELED AS CERTIFIED.
- INSULATION SHALL BE INSTALLED ACCORDING TO MFRS. INSTRUCTIONS, AND IN A MANNER THAT ACHIEVES THE REQ'D R-VALUE
- STAIR, ELEVATOR SHAFT VENTS, AND OTHER OUTDOOR INTAKE AND EXHAUST OPENINGS SHALL BE EQUIPPED WITH MOTORIZED DAMPERS. RECESSED LIGHTING FIXTURES INSTALLED IN THE BUILDING ENVELOPE SHALL BE TRYPE IC RATED AS MEETING ASTM E283, AND SEALED OR CAULKED.

CODE REVIEW NFPA 101
Chapter 24 One and Two Family Dwellings
24.2 Means of Egress - One primary means of egress and one secondary means of escape is required from every sleeping room and every living area. This design meets this requirement
24.2.5 Stairs - min. width =36in.
24.2.6 Hallways - min. width 36in.
24.2.7 Bulkheads - shall provide direct access to the basement, are exempt from requirements of 24.2.5.1
24.3.4.1 Smoke alarms shall be provided in each sleeping room, outside each separate sleeping area in the immediate vicinity, and on each additional level including attic and basement, and shall be interconnect per this code
24.3.5.2 Sprinkler system is required per NFPA 13D

Single Family Residence Code Review

21 STUART STREET
PORTLAND, MAINE

CODE REVIEW: IRC2009

CH3
SECT 301 DESIGN CRITERIA
Design Wind speed = 100mph, therefore design per IRC
Design Snow, Pg= 60psf, therefore design per IRC
For additional structural design criteria, refer to Structural notes.

SECT 302 FIRE RESISTANT CONSTRUCTION
R302.1 Exterior Walls shall comply with Table R302.1 Not within 5ft of property line.
R302.7 Under stair protection is required for accessible spaces below stairs
R302.9 Wall and ceiling finishes shall meet flame spread <200 and smoke index <450.
R302.10 Insulation materials including vapor barriers shall meet flame spread <25 and smoke index <450 except as otherwise provided in this section
R302.11 Fireblocking is required at floors and ceilings, top and bottom of stair runs, and openings at vents, pipes, ducts, cables and wires with materials approved in this code
R302.12 Draftstopping at floor/ceilings is not required for this project
R302.13 Recessed lights, fans, etc shall be installed per this section
R303 LIGHT VENTILATION AND HEATING
R303.1 Habitable rooms shall have glazing >8 % of floor area, with 4% operable
R303.3 Bathrooms, min. glazing area of 3 sq. ft. with half operable
R303.6 Stairways shall have artificial illumination per this section
R303.8 Heating shall be provided per the requirements of this code

R304 MINIMUM ROOM AREA requirements have been met in these plans
R305 CEILING HEIGHT min. of 7ft has been met
R306 SANITATION requirements have been met
R307 TOILET, BATH AND SHOWER SPACES comply with this section
R308 GLAZING shall comply with the requirements of this section
R310 EMERGENCY ESCAPE is required from the basement and sleeping rooms - Complies.
R311 MEANS OF EGRESS each unit in these plans has one egress in compliance with this section
R311.6 Hallways are > 36 in. wide
R311.7 Stairways, handrails, rise and run, nosings, headroom, etc are in compliance with this code refer to stairway sections and details within (these are existing)
R313 AUTOMATIC SPRINKLER SYSTEMS R313.2, new two family dwellings shall have an automatic sprinkler system complying with NFPA13D
R314 SMOKE ALARMS shall be provided in each sleeping room, outside each separate sleeping area in the immediate vicinity, and on each additional level including attic and basement, and shall be interconnect per this code
R315 CARBON MONOXIDE ALARMS shall be provided in the immediate vicinity outside sleeping areas

CHAPTER 6 WALL CONSTRUCTION

602.10.1 Braced Wall Panels
Mixed wall types are used
First Floor Walls are Existing
CHAPTER 11 ENERGY EFFICIENCY
Table N1101.2 Climate zone 6A
Windows, U= 0.35, SHGC = NR
Doors, U = 0.35
Glazed Fenestrations, U = 0.35, SHGC = NR
Attic, R= 49 (R30 if uncompressed over exterior walls and at Sloped Ceilings)
Exterior walls, R=20
Basement, R= 30 at ceiling

RESIDENTIAL SPECIFICATIONS:

FLOOR SYSTEM:
14" ENGINEERED JOIST @ 16"o.c.
2x8 SPF #1/2 JOIST @ 12"o.c.
SHEATHING AS INDICATED (3/4")

EXTERIOR WALLS:
2x6 Studs as Indicated (16"oc)
Sheathing as Indicated (7/8")
Air Infiltration Wrap
Siding/Finish as Indicated

INTERIOR WALLS:
2x4 Studs @ 16"oc
1/2" Gypboard as Indicated

ROOF SYSTEM:
Rafters/Trusses as Indicated
Sheathing as Indicated (5/8")
15# Underlayment
Ice & Water Shield at Eaves/Valleys
235# Asphalt Shingles as Indicated

INSULATION:
Exterior Walls R-19
Attic Cap R-49
Sills -Existing

VENTILATION:
Soffit - 2"Contin. Strip
Ridges - Contin. Shingle
Circulation Vents Between
Rafters/Trusses

BEAMS/HEADERS:
(3)2x6 Max. 40" Span
(3)2x10s Max 76" Span
Min. 4" Bearing all Beams

INTERIOR FINISHES:
1/2" Gypboard or As Indicated
At Walls/Ceilings
Flooring As Indicated
Paint/Stain As Indicated

Note: Items not Indicated Shall be Per Contract

DRAWING LIST:

- | | |
|------|------------------|
| A0.0 | COVER SHEET |
| A-1 | FLOOR PLANS |
| A-2 | ELEVATIONS |
| A-3 | FRAMING PLANS |
| S-1 | SECTIONS & NOTES |

ISSUED FOR PERMIT ONLY
NOT FOR CONSTRUCTION
4/26/17

These drawings are the property of MacLeod Structural Engineers, PA and are for the exclusive use of:

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WESTBROOK, MAINE 04092 207.839.0980

SECOND FLOOR ADDITION
21 STUART STREET
PORTLAND, MAINE

TITLE: COVER SHEET
DATE: 04.25.17 DRAWN BY: JLL DRAWING NUMBER:
SCALE: as noted PROJ NO: 2017-037 A-0.0

