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A3 Floor & Roof Framing Plans

South & West Elevation

Permit Information

Floor & Roof Plans

A5 North & East Elevation

SKYPOND ENGINEERING Matthew Khachaturian, PE (504) 940-8278 312 E Elkhorn Ave

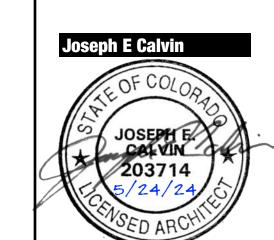
ARCHITECTURE & ENGINEERING

9 RESIDE

Vrain Ave CO 8051

Sheet Title Title Sheet & Site

May 24, 2024



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Project Narrative

There is an existing small home and freestanding garage on the property. This project entails the proposed installation of a new single-family modular home on a new concrete foundation at the south edge of the property. The new home is located clear of the other buildings to avoid fire ratings. The new home complies with State of Colorado requirements for modular homes - an approved set of the manufacturer's drawings is to be submitted with this set. The home will be protected by an NFPA 13D sprinkler system which is to be installed on-site after the installation of the home, but before occupancy. Fire sprinkler system drawings are to be submitted to the Town along with this set.

Aside from the foundation and sprinkler system, other minor on-site modifications are to be made to the house and are illustrated here-in... Addition of a small covered front porch on the north side of the house; Addition of a set of exterior stairs from the east-facing deck down to grade; Addition of decorative trim on the west and east elevations; and Bolstering of the east deck to support the weight of a hot tub

Work on the site to accommodate the new home includes.. Construction of a asphalt driveway (in place of existing unpaved driveway) from Highway 7 entering the site from the west. The driveway will include a concrete apron with drainpan near the existing garage to maintain existing drainage

Creation of a defined swale within the site to maintain existing drainage pattern Creation of an unpaved utility driveway south of the new home to allow vehicular accesses and deliveries to the south side of the house.

APPLICABLE CODES: 2021 International Residential Code (IRC)

2020 National Electric Code (NEC) 2021 International Energy Conservation Code (IECC) Estes Park Development Code (EPDC)

1,980 sf

2,340 sf

175 mph Exposure C (habitable structure)

Moderate to Severe

Slight to Moderate

43 psf

200 psf

105 psf

(3) toilets, (1) shower, (1) tub/shower, (1) clothes washer, (1) hose bib

(1) kitchen sink, (1) laundry sink, (1) dishwasher, (1) hot tub

FEMA Zone X — Low Risk

360 sf

Town of Estes Park

SUBDIVISION # Bonnie Brae Addition PARCEL #: 2530406038 LOT AREA: $31,680 \text{ sf } \pm (0.73 \text{ Acres})$ **ZONING CLASSIFICATION**: A-Accomidations OCCUPANCY: Single-Family Residence

CONSTRUCTION TYPE: Type V-B (IBC Classification) - sprinklered **BUILDING SETBACKS**: 25'-0" front (west) and south side adjacent to E-Estate zoning district 15' at north side are rear (east)

FLOOR AREA: Conditioned House

> Seismic Design Category: Subject to Damage From

> > Frost Line Depth:

Flood Hazard:

Roofing Classification:

Roof Snow Load:

Deck at Hot Tub:

Guards & Handrails:

Air Freezing Index:

UNIFORMLY DISTRIBUTED LOADS:

NEW PROPOSED PLUMBING FIXTURES:

Winter Design Temperature: 1°F

Mean Annual Temperature: 43° F

Presumed Soil Bearing Pressure: 2,500 psf

Ice Barrier Underlayment: < 4:12 pitch

Weather:

Termites:

Climate

Highest peak = Approx 19'-10" above natural grade. BUILDING HEIGHT: NUMBER OF STORIES:

DESIGN CRITERIA: Project Elevation: Ground Snow Load: Wind Speed: Altitude Correction Factor:

drawings graphically as well as those called for by note.

Provide shoring, temporary bracing, barricades and other measures as

. GC provide concrete splash blocks at all downspout locations.

10. Portable fire extinguishers shall be provided and installed in accordance with the current International Fire Code and Fire Code Standard number 10-1. All portable fire extinguishers shall be 10 lb multi-purpose ABC type, manufactured by JL Industries or approved substitute. Fire Department to verify the locations of all fire extinguishers.

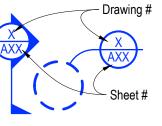
separate approval drawings for specifications and layout.

of materials.

14. The work illustrated on these drawings shall not interrupt the operation of surrounding off-site businesses or activities.

installed on the south elevation of the building. Location, size, etc to be reviewed and approved by the Fire Authority.

Graphics Legend



ROOM NAME & NUMBER Refer to Room Finishes Schedule DOOR NUMBER TAG

SECTION AND DETAIL

REFERENCES

Refer to Door Schedule **ELEVATION MARKERS - Relative to** Elevation 100'-0" which is typically the Main Level Finish Floor elevation SLOPE INDICATORS - For Elevations/Sections

and Plans respectively STAIRWAY RUN - indicates up/down direction, number and dimensions of treads and risers,

and overall dimensions CHANGE IN CONDITION



REVISION CLOUD AND NUMBER - Refer to revision dates listed in the title block below the sheet title

Electronic Documents



1'-0" increment contours - Historic Survey

provided by Owner does not have absolute

is approx 7665' at finished floor elevation

- noted on these drawings as 100'-0"

Ri-rap - min 2-layers 3" in 6" deep

taper from 2'-0" to 5'-0" wide

geotech fabric lined recess - 6'-0" long,

elevations for contours, Elevations at house

Documents and Resources are available on the project web site...

https://www.skypondengineering.com/project/tarczali/

Color Legend

In these drawings colors represent...



New Construction

Items that have no color represent existing conditions to be maintained. Items by Owner including prefabricated modular home - Not In

Site Plan Notes

- The Contractor shall be responsible for the locations and protection of all existing utilities shown on these plans, all existing utilities not shown, and all proposed utilities. The existing utilities shown have been plotted from available information. Contractor shall contact representatives from the respective utility companies to have all of their utilities and facilities located prior to construction.
- Contractor shall protect all adjacent improvements from damage and erosion. All disturbed areas shall be restored to a minimum of their original condition.
- All water taps to public mains shall be installed by Contractor & inspected by
- Contractor to verify positive drainage away from building with top of foundation wall & finish floor elevation.
- Provide footing drainage to day-light as required. All footing drains and retaining wall drains to have end grating for animal protection at day-light
- A registered land surveyor shall set the survey stakes for the footing & foundation form-work.

reseeded with native grasses.

Water and sanitary sewer pipe shall be bedded and installed in accordance with Town & District standard specifications.

All areas disturbed due to grading & other construction activities shall be

11. Excavated organic soils are to be reclaimed and stored on site for reuse in

specification requirements. Depressions shall not exceed ½" in 10'-0".

- Water meters shall not be located within driveways, parking areas or sidewalks. Coordinate with the Town of Estes Park Water Department.
- the appropriate public agency.
- terminations. Drainage tile to be inspected by the Architect.
- 10. Asphalt paving shown shall be 3" asphaltic concrete complying with Colorado Department of Transportation Grade S or SX specification over 4" sand and 4" gravel aggregate base course comply with CDOT Class 5 or Class 6

- . Do not scale drawings for dimensions. Dimensions are typically to face of
- Clean-up of rubbish and debris resulting from work shall be collected regularly from project site and legally disposed of.
- All weather-exposed surfaces shall have a weather-resistive barrier to protect the interior wall covering and exterior openings shall be flashed in such a manner as to make them weatherproof.
- Contractors are responsible for all materials and quantities shown in these
- The Contractor shall obtain all necessary permits to complete the proposed work and shall comply with all local, state, and federal regulations.
- requirements of Town of Estes Park and the 2021 IBC.
- necessary to ensure a safe building construction site. Establish a protected access route to the main house -- coordinate with Owner.
- Contractor to verify existing conditions and review discrepancies or inconsistencies of site and drawings with Architect prior to commencing
- 11. This project includes an NFFA-13D residential fire sprinkler system. Refer to
- 12. Field verify all rough openings and wall widths prior to ordering or fabrication
- 13. Coordinate the shutoff of power and other utilities with the Owner.

General Notes

- masonry or concrete and face of framing member, unless otherwise noted.

- All materials and construction shall be completed in accordance with the

- 15. 12" Tall permanent building address numerals of a contrasting color shall be

Vicinity Map Estes Park, Colorado

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Fire Sprinkler Riser

· Air conditioner condensor pad

as illustrated hereir

olementary Entrance porch

& steps as illustrated herein

FOUNDATION DESIGN:

Design of individual and continuous footings is based on a maximum allowable bearing pressure of 2000 lbs per square foot (dead load plus full live load) placed on the undisturbed natural soils, compacted structural fill or native stone, below frost depth.

CAST-IN-PLACE CONCRETE:

a. All concrete design is based on the "Building Code Requirements for Reinforced Concrete" (ACI 318).

- All structural concrete shall have minimum 28-day compressive strengths as follows: Footings 3000 psi; slabs on grade 3500 psi.
- Concrete shall be proportioned utilizing Type 1/11 cement. Concrete susceptible to freezing shall be formulated for maximum frost resistance in accordance with "ACI Manual of Concrete Practice".
- Contractor shall notify Architect of cold joint locations prior to or during concrete forming. Cold weather and/or hot weather concreting procedures shall be provided, if conditions warrant, as recommended in the "ACI Manual of Concrete
- Practice". All anchor bolts shall be located at a minimum of 5 bolt diameters from concrete edge. Concrete footing and foundation shall have min frost protection of 30" to grade. Exterior deck piers shall be poured to elevations
- as shown on plans. Contractor verify top of footing and top of concrete elevations with existing
- and proposed grade. Saw-cut slab control joints shall be min 1" deep & min 12'-0" oc or less as may be shown on Plans.
- Place new slabs over 2" sand over 10-mil poly vapor barrier over existing compacted soil. Refer to Sections for below-slab insulation.

REINFORCING STEEL:

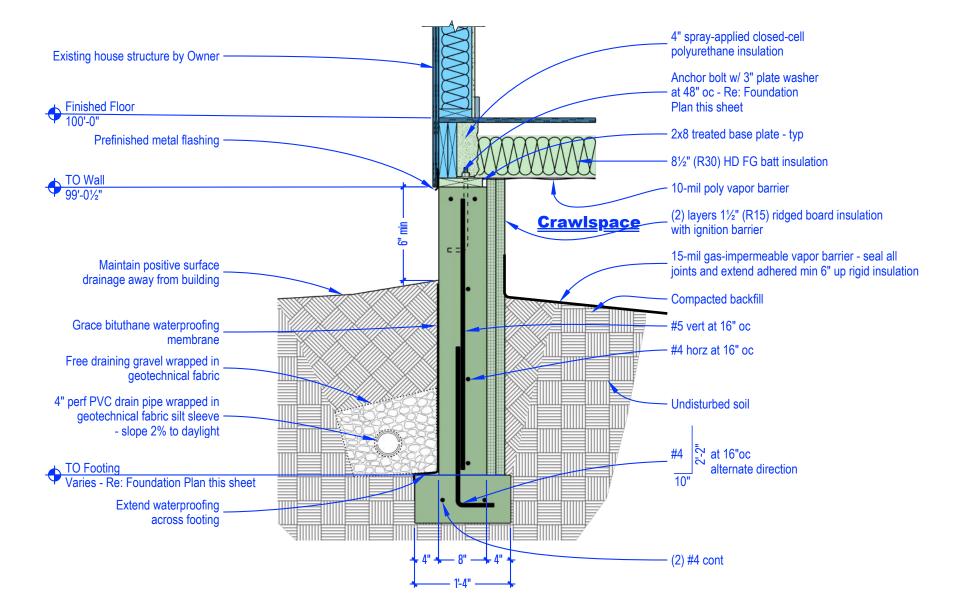
- a. All detailing, fabrication, and placement of reinforcing steel shall be in accordance with the "ACI Manual of Concrete Practice".
- Reinforcing bars shall conform to ASTM Specification A615 and shall be Grade 60, except ties, field bent bars where permitted by Note on Plan, or bars to be welded which shall be Grade 40.
- At splices, lap bars 36 diameters. At splices in masonry, lap bars 42 diameters. At corners, make horizontal bars continuous or provide corner bars. Around openings in walls and slabs, provide (2) #5's extending 2'-0" beyond edge of opening.
- Except as noted on the Drawings, minimum concrete protection for reinforcement shall be in accordance with ACI 318.
- Welded wire fabric shall conform to ASTM Specification A-185.

ANCHOR BOLTS:

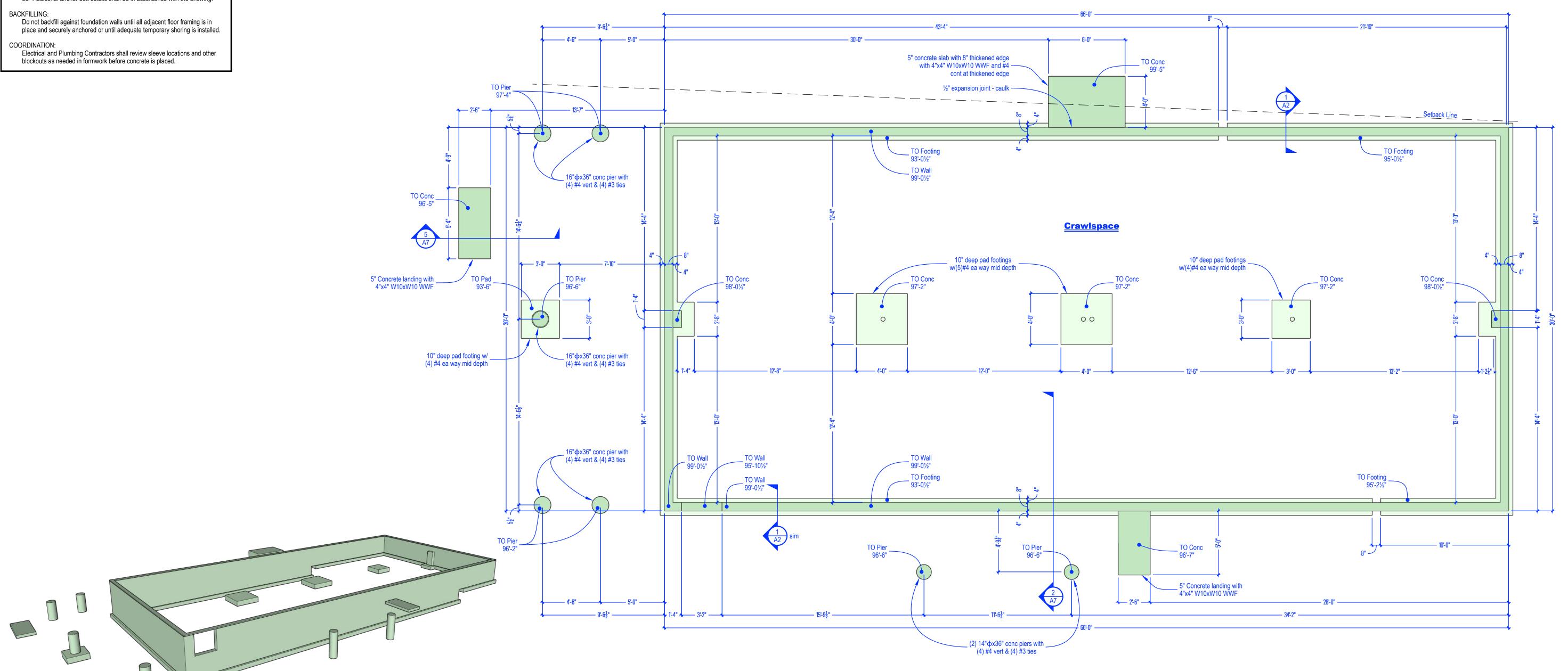
Shall conform to ASTM F1554 Grade 36 with a min ½" diameter by 12" length. Anchor bolts shall be placed within 12" from building corners, concrete cold joints, and sill plates and shall be spaced at a maximum of 48" oc. Additional anchor bolt details shall be in accordance with the Drawing.

3D Foundation View

Not to Scale



Typ. Foundation Section 0 6" 1'-0" 1'-6" 2'-0" 2'-6" Scale: 3/4" = 1'-0"



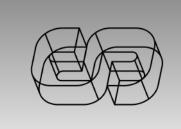
Foundation Plan Joseph E Calvin

Saint Vrain Ave Park, CO 80517

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



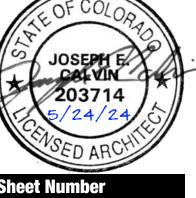
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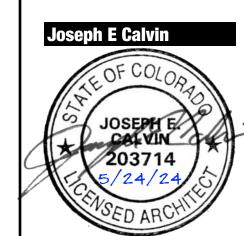
NCE NCE RESIDE

820 S Estes I **Sheet Title**

May 24, 2024



Vrain Ave CO 80517



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Nailing Schedule **Joint Description** Number of Common Nails **Number of Box Nails** a. Except where noted otherwise, all 2" lumber shall be Douglas Fir-Larch S4S **ROOF FRAMING** #2 or better, and all solid timber beams and posts shall be Douglas Fir-Larch Blocking to Rafter (Toe-Nailed) (2) 10d (2) 8d professional to have equal or better properties than Douglas Fir Larch #1.

2x6 studs shall be Douglas Fir-Larch #2 or better. 2x4 studs shall be Stud (3) 16d Rim Board to Rafter (End-Nailed) (2) 16d grade or better Douglas Fir-Larch or Hem-Fir unless noted otherwise on the FLOOR AND DECK FRAMING Joists to Sill, Top Plate or Girder (Toe-Nailed) (4) 8d (4) 10d Provide solid blocking at supports for wood joists. Within floor joist spaces

beneath solid or built-up columns noted on Plans, blocking of area equivalent to column above shall be provided for proper load transfer. Provide wind/seismic anchors at supports for all roof joists and trussed rafters. Anchor type shall be approved by Structural Engineer. Except as noted otherwise, minimum nailing shall be provided as specified in

"Fastening Schedule" of the IRC, 2003 edition. 2x6 studs shall be nailed to top plate with (2) 16d end nails and to sill plate with (3) 8d toenails or (2) 16d end nails. All floor and roof sheathing shall be APA rated sheathing, Exposure C.

#1. Any proposed reclaimed lumber certified or graded by qualified

. Top and bottom plates shall be Douglas Fir-Larch #2 and better.

Framing Notes

STRUCTURAL WOOD FRAMING:

Panel identification index and/or thickness shall be as noted on the Drawings. Screw and glue plywood floor sheathing to floor joists with adhesive conforming to Manufacturer's directions. Unless otherwise noted, steel connectors such as those manufactured by the

Simpson Company shall be used to join rafters, trusses, joists, or beams to other members at flush-framed conditions. Connector conditions not otherwise noted shall utilize Type U or Type HU hangers of a size specifically designed for the member supported, as shown in Manufacturer's published

. All wood framing members in contact with concrete or CMU shall be either redwood or pressure treated. All architecturally exposed beams to be weather-resistant with stained finish.

FRAMING NOTES: Exterior Walls:

a. All exterior walls are 2x6 studs at 16" oc unless noted or dimensioned otherwise. Exterior bearing wall heights above 10'-0" are to be constructed of 2x6 Hem Fir #2 Studs at 16" oc.

Provide (2) 2x8 header with (1) trimmer and (2) king studs at all new door & window openings unless otherwise noted. At beam bearing locations in stud walls, provide multiple-stud posts equal to

width of bearing member unless noted otherwise.

Pre-Engineered Trusses:

a. Wood roof truss systems shall be designed, manufactured, and installed in accordance with ANSI/TPI 1 National Design Standard for Metal Plate Connected Wood Truss Construction, the truss design drawing, and/or the manufacturer's code evaluation report.

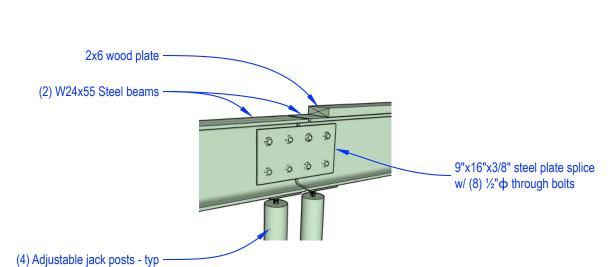
a. Shaded areas on Roof Plan represent overframing. Provide 2x6 or 2x8 rafters at 16" oc with 2x4 cripple posts at 48" oc max to trusses/framing below (stagger posts) use (2) 2x8 at ridge & valley members.

Interior Walls:

a. Interior walls shall be 2x4 studs full height at 16" oc unless noted or dimensioned otherwise.

Provide (2) 2x4 header with (1) 2x4 trimmer and (2) 2x4 king studs at each side of door & window openings typical unless noted otherwise on Plan.

Nail Spacing each end each end per joist (2) 8d (2) 10d Bridging to Joist (Toe-Nailed) each end (2) 8d (2) 10d Blocking to Joist (Toe-Nailed) each end (3) 16d (4) 16d Blocking to Sill or Top Plate (Toe-Nailed) each block Ledger Strip to Beam (Face-Nailed) (3) 16d (4) 16d each joist Joist on Ledger to Beam (Toe-Nailed) (3) 8d (3) 10d per joist (3) 16d (4) 16d Band Joist to Joist (End-Nailed) per joist (2) 16d Band Joist to Sill or Top Plate (Toe-Nailed) (3) 16d per foot **ROOF SHEATHING** Wood Structural Panels 10d see wall type notes Diagonal Board Sheathing (2) 10d 1"x6" or 1"x8" per support (3) 8d (3) 10d 1"x10" or wider per support





6"sq Wood timber post ——

12"sq Wood timber post w/

4x6 wood timber kicker

Refer to detail 5/A7 for

12x8 DF timber post

(part of modular package)

6" DF treated timber post —

stair framing at this location



(4) Adjustable jack posts - typ -

- 2x6 Wood plate

2x6 Wood fascia

- match existing

- 2x10 deck joists at 16" spanning 15'-0" (part of modular package)

W24x55 Steel beam - TO Steel = 99'-01/2"

joist hangers - typ

joist hangers - typ

New 2x10 deck joists x 4'-0" long in each bay with

(4) 2x10 beam (flush) (part of modular package)

New drop 4x6 DF beam

- New drop 4x6 DF beam

Simpson HUC46TF beam hanger

install before placement of house

Simpson LUS20Z joist hangers

Grace Vycor Deck Protector ice and water shield tape

Existing roof ridge

2x10 blocking between

existing roof trusses

W24x55 Steel beam - TO Steel = 99'-01/2"

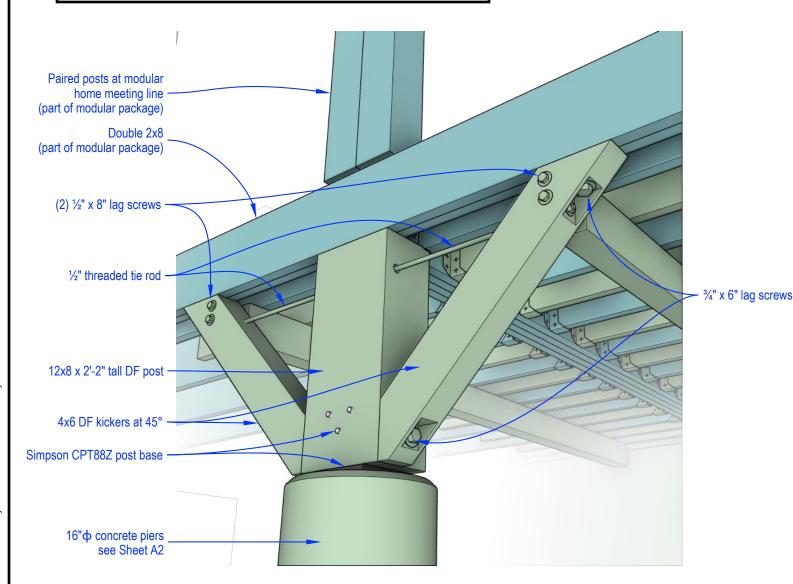
%" thick steel plate w/

- (8) ¾"**♦** through bolts beam splice - see detail 1/A3

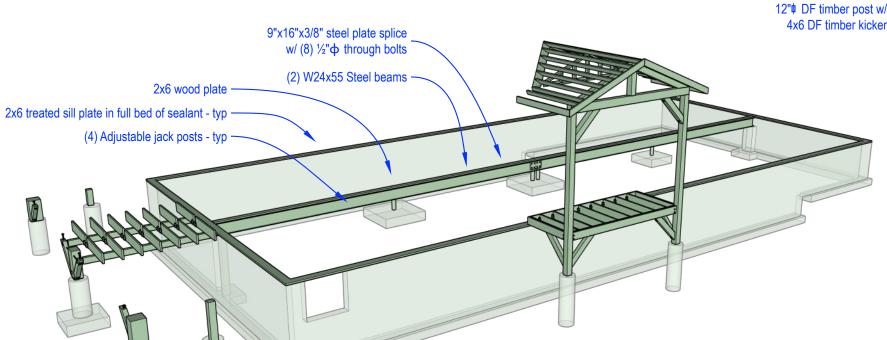
Refer to detail 3/A7 for stair framing at this location

4x6 Wood timber kicker

6x6 Wood timber posts full ht







3D Framing View
Not to Scale

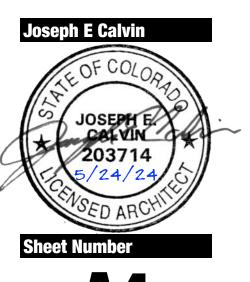
Deck Framing Plan
Scale: 1/4" = 1'-0"



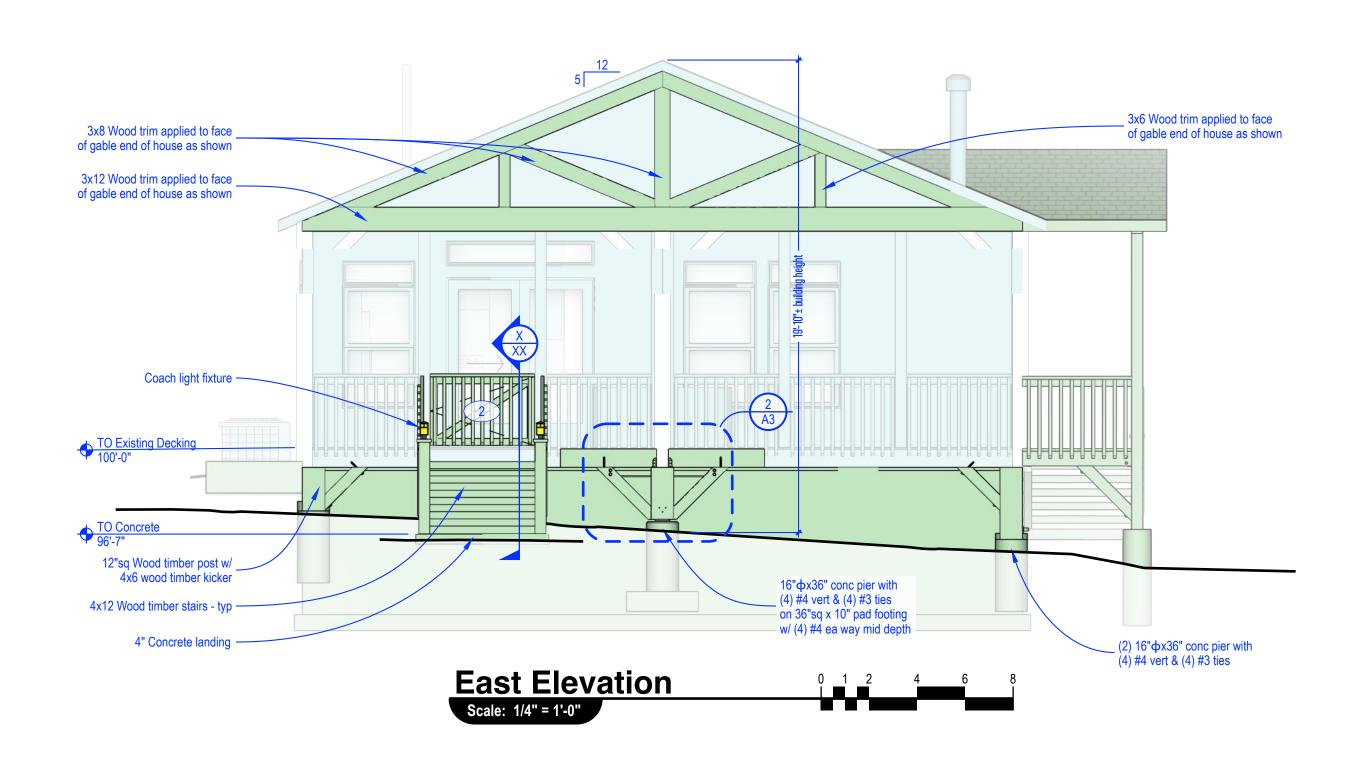
TARCZALI RESIDENCE

Sheet Title
Floor & Roof Plan

Date May 24, 2024



A4

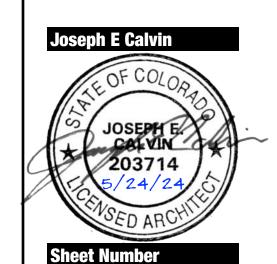


ARCZALI RESIDENCE

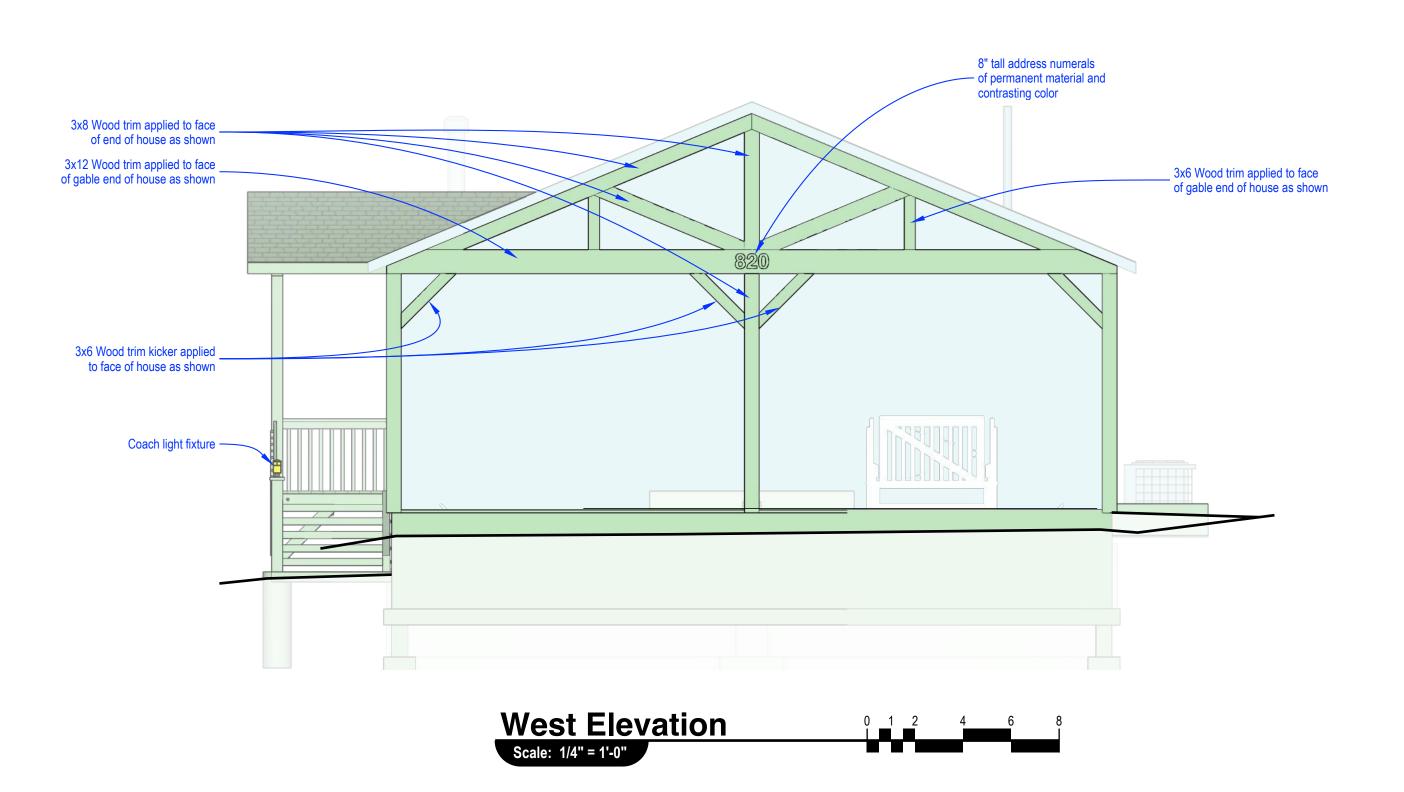
Sheet Title
North & East
Elevations

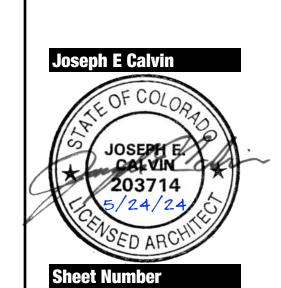
820 S Saint Vrain Ave Estes Park, CO 80517

Date May 24, 2024



A5





A6

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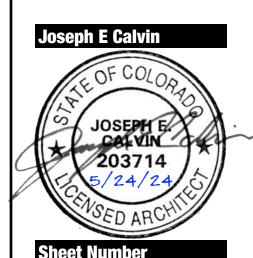
TARCZALI RESIDENCE

Vrain Ave CO 80517

Sheet Title
Sections & Details

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May 24, 2024



A7