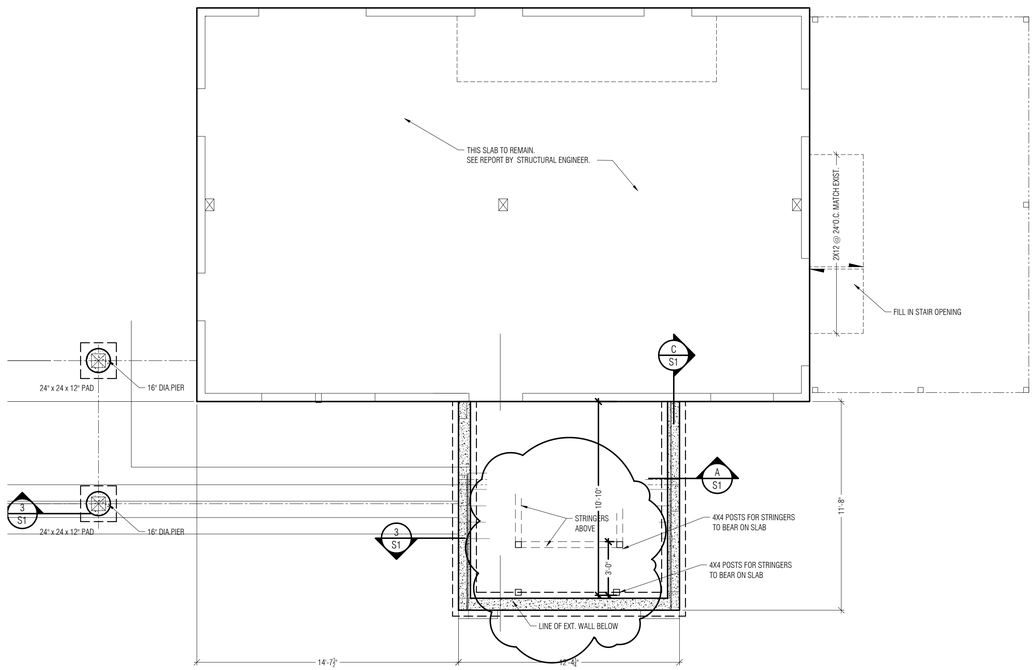
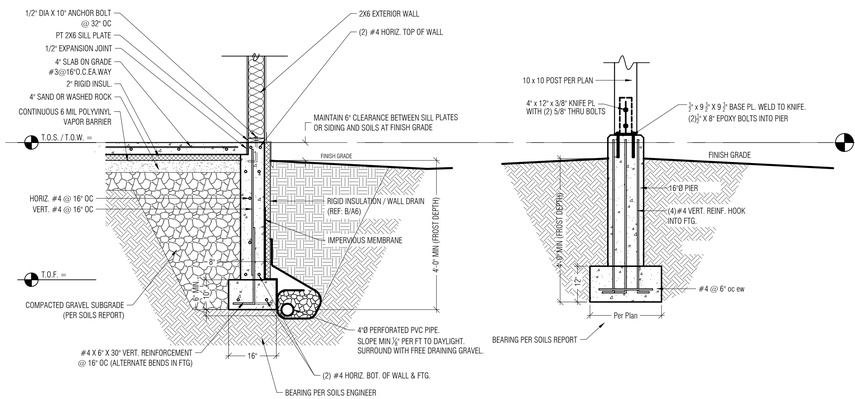


1 S1 FOUNDATION PLAN

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

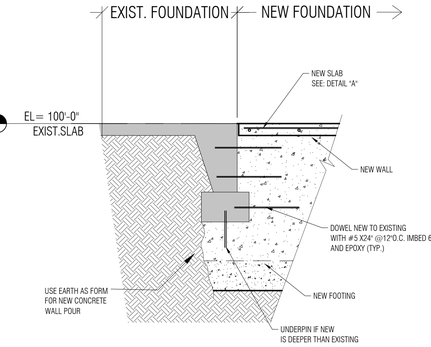


A S1 WALL DETAIL A

SCALE: 1/2" = 1'-0"
NOTE: WHERE THIS WALL IS 4'-8' USE #4 @ 12"OC WALL STEEL. TALLER THAN 8' USE #5 @ 12"OC

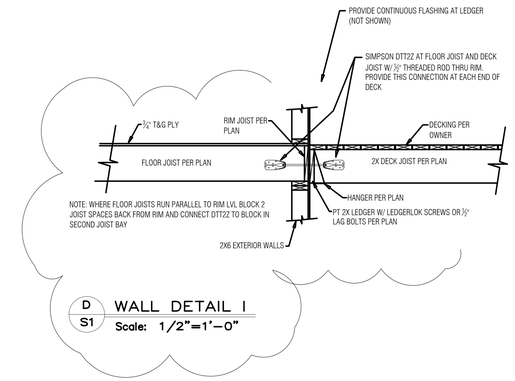
B S1 EXTERIOR PAD / PIER DETAIL

SCALE: 1/2" = 1'-0"



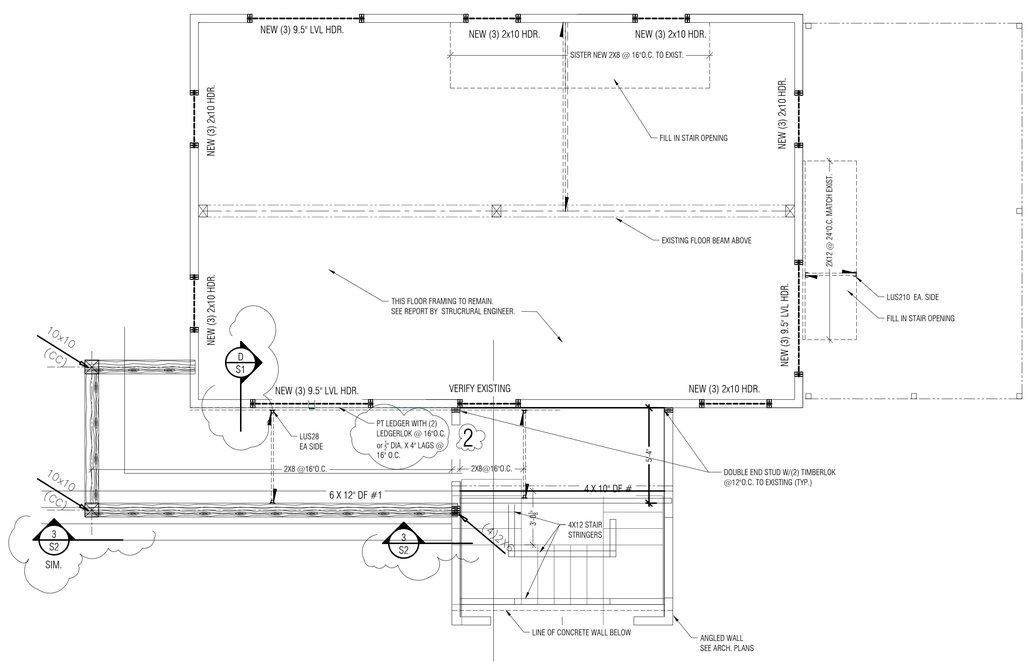
C S1 EXIST./NEW TIE

SCALE: 1/2" = 1'-0"



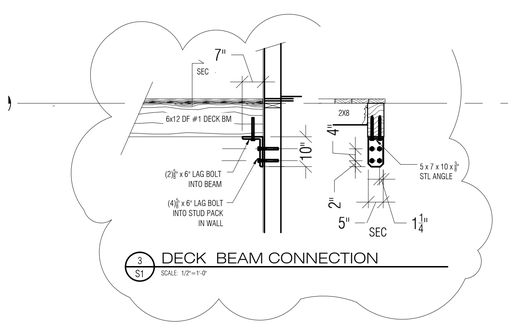
D S1 WALL DETAIL I

Scale: 1/2"=1'-0"



2 S2 MAIN FLOOR FRAMING

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



3 S1 DECK BEAM CONNECTION

SCALE: 1/2" = 1'-0"

3 12.30.19

GENERAL STRUCTURAL NOTES

RCRBD Record Set T.A.

03/31/2020

STATE OF COLORADO · EDWARD L. BECKER · B-2249 · LICENSED ARCHITECT

GENERAL

1. Verify all openings through floors, roof and walls with mechanical and electrical contractors. Verification of locations sizes, lintels, and required connections are the responsibility of the Contractor.
2. Provide all embedded items in structure as noted on the drawings and as may be required, including rebar, welded wire fabric, anchor bolts, weld plates and connectors.
3. The contractor is responsible for cross-referencing all plans to assure that no omissions or discrepancies exist that will adversely affect construction or the integrity of the finished product.

FOUNDATION NOTES

1. LIVE LOADS USED IN DESIGN

A. Roof	80 PSF
B. Floors	40 PSF + 10 PSF partitions
C. Wind	115 mph Vult
(residential:)	D. Seismic Zone B

2. SOILS: Assumed soil bearing pressure to be 2500 PSF.

Contractor to provide open-hole inspection and re-verification of sub-soil conditions and submit a written report of such conditions by the soils engineer to the Building Department. In the absence of a soil report, fill to be non-expansive and compacted to 100% standard proctor below footings, 95% below slabs and paving, and 90% for foundation backfill. Place fill in uniform 8" lifts at optimum moisture content with proper compaction equipment. Remove topsoil, organic material and any questionable material below slabs, pads or footers.

3. CONCRETE

E. All concrete shall conform to ACI 318 and 309.
F. All concrete for foundation walls and footings shall develop 3000-psi compressive strength in 28 days. All concrete for slabs on grade shall develop 4000-psi compressive strength in 28 days. All concrete shall be made with a minimum of 5 sacks of cement per cubic yard. Concrete for slabs shall have a minimum cement factor of 51/2 sacks per cubic yard of concrete. Exposed concrete shall have 5% + entrapped air content, and shall be placed with 4" maximum slump.
G. All walls are 8" thick unless otherwise noted on plans.
H. Unless otherwise noted, all footings shall be 1'-4" wide x 10" thick under 8" walls and 1'-8" wide x 10" thick under 10" walls.
I. Form footings to exact widths noted. Provide void forms under all foundation walls where "void" is dimensioned on plans.
J. T.O.F. denotes top of footing elevation.
K. T.O.W. denotes top of concrete wall.
L. T.O.S. denotes top of slab.
M. Do not backfill against any foundation or retaining wall until supporting floor systems are in place and securely anchored, or adequate wall support is provided. Backfill to be granular free draining material. Before placing finish topsoil, we recommend capping backfill with a Mirafi fabric under 12" of water impermeable material (e.g. clay). Refer to soils report.
N. Inspect soils during excavation and before construction of any part of the foundation to verify assumed bearing pressure values.
O. Provide 1/2" diameter x 10" long anchor bolts at 32" o.c. to connect framing to top of wall and where not otherwise shown. Galvanized bolts required for pressure treated plates. Anchor bolts and/or expansion anchors for sill plates and ledgers shall extend the distance required to bolt wood members shown without countersinking. Expansion anchors shall be Ankr-tite "Wej-It", Hilti "Kwik Bolt", or an approved equal.
P. Cast in place concrete shall be poured continuously so as to prevent cold joints. Slabs, beams, and walls shall not have joints in a horizontal plane. Any stop in concrete work will be made with vertical bulkheads, keys and dowels, unless otherwise shown. Construction joints shall be as detailed, or as approved by the Architect. In the absence, provide tooled construction joints in slabs with no dimension greater than 15 feet and no area greater than 150 S.F.
Q. All piers, walls, footings, etc. to bear on unweathered underlying undisturbed natural soils while maintaining the minimum 4'-0" frost depth. Concrete shall not be placed on frozen, muddy, or saturated soil and shall be protected from freezing for 7 days.
R. Provide an approved hardener and sealer to the surface of all slabs.
S. Provide minimum 2" rigid insulation (R-10-13 min) over foundation waterproofing and concrete wall unless shown otherwise. Foundation insulation and waterproofing to be installed in accordance with the soils report, IBC/IRC and local codes, and accepted construction practice.
T. Drain all exterior footings with 4" diameter rigid drain tile to daylight in a 12" X 12" washed rock envelope at lowest levels of excavation and cover with mirafi filter fabric. Provide clean-outs and cover daylighted ends with wire screening. Slope minimum 1/8" per foot. Exercise caution that drain tile is not damaged while compacting fills. Test drain tile before and after backfilling. Refer to soils report.
U. Provide bond breaker or expansion joint material at perpendicular concrete interfaces for proper slippage.
V. Provide beam pockets as necessary for the proper bearing of all beams.
W. Slab surfaces to be left free from trowel marks, uniform in appearance, and with a surface plane tolerance not exceeding 1/8" in 10'-0" when tested with a 10' straightedge.
X. Finish all concrete wall tops to within 1/8" of specified elevations.
Y. Provide a 1/2" expansion joint material at all slab to wall, footing, or column interfaces to allow for proper slip jointing.
Z. Provide a 6 mil poly barrier under all interior slabs for moisture protection and as a bond breaker.

4. REINFORCING STEEL

A. All reinforcing bars shall be ASTM A615 - Grade 40 unless specifically noted on plans.
B. All welded wire fabric to be ASTM A185.
C. Assure proper protection of reinforcement steel per ASTM, ACI and IBC.
At a minimum:

Concrete cast against and permanently exposed to earth	3"
Concrete exposed to weather	1 1/2"
Other	1 1/2"

D. All reinforcing shall lap 36 bar diameters (1'-0" min.) unless otherwise noted.
E. When the contractor requires construction joints other than those shown on the drawings, the reinforcing shall run continuously through the joint and adequate shear transfer reinforcing shall be added.
F. Welded wire fabric shall lap so that the crosswires lap one space plus 2". Welded wire fabric shall be placed on top of all bars, sleeves, conduits, etc.
G. Provide minimum 6x6-W1.4xW1.4 WWF or polyfiber reinforcement in all slabs per manufacturer's instructions.
H. Provide minimum (2) #5 bars parallel to and extending 24" beyond each side of openings 1'-0" and larger in slabs and walls unless otherwise noted.
I. Make all bars continuous around corners or provides corner bars of equal size and spacing.
J. Provide all accessories necessary to support reinforcing at the positions indicated. Detail bars in accordance with the latest edition of the ACI Detailing manual and ACI Building Code Requirements.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL

A. All structural steel shall conform to ASTM specifications A36 except pipe columns, which shall conform to ASTM A53 Grade B, and steel tube columns, which shall conform to ASTM A500 Grade B. Anchor bolts shall be A307 steel and miscellaneous embedded items shall be A36 steel.
B. Structural steel shall be detailed and fabricated in accordance with latest provisions of AISC "Manual of Steel Construction".
C. Minimum welds to be per AISC and/or AWS, but not less than 3/16" continuous fillet unless otherwise noted. Welding quality control shall be per AWS.
D. All welders shall have evidence of passing the American Welding Society Standard Qualifications Test as detailed in AWS D1.1.

2. STEEL JOISTS

A. Steel joists shall be designed, fabricated, and erected in accordance with "SJI Standard Specifications" for Open Web K series joists and in accordance with notes and details on structural drawings.
B. Where required, provide joists with special end bearings and joist extensions, as shown in drawings.
C. Provide continuous horizontal bridging for all joists in accordance with SJI requirements.
D. Provide bottom chord extensions where required to support ceilings or fireproofing.

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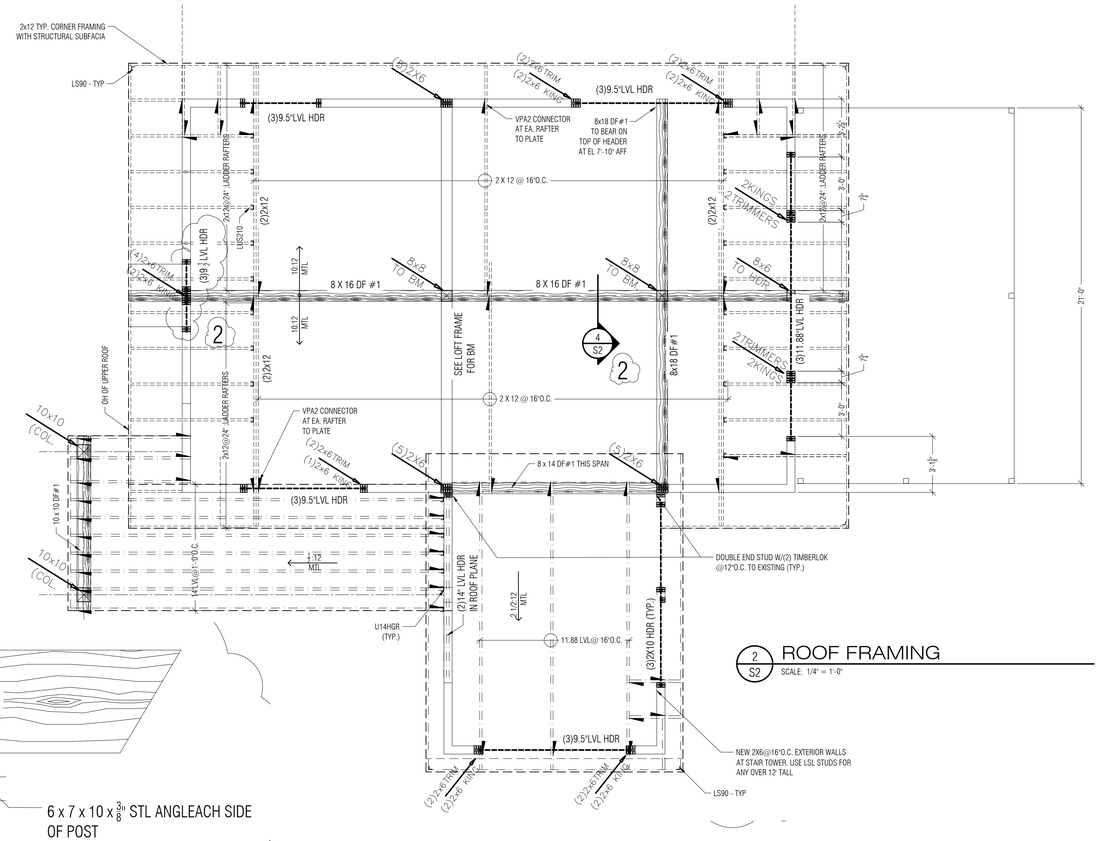
A Home renovation for
THE CHARLES ATWOOD COX
910 Yahmonite
Steamboat Springs, Colorado

TITLE
FLOOR FRAMING
FOUNDATION

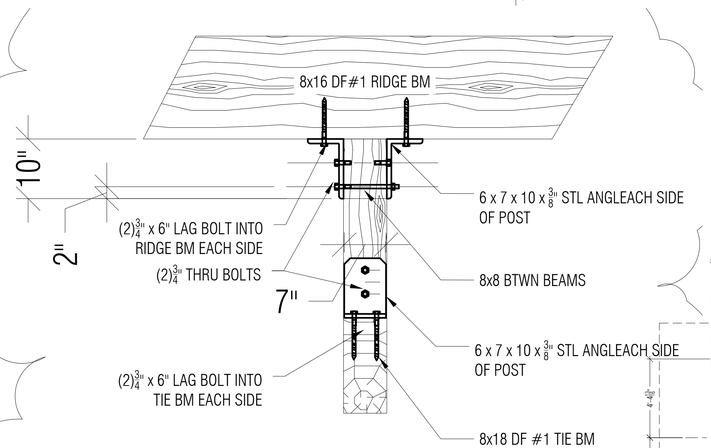
JOB NO. 1910
DRAWN elb
CHECKED
DATE 10.03.2019 PERMIT
REVISIONS:

NO.	DATE
1	10.16.19
2	12.10.19
3	12.30.19

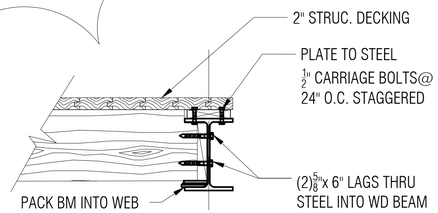
DRAWING NUMBER
S1
OF DRAWINGS



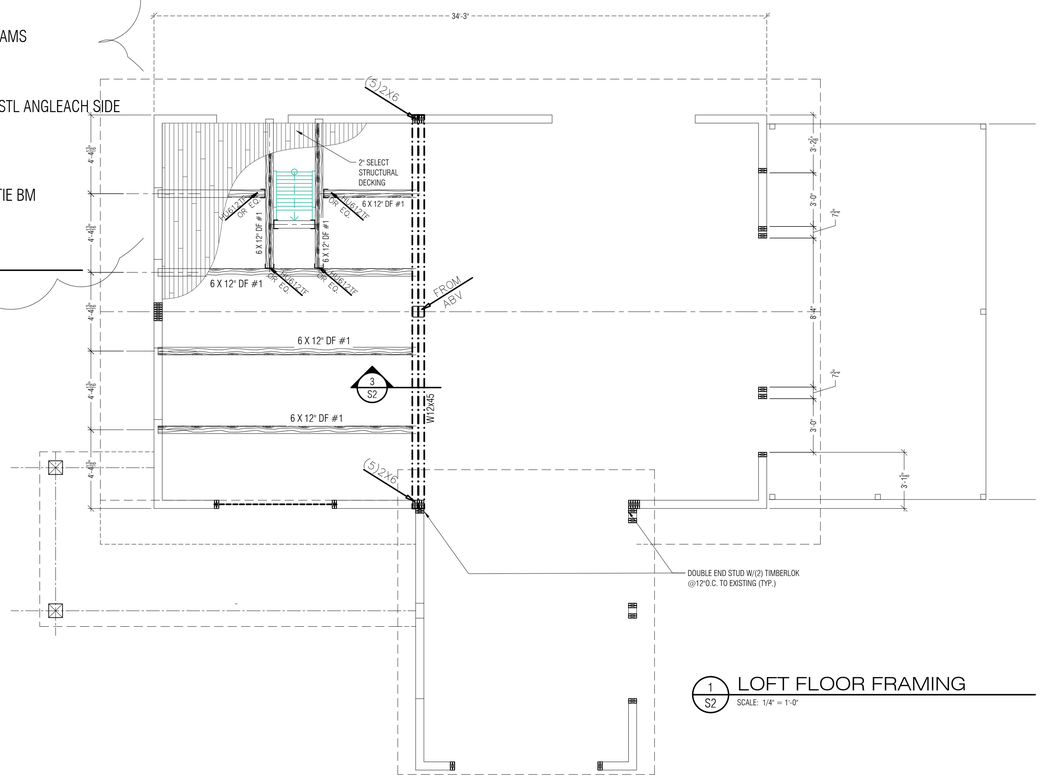
2 S2 ROOF FRAMING
SCALE: 1/4" = 1'-0"



4 S2 BEAM CONNECTION
SCALE: 1"=1'-0"



3 S2 DECK DETAIL
SCALE: 1"=1'-0"



1 S2 LOFT FLOOR FRAMING
SCALE: 1/4" = 1'-0"

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T.A.
03/31/2020

FRAMING / VAPOR / OTHER MATERIALS

GENERAL STRUCTURAL NOTES, CONTINUED

FRAMING NOTES

1. STRUCTURAL WOOD FRAMING

A. Framing plans show structural requirements only. Additional members may be required for blocking, nailers and code requirements.
B. Except where noted otherwise; all 2" lumber shall be Douglas Fir-Larch S4S No. 2 and better.
C. 2x4 non-bearing studs may be Standard grade and better Douglas Fir-Larch. Finger jointed studs, if used, shall be of equivalent grade and species required of non-finger jointed studs, and shall not be used at exterior walls.
D. Top and bottom plates shall be Douglas Fir-Larch No.2. Provide pressure treated or redwood plates where wood comes in contact with concrete. Galvanized bolts required for pressure treated plates.
J. Provide sill sealer under the sill plate on all floors prior to standing the wall.
E. Provide solid blocking at supports for wood floor and joists and 1x3 cross-bridging at mid-span or at lines of 8'-0" maximum spacing.
F. Except as noted otherwise, minimum nailing shall be provided as specified in Tables found in Chapter 23 "Fastening Schedule" of the 2015 IBC.
G. Where light gauge framing anchors, column bases, or caps are shown or required, they shall be Simpson "Strong Tie" or equal ICBO approved connectors and shall be installed with the number and the type of nails or bolts recommended by the manufacture to develop the rated capacity.
H. Multiple studs called for on the drawings may bear on the wall plate if full width solid blocking is provided through framing system. Headers and/or beams shall bear fully on all studs called for, cripple studs are additional.
I. Maintain 6" clearance between untreated wood or siding and soils at finish grade.
J. Provide (2) studs under each end of all load bearing beams or headers >-38" in width (UNO).
K. Connect trusses to all bearing points with Simpson H3 connectors @ 48" o.c. (UNO). Connect all rafters and trusses to blocking with (3) 16d nails. Trusses and 2x rafters to plate below with (3) 16d toenails. Connect blocking to plate below with (3) 16d toenails minimum.
L. Solid block all bearing walls and posts for continuity to foundation.
M. Block all trusses, outlookers, rafters and joists at all bearing points.
N. All joists, trusses, and rafters to stack over studs below. Provide end joist where studs above do not stack over studs below. Posts to stack over equal below (UNO).
O. Wall studs to be continuous from floor to floor, or floor to roof.
P. Connect joists to blocking with a minimum of (2) 16d nails and connect joists to plate or beam below with a minimum of (4) 16d toenails.
Q. Connect floor and roof ply to joists below with 8d nails at 6" o.c. edge, 10" o.c. intermediate.
R. OSB (preferred over plywood) sheath 100% all exterior walls. Nail with 8d's 6" o.c. edge, 12" o.c. field.
S. All headers (3) 2x10 min unless noted otherwise.
T. Provide joists or blocking under all interior walls.
U. Shear wall sheath one side fully with 1/2" CD ply with 8d's at 6" o.c. edge, 12" o.c. field. Double studs at each end of shear wall. Connect to log walls with 3/4" x 14" lag bolt each course. At 2x6 T&G roof decking, connect to shear wall single top plate with 10d's @ 4" o.c. Connect bottom plate to floor ply with 8d's at 4" o.c.
V. Logs - 12" diameter Engleman Spruce or Lodgepole Pine full rounds with moisture content at or below 19%. Fb >-875 psi. Spike double log beams with #4 rebar @ 24"oc. Contractor should anticipate and allow for any log shrinkage.
W. Connect log rafters and beams to log bearing points with a minimum of (2) 5/8" Lag-bolts with 8" minimum penetration (TYP, UNO). Use 2" washers (UNO).
X. Lag all stud wall end studs to D logs with 3/8" diameter Lags @ 24" o.c.
Y. Log construction shall employ standard proven construction methods which will ensure the stability of logs under the floor, roof and wind loading shown on these drawings. The following recommendations are not intended to dictate construction methods or modify proven methods by established reputable contractors.
1. Subsequent lays of logs in walls shall be spiked together, not over 4'-0" on center, with spikes which will penetrate the lower level of logs to at least 1/2 of the log depth.
2. Logs shall be lapped at corners with lateral support provided by spikes, bolts or scribed log cuts.
3. Vertical jamb members attached to each log layer with spikes or bolts shall stabilize all log openings.
4. Where noted on plans, logs under vertical loads shall be stiffened by vertical stiffeners attached to the upper and lower framing and to the log wall, as noted or as appropriate.
5. Do not splice logs above openings. The minimum number of un-spliced logs over openings is noted on the drawings.

2. STRUCTURAL GLUED LAMINATED TIMBER

A. Lumber shall be of such stress grade to provide glued laminated beams with allowable stress values of 2400 psi in bending. Glue laminated timber shall be of such stress grade to provide glue laminated beams with combination symbol 24F-V4. Beams in cantilevered or reverse bending shall be 24F-V8. Micro-lam (LVL) beams to be 2600 psi and Parallam (PSL) beams to be 2900 psi in bending. Multiple LVL and PSL to be assembled with Fastenmaster TrussLOK II connectors.
B. Members shall be Architectural Appearance Grade.
C. Adhesives shall meet the requirements for wet conditions of service.
D. All rim board to be Timber Strand LSL 1 1/4" x 11 7/8" Grade 1.3 with allowable bending stress of 1700 psi and allowable shear stress of 400 psi parallel to grain. All Timber Strand LSL beams & rafters to be Grade 1.55 with allowable bending stress of 2325 psi and allowable shear stress of 310 psi parallel to grain.
E. All Parrallam beams are PSL 2.0E to have allowable bending stress of 2900 psi and allowable shear stress of 290 psi. Parrallam columns are PSL 1.8E to have allowable compressive stress of 2500 psi parallel to grain.

3. PLYWOOD

DFPA Grade-Trademarked "C-D Exterior" conforming to American Plywood Association Standard PS 1-83, unless otherwise noted below or on the Drawings. See Drawings for thickness and/or panel index.
1. Floor sheathing shall be sanded, tongue and grooved plywood.
2. Interior stair treads and risers may be DFPA "C-D Interior".
3. All floor plywood to be glued and nailed.
4. Place plywood with 8'-0" dimension perpendicular to framing with end joints staggered.
5. Horizontal joints of all wall sheathing and gypsum board shear walls shall be blocked and edge nailed.

4. MANUFACTURED JOISTS

A. "Trus Joists" shall be joists using plywood web with micro/lam flange or pinned tubular steel web with kiln dried wood as noted on framing plans, and as manufactured by Trus Joist (a Weyerhauser Business), Boise Idaho. Materials and methods used in the erection and bracing of "Trus Joist" members shall comply with recommendations presented in the "Trus Joist Design Manual". Alternate systems to be approved by Architect. Provide approved Microlam LVL or Timberstrand LSL rim system. Shop drawings to be provided by manufacturer to Building Department.
B. "BCI-joists' shall be joists using plywood web with micro-lam or solid wood flange or pinned tubular steel web with kiln-dried wood as noted on framing plans, and as manufactured by Boise Cascade Corp. Materials and methods used in the erection and bracing of "BCI-Joists" members shall comply with recommendations of the manufacturer and the U.B.C. Alternate systems to be approved by Architect. Provide approved rim joist system.

5. TRUSSES

A. Roof trusses shall be fabricated from 2x wood members and metal connectors to the sizes and slopes on the drawings.
B. Design calculations, truss layout and shop drawings shall be submitted and approved prior to fabrication. Ceiling live load of 10 PSF shall be applied to bottom chords.
C. Member layout and sizes shall be at the discretion of the truss designer, except that no member shall be less than 2x4 and the minimum chord size will be met.
D. Blocking and bracing shall be installed according to the approved design, and as detailed on the drawings.
E. Multiple trusses to be assembled with Fastenmaster TrussLOK-Z connectors.

6. VAPOR BARRIER

A. The Contractor is to insure that the building is to be constructed as airtight as possible, and that all penetrations and vapor barriers within the exterior walls and roof cavities are sealed.
B. All vapor barrier is to be 6 mil. cross-laminated poly.
C. Install vapor barrier in widest sheets to avoid splices and overlap. At ceilings, overlap wall vapor barrier where joints must occur; lap and ensure that poly joints occur at a framing member or other solid backing.
D. All seams must be sealed with 3M #8086 Contractor Sheathing Tape or 3M Super 77 Poly Spray Adhesive.
E. At windows and doors, seal vapor barrier to trimmer studs of windows and doors with 3M Super 77 Poly Spray Adhesive or Tremco Acoustical Sealant.
F. After doors and windows are set in openings, fill the rough opening joint between the trimmer stud and frame with non-expanding polyurethane foam sealant, or equivalent.
G. To seal the ceiling vapor barrier to an interior partition, spray 3M Super 77 Poly Spray Adhesive to interior portion wall top plate (edges) and overlap vapor barrier down a minimum of 6".
H. All outside wall or ceiling electrical boxes should be set within an air/vapor box (Essco). Tu-Tuff to be sealed to those boxes with acrylic latex adhesive tape (3M 8086).
I. All wire penetrations into insulated spaces to be caulked with an expanding urethane caulk.

7. OTHER MATERIALS

A. Exterior wall sheathing where required shall be 1/2" CDX Plywood or exterior grade OSB. "Tyvek" air infiltration barrier to be installed behind all siding.
B. Bolts shall conform to ASTM A307. Lag bolts shall be fabricated from ASTM A307 steel to the standard dimensions outlined in the AITC Manual. Provide washers for all bolts bearing directly on wood.
C. Box nails, staples, and power driven nails may be substituted for common nails only upon approval of the Architect. Submit samples and manufacturer's supportive data for approval at least 2 weeks prior to their anticipated use on the project.
D. Adhesives for gluing floor plywood shall conform to Specification AFG-01 of the American Plywood Association.
E. Adhesives for assembly of fabricated timber members, except glue laminated structural members, shall be a casein type or resorcinol resin type, waterproof glue, conforming to ANSI/AITC Specification A190.1-1983.
F. Wood preservative shall be zinc naphthanate 6% (copper naphthanate as alternate).
G. Wood products treated with pentachlorophenol, arsenic or chromium shall not be used.
H. Redwood decking to be back-primed clear or select grade and attached with 3" coated deck screws.

END OF GENERAL STRUCTURAL NOTES

STATE OF COLORADO
EDWARD L. BECKER B-2249
LICENSED ARCHITECT

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©

A Home renovation for
THE CHARLES ATWOOD CO.
910 Yahmonite
Steamboat Springs, Colorado

TITLE
ROOF FRAMING
LOFT FRAMING

JOB NO. 1910
DRAWN elb
CHECKED
DATE 10.03.2019 PERMIT
REVISIONS:

NO.	DATE
1	10.16.19
2	12.10.19

DRAWING NUMBER
S2
OF DRAWINGS