

212 Chenega Ave. Valdez, AK 99686

Meeting Agenda - Final

Planning and Zoning Commission

Wednesday, March 12, 2025 7:00 PM Council Chambers

Regular Meeting

REGULAR AGENDA - 7:00 PM

- I. CALL TO ORDER
- II. ROLL CALL
- III. APPROVAL OF MINUTES
 - 1. Planning & Zoning Commission Meeting Minutes 2.12.2025
- IV. PUBLIC BUSINESS FROM THE FLOOR
- V. PUBLIC HEARINGS
 - 1. Public Hearing CUP 25-01: Application from Scott Smith for a Conditional Use Permit for Rental Cabins
- VI. NEW BUSINESS
 - 1. Approval of Conditional Use Permit 25-01 A request from Scott Smith to Allow Rental Cabins on Lot 4, Black Forest Subdivision, Plat 2024-5 (1725 Richardson Highway) and Adopt Findings
- VII. COMMISSION BUSINESS FROM THE FLOOR
- VIII. ADJOURNMENT



212 Chenega Ave. Valdez, AK 99686

Legislation Text

File #: 25-0095, Version: 1

ITEM TITLE:

Planning & Zoning Commission Meeting Minutes 2.12.2025 **SUBMITTED BY:** Jared Chase Administrative Assistant

FISCAL NOTES:

Expenditure Required: n/a Unencumbered Balance: n/a

Funding Source: n/a

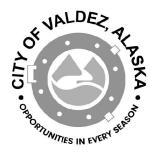
RECOMMENDATION:

Receive & File

SUMMARY STATEMENT:

Meeting minutes from the Planning & Zoning Commission Meeting that was held February 12th 2025.

212 Chenega Ave. Valdez, AK 99686



Minutes - Draft

Wednesday, February 12, 2025 7:00 PM

Regular Meeting
Council Chambers

Planning and Zoning Commission

REGULAR AGENDA - 7:00 PM

I. CALL TO ORDER

II. ROLL CALL

Present 4 - Donald Haase

Rhonda Wade Maureen Radotich Caleb Metroka

Excused 3 - Stephen Goudreau

Cherise Beatus Christopher Moulton

Also Present 3 - Kate Huber Community Development Director

Jared Chase Administrative Assistant Bruce Wall Senior Floodplain Manager

III. PUBLIC BUSINESS FROM THE FLOOR

No business was presented.

IV. NEW BUSINESS

1. Approval of a Recommendation to City Council to Authorize a Lease with Crowley Fuels, LLC for a 6,230 Square Foot Portion of USS 495 Tidelands (North Fuel Dock)

MOTION: Commission Member Radotich moved, seconded by Commission Member Wade, to approve a lease with Crowley Fuels, LLC for a 6,230 square foot portion of USS 495 Tidelands (North Fuel Dock).

DISCUSSION: Commissioner Radotich had a few questions related to some environmental risks, such as which tanks are above ground, and facility maintenance. Commissioner Wade asked about some of the history of the lease and various changes over time.

VOTE:

Yays: 4 - Wade, Haase, Radotich, and Metroka

Absent: 3 - Goudreau, Beatus, and Moulton

MOTION CARRIED

2. Approval of a Recommendation to City Council to Authorize a Lease with Crowley Fuels, LLC for an 8,400 Square Foot Portion of USS 495 Tidelands (South Fuel Dock)

Minutes - Draft

MOTION: Commission Member Wade moved, seconded by Commission Member Metroka, to Approve a recommendation to approve a lease with Crowley Fuels, LLC for an 8,400 square foot portion of USS 495 Tidelands (South Fuel Dock).

DISCUSSION: No additional discussion was added to this item because of how similar it is with the previous item.

VOTE:

Yays: 4 - Wade, Haase, Radotich, and Metroka Absent: 3 - Goudreau . Beatus, and Moulton

MOTION CARRIED

V. REPORTS

1. Hazard Mitigation Plan Implementation Report

DISCUSSION: Bruce Wall provided an update on the status and the timeline for the HMP. At Haase's request, Wall clarified why the plan was turned down at the state level. Bruce summarized the States list of items the State has requested.

2. Community Development Director's Report

DISCUSSION: Kate Huber provided an update to the commission on various department projects. She also gave an update on the timeline for the updated building code revision. Notice was given for and upcoming joint work sessions.

VII. COMMISSION BUSINESS FROM THE FLOOR

VIII. ADJOURNMENT



212 Chenega Ave. Valdez, AK 99686

Legislation Text

File #: 25-0096, Version: 1

ITEM TITLE:

Public Hearing CUP 25-01: Application from Scott Smith for a Conditional Use Permit for Rental

Cabins

SUBMITTED BY: Bruce Wall, Senior Planner

FISCAL NOTES:

Expenditure Required: N/A Unencumbered Balance: N/A

Funding Source: N/A

RECOMMENDATION:

Public hearing only.

SUMMARY STATEMENT:

The purpose of this hearing is to allow the public to comment on an application for a Conditional Use Permit. The application was submitted by Scott Smith, for a Boat Charter Service and Rental Cabins to be at 7275 Richardson Hwy.

Applicant: Scott Smith
Property Owner: High Tides, LLC

Street Address: 7275 Richardson Hwy

Legal Description: Lot 4, Black Forest Subdivision, Plat 2024-5

Zoning District: Rural Residential (RR)

Existing Land Use: Vacant

Access: Richardson Highway

Notice of the meeting was published on the City of Valdez website on February 26, 2025. Notice of the meeting was mailed on February 26, 2025, to the seven property owners within 300 feet of the subject property. A document holder was posted on Richardson Highway with public notice flyers on February 26, 2025.



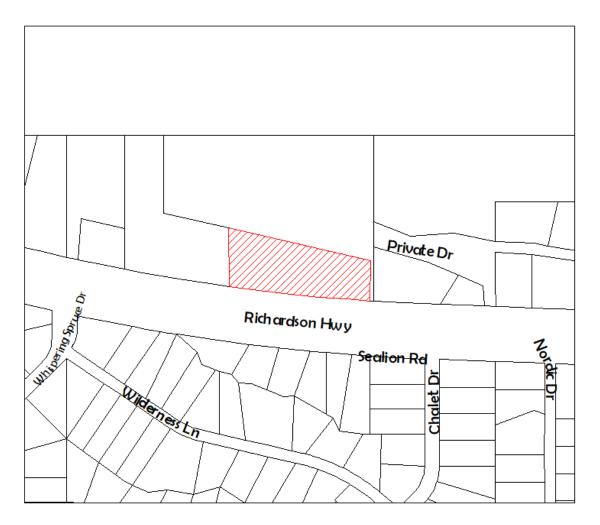
NOTICE OF PUBLIC HEARING FOR A CONDITIONAL USE PERMIT FOR RENTAL CABINS

The Valdez Planning and Zoning Commission will hold a public hearing on Wednesday, **March 12, 2025**, at 7:00 pm in the City Council Chambers at 212 Chenega Avenue, Valdez, Alaska.

The purpose of the hearing is to take public testimony concerning a conditional use permit application for Rental Cabins to be located at 7275 Richardson Highway (Lot 4 Black Forest Subdivision, Plat 2024-5). The applicant is Scott Smith and the property owner is High Tides, LLC.

The public is encouraged to attend the hearing to provide comments or may submit comments in writing to the Community Development Department. Submitted comments must be received by 4:00 pm on the day of the meeting to be presented to the Planning & Zoning Commission. Submissions by email may be sent to: communitydevelopment@valdezak.gov.

Anyone having questions concerning this notice, or who would like more information should contact the Community Development Department at 907-834-3401.



Conditional Use Permit for Rental Cabins
Planning & Zoning Commission Meeting - March 12, 2025







FEE: \$50.00 SITE PLAN (WAIVED 2013 PER RESOLUTION #12-72)

CITY OF VALDEZ

APPLICATION FOR CONDITIONAL USE PERMIT

| APPLICATION NUMBER | | DATE 1/27/2025 |
|--|-----------------------|---------------------|
| NAME OF APPLICANT | Scott Smith | |
| ADDRESS OF APPLICAN | T5450 Chalet Drive | |
| | Valdez, AK 99686 | |
| DAYTIME PHONE | 907-255-9059 | |
| SIGNATURE | | |
| LEGAL OWNER | High Tides, LLC | |
| ADDRESS | 5450 Chalet Drive | |
| | Valdez, Alaska 99686 | 3 |
| PHONE NUMBER | 907-255-9059 | |
| STREET ADDRESS: | 7275 Richardson Hig | hway |
| LEGAL DESCRIPTION: | Lot 4 Black Forest St | ubdivision |
| | | |
| CURRENT ZONING | Rural Residential | |
| | | |
| PROVISIONS OF ZONING SETBACK, LOT COVERA | | NG A VARIANCE (I.E. |
| | No, Variance request | ted |
| USE REQUESTED | Rental Cabins | |
| TEMPORARY | HOW LON | G |
| PERMANENT | Yes, Permanent | |

Please answer the following questions:

How will the proposed use conform to the present and future development of the area? What will be its effect on present and future development?

This land is currently undeveloped, it will benefit the tourism as well as long term or short term housing for employment and add to housing accommodations. The area has single family homes, cabins, and trailer homes. Building 4 cabins on this lot will at to the beauty of the area as it will be a nicer development.

Why is there a need in the area for the Conditional Use requested? Wherever possible, substantiate this statement with factual data.

A permit is required for "Rental Cabins" as the parcel is zoned Rural Residential. I will be building four 20 ft x 26 ft log cabins. Rental Cabins require either a CUP or to be zoned NMU, CB, or G. The cabins will be built on 4.6 acres leaving plenty of space between them, and all setback from the creek with a private natural feel.

Why is this site especially suited to the Conditional Use proposed?

The site is large enough to provide space for the cabins, and still keep it very private. The site is quite and private as it is setback from the Richardson Highway.

Why would the Conditional Use have no detrimental effects on surrounding property and uses?

There are no detrimental effects since the parcel is large enough that it doesn't affect anyone. The cabins will have their own access to the highway. It will have very little effect on the surrounding properties. I own the adjacent lot to the West (Lot 3 @6.356 acres). On the East side of the cabin will be at least 150 ft of "Green Space" between the neighboring parcel.

Attach or include any other information you feel is relevant to this application

| see atta | acned stan | npea build | aing aesi | gn, Site | olan, as | well as | overnead | <u>Lida</u> |
|----------|------------|------------|------------|----------|----------|---------|----------|-------------|
| image s | showing th | e layout c | of the pro | ject. | | | | |
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| | | | | | | | | |

ComDev/Data/Forms/P & Z Forms/ CUP Application

Rev. 1_23_12

Conditional Use Permit

Scott Smith

"Rental Cabins" on Rural Residential zoning

Black Forest Cabins

2/1/2025

Located 12 miles outside of the Valdez City center, 7275 Richardson Highway (otherwise known as Lot 4 in the Black Forest Subdivision) is set back on 4.8 acres nestled among old forest growth. There are no structures or development on the lot or the surrounding lots. There is a natural year-round flowing creek from a spring and runoff from the mountain above. It is the ideal setting for our quiet, peaceful, log cabin rentals. Focus will be on nature and the natural growth on the property, having designed the cabins to blend in seamlessly to the natural beauty.

There will be four small log cabins, 20 ft x 26 ft, with minimal guests. They will feature engineered septic systems along with a well. The septic systems will be engineered to sustain two cabins on one septic. There will be one well connected to all four cabins. Each cabin will be set back 70 ft from each other to give privacy to the guests. This property is not in a flood zone. However, due to snow melt and possible heavy rain, we will be adding an additional 3 feet of fill for a higher elevation. In the fall of 2024 we sent soil samples to Goldstream Engineering in Fairbanks who told the soil was stable for building and contained more sand than silt.

Power will be underground service to minimize outages and enhance the natural environment. We have been working with Copper Valley Electric to establish electricity this year, Summer 2025. 7275 Richardson Highway is located right off the highway and is a loop through driveway, planned for ease of snow removal as well as emergency vehicles and trash service.

Zoning for the cabins will be within the allowed standards if the Conditional Use Permit is given. "Rental Cabins" follow all requirements in Chapter 17.80 as well as all standards for short term rentals Chapter 17.80.090. We would like to have the option for long-term rentals as well as short-term rentals. All cabins will be built the same with dimensional standards within the zoning requirements for height and all setbacks.

Rental cabins comply with the comprehensive plan to provide additional quality housing options. This land falls into Area 3 in the comprehensive plan as Rural

Neighborhood. Continuing to follow the comprehensive plan with goals 2.1 planning for responsible growth, 2.2 with new development, and 2.3 built quality housing. This promotes Valdez as a destination, adding to the sustainable economy.

We will take appropriate actions to reduce noise, light, and traffic. The goal is to have the cabins remain a peaceful retreat among nature for others. Quite hours will be observed. Trash and litter will be zero as I plan to pick up after guests as needed. We will practice leave no trace.

There is one main access loop road along with 4 adequately sized driveways for each cabin to provide enough room for vehicles, pedestrians, and snow removal. With the size and length of the loop along with each driveway, there will be no street parking. There will also be a stop sign installed before turning onto/entering the Richardson Highway.

In summary, 7275 Richardson Highway is currently raw, undeveloped land. We plan to build four 20ft by 26ft log cabins with roughly 70ft of space between them, adhering to all building codes, zoning standards, and specific use standards. These cabins will be both long- and short-term rentals, which are always needed in Valdez. We will be keeping as much vegetation as possible to keep the area "natural" with a peaceful and tranquil vibe, mitigating any potential nuisances. The cabins have been designed to fit seamlessly into the surrounding wilderness while being visually appealing.

Snow removal Plan

All the snow on the main drive will be moved West to the main snow dump as seen in the site plan.

SEE SITE PLAN for sketch

Each driveway will be piled just past the cabins with access to both sides of the cabins if snow removal is needed due to a heavy snow year. When snow piles up too much it will be bailed out to the snow dump as needed between guests.

Each cabin driveway will be built to have space to park two vehicles side by side with additional space. Driveways will also be long enough if more parking is needed. No parking spaces will be taken by snow storage.

Egress will be on either gable ends to eliminate snow shedding on ingress/egress. Snow will shed to the side yard. Setback to the property line is excess of 50 ft.

GENERAL NOTES & SPECIFICATIONS

- 1. ALL WORK SHALL COMPLY WITH ALL BUILDING CODES HAVING JURISDICTION.
- 2. EACH CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS. SAID CONTRACTORS SHALL REPORT TO THE GENERAL CONTRACTOR, IN WRITING, ANY DISCREPANCIES BETWEEN THE DRAWINGS AND/OR THE SITE CONDITIONS BEFORE PROCEEDING WITH BIDDING AND PERFORMANCE OF THE WORK. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- 3. ALL SYMBOLS AND ABREVIATIONS WITHIN THESE CONSTRUCTION DOCUMENTS ARE TO BE CONSIDERED CONSTRUCTION STANDARDS. ANY QUESTIONS AS TO THEIR MEANING SHALL BE ADDRESSED TO THE DESIGNER, IN WRITING, FOR CLARIFICATION.
- 4. ALL NEW GYPSUM WALLBOARD SHALL BE ML 5/8" THICKNESS, UNLESS OTHERWISE NOTED ON THESE PLANS. ALL OUTSIDE CORNERS SHALL HAVE METAL CORNER BEADS. TYPE MOISTURE RESISTANT (MR) GYPSUM WALLBOARD SHALL BE USED AT ALL PLUMBING WALLS.
- 5. ANY INTERIOR DESIGN, MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THESE BUILDING PLANS. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO REVIEW THESE PLANS BEFORE INSTALLING ELECTRICAL AND MECHANICAL WORK. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THESE PLANS AND OTHER DRAWINGS WHICH WOULD CAUSE AN AWKWARD INSTALLATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER FOR CLARIFICATION PRIOR TO INSTALLATION.
- 6. ALL NEW PLUMBING WORK SHALL BE "DESIGN-BUILD" BY THE PLUMBING CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING BUILDING PERMITS AND PAYMENT OF THE REQUIRED
- ALL NEW ELECTRICAL WORK SHALL BE "DESIGN-BUILD" BY THE ELECTRICAL CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL THE DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING BUILDING PERMITS AND PAYMENT OF THE REQUIRED FEES.
- 8. ALL NEW HEATING/AIR CONDITIONING WORK SHALL BE "DESIGN-BUILD" BY THE HEATING/AIR CONDITIONING CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING PERMITS AND PAYMENT OF THE REQUIRED FEES.
- 9. SITE PREPARATION, EXCAVATION AND GRADING SHALL BE DONE IN CONFORMANCE WITH THE LOCAL BUILDING CODE.
- 10. THESE PLANS ARE COPYRIGHTED BY THE PROJECT DESIGNER AND ARE INTENDED FOR THE ONE-TIME USE FOR THE PROPERTY SPECIFIED HEREIN. USE OF THESE PLANS FOR ANY OTHER PURPOSE IS STRICTLY PROHIBITED.
- 11. THE BUILDER SHALL PROVIDE A STREET ADDRESS ON THE JOB SITE PRIOR TO AND DURING CONSTRUCTION.
- 12. THE DESIGNER PREPARING THESE PLANS SHALL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THESE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PROJECT ENGINEER.
- 13. IN THE EVENT OF CONFLICT BETWEEN THESE PLANS AND THE PLANS APPROVED BY THE GOVERNING AGENCY, THE APPROVED PLANS TAKE
- 14. THE PROJECT CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO THE BEGINNING OF CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES TO THE PROJECT ENGINEER. ANY DISCREPANCIES DISCOVERED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPORTED TO THE PROJECT DESIGNER.
- 15. *PLEASE NOTE, WE RECOMMEND WAITING FOR DELIVERY OF LOG PACKAGE BEFORE ORDERING WINDOWS AND DOORS FROM MANUFACTURER. GENERAL CONTRACTOR TO DOUBLE CHECK WINDOW SIZES AND R.O. DIMENSIONS LISTED IN THE SCHEDULES W/ MANUFACTURES LISTED R.O. DIMENSIONS AND W/ OPENING DIMENSIONS IN LOG WORK TO ENSURE A PERFECT FIT.

PROJECT DATA

OWNER/APPLICANT
Black Forest Cabins

PROJECT LOCATION

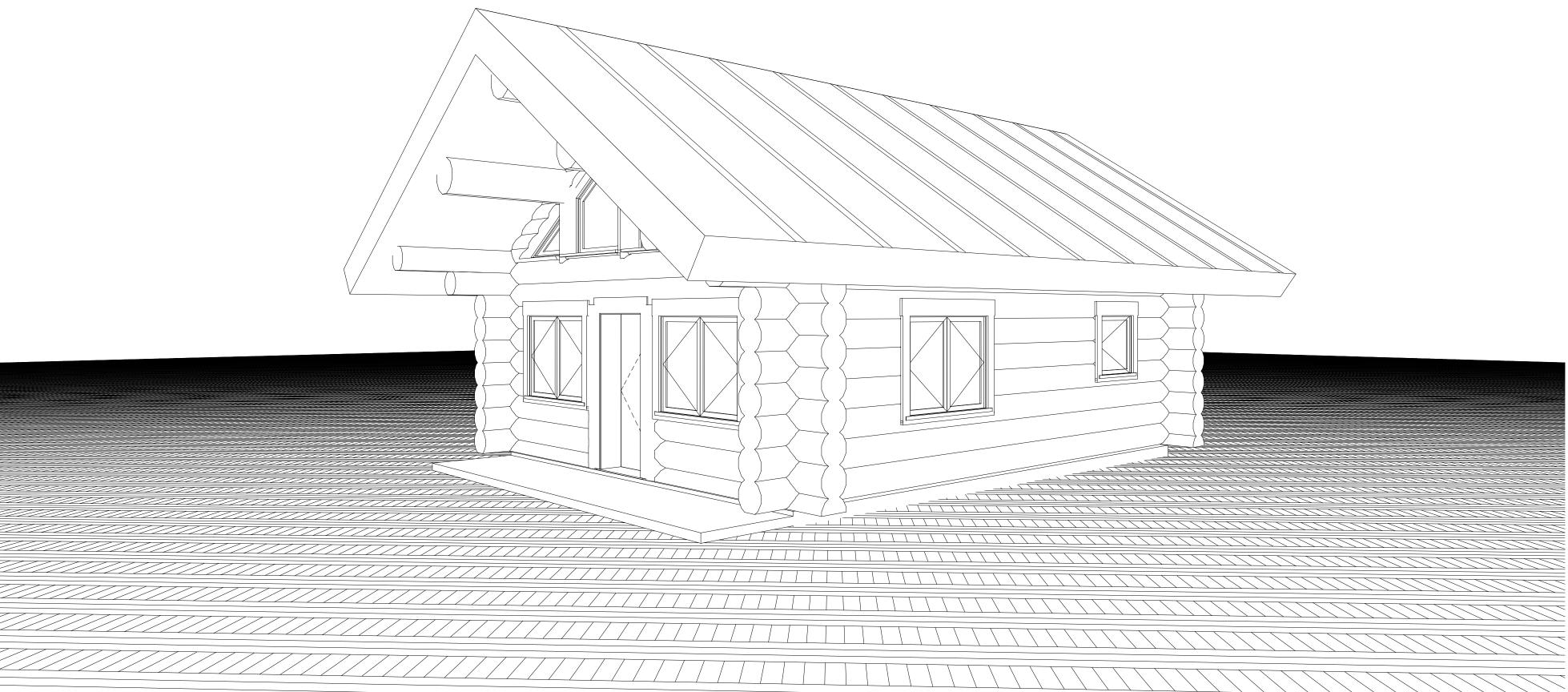
7251 Richardson Way Valdez Alaska

LEGAL DESCRIPTION

-Legal Description

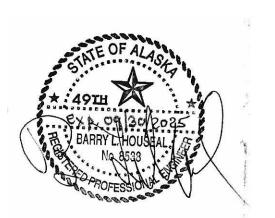
PROJECT DESCRIPTION

PROPOSED NEW SINGLE FAMILY RESIDENCE



| | • | | | |
|------------------|--|--------------------------------|---|-----------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| blh2.com | 5 | | | |
| | | STRUCTURAL RECA | A11 - | |
| | | 251 RICHARDSON WAY, VALDWZ, AK | BEARING | |
| DESCRIPTION | LOCATION | SIZE & SPECIES | AREA | PAGE# |
| Design Criteria | All Areas | = | - | 1 |
| Snow Load Calcs. | All Areas | - | - | 2,7A |
| Lateral Analysis | All Areas | See Details p. # 24 | - | 3 thru 24 |
| Rafters | Roof (8:12) | 2" x 12" DF # 2 @ 16" cc | (= | 25,26 |
| Ridge & Purlins | Roof | 18" φ Sitka Spruce # 1 | 26.98 in2 | 25,27 |
| | and the second s | | | |

42" W x 12" D w/ (2) - # 4's cont. 26" W x 12" D w/ (2) - # 4's cont.



CASEMENT W/ BOTTOM AWNING

| | WINDOW SCHEDULE | | | | | | | | |
|----|-----------------|----------------------|----------|------------------|--|--|--|--|--|
| ID | Home Story | Library Part Name | Quantity | Carpenter's R.O. | | | | | |
| W1 | 1st FLOOR | W2 Casement 27 | 4 | 5'-0"×4'-0" | | | | | |
| W2 | 1st FLOOR | W1 Casement 27 | 2 | 3'-0"×3'-0" | | | | | |
| W3 | 2nd FLOOR | W Triangle Fixed 27 | 4 | 3'-0"×2'-0" | | | | | |
| W4 | 2nd FLOOR | W Trapezoid Fixed 27 | 4 | 3'-6"×5'-0" | | | | | |

| | DOOR SCHEDULE | | | | | | | | | | |
|----|---------------|-------------------|-------------|----------|-------------|------------------|--|--|--|--|--|
| ID | Home Story | Library Part Name | Orientation | Quantity | W x H Size | Carpenter's R.O. | | | | | |
| D2 | 1st FLOOR | D1 27 | LH | 2 | 3'-0"×6'-8" | 3'-2" X 6'-11" | | | | | |

Black Forest Cabins

AREA TABULATION

| Square I | Footage |
|-------------|---------|
| FLOOR | Area |
| FIRST FLOOR | 543 |
| | 543 ft² |

● ALL ● ALL ● IT IS CHE OF F ● BUIL LOC

BUILDING CODE LEGEND

THESE PLANS SHALL COMPLY WITH THE FOLLOWING:

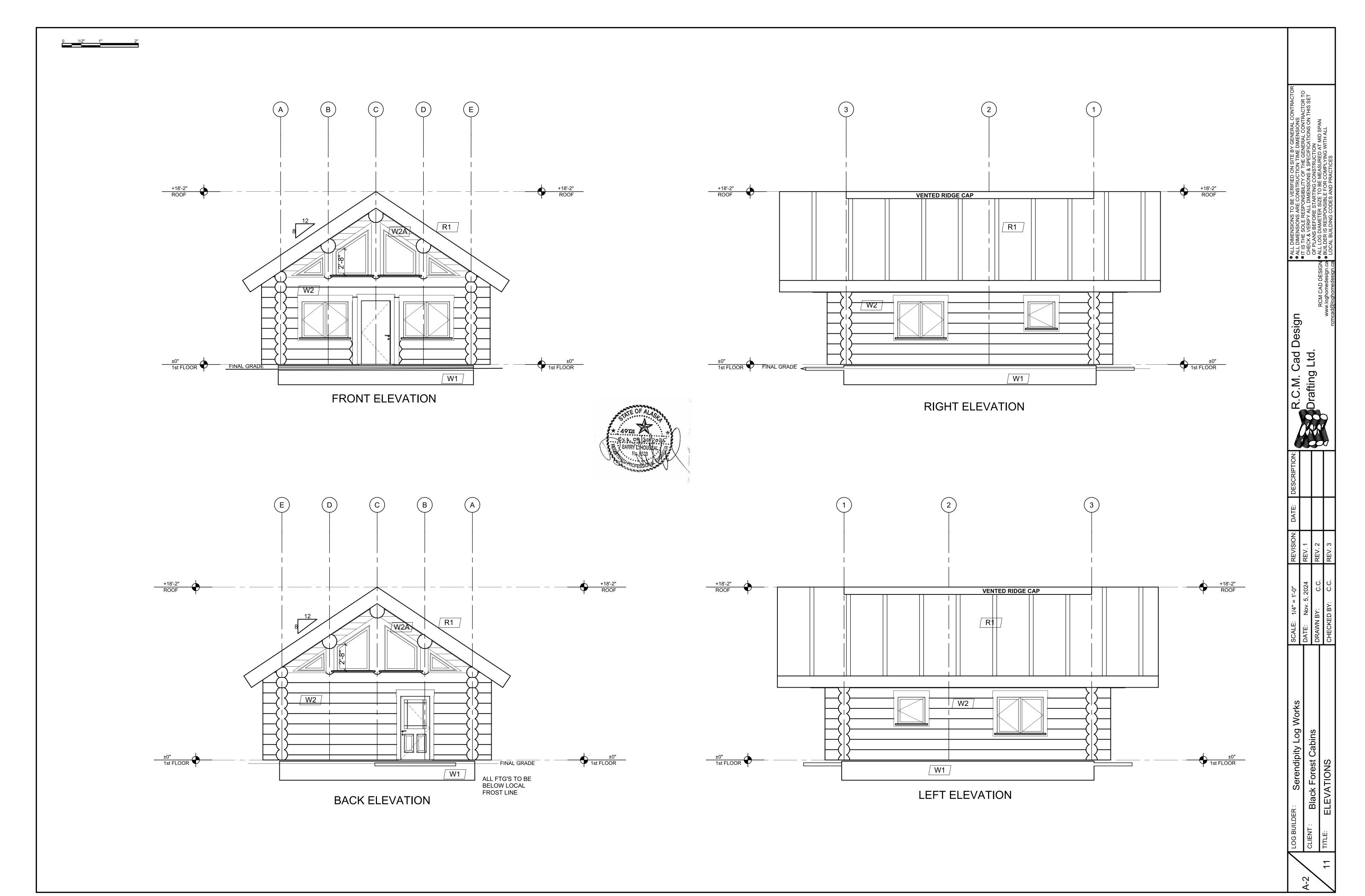
IBC 2021
IRC 2021
IMC 2021
IEC 2021
IPC 2021
SPRINKLERS: NO

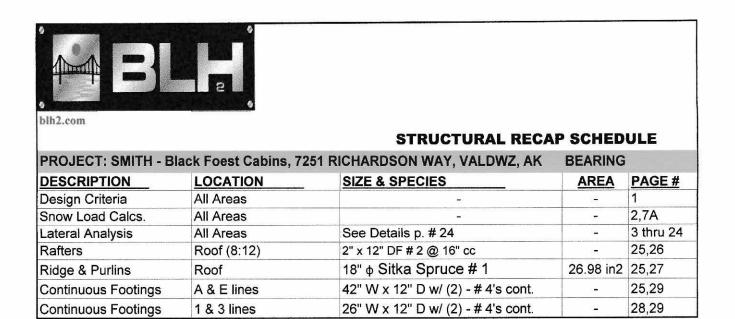
DESIGN CRITERIA:

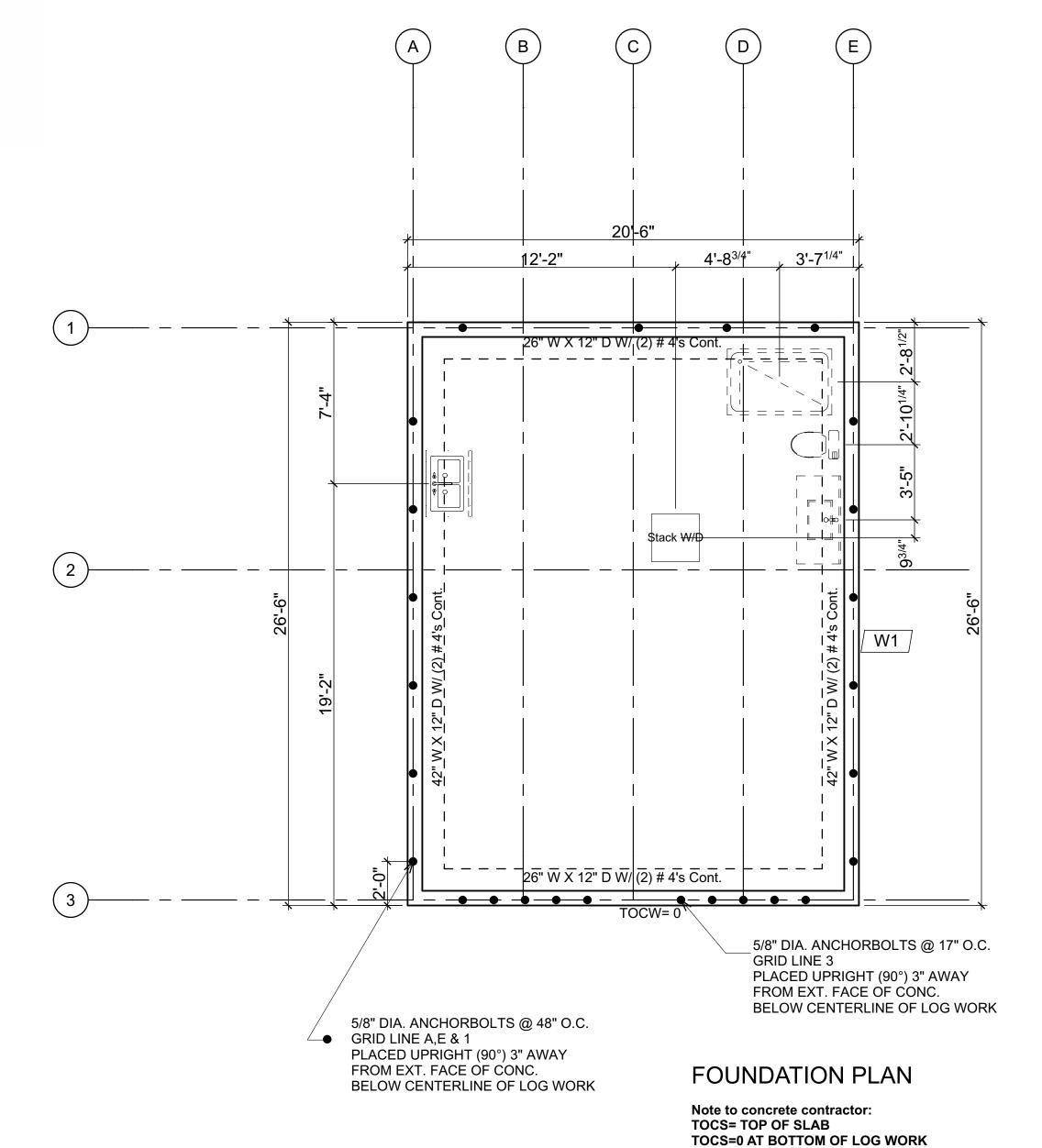
CODE: 2021 IBC SNOWLOAD: 88.7 PSF SEISMIC ZONE: D DESIGN WIND SPEED: 120mph WIND EXPOSURE: C

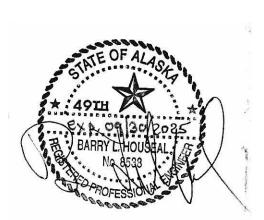
| SHEET INDEX | | | | | |
|-------------|-------------------------|--|--|--|--|
| ID | NAME | | | | |
| A-1 | COVER SHEET | | | | |
| A-2 | ELEVATIONS | | | | |
| A-3 | FOUNDATION PLAN | | | | |
| A-4 | FIRST FLOOR & ROOF PLAN | | | | |
| A- 5 | DETAILS | | | | |
| A-6 | ELECTRICAL PLANS | | | | |
| 4-7 | WALL SECTIONS | | | | |
| A-8 | WALL SECTIONS | | | | |
| 4- 9 | ISOMETRICS | | | | |
| A-10 | GENERAL NOTES | | | | |
| 4-11 | SITE PLAN | | | | |

A-1 CLIENT









FOUNDATION NOTES

CENTERLINE OF LOG WORK TO BE 3" FROM EXTERIOR EDGE OF MONOLITHIC SLAB

ALL CONC. TO BE 2500 PSI @ 28 DAYS.

FOUNDATION:

SOIL BEARING PRESSURE IS ASSUMED TO BE A MINIMUM OF 1500 P.S.F. ALL FTGS. TO BEAR ON FIRM UNDISTURBED MATERIAL TOCS= TOP OF CONCRETE SLAB

CONCRETE REINFORCEMENT TABLE TO BE VERIFIED BY ENG. TURN DOWN SLAB FOOTING: 2-NO 4 REBAR LONGITUDINALLY

WIRE MESH REINFORCEMENT IN ALL CONC. SLABS TO AVOID CRACKS

NOTE: 5/8" ANCHOR BOLTS PLACED 24"

AWAY FROM CORNERS AND @ 32" O.C.

C/W NUTS & WASHERS AROUND PERIMETER

CONSTRUCTION MATERIALS

W1 TYPICAL SLAB ON GRADE
5" THICK MONOLITHIC SLAB ON GRADE 18"x18" TAPERED UP TO 5" THICK MONOLITHIC HEATED SLAB OVER LAYER OF 2" XPS f-250 FOAM (25 psi COMPRESSION) OVER 4" MIN. COMPACTED SAND AND GRAVEL

W2 TYPICAL EXTERIOR LOG WALL LOGS TO BE 14" dia. MIDSPAN SITKA SPRUCE WITH 13" GAIN PER STACK AVERAGE

W2A TYPICAL 2ND STOREY EXTERIOR WALL FALSE LOG SIDING PANELS (4 PIECES B/W POSTS) ON 5/8" CDX SHEATHING 2X6 @ 16" O.C. FRAME WALL R24 BATT INSULATION 6 MIL POLY V.B. INT. FINISH TO OWNERS SPECS.

W3A TYPICAL INTERIOR FRAME WALL (SETTLING) (1st FL.) INT. PARTITION WALLS TO BE:

WALL FINISH TO OWNER'S SPECS BOTH SIDES 2X6 @ 16" O.C FRAME WALL W/ SLIP JOINT @ BOTTOM OF WALL

W3B TYPICAL NONE BEARING INTERIOR FRAME WALL (ROOF)
INT. PARTITION WALLS TO BE:

● ALL DI ● ALL DI ● IT IS T CHECI OF PL ● ALL LC ● BUILD

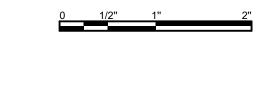
WALL FINISH TO OWNER'S SPECS BOTH SIDES 2X4 @ 16" O.C FRAME WALL

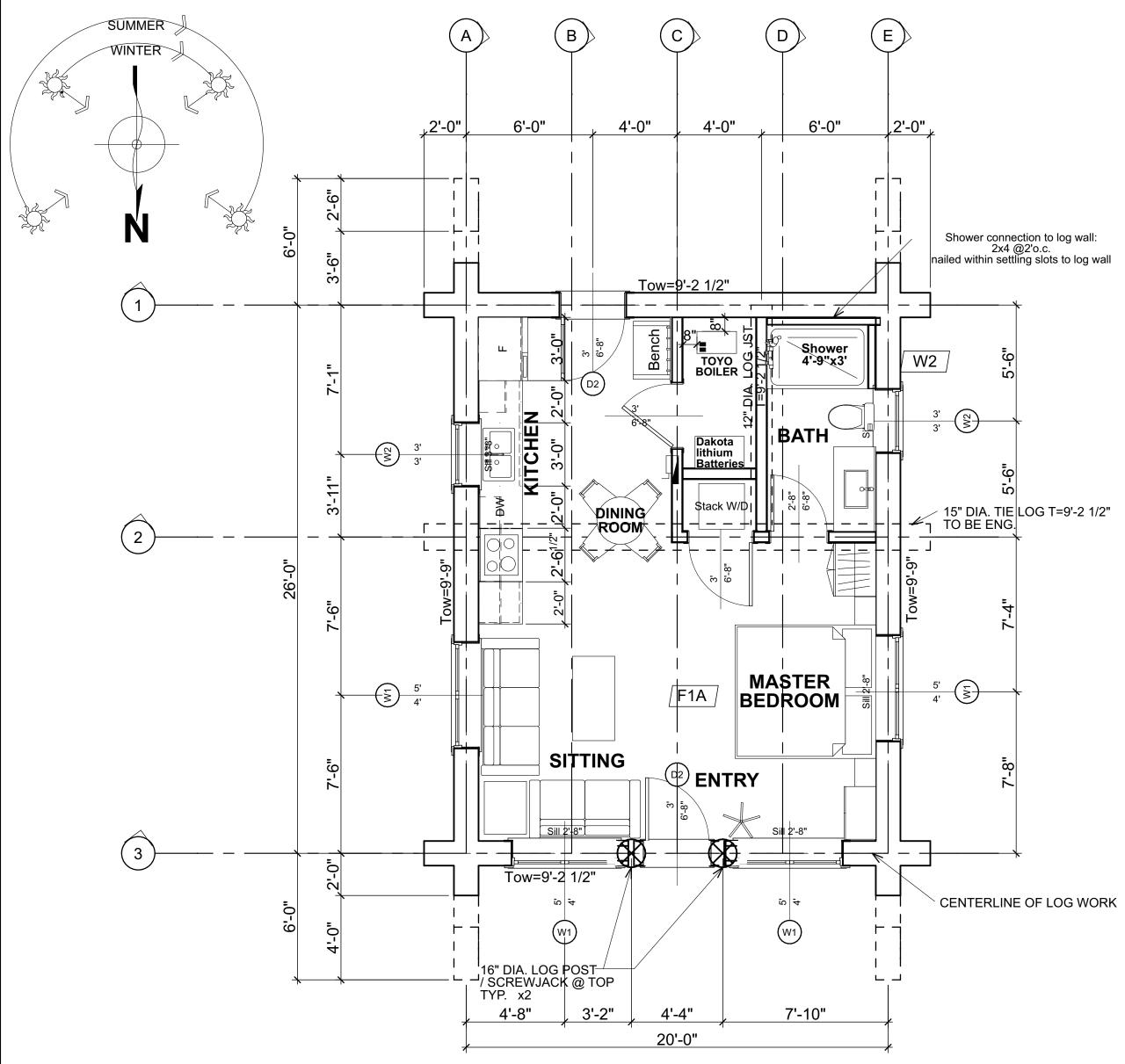
F1A TYPICAL FIRST FLOOR
5" CONC. SLAB HOUSING IN FL. HEATING LVP FLOORING GLUED DOWN

5/8" SHEETROCK

R1 TYPICAL ROOF TO BE: 24 GAUGE STANDING SEAM ROOF (BLACK) ON ICE & WATER SHIELD 5/8" CDX SHEATHING 2x12 DF #2 @ 16" O.C. RAFTERS R 38 MIN. BATT INSULATION OVER LIVING AREA W/ 1.5" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED SOFFIT TO VENTED RIDGE CAP) 6 MIL POLY V.B. 2" XPS FOAM UNDER RAFTERS

| TE OUII) | T SHEARWALLS | | W 10 10 10 10 10 10 10 10 10 10 10 10 10 | Stagger | Bottom Plate | Top Plate | Bottom Plate | Anchor | N 17 W N | | Seismic | Wind |
|--------------------------------------|--|---|---|--|--|---|------------------------|--------------------------|-----------|-------|---------|------|
| Type | Sheathing | Nailing | Sides | Bot. Plate | Connection | Connection | Connection | Bolts | Framing | Plate | PLF | PLF |
| A | 3/8" ply or 7/16" OSB | 8d @ 6"/12" | 1 | No | SDWS 1/4x6" @ 15" cc | LTP4 @ 30" cc | | 5/8" dia. x 12" @ 48" cc | 2x Studs | 2x | 260 | 365 |
| В | 3/8" ply or 7/16" OSB | 8d @ 4"/12" | 1 | Yes | SDWS 1/4x6" @ 11" cc | LTP4 @ 20" cc | | 5/8" dia. x 14" @ 48" cc | 3x Studs | 3x | 380 | 530 |
| C | 3/8" ply or 7/16" OSB | 8d @ 3"/12" | 1 | Yes | SDWS 1/4x6" @ 8" cc | LTP4 @ 16" cc | LTP5 @ 14" cc | | 3x Studs | 3x | 490 | 685 |
| D | 3/8" ply or 7/16" OSB | 8d @ 2"/12" | 1 | Yes | SDWS 1/4x6" @ 6" cc | LTP4 @ 12" cc | LTP5 @ 10" cc | | 3x Studs | 3x | 640 | 895 |
| E | 3/8" Struc 1 | 8d @ 2"/12" | 1 | Yes | SDWS 1/4 x6" @ 5" cc | LTP4 @ 10" cc | LTP5 @ 10" cc | | 3x Studs | 3x | 730 | 1020 |
| F | 3/8" ply or 7/16" OSB | 8d @ 4"/12" | 2 | Yes | SDWS 1/4x6" @ 5" cc | LTP4 @ 10" cc | LTP5 @ 8" cc | 5/8" dia. x 14" @ 24" cc | 3x Studs | 3x | 760 | 1060 |
| G | 3/8" ply or 7/16" OSB | 8d @ 3"/12" | 2 | Yes | SDWS 1/4x6" @ 4" cc | LTP4 @ 8" cc | LTP5 @ 6" cc | 5/8" dia. x 14" @ 18" cc | 3x Studs | 3x | 980 | 1370 |
| Н | 3/8" ply or 7/16" OSB | 8d @ 2"/12" | 2 | Yes | SDWS 1/4x6" @ 3" cc | LTP4 @ 6" cc | | 5/8" dia. x 14" @ 14" cc | 4x DF # 2 | 3x | 1280 | 1790 |
| ī | 3/8" Struct 1 | 8d @ 2"/12" | 2 | Yes | SDWS 1/4x6" @ 2" cc | LTP4 @ 4" cc | LTP5 @ 4" cc | 5/8" dia. x 14" @ 12" cc | 4x DF # 1 | 3x | 1460 | 2040 |
| | | | | | <u> </u> | | | | | | | |
| 1000 | | | | | SDC C-F | SDC C-F | | 10 A | | 3 | /2 | |
| SSTB's | Stemwall Width (") | AB Ø (") | Length (") | Embed (") | Stemwall Allow Tension | Allow Slab-on-grade | | | | | | |
| SSTB 16 | 6 | 5/8" | 17 5/0 | | | | | | | | | |
| | | 5/8 | 17-5/8 | 12-5/8" | 2,550 | 3,780 | | | | | | |
| SSTB20 | 6 | 5/8" | 21-5/8 | 12-5/8" 16-5/8 | 2,550 2,960 | 3,780 4,785 | - | | | | | |
| | | 1 12 1 12 1 | | | | | - | | | | | |
| SSTB20 | 6 | 5/8" | 21-5/8 | 16-5/8 | 2,960 | 4,785 | - | | | | | |
| SSTB20 SSTB24 | 6 | 5/8" 5/8" | 21-5/8 25-5/8 | 16-5/8 20-5/8 | 2,960 3,325 | 4,785 5,790 | - | | | | | |
| SSTB20 SSTB24 SSTB28 | 6 6 8 | 5/8" 5/8" 7/8" | 21-5/8 25-5/8 29-7/8 | 16-5/8 20-5/8 24-7/8 | 2,960 3,325 6,395 | 4,785 5,790 11,675 | | | | | | |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 | 5/8" 5/8" 7/8" 7/8" | 21-5/8 25-5/8 29-7/8 34-7/8 | 16-5/8 20-5/8 24-7/8 28-7/8 | 2,960 3,325 6,395 6,395 | 4,785 5,790 11,675 11,675 | | | | | | ε |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 | 5/8" 5/8" 7/8" 7/8" | 21-5/8 25-5/8 29-7/8 34-7/8 | 16-5/8 20-5/8 24-7/8 28-7/8 | 2,960 3,325 6,395 6,395 6,395 | 4,785 5,790 11,675 11,675 | <u>Notes</u> | | | | | * |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS | 5/8" 5/8" 7/8" 7/8" 7/8" 7/8" 3" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 | 2,960 3,325 6,395 6,395 6,395 AB Ø (") | 4,785 5,790 11,675 11,675 11,675 | <u>Notes</u> | | | | | * |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS HDU2 HDU4 | 5/8" 5/8" 7/8" 7/8" 7/8" 7/8" 3" 3" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 DF/SP 3,075 4,565 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 SPF/HF 2,215 3,285 | 2,960 3,325 6,395 6,395 6,395 AB Ø (") 5/8" | 4,785 5,790 11,675 11,675 11,675 | <u>Notes</u> | | | | | |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS | 5/8" 5/8" 7/8" 7/8" 7/8" POST "t" 3" 3" 3" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 DF/SP 3,075 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 SPF/HF 2,215 | 2,960 3,325 6,395 6,395 6,395 AB Ø (") 5/8" 5/8" | 4,785 5,790 11,675 11,675 11,675 Post Fasteners (6) - 1/4" x 2-1/2" SDS | Notes | | | | | |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS HDU2 HDU4 | 5/8" 5/8" 7/8" 7/8" 7/8" POST "t" 3" 3" 3" 3" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 DF/SP 3,075 4,565 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 SPF/HF 2,215 3,285 | 2,960 3,325 6,395 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" | 4,785 5,790 11,675 11,675 11,675 Post Fasteners (6) - 1/4" x 2-1/2" SDS (10)-1/4" x 2-1/2" SOS | Notes | | | | | · · |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 HDU8 | 5/8" 5/8" 7/8" 7/8" 7/8" 7/8" 3" 3" 3" 3.5" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 | 2,960 3,325 6,395 6,395 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" 7/8" | 4,785 5,790 11,675 11,675 11,675 Post Fasteners (6) - 1/4" x 2-1/2" SDS (10)-1/4" x 2-1/2" SDS (14)-1/4" x 2-1/2" SDS | Notes | | | | | |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 | 5/8" 5/8" 7/8" 7/8" 7/8" POST "t" 3" 3" 3" 3" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 4,305 | 2,960 3,325 6,395 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" | 4,785 5,790 11,675 11,675 11,675 Post Fasteners (6) - 1/4" x 2-1/2" SDS (10)-1/4" x 2-1/2" SDS (14)-1/4" x 2-1/2" SDS (20)-1/4" x 2-1/2" SDS | Notes | | | | | |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 HDU8 | 5/8" 5/8" 7/8" 7/8" 7/8" 7/8" 3" 3" 3" 3.5" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 6,970 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 4,305 5,020 | 2,960 3,325 6,395 6,395 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" 7/8" | 4,785 5,790 11,675 11,675 11,675 Post Fasteners (6) - 1/4" × 2-1/2" SDS (10)-1/4" × 2-1/2" SDS (14)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS | Notes | | | | | * |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 HDU8 HDU8 | 5/8" 5/8" 7/8" 7/8" 7/8" 7/8" 3" 3" 3" 3.5" 4.5" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 6,970 7,870 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 4,305 5,020 5,665 | 2,960 3,325 6,395 6,395 6,395 6,395 AB Ø (") 5/8" 5/8" 7/8" 7/8" 7/8" | 4,785 5,790 11,675 11,675 11,675 Post Fasteners (6) - 1/4" × 2-1/2" SDS (10)-1/4" × 2-1/2" SDS (14)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS | Notes | | | | | |
| SSTB20 SSTB24 SSTB28 SSTB34 | 6 6 8 8 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 HDU8 HDU8 HDU8 HDU8 | 5/8" 5/8" 7/8" 7/8" 7/8" 7/8" 3" 3" 3" 3.5" 4.5" 5.5" | 21-5/8 25-5/8 29-7/8 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 6,970 7,870 9,535 | 16-5/8 20-5/8 24-7/8 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 4,305 5,020 5,665 6,865 | 2,960 3,325 6,395 6,395 6,395 AB Ø (") 5/8" 5/8" 7/8" 7/8" 7/8" 1" 1" | 4,785 5,790 11,675 11,675 11,675 Post Fasteners (6) - 1/4" x 2-1/2" SDS (10)-1/4" x 2-1/2" SDS (14)-1/4" x 2-1/2" SDS (20)-1/4" x 2-1/2" SDS (20)-1/4" x 2-1/2" SDS (20)-1/4" x 2-1/2" SDS (30)-1/4" x 2-1/2" SDS | Notes Heavy Hex Ancho | or Nut | | | | |





FIRST FLOOR PLAN AREA: 543 SQ.FT.

LOG WORK GENERAL NOTES

ALL DIMENSIONS ARE CONSTRUCTION DIMENSIONS.
ALL DIMENSIONS TO BE VERIFIED ON SITE BY GEN.
CONTRACTOR BEFORE STARTING CONSTRUCTION

TOW= TOP OF WALL
TOW= 0 @ BOTTOM OF LOG WALL
T= TOP OF LOG
B= BOTTOM OF LOG
TYP.= TYPICAL

ALL LOG SIZES NOTED TO BE MID SPAN DIAMETERS.
ALL LOG WALL AND LOG HEIGHTS INDICATED
ON PLAN ARE MINIMUM HGT.
ALLOW FOR 1.5" FLAT CUT ON SILL AND HEADER LOGS

TO CONNECT FRAMING. ALLOW FOR 3-4" TAKEN OFF OF TOW HEIGHT.

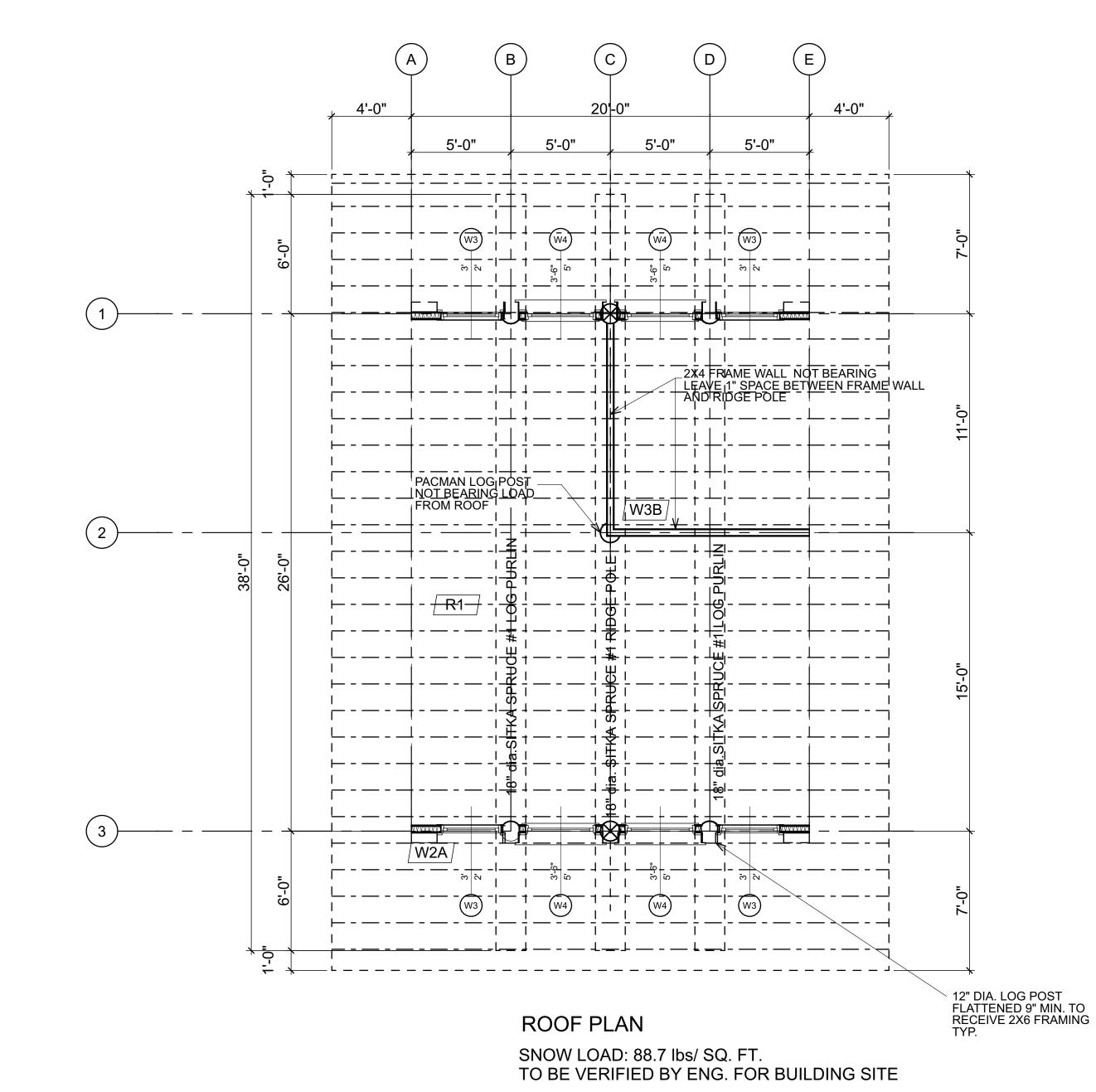
THRU BOLTS TO BE TIGHTENED TO BE LOWERED EVERY 3 MONTHS FOR 1ST YEAR AND TWICE A YEAR FOR NEXT 4 YEARS AS HOUSE LOGWORK SETTLES

DOWN AS LOGS LOSE MOISTURE CONTENT & COMPRESS

UNDER LOADS

FASTEN SILL LOG TO ANCOR BOLTS
USING COUPLER NUT TO 5/8" THREADED
ROD, TIMBER WASHER AND NUTS.
FASTEN CAP LOG DOWN TO LOG BELOW
W/ 3/8" ASSY SCREWS @ 4' O.C.

ALL LOGWORK TO BE REVIEWED BY STRUCTURAL ENGINEER



- 25,26

- 25,29

SSTB 16 SSTB20 SSTB24 SSTB28 SSTB34 SSTB36

- 28,29

26.98 in2 25,27

STRUCTURAL RECAP SCHEDULE

PROJECT: SMITH - Black Foest Cabins, 7251 RICHARDSON WAY, VALDWZ, AK

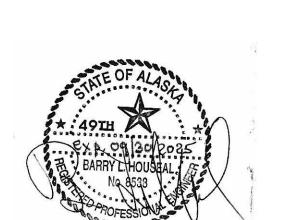
DESCRIPTION
LOCATION
SIZE & SPECIES
AREA
PAGE #
Design Criteria
All Areas
- 1
Snow Load Calcs.
All Areas
- 2,7A
Lateral Analysis
All Areas
See Details p. # 24
- 3 thru 24

2" x 12" DF # 2 @ 16" cc

18" φ Sitka Spruce # 1

42" W x 12" D w/ (2) - # 4's cont.

26" W x 12" D w/ (2) - # 4's cont.



Roof (8:12)

A & E lines 1 & 3 lines

Roof

Rafters

Ridge & Purlins

Continuous Footings

Continuous Footings

CONSTRUCTION MATERIALS

W1 TYPICAL SLAB ON GRADE
5" THICK MONOLITHIC SLAB ON GRADE
18"x18" TAPERED UP TO 5" THICK MONOLITHIC HEATED
SLAB OVER LAYER OF 2" XPS f-250 FOAM
(25 psi COMPRESSION)
OVER 4" MIN. COMPACTED SAND AND GRAVEL

W2 TYPICAL EXTERIOR LOG WALL
LOGS TO BE 14" dia. MIDSPAN SITKA SPRUCE
WITH 13" GAIN PER STACK AVERAGE

W2A TYPICAL 2ND STOREY EXTERIOR WALL
FALSE LOG SIDING PANELS (4 PIECES B/W POSTS)
ON 5/8" CDX SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B.
INT. FINISH TO OWNERS SPECS.

W3A TYPICAL INTERIOR FRAME WALL (SETTLING) (1st FL.)

INT. PARTITION WALLS TO BE:
WALL FINISH TO OWNER'S SPECS BOTH SIDES
2X6 @ 16" O.C FRAME WALL
W/ SLIP JOINT @ BOTTOM OF WALL

W3B TYPICAL NONE BEARING INTERIOR FRAME WALL (ROOF)
INT. PARTITION WALLS TO BE:
WALL FINISH TO OWNER'S SPECS BOTH SIDES
2X4 @ 16" O.C FRAME WALL

F1A TYPICAL FIRST FLOOR
5" CONC. SLAB HOUSING IN FL. HEATING
LVP FLOORING GLUED DOWN

R1 TYPICAL ROOF TO BE:

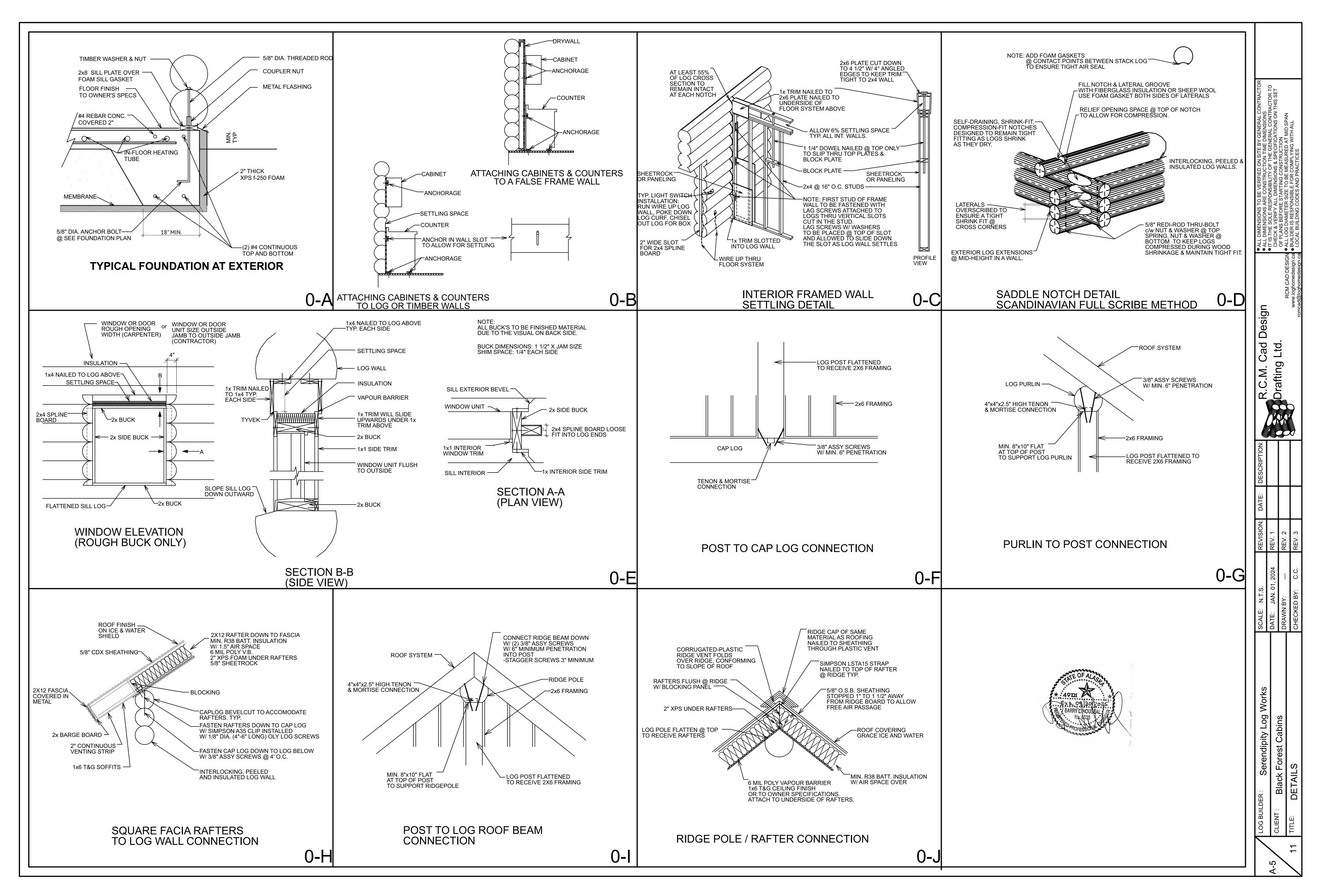
24 GAUGE STANDING SEAM ROOF (BLACK)
ON ICE & WATER SHIELD
5/8" CDX SHEATHING
2x12 DF #2 @ 16" O.C. RAFTERS
R 38 MIN. BATT INSULATION OVER LIVING AREA
W/ 1.5" AIRSPACE (ROOF VENTILATION
FROM SCREENED VENTED SOFFIT TO
VENTED RIDGE CAP)
6 MIL POLY V.B.
2" XPS FOAM UNDER RAFTERS
5/8" SHEETROCK

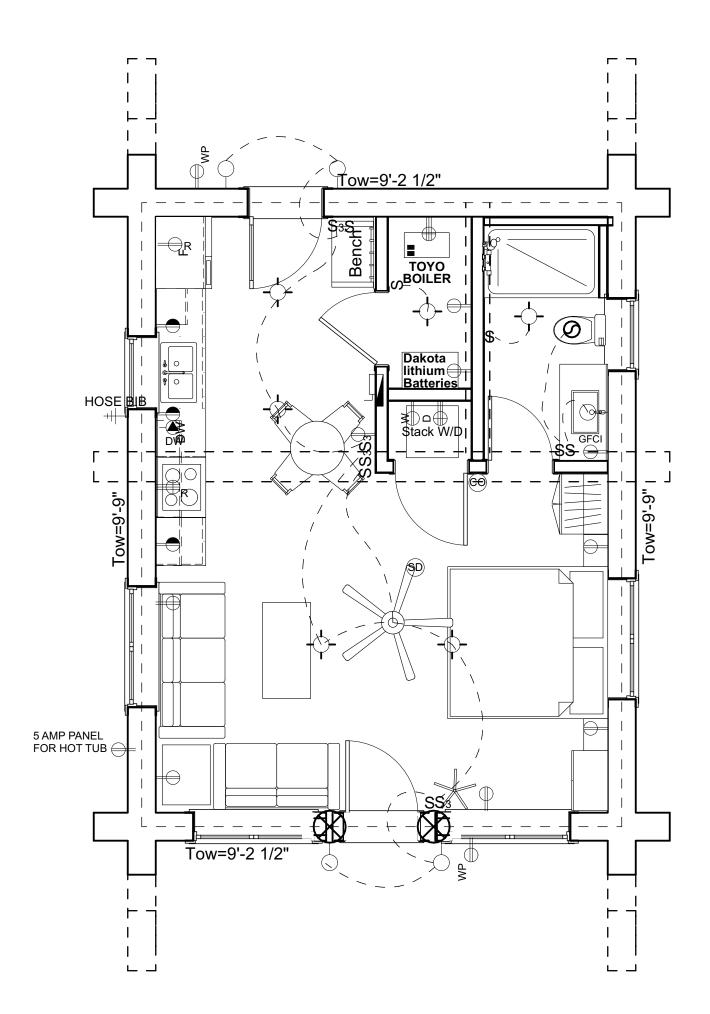
| | BLH | | | Change | Dottom Nat- | Ton Diete | Dattau Ni-t- | Anabay | | | Seismic | Wind |
|----|------------------------|-------------|------------|--|--|-------------------------|--|--------------------------|-----------|-------|---------|----------------------|
| IL | T SHEARWALLS Sheathing | Nailing | Sides | Stagger Bot. Plate | Bottom Plate Connection | Top Plate Connection | Bottom Plate Connection | Anchor Bolts | Framing | Plate | PLF | PLF |
| | 3/8" ply or 7/16" OSB | 8d @ 6"/12" | 1 | No. | SDWS 1/4x6" @ 15" cc | LTP4 @ 30" cc | | 5/8" dia. x 12" @ 48" cc | 2x Studs | 2x | 260 | 365 |
| ¥. | 3/8" ply or 7/16" OSB | 8d @ 4"/12" | 1 | Yes | SDWS 1/4x6" @ 11" cc | LTP4 @ 20" cc | | 5/8" dia. x 14" @ 48" cc | 3x Studs | 3x | 380 | 530 |
| | 3/8" ply or 7/16" OSB | 8d @ 3"/12" | 1 | Yes | SDWS 1/4x6" @ 8" cc | LTP4 @ 16" cc | LTP5 @ 14" cc | | 3x Studs | 3x | 490 | 685 |
| | 3/8" ply or 7/16" OSB | 8d @ 2"/12" | 1 | Yes | SDWS 1/4x6" @ 6" cc | LTP4 @ 12" cc | LTP5 @ 10" cc | | 3x Studs | 3x | 640 | 895 |
| | 3/8" Struc 1 | 8d @ 2"/12" | 1 | Yes | SDWS 1/4 x6" @ 5" cc | LTP4 @ 10" cc | LTP5 @ 10" cc | | 3x Studs | 3x | 730 | 1020 |
| | 3/8" ply or 7/16" OSB | 8d @ 4"/12" | 2 | Yes | SDWS 1/4x6" @ 5" cc | LTP4 @ 10" cc | LTP5 @ 8" cc | 5/8" dia. x 14" @ 24" cc | 3x Studs | 3x | 760 | 1060 |
| | 3/8" ply or 7/16" OSB | 8d @ 3"/12" | 2 | Yes | SDWS 1/4x6" @ 4" cc | LTP4 @ 8" cc | LTP5 @ 6" cc | 5/8" dia. x 14" @ 18" cc | 3x Studs | 3x | 980 | 1370 |
| | 3/8" ply or 7/16" OSB | 8d @ 2"/12" | 2 | Yes | SDWS 1/4x6" @ 3" cc | LTP4 @ 6" cc | LTP5 @ 5.5" cc | 5/8" dia. x 14" @ 14" cc | 4x DF # 2 | 3x | 1280 | 1790 |
| | 3/8" Struct 1 | 8d @ 2"/12" | 2 | Yes | SDWS 1/4x6" @ 2" cc | LTP4 @ 4" cc | LTP5 @ 4" cc | 5/8" dia. x 14" @ 12" cc | 4x DF # 1 | 3x | 1460 | 2040 |
| | | | | WOOD AND A STATE OF THE STATE O | WOLD THE THE THE TANK | | | | | | | |
| | | | | | SDC C-F | SDC C-F | | | | | | |
| 5 | Stemwall Width (") | AB Ø (") | Length (") | The second secon | Stemwall Allow Tension | Allow Slab-on-grade | | | | | | |
| 6 | | 5/8" | 17-5/8 | 12-5/8" | 2,550 | 3,780 | _ | | | | | |
| 0 | 6 | 5/8" | 21-5/8 | 16-5/8 | 2,960 | 4,785 | _ | | | | | |
| 4 | 6 | 5/8" | 25-5/8 | 20-5/8 | 3,325 | 5,790 | | | | | | |
| 8 | 8 | 7/8" | 29-7/8 | 24-7/8 | 6,395 | 11,675 | | | | | | |
| 4 | 8 | 7/8" | 34-7/8 | 28-7/8 | 6,395 | 11,675 | | | | | | |
| 6 | 8 | 7/8" | 36-7/8 | 28-7/8 | 6,395 | 11,675 | - | | | | | |
| | HOLDOWNS | POST "t" | DF/SP | SPF/HF | AB Ø (") | Post Fasteners | Notes | | | T | | |
| | HDU2 | 3" | 3,075 | 2,215 | 5/8" | (6) - 1/4" x 2-1/2" SDS | | | | | | |
| | HDU4 | 3" | 4,565 | 3,285 | 5/8" | (10)-1/4" x 2-1/2" SDS | 1 | | | 1 | | |
| | HDU5 | 3" | 5,645 | 4,065 | 5/8" | (14)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU8 | 3" | 5,980 | 4,305 | 7/8" | (20)-1/4" x 2-1/2" SDS | | 70.1 | | | | |
| | HDU8 | 3.5" | 6,970 | 5,020 | 7/8" | (20)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU8 | 4.5" | 7,870 | 5,665 | 7/8" | (20)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU11 | 5.5" | 9,535 | 6,865 | 1" | (30)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU11 | 7.25" | 11,175 | 8,045 | 1" | (30)-1/4" x 2-1/2" SDS | | | | | | |
| | | | | | 1 | | 1 Street 1 S | 337. 32 | | | | On the second second |
| | HDU14 | 7.25" | 14,375 | 10,435 | 1 ⁿ | (36)-1/4" x 2-1/2" SDS | Heavy Hex Ancho | or Nut | | | | |

| Wind PLF 365 530 685 895 1020 1060 1370 1790 2040 | LOG BUILDER: Serendipity Log Works | CLIENT: Black Forest Cabins | TITLE: FIRST FLOOR & ROOF PLAN | |
|---|------------------------------------|-----------------------------|--------------------------------|--|
| | | A-4 | 11 T | |
| | | < | | |

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FIRST FLOOR ELECTRICAL PLAN

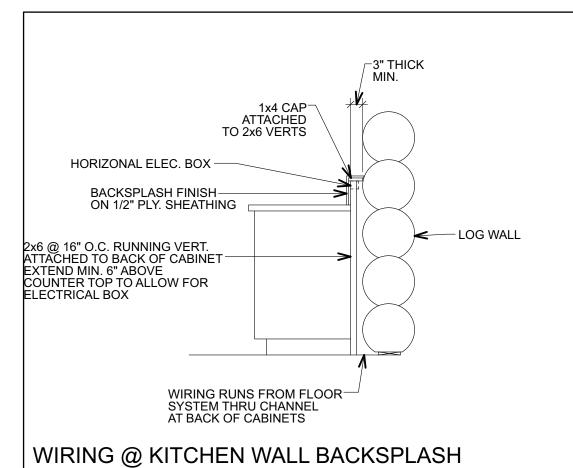
NOTE: ALL ELECTRICAL BOXES TO BE CUT
BY LOG MANUFACTURER AS PER PLAN

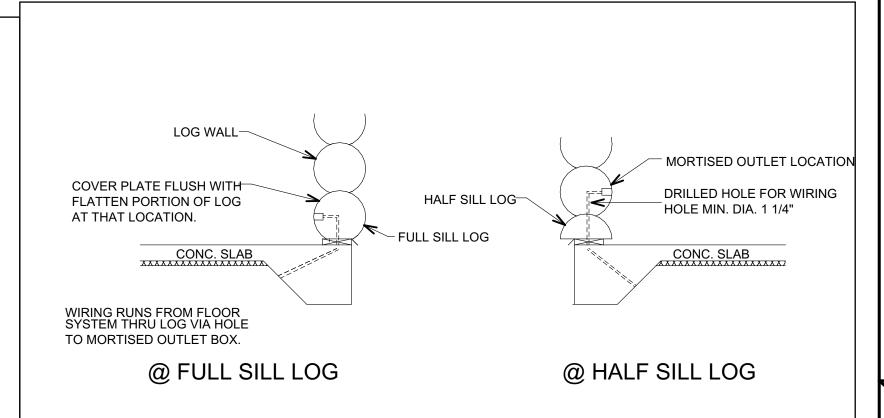


| | CAL L | EGE | ND | | | |
|------------------------|-------------------------------------|------|------|-------|------------------|------------------------|
| SYMBOL | DESCRIPTION | VOLT | WATT | WIRES | OUTLET | REMARKS |
| \longrightarrow | DUPLEX RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| \longrightarrow_{WP} | OUTSIDE DUPLEX RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| \longrightarrow R | REFRIGERATOR RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| \longrightarrow w | WASHER RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| ■ D | DRYER RECEPTACLE | 240 | 5200 | 3#10+ | <u>↓</u> 14-30 R | |
| ₩ R | RANGE RECEPTACLE | 240 | 5200 | 3#10+ | <u></u> 14-30 R | |
| - | DUPLEX REC. SPLIT CIRCUIT | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| — DW | DISH WASHER RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| FR | FREEZER RECEPTACLE | 240 | 5200 | 3#10+ | <u></u> 14-30 R | |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| | INFLOOR RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| Ø | EXHAUST FAN | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| K | PHONE | | | | | |
| TV | CABLE OUTLET | | | | | |
| | BROADBAND CABLE | | | | | |
| * | SATELLITE CABLE | | | | | |
| (SD) | SMOKE ALARM RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| CO | CARBON MONOXIDE DETECTOR | 120 | 1200 | 2#12+ | 5-20 R | |
| | BELL/BUZZER RECEPTACLE | 120 | 1200 | 2#12+ | 5-20 R | |
| • | PUSH BUTTON RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| <u> </u> | CEILING OUTLET | 120 | 1200 | 2#12+ | 5-20 R | |
| | RECESSED CEILING OUTLET | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| <u> </u> | WALL MOUTING LIGHT | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| MS | MOTION SENSOR LIGHT | 120 | 1200 | 2#12+ | 5-20 R | |
| ÐΑ | 1-4' FLUORESCENT | 120 | 1200 | 2#12+ | 5-20 R | |
| PRA | 2-8' FLUORESCENT | 120 | 1200 | 2#12+ | 5-20 R | |
| S | SINGLE POLE SWITCH | 120 | 1200 | 2#12+ | <u></u> 5-20 R | |
| S ₃ | THREE WAY SWITCH | 120 | 1200 | 2#12+ | ↓ 5-20 R | |
| S ₄ | FOUR WAY SWITCH | 120 | 1200 | 2#12+ | 5-20 R | |
| | POWER PANEL | | | | | |
| | CIRCUIT BREAKER PANEL | | | | | 50 CIRCUIT BREAKERS |
| M | METER BASE | | | | | |
| X | BASEBOARD HEATER | 120 | 1200 | 2#12+ | 5-15 R | |
| T | THERMOSTAT | | | | | |
| | HOSE BIB | | | | | |

GENERAL ELECTRICAL NOTES:

- SERVICE SIZE TO BE 200 AMPS WITH A 50 CIRCUIT BREAKER PANEL.
 SERVICE BREAKER RATING TO BE 200 AMPS.
 HOT CONDUCTORS TO BE 2-#1R90 (XLPE) COPPER (BLACK, RED OR BLUE)
 NEUTRAL CONDUCTOR TO BE 1-#4R90 (XLPE) COPPER (WHITE)
 SERVICE CONDUIT TO INSIDE TO BE 1 1/4" IN DIAMETER.
 SERVICE GROUNDING CONDUCTOR TO BE MINIMUM #4 BARE COPPER.
- ALL WORK TO CONFORM TO APPLICABLE ELECTRICAL CODES & LOCAL CODES & BYLAWS.
- 3. ALL ABOVE COUNTER RECEPTACLE TO BE 12" ABOVE TOP OF COUNTER. WASHER & DRYER OUTLETS TO BE BEHIND MACHINES 2' MAX. ABOVE FLOOR. ALL OTHER WALL PLUGS & PHONE OUTLET TO BE 1' ABOVE FLOOR. ALL SWITCHES & THERMOSTATS TO BE 4' ABOVE FLOOR.



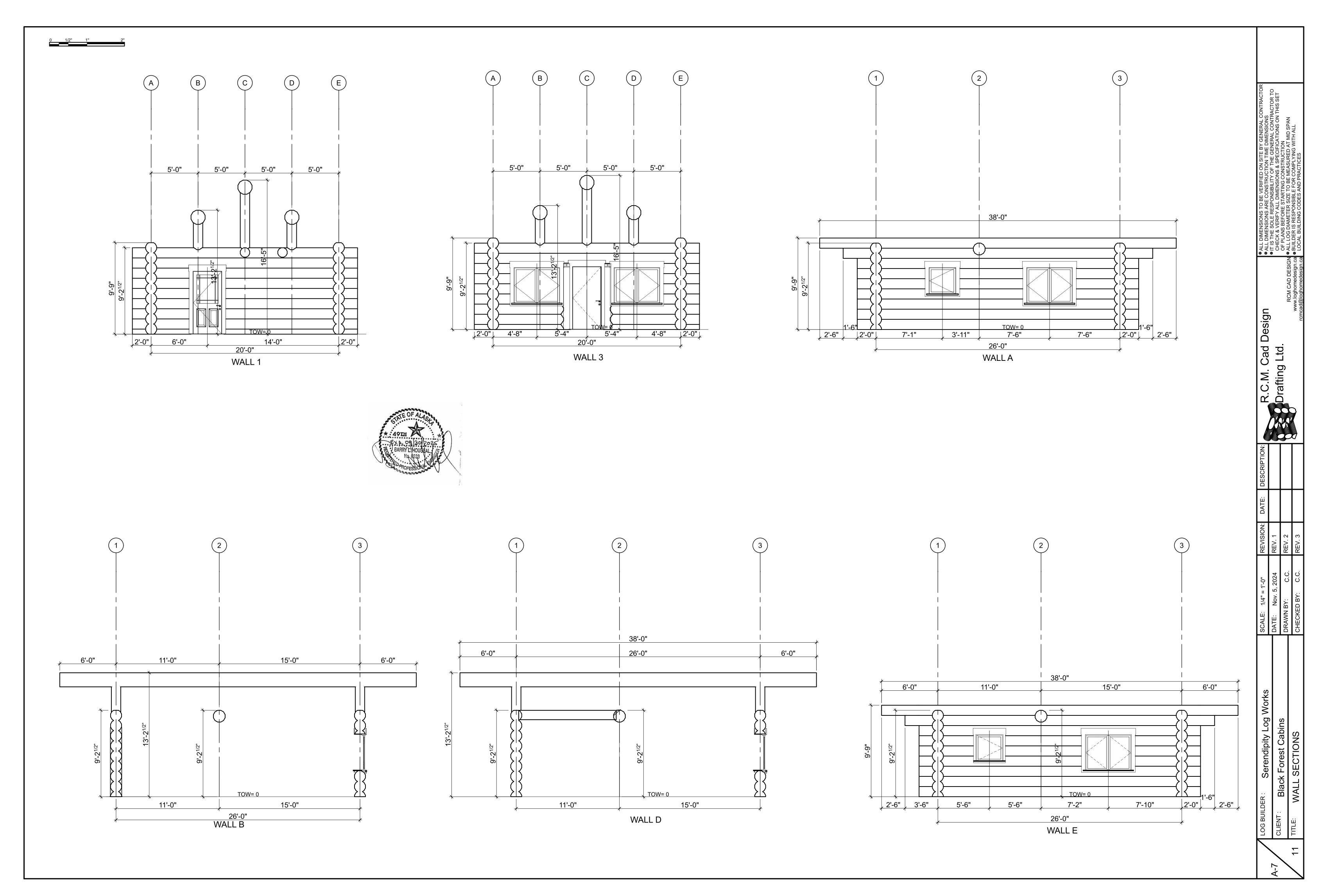


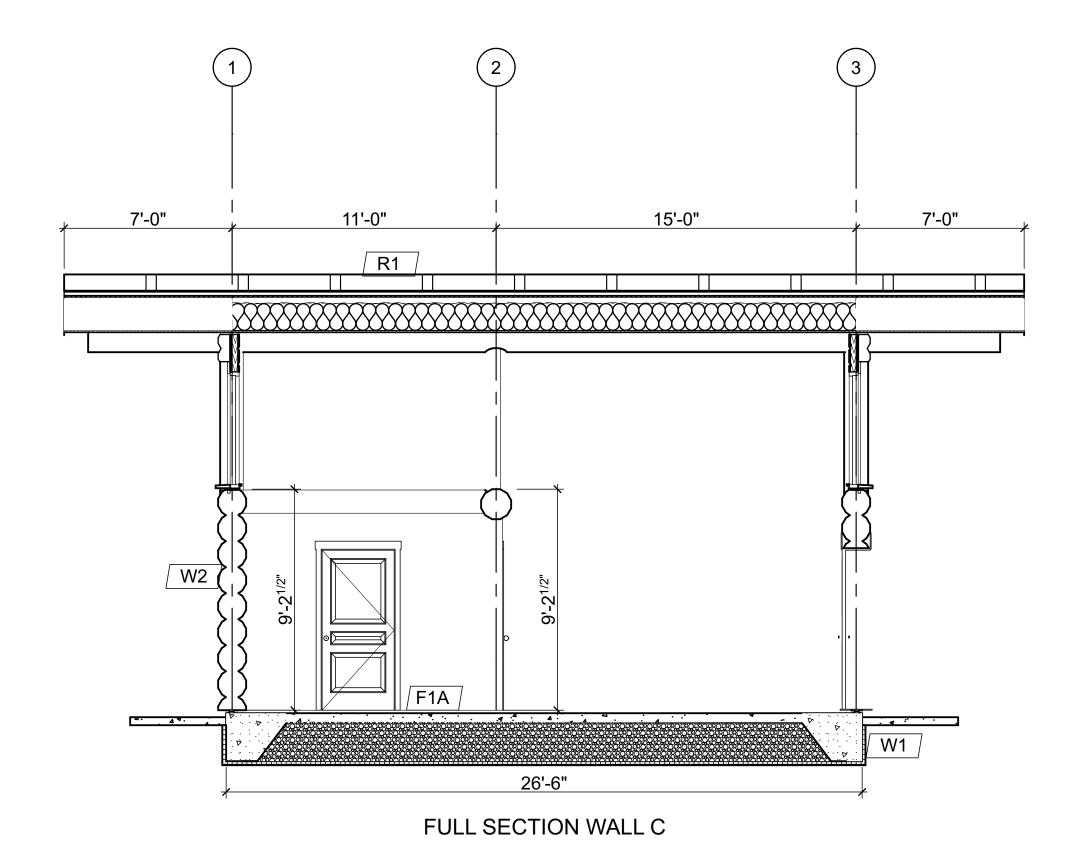
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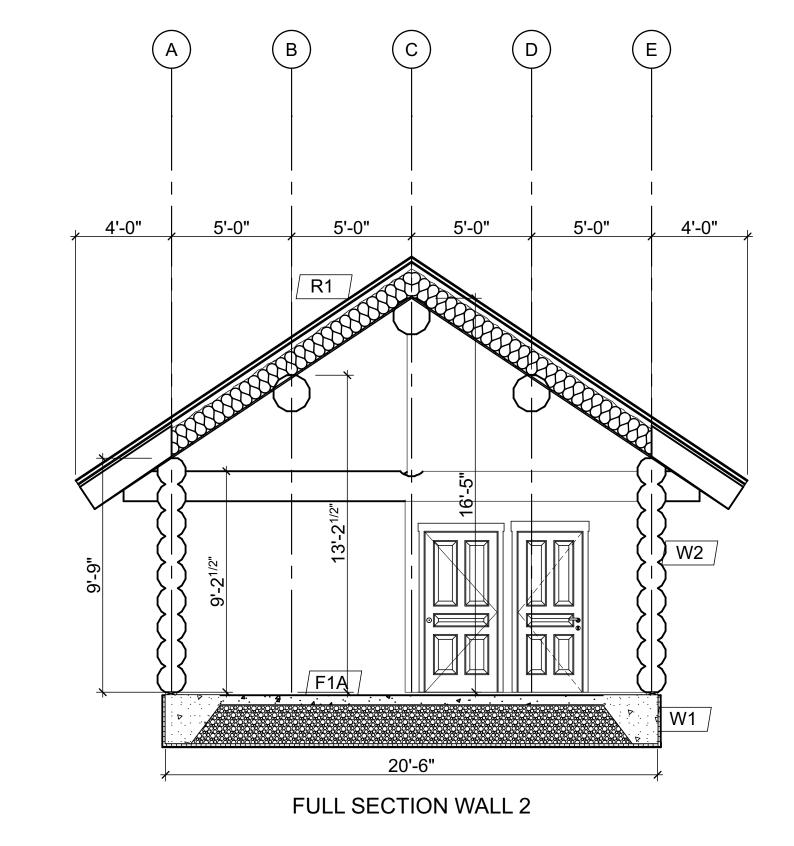
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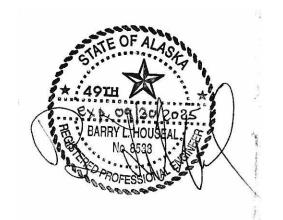
ELECTRICAL WIRING DETAIL IN LOG WALLS

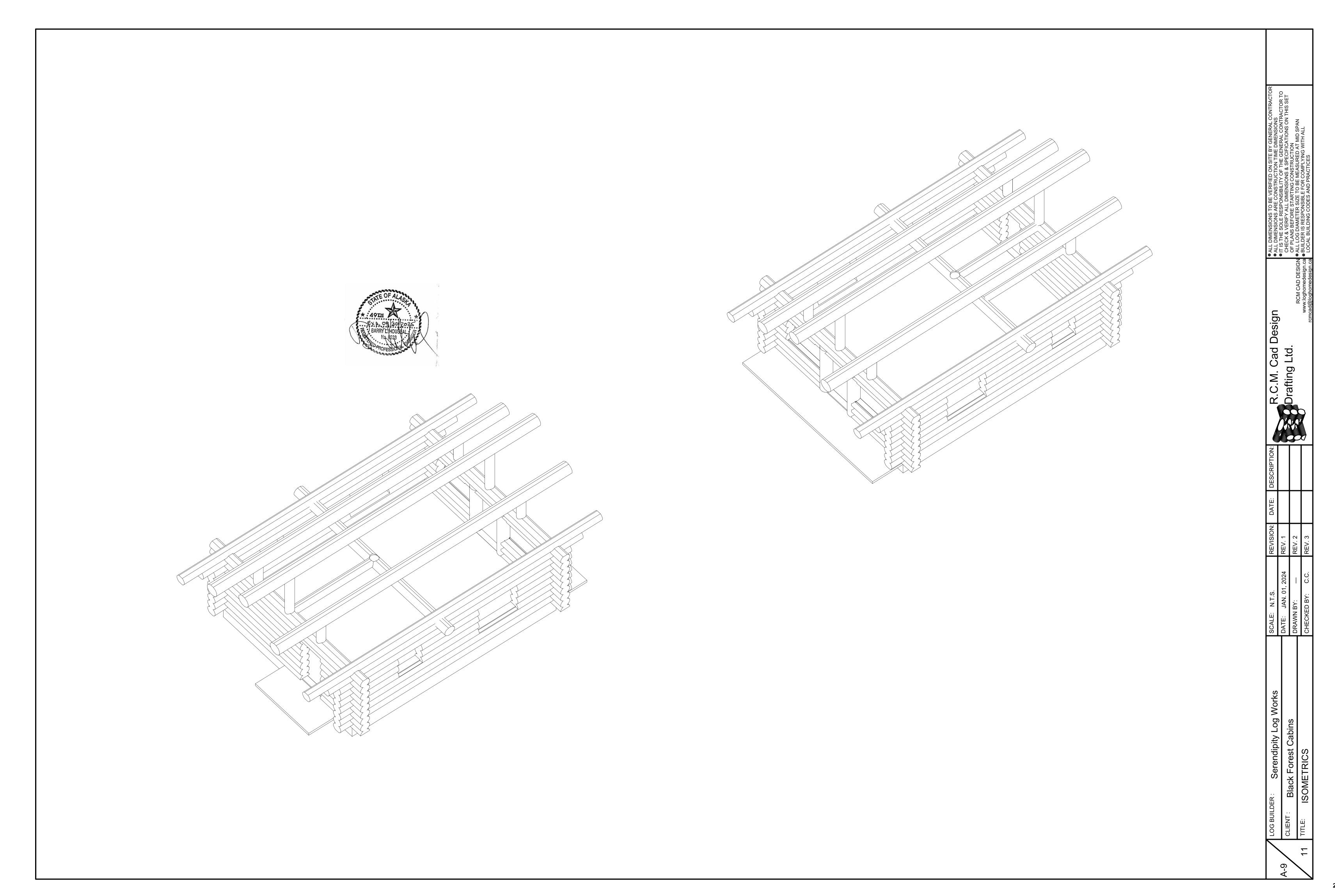
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GENERAL NOTES ARE NOT INTENDED TO APPLY TO EVERY SET OF PLANS, BUT ARE INTENDED TO GIVE OWNER & CONTRACTORS SOME BASIC GENERAL GUIDELINES RELATING TO LOG CONSTRUCTION.

ALL NOTES FOUND ON ATTACHED PLANS TAKE PRECEDENCE OVER THESE GENERAL NOTES.

THIS BUILDING IS DESIGNED IN ACCORDANCE WITH THE 2021 IBC & MAY BE MODIFIED TO SUIT FEDERAL & LOCAL CODE REQUIREMENTS, GEOGRAPHICAL ENVIRONMENTAL DIFFERENCES & MATERIAL AVAILABILITY. ALL COSTS INCURRED TO APPLY THOSE CHANGES, AS WELL AS ENGINEERING, PERMIT, INSPECTION, MATERIAL & LABOUR COSTS ARE THE SOLE RESPONSIBILITY OF THE OWNER.

ALL DIMENSIONS ARE AT CONSTRUCTION TIME DIMENSIONS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION. THIS SET OF WORKING DRAWINGS DOES NOT INCLUDE A BUILDING MATERIAL LIST.

THE OWNER OR PROJECT MANAGER IS TO PROVIDE & COORDINATE PRODUCT SELECTION. ASSEMBLY & INSTALLATION WITH GENERAL CONTRACTOR

ALL LOGS DIAMETER NOTED SIZE TO BE MEASURED AT MID SPAN.

DESIGN DATA

UNLESS OTHERWISE NOTIFIED BY OWNER & NOTED IN ATTACHED DRAWINGS, MIN. DESIGN LOADS ARE: -SOILS TESTS TO CONFIRMED A SOIL BEARING PRESSURE OF 1500 POUNDS PER SQUARE FOOT. FOUNDATION & FOOTING DESIGN MUST BE CHECKED BY ENGINEER OR LOCAL BUILDING DEPARTMENT -THE DEAD LOAD IS THE ACCUMULATIVE WEIGHT OF ALL STRUCTURAL MEMBERS, THE FIXTURES AND THE PERMANENTLY ATTACHED EQUIPMENT OF THE LOG BUILDING AND ITS FOUNDATION. -THE LIVE LOAD IS THE WEIGHT THAT IS SUPERIMPOSED ON THE STRUCTURAL COMPONENTS BY THE USE AND OCCUPANCY OF THE BUILDING, SUCH AS FURNITURE, APPLIANCES AND PEOPLE. FIRST FLOOR LOADS ARE: 40 PSF LIVE LOAD + 10 PSF DEAD LOAD = 50 PSF TOTAL LOAD SECOND FLOOR LOADS ARE : 40 PSF LIVE LOAD + 10 PSF DEAD LOAD = 50 PSF TOTAL LOAD ROOF LOADS ARE: 88.7 PSF ROOF SNOW LOAD + 15 PSF DEAD LOAD = 103.7 PSF TOTAL LOAD DECK LOADS ARE: 10 PSF DEAD LOAD+40 PSF LIVE LOAD+ 88.7 PSF SNOW LOAD= 138.7 PSF TOTAL LOAD HOTTUB LOAD ON DECK IS 95 PSF TO BE ADDED TO DECK LOAD. DESIGN IS TO BE MODIFIED ACCORDINGLY IF LOCAL CONDITIONS SUCH AS SEIMIC ACTIVITY, WIND SPEED

&, OR HEAVY SNOW ACCUMULATION EXCEED THE PRECEDING DESIGN PARAMETERS. - MAXIMUM ALLOWED DEFLECTION FOR FIRST FLOOR SYSTEM & GYPROC CLADDED CEILINGS IS 1/360 OF THE SPAN DIMENSION. SECOND FLOOR & ATTIC, PURLINS, LINTELS, RAFTERS, NO GYPROC CEILINGS. MUST NOT DEFLECT MORE THAN 1/240 OF THE SPAN DIMENSION.

GENERAL CONSTRUCTION NOTES

SITE PREPARATION

OWNER / CONTRACTOR IS TO CONDUCT SOIL TESTS & DIG TEST HOLES TO DETERMINE SOIL TYPE & DRAINAGE PROPERTIES OF SITE. A SURFACE DRAINAGE PATTERN SHOULD BE ESTABLISHED WHICH WILL DRAIN THE ENTIRE AREA AND DIRECT WATER AWAY FROM THE HOUSE. DRIVEWAYS & WALKWAYS SHOULD BE SET LOW ENOUGH TO AVOID INTERFERENCE WITH THE DRAINAGE PATTERN. THE FINISHED GRADE WILL BE SLOPED AWAY FROM THE FOUNDATION WALL OF HOUSE. WHERE THE DRAINAGE SLOPE AROUND THE HOUSE MEETS A REVERSE SLOPE. A GENTLY SLOPING DITCH IS USED TO CARRY SURFACE WATER AWAY.

IF A WELL IS USED TO SUPPLY WATER FOR THE HOUSE, ALL SURFACE DRAINAGE MUST BE DIRECTED AWAY FROM WELL TO AVOID CONTAMINATION OF WATER SUPPLY. PRIVATE WATER WELL SHOULD BE AT LEAST 100' (30m) AWAY FROM SEPTIC TANK AND LEACH FIELD.

SEPTIC FIELD SHOULD BE 100' (30m) TO 500' (150m) AWAY FROM WATER FRONT (STREAM, LAKE, OCEAN) DEPENDING ON SOIL TYPE AND DEPTH.

CONCRETE FOUNDATION

REMOVE ALL LOOSE & ORGANIC MATERIALS & EXCAVATE FOR FOOTINGS & PADS AS PER PLANS. THE DISTANCE OF THE FOOTING BASE TO THE FINISHED GRADE MUST BE NO LESS THAN THE DEPTH OF LOCAL FROST PENETRATION.

FOOTINGS MUST BE ACCURATELY POSITIONED AND ROUGHLY LEVEL. FOOTING FORMS ARE TYPICALLY MADE OF 2x STOCK. CONCRETE MUST BE PLACED CONTINUOUSLY WITHOUT INTERRUPTION. POST & COLUMN FOOTINGS ARE TO BE PLACED SO THAT SUPPORTED LOAD IS APPLIED AT CENTER FOOTINGS VARY IN SIZE & DEPTH DEPENDING ON THE ALLOWABLE SOIL PRESSURE AND THE LOAD. - STEPPED FOOTINGS MAY BE REQUIRED ON STEEPLY SLOPING SITES, OR WHERE AN UNSTABLE SOIL IS ENCOUNTERED IN PART OF THE EXCAVATION.

THE VERTICAL PART OF THE STEP SHOULD BE PLACED AT THE SAME TIME AS THE FOOTING. THE BOTTOM OF THE FOOTING IS ALWAYS PLACED ON UNDISTURBED SOIL OR COMPACTED GRANULAR FILL WITH EACH RUN LEVEL. ON STEEP SLOPES, MORE THAN ONE STEP MAY BE REQUIRED. EXCEPT IN ROCK, THE VERTICAL DISTANCE BETWEEN STEPS SHOULD NOT EXCEED 2' & THE HORIZONTAL DISTANCE BETWEEN STEPS SHOULD BE NOT LESS THAN 2'. FOR VERY STEEP SLOPES. WHERE THESE LIMITATIONS CANNOT BE MAINTAINED. SPECIAL FOOTINGS MAY BE REQUIRED.

PLACING CONCRETE:

· WHENEVER POSSIBLE, CONCRETE SHOULD BE PLACED INTO FORMS CONTINUOUSLY IN HORIZONTAL LIFTS NOT EXCEEDING 12" TO 18" IN DEPTH. CONCRETE SHOULD NOT BE ALLOWED TO FALL INTO FORMS FROM A HEIGHT OF MORE THAN 5', AS THIS CAUSES THE CONCRETE TO SEGREGATE. FOR HIGHER DROPS, THE CONCRETE SHOULD BE DEPOSITED THROUGH A SUITABLE VERTICAL PIPE. THE CONCRETE SHOULD NOT BE DEPOSITED IN A PILE BUT SHOULD BE SPREAD OUT AND LEVELLED BY RAKING OR SHOVELLING. VIBRATORS MAY BE USED TO CONSOLIDATE THE CONCRETE BUT SHOULD NOT BE USED TO ASSIST PLACEMENT. CONCRETE CAN ALSO BE PLACED BY PUMPING. - IF IT IS NECESSARY TO INTERRUPT THE PLACING OPERATIONS, THE SURFACE OF THE CONCRETE PLACED IN THE FORMS SHOULD BE LEVELLED OFF & THE CONCRETE ALLOWED TO SET PARTIALLY. THE SURFACE SHOULD THEN BE ROUGHENED TO PROVIDE A GOOD BONDING SURFACE FOR NEXT LIFT. WHEN WORK RESUMES, THE SURFACE SHOULD BE CLEANED AND SLIGHTLY DAMPENED PRIOR TO PLACING THE CONCRETE. GROUT OF 1 PART CEMENT TO 2 PARTS SAND SHOULD BE SPREAD ABOUT 1/2" THICK OVER THE ROUGHENED SURFACE TO PROVIDE A GOOD JOINT BETWEEN THE TWO LIFT. THE NEW LIFT SHOULD BE PLACED IMMEDIATELY AFTER THE PLACEMENT OF THE GROUT. WHEN THE AIR TEMPERATURE IS AT OR BELOW 40°F OR WHEN THERE IS A POSSIBILITY OF IT FALLING TO THAT LEVEL WITHIN 24 HOURS, CONCRETE OPERATIONS SHOULD BE SUSPENDED. IF CONCRETE IS CARRIED ON, THE CONCRETE MUST BE KEPT AT A TEMPERATURE OF NOT LESS THAN 50°F OR MORE THAN 77°F WHILE BEING MIXED AND PLACED, AND IT MUST BE MAINTAINED AT A TEMPERATURE OF NOT LESS THAN 50°F FOR A MINIMUM OF 72 HOURS WHILE CURING. THE WATER TO BE MIXED INTO THE CONCRETE MAY HAVE TO BE HEATED. CONCRETE SHOULD NOT BE PLACED AGAINST FROZEN SOIL, AND ANY ICE OR SNOW SHOULD BE REMOVED FROM THE FORMWORK.

CURING CONCRETE:

SHRINKING FOR SEVERAL DAYS AFTER PLACING. THE CRACKING OF CONCRETE WALLS AND FLOORS CAN OFTEN RESULT FROM IMPROPER ATTENTION TO CURING, RADICALLY LOWERING THE CONCRETE POTENTIAL STRENGTH. WATER TIGHTNESS AND DURABILITY.

CONTROL JOINTS:

IF UNCONTROLLED CRACKING OF CONCRETE SLABS AND WALLS IS TO BE AVOIDED, STEEL REINFORCING RODS OR PROPERLY LOCATED AND FORMED VERTICAL CONTROL JOINTS SHOULD BE USED. WALL JOINTS ARE FORMED BY NAILING WOOD STRIP 3/4" THICK, BEVELLED TO 1/2" IN WIDTH, TO THE INSIDE OF BOTH INTERIOR & EXTERIOR WALL FORMS. THE PURPOSE OF THESE GROOVES IS TO PROVIDE A CONTROLLED PLANE OF WEAKNESS IN THE WALL, THUS PREDETERMINING THE LOCATION OF SHRINKAGE CRACKS.

DAMPPROOFING and EXTERIOR INSULATION:

CONCRETE WALLS BELOW GRADE SHOULD BE DAMPPROOFED WITH A HEAVY COAT OF BITU--MINUS MATERIAL APPLIED ON THE EXTERIOR SURFACE FROM THE FOOTINGS TO THE FINISHED GRADE LINE, TO MAKE THE WALL WATERTIGHT AGAINST ORDINARY SEEPAGE THAT MAY OCCUR AFTER A RAINSTORM.

2" EPS (EXTRUDED POLYSTYRENE) A CLOSED CELL RIGID INSULATION THAT DOES NOT ABSORB MOISTURE, SHOULD BE ATTACHED TO EXTERIOR CONCRETE PERIMETER WALL WITH ADHESIVE OR STEEL FASTENERS. (A MUST FOR HEATED BASEMENT AND CRAWL SPACE)

BEAM POCKETS FOR UNTREATED WOOD BEAMS SHOULD BE BIG ENOUGH TO ALLOW 1/2" AIR SPACE AT THE SIDES & ENDS OF THE BEAM TO PREVENT DECAY. USE 30# FELT UNDER BEAM TO MAKE SURE WOOD BEAM IS NOT IN DIRECT CONTACT WITH CONCRETE.

CONCRETE SLABS:

BASEMENT FLOOR SLAB SHOULD BE AT LEAST 3" THICK AND SLOPED TOWARDS FLOOR DRAIN. - COMPLETE THE INSTALLATION OF SEWER & WATER LINES... BEFORE THE SLAB IS PLACED. COMPACT BACKFILL IN TRENCHES.

· PUT 5" MIN. OF CRUSHED ROCK OR COARSE GRAVEL UNDER THE FLOOR SLAB TO RESTRICT THE PASSAGE OF MOISTURE BY CAPILLARY ACTION FROM THE GROUND UP TO THE SLAB SUGGEST NOW ADDING 2" RIGID INSULATION, R12 MINIMUM AND 2" OF SAND APPLY A LAYER OF 6 MIL POLYETHYLENE TO DAMPPROOF THE FLOOR. VAPOUR BARRIER TO OVERLAP 4" MINIMUM AT THE JOINTS.

BASEMENT FLOOR SLAB SHOULD NOT BEAR DIRECTLY ON WALL OR COLUMN FOOTINGS BUT SHOULD BE ISOLATED FROM THEM BY A 1" SAND CUSHION OR OTHER MEANS. - A PREMOULDED JOINT FILTER OR DOUBLE LAYER OF SHEATHING PAPER BETWEEN FLOOR SLAB AND WALL OR COLUMN SHOULD BE PROVIDED TO ALLOW FOR SLIGHT MOVEMENT OF THE FLOOR SLAB DUE TO SHRINKAGE OF THE SLAB DURING THE DRYING AND SETTLING OF THE SUBBASE.

- AFTER THE CONCRETE HAS BEEN PLACED AND CONSOLIDATED, IT SHOULD BE STRUCK OFF WITH A STRAIGHT EDGE TO THE PROPER ELEVATION.

- AFTER THE WATER SHEEN HAS DISAPPEARED AND THE CONCRETE HAS STIFFENED SLIGHTLY EDGING, JOINTING AND FLOATING OPERATIONS CAN BEGIN. - CONTROL JOINTING AND GROOVING MAY BE NECESSARY TO AVOID RANDOM CRACKING IN

THE SLAB. CONTROL JOINTS SHOULD BE PLACED ON LINE WITH COLUMNS AND WHEN FLOOR SLAB WIDTH CHANGES. THE DEPTH OF JOINTS SHOULD BE 1/4 OF THE SLAB THICKNESS.

FOUNDATION DRAINAGE:

DRAIN TILES SHOULD BE LAID ON SOLID UNDISTURBED SOIL AROUND THE PERIMETER OF THE WALL FOOTINGS WITH TOP OF TILE TO BE BELOW THE LEVEL OF THE BASEMENT FLOOR OR CRAWL SPACE, WITH A SLIGHT SLOPE TO A STORM SEWER OR OTHER ADEQUATE OUTLET. THE TILE IS THEN COVERED WITH 6" OF GRAVEL OR CRUSHED ROCK. TO PREVENT CLOGGED DRAIN TILE, LAY A FILTER CLOTHE OVER THE 6" OF GRAVEL OR USE

CORRUGATED PIPE WITH FABRIC SOCK COVERING TO PREVENT SOIL PARTICLES FROM

CONCRETE REINFORCEMENT:

CONCRETE 28 DAYS CURING PERIOD HAS PASSED.

CONCRETE DENSITY IS INCREASED BY ADDING MORE CEMENT TO THE MIX. FOR LOG HOMES. THE CONCRETE COMPRESSIVE STRENGTH SHOULD BE A MINIMUM OF 3000 PSI AFTER MINIMUM 28 DAYS FIELD CURING PERIOD.

CONCRETE IS NOT AN ELASTIC MATERIAL AND IS FAIRLY WEAK IN SHEAR STRENGTH. BY PLACING METAL REINFORCING BARS (REBARS) INTO THE FORMS BEFORE THE CONCRETE IS POURED, THE CONCRETE SHEAR STRENGTH CAN BE INCREASED MANY TIMES. REBAR COMES IN SIZES DESIGNATED BY NUMBERS 2 TO 8. THAT NUMBER x 1/8" EQUALS THE REBAR DIAMETER. #5 REBAR IS 5/8" IN DIAMETER. #4 OR #5 REBAR IS USUALLY USED IN RESIDENTIAL CONSTRUCTION.

CONCRETE REINFORCEMENT SHALL BE DESIGNED, FABRICATED, & PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS & / OR ENGINEER SPECIFICATIONS.

BACKFILLING:

BACKFILLING OF FOUNDATION WALLS SHOULD NOT BE CARRIED OUT UNTIL: - FLOOR JOIST & SUBFLOOR ARE IN PLACE, FULLY NAILED TO BRACE CONCRETE WALLS.

- 4" PERIPHERAL DRAIN TILES ARE IN PLACE, COVERED WITH 6" GRAVEL. - ALL DAMPPROOFING MEMBRANE AND EXTERNALLY MOUNTED INSULATION INSTALLED SUDDEN PRESSURES AGAINST FOUNDATION WALLS BROUGHT ABOUT BY LOADS OF BACKFILL MATERIAL MAY CAUSE THE WALLS TO MOVE, RESULTING IN DAMAGE SUCH AS CRACKING

THUS GREATLY LOWERING OVERALL STRENGTH OF FOUNDATION. THEREFORE. IT IS CRUCIAL THAT BACKFILL MATERIAL BE DEPOSITED GRADUALLY AND UNIFORMLY AROUND THE PERIMETER IN SMALL LIFTS, 6" HIGH MAXIMUM. EACH LIFT BEING COMPACTED TO THE APPROPRIATE DENSITY BEFORE THE NEXT LIFT IS PLACED. CARE SHOULD BE TAKEN TO ENSURE THAT THE DAMPROOFING MEMBRANE & INSULATION IS NOT DAMAGED.

BACKFILL SHOULD CONSIST OF FREE DRAINING GRANULAR MATERIAL BOTTOM OF FIRST ROUND OF LOGS SHOULD BE AT LEAST 18" ABOVE FINISHED GRADE & WP TO 48" OR MORE WHERE HEAVY SNOW IS THE NORM. IF GUTTERS TO CHANNEL ROOF WATER AWAY FROM LOG HOME ARE NOT PRACTICAL BECAUSE OF ICE DAM BUILDUP @ ROOF, THEN DIG A SMALL TRENCH RIGHT UNDER ROOF DRIP LINE & FILL WITH SMALL ROUND GRAVEL TO MINIMIZE SPLASHING OF ROOF WATER ON TO BOTTOM LOGS. USE DRIP IRRIGATION INSTEAD OF SPRINKLERS TO WATER PLANTS CLOSE TO LOGHOME PERIMETER.

BUILDING MATERIAL DELIVERY & STORAGE:

PRIOR TO LOG PACKAGE DELIVERY AND SET UP, FOUNDATION AND FIRST FLOOR SYSTEM MUST BE COMPLETED AND READY TO BEAR LOG STRUCTURE. ALL CONCRETE MUST BE CURED AND FIRST FLOOR SYSTEM MUST BE FULLY NAILED AND ANCHOR BOLTED TO CONCRETE WALLS. ACCESS IN & OUT TO BUILDING SITE BY A 48' TRUCK-TRAILER WITH CRANE MUST BE PROVIDED ACCESSIBLE BY TRUCK-TRAILER IS THE FULL RESPONSIBILITY OF OWNER-BUYER. AS FAR AS POSSIBLE MATERIAL SHOULD BE DELIVERED TO THE SITE JUST BEFORE IT IS TO BE USED. AS SOON AS LOG STRUCTURE IS ERECTED AND THRU BOLTED, ROOF SYSTEM SHOULD BE

THE PROTECTION OF BUILDING MATERIALS ON THE SITE & STORAGE BEFORE USE ARE VERY IMPORTANT. ROOF: - IN THE NORMAL STAGING OF CONSTRUCTION, THE FRAMING LUMBER AND SHEATHING MATERIALS ARE DELIVERED TO THE SITE AFTER THE FOUNDATION IS COMPLETE. THE LOG PACKAGE IS TRUCKED TO THE

SITE ON CONSECUTIVE DAYS SO LOGS MAY BE UNLOADED & PLACED BY CRANE. TRY TO ARRANGE LOG DELIVERY WHEN LOCAL WEATHER DOES NOT CALL FOR RAIN. TO PROTECT THE NEWLY ERECTED LOG STRUCTURE FROM RAIN AND SUN DAMAGE.

INSTALL A ROOF ON THE HOUSE AS SOON AS POSSIBLE. FOR EXAMPLE, INSTALLING A STRUCTURAL INSULATED PANEL ROOF (SIP) IS A QUICK WAY TO GET ROOF

- LOGS AND FRAMING MATERIALS IN PLACE BEFORE THE HOUSE IS ENCLOSED MAY BE SUBJECTED TO RAINSTORM, BUT THE WETTING IS MOSTLY ON THE EXPOSED SURFACES AND WILL DRY OUT QUICKLY IN DRY WEATHER WITHOUT CAUSING DAMAGE.

- LUMBER STORED IN CLOSED PILES, MAY SOAK UP AND RETAIN WATER, AND DRYING OUT WILL BE VERY SLOW. THIS CONDITION SHOULD BE AVOIDED AS IT MAY LEAD TO STAIN AND DECAY. PILES OF LUMBER SHOULD BE PLACED ON SKIDS RAISED OFF THE GROUND AND COVERED WITH SHEETS OF WATERPROOF MATERIAL TO SHED WATER.

- WINDOW AND DOOR FRAMES ARE USUALLY THE NEXT ITEMS TO BE INSTALLED AFTER THE ROOFING. IF THE FRAMES ARE DELIVERED BEFORE THEY CAN BE INSTALLED, THEY SHOULD BE SHELTERED UNTIL THEY ARE USED. GOOD FRAMES ARE COSTLY ITEMS, AND EXPOSURE TO THE WEATHER WILL NULLIFY THEIR GOOD CONSTRUCTION, ESPECIALLY IF THE FRAMES HAVE THE WINDOW SASH INSTALLED. - INSULATION, INTERIOR WALL AND CEILING FINISH, WOOD SIDING... CAN EASILY BE STORED INSIDE. HEAVY ITEMS LIKE GYPROC BOARDS SHOULD BE DISTRIBUTED OVER THE FLOOR AREA SO AS NOT TO OVERLOAD THE FLOOR JOISTS. HEAVY LOADS CONCENTRATED ON ONE SPOT MAY CAUSE PERMANENT DEFLECTION IN THE FLOOR SYSTEM.

- HARDWOOD FLOORING, INTERIOR TRIM & MILLWORK SHOULD NOT BE STORED IN THE HOUSE UNTIL AFTER THE BASEMENT CONCRETE SLAB HAS BEEN COMPLETED AND ALLOWED TO DRY, AS THE AIR MOISTURE GIVEN OFF MAY CAUSE THE KILN-DRIED MATERIALS TO SWELL, RESULTING IN EXCESSIVE SHRINKAGE AFTER THE MATERIALS ARE INSTALLED.

FRAMING (ROUGH CARPENTRY):

- PRIOR TO SILL PLATE INSTALLATION, CONTRACTOR MUST INSPECT CONCRETE WORK CONDITION AND COMPARE ALL SITE DIMENSIONS WITH FOUNDATION PLAN DIMENSIONS. IF FOUNDATION IS UNACCEPTABLE TO THE BUILDING TOLERANCES, CONTRACTOR IS TO STOP ALL WORK AND IMMEDIATELY INFORM THE OWNER.

SILL ANCHOR

THE SILL PLATE SHOULD BE LEVELLED CAREFULLY. IF THE TOP OF THE FOUNDATION IS LEVEL, THE SILL PLATE MAY BE LAID ON FOUNDATION WITH A CLOSED CELL FOAM GASKET OR OTHER AIR-IMPERMEABLE MATERIAL IN BETWEEN, AND OF SAME WIDTH AS SILL PLATE.

IF THE TOP OF THE FOUNDATION IS UNEVEN OR NOT LEVEL, THE SILL PLATE MAY BE LAID IN A FULL BED OF MORTAR AND ANCHORED TO THE FOUNDATION WALL SILL IS INSTALLED TAKING CARE TO SQUARE BUILDING IN THE PROCESS. TO VERIFY SQUARENESS OF SILL PLATE INSTALLATION, MEASURE BOTH DIAGONALS FROM CORNER TO CORNER OF PLATES

BOTH DIAGONALS SHOULD BE EQUAL WITH A TOLERANCE OF +/- 1/4". SILL PLATES SHOULD BE PRESSURE TREATED 2x MATERIAL DF #2 OR BETTER

SILL PLATES ARE ANCHORED TO CONCRETE WALL WITH 5/8" ANCHOR BOLTS EMBEDDED 8" MIN. IN CONCRETE & 2" MIN. ABOVE CONCRETE. ANCHOR BOLT SHOULD BE PLACED 4'-0" o.c. MAX. APART, WITH TWO BOLTS MIN. PER SILL PLATE AND LEDGER STRIP, 24" MAX. FROM EACH END.

BEAMS

I-BEAM IS THE MOST COMMONLY USED SHAPE FOR STEEL BEAM. ALL STRUCTURAL STEEL MUST BE PAINTED FOR RUST PROTECTION WOOD BEAMS ARE OF THREE TYPES: SOLID, BUILT UP & LAMINATED.

A BUILT UP BEAM IS USUALLY MADE OF THREE OR MORE 2x LUMBER SET ON EDGE AND SPIKED TOGETHER FROM EACH SIDE WITH 3 1/2" NAILS. THE FIRST TWO NAILS ARE DRIVEN NEAR THE END OF EACH PIECE OF LUMBER. ADDITIONAL NAILS ARE DRIVEN NOT MORE THAN 12" APART IN EACH ROW. BUTT JOINTS IN EACH MEMBER ARE LOCATED OVER A SUPPORTING POST OR WITHIN ABOUT 6" OF THE QUARTER POINTS IN THE SPAN.

END OF BEAMS SHOULD BEAR 3 1/2" MINIMUM ON CONC WALL OR COLUMNS. IF WOOD BEAM IS UNTREATED IT SHOULD BE SEPARATED FROM CONCRETE BY IMPERMEABLE MEMBRANE. LAMINATED BEAMS ARE TO BE TO ENGINEER SPECIFICATIONS.

FLOOR JOISTS

AFTER SILL PLATES HAVE BEEN LEVELLED AND ANCHORED, THE JOISTS ARE INSTALLED, LOCATED AND SPACED ACCORDING TO THE DESIGN. ANY JOISTS HAVING A SLIGHT BOW EDGEWISE SHOULD BE PLACED WITH THE CROWN ON TOP. A CROWNED JOIST WILL TEND TO STRAIGHTEN OUT WHEN THE SUBFLOOR AND FLOOR LOADS ARE APPLIED

ALL JOISTS TO HAVE A MINIMUM OF 2" BEARING AT SUPPORT

FLUSH FRAMED JOISTS TO BE FASTENED TO BEAM WITH FULLY NAILED JOIST HANGERS ALL FLOOR OPENINGS TO BE FRAMED WITH DOUBLE TRIMMER JOIST AND DOUBLE HEADER JOIST. INSTALL DOUBLE JOIST OR SOLID BLOCKINGS UNDER ALL FRAMED PARTITION WALLS. INSTALL BLOCKINGS BETWEEN JOISTS TO TRANSFER CONCENTRATED LOADS TO BEARING BELOW JOIST MAY BE KEPT FROM TWISTING BY CROSS BRIDGING, BLOCKING, STRAPPING OR BY THE USE

OF GLUE IN ADDITION TO NAILING WHEN FASTENING THE PLYWOOD SUBFLOOR TO THE JOISTS.

SUBFLOOR

UNLESS OTHERWISE NOTED IN ATTACHED PLANS, FIRST FLOOR SUBFLOOR SHOULD BE 3/4" T&G PLYWOOD AND SECOND FLOOR SUBFLOOR SHOULD BE MINIMUM 5/8" T&G PLYWOOD PLYWOOD PANEL SHOULD BE INSTALLED WITH THE SURFACE GRAIN AT RIGHT ANGLES TO THE FLOOR JOISTS AND WITH THE END JOINTS STAGGERED AND NAILED ALONG THE EDGES AT 6" ON CENTRE AND 12" AT INTERMEDIATE SUPPORTS. FLOOR STIFFNESS CAN BE GREATLY INCREASED AND FLOOR SQUEAKS MINIMIZED, BY APPLYING ELASTOMERIC GLUE BETWEEN THE FLOOR JOISTS AND THE PLYWOOD SUBFLOOR. THUS, THE PLYWOOD AND JOISTS ACT TOGETHER AS A SERIES OF STIFF T-BEAMS THAT HELP PREVENT DIFFERENCIAL DEFLECTION BETWEEN JOISTS. GLUE APPLIED IN THE PLYWOOD TONGUE & GROOVE JOINTS WILL FURTHER STIFFEN THE FLOOR SYSTEM.

WALL FRAMING

FIRST FLOOR FRAMED PARTITIONS IN A LOG HOME MUST ALLOW FOR SETTLEMENT OF STACKED LOG WALLS WITH MOISTURE CONTENT ABOVE LOCAL MOISTURE EQUILIBRIUM BY HAVING A MINIMUM OF 5" SETTLING SPACE ABOVE.

NEVER NAIL FRAMED WALL TO SHRINKAGE TRIM BOARD AT TOP AS IT NEEDS TO SLIDE DOWN OVER WALL FINISH BECAUSE LOG WALLS SETTLE DOWN WHILE LOOSING MOISTURE CONTENT. SECURING FRAME WALL STUDS TO LOG WALL CAN BE DONE BY NAILING THE STUD THRU TOP OF A SLOT CUT IN STUD SO TO ALLOW THE NAIL TO TRAVEL DOWN THE SLOT AS LOG WALL SHRINKS IN HEIGHT. CURING INVOLVES KEEPING FRESHLY SET CONCRETE MOIST OR PREVENTING IT FROM DRYING OUT AND BY OWNER. ANY ADDITIONAL COSTS TO TRANSPORT MATERIAL TO THE BUILDING SITE NOT DIRECTLY ALL FRAMED WALLS TO HAVE TWO TOP PLATES AND EXTRA TOP PLATE IS ATTACHED TO THE UNDERSIDE SECOND FLOOR SYSTEM OR LOG JOIST, ABOVE SETTLING SPACE SO TO NAIL SHRINKAGE TRIM THAT IS HIDING SETTLING SPACE. UNLESS OTHERWISE NOTED, INTERIOR PARTITION WALLS ARE 2X4 @ 16" O.C TO ALLOW SECOND FLOOR VENTS & DRAINS TO PASS THROUGH. PARTITION WALLS USED TO CHANNEL PLUMBING DRAINS NEEDS TO BE 2X6 FRAME WALLS.

LOG HOME ROOF SYSTEMS ARE TO PROTECT LOG BEAMS & LOG WALLS AROUND THE PERIMETER OF THE HOUSE AGAINST WEATHER DAMAGE NAMELY SUN, RAIN AND SNOW.

THIS IS ACHIEVED BY PROVIDING EXTRA WIDE ROOF OVERHANGS BEYOND PITCH LINE (3'-6" MINIMUM) AND RAKES AT GABLES (5' MINIMUM).

COVERED PORCHES ARE IDEAL TO PROTECT LOG WALLS FROM RAIN & SUN.

NO LOG ENDS SHOULD BE EXTENDED BEYOND ROOF LINE, UNLESS LOG ENDS ARE WRAPPED WITH A DURABLE METAL FLASHING

LOG ROOF BEAMS SHOULD HAVE MINIMUM 6" OF ROOF EXTENSION BEYOND LOG ENDS A COMMON LOG HOME ROOF SYSTEM INCLUDES RIDGEPOLES, PURLINS AND LOG POSTS, LOG TRUSSES AND/OR LOG RAFTERS

AS LOG ROOF MEMBERS SHRINK IN DIAMETER WHILE THEY DRY, STEPS MUST BE TAKEN TO SEAL FROM WEATHER & INSECT INFILTRATION WHERE ROOF LOGS INTERSECT GABLE WALLS. STRUCTURAL ROOF LOGS MUST BE SLIGHTLY NOTCHED TO HOUSE EXTERIOR AND INTERIOR WALL COVER

METAL FLASHING MUST BE INSTALLED WHERE FRAME GABLE WALLS SIT ON TOP OF ALL PLATE LOGS ALL FLASHING AROUND CHIMNEYS MUST ACCOMMODATE SETTLING BY INSTALLING HEAVY GAUGE FLASHING AND COUNTER FLASHING WHICH MUST FREELY SLIDE VERTICALLY PAST EACH OTHER TO ALLOW SETTLING. NO ROOFING COMBUSTIBLE MATERIAL IS TO BE LESS THAN 2" FROM A MASONRY CHIMNEY AND DO NOT ALLOW LOG WORK OR ROOFING SYSTEM TO BE IN CONTACT WITH A FREE STANDING CHIMNEY UNLESS PROVISIONS FOR VERTICAL SETTLING ARE IN EFFECT IN THIS CASE.

FIRE SAFETY:

GARAGES ATTACHED TO LIVING SPACE MUST HAVE A ONE HOUR FIRE SEPARATION. CONSISTING OF 6" MINIMUM LOG THICKNESS OR 5/8" TYPE "X" GYPSUM BOARD ON ALL WALLS & CEILINGS, AND A 20 MINUTES FIRE RATED DOOR ASSEMBLY WITH AUTOMATIC CLOSING DEVICE, AND SMOKE GASKET A MINIMUM OF ONE BATTERY OPERATED SMOKE ALARM DETECTOR MUST BE INSTALLED IN HOUSE. ADD SMOKE DETECTOR IN BASEMENT TO BE WIRED WITH OTHER SMOKE DETECTOR IN THE HOUSE. INSTALL A SMOKE DETECTOR IN EACH BEDROOMS.

IF SMOKE ALARM IS TRIGGERED, IT MUST BE HEARD IN ALL BEDROOMS.

AND EXPANDABLE GASKETS MUST BE APPLIED AT THOSE LOCATIONS

CARBON MONOXIDE ALARM MUST BE INSTALLED AT EACH HOUSE STOREY AT EYE LEVEL ON INTERIOR WALL

SET OF PLANS SHOULD INCLUDE AN ELECTRICAL PLAN FOR EACH STOREY. LOCATION & AMOUNT OF ELECTRICAL OUTLETS IS ONLY SUGGESTED. THE ELECTRICAL CONTRACTOR MUST VERIFY THE ELECTRICAL LAYOUT WITH THE OWNER. THE ELECTRICAL CONTRACTOR MUST CALCULATE THE ADEQUATE AMP. SERVICE FOR THE HOUSE, SUPPLY AND INSTALL LATERAL SERVICE TO THE BUILDING, PERFORM ALL ELECTRICAL WIRING, BRING REQUIRED POWER TO ALL APPLIANCES, MEET ALL APPLICABLE CODES REQUIREMENTS, WITH ACCOMMODATIONS FOR PRE-WIRING AND WALL SETTLEMENT WHERE NECESSARY. USUALLY SWITCH AND OUTLET BOXES ARE HIDDEN IN THE MORTISED LOG, WITH THE COVER PLATE FLUSH WITH FLATTEN PORTION OF LOG AT THAT LOCATION. WALL ELECTRICAL OUTLETS ARE USUALLY WIRED DOWN FROM ELECTRICAL BOX, THRU LOG WALL, INTO SUBFLOOR SPACE. ELECTRICAL SWITCHES BY DOORS ARE WIRED FROM SUBFLOOR SPACE THRU SPACE @ DOOR SPLINE BOARD, TO MORTISED SWITCH BOX. DO NOT USE CONDUITS IN A LOG WALL PRE-DRILL VERTICAL HOLES IN A LOG WALL ARE A MIN. 1 1/4" IN DIAMETER TO FISH WIRES THRU.

PLUMBING:

PLUMBING CONTRACTOR MUST CONSIDER THE NEED FOR SETTLING ALLOWANCES IN ALL PLUMBING RUNS. PLUMBING RUNS SHOULD BE INSTALLED IN FRAMED WALLS.

ALL BATHROOMS WITHOUT OPENABLE WINDOW, MUST HAVE AN ADEQUATE EXHAUST FAN INSTALLED.

DO NOT RUN PLUMBING WASTE, VENT & SUPPLY PIPES THROUGH OR WITHIN LOG WALLS. ANY FUTURE REPAIR WOULD BE VERY DIFFICULT.

WATER LINES TO SECOND FLOOR SHOULD HAVE A FLEXIBLE LOOP HIDDEN WITHIN SECOND FLOOR FRAMING THAT OPENS AS SECOND FLOOR SETTLES DOWN.

WASTE & VENT PIPES USE A SERIES OF COMPRESSION & EXPANSION FITTINGS TO ACOMMODATE SETTLING, WITH BLOCKINGS TO SUPPORT TOP & BOTTOM COMPRESSION FITTINGS ALLOWING FITTINGS TO COMPRESS.

PLUMBING VENTS MAY BE STRAPPED OR BLOCKED AT LOWER PART, WITH ROOF SETTLING AROUND VENT AND COUNTERFLASHING SLIDING ALONG FLASHING TO ALLOW SETTLING.

CABINETRY:

CABINET MAKER MUST CHECK ALL DIMENSIONS ON SITE BEFORE STARTING ANY WORK. CABINETS MUST NOT BE SECURED TO LOG WALL UNLESS SETTLING ACCOMODATIONS ARE APPLIED. ONE METHOD IS TO RECESS THE CABINETS AND COUNTERS 2" TO 3" IN THE LOG WALL. CABINETS ARE HANGED AT TOP BY SCREWING THEM INTO ONE LOG ONLY, AND THE COUNTERS ARE SCREWED TO FLOOR AND TO LOG WALL WITH SLOT FOR SETTLING. ADD SETTLING SPACE ABOVE SPLASH BOARD. ANOTHER METHOD IS TO INSTALL OVER LOG WALL INTERIOR FRAME WALL AND PLACE WIRING & PLUMBING IN CAVITY.

INSULATION & THERMAL EFFICIENCY: ROOFS & EXTERIOR FRAME WALLS ARE USUALLY INSULATED WITH BATT FIBER GLASS, STYROFOAM

RIGID PANELS (SIP) OR SPRAY FOAM.

HANDCRAFTED LOG WALLS HAVE LOOSE FIBERGLASS INSULATION WRAP IN PLASTIC OR SHEEP WOOL INSTALLED IN W SHAPE LATERAL GROOVES AND SADDLE NOTCHES

A BARRIER FOAM SEAL "P" GASKET SHOULD BE STAPLED AT THE FLANGE ON THE INSIDE OF THE LOG CONTACT LINE (BOTH AT EXTERIOR AND INTERIOR CONTACT LINE). THIS 1" DIAMETER WATER PROOF FOAM BACKER ROD IS A SUPERIOR WEATHER SEAL WHEN COMPRESSED AT LOGS LATERAL CONTACT

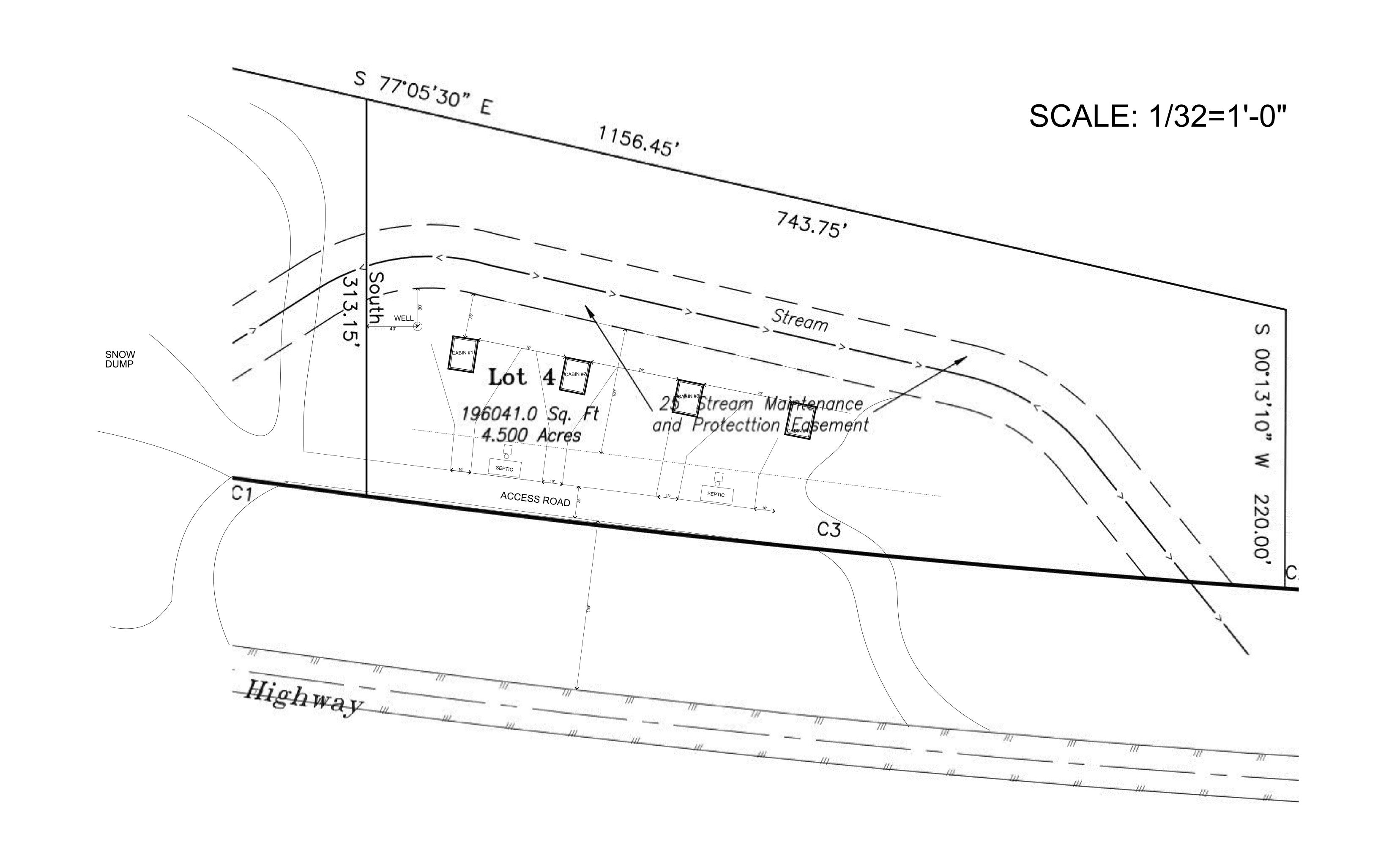
THE THERMAL VALUE OF A LOG WALL DEPENDS ON ITS MASS, OR THE DIAMETER SIZE OF THE LOGS. THE MORE MASS IN A STRUCTURE, THE LESS PRONOUNCED THE TEMPERATURE SWINGS ARE WITHIN THIS STRUCTURE. AS OUTSIDE TEMPERATURE DROPS, THE INSIDE OF THE BUILDING TENDS TO RETAIN ITS WARMTH, AS THE LOGS RELEASE HEAT STORED WITHIN THEIR MASS.

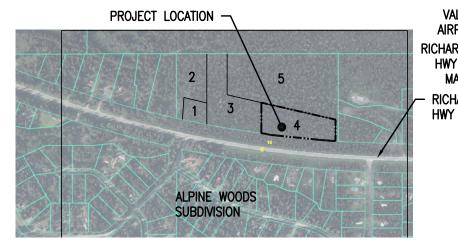
CONVERSELY, IN SUMMER THE INTERIOR OF THE LOG HOME WILL REMAIN COOLER. AS LOG LOOSES ITS MOISTURE & SHRINK, LATERAL CHECKS IN LOGS AT CROSS CORNERS SHOULD BE CAULKED TO SEAL OFF AIR INFILTRATION. A FINAL SEALING OF THE LOG HOME USING ENERGY SEAL CAULKING OF SAME COLOR AS LOGS TAKES PLACE WHEN LOGS HAVE REACHED EQUILIBRIUM WITH THEIR ENVIRONMENT, IN ABOUT THREE YEARS AFTER CONSTRUCTION TO ENSURE A DRAFT FREE HOME.

LOG HOME MAINTENANCE:

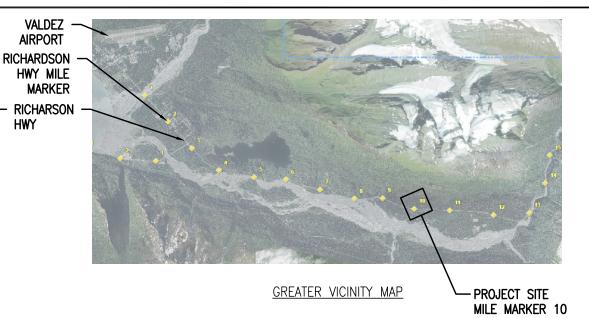
WITH ADEQUATE WOOD CARE AND PREVENTATIVE MAINTENANCE, YOUR LOG HOME WILL LAST CENTURIES. MOST WOODS CONTAIN NATURALLY OCCURING OILS THAT RESIST WEATHERING AND DECAY. BUT WITH TIME, THESE OILS ARE LEACHED FROM THE WOOD AND NEED TO BE REPLACED. REGIONAL CLIMATES WILL DICTATE GENERAL PRESERVATION TECHNIQUES. THE FIRST GENERAL RULE IS TO PREVENT WATER FROM COMING IN CONTACT WITH THE LOGS. LOGS MUST BE THOROUGHLY CLEANSED WITH A SOLUTION OF SOAP AND BLEACH, COMPLETELY DRIED BEFORE APPLYING A PRESERVATIVE SOLUTION CONTAINING A WATER REPELLENT & MILDEWCIDE. REAPPLY THE SOLUTION UNTIL LOGS WILL NO LONGER ACCEPT ANY MORE PRESERVATIVE. IF SUN DAMAGE ON SOUTH & WEST SIDE OF THE HOUSE IS ANTICIPATED, APPLY A PRESERVATIVE THAT CONTAINS OILS WITH PIGMENTS AS ULTRAVIOLET BLOCKERS. DO NOT APPLY AN IMPERMEABLE FINISH SUCH AS VARNISH OR PAINT TO THE SURFACE OF LOGS. FOLLOW APPLICATION INSTRUCTIONS TO THE LETTER, AND NEVER APPLY FINISHES NOT SPECIFICALLY FORMULATED FOR LOGS.

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LOCAL VICINITY MAP 1" = 1,000'



GENERAL NOTES:

- 1. THIS SITE PLAN IS NOT A SURVEY. NEW AND EXISTING COMPONENTS ARE APPROXIMATELY LOCATED. THE SITE PLAN IS BASED ON DOCUMENTATION PROVIDED BY THE CLIENT AND BACKGROUND IMAGERY FROM THE CITY OF VALDEZ GIS MAP VIEWER, AS OF THE DATE OF THIS PLAN SET. IT IS INTENDED TO CONVEY GENERAL SITE CONDITIONS TO MEET ADEC AND LOCAL REQUIREMENTS.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED SEPARATION DISTANCES.
- 3. MAINTAIN A MINIMUM OF 200' SEPARATION DISTANCE FROM SEPTIC SYSTEM TO NEIGHBORING PUBLIC WELLS AND 100' TO NEIGHBORING PRIVATE WELLS.
- 4. MAINTAIN A MINIMUM OF 100' SEPARATION DISTANCE FROM SEPTIC SYSTEM COMPONENTS TO SURFACE WATER.
- 5. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADEC REGULATIONS AND INTERIM GUIDANCE. LOCATION AND ORIENTATION OF SEPTIC SYSTEM COMPONENTS MAY BE ADJUSTED AS LONG AS MINIMUM SEPARATION DISTANCES ARE ACHIEVED AND MINIMUM REQUIREMENTS ARE MET.
- 6. A FOUNDATION CLEANOUT SHALL BE INSTALLED WITHIN 5' OF EACH BUILDING.



SITE PLAN = 80

DEFINITIONS:

(N) - NEW

(E) - EXISTING

B.G. - BELOW GROUND

A.G. - ABOVE GROUND

FCO - FOUNDATION CLEANOUT

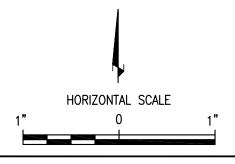
CO - CLEANOUT

TL - TRANSFER LINE

LS - LIFT STATION

ST - SEPTIC TANK

SAS - SOIL ABSORPTION SYSTEM







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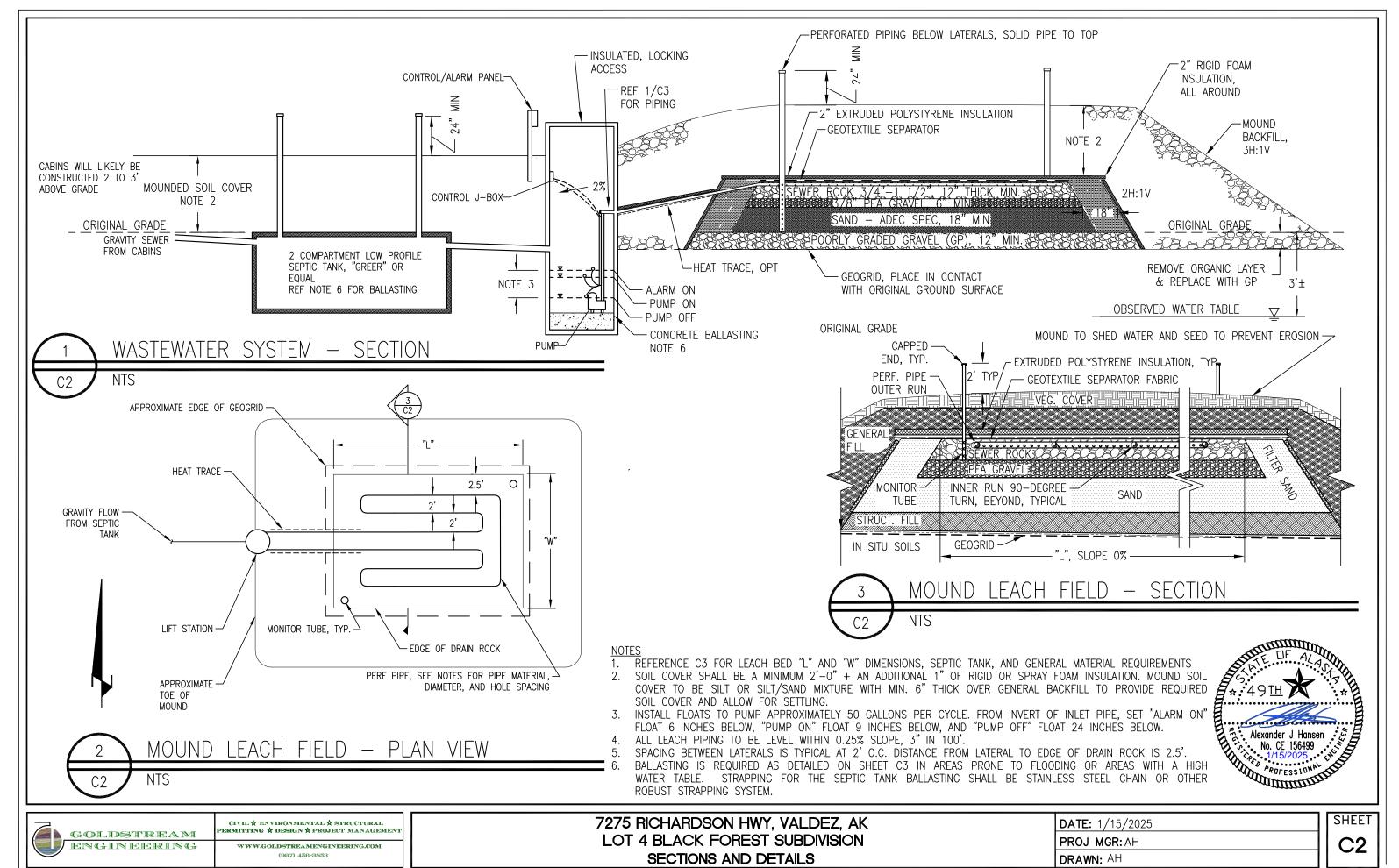
WWW.GOLDSTREAMENGINEERING.COM

7275 RICHARDSON HWY, VALDEZ, AK LOT 4 BLACK FOREST SUBDIVISION SITE PLAN

DATE: 1/15/2025 PROJ MGR: AH

DRAWN: AH

SHEET C₁



GENERAL INFORMATION

PROJECT NAME: 7275 RICHARDSON HWY CABINS LOCATION: 7275 RICHARDSON HWY, VALDEZ, AK

CONTRACTOR: TBD

ENGINEER: GOLDSTREAM ENGINEERING, INC., ALEXANDER J HANSEN, PE

FACILITY DESCRIPTION:

(2) 1-BEDROOM CABINS TO BE USED FOR SHORT TERM RENTALS THAT RECEIVE POTABLE WATER SERVICE FROM A NEW WELL TO BE INSTALLED. 2 ADULTS & 2 KIDS PER CABIN. 3/4 BATH, WASHER, DRYER, AND FULL KITCHEN.

DESIGN FLOW:

2 BEDROOMS RESIDENTIAL @ 150 GPD/BEDROOM = 300 GPD

2 SHORT TERM CABIN RENTALS WITH 4 PEOPLE PER CABIN @ 50 GPD/PERSON = 400 GPD

=> DESIGN FLOW = 400 GPD

SEPTIC TANK REQUIREMENTS:

1000 GALLONS = MIN TANK CAPACITY FROM OWSIM (APRIL 2024) USE A GREER PLASTIC 1000-GALLON LOW PROFILE TANK

SOIL INFORMATION:

SOILS INFORMATION OBTAINED FROM OWNER OBSERVATIONS. IN VICINITY OF SAS, SOILS ARE SILTY SAND (SM) WITH THE WATER TABLE ENCOUNTERED AROUND 3' BELOW GRADE, OCTOBER 6, 2024. NO IMPERMEABLE LAYER WAS OBSFRVFD.

DESIGN APPLICATION RATES:

FROM OWSIM (APRIL 2024):

SOIL TYPE BASED ON ADEC SPEC SAND (SP) APPLICATION RATE = 1.0 G/DAY/FT²

AREA REQUIREMENTS:

 $400 \text{ G/DAY} \div 1.0 \text{ G/DAY/FT}^2 = 400 \text{ FT}^2$

DESIGN LENGTH "L" = 27' DESIGN WIDTH "W" = 15'

=> DESIGN AREA = 405 FT²

OTHER GENERAL NOTES:

- 1. SYSTEM SHALL BE INSPECTED BY ENGINEER PRIOR TO BACKFILLING OVER SAS.
- 2. VEGETATIVE COVER SHOULD BE SEEDED OVER LEACH MOUND AND AREAS OF DISTURBED GROUND SURFACE TO PREVENT INFILTRATION/EROSION.
- 3. ENGINEER SHALL BE MADE AWARE OF ANY FIELD CONDITIONS THAT DIFFER FROM WHAT WAS USED FOR THE BASIS OF DESIGN.

CIVIL * ENVIRONMENTAL * STRUCTURAL ERMITTING & DESIGN & PROJECT MANAGEME

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LIFT STATION (LS) REQUIREMENTS:

LS VAULT: "GREER" PRE-FABRICATED PLASTIC LIFT STATION VAULT, ~8"

DEEP WITH LOCKING LID. FILL BOTTOM 1' OF VAULT WITH CONCRETE FOR BALLASTING. RISERS INSTALLED AS NEEDED FOR HEIGHT. RISERS AND LID INSULATED W/ SPRAY FOAM WITH

WATER TIGHT SEAL AT RISER JOINTS.

PUMPS: 1/2 HP, NON-AUTOMATIC, FLOAT OPERATED, FULLY

SUBMERSIBLE. LIBERTY LE 50 PUMP. NO CHECK VALVE, SELF

ALARM: TWO OUTDOOR HIGH WATER ALARMS. ENCLOSURES TO MEET

TYPE 3R WATER-TIGHT STANDARD. ALARM SYSTEM SHALL BE

INSTALLED ON SEPARATE CIRCUIT FROM PUMPS.

NEMA 3R WATER TIGHT. J-BOX:

MATERIAL REQUIREMENTS:

4" DIAMETER ABS SCHEDULE 40 PIPE. ABS PIPE:

SOLID PIPE: 1-1/2" (MIN.) TO 2" (MAX) SDR11 HDPE W/ BUTT FUSED,

HEAT WELDED CONNECTIONS OR 1-1/2" (MIN.) TO 2" (MAX)

PEX TUBING W/ PRE-APPROVED FITTINGS.

1-1/2" (MIN.) TO 2" (MAX) SDR11 HDPE W/ BUTT FUSED, PERF. PIPE:

HEAT WELDED CONNECTIONS OR 1-1/2" (MIN.) TO 2" (MAX) PEX TUBING W/ PRE-APPROVED FITTINGS. 1/4" DRILLED HOLES AT 18" ON CENTER. OFF-SET HOLES AT 90°.

PIPE FITTINGS: MOLDED FACTORY FITTINGS DESIGNED FOR APPLICATION TANK CONNECTIONS: "FERNCO" WITH STAINLESS STEEL BACKER BANDS.

LEACH ROCK: MAX 1 1/2", MIN 3/4" MAX 3/8", MIN 1/4" PEA GRAVEL:

SAND LINER: MEETS ADEC SPECIFICATION FOR SAND LINERS,

18AAC72.260(a)(4)(D), TABLE C, GROUP A OR B

STRUCTURAL FILL: GRANULAR, NON FROST SUSCEPTIBLE, MAX 12% < #200 SIEVE GENERAL FILL: NON FROZEN, NO ROOTS, TREES OR LARGE ORGANIC MATTER,

OR ROCKS GREATER THAN 3" DIAMETER

WOVEN GEOTEXTILE TERRATEX GS OR APPROVED EQUAL **GEOTEXTILE:** UNWOVEN GEOTEXTILE TERRATEX NO4 OR APPROVED EQUAL

MIRAGRID 3XT OR APPROVED EQUAL **GEOGRID:**

HEAT TRACE: RAYCHEM FROSTGUARD OR APPROVED EQUAL

INSULATION: SHALL MEET ASTM C578 TYPE IV, 25PSI MIN, REF ADEC SPEC.

ANY DEVIATION FROM THE ADEC MATERIAL OR CONSTRUCTION SPECIFICATIONS WILL REQUIRE PRE-APPROVAL BY THE ENGINEER AND POSSIBLY ADEC.

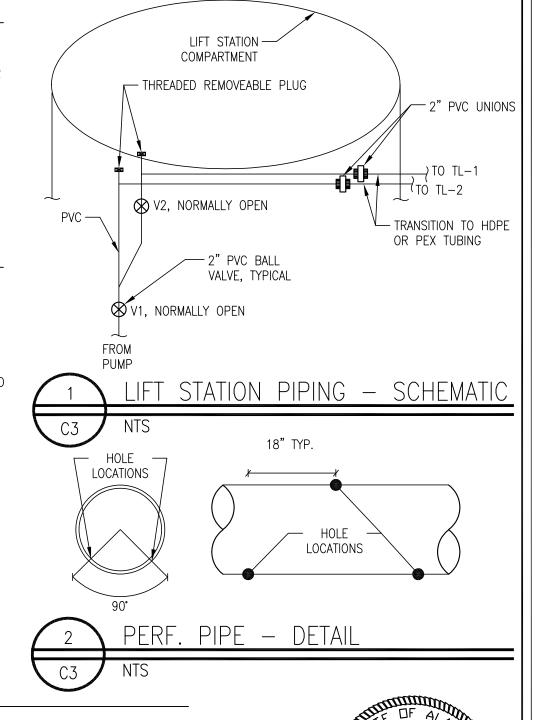
BALLASTING:

WATER - 62.4 LB/CF SOIL - 90 LB/CF CONCRETE - 150 LB/CF SEPTIC TANK: PER ST REQUIREMENTS L=9' W=5.8' D=4.3' SELF WEIGHT=300 LB

- WEIGHT OF 2' SOIL ABOVE TANK = 9,400 LB (4,700LB/FT OF COVER) DISPLACEMENT FOR SUBMERGED TANK = 134 CF, 1000 GAL, 8,400 LB
- BALLASTING REQUIRED IF LESS THAN 2' OF GROUND COVER IS INSTALLED OR TOP OF TANK IS SUBMERGED. 3,300 LBS OF BALLASTING IS NEEDED FOR EACH FT THE TOP OF THE TANK WILL BE SUBMERGED.

LIFT STATION: 2.5' DIAMETER GREER POLY, AREA= 4.9 SF, SELF WEIGHT=200 LB

- DISPLACEMENT PER FT = 4.9 CF, 36.7 GAL, 306 LB
- CONCRETE WEIGHT = 735 LB/FT = 62 LB/INCH
- POUR 4" OF CONCRETE INTO THE BOTTOM OF THE LIFT STATION FOR EVERY FT OF ANTICIPATED SUBMERGED DEPTH. SMOOTH CONCRETE SURFACE FOR LIFT STATION PUMP.



No. CE 156499

ROFESSION

ROFESSION

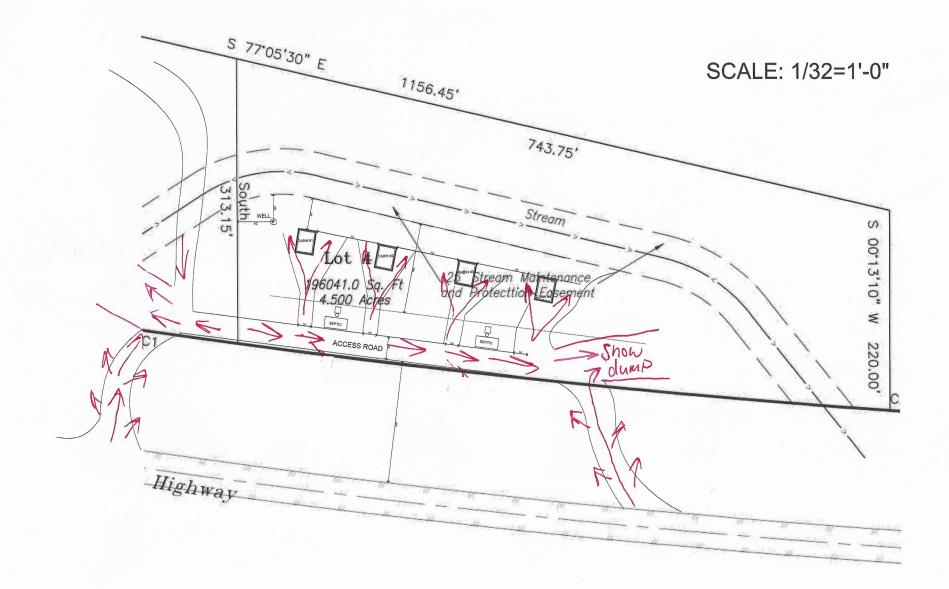
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7275 RICHARDSON HWY, VALDEZ, AK LOT 4 BLACK FOREST SUBDIVISION **DESIGN PARAMETERS**

SHEET





Bruce Wall, AICP
Senior Planner, City of Valdez-Planning Department

RE: Conditional Use Permit Application for Rental Cabins at 7275 Richardson Highway

Greetings Bruce,

We own adjacent property and are issuing this communication in <u>Support for Approval</u> of the subject application. However, there are two concerns the Applicant should consider:

*Fire Risk: Limit "campfires" to safely-sited fire pits/burn rings. Provide the firewood in order to discourage Itinerant Rental Tenant "bonfires" and "foraging" of firewood from adjacent property. Lastly; Prohibit the use of "aerial" fireworks displays (mortars, cakes, roman candles, etc.). These are prone to ignite the surrounding old-growth forest canopy. There are other nearby locations to enjoy "aerial" displays without incurring a local fire risk.

*Salmon Stream Protection: Registered Anadromous Stream #221-60-11370-2219-3015 flows through the property and is subject to protections required by the State of Alaska and Valdez Municipal Code Title 16: Design Standards 16.16.070. The referenced code establishes a 25' "Stream Maintenance and Protection Easement". Maintenance of this required protection is particularly important as the return of salmon in this stream has been in decline for years. Lastly, in effort to protect the stressed returns of salmon, it should be clearly communicated to Itinerant Rental Tenants that the harassment or taking of salmon in all fresh water drainages to Port Valdez is prohibited by ADF&G General Regulations.

Thank you for considering these comments,

Steve & Joy Hanson 3/10/25



212 Chenega Ave. Valdez, AK 99686

Legislation Text

File #: 25-0097, Version: 1

ITEM TITLE:

Approval of Conditional Use Permit 25-01 - A request from Scott Smith to Allow Rental Cabins on Lot 4, Black Forest Subdivision, Plat 2024-5 (1725 Richardson Highway) and Adopt Findings **SUBMITTED BY:** Bruce Wall, Senior Planner

FISCAL NOTES:

Expenditure Required: N/A Unencumbered Balance: N/A

Funding Source: N/A

RECOMMENDATION:

Approve the request from Scott Smith for Rental Cabins on Lot 4, Black Forest Subdivision, Plat 2024-5 (1725 Richardson Highway) and adopt the proposed findings.

SUMMARY STATEMENT:

Applicant: Scott Smith
Property Owner: High Tides, LLC

Street Address: 7275 Richardson Hwy

Legal Description: Lot 4, Black Forest Subdivision, Plat 2024-5

Zoning District: Rural Residential (RR)

Existing Land Use: Vacant

Access: Richardson Highway

VMC 17.12.090(C) states, "The Planning and Zoning Commission shall evaluate whether the conditional use permit application complies with the criteria established in this section in determining to approve, approve with conditions, or deny the request."

Please see the attached staff report for details on the code requirements, staff's evaluation of the application, and the proposed conditions.



FEE: \$50.00 SITE PLAN (WAIVED 2013 PER RESOLUTION #12-72)

CITY OF VALDEZ

APPLICATION FOR CONDITIONAL USE PERMIT

| APPLICATION NUMBER | | DATE 1/27/2025 |
|--|---------------------------------|---------------------|
| NAME OF APPLICANT | Scott Smith | |
| ADDRESS OF APPLICAN | NT ₅₄₅₀ Chalet Drive | |
| | Valdez, AK 99686 | |
| DAYTIME PHONE | 907-255-9059 | |
| SIGNATURE | | |
| LEGAL OWNER | High Tides, LLC | |
| ADDRESS | 5450 Chalet Drive | |
| | Valdez, Alaska 99686 | |
| PHONE NUMBER | 907-255-9059 | |
| STREET ADDRESS: | 7275 Richardson Hig | hway |
| LEGAL DESCRIPTION: | Lot 4 Black Forest St | ubdivision |
| | | |
| CURRENT ZONING | Rural Residential | |
| | | |
| PROVISIONS OF ZONING SETBACK, LOT COVERA | | NG A VARIANCE (I.E. |
| | No, Variance request | ted |
| USE REQUESTED | Rental Cabins | |
| TEMPORARY | HOW LON | G |
| PERMANENT | Yes, Permanent | |

Please answer the following questions:

How will the proposed use conform to the present and future development of the area? What will be its effect on present and future development?

This land is currently undeveloped, it will benefit the tourism as well as long term or short term housing for employment and add to housing accommodations. The area has single family homes, cabins, and trailer homes. Building 4 cabins on this lot will at to the beauty of the area as it will be a nicer development.

Why is there a need in the area for the Conditional Use requested? Wherever possible, substantiate this statement with factual data.

A permit is required for "Rental Cabins" as the parcel is zoned Rural Residential. I will be building four 20 ft x 26 ft log cabins. Rental Cabins require either a CUP or to be zoned NMU, CB, or G. The cabins will be built on 4.6 acres leaving plenty of space between them, and all setback from the creek with a private natural feel.

Why is this site especially suited to the Conditional Use proposed?

The site is large enough to provide space for the cabins, and still keep it very private. The site is quite and private as it is setback from the Richardson Highway.

Why would the Conditional Use have no detrimental effects on surrounding property and uses?

There are no detrimental effects since the parcel is large enough that it doesn't affect anyone. The cabins will have their own access to the highway. It will have very little effect on the surrounding properties. I own the adjacent lot to the West (Lot 3 @6.356 acres). On the East side of the cabin will be at least 150 ft of "Green Space" between the neighboring parcel.

Attach or include any other information you feel is relevant to this application

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|-------|---------------|---------------|-------------|------------|-----------|--------------|
| image | e showing the | layout of the | e project. | | | |
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ComDev/Data/Forms/P & Z Forms/ CUP Application

Rev. 1_23_12

Conditional Use Permit

Scott Smith

"Rental Cabins" on Rural Residential zoning

Black Forest Cabins

2/1/2025

Located 12 miles outside of the Valdez City center, 7275 Richardson Highway (otherwise known as Lot 4 in the Black Forest Subdivision) is set back on 4.8 acres nestled among old forest growth. There are no structures or development on the lot or the surrounding lots. There is a natural year-round flowing creek from a spring and runoff from the mountain above. It is the ideal setting for our quiet, peaceful, log cabin rentals. Focus will be on nature and the natural growth on the property, having designed the cabins to blend in seamlessly to the natural beauty.

There will be four small log cabins, 20 ft x 26 ft, with minimal guests. They will feature engineered septic systems along with a well. The septic systems will be engineered to sustain two cabins on one septic. There will be one well connected to all four cabins. Each cabin will be set back 70 ft from each other to give privacy to the guests. This property is not in a flood zone. However, due to snow melt and possible heavy rain, we will be adding an additional 3 feet of fill for a higher elevation. In the fall of 2024 we sent soil samples to Goldstream Engineering in Fairbanks who told the soil was stable for building and contained more sand than silt.

Power will be underground service to minimize outages and enhance the natural environment. We have been working with Copper Valley Electric to establish electricity this year, Summer 2025. 7275 Richardson Highway is located right off the highway and is a loop through driveway, planned for ease of snow removal as well as emergency vehicles and trash service.

Zoning for the cabins will be within the allowed standards if the Conditional Use Permit is given. "Rental Cabins" follow all requirements in Chapter 17.80 as well as all standards for short term rentals Chapter 17.80.090. We would like to have the option for long-term rentals as well as short-term rentals. All cabins will be built the same with dimensional standards within the zoning requirements for height and all setbacks.

Rental cabins comply with the comprehensive plan to provide additional quality housing options. This land falls into Area 3 in the comprehensive plan as Rural

Neighborhood. Continuing to follow the comprehensive plan with goals 2.1 planning for responsible growth, 2.2 with new development, and 2.3 built quality housing. This promotes Valdez as a destination, adding to the sustainable economy.

We will take appropriate actions to reduce noise, light, and traffic. The goal is to have the cabins remain a peaceful retreat among nature for others. Quite hours will be observed. Trash and litter will be zero as I plan to pick up after guests as needed. We will practice leave no trace.

There is one main access loop road along with 4 adequately sized driveways for each cabin to provide enough room for vehicles, pedestrians, and snow removal. With the size and length of the loop along with each driveway, there will be no street parking. There will also be a stop sign installed before turning onto/entering the Richardson Highway.

In summary, 7275 Richardson Highway is currently raw, undeveloped land. We plan to build four 20ft by 26ft log cabins with roughly 70ft of space between them, adhering to all building codes, zoning standards, and specific use standards. These cabins will be both long- and short-term rentals, which are always needed in Valdez. We will be keeping as much vegetation as possible to keep the area "natural" with a peaceful and tranquil vibe, mitigating any potential nuisances. The cabins have been designed to fit seamlessly into the surrounding wilderness while being visually appealing.

Snow removal Plan

All the snow on the main drive will be moved West to the main snow dump as seen in the site plan.

SEE SITE PLAN for sketch

Each driveway will be piled just past the cabins with access to both sides of the cabins if snow removal is needed due to a heavy snow year. When snow piles up too much it will be bailed out to the snow dump as needed between guests.

Each cabin driveway will be built to have space to park two vehicles side by side with additional space. Driveways will also be long enough if more parking is needed. No parking spaces will be taken by snow storage.

Egress will be on either gable ends to eliminate snow shedding on ingress/egress. Snow will shed to the side yard. Setback to the property line is excess of 50 ft.

GENERAL NOTES & SPECIFICATIONS

- ALL WORK SHALL COMPLY WITH ALL BUILDING CODES HAVING JURISDICTION.
- EACH CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS. SAID CONTRACTORS SHALL REPORT TO THE GENERAL CONTRACTOR, IN WRITING, ANY DISCREPANCIES BETWEEN THE DRAWINGS AND/OR THE SITE CONDITIONS BEFORE PROCEEDING WITH BIDDING AND PERFORMANCE OF THE WORK. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- ALL SYMBOLS AND ABREVIATIONS WITHIN THESE CONSTRUCTION DOCUMENTS ARE TO BE CONSIDERED CONSTRUCTION STANDARDS. ANY QUESTIONS AS TO THEIR MEANING SHALL BE ADDRESSED TO THE DESIGNER, IN WRITING, FOR CLARIFICATION.
- ALL NEW GYPSUM WALLBOARD SHALL BE ML 5/8" THICKNESS, UNLESS OTHERWISE NOTED ON THESE PLANS. ALL OUTSIDE CORNERS SHALL HAVE METAL CORNER BEADS. TYPE MOISTURE RESISTANT (MR) GYPSUM WALLBOARD SHALL BE USED AT ALL PLUMBING WALLS.
- ANY INTERIOR DESIGN, MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THESE BUILDING PLANS. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO REVIEW THESE PLANS BEFORE INSTALLING ELECTRICAL AND MECHANICAL WORK. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THESE PLANS AND OTHER DRAWINGS WHICH WOULD CAUSE AN AWKWARD INSTALLATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER FOR CLARIFICATION PRIOR TO INSTALLATION.
- ALL NEW PLUMBING WORK SHALL BE "DESIGN-BUILD" BY THE PLUMBING CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING BUILDING PERMITS AND PAYMENT OF THE REQUIRED
- ALL NEW ELECTRICAL WORK SHALL BE "DESIGN-BUILD" BY THE ELECTRICAL CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL THE DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING BUILDING PERMITS AND PAYMENT OF THE REQUIRED
- ALL NEW HEATING/AIR CONDITIONING WORK SHALL BE "DESIGN-BUILD" BY THE HEATING/AIR CONDITIONING CONTRACTOR. HE SHALL BE RESPONSIBLE FOR PREPARING ALL DRAWINGS, DIAGRAMS AND CALCULATIONS WHICH ARE REQUIRED FOR OBTAINING PERMITS AND PAYMENT OF THE REQUIRED FEES.
- SITE PREPARATION, EXCAVATION AND GRADING SHALL BE DONE IN CONFORMANCE WITH THE LOCAL BUILDING CODE.
- THESE PLANS ARE COPYRIGHTED BY THE PROJECT DESIGNER AND ARE INTENDED FOR THE ONE-TIME USE FOR THE PROPERTY SPECIFIED HEREIN. USE OF THESE PLANS FOR ANY OTHER PURPOSE IS STRICTLY PROHIBITED.
- THE BUILDER SHALL PROVIDE A STREET ADDRESS ON THE JOB SITE PRIOR TO AND DURING CONSTRUCTION.
- 12. THE DESIGNER PREPARING THESE PLANS SHALL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THESE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PROJECT ENGINEER.
- 13. IN THE EVENT OF CONFLICT BETWEEN THESE PLANS AND THE PLANS APPROVED BY THE GOVERNING AGENCY, THE APPROVED PLANS TAKE
- 14. THE PROJECT CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO THE BEGINNING OF CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES TO THE PROJECT ENGINEER. ANY DISCREPANCIES DISCOVERED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPORTED TO THE PROJECT DESIGNER.
- 15. *PLEASE NOTE, WE RECOMMEND WAITING FOR DELIVERY OF LOG PACKAGE BEFORE ORDERING WINDOWS AND DOORS FROM MANUFACTURER. GENERAL CONTRACTOR TO DOUBLE CHECK WINDOW SIZES AND R.O. DIMENSIONS LISTED IN THE SCHEDULES W/ MANUFACTURES LISTED R.O. DIMENSIONS AND W/ OPENING DIMENSIONS IN LOG WORK TO ENSURE A PERFECT FIT.

PROJECT DATA

OWNER/APPLICANT Black Forest Cabins

PROJECT LOCATION

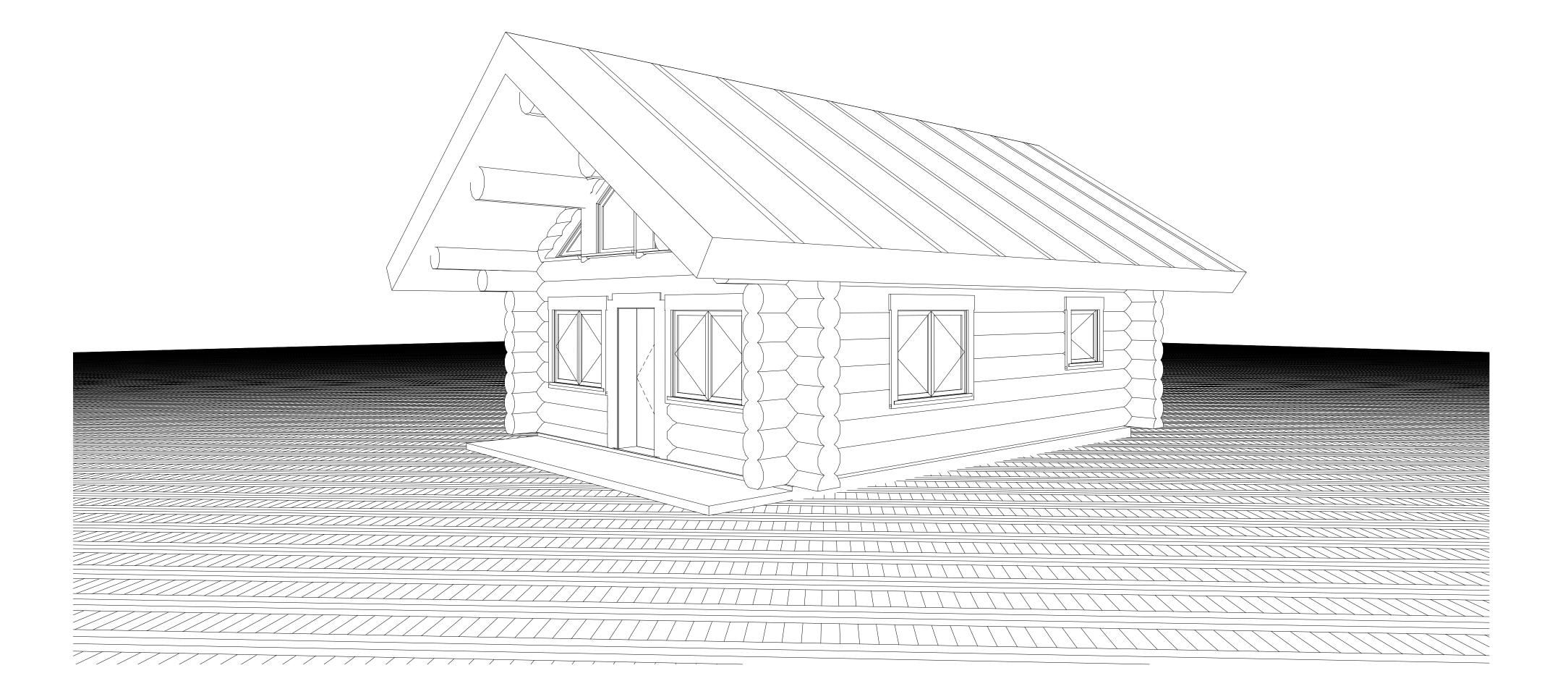
7251 Richardson Way Alaska

LEGAL DESCRIPTION

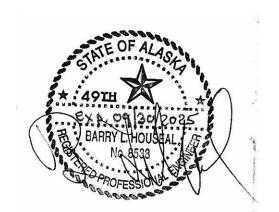
-Legal Description

PROJECT DESCRIPTION

PROPOSED NEW SINGLE FAMILY RESIDENCE



| | • | | | |
|---|--------------------------|---|---------------------|--------------------|
| | | | | |
| | A et l | | | |
| 6 | | | | |
| blh2.com | | | | |
| | | STRUCTURAL RECA | P SCHED | ULE |
| PROJECT: SMITH - B | lack Foest Cabins, 7 | 251 RICHARDSON WAY, VALDWZ, AK | BEARING | |
| DESCRIPTION | LOCATION | SIZE & SPECIES | AREA | PAGE# |
| Design Criteria | All Areas | | 1= | 1 |
| | AUA | | | |
| Snow Load Calcs. | All Areas | - | | 2,7A |
| | All Areas | See Details p. # 24 | - | 2,7A 3 thru 24 |
| Lateral Analysis | | See Details p. # 24 2" x 12" DF # 2 @ 16" cc | - | |
| Lateral Analysis Rafters | All Areas | | - - 26.98 in2 | 3 thru 24 25,26 |
| Snow Load Calcs. Lateral Analysis Rafters Ridge & Purlins Continuous Footings | All Areas Roof (8:12) | 2" x 12" DF # 2 @ 16" cc | - - 26.98 in2 | 3 thru 24 25,26 |



| | | WINDOW SCHED | ULE | |
|----|------------|----------------------|----------|------------------|
| ID | Home Story | Library Part Name | Quantity | Carpenter's R.O. |
| W1 | 1st FLOOR | W2 Casement 27 | 4 | 5'-0"×4'-0" |
| W2 | 1st FLOOR | W1 Casement 27 | 2 | 3'-0"×3'-0" |
| W3 | 2nd FLOOR | W Triangle Fixed 27 | 4 | 3'-0"×2'-0" |
| W4 | 2nd FLOOR | W Trapezoid Fixed 27 | 4 | 3'-6"×5'-0" |

| | | | DOOR SCH | DULE | | |
|----|------------|-------------------|-------------|----------|-------------|------------------|
| ID | Home Story | Library Part Name | Orientation | Quantity | W x H Size | Carpenter's R.O. |
| D2 | 1st FLOOR | D1 27 | LH | 2 | 3'-0"×6'-8" | 3'-2" X 6'-11" |

Black Forest Cabins

AREA TABULATION

| Square Footage | | |
|----------------|---------|--|
| FLOOR | Area | |
| FIRST FLOOR | 543 | |
| | 543 ft² | |

● ALL ● ALL ● IT IS CHE OF F ● BUIL LOC

BUILDING CODE LEGEND

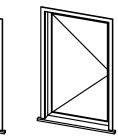
THESE PLANS SHALL COMPLY WITH THE FOLLOWING:

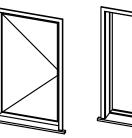
IRC 2021 IMC 2021 IEC 2021 SPRINKLERS: NO

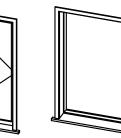
DESIGN CRITERIA:

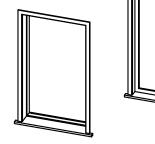
CODE: 2021 IBC SNOWLOAD: 88.7 PSF SEISMIC ZONE: D DESIGN WIND SPEED: 120mph WIND EXPOSURE: C

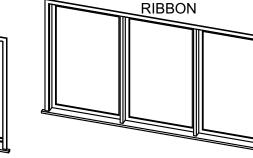
| | SHEET INDEX |
|------|-------------------------|
| ID | NAME |
| A-1 | COVER SHEET |
| A-2 | ELEVATIONS |
| A-3 | FOUNDATION PLAN |
| A-4 | FIRST FLOOR & ROOF PLAN |
| A-5 | DETAILS |
| A-6 | ELECTRICAL PLANS |
| A-7 | WALL SECTIONS |
| A-8 | WALL SECTIONS |
| A-9 | ISOMETRICS |
| A-10 | GENERAL NOTES |
| A-11 | SITE PLAN |

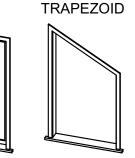


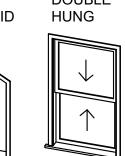


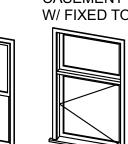








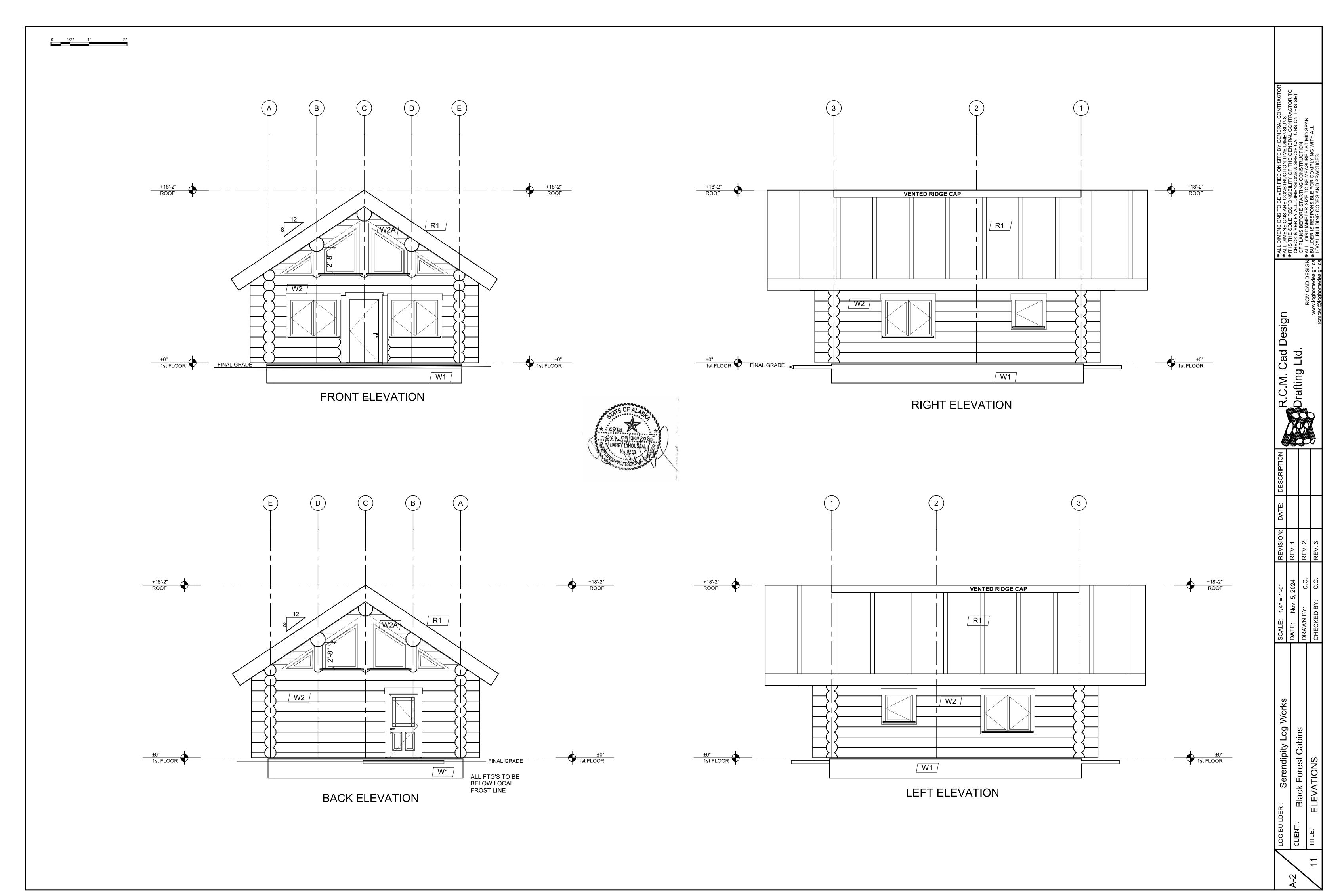


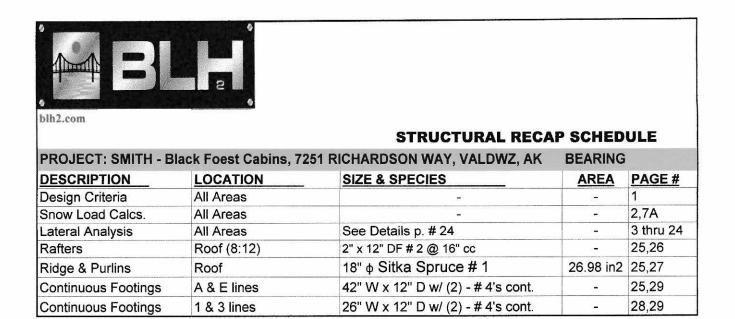


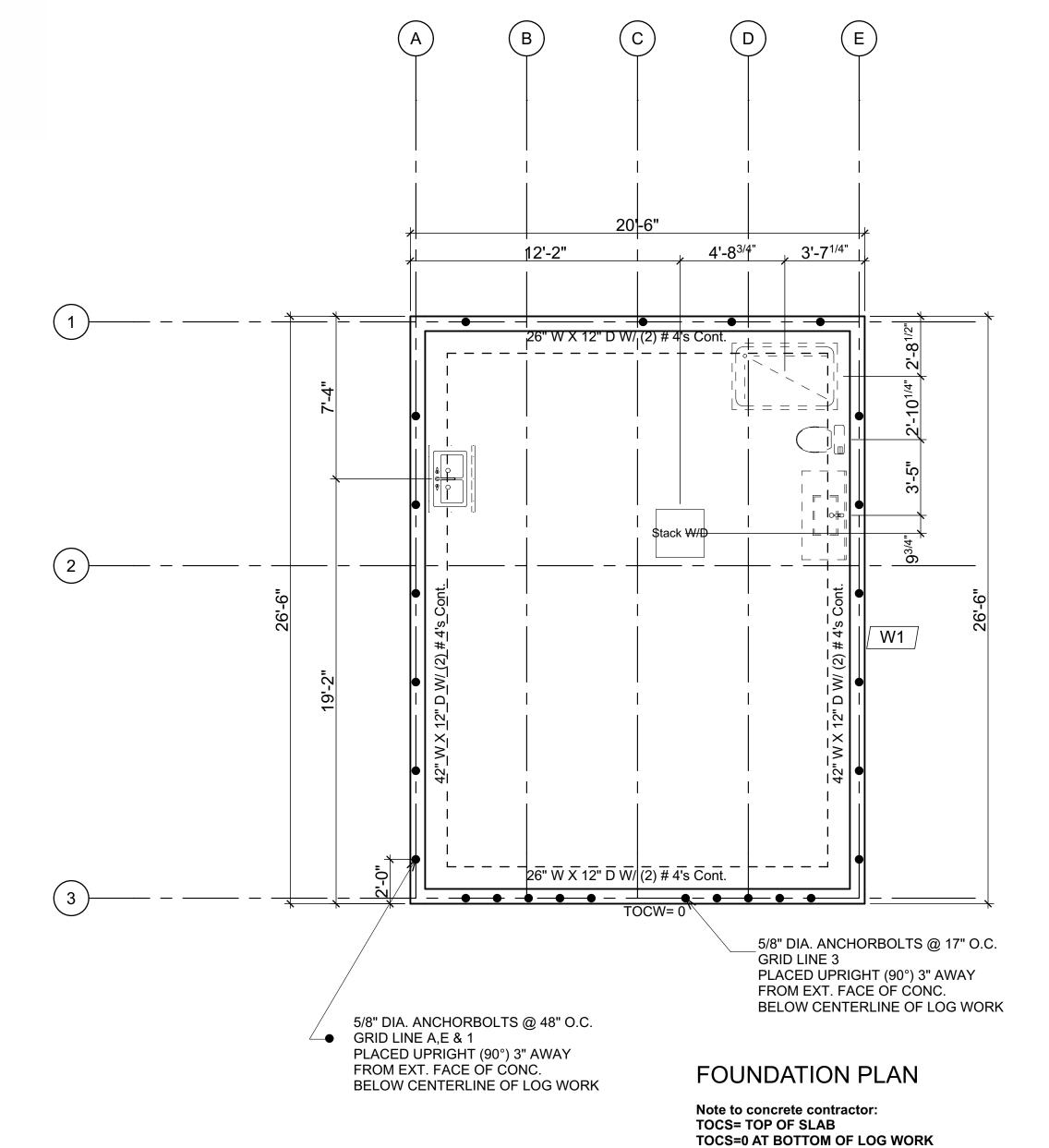


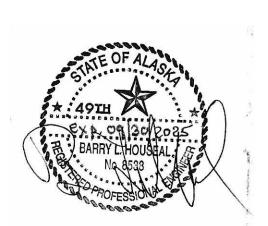












FOUNDATION NOTES

CENTERLINE OF LOG WORK TO BE 3" FROM EXTERIOR EDGE OF MONOLITHIC SLAB

ALL CONC. TO BE 2500 PSI @ 28 DAYS.

FOUNDATION:

SOIL BEARING PRESSURE IS ASSUMED TO BE A MINIMUM OF 1500 P.S.F. ALL FTGS. TO BEAR ON FIRM UNDISTURBED MATERIAL TOCS= TOP OF CONCRETE SLAB

CONCRETE REINFORCEMENT TABLE TO BE VERIFIED BY ENG. TURN DOWN SLAB FOOTING: 2-NO 4 REBAR LONGITUDINALLY

WIRE MESH REINFORCEMENT IN ALL CONC. SLABS TO AVOID CRACKS

NOTE: 5/8" ANCHOR BOLTS PLACED 24" AWAY FROM CORNERS AND @ 32" O.C. C/W NUTS & WASHERS AROUND PERIMETER

CONSTRUCTION MATERIALS

W1 TYPICAL SLAB ON GRADE
5" THICK MONOLITHIC SLAB ON GRADE 18"x18" TAPERED UP TO 5" THICK MONOLITHIC HEATED SLAB OVER LAYER OF 2" XPS f-250 FOAM (25 psi COMPRESSION) OVER 4" MIN. COMPACTED SAND AND GRAVEL

W2 TYPICAL EXTERIOR LOG WALL LOGS TO BE 14" dia. MIDSPAN SITKA SPRUCE WITH 13" GAIN PER STACK AVERAGE

W2A TYPICAL 2ND STOREY EXTERIOR WALL FALSE LOG SIDING PANELS (4 PIECES B/W POSTS) ON 5/8" CDX SHEATHING 2X6 @ 16" O.C. FRAME WALL R24 BATT INSULATION 6 MIL POLY V.B. INT. FINISH TO OWNERS SPECS.

W3A TYPICAL INTERIOR FRAME WALL (SETTLING) (1st FL.) INT. PARTITION WALLS TO BE:

WALL FINISH TO OWNER'S SPECS BOTH SIDES 2X6 @ 16" O.C FRAME WALL W/ SLIP JOINT @ BOTTOM OF WALL

W3B TYPICAL NONE BEARING INTERIOR FRAME WALL (ROOF)
INT. PARTITION WALLS TO BE:

WALL FINISH TO OWNER'S SPECS BOTH SIDES 2X4 @ 16" O.C FRAME WALL

F1A TYPICAL FIRST FLOOR
5" CONC. SLAB HOUSING IN FL. HEATING LVP FLOORING GLUED DOWN

R1 TYPICAL ROOF TO BE: 24 GAUGE STANDING SEAM ROOF (BLACK) ON ICE & WATER SHIELD 5/8" CDX SHEATHING 2x12 DF #2 @ 16" O.C. RAFTERS R 38 MIN. BATT INSULATION OVER LIVING AREA

W/ 1.5" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED SOFFIT TO VENTED RIDGE CAP) 6 MIL POLY V.B. 2" XPS FOAM UNDER RAFTERS 5/8" SHEETROCK

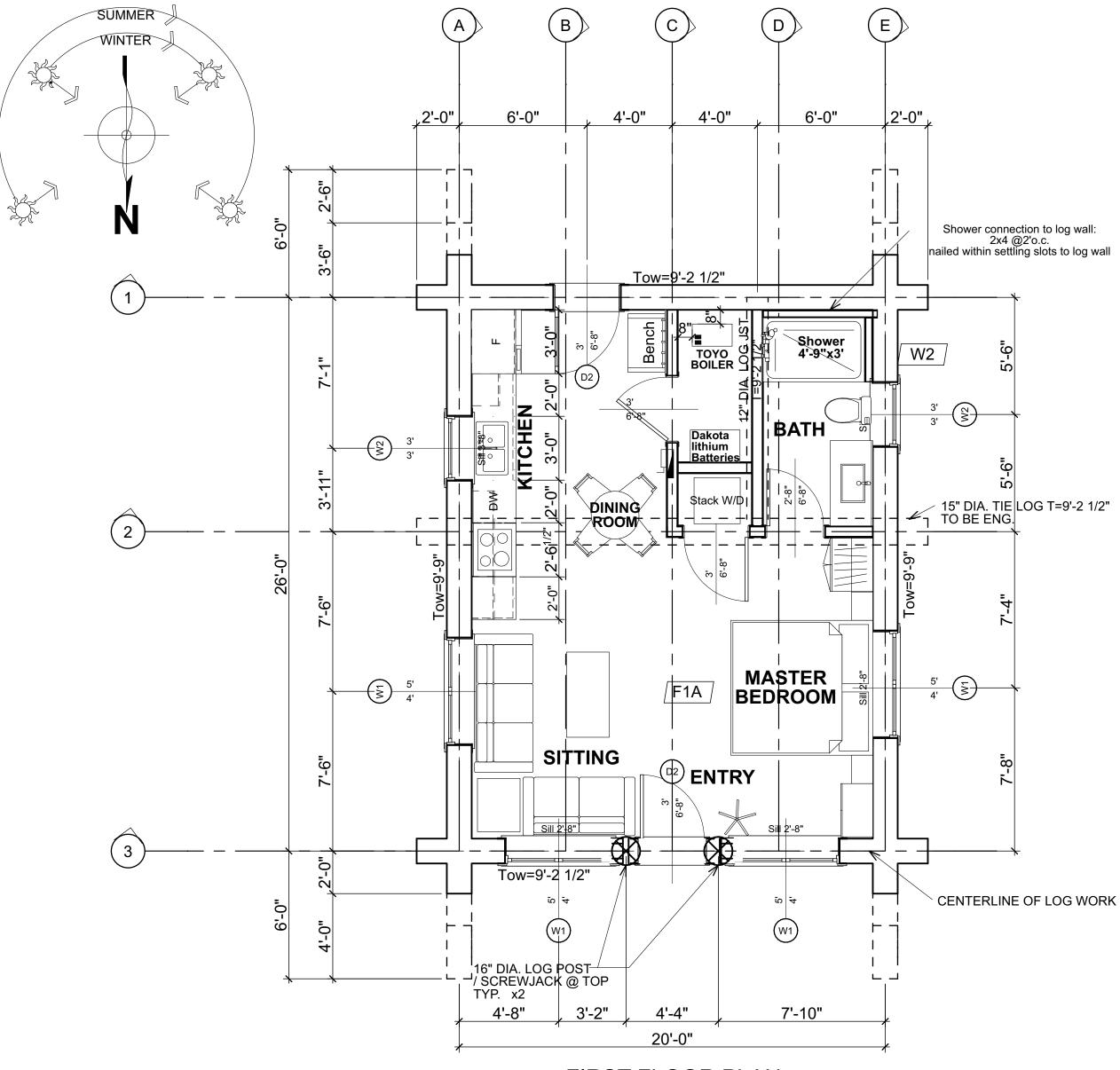
● ALL DIMENSION; ● ALL DIMENSION; ● IT IS THE SOLE F CHECK & VERIF' OF PLANS BEFO I ● ALL LOG DIAMET ■ BUILDER IS RES LOCAL BUILDING

| 4/// | | | | |
|--------------|--------------|--------|-------------|--|
| DESCRIPTION: | | | | |
| DATE: | | | | |
| REVISION: | REV. 1 | REV. 2 | REV. 3 | |
| 1'-0" | , 2024 | C.C. | | |
| 1/4" = 1'-0" | Nov. 5, 2024 | BY: | ED BY: C.C. | |

| Type Sheathing Nailing Sides Bot. Plate Connection Connection Connection Bolts Framing Plate PLF F A 3/8" ply or 7/16" OSB 8d @ 6"/12" 1 No SDWS 1/4x6" @ 15" cc LTP4 @ 30" cc LTP5 @ 28" cc 5/8" dia. x 12" @ 48" cc 2x Studs 2x 260 33 B 3/8" ply or 7/16" OSB 8d @ 4"/12" 1 Yes SDWS 1/4x6" @ 11" cc LTP4 @ 20" cc LTP5 @ 18" cc 5/8" dia. x 14" @ 48" cc 3x Studs 3x 380 5 C 3/8" ply or 7/16" OSB 8d @ 3"/12" 1 Yes SDWS 1/4x6" @ 8" cc LTP4 @ 16" cc LTP5 @ 14" cc 5/8" dia. x 14" @ 36" cc 3x Studs 3x 490 6 D 3/8" ply or 7/16" OSB 8d @ 2"/12" 1 Yes SDWS 1/4x6" @ 6" cc LTP4 @ 12" cc LTP5 @ 10" cc 5/8" dia. x 14" @ 28" cc 3x Studs 3x 640 8 E 3/8" Struc 1 8d @ 2"/12" 1 Yes SDWS 1/4x6" @ 5" cc LTP4 @ 10" cc LTP5 | | | | | | | | | | | | | |
|--|------------|--|----------|--|--|--|---------------------|-----------------|--|-------------|------------|---------|------|
| Type | ~~~ | | | N-11-11-11-11-11-11-11-11-11-11-11-11-11 | | | | | | | (<u> </u> | | |
| Type | ITE BUILT | SHEARWALLS | | William Control | Stagger | Rottom Plate | Ton Plate | Rottom Plate | Anchor | 75 16 0 0 m | | Seismic | Wind |
| A 3/8" ply or 7/16" OSB 8d @ 6"/12" 1 No SDWS 1/4x6" @ 15" cc LTP4 @ 30" cc LTP5 @ 28" cc \$/8" dia. x 12" @ 48" cc 2x Studs 3x 380 5 5 3/8" ply or 7/16" OSB 8d @ 4"/12" 1 Yes SDWS 1/4x6" @ 11" cc LTP4 @ 20" cc LTP5 @ 18" cc \$/8" dia. x 14" @ 14" cc S\$ 3x Studs 3x 380 5 5 1 1/6" of 20" cc LTP5 @ 18" cc S\$ 5/8" dia. x 14" @ 14" cc S\$ 3x Studs 3x 380 5 5 1 1/6" of 20" cc LTP5 @ 18" cc S\$ 5/8" dia. x 14" @ 28" cc 3x Studs 3x 490 6 6 5 3/8" ply or 7/16" OSB 8d @ 2"/12" 1 Yes SDWS 1/4x6" @ 6" cc LTP4 @ 12" cc LTP5 @ 10" cc S\$ 8" dia. x 14" @ 28" cc 3x Studs 3x 490 6 6 5 3/8" struc 1 8d @ 2"/12" 1 Yes SDWS 1/4x6" @ 6" cc LTP4 @ 10" cc LTP5 @ 10" cc S\$ 8" dia. x 14" @ 24" cc 3x Studs 3x 730 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | Nailing | Sides | The state of the s | | | | | Framing | Plate | | PLF |
| B 3/8" ply or 7/16" OSB 8d @ 4"/12" 1 Yes SDWS 1/466" @ 31" cc LTP4 @ 20" cc LTP5 @ 18" cc 5/8" dia x 14" @ 48" cc 3x Studs 3x 490 5 5 5 3/8" ply or 7/16" OSB 8d @ 3"/12" 1 Yes SDWS 1/466" @ 3" cc LTP4 @ 16" cc LTP5 @ 10" cc 5/8" dia x 14" @ 36" cc 3x Studs 3x 460 8 5 5 5 3/8" ply or 7/16" OSB 8d @ 2"/12" 1 Yes SDWS 1/466" @ 3" cc LTP4 @ 10" cc LTP5 @ 10" cc 5/8" dia x 14" @ 28" cc 3x Studs 3x 460 8 5 5 5 3/8" Struc 1 8d @ 2"/12" 1 Yes SDWS 1/466" @ 5" cc LTP4 @ 10" cc LTP5 @ 10" cc 5/8" dia x 14" @ 24" cc 3x Studs 3x 730 1 1 7 3/8" ply or 7/16" OSB 8d @ 4"/12" 2 Yes SDWS 1/466" @ 5" cc LTP4 @ 10" cc LTP5 @ 10" cc 5/8" dia x 14" @ 24" cc 3x Studs 3x 750 1 1 7 3/8" ply or 7/16" OSB 8d @ 2"/12" 2 Yes SDWS 1/466" @ 3" cc LTP4 @ 10" cc LTP5 @ 10" cc 5/8" dia x 14" @ 24" cc 3x Studs 3x 760 1 1 3/8" struct 1 8d @ 2"/12" 2 Yes SDWS 1/466" @ 3" cc LTP4 @ 10" cc LTP5 @ 10" cc 5/8" dia x 14" @ 24" cc 3x Studs 3x 760 1 1 1 3/8" Struct 1 8d @ 2"/12" 2 Yes SDWS 1/466" @ 3" cc LTP4 @ 10" cc LTP5 @ 10" cc 5/8" dia x 14" @ 14" cc 3x Studs 3x 760 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | 10 | | | | | | - HUMANAMAN | | 2x | 260 | 365 |
| C 3/8" ply or 7/16" OSB 8d @ 3"/12" 1 Yes SDWS 1/4x6" @ 8" cc LTP4 @ 16" cc LTP5 @ 14" cc 5/8" dia. x 14" @ 36" cc 3x Studs 3x 490 6 6 3/8" ply or 7/16" OSB 8d @ 2"/12" 1 Yes SDWS 1/4x6" @ 6" cc LTP4 @ 12" cc LTP5 @ 10" cc 5/8" dia. x 14" @ 28" cc 3x Studs 3x 640 8 5 34" Struc 1 8d @ 2"/12" 1 Yes SDWS 1/4x6" @ 6" cc LTP4 @ 12" cc LTP5 @ 10" cc 5/8" dia. x 14" @ 28" cc 3x Studs 3x 640 8 3 5 5 5 5 5 5 5 5 5 | | | | 1 | Yes | A STATE OF THE PARTY OF T | | | | 3x Studs | 3x | 380 | 530 |
| D 3/8" ply or 7/16" OSB 8d @ 2"/12" 1 Yes SDWS 1/4x6" @ 6" cc LTP4 @ 12" cc LTP5 @ 10" cc S/8" dia. x 14" @ 28" cc 3x Studs 3x 640 8 | | | | | Yes | | | | | 3x Studs | 3x | 490 | 685 |
| E 3/8" Struc 1 8d @ 2"/12" 1 Yes SDWS 1/4 x6" @ 5" cc LTP4 @ 10" cc LTP5 @ 10" cc S/8" dia. x 14" @ 24" cc 3x Studs 3x 730 1 F 3/8" ply or 7/16" OSB 8d @ 4"/12" 2 Yes SDWS 1/4x6" @ 5" cc LTP4 @ 10" cc LTP5 @ 10" cc S/8" dia. x 14" @ 24" cc 3x Studs 3x 760 1 G 3/8" ply or 7/16" OSB 8d @ 4"/12" 2 Yes SDWS 1/4x6" @ 5" cc LTP4 @ 10" cc LTP5 @ 10" cc S/8" dia. x 14" @ 12" cc 3x Studs 3x 760 1 H 3/8" ply or 7/16" OSB 8d @ 2"/12" 2 Yes SDWS 1/4x6" @ 3" cc LTP4 @ 6" cc LTP5 @ 10" cc S/8" dia. x 14" @ 12" cc 4x DF # 2 3x 1280 1 I 3/8" Struct 1 8d @ 2"/12" 2 Yes SDWS 1/4x6" @ 3" cc LTP4 @ 4" cc LTP5 @ 10" cc S/8" dia. x 14" @ 14" cc 4x DF # 2 3x 1280 1 I 3/8" Struct 1 8d @ 2"/12" 2 Yes SDWS 1/4x6" @ 2" cc LTP4 @ 4" cc LTP5 @ 10" cc S/8" dia. x 14" @ 14" cc 4x DF # 2 3x 1280 1 I 3/8" Struct 1 8d @ 2"/12" 2 Yes SDWS 1/4x6" @ 2" cc LTP4 @ 4" cc LTP5 @ 4" cc S/8" dia. x 14" @ 14" cc 4x DF # 2 3x 1460 2 SSTB 16 6 5/8" 17-5/8 12-5/8 2,550 3,780 SSTB 16 6 5/8" 21-5/8 12-5/8 2,950 4,785 SSTB 20 6 5/8" 29-7/8 6,395 11,675 SSTB 34 8 7/8" 34-7/8 28-7/8 6,395 11,675 SSTB 34 8 7/8" 34-7/8 28-7/8 6,395 11,675 SSTB 34 8 7/8" 34-7/8 28-7/8 6,395 11,675 SSTB 35 8 7/8" 34-7/8 34-7/8 28-7/8 6,395 11,675 SSTB 34 8 7/8" 34-7/8 28-7/8 6,395 11,675 SSTB 34 8 7/8" 35-7/8" 35-7/8" (6)-1/4" x 2-1/2" SDS HDU2 3" 5,586 4,4065 5/8" (10)-1/4" x 2-1/2" SDS HDU3 3" 5,665 3,285 5/8" (10)-1/4" x 2-1/2" SDS HDU4 3" 5,580 4,305 7/8" (20)-1/4" x 2-1/2" SDS HDU8 3.5" 5,980 4,305 7/8" (20)-1/4" x 2-1/2" SDS HDU8 3.5" 6,970 5,665 7/8" (20)-1/4" x 2-1/2" SDS | | | | | The second second second second | | | | | 3x Studs | 3x | 640 | 895 |
| F 3/8" ply or 7/16" OSB 8d @ 4"/12" 2 Yes SDWS 1/4x6" @ 5" cc LTP4 @ 10" cc LTP5 @ 8" cc 5/8" dia. x 14" @ 24" cc 3x Studs 3x 760 1 | | | | | | | | | | | 3x | 730 | 1020 |
| Symbol S | | | | | | | | | AND AND AND ADDRESS OF THE PARTY OF THE PART | | | 760 | 1060 |
| H 3/8" ply or 7/16" OSB 8d @ 2"/12" 2 Yes SDWS 1/4x6" @ 3" cc LTP4 @ 6" cc LTP5 @ 5.5" cc 5/8" dia. x 14" @ 14" cc 4x DF # 2 3x 1280 1 | | | | | | | | | | | | 980 | 1370 |
| Second S | | | | 1/2702 | VIS-0500 6 | | | | | | | 1280 | 1790 |
| Second S | ı | | | | | | | | | 4x DF # 1. | 3x | 1460 | 2040 |
| SSTB's Stemwall Width (") AB Ø (") Length (") Embed (") Stemwall Allow Tension Allow Slab-on-grade | | -L | | | | | | | | | | | |
| SSTB 16 6 5/8" 17-5/8 12-5/8" 2,550 3,780 | 1 | | | | | SDC C-F | SDC C-F | | 10 | | 30 | | |
| SSTB 16 6 5/8" 17-5/8 12-5/8" 2,550 3,780 | SSTB's | Stemwall Width (") | AB Ø (") | Length (") | Embed (") | Stemwall Allow Tension | Allow Slab-on-grade | | | | | | |
| SSTB24 6 5/8" 25-5/8 20-5/8 3,325 5,790 SSTB28 8 7/8" 29-7/8 24-7/8 6,395 11,675 SSTB34 8 7/8" 34-7/8 28-7/8 6,395 11,675 SSTB36 8 7/8" 36-7/8 28-7/8 6,395 11,675 SSTB36 8 7/8" 36-7/8 28-7/8 6,395 11,675 SSTB36 8 7/8" 36-7/8 28-7/8 6,395 11,675 HDU2 3" 3,075 2,215 5/8" (6)-1/4" × 2-1/2" SDS HDU4 3" 4,565 3,285 5/8" (10)-1/4" × 2-1/2" SDS HDU5 3" 5,645 4,065 5/8" (10)-1/4" × 2-1/2" SDS HDU8 3" 5,980 4,305 7/8" (20)-1/4" × 2-1/2" SDS HDU8 3.5" 6,970 5,020 7/8" (20)-1/4" × 2-1/2" SDS HDU8 4.5" 7,870 5,665 7/8" (20)-1/4" × 2-1/2" SDS HDU8 4.5" 7,870 5,665 7/8" (20)-1/4" × 2-1/2" SDS | SSTB 16 | 6 | 5/8" | The state of the s | 12-5/8" | 2,550 | 3,780 | - | | | | | |
| SSTB28 8 7/8" 29-7/8 24-7/8 6,395 11,675 | SSTB20 | 6 | 5/8" | 21-5/8 | 16-5/8 | 2,960 | 4,785 | | | | | | |
| SSTB34 8 7/8" 34-7/8 28-7/8 6,395 11,675 | SSTB24 | 6 | 5/8" | 25-5/8 | 20-5/8 | 3,325 | 5,790 | - | | | | | |
| SSTB36 8 7/8" 36-7/8 28-7/8 6,395 11,675 | SSTB28 | 8 | 7/8" | 29-7/8 | 24-7/8 | 6,395 | 11,675 | | | | | | |
| HOLDOWNS | SSTB34 | 8 | 7/8" | 34-7/8 | 28-7/8 | 6,395 | 11,675 | TT. | | | | | |
| HDU2 3" 3,075 2,215 5/8" (6) - 1/4" x 2-1/2" SDS | SSTB36 | 8 | 7/8" | 36-7/8 | 28-7/8 | 6,395 | 11,675 | _ | | | | | |
| HDU2 3" 3,075 2,215 5/8" (6) - 1/4" x 2-1/2" SDS | | HOLDOWNS | DOST "+" | ne/sp | CDE/LIE | AR (1") | Post Fastanors | Notes | | | T | | 1 |
| HDU4 3" 4,565 3,285 5/8" (10)-1/4" x 2-1/2" SDS | | Direction of the second of the | | | | The state of the s | | NOTES | | | - | | |
| HDUS 3" 5,645 4,065 5/8" (14)-1/4" x 2-1/2" 5DS HDU8 3" 5,980 4,305 7/8" (20)-1/4" x 2-1/2" 5DS HDU8 3.5" 6,970 5,020 7/8" (20)-1/4" x 2-1/2" 5DS HDU8 4.5" 7,870 5,665 7/8" (20)-1/4" x 2-1/2" 5DS HDU11 5.5" 9,535 6,865 1" (30)-1/4" x 2-1/2" 5DS | | | | | | + | | + | | | - | | - |
| HDU8 3" 5,980 4,305 7/8" (20)-1/4" x 2-1/2" SDS HDU8 3.5" 6,970 5,020 7/8" (20)-1/4" x 2-1/2" SDS HDU8 4.5" 7,870 5,665 7/8" (20)-1/4" x 2-1/2" SDS HDU11 5.5" 9,535 6,865 1" (30)-1/4" x 2-1/2" SDS | | | | | | The same of the sa | + | | | | - | - | + |
| HDU8 3.5" 6,970 5,020 7/8" (20)-1/4" x 2-1/2" SDS HDU8 4.5" 7,870 5,665 7/8" (20)-1/4" x 2-1/2" SDS HDU11 5.5" 9,535 6,865 1" (30)-1/4" x 2-1/2" SDS | | | | | | | | | | | - | | |
| HDU8 4.5" 7,870 5,665 7/8" (20)-1/4" x 2-1/2" SDS HDU11 5.5" 9,535 6,865 1" (30)-1/4" x 2-1/2" SDS | | | | - | | | | | | | - | - | - |
| HDU11 5.5" 9,535 6,865 1" (30)-1/4" x 2-1/2" SDS | | The second secon | | - | | | | | | | - | + | - |
| | | | | | | | | | | | | - | + |
| | | | | | | | | | | | - | | - |
| HDU14 7.25" 14,375 10,435 1" (36)-1/4" x 2-1/2" SDS Heavy Hex Anchor Nut | | | | | | The second secon | | Honer Hoy Anche | or Nut | | - | - | - |

| . C. DOIL | T SHEARWALLS | | | Stagger | Bottom Plate | Top Plate | Bottom Plate | Anchor | | | Seismic | Wind |
|----------------------------|--|---|---|---|--|---|------------------------|--|-----------|-------|---------|------|
| Туре | Sheathing | Nailing | Sides | Bot. Plate | Connection | Connection | Connection | <u>Bolts</u> | Framing | Plate | PLF | PLF |
| Α | 3/8" ply or 7/16" OSB | 8d @ 6"/12" | 1 | No | SDWS 1/4x6" @ 15" cc | LTP4 @ 30" cc | LTP5 @ 28" cc | 5/8" dia. x 12" @ 48" cc | 2x Studs | 2x | 260 | 365 |
| В | 3/8" ply or 7/16" OSB | 8d @ 4"/12" | 1 | Yes | SDWS 1/4x6" @ 11" cc | LTP4 @ 20" cc | LTP5 @ 18" cc | 5/8" dia. x 14" @ 48" cc | 3x Studs | 3x | 380 | 530 |
| С | 3/8" ply or 7/16" OSB | 8d @ 3"/12" | 1 | Yes | SDWS 1/4x6" @ 8" cc | LTP4 @ 16" cc | LTP5 @ 14" cc | 5/8" dia. x 14" @ 36" cc | 3x Studs | 3x | 490 | 685 |
| D | 3/8" ply or 7/16" OSB | 8d @ 2"/12" | 1 | Yes | SDWS 1/4x6" @ 6" cc | LTP4 @ 12" cc | LTP5 @ 10" cc | 5/8" dia. x 14" @ 28" cc | 3x Studs | 3x | 640 | 895 |
| E | 3/8" Struc 1 | 8d @ 2"/12" | 1 | Yes | SDWS 1/4 x6" @ 5" cc | LTP4 @ 10" cc | LTP5 @ 10" cc | 5/8" dia. x 14" @ 24" cc | 3x Studs | 3x | 730 | 1020 |
| F | 3/8" ply or 7/16" OSB | 8d @ 4"/12" | 2 | Yes | SDWS 1/4x6" @ 5" cc | LTP4 @ 10" cc | LTP5 @ 8" cc | 5/8" dia. x 14" @ 24" cc | 3x Studs | 3x | 760 | 106 |
| G | 3/8" ply or 7/16" OSB | 8d @ 3"/12" | 2 | Yes | SDWS 1/4x6" @ 4" cc | LTP4 @ 8" cc | LTP5 @ 6" cc | 5/8" dia. x 14" @ 18" cc | 3x Studs | 3x | 980 | 1370 |
| Н | 3/8" ply or 7/16" OSB | 8d @ 2"/12" | 2 | Yes | SDWS 1/4x6" @ 3" cc | LTP4 @ 6" cc | LTP5 @ 5.5" cc | 5/8" dia. x 14" @ 14" cc | 4x DF # 2 | 3x | 1280 | 179 |
| 1 | 3/8" Struct 1 | 8d @ 2"/12" | 2 | Yes | SDWS 1/4x6" @ 2" cc | LTP4 @ 4" cc | LTP5 @ 4" cc | 5/8" dia. x 14" @ 12" cc | 4x DF # 1 | 3x | 1460 | 2040 |
| | | | | | SDC C-F | SDC C-F | | A COLUMN TO THE PARTY OF THE PA | | 1 | | |
| SSTB's | Stemwall Width (") | AB Ø (") | Length (") | Embed (") | The same of the sa | | | | | | | |
| SSTB 16 | 6 | 5/8" | 17-5/8 | 12-5/8" | 2,550 | 3,780 | - | | | | | |
| SSTB20 | 6 | 5/8" | 21-5/8 | 16-5/8 | 2,960 | 4,785 | | | | | | |
| SSTB24 | 6 | 5/8" | 25-5/8 | 20-5/8 | 3,325 | 5,790 | === | | | | | |
| | 8 | 7/8" | 29-7/8 | 24-7/8 | 6,395 | 11.675 | | | | | | |
| SSTB28 | 0 | 1/0 | 25-1/0 | 24-110 | 0,333 | 11,675 | | | | | | |
| | 8 | 7/8" | 34-7/8 | 28-7/8 | 6,395 | 11,675 | | | | | | |
| SSTB28 SSTB34 SSTB36 | | | | | | | _ | | | | | |
| SSTB34 | 8 8 | 7/8" 7/8" | 34-7/8 36-7/8 | 28-7/8 28-7/8 | 6,395 6,395 | 11,675 11,675 | Notes | | | T | | ε |
| SSTB34 | 8 8 HOLDOWNS | 7/8" 7/8" POST "t" | 34-7/8 36-7/8 DF/SP | 28-7/8 28-7/8 SPF/HF | 6,395 6,395 AB Ø (") | 11,675 11,675 Post Fasteners | Notes | | | | | |
| SSTB34 | 8 8 HOLDOWNS HDU2 | 7/8" 7/8" POST "t" 3" | 34-7/8 36-7/8 DF/SP 3,075 | 28-7/8 28-7/8 SPF/HF 2,215 | 6,395 6,395 AB Ø (") 5/8" | 11,675 11,675 Post Fasteners (6) - 1/4" x 2-1/2" SDS | Notes | | | | | |
| SSTB34 | 8 8 HOLDOWNS HDU2 HDU4 | 7/8" 7/8" POST "t" 3" 3" | 34-7/8 36-7/8 DF/SP 3,075 4,565 | 28-7/8 28-7/8 SPF/HF 2,215 3,285 | 6,395 6,395 AB Ø (") 5/8" | 11,675 11,675 Post Fasteners (6) - 1/4" x 2-1/2" SDS (10)-1/4" x 2-1/2" SDS | Notes | | | | | |
| SSTB34 | 8 8 HOLDOWNS HDU2 | 7/8" 7/8" POST "t" 3" | 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 | 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 | 6,395 6,395 AB Ø (") 5/8" 5/8" | 11,675 11,675 Post Fasteners (6) - 1/4" x 2-1/2" SDS (10)-1/4" x 2-1/2" SDS (14)-1/4" x 2-1/2" SDS | Notes | | | | | |
| SSTB34 | 8 8 HOLDOWNS HDU2 HDU4 HDU5 | 7/8" 7/8" POST "t" 3" 3" 3" | 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 | 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 4,305 | 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" 7/8" | 11,675 11,675 Post Fasteners (6) - 1/4" × 2-1/2" SDS (10)-1/4" × 2-1/2" SDS (14)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS | Notes | | | | | |
| SSTB34 | 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 | 7/8" 7/8" POST "t" 3" 3" 3" 3" | 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 6,970 | 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 4,305 5,020 | 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" 7/8" | 11,675 11,675 Post Fasteners (6) - 1/4" × 2-1/2" SDS (10)-1/4" × 2-1/2" SDS (14)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS | Notes | | | | | |
| SSTB34 | 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 HDU8 | 7/8" 7/8" POST "t" 3" 3" 3" 3" 4.5" | 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 6,970 7,870 | 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 4,305 5,020 5,665 | 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" 7/8" 7/8" 7/8" | 11,675 11,675 Post Fasteners (6) - 1/4" × 2-1/2" SDS (10)-1/4" × 2-1/2" SDS (14)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS | Notes | | | | | |
| SSTB34 | 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 HDU8 HDU8 HDU8 HDU8 HDU8 HDU11 | 7/8" 7/8" POST "t" 3" 3" 3" 3" 4.5" 5.5" | 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 6,970 7,870 9,535 | 28-7/8 28-7/8 28-7/8 2,215 3,285 4,065 4,305 5,020 5,665 6,865 | 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" 7/8" 7/8" 7/8" 1" | 11,675 11,675 Post Fasteners (6) - 1/4" × 2-1/2" SDS (10)-1/4" × 2-1/2" SDS (14)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (30)-1/4" × 2-1/2" SDS | Notes | | | | | |
| SSTB34 | 8 8 HOLDOWNS HDU2 HDU4 HDU5 HDU8 HDU8 HDU8 HDU8 | 7/8" 7/8" POST "t" 3" 3" 3" 3" 4.5" | 34-7/8 36-7/8 DF/SP 3,075 4,565 5,645 5,980 6,970 7,870 | 28-7/8 28-7/8 SPF/HF 2,215 3,285 4,065 4,305 5,020 5,665 | 6,395 6,395 AB Ø (") 5/8" 5/8" 5/8" 7/8" 7/8" 7/8" 1" 1" | 11,675 11,675 Post Fasteners (6) - 1/4" × 2-1/2" SDS (10)-1/4" × 2-1/2" SDS (14)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS (20)-1/4" × 2-1/2" SDS | Notes Heavy Hex Ancho | or Nut | | | | |





FIRST FLOOR PLAN AREA: 543 SQ.FT.

LOG WORK GENERAL NOTES

ALL DIMENSIONS ARE CONSTRUCTION DIMENSIONS ALL DIMENSIONS TO BE VERIFIED ON SITE BY GEN. CONTRACTOR BEFORE STARTING CONSTRUCTION

TOW= TOP OF WALL TOW= 0 @ BOTTOM OF LOG WALL T= TOP OF LOG B= BOTTOM OF LOG TYP.= TYPICAL

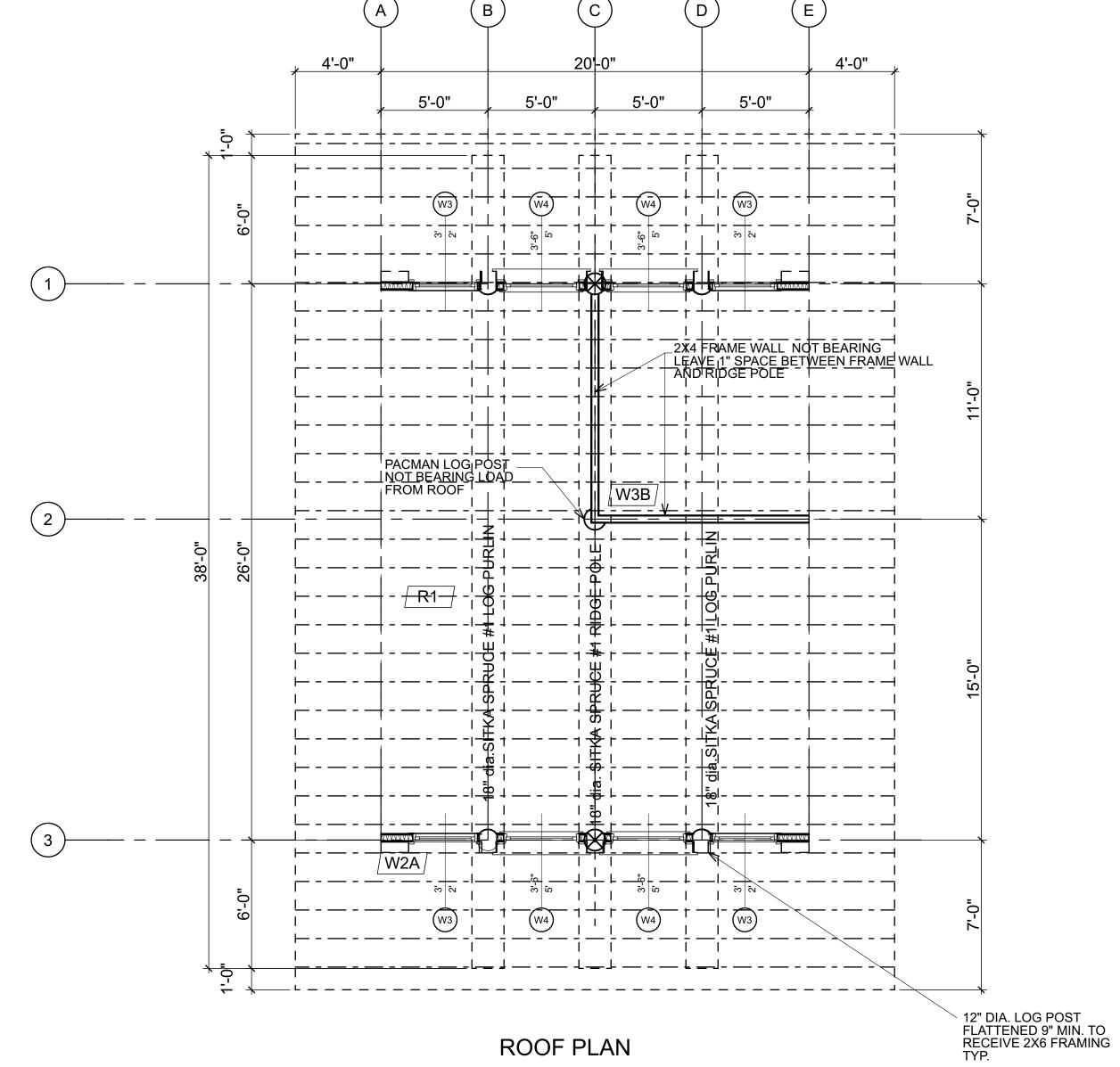
ALL LOG SIZES NOTED TO BE MID SPAN DIAMETERS. ALL LOG WALL AND LOG HEIGHTS INDICATED ON PLAN ARE MINIMUM HGT. ALLOW FOR 1.5" FLAT CUT ON SILL AND HEADER LOGS

TO CONNECT FRAMING. ALLOW FOR 3-4" TAKEN OFF OF TOW HEIGHT. THRU BOLTS TO BE TIGHTENED TO BE

LOWERED EVERY 3 MONTHS FOR 1ST YEAR AND TWICE A YEAR FOR NEXT 4 YEARS AS HOUSE LOGWORK SETTLES DOWN AS LOGS LOSE MOISTURE CONTENT & COMPRESS **UNDER LOADS**

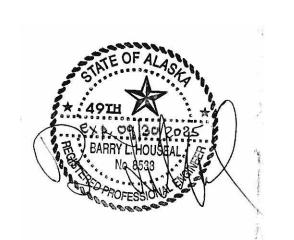
FASTEN SILL LOG TO ANCOR BOLTS USING COUPLER NUT TO 5/8" THREADED ROD, TIMBER WASHER AND NUTS. FASTEN CAP LOG DOWN TO LOG BELOW W/ 3/8" ASSY SCREWS @ 4' O.C.

ALL LOGWORK TO BE REVIEWED BY STRUCTURAL ENGINEER



SNOW LOAD: 88.7 lbs/ SQ. FT. TO BE VERIFIED BY ENG. FOR BUILDING SITE

| blh2.com | • | | | |
|--|--|---|-------------------------------|---------------------------------|
| | | STRUCTURAL RECA | P SCHED | ULE |
| PROJECT: SMITH - B | lack Foest Cabins, 7 | 251 RICHARDSON WAY, VALDWZ, AK | BEARING | |
| | LOCATION | | ADEA | DA 05 # |
| DESCRIPTION | LOCATION | SIZE & SPECIES | AREA | PAGE # |
| DESCRIPTION Design Criteria | All Areas | SIZE & SPECIES | AREA - | 1 |
| | | SIZE & SPECIES - | AREA - - | PAGE # 1 2,7A |
| Design Criteria | All Areas | SIZE & SPECIES - See Details p. # 24 | | 1 |
| Design Criteria Snow Load Calcs. | All Areas All Areas | - | | 1 2,7A |
| Design Criteria Snow Load Calcs. Lateral Analysis | All Areas All Areas All Areas | See Details p. # 24 | - - - - 26.98 in2 | 1 2,7A 3 thru 24 |
| Design Criteria Snow Load Calcs. Lateral Analysis Rafters | All Areas All Areas All Areas Roof (8:12) | See Details p. # 24 2" x 12" DF # 2 @ 16" cc | | 1 2,7A 3 thru 24 25,26 |



| ITE BUIL | T SHEARWALLS | | Mark Congress | Stagger | Bottom Plate | Top Plate | Bottom Plate | Anchor | PART THE P | | Seismic | Wind |
|----------|-----------------------|----------------------|----------------|----------------|------------------------|--|-----------------|--------------------------|------------|-------|---------|------|
| Type | Sheathing | Nailing | Sides | Bot. Plate | Connection | Connection | Connection | Bolts | Framing | Plate | PLF | PLF |
| A | 3/8" ply or 7/16" OSB | 8d @ 6"/12" | 1 | No | SDWS 1/4x6" @ 15" cc | LTP4 @ 30" cc | LTP5 @ 28" cc | 5/8" dia. x 12" @ 48" cc | 2x Studs | 2x | 260 | 365 |
| В | 3/8" ply or 7/16" OSB | 8d @ 4"/12" | 1 | Yes | SDWS 1/4x6" @ 11" cc | LTP4 @ 20" cc | LTP5 @ 18" cc | 5/8" dia. x 14" @ 48" cc | 3x Studs | 3x | 380 | 530 |
| С | 3/8" ply or 7/16" OSB | 8d @ 3"/12" | 1 | Yes | SDWS 1/4x6" @ 8" cc | LTP4 @ 16" cc | LTP5 @ 14" cc | 5/8" dia. x 14" @ 36" cc | 3x Studs | 3x | 490 | 685 |
| D | 3/8" ply or 7/16" OSB | 8d @ 2"/12" | 1 | Yes | SDWS 1/4x6" @ 6" cc | LTP4 @ 12" cc | LTP5 @ 10" cc | 5/8" dia. x 14" @ 28" cc | 3x Studs | 3x | 640 | 895 |
| E | 3/8" Struc 1 | 8d @ 2"/12" | 1 | Yes | SDWS 1/4 x6" @ 5" cc | LTP4 @ 10" cc | LTP5 @ 10" cc | 5/8" dia. x 14" @ 24" cc | 3x Studs | 3x | 730 | 1020 |
| F | 3/8" ply or 7/16" OSB | 8d @ 4"/12" | 2 | Yes | SDWS 1/4x6" @ 5" cc | LTP4 @ 10" cc | LTP5 @ 8" cc | 5/8" dia. x 14" @ 24" cc | 3x Studs | 3x | 760 | 1060 |
| G | 3/8" ply or 7/16" OSB | 8d @ 3"/12" | 2 | Yes | SDWS 1/4x6" @ 4" cc | LTP4 @ 8" cc | LTP5 @ 6" cc | 5/8" dia. x 14" @ 18" cc | 3x Studs | 3x | 980 | 1370 |
| Н | 3/8" ply or 7/16" OSB | 8d @ 2"/12" | 2 | Yes | SDWS 1/4x6" @ 3" cc | LTP4 @ 6" cc | LTP5 @ 5.5" cc | 5/8" dia. x 14" @ 14" cc | 4x DF # 2 | 3x | 1280 | 1790 |
| ı | 3/8" Struct 1 | 8d @ 2"/12" | 2 | Yes | SDWS 1/4x6" @ 2" cc | LTP4 @ 4" cc | LTP5 @ 4" cc | 5/8" dia. x 14" @ 12" cc | 4x DF # 1 | 3x | 1460 | 204 |
| | | | | | | | | | | | | |
| | | | | | SDC C-F | SDC C-F | | | | | | |
| SSTB's | Stemwall Width (") | AB Ø (") | Length (") | Embed (") | Stemwall Allow Tension | Allow Slab-on-grade | | | | | | |
| SSTB 16 | 6 | 5/8" | 17-5/8 | 12-5/8" | 2,550 | 3,780 | | | | | | |
| SSTB20 | 6 | 5/8" | 21-5/8 | 16-5/8 | 2,960 | 4,785 | | | | | | |
| SSTB24 | 6 | 5/8" | 25-5/8 | 20-5/8 | 3,325 | 5,790 | | | | | | |
| SSTB28 | 8 | 7/8" | 29-7/8 | 24-7/8 | 6,395 | 11,675 | | | | | | |
| SSTB34 | 8 | 7/8" | 34-7/8 | 28-7/8 | 6,395 | 11,675 | | | | | | |
| SSTB36 | 8 | 7/8" | 36-7/8 | 28-7/8 | 6,395 | 11,675 | | | | | | |
| | | | | | | | | | | | | _ |
| | HOLDOWNS | POST "t" | DF/SP | SPF/HF | AB Ø (") | Post Fasteners | <u>Notes</u> | | | | | |
| | HDU2 | 3" | 3,075 | 2,215 | 5/8" | (6) - 1/4" x 2-1/2" SDS | | | | | | |
| | HDU4 | 3" | 4,565 | 3,285 | 5/8" | (10)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU5 | 3" | 5,645 | 4,065 | 5/8" | (14)-1/4" x 2-1/2" SDS | | | | | -10 | |
| | | 3" | 5,980 | 4,305 | 7/8" | (20)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU8 | 3 | | | 7/8" | (20)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU8 HDU8 | 3.5" | 6,970 | 5,020 | | | | | | | | 4 |
| -10 | | 1000 | 6,970 7,870 | 5,020 5,665 | 7/8" | (20)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU8 | 3.5" | - | | | (20)-1/4" x 2-1/2" SDS (30)-1/4" x 2-1/2" SDS | | | | | | |
| | HDU8 HDU8 | 3.5" 4.5" | 7,870 | 5,665 | 7/8" | | | | | | | |
| | HDU8 HDU8 HDU11 | 3.5" 4.5" 5.5" | 7,870 9,535 | 5,665 6,865 | 7/8" 1" | (30)-1/4" x 2-1/2" SDS | Heavy Hex Ancho | or Nut | | | | |

SLAB OVER LAYER OF 2" XPS f-250 FOAM OVER 4" MIN. COMPACTED SAND AND GRAVEL W2 TYPICAL EXTERIOR LOG WALL LOGS TO BE 14" dia. MIDSPAN SITKA SPRUCE W2A TYPICAL 2ND STOREY EXTERIOR WALL FALSE LOG SIDING PANELS (4 PIECES B/W POSTS) W3A TYPICAL INTERIOR FRAME WALL (SETTLING) (1st FL.) WALL FINISH TO OWNER'S SPECS BOTH SIDES W3B TYPICAL NONE BEARING INTERIOR FRAME WALL (ROOF)
INT. PARTITION WALLS TO BE: WALL FINISH TO OWNER'S SPECS BOTH SIDES ● ALL I ● ALL I ● IT IS CHE(OF P OF P BUIL I F1A TYPICAL FIRST FLOOR
5" CONC. SLAB HOUSING IN FL. HEATING 24 GAUGE STANDING SEAM ROOF (BLACK) R 38 MIN. BATT INSULATION OVER LIVING AREA W/ 1.5" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED SOFFIT TO

CONSTRUCTION MATERIALS

18"x18" TAPERED UP TO 5" THICK MONOLITHIC HEATED

5" THICK MONOLITHIC SLAB ON GRADE

WITH 13" GAIN PER STACK AVERAGE

W1 TYPICAL SLAB ON GRADE

(25 psi COMPRESSION)

ON 5/8" CDX SHEATHING 2X6 @ 16" O.C. FRAME WALL R24 BATT INSULATION

INT. FINISH TO OWNERS SPECS.

INT. PARTITION WALLS TO BE:

2X6 @ 16" O.C FRAME WALL

2X4 @ 16" O.C FRAME WALL

LVP FLOORING GLUED DOWN

2x12 DF #2 @ 16" O.C. RAFTERS

2" XPS FOAM UNDER RAFTERS

ON ICE & WATER SHIELD 5/8" CDX SHEATHING

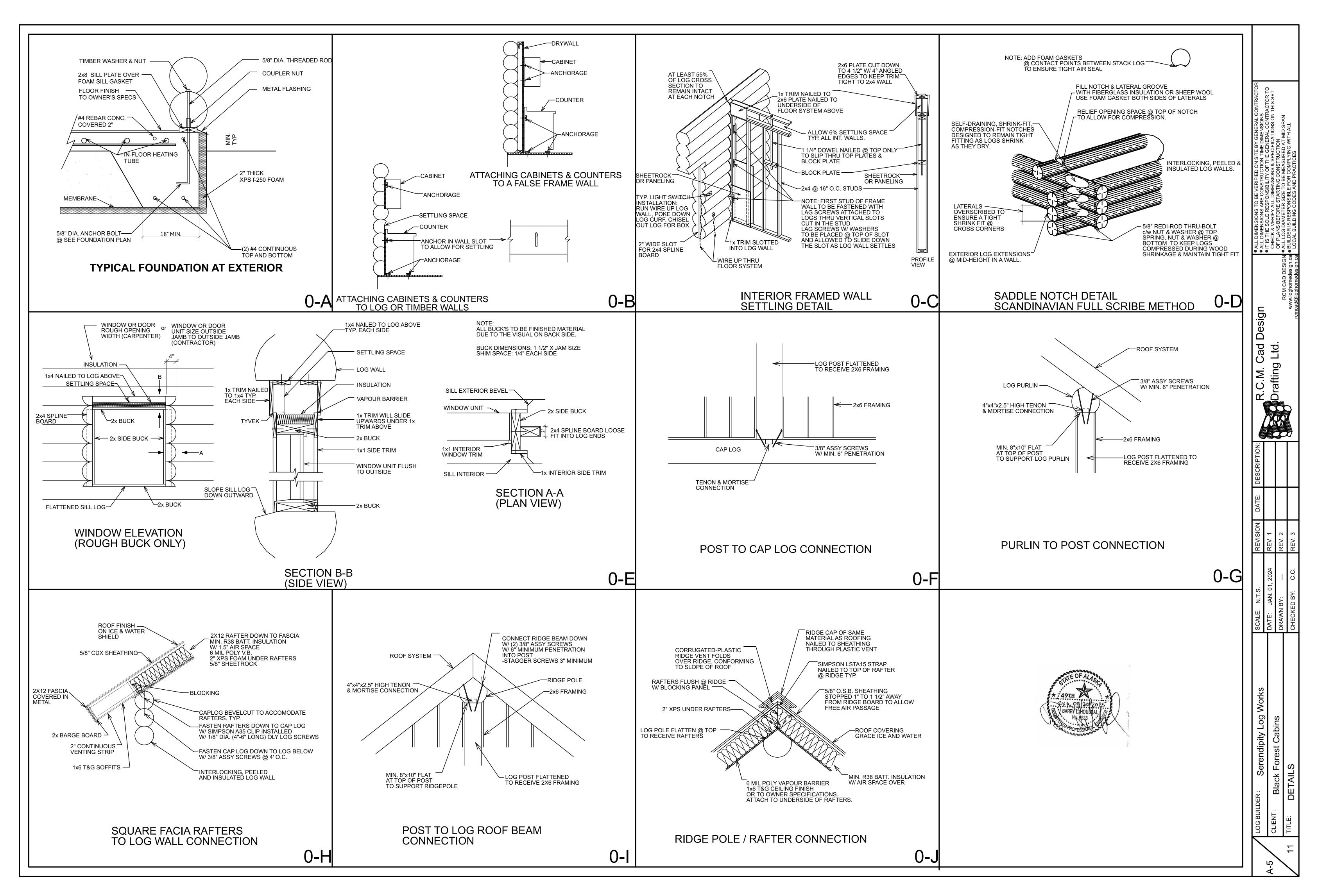
VENTED RIDGE CAP) 6 MIL POLY V.B.

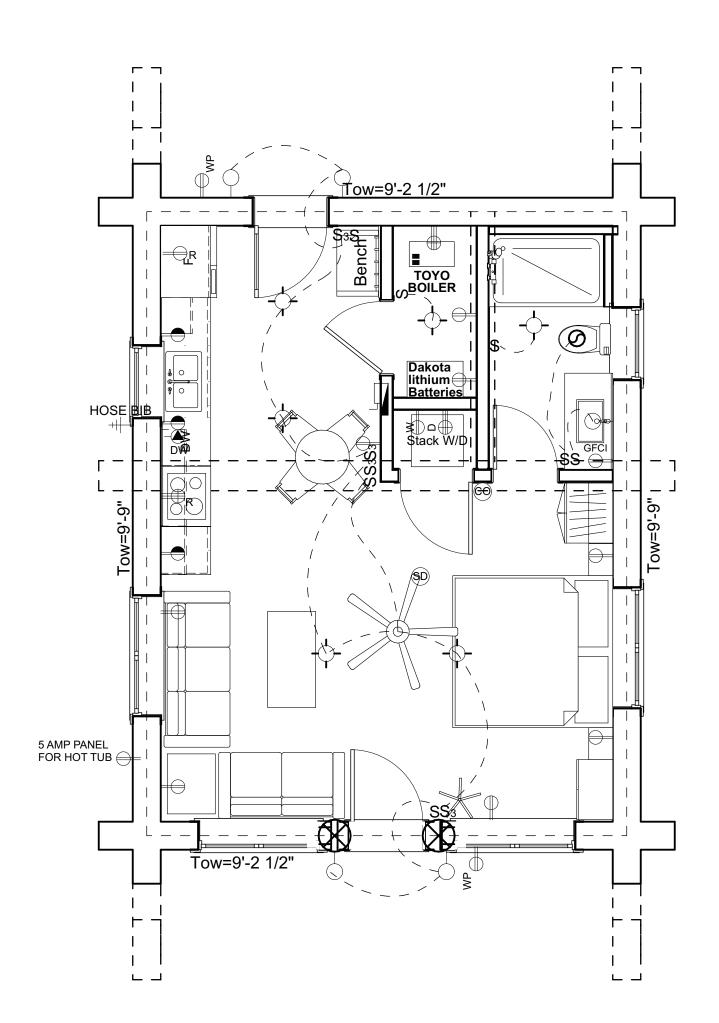
5/8" SHEETROCK

R1 TYPICAL ROOF TO BE:

W/ SLIP JOINT @ BOTTOM OF WALL

6 MIL POLY V.B.





FIRST FLOOR ELECTRICAL PLAN

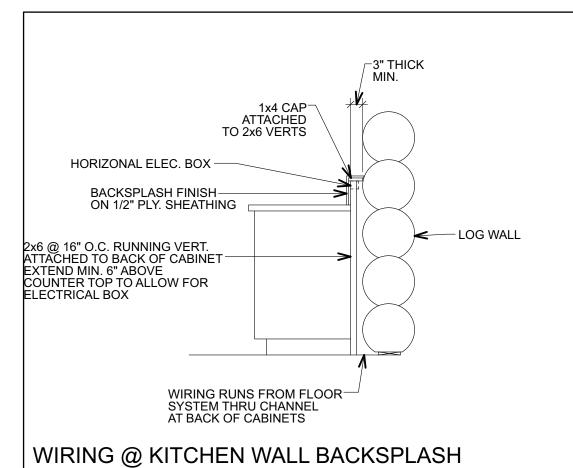
NOTE: ALL ELECTRICAL BOXES TO BE CUT
BY LOG MANUFACTURER AS PER PLAN

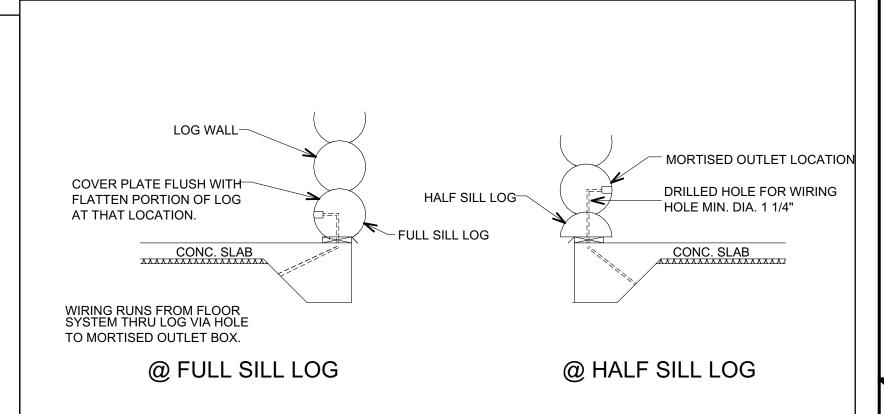


| ELECTRICAL LEGEND | | | | | | | | | | |
|------------------------|-------------------------------------|------|------|-------|-----------------|------------------------|--|--|--|--|
| SYMBOL | DESCRIPTION | VOLT | WATT | WIRES | OUTLET | REMARKS | | | | |
| \longrightarrow | DUPLEX RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| \Longrightarrow_{WP} | OUTSIDE DUPLEX RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| \longrightarrow R | REFRIGERATOR RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| \longrightarrow w | WASHER RECEPTACLE | 120 | 1200 | 2#12+ | 5-20 R | | | | | |
| ■ D | DRYER RECEPTACLE | 240 | 5200 | 3#10+ | <u></u> 14-30 R | | | | | |
| \rightleftharpoons R | RANGE RECEPTACLE | 240 | 5200 | 3#10+ | 14-30 R | | | | | |
| | DUPLEX REC. SPLIT CIRCUIT | 120 | 1200 | 2#12+ | 5-20 R | | | | | |
| — DW | DISH WASHER RECEPTACLE | 120 | 1200 | 2#12+ | 5-20 R | | | | | |
| FR | FREEZER RECEPTACLE | 240 | 5200 | 3#10+ | 14-30 R | | | | | |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| | INFLOOR RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| Ø | EXHAUST FAN | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| K | PHONE | | | | | | | | | |
| TV | CABLE OUTLET | | | | | | | | | |
| | BROADBAND CABLE | | | | | | | | | |
| * | SATELLITE CABLE | | | | | | | | | |
| SD | SMOKE ALARM RECEPTACLE | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| CO | CARBON MONOXIDE DETECTOR | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| | BELL/BUZZER RECEPTACLE | 120 | 1200 | 2#12+ | <u>↓</u> 5-20 R | | | | | |
| • | PUSH BUTTON RECEPTACLE | 120 | 1200 | 2#12+ | <u>↓</u> 5-20 R | | | | | |
| <u></u> | CEILING OUTLET | 120 | 1200 | 2#12+ | <u>↓</u> 5-20 R | | | | | |
| | RECESSED CEILING OUTLET | 120 | 1200 | 2#12+ | 5-20 R | | | | | |
| <u> </u> | WALL MOUTING LIGHT | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| MS | MOTION SENSOR LIGHT | 120 | 1200 | 2#12+ | <u>↓</u> 5-20 R | | | | | |
| ĎΑ | 1-4' FLUORESCENT | 120 | 1200 | 2#12+ | ↓ 5-20 R | | | | | |
| ĎRА | 2-8' FLUORESCENT | 120 | 1200 | 2#12+ | 5-20 R | | | | | |
| S | SINGLE POLE SWITCH | 120 | 1200 | 2#12+ | <u>↓</u> 5-20 R | | | | | |
| S_3 | THREE WAY SWITCH | 120 | 1200 | 2#12+ | <u>↓</u> 5-20 R | | | | | |
| S ₄ | FOUR WAY SWITCH | 120 | 1200 | 2#12+ | <u>↓</u> 5-20 R | | | | | |
| | POWER PANEL | | | | | | | | | |
| | CIRCUIT BREAKER PANEL | | | | | 50 CIRCUIT BREAKERS | | | | |
| М | METER BASE | | | | | | | | | |
| × | BASEBOARD HEATER | 120 | 1200 | 2#12+ | <u>↓</u> 5-15 R | | | | | |
| T | THERMOSTAT | | | | | | | | | |
| - + | HOSE BIB | | | | | | | | | |

GENERAL ELECTRICAL NOTES:

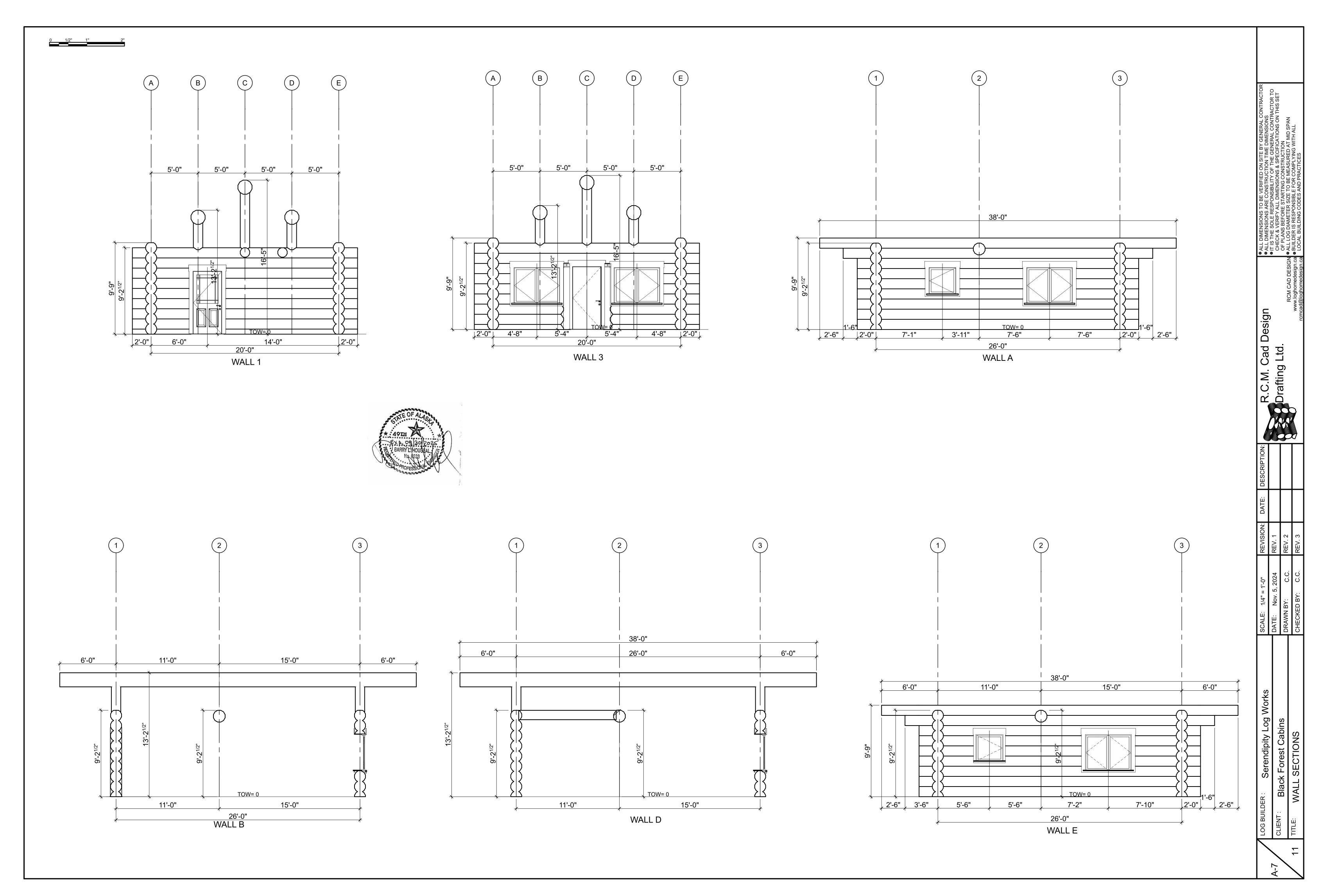
- SERVICE SIZE TO BE 200 AMPS WITH A 50 CIRCUIT BREAKER PANEL.
 SERVICE BREAKER RATING TO BE 200 AMPS.
 HOT CONDUCTORS TO BE 2-#1R90 (XLPE) COPPER (BLACK, RED OR BLUE)
 NEUTRAL CONDUCTOR TO BE 1-#4R90 (XLPE) COPPER (WHITE)
 SERVICE CONDUIT TO INSIDE TO BE 1 1/4" IN DIAMETER.
 SERVICE GROUNDING CONDUCTOR TO BE MINIMUM #4 BARE COPPER.
- ALL WORK TO CONFORM TO APPLICABLE ELECTRICAL CODES & LOCAL CODES & BYLAWS.
- 3. ALL ABOVE COUNTER RECEPTACLE TO BE 12" ABOVE TOP OF COUNTER. WASHER & DRYER OUTLETS TO BE BEHIND MACHINES 2' MAX. ABOVE FLOOR. ALL OTHER WALL PLUGS & PHONE OUTLET TO BE 1' ABOVE FLOOR. ALL SWITCHES & THERMOSTATS TO BE 4' ABOVE FLOOR.



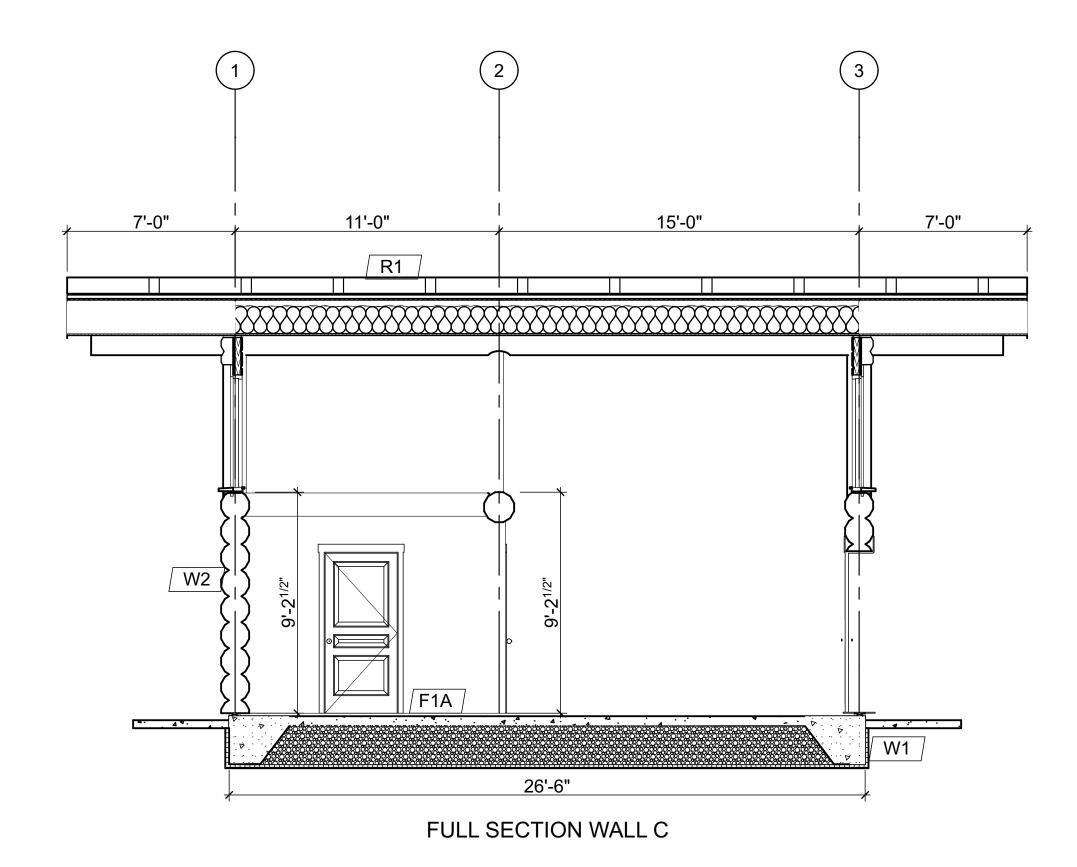


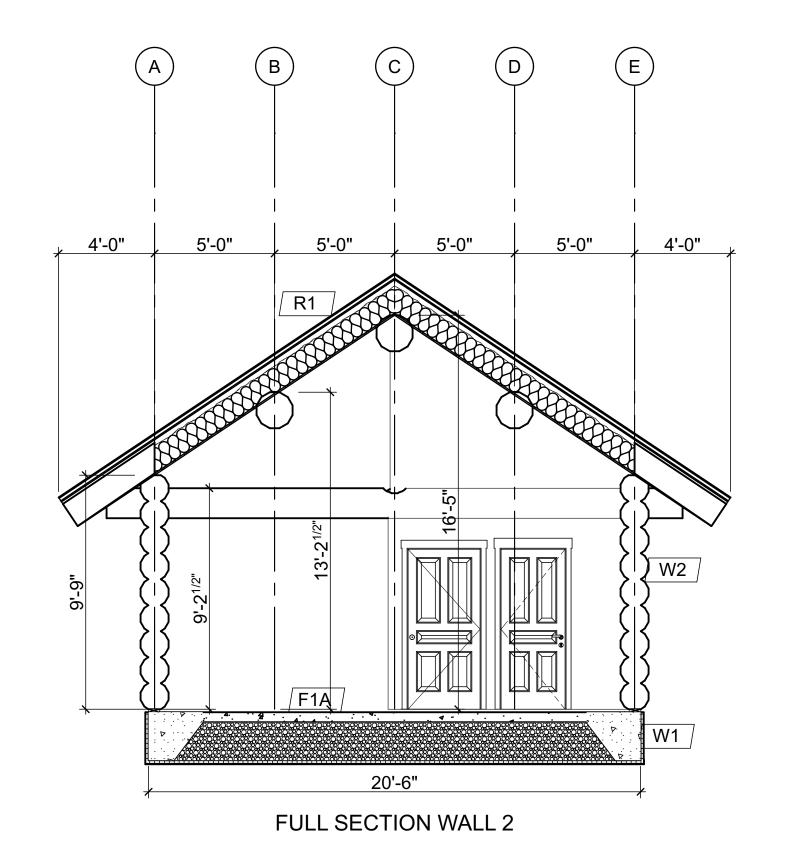
ELECTRICAL WIRING DETAIL IN LOG WALLS

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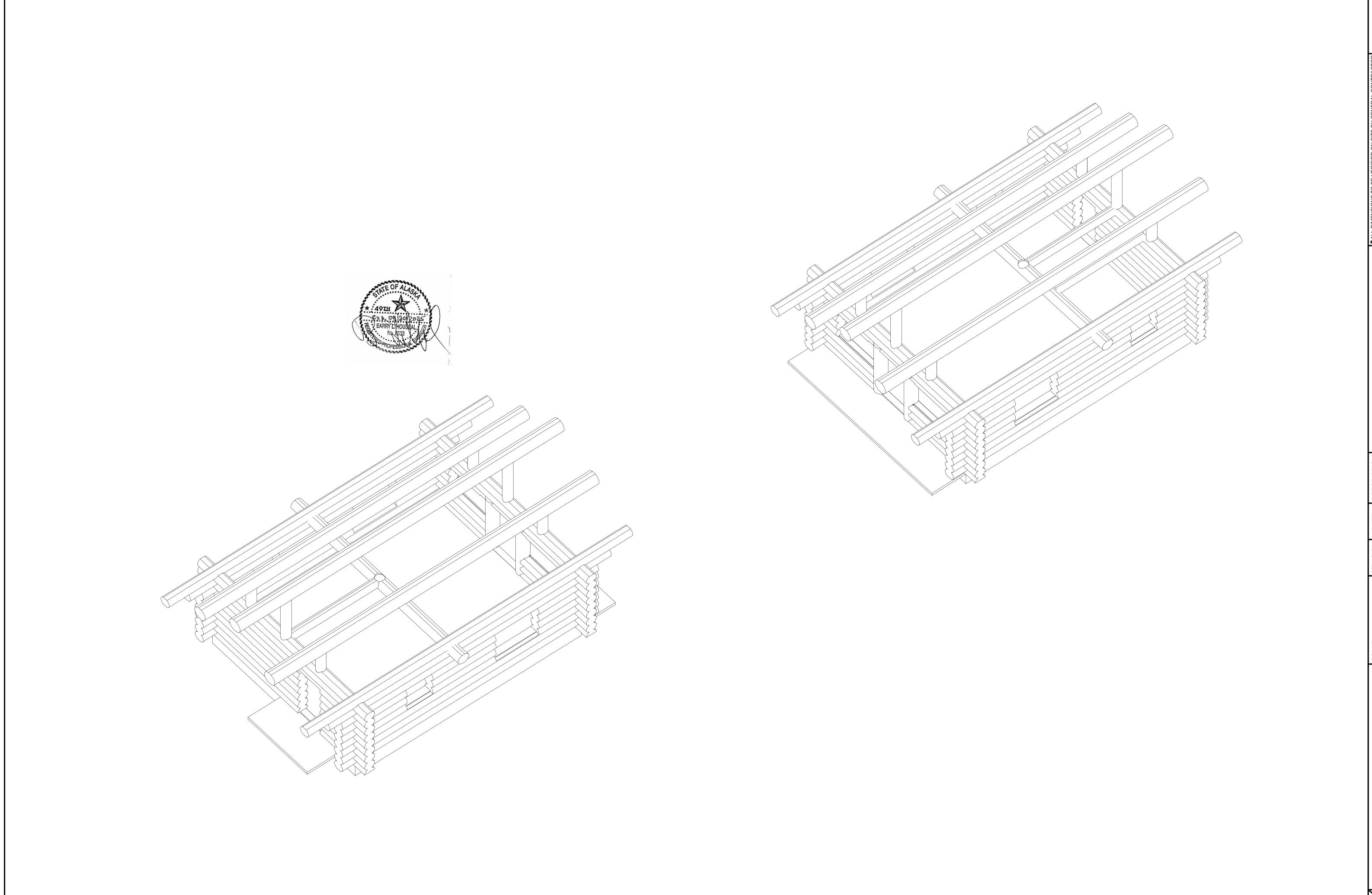


0 1/2" 1" 2"









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GENERAL NOTES ARE NOT INTENDED TO APPLY TO EVERY SET OF PLANS, BUT ARE INTENDED TO GIVE OWNER & CONTRACTORS SOME BASIC GENERAL GUIDELINES RELATING TO LOG CONSTRUCTION.

ALL NOTES FOUND ON ATTACHED PLANS TAKE PRECEDENCE OVER THESE GENERAL NOTES.

THIS BUILDING IS DESIGNED IN ACCORDANCE WITH THE 2021 IBC & MAY BE MODIFIED TO SUIT FEDERAL & LOCAL CODE REQUIREMENTS, GEOGRAPHICAL ENVIRONMENTAL DIFFERENCES & MATERIAL AVAILABILITY. ALL COSTS INCURRED TO APPLY THOSE CHANGES, AS WELL AS ENGINEERING, PERMIT, INSPECTION, MATERIAL & LABOUR COSTS ARE THE SOLE RESPONSIBILITY OF THE OWNER.

ALL DIMENSIONS ARE AT CONSTRUCTION TIME DIMENSIONS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS & SPECIFICATIONS ON THIS SET OF PLANS BEFORE STARTING CONSTRUCTION. THIS SET OF WORKING DRAWINGS DOES NOT INCLUDE A BUILDING MATERIAL LIST.

THE OWNER OR PROJECT MANAGER IS TO PROVIDE & COORDINATE PRODUCT SELECTION. ASSEMBLY & INSTALLATION WITH GENERAL CONTRACTOR

ALL LOGS DIAMETER NOTED SIZE TO BE MEASURED AT MID SPAN.

DESIGN DATA

UNLESS OTHERWISE NOTIFIED BY OWNER & NOTED IN ATTACHED DRAWINGS, MIN. DESIGN LOADS ARE: -SOILS TESTS TO CONFIRMED A SOIL BEARING PRESSURE OF 1500 POUNDS PER SQUARE FOOT. FOUNDATION & FOOTING DESIGN MUST BE CHECKED BY ENGINEER OR LOCAL BUILDING DEPARTMENT -THE DEAD LOAD IS THE ACCUMULATIVE WEIGHT OF ALL STRUCTURAL MEMBERS, THE FIXTURES AND THE PERMANENTLY ATTACHED EQUIPMENT OF THE LOG BUILDING AND ITS FOUNDATION. -THE LIVE LOAD IS THE WEIGHT THAT IS SUPERIMPOSED ON THE STRUCTURAL COMPONENTS BY THE USE AND OCCUPANCY OF THE BUILDING, SUCH AS FURNITURE, APPLIANCES AND PEOPLE. FIRST FLOOR LOADS ARE: 40 PSF LIVE LOAD + 10 PSF DEAD LOAD = 50 PSF TOTAL LOAD SECOND FLOOR LOADS ARE : 40 PSF LIVE LOAD + 10 PSF DEAD LOAD = 50 PSF TOTAL LOAD ROOF LOADS ARE: 88.7 PSF ROOF SNOW LOAD + 15 PSF DEAD LOAD = 103.7 PSF TOTAL LOAD DECK LOADS ARE: 10 PSF DEAD LOAD+40 PSF LIVE LOAD+ 88.7 PSF SNOW LOAD= 138.7 PSF TOTAL LOAD HOTTUB LOAD ON DECK IS 95 PSF TO BE ADDED TO DECK LOAD.

DESIGN IS TO BE MODIFIED ACCORDINGLY IF LOCAL CONDITIONS SUCH AS SEIMIC ACTIVITY, WIND SPEED &, OR HEAVY SNOW ACCUMULATION EXCEED THE PRECEDING DESIGN PARAMETERS. - MAXIMUM ALLOWED DEFLECTION FOR FIRST FLOOR SYSTEM & GYPROC CLADDED CEILINGS IS 1/360 OF THE SPAN DIMENSION. SECOND FLOOR & ATTIC, PURLINS, LINTELS, RAFTERS, NO GYPROC CEILINGS. MUST NOT DEFLECT MORE THAN 1/240 OF THE SPAN DIMENSION.

GENERAL CONSTRUCTION NOTES

SITE PREPARATION

OWNER / CONTRACTOR IS TO CONDUCT SOIL TESTS & DIG TEST HOLES TO DETERMINE SOIL TYPE & DRAINAGE PROPERTIES OF SITE. A SURFACE DRAINAGE PATTERN SHOULD BE ESTABLISHED WHICH WILL DRAIN THE ENTIRE AREA AND DIRECT WATER AWAY FROM THE HOUSE. DRIVEWAYS & WALKWAYS SHOULD BE SET LOW ENOUGH TO AVOID INTERFERENCE WITH THE DRAINAGE PATTERN. THE FINISHED GRADE WILL BE SLOPED AWAY FROM THE FOUNDATION WALL OF HOUSE. WHERE THE DRAINAGE SLOPE AROUND THE HOUSE MEETS A REVERSE SLOPE. A GENTLY SLOPING DITCH IS USED TO CARRY SURFACE WATER AWAY.

IF A WELL IS USED TO SUPPLY WATER FOR THE HOUSE, ALL SURFACE DRAINAGE MUST BE DIRECTED AWAY FROM WELL TO AVOID CONTAMINATION OF WATER SUPPLY.

PRIVATE WATER WELL SHOULD BE AT LEAST 100' (30m) AWAY FROM SEPTIC TANK AND LEACH FIELD. SEPTIC FIELD SHOULD BE 100' (30m) TO 500' (150m) AWAY FROM WATER FRONT (STREAM, LAKE, OCEAN) DEPENDING ON SOIL TYPE AND DEPTH.

CONCRETE FOUNDATION

REMOVE ALL LOOSE & ORGANIC MATERIALS & EXCAVATE FOR FOOTINGS & PADS AS PER PLANS. THE DISTANCE OF THE FOOTING BASE TO THE FINISHED GRADE MUST BE NO LESS THAN THE DEPTH OF LOCAL FROST PENETRATION.

FOOTINGS MUST BE ACCURATELY POSITIONED AND ROUGHLY LEVEL. FOOTING FORMS ARE TYPICALLY MADE OF 2x STOCK. CONCRETE MUST BE PLACED CONTINUOUSLY WITHOUT INTERRUPTION. POST & COLUMN FOOTINGS ARE TO BE PLACED SO THAT SUPPORTED LOAD IS APPLIED AT CENTER FOOTINGS VARY IN SIZE & DEPTH DEPENDING ON THE ALLOWABLE SOIL PRESSURE AND THE LOAD. - STEPPED FOOTINGS MAY BE REQUIRED ON STEEPLY SLOPING SITES, OR WHERE AN UNSTABLE SOIL IS ENCOUNTERED IN PART OF THE EXCAVATION.

THE VERTICAL PART OF THE STEP SHOULD BE PLACED AT THE SAME TIME AS THE FOOTING. THE BOTTOM OF THE FOOTING IS ALWAYS PLACED ON UNDISTURBED SOIL OR COMPACTED GRANULAR FILL WITH EACH RUN LEVEL. ON STEEP SLOPES, MORE THAN ONE STEP MAY BE REQUIRED. EXCEPT IN ROCK, THE VERTICAL DISTANCE BETWEEN STEPS SHOULD NOT EXCEED 2' & THE HORIZONTAL DISTANCE BETWEEN STEPS SHOULD BE NOT LESS THAN 2'. FOR VERY STEEP SLOPES. WHERE THESE LIMITATIONS CANNOT BE MAINTAINED. SPECIAL FOOTINGS MAY BE REQUIRED.

PLACING CONCRETE:

· WHENEVER POSSIBLE, CONCRETE SHOULD BE PLACED INTO FORMS CONTINUOUSLY IN HORIZONTAL LIFTS NOT EXCEEDING 12" TO 18" IN DEPTH. CONCRETE SHOULD NOT BE ALLOWED TO FALL INTO FORMS FROM A HEIGHT OF MORE THAN 5', AS THIS CAUSES THE CONCRETE TO SEGREGATE. FOR HIGHER DROPS, THE CONCRETE SHOULD BE DEPOSITED THROUGH A SUITABLE VERTICAL PIPE. THE CONCRETE SHOULD NOT BE DEPOSITED IN A PILE BUT SHOULD BE SPREAD OUT AND LEVELLED BY RAKING OR SHOVELLING. VIBRATORS MAY BE USED TO CONSOLIDATE THE CONCRETE BUT SHOULD NOT BE USED TO ASSIST PLACEMENT. CONCRETE CAN ALSO BE PLACED BY PUMPING. - IF IT IS NECESSARY TO INTERRUPT THE PLACING OPERATIONS, THE SURFACE OF THE CONCRETE PLACED IN THE FORMS SHOULD BE LEVELLED OFF & THE CONCRETE ALLOWED TO SET PARTIALLY. THE SURFACE SHOULD THEN BE ROUGHENED TO PROVIDE A GOOD BONDING SURFACE FOR NEXT LIFT. WHEN WORK RESUMES, THE SURFACE SHOULD BE CLEANED AND SLIGHTLY DAMPENED PRIOR TO PLACING THE CONCRETE. GROUT OF 1 PART CEMENT TO 2 PARTS SAND SHOULD BE SPREAD ABOUT 1/2" THICK OVER THE ROUGHENED SURFACE TO PROVIDE A GOOD JOINT BETWEEN THE TWO LIFT. THE NEW LIFT SHOULD BE PLACED IMMEDIATELY AFTER THE PLACEMENT OF THE GROUT. WHEN THE AIR TEMPERATURE IS AT OR BELOW 40°F OR WHEN THERE IS A POSSIBILITY OF IT FALLING TO THAT LEVEL WITHIN 24 HOURS, CONCRETE OPERATIONS SHOULD BE SUSPENDED. IF CONCRETE IS CARRIED ON, THE CONCRETE MUST BE KEPT AT A TEMPERATURE OF NOT LESS THAN 50°F OR MORE THAN 77°F WHILE BEING MIXED AND PLACED, AND IT MUST BE MAINTAINED AT A TEMPERATURE OF NOT LESS THAN 50°F FOR A MINIMUM OF 72 HOURS WHILE CURING. THE WATER TO BE MIXED INTO THE CONCRETE MAY HAVE TO BE HEATED. CONCRETE SHOULD NOT BE PLACED AGAINST FROZEN SOIL, AND ANY ICE OR SNOW SHOULD BE REMOVED FROM THE FORMWORK.

CURING CONCRETE:

SHRINKING FOR SEVERAL DAYS AFTER PLACING. THE CRACKING OF CONCRETE WALLS AND FLOORS CAN OFTEN RESULT FROM IMPROPER ATTENTION TO CURING, RADICALLY LOWERING THE CONCRETE POTENTIAL STRENGTH, WATER TIGHTNESS AND DURABILITY.

CONTROL JOINTS:

IF UNCONTROLLED CRACKING OF CONCRETE SLABS AND WALLS IS TO BE AVOIDED, STEEL REINFORCING RODS OR PROPERLY LOCATED AND FORMED VERTICAL CONTROL JOINTS SHOULD BE USED. WALL JOINTS ARE FORMED BY NAILING WOOD STRIP 3/4" THICK, BEVELLED TO 1/2" IN WIDTH, TO THE INSIDE OF BOTH INTERIOR & EXTERIOR WALL FORMS. THE PURPOSE OF THESE GROOVES IS TO PROVIDE A CONTROLLED PLANE OF WEAKNESS IN THE WALL, THUS PREDETERMINING THE LOCATION OF SHRINKAGE CRACKS.

DAMPPROOFING and EXTERIOR INSULATION:

CONCRETE WALLS BELOW GRADE SHOULD BE DAMPPROOFED WITH A HEAVY COAT OF BITU--MINUS MATERIAL APPLIED ON THE EXTERIOR SURFACE FROM THE FOOTINGS TO THE FINISHED GRADE LINE, TO MAKE THE WALL WATERTIGHT AGAINST ORDINARY SEEPAGE THAT MAY OCCUR AFTER A RAINSTORM.

2" EPS (EXTRUDED POLYSTYRENE) A CLOSED CELL RIGID INSULATION THAT DOES NOT ABSORB MOISTURE, SHOULD BE ATTACHED TO EXTERIOR CONCRETE PERIMETER WALL WITH ADHESIVE OR STEEL FASTENERS. (A MUST FOR HEATED BASEMENT AND CRAWL SPACE)

BEAM POCKETS FOR UNTREATED WOOD BEAMS SHOULD BE BIG ENOUGH TO ALLOW 1/2" AIR SPACE AT THE SIDES & ENDS OF THE BEAM TO PREVENT DECAY. USE 30# FELT UNDER BEAM TO MAKE SURE WOOD BEAM IS NOT IN DIRECT CONTACT WITH CONCRETE.

CONCRETE SLABS:

BASEMENT FLOOR SLAB SHOULD BE AT LEAST 3" THICK AND SLOPED TOWARDS FLOOR DRAIN. - COMPLETE THE INSTALLATION OF SEWER & WATER LINES... BEFORE THE SLAB IS PLACED. COMPACT BACKFILL IN TRENCHES.

· PUT 5" MIN. OF CRUSHED ROCK OR COARSE GRAVEL UNDER THE FLOOR SLAB TO RESTRICT THE PASSAGE OF MOISTURE BY CAPILLARY ACTION FROM THE GROUND UP TO THE SLAB SUGGEST NOW ADDING 2" RIGID INSULATION, R12 MINIMUM AND 2" OF SAND APPLY A LAYER OF 6 MIL POLYETHYLENE TO DAMPPROOF THE FLOOR. VAPOUR BARRIER TO OVERLAP 4" MINIMUM AT THE JOINTS.

BASEMENT FLOOR SLAB SHOULD NOT BEAR DIRECTLY ON WALL OR COLUMN FOOTINGS BUT SHOULD BE ISOLATED FROM THEM BY A 1" SAND CUSHION OR OTHER MEANS. - A PREMOULDED JOINT FILTER OR DOUBLE LAYER OF SHEATHING PAPER BETWEEN FLOOR SLAB AND WALL OR COLUMN SHOULD BE PROVIDED TO ALLOW FOR SLIGHT MOVEMENT OF THE FLOOR SLAB DUE TO SHRINKAGE OF THE SLAB DURING THE DRYING AND SETTLING OF THE SUBBASE.

- AFTER THE CONCRETE HAS BEEN PLACED AND CONSOLIDATED, IT SHOULD BE STRUCK OFF WITH A STRAIGHT EDGE TO THE PROPER ELEVATION.

- AFTER THE WATER SHEEN HAS DISAPPEARED AND THE CONCRETE HAS STIFFENED SLIGHTLY EDGING, JOINTING AND FLOATING OPERATIONS CAN BEGIN. - CONTROL JOINTING AND GROOVING MAY BE NECESSARY TO AVOID RANDOM CRACKING IN THE SLAB. CONTROL JOINTS SHOULD BE PLACED ON LINE WITH COLUMNS AND WHEN FLOOR

SLAB WIDTH CHANGES. THE DEPTH OF JOINTS SHOULD BE 1/4 OF THE SLAB THICKNESS.

FOUNDATION DRAINAGE:

DRAIN TILES SHOULD BE LAID ON SOLID UNDISTURBED SOIL AROUND THE PERIMETER OF THE WALL FOOTINGS WITH TOP OF TILE TO BE BELOW THE LEVEL OF THE BASEMENT FLOOR OR CRAWL SPACE, WITH A SLIGHT SLOPE TO A STORM SEWER OR OTHER ADEQUATE OUTLET. THE TILE IS THEN COVERED WITH 6" OF GRAVEL OR CRUSHED ROCK. TO PREVENT CLOGGED DRAIN TILE, LAY A FILTER CLOTHE OVER THE 6" OF GRAVEL OR USE

CONCRETE REINFORCEMENT:

CONCRETE DENSITY IS INCREASED BY ADDING MORE CEMENT TO THE MIX. FOR LOG HOMES. THE CONCRETE COMPRESSIVE STRENGTH SHOULD BE A MINIMUM OF 3000 PSI AFTER MINIMUM 28 DAYS FIELD CURING PERIOD.

CORRUGATED PIPE WITH FABRIC SOCK COVERING TO PREVENT SOIL PARTICLES FROM

CONCRETE IS NOT AN ELASTIC MATERIAL AND IS FAIRLY WEAK IN SHEAR STRENGTH. BY PLACING METAL REINFORCING BARS (REBARS) INTO THE FORMS BEFORE THE CONCRETE IS POURED, THE CONCRETE SHEAR STRENGTH CAN BE INCREASED MANY TIMES. REBAR COMES IN SIZES DESIGNATED BY NUMBERS 2 TO 8. THAT NUMBER x 1/8" EQUALS THE REBAR DIAMETER. #5 REBAR IS 5/8" IN DIAMETER.

#4 OR #5 REBAR IS USUALLY USED IN RESIDENTIAL CONSTRUCTION. CONCRETE REINFORCEMENT SHALL BE DESIGNED, FABRICATED, & PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS & / OR ENGINEER SPECIFICATIONS.

BACKFILLING:

BACKFILLING OF FOUNDATION WALLS SHOULD NOT BE CARRIED OUT UNTIL: - FLOOR JOIST & SUBFLOOR ARE IN PLACE, FULLY NAILED TO BRACE CONCRETE WALLS. CONCRETE 28 DAYS CURING PERIOD HAS PASSED.

- 4" PERIPHERAL DRAIN TILES ARE IN PLACE, COVERED WITH 6" GRAVEL. - ALL DAMPPROOFING MEMBRANE AND EXTERNALLY MOUNTED INSULATION INSTALLED SUDDEN PRESSURES AGAINST FOUNDATION WALLS BROUGHT ABOUT BY LOADS OF BACKFILL MATERIAL MAY CAUSE THE WALLS TO MOVE, RESULTING IN DAMAGE SUCH AS CRACKING THUS GREATLY LOWERING OVERALL STRENGTH OF FOUNDATION.

THEREFORE. IT IS CRUCIAL THAT BACKFILL MATERIAL BE DEPOSITED GRADUALLY AND UNIFORMLY AROUND THE PERIMETER IN SMALL LIFTS, 6" HIGH MAXIMUM. EACH LIFT BEING COMPACTED TO THE APPROPRIATE DENSITY BEFORE THE NEXT LIFT IS PLACED. CARE SHOULD BE TAKEN TO ENSURE THAT THE DAMPROOFING MEMBRANE & INSULATION IS NOT DAMAGED. BACKFILL SHOULD CONSIST OF FREE DRAINING GRANULAR MATERIAL

BOTTOM OF FIRST ROUND OF LOGS SHOULD BE AT LEAST 18" ABOVE FINISHED GRADE & WP TO 48" OR MORE WHERE HEAVY SNOW IS THE NORM. IF GUTTERS TO CHANNEL ROOF WATER AWAY FROM LOG HOME ARE NOT PRACTICAL BECAUSE OF ICE DAM BUILDUP @ ROOF, THEN DIG A SMALL TRENCH RIGHT UNDER ROOF DRIP LINE & FILL WITH SMALL ROUND GRAVEL TO MINIMIZE SPLASHING OF ROOF WATER ON TO BOTTOM LOGS. USE DRIP IRRIGATION INSTEAD OF SPRINKLERS TO WATER PLANTS CLOSE TO LOGHOME PERIMETER.

BUILDING MATERIAL DELIVERY & STORAGE:

PRIOR TO LOG PACKAGE DELIVERY AND SET UP, FOUNDATION AND FIRST FLOOR SYSTEM MUST BE COMPLETED AND READY TO BEAR LOG STRUCTURE. ALL CONCRETE MUST BE CURED AND FIRST FLOOR SYSTEM MUST BE FULLY NAILED AND ANCHOR BOLTED TO CONCRETE WALLS. ACCESS IN & OUT TO BUILDING SITE BY A 48' TRUCK-TRAILER WITH CRANE MUST BE PROVIDED ACCESSIBLE BY TRUCK-TRAILER IS THE FULL RESPONSIBILITY OF OWNER-BUYER. AS FAR AS POSSIBLE MATERIAL SHOULD BE DELIVERED TO THE SITE JUST BEFORE IT IS TO BE USED. AS SOON AS LOG STRUCTURE IS ERECTED AND THRU BOLTED, ROOF SYSTEM SHOULD BE

THE PROTECTION OF BUILDING MATERIALS ON THE SITE & STORAGE BEFORE USE ARE VERY IMPORTANT. ROOF: - IN THE NORMAL STAGING OF CONSTRUCTION, THE FRAMING LUMBER AND SHEATHING MATERIALS ARE DELIVERED TO THE SITE AFTER THE FOUNDATION IS COMPLETE. THE LOG PACKAGE IS TRUCKED TO THE

SITE ON CONSECUTIVE DAYS SO LOGS MAY BE UNLOADED & PLACED BY CRANE. TRY TO ARRANGE LOG DELIVERY WHEN LOCAL WEATHER DOES NOT CALL FOR RAIN. TO PROTECT THE NEWLY ERECTED LOG STRUCTURE FROM RAIN AND SUN DAMAGE.

INSTALL A ROOF ON THE HOUSE AS SOON AS POSSIBLE. FOR EXAMPLE, INSTALLING A STRUCTURAL INSULATED PANEL ROOF (SIP) IS A QUICK WAY TO GET ROOF

- LOGS AND FRAMING MATERIALS IN PLACE BEFORE THE HOUSE IS ENCLOSED MAY BE SUBJECTED TO RAINSTORM, BUT THE WETTING IS MOSTLY ON THE EXPOSED SURFACES AND WILL DRY OUT QUICKLY IN DRY WEATHER WITHOUT CAUSING DAMAGE.

- LUMBER STORED IN CLOSED PILES, MAY SOAK UP AND RETAIN WATER, AND DRYING OUT WILL BE VERY SLOW. THIS CONDITION SHOULD BE AVOIDED AS IT MAY LEAD TO STAIN AND DECAY. PILES OF LUMBER SHOULD BE PLACED ON SKIDS RAISED OFF THE GROUND AND COVERED WITH SHEETS OF WATERPROOF MATERIAL TO SHED WATER.

- WINDOW AND DOOR FRAMES ARE USUALLY THE NEXT ITEMS TO BE INSTALLED AFTER THE ROOFING. IF THE FRAMES ARE DELIVERED BEFORE THEY CAN BE INSTALLED, THEY SHOULD BE SHELTERED UNTIL THEY ARE USED. GOOD FRAMES ARE COSTLY ITEMS, AND EXPOSURE TO THE WEATHER WILL NULLIFY THEIR GOOD CONSTRUCTION, ESPECIALLY IF THE FRAMES HAVE THE WINDOW SASH INSTALLED. - INSULATION, INTERIOR WALL AND CEILING FINISH, WOOD SIDING... CAN EASILY BE STORED INSIDE. HEAVY ITEMS LIKE GYPROC BOARDS SHOULD BE DISTRIBUTED OVER THE FLOOR AREA SO AS NOT TO OVERLOAD THE FLOOR JOISTS. HEAVY LOADS CONCENTRATED ON ONE SPOT MAY CAUSE PERMANENT DEFLECTION IN THE FLOOR SYSTEM.

- HARDWOOD FLOORING, INTERIOR TRIM & MILLWORK SHOULD NOT BE STORED IN THE HOUSE UNTIL AFTER THE BASEMENT CONCRETE SLAB HAS BEEN COMPLETED AND ALLOWED TO DRY, AS THE AIR MOISTURE GIVEN OFF MAY CAUSE THE KILN-DRIED MATERIALS TO SWELL, RESULTING IN EXCESSIVE SHRINKAGE AFTER THE MATERIALS ARE INSTALLED.

FRAMING (ROUGH CARPENTRY):

- PRIOR TO SILL PLATE INSTALLATION, CONTRACTOR MUST INSPECT CONCRETE WORK CONDITION AND COMPARE ALL SITE DIMENSIONS WITH FOUNDATION PLAN DIMENSIONS. IF FOUNDATION IS UNACCEPTABLE TO THE BUILDING TOLERANCES, CONTRACTOR IS TO STOP ALL WORK AND IMMEDIATELY INFORM THE OWNER.

SILL ANCHOR

THE SILL PLATE SHOULD BE LEVELLED CAREFULLY. IF THE TOP OF THE FOUNDATION IS LEVEL, THE SILL PLATE MAY BE LAID ON FOUNDATION WITH A CLOSED CELL FOAM GASKET OR OTHER AIR-IMPERMEABLE MATERIAL IN BETWEEN, AND OF SAME WIDTH AS SILL PLATE. IF THE TOP OF THE FOUNDATION IS UNEVEN OR NOT LEVEL, THE SILL PLATE MAY BE LAID IN A

FULL BED OF MORTAR AND ANCHORED TO THE FOUNDATION WALL SILL IS INSTALLED TAKING CARE TO SQUARE BUILDING IN THE PROCESS. TO VERIFY SQUARENESS OF SILL PLATE INSTALLATION, MEASURE BOTH DIAGONALS FROM CORNER TO CORNER OF PLATES BOTH DIAGONALS SHOULD BE EQUAL WITH A TOLERANCE OF +/- 1/4".

SILL PLATES SHOULD BE PRESSURE TREATED 2x MATERIAL DF #2 OR BETTER SILL PLATES ARE ANCHORED TO CONCRETE WALL WITH 5/8" ANCHOR BOLTS EMBEDDED 8" MIN. IN CONCRETE & 2" MIN. ABOVE CONCRETE. ANCHOR BOLT SHOULD BE PLACED 4'-0" o.c. MAX. APART, WITH TWO BOLTS MIN. PER SILL PLATE AND LEDGER STRIP, 24" MAX. FROM EACH END.

BEAMS

I-BEAM IS THE MOST COMMONLY USED SHAPE FOR STEEL BEAM. ALL STRUCTURAL STEEL MUST BE PAINTED FOR RUST PROTECTION WOOD BEAMS ARE OF THREE TYPES: SOLID, BUILT UP & LAMINATED.

A BUILT UP BEAM IS USUALLY MADE OF THREE OR MORE 2x LUMBER SET ON EDGE AND SPIKED TOGETHER FROM EACH SIDE WITH 3 1/2" NAILS. THE FIRST TWO NAILS ARE DRIVEN NEAR THE END OF EACH PIECE OF LUMBER. ADDITIONAL NAILS ARE DRIVEN NOT MORE THAN 12" APART IN EACH ROW. BUTT JOINTS IN EACH MEMBER ARE LOCATED OVER A SUPPORTING POST OR WITHIN ABOUT 6" OF THE QUARTER POINTS IN THE SPAN.

END OF BEAMS SHOULD BEAR 3 1/2" MINIMUM ON CONC WALL OR COLUMNS. IF WOOD BEAM IS UNTREATED IT SHOULD BE SEPARATED FROM CONCRETE BY IMPERMEABLE MEMBRANE. LAMINATED BEAMS ARE TO BE TO ENGINEER SPECIFICATIONS.

FLOOR JOISTS

AFTER SILL PLATES HAVE BEEN LEVELLED AND ANCHORED, THE JOISTS ARE INSTALLED, LOCATED AND SPACED ACCORDING TO THE DESIGN. ANY JOISTS HAVING A SLIGHT BOW EDGEWISE SHOULD BE PLACED WITH THE CROWN ON TOP. A CROWNED JOIST WILL TEND TO STRAIGHTEN OUT WHEN THE SUBFLOOR AND FLOOR LOADS ARE APPLIED

ALL JOISTS TO HAVE A MINIMUM OF 2" BEARING AT SUPPORT

FLUSH FRAMED JOISTS TO BE FASTENED TO BEAM WITH FULLY NAILED JOIST HANGERS ALL FLOOR OPENINGS TO BE FRAMED WITH DOUBLE TRIMMER JOIST AND DOUBLE HEADER JOIST. INSTALL DOUBLE JOIST OR SOLID BLOCKINGS UNDER ALL FRAMED PARTITION WALLS. INSTALL BLOCKINGS BETWEEN JOISTS TO TRANSFER CONCENTRATED LOADS TO BEARING BELOW JOIST MAY BE KEPT FROM TWISTING BY CROSS BRIDGING, BLOCKING, STRAPPING OR BY THE USE

OF GLUE IN ADDITION TO NAILING WHEN FASTENING THE PLYWOOD SUBFLOOR TO THE JOISTS.

SUBFLOOR

UNLESS OTHERWISE NOTED IN ATTACHED PLANS, FIRST FLOOR SUBFLOOR SHOULD BE 3/4" T&G PLYWOOD AND SECOND FLOOR SUBFLOOR SHOULD BE MINIMUM 5/8" T&G PLYWOOD PLYWOOD PANEL SHOULD BE INSTALLED WITH THE SURFACE GRAIN AT RIGHT ANGLES TO THE FLOOR JOISTS AND WITH THE END JOINTS STAGGERED AND NAILED ALONG THE EDGES AT 6" ON CENTRE AND 12" AT INTERMEDIATE SUPPORTS. FLOOR STIFFNESS CAN BE GREATLY INCREASED AND FLOOR SQUEAKS MINIMIZED, BY APPLYING ELASTOMERIC GLUE BETWEEN THE FLOOR JOISTS AND THE PLYWOOD SUBFLOOR. THUS, THE PLYWOOD AND JOISTS ACT TOGETHER AS A SERIES OF STIFF T-BEAMS THAT HELP PREVENT DIFFERENCIAL DEFLECTION BETWEEN JOISTS. GLUE APPLIED IN THE PLYWOOD TONGUE & GROOVE JOINTS WILL FURTHER STIFFEN THE FLOOR SYSTEM.

WALL FRAMING

FIRST FLOOR FRAMED PARTITIONS IN A LOG HOME MUST ALLOW FOR SETTLEMENT OF STACKED LOG WALLS WITH MOISTURE CONTENT ABOVE LOCAL MOISTURE EQUILIBRIUM BY HAVING A MINIMUM OF 5" SETTLING SPACE ABOVE.

NEVER NAIL FRAMED WALL TO SHRINKAGE TRIM BOARD AT TOP AS IT NEEDS TO SLIDE DOWN OVER WALL FINISH BECAUSE LOG WALLS SETTLE DOWN WHILE LOOSING MOISTURE CONTENT. SECURING FRAME WALL STUDS TO LOG WALL CAN BE DONE BY NAILING THE STUD THRU TOP OF A SLOT CUT IN STUD SO TO ALLOW THE NAIL TO TRAVEL DOWN THE SLOT AS LOG WALL SHRINKS IN HEIGHT. CURING INVOLVES KEEPING FRESHLY SET CONCRETE MOIST OR PREVENTING IT FROM DRYING OUT AND BY OWNER. ANY ADDITIONAL COSTS TO TRANSPORT MATERIAL TO THE BUILDING SITE NOT DIRECTLY ALL FRAMED WALLS TO HAVE TWO TOP PLATES AND EXTRA TOP PLATE IS ATTACHED TO THE UNDERSIDE SECOND FLOOR SYSTEM OR LOG JOIST, ABOVE SETTLING SPACE SO TO NAIL SHRINKAGE TRIM THAT IS HIDING SETTLING SPACE. UNLESS OTHERWISE NOTED, INTERIOR PARTITION WALLS ARE 2X4 @ 16" O.C TO ALLOW SECOND FLOOR VENTS & DRAINS TO PASS THROUGH. PARTITION WALLS USED TO CHANNEL PLUMBING DRAINS NEEDS TO BE 2X6 FRAME WALLS.

LOG HOME ROOF SYSTEMS ARE TO PROTECT LOG BEAMS & LOG WALLS AROUND THE PERIMETER OF THE HOUSE AGAINST WEATHER DAMAGE NAMELY SUN, RAIN AND SNOW.

THIS IS ACHIEVED BY PROVIDING EXTRA WIDE ROOF OVERHANGS BEYOND PITCH LINE (3'-6" MINIMUM) AND RAKES AT GABLES (5' MINIMUM).

COVERED PORCHES ARE IDEAL TO PROTECT LOG WALLS FROM RAIN & SUN.

NO LOG ENDS SHOULD BE EXTENDED BEYOND ROOF LINE, UNLESS LOG ENDS ARE WRAPPED WITH A DURABLE METAL FLASHING

LOG ROOF BEAMS SHOULD HAVE MINIMUM 6" OF ROOF EXTENSION BEYOND LOG ENDS A COMMON LOG HOME ROOF SYSTEM INCLUDES RIDGEPOLES, PURLINS AND LOG POSTS, LOG TRUSSES

AND/OR LOG RAFTERS AS LOG ROOF MEMBERS SHRINK IN DIAMETER WHILE THEY DRY, STEPS MUST BE TAKEN TO SEAL FROM WEATHER & INSECT INFILTRATION WHERE ROOF LOGS INTERSECT GABLE WALLS.

STRUCTURAL ROOF LOGS MUST BE SLIGHTLY NOTCHED TO HOUSE EXTERIOR AND INTERIOR WALL COVER AND EXPANDABLE GASKETS MUST BE APPLIED AT THOSE LOCATIONS METAL FLASHING MUST BE INSTALLED WHERE FRAME GABLE WALLS SIT ON TOP OF ALL PLATE LOGS ALL FLASHING AROUND CHIMNEYS MUST ACCOMMODATE SETTLING BY INSTALLING HEAVY GAUGE FLASHING

AND COUNTER FLASHING WHICH MUST FREELY SLIDE VERTICALLY PAST EACH OTHER TO ALLOW SETTLING. NO ROOFING COMBUSTIBLE MATERIAL IS TO BE LESS THAN 2" FROM A MASONRY CHIMNEY AND DO NOT ALLOW LOG WORK OR ROOFING SYSTEM TO BE IN CONTACT WITH A FREE STANDING CHIMNEY UNLESS PROVISIONS FOR VERTICAL SETTLING ARE IN EFFECT IN THIS CASE.

FIRE SAFETY:

GARAGES ATTACHED TO LIVING SPACE MUST HAVE A ONE HOUR FIRE SEPARATION. CONSISTING OF 6" MINIMUM LOG THICKNESS OR 5/8" TYPE "X" GYPSUM BOARD ON ALL WALLS & CEILINGS, AND A 20 MINUTES FIRE RATED DOOR ASSEMBLY WITH AUTOMATIC CLOSING DEVICE, AND SMOKE GASKET A MINIMUM OF ONE BATTERY OPERATED SMOKE ALARM DETECTOR MUST BE INSTALLED IN HOUSE. ADD SMOKE DETECTOR IN BASEMENT TO BE WIRED WITH OTHER SMOKE DETECTOR IN THE HOUSE. INSTALL A SMOKE DETECTOR IN EACH BEDROOMS.

IF SMOKE ALARM IS TRIGGERED, IT MUST BE HEARD IN ALL BEDROOMS.

CARBON MONOXIDE ALARM MUST BE INSTALLED AT EACH HOUSE STOREY AT EYE LEVEL ON INTERIOR WALL

SET OF PLANS SHOULD INCLUDE AN ELECTRICAL PLAN FOR EACH STOREY. LOCATION & AMOUNT OF ELECTRICAL OUTLETS IS ONLY SUGGESTED. THE ELECTRICAL CONTRACTOR MUST VERIFY THE ELECTRICAL LAYOUT WITH THE OWNER. THE ELECTRICAL CONTRACTOR MUST CALCULATE THE ADEQUATE AMP. SERVICE FOR THE HOUSE, SUPPLY AND INSTALL LATERAL SERVICE TO THE BUILDING, PERFORM ALL ELECTRICAL WIRING, BRING REQUIRED POWER TO ALL APPLIANCES, MEET ALL APPLICABLE CODES REQUIREMENTS, WITH ACCOMMODATIONS FOR PRE-WIRING AND WALL SETTLEMENT WHERE NECESSARY. USUALLY SWITCH AND OUTLET BOXES ARE HIDDEN IN THE MORTISED LOG, WITH THE COVER PLATE FLUSH WITH FLATTEN PORTION OF LOG AT THAT LOCATION. WALL ELECTRICAL OUTLETS ARE USUALLY WIRED DOWN FROM ELECTRICAL BOX, THRU LOG WALL, INTO SUBFLOOR SPACE. ELECTRICAL SWITCHES BY DOORS ARE WIRED FROM SUBFLOOR SPACE THRU SPACE @ DOOR SPLINE BOARD, TO MORTISED SWITCH BOX. DO NOT USE CONDUITS IN A LOG WALL PRE-DRILL VERTICAL HOLES IN A LOG WALL ARE A MIN. 1 1/4" IN DIAMETER TO FISH WIRES THRU.

PLUMBING:

PLUMBING CONTRACTOR MUST CONSIDER THE NEED FOR SETTLING ALLOWANCES IN ALL PLUMBING RUNS. PLUMBING RUNS SHOULD BE INSTALLED IN FRAMED WALLS.

ALL BATHROOMS WITHOUT OPENABLE WINDOW, MUST HAVE AN ADEQUATE EXHAUST FAN INSTALLED.

DO NOT RUN PLUMBING WASTE, VENT & SUPPLY PIPES THROUGH OR WITHIN LOG WALLS. ANY FUTURE REPAIR WOULD BE VERY DIFFICULT.

WATER LINES TO SECOND FLOOR SHOULD HAVE A FLEXIBLE LOOP HIDDEN WITHIN SECOND FLOOR FRAMING THAT OPENS AS SECOND FLOOR SETTLES DOWN. WASTE & VENT PIPES USE A SERIES OF COMPRESSION & EXPANSION FITTINGS TO ACOMMODATE

SETTLING, WITH BLOCKINGS TO SUPPORT TOP & BOTTOM COMPRESSION FITTINGS ALLOWING FITTINGS TO COMPRESS. PLUMBING VENTS MAY BE STRAPPED OR BLOCKED AT LOWER PART, WITH ROOF SETTLING AROUND VENT

AND COUNTERFLASHING SLIDING ALONG FLASHING TO ALLOW SETTLING.

CABINETRY:

CABINET MAKER MUST CHECK ALL DIMENSIONS ON SITE BEFORE STARTING ANY WORK. CABINETS MUST NOT BE SECURED TO LOG WALL UNLESS SETTLING ACCOMODATIONS ARE APPLIED. ONE METHOD IS TO RECESS THE CABINETS AND COUNTERS 2" TO 3" IN THE LOG WALL. CABINETS ARE HANGED AT TOP BY SCREWING THEM INTO ONE LOG ONLY, AND THE COUNTERS ARE SCREWED TO FLOOR AND TO LOG WALL WITH SLOT FOR SETTLING. ADD SETTLING SPACE ABOVE SPLASH BOARD. ANOTHER METHOD IS TO INSTALL OVER LOG WALL INTERIOR FRAME WALL AND PLACE WIRING & PLUMBING IN CAVITY.

INSULATION & THERMAL EFFICIENCY: ROOFS & EXTERIOR FRAME WALLS ARE USUALLY INSULATED WITH BATT FIBER GLASS, STYROFOAM

RIGID PANELS (SIP) OR SPRAY FOAM.

HANDCRAFTED LOG WALLS HAVE LOOSE FIBERGLASS INSULATION WRAP IN PLASTIC OR SHEEP WOOL INSTALLED IN W SHAPE LATERAL GROOVES AND SADDLE NOTCHES

A BARRIER FOAM SEAL "P" GASKET SHOULD BE STAPLED AT THE FLANGE ON THE INSIDE OF THE LOG CONTACT LINE (BOTH AT EXTERIOR AND INTERIOR CONTACT LINE). THIS 1" DIAMETER WATER PROOF FOAM BACKER ROD IS A SUPERIOR WEATHER SEAL WHEN COMPRESSED AT LOGS LATERAL CONTACT

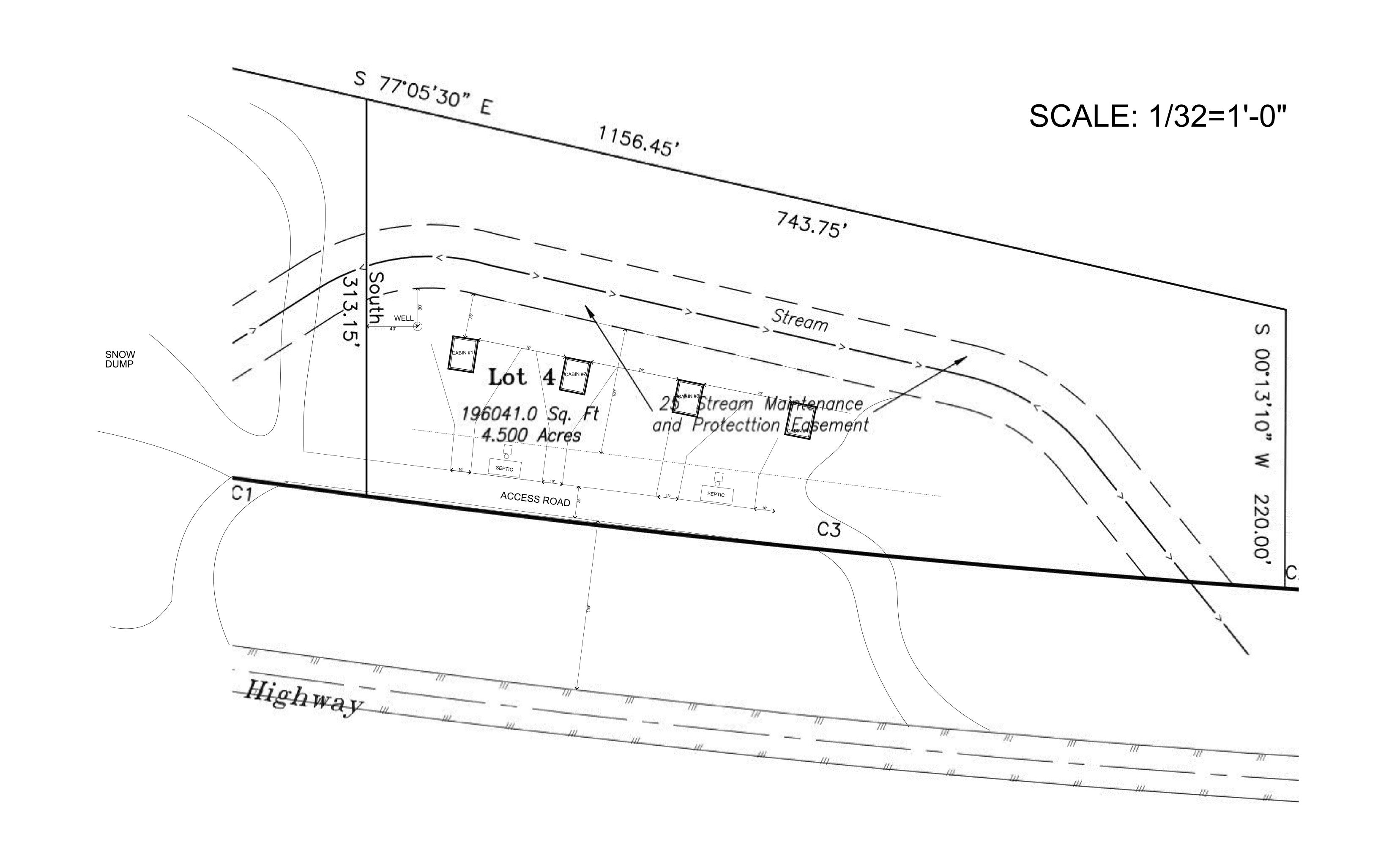
THE THERMAL VALUE OF A LOG WALL DEPENDS ON ITS MASS, OR THE DIAMETER SIZE OF THE LOGS. THE MORE MASS IN A STRUCTURE, THE LESS PRONOUNCED THE TEMPERATURE SWINGS ARE WITHIN THIS STRUCTURE. AS OUTSIDE TEMPERATURE DROPS, THE INSIDE OF THE BUILDING TENDS TO RETAIN ITS WARMTH, AS THE LOGS RELEASE HEAT STORED WITHIN THEIR MASS.

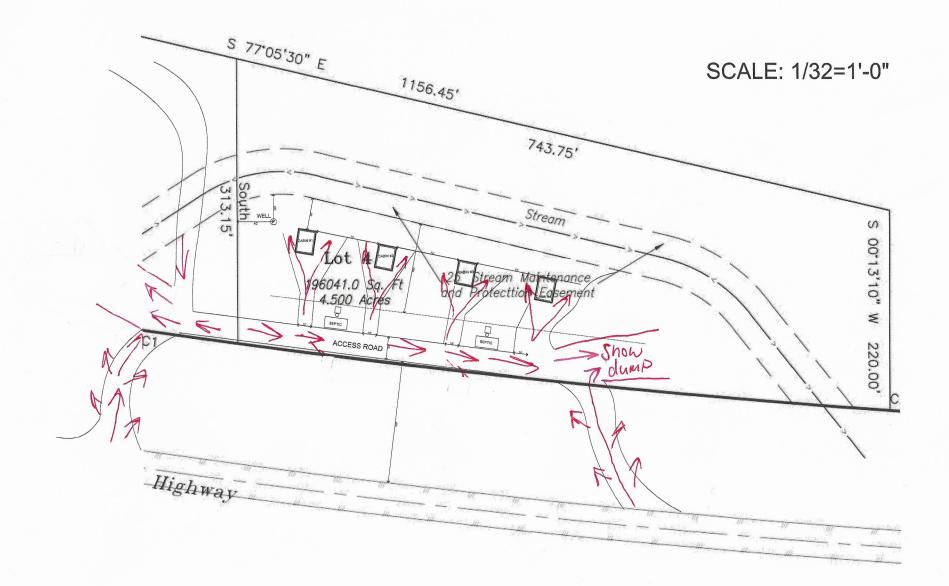
CONVERSELY, IN SUMMER THE INTERIOR OF THE LOG HOME WILL REMAIN COOLER. AS LOG LOOSES ITS MOISTURE & SHRINK, LATERAL CHECKS IN LOGS AT CROSS CORNERS SHOULD BE CAULKED TO SEAL OFF AIR INFILTRATION. A FINAL SEALING OF THE LOG HOME USING ENERGY SEAL CAULKING OF SAME COLOR AS LOGS TAKES PLACE WHEN LOGS HAVE REACHED EQUILIBRIUM WITH THEIR ENVIRONMENT, IN ABOUT THREE YEARS AFTER CONSTRUCTION TO ENSURE A DRAFT FREE HOME.

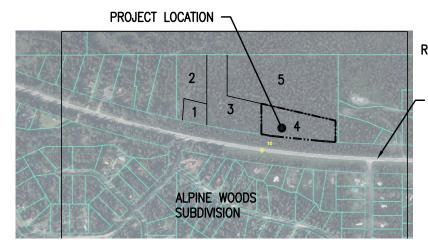
LOG HOME MAINTENANCE:

WITH ADEQUATE WOOD CARE AND PREVENTATIVE MAINTENANCE, YOUR LOG HOME WILL LAST CENTURIES. MOST WOODS CONTAIN NATURALLY OCCURING OILS THAT RESIST WEATHERING AND DECAY. BUT WITH TIME, THESE OILS ARE LEACHED FROM THE WOOD AND NEED TO BE REPLACED. REGIONAL CLIMATES WILL DICTATE GENERAL PRESERVATION TECHNIQUES. THE FIRST GENERAL RULE IS TO PREVENT WATER FROM COMING IN CONTACT WITH THE LOGS. LOGS MUST BE THOROUGHLY CLEANSED WITH A SOLUTION OF SOAP AND BLEACH, COMPLETELY DRIED BEFORE APPLYING A PRESERVATIVE SOLUTION CONTAINING A WATER REPELLENT & MILDEWCIDE. REAPPLY THE SOLUTION UNTIL LOGS WILL NO LONGER ACCEPT ANY MORE PRESERVATIVE. IF SUN DAMAGE ON SOUTH & WEST SIDE OF THE HOUSE IS ANTICIPATED, APPLY A PRESERVATIVE THAT CONTAINS OILS WITH PIGMENTS AS ULTRAVIOLET BLOCKERS. DO NOT APPLY AN IMPERMEABLE FINISH SUCH AS VARNISH OR PAINT TO THE SURFACE OF LOGS. FOLLOW APPLICATION INSTRUCTIONS TO THE LETTER, AND NEVER APPLY FINISHES NOT SPECIFICALLY FORMULATED FOR LOGS.

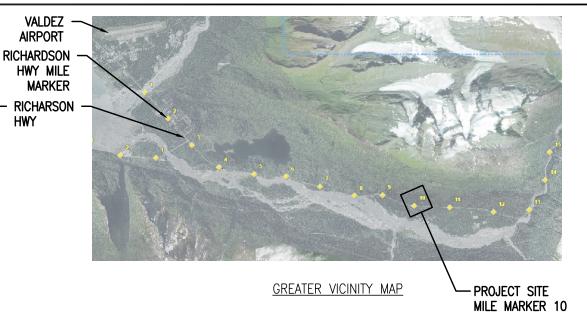
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LOCAL VICINITY MAP 1" = 1,000'



GENERAL NOTES:

- 1. THIS SITE PLAN IS NOT A SURVEY. NEW AND EXISTING COMPONENTS ARE APPROXIMATELY LOCATED. THE SITE PLAN IS BASED ON DOCUMENTATION PROVIDED BY THE CLIENT AND BACKGROUND IMAGERY FROM THE CITY OF VALDEZ GIS MAP VIEWER, AS OF THE DATE OF THIS PLAN SET. IT IS INTENDED TO CONVEY GENERAL SITE CONDITIONS TO MEET ADEC AND LOCAL REQUIREMENTS.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL REQUIRED SEPARATION DISTANCES.
- 3. MAINTAIN A MINIMUM OF 200' SEPARATION DISTANCE FROM SEPTIC SYSTEM TO NEIGHBORING PUBLIC WELLS AND 100' TO NEIGHBORING PRIVATE WELLS.
- 4. MAINTAIN A MINIMUM OF 100' SEPARATION DISTANCE FROM SEPTIC SYSTEM COMPONENTS TO SURFACE WATER.
- 5. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADEC REGULATIONS AND INTERIM GUIDANCE. LOCATION AND ORIENTATION OF SEPTIC SYSTEM COMPONENTS MAY BE ADJUSTED AS LONG AS MINIMUM SEPARATION DISTANCES ARE ACHIEVED AND MINIMUM REQUIREMENTS ARE MET.
- 6. A FOUNDATION CLEANOUT SHALL BE INSTALLED WITHIN 5' OF EACH BUILDING.



SITE PLAN

= 80

DEFINITIONS:

(N) - NEW

(E) - EXISTING

B.G. - BELOW GROUND

A.G. - ABOVE GROUND

FCO - FOUNDATION CLEANOUT

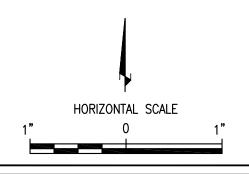
CO - CLEANOUT

TL - TRANSFER LINE

LS - LIFT STATION

ST - SEPTIC TANK

SAS - SOIL ABSORPTION SYSTEM







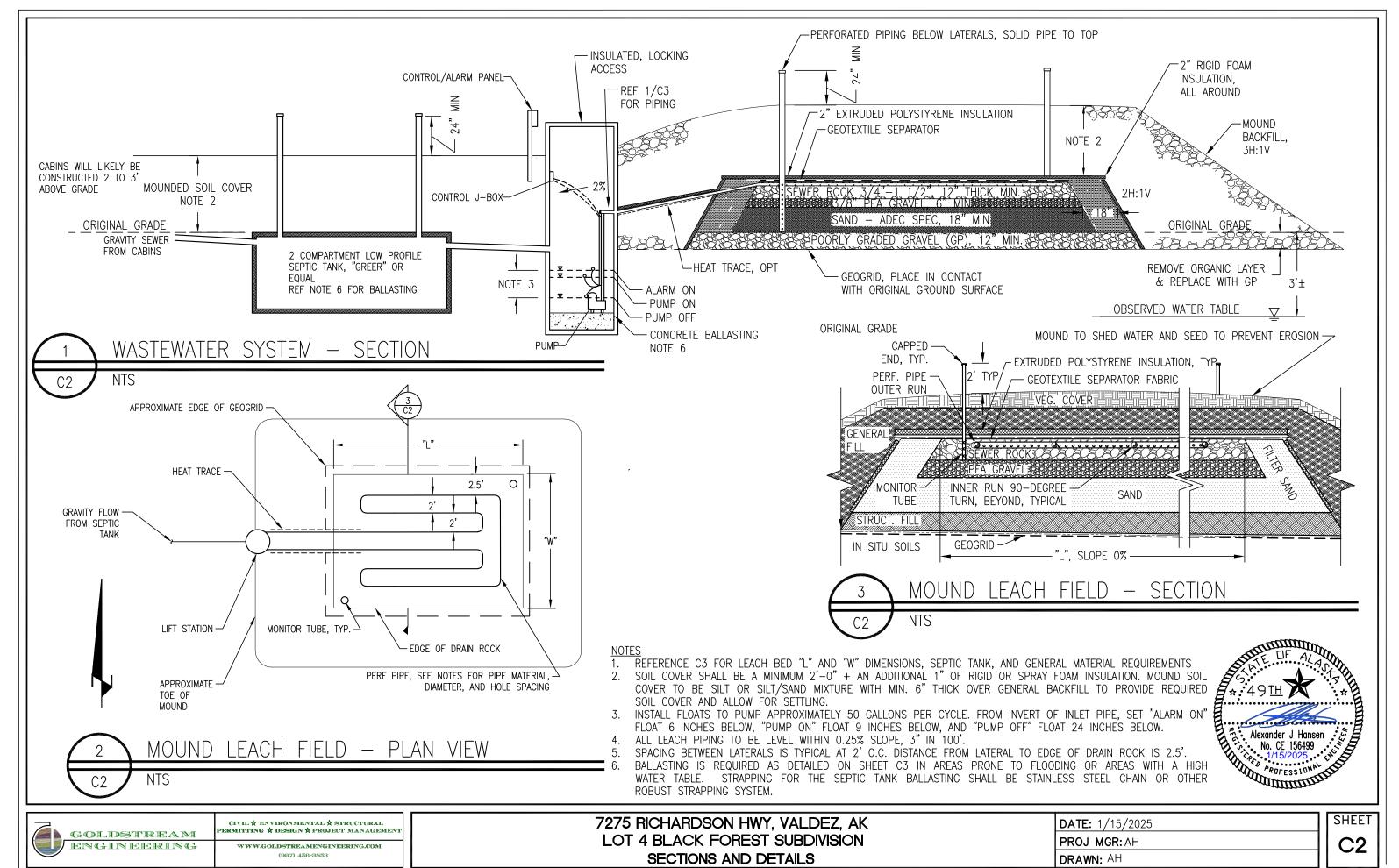
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7275 RICHARDSON HWY, VALDEZ, AK LOT 4 BLACK FOREST SUBDIVISION SITE PLAN

DATE: 1/15/2025 PROJ MGR: AH

DRAWN: AH



GENERAL INFORMATION

PROJECT NAME: 7275 RICHARDSON HWY CABINS LOCATION: 7275 RICHARDSON HWY, VALDEZ, AK

CONTRACTOR: TBD

ENGINEER: GOLDSTREAM ENGINEERING, INC., ALEXANDER J HANSEN, PE

FACILITY DESCRIPTION:

(2) 1—BEDROOM CABINS TO BE USED FOR SHORT TERM RENTALS THAT RECEIVE POTABLE WATER SERVICE FROM A NEW WELL TO BE INSTALLED. 2 ADULTS & 2 KIDS PER CABIN. 3/4 BATH, WASHER, DRYER, AND FULL KITCHEN.

DESIGN FLOW:

2 BEDROOMS RESIDENTIAL @ 150 GPD/BEDROOM = 300 GPD OR

2 SHORT TERM CABIN RENTALS WITH 4 PEOPLE PER CABIN © 50 GPD/PERSON = 400 GPD

=> DESIGN FLOW = 400 GPD

SEPTIC TANK REQUIREMENTS:

1000 GALLONS = MIN TANK CAPACITY FROM OWSIM (APRIL 2024) USE A GREER PLASTIC 1000-GALLON LOW PROFILE TANK.

SOIL INFORMATION:

SOILS INFORMATION OBTAINED FROM OWNER OBSERVATIONS. IN VICINITY OF SAS, SOILS ARE SILTY SAND (SM) WITH THE WATER TABLE ENCOUNTERED AROUND 3' BELOW GRADE, OCTOBER 6, 2024. NO IMPERMEABLE LAYER WAS OBSERVED.

DESIGN APPLICATION RATES:

FROM OWSIM (APRIL 2024):

SOIL TYPE BASED ON ADEC SPEC SAND (SP) APPLICATION RATE = 1.0 G/DAY/FT2

AREA REQUIREMENTS:

 $400 \text{ G/DAY} \div 1.0 \text{ G/DAY/FT}^2 = 400 \text{ FT}^2$

DESIGN LENGTH "L" = 27' DESIGN WIDTH "W" = 15'

=> DESIGN AREA = 405 FT²

OTHER GENERAL NOTES:

- 1. SYSTEM SHALL BE INSPECTED BY ENGINEER PRIOR TO BACKFILLING OVER SAS.
- 2. VEGETATIVE COVER SHOULD BE SEEDED OVER LEACH MOUND AND AREAS OF DISTURBED GROUND SURFACE TO PREVENT INFILTRATION/EROSION.
- 3. ENGINEER SHALL BE MADE AWARE OF ANY FIELD CONDITIONS THAT DIFFER FROM WHAT WAS USED FOR THE BASIS OF DESIGN.

LIFT STATION (LS) REQUIREMENTS:

LS VAULT: "GREER" PRE-FABRICATED PLASTIC LIFT STATION VAULT, ~8"

DEEP WITH LOCKING LID. FILL BOTTOM 1' OF VAULT WITH CONCRETE FOR BALLASTING. RISERS INSTALLED AS NEEDED FOR HEIGHT. RISERS AND LID INSULATED W/ SPRAY FOAM WITH

WATER TIGHT SEAL AT RISER JOINTS.

PUMPS: 1/2 HP, NON-AUTOMATIC, FLOAT OPERATED, FULLY

SUBMERSIBLE, LIBERTY LE 50 PUMP. NO CHECK VALVE, SELF

DRAINING.

ALARM: TWO OUTDOOR HIGH WATER ALARMS. ENCLOSURES TO MEET

TYPE 3R WATER-TIGHT STANDARD. ALARM SYSTEM SHALL BE

INSTALLED ON SEPARATE CIRCUIT FROM PUMPS.

J-BOX: NEMA 3R WATER TIGHT.

MATERIAL REQUIREMENTS:

ABS PIPE: 4" DIAMETER ABS SCHEDULE 40 PIPE.

SOLID PIPE: 1-1/2" (MIN.) TO 2" (MAX) SDR11 HDPE W/ BUTT FUSED,

HEAT WELDED CONNECTIONS OR 1-1/2" (MIN.) TO 2" (MAX)

PEX TUBING W/ PRE-APPROVED FITTINGS.

PERF. PIPE: 1-1/2" (MIN.) TO 2" (MAX) SDR11 HDPE W/ BUTT FUSED,

HEAT WELDED CONNECTIONS OR 1-1/2" (MIN.) TO 2" (MAX)
PEX TUBING W/ PRE-APPROVED FITTINGS. 1/4" DRILLED
HOLES AT 18" ON CENTER. OFF-SET HOLES AT 90°.

<u>PIPE FITTINGS:</u> MOLDED FACTORY FITTINGS DESIGNED FOR APPLICATION TANK CONNECTIONS: "FERNCO" WITH STAINLESS STEEL BACKER BANDS.

<u>LEACH ROCK:</u> MAX 1 1/2", MIN 3/4" PEA GRAVEL: MAX 3/8", MIN 1/4"

SAND LINER: MEETS ADEC SPECIFICATION FOR SAND LINERS,

18AAC72.260(a)(4)(D), TABLE C, GROUP A OR B

STRUCTURAL FILL: GRANULAR, NON FROST SUSCEPTIBLE, MAX 12% < #200 SIEVE GENERAL FILL: NON FROZEN, NO ROOTS, TREES OR LARGE ORGANIC MATTER,

OR ROCKS GREATER THAN 3" DIAMETER

GEOTEXTILE: WOVEN GEOTEXTILE TERRATEX GS OR APPROVED EQUAL UNWOVEN GEOTEXTILE TERRATEX NO4 OR APPROVED EQUAL

GEOGRID: MIRAGRID 3XT OR APPROVED EQUAL

<u>HEAT TRACE:</u> RAYCHEM FROSTGUARD OR APPROVED EQUAL

INSULATION: SHALL MEET ASTM C578 TYPE IV, 25PSI MIN, REF ADEC SPEC.

ANY DEVIATION FROM THE ADEC MATERIAL OR CONSTRUCTION SPECIFICATIONS WILL REQUIRE PRE—APPROVAL BY THE ENGINEER AND POSSIBLY ADEC.

BALLASTING:

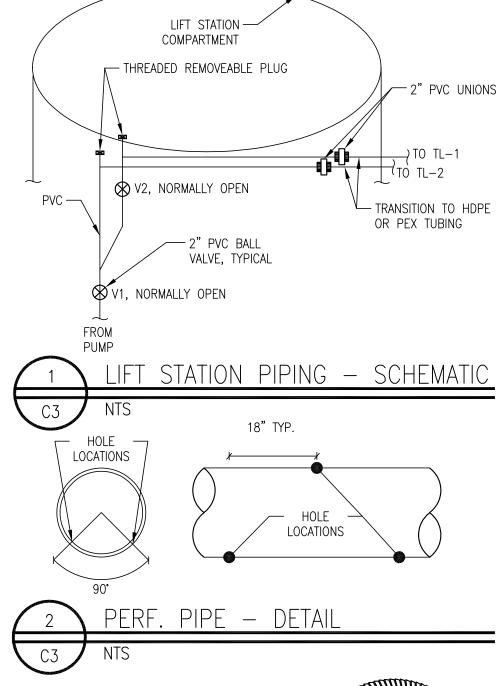
WATER - 62.4 LB/CF SOIL - 90 LB/CF CONCRETE - 150 LB/CF SEPTIC TANK: PER ST REQUIREMENTS L=9' W=5.8' D=4.3' SELF WEIGHT=300 LB

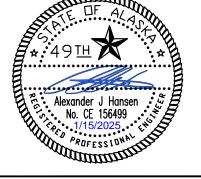
- WEIGHT OF 2' SOIL ABOVE TANK = 9,400 LB (4,700LB/FT OF COVER)
 DISPLACEMENT FOR SUBMERGED TANK = 134 CF, 1000 GAL, 8,400 LB
- BALLASTING REQUIRED IF LESS THAN 2' OF GROUND COVER IS INSTALLED OR TOP OF TANK IS SUBMERGED.

 3,300 LBS OF BALLASTING IS NEEDED FOR EACH FT THE TOP OF THE TANK WILL BE SUBMERGED.

<u>LIFT STATION:</u> 2.5' DIAMETER GREER POLY, AREA= 4.9 SF, SELF WEIGHT=200 LB

- DISPLACEMENT PER FT = 4.9 CF, 36.7 GAL, 306 LB
- CONCRETE WEIGHT = 735 LB/FT = 62 LB/INCH
- POUR 4" OF CONCRETE INTO THE BOTTOM OF THE LIFT STATION FOR EVERY FT OF ANTICIPATED SUBMERGED DEPTH. SMOOTH CONCRETE SURFACE FOR LIFT STATION PUMP.







CIVIL★ ENVIRONMENTAL★ STRUCTURAL PERMITTING ★ DESIGN ★ PROJECT MANAGEMENT

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7275 RICHARDSON HWY, VALDEZ, AK LOT 4 BLACK FOREST SUBDIVISION DESIGN PARAMETERS DATE: 1/15/2025
PROJ MGR: AH
DRAWN: AH

SHEET C3

Conditional Use Permit – Proposed Findings and Proposed Conditions

Date: March 12, 2025 File: CUP 25-01

To: Planning & Zoning Commission From: Bruce Wall, Senior Planner

Conditional Use: Rental Cabins

General Information

Applicant: Scott Smith
Property Owner: High Tides, LLC

Street Address: 7275 Richardson Hwy

Legal Description: Lot 4, Black Forest Subdivision, Plat 2024-5

Zoning District: Rural Residential (RR)

Existing Land Use: Vacant

Access: Richardson Highway

VMC 17.08

"Conditional use" means a provision which allows for flexibility within this chapter by permitting certain specified uses in zoning districts where such uses are generally considered appropriate, but only after additional conditions and safeguards are applied to ensure their compatibility with permitted principal uses.

"Rental cabins" means detached cabins for temporary lodging that are available for rent on a nightly basis as part of a group of three or more cabins for rent. Rental cabins are considered a primary use only. Detached accessory dwelling units utilized as short-term rentals are excluded from rental cabins.

Project Description

The applicant is requesting a conditional use permit for four 20-foot x 26-foot rental cabins on a 4.84-acre lot. The four cabins will be served by a single well and two septic systems with two cabins sharing each septic system. Table 17.16.040-1 of the Valdez Municipal Code allows rental cabins in the rural residential zoning district if approved by a conditional use permit. The applicant also indicates that he would like the option to

rent the cabins as long-term housing. However, rental cabins are limited to temporary lodging that is available for rent on a nightly basis. Community Development staff have discussed with the applicant other provisions in the code that could allow for long-term housing on the property.

Proposed Findings

Procedural Findings

- a) On February 10, 2025, the Community Development Department received a conditional use permit application from Scott Smith for Rental Cabins.
- b) The applicant submitted a revised snow storage plan on February 24, 2025.
- c) The Community Development Department reviewed the application and determined that it was complete, in accordance with VMC 17.12.090(E)(1).
- d) A public hearing was scheduled for March 12, 2025, to consider the Conditional Use Permit.
- e) Notice of the meeting was published in the Copper River Record on February 27, 2025 and March 3, 2025.
- f) Notice of the publication was published in KVAK's e-blast newspaper on March 3, 2025 and March 10, 2025.
- g) Notice of the meeting was published on the City of Valdez website on February 26, 2025, in accordance with VMC 17.12.090(E)(5) and 17.12.160(C)(1).
- h) Notice of the meeting was mailed on February 26, 2025 to the seven property owners within 300 feet of the subject properties, in accordance with VMC 17.12.090(E)(5) and 17.12.160(C) (2).
- i) A document holder was posted on the Richardson Highway with public notice flyers on February 26, 2025, in accordance with VMC 17.12.090(E)(5) and 17.12.160(C) (3).
- 1. Criterion 1: Site Suitability. The subject site shall be suitable to support the proposed conditional use and its associated structure(s) and site improvements. The Planning and Zoning Commission shall consider topography, slope and soil stability, geophysical hazards, surface and subsurface drainage, and water quality conditions on and around the subject site and the probable effects of the proposed conditional use upon these factors. VMC 17.12.090(C)(1)
 - a) The narrative submitted by the applicant states, "There is a natural year-round flowing creek from a spring and runoff from the mountain above."
 - b) The property is not located in the mapped Special Flood Hazard Area (SFHA); however, there is an unnamed stream flowing through the property and low-lying portions of the property should be considered susceptible to flooding.
 - c) The unnamed stream flowing through the property is identified as an anadromous stream in the Alaska Anadromous Waters Catalog. (AWC 221-60-11370-2219-3015)
 - d) The USACE National Levee Database depicts this property as being a leveed area. Property protected by a levee is subject to flooding if the levee fails or is

- overtopped.
- e) South of the stream the property slopes slightly. North of the stream the property is steeply sloped.
- f) The narrative submitted by the applicant states, "In the fall of 2024 we sent soil samples to Goldstream Engineering in Fairbanks who told the soil was stable for building and contained more sand than silt."
- g) The narrative submitted by the applicant states, "This property is not in a flood zone. However, due to snow melt and possible heavy rain, we will be adding an additional 3 feet of fill for a higher elevation".
- h) Notice of the application was provided to the Alaska Department of Fish and Game.
- i) The geography of the site is suitable for the proposed use.
- 2. Criterion 2: Utility, Sanitation, and Public Service Needs. The conditional use and the associated site improvements shall be adequately served by utilities, emergency responders, and a sanitation facility to ensure long-term safety for its occupants and surrounding populations. The planning and zoning commission shall consider whether adequate sewer/sanitation, storm drainage, potable water, fire protection, public safety, access, and electrical power exist to serve the proposed use and associated structures/site improvements. VMC 17.12.090(C)(2)
 - a) The narrative submitted by the applicant states, "The septic systems will be engineered to sustain two cabins on one septic. There will be one well connected to all four cabins."
 - b) The narrative submitted by the applicant states, "Power will be underground service to minimize outages and enhance the natural environment."
 - c) Notice of the application was provided to the following city departments: Fire, Police, Public Works, and the Building Official. Notice was also provided to Copper Valley Electric Association.
 - d) Condition of Approval Number 3 requires the proposed septic systems to be approved prior to obtaining a building permit.
 - e) The application materials together with the conditions of approval demonstrate that the utility, sanitation, and public service needs will be met.
- Criterion 3: Zoning District Standards. With the exception of Planned Unit Developments (PUDs), the proposed conditional use and its associated site improvement(s) shall comply with the dimensional standards of the zone in which it is located. Notwithstanding, those zoning standards may be adjusted pursuant to a separate variance and/or administrative adjustment application. VMC 17.12.090 (C)(3)
 - a) The narrative submitted by the applicant states, "All cabins will be built the same with dimensional standards within the zoning requirements for height and all setbacks."
 - b) The subject property is in the Rural Residential (RR) district.

- c) The Rural Residential (RR) district requires a 20-foot front setback, 10-foot side setback, and 15-foot rear setback, it also establishes a 35-foot maximum building height for primary structures and a 35-foot height for accessory structures.
- d) The materials submitted with the application indicate that the proposed use is in compliance with these dimensional standards.
- 4. Criterion 4: Specific Use Standards. The proposed conditional use and its associated site improvement(s) shall comply with the applicable specific use standards pursuant to Chapter 17.80. VMC 17.12.090(C)(4)
 - a) Chapter 17.80 does not contain specific use standards for Rental Cabins.
- 5. Criterion 5: Comprehensive Plan Consistency. The proposed conditional use and its associated site improvement(s) shall be consistent with the Comprehensive Plan's goals, policies, and maps in terms of land uses, development character, and scale. VMC 17.12.090(C)(5)
 - b) The narrative submitted by the applicant states, "Rental cabins comply with the comprehensive plan to provide additional quality housing options. This land falls into Area 3 in the comprehensive plan as Rural Neighborhood. Continuing to follow the comprehensive plan with goals 2.1 planning for responsible growth, 2.2 with new development, and 2.3 built quality housing. This promotes Valdez as a destination, adding to the sustainable economy."
 - c) The Future Land Use Map in Plan Valdez, the comprehensive plan for the City of Valdez, depicts the subject properties within the Rural Neighborhood place type.
 - d) The comprehensive plan, as amended by Resolution 22-63, states that limited commercial uses are appropriate along the fringes of the Rural Neighborhood place type and along the Richardson Highway.
 - e) Goal 3.1, Action A is, "Continue to advocate for the core economies (shipping, fishing, oil, tourism)."
 - f) The proposed rental cabins will support the local tourism industry.
 - g) The proposed conditional use and its associated site improvement(s) are consistent with the Comprehensive Plan's goals, policies, and maps in terms of land uses, development character, and scale.
- 6. Criterion 6: Nuisance Mitigation. The proposed conditional use and its associated site improvement(s) shall provide mitigation measures to address potential nuisances relating to excessive noise, lighting, vibration, traffic, debris and litter, and outdoor material storage. VMC 17.12.090(C)(6)
 - a) The narrative submitted by the applicant states, "We will take appropriate actions to reduce noise, light, and traffic. The goal is to have the cabins remain a peaceful retreat among nature for others. Quite hours will be observed. Trash and litter will be zero as I plan to pick up after guests as needed."

- b) It is not anticipated that the proposed use will create any nuisances related to excessive noise, lighting, vibration, traffic, debris and litter, or outdoor material storage.
- 7. Criterion 7: Access and Circulation. The proposed conditional use and its associated site improvement(s) shall provide adequate site access for motor vehicles, pedestrians, and cyclists. Applications shall not be approved where the proposed use would create undue traffic congestion or pose a safety hazard to motorists, pedestrians, and/or cyclists. VMC 17.12.090(C)(7)
 - a) The site plan submitted with the application depicts an access road connecting to the Richardson Highway.
 - b) Notice of the application was provided to the Alaska Department of Transportation and Public Facilities.
 - c) Condition of approval number 4 requires the applicant to obtain highway access permit(s) from the Alaska Department of Transportation and Public Facilities prior to obtaining a building permit.
 - d) The proposed use and its associated site improvements will provide adequate site access for motor vehicles, pedestrians, and cyclists.
 - e) The proposed use will not create undue traffic congestion or pose a safety hazard to motorists, pedestrians, and/or cyclists.

8. Snow Storage:

- a) The applicant has submitted a snow storage plan as required by VMC 17.88.030(C). The accompanying sketch map was revised and resubmitted on February 24, 2025.
- b) The snow storage plan was provided to various city departments and other agencies along with other application materials.
- c) The City of Valdez Public Works Department responded saying, "While the plan outlines general snow management, I want to emphasize that all snow must be contained and stored on the property, even during heavy snow years. Since this development is located on a state road, it's critical that snow storage does not overwhelm the designated city-maintained roadway storage areas. The applicant should clarify how excess snow will be managed within the property limits to ensure compliance".
- d) The snow storage plan indicates that there will not be a reduction in the available parking spaces for snow storage.
- e) The snow storage plan has been reviewed by Community Development staff, and they have determined that the plan provides adequate space to reasonably handle expected snow storage needs on the site.
- f) The snow storage plan indicates that the intersection visibility triangle will be maintained as required by VMC 17.88.050. This will be enforced administratively.
- g) Condition of approval number 5 requires that the permittee store all snow on site.

h) The roofs of the proposed rental cabins will shed snow to the side of the cabins and will not block the ingress or egress of the structures.

VMC 17.12.090(E)(7)

The Planning and Zoning Commission shall conduct a public hearing to review the conditional use application, review the staff report, hear staff, applicant, and public testimony, discuss the proposal, adopt findings of fact (from staff or establishing their own), and take action on the application. The Commission may approve, approve with conditions, or deny the application.

Conditions

- 1. The conditional use permit is for Lot 4, Black Forest Subdivision, Plat 2024-5 for Rental Cabins.
- 2. The conditional use permit is effective upon approval.
- 3. The permittee shall obtain highway access permit(s) from the Alaska Department of Transportation and Public Facilities prior to obtaining a building permit.
- 4. The permittee shall obtain approval of the proposed septic systems prior to obtaining a building permit.
- 5. The permittee shall store all snow on site.
- 6. The conditional use permit must be utilized within twelve months after the effective date of the approval. In the event construction work is involved, it must actually commence within the stated period and must be diligently prosecuted to completion.
- 7. The use must be consistent with the submitted application and site plan. Any substantial change to the plans shall require resubmission to the planning and zoning commission.

RESIDENTIAL NEIGHBORHOOD

Single-family homes with public utilities in residential neighborhoods requiring automobile dependency.

The Residential Neighborhood place type has a dependency on the automobile to reach services and jobs. The Residential Neighborhood may include parks, greenbelts, community centers, and similar amenities. Public services, including water and wastewater services, are readily available or in close proximity with a service expansion plan in place.







PRIMARY LAND USE



Single-Family Detached Single-Family Attached

SUPPORTING LAND USE







Manufactured Multi-Family (Up to and including four-plex)

Educational Community

COMPATIBLE LAND USE





Live/Work Temporary Worker Multi-Family (Greater than four-plex)



ΑII





COMMERCIAL INSTITUTIONAL All

Medical

RURAL NEIGHBORHOOD

Larger lots or clustered on smaller lots to preserve natural features, important vistas, and viewsheds.

The Rural Neighborhood place type is primarily used for residential buildings and surrounded by lands that exhibit a more rural character. Development layouts follow land contours, incorporate natural features, and protect sensitive resources. The neighborhoods are automobile dependent and frequently characterized by non-grid street patterns and relatively long distances to the Town Center. Public services are not readily available and large lots are required to support on-site wells and septic systems.

Limited commercial uses are appropriate along the fringes of this place type and along the Richardson Highway.



DEPENDENCY ON THE **AUTOMOBILE**



PRIMARY LAND USE



Single-Family Detached

SUPPORTING LAND USE







RESIDENTIAL Single-Family Attached

Manufactured

RECREATION Parks Passive

COMMERCIAL

Neighborhood

COMPATIBLE LAND USE



Live/Work Multi-Family Temporary Worker



ΑII

General Major Office





Regional

PLANVALDEZ

From: John Witte

Sent: Monday, March 3, 2025 3:46 PM

To: Bruce Wall; Kate Huber; Bart Hinkle; Tracy Raynor; Nathan Duval

Cc: Michael Wesson

Subject: RE: Conditional Use Permit Application

Hi Bruce,

I've reviewed the Conditional Use Permit Application for Scott Smith, specifically the snow removal plan. While the plan outlines general snow management, I want to emphasize that all snow must be contained and stored on the property, even during heavy snow years.

Since this development is located on a state road, it's critical that snow storage does not overwhelm the designated city-maintained roadway storage areas. The applicant should clarify how excess snow will be managed within the property limits to ensure compliance.



John Witte

Public Works Director, Public Works Department

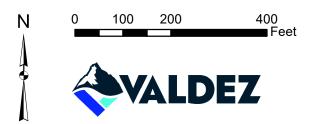
907-835-4473

iwitte@valdezak.gov

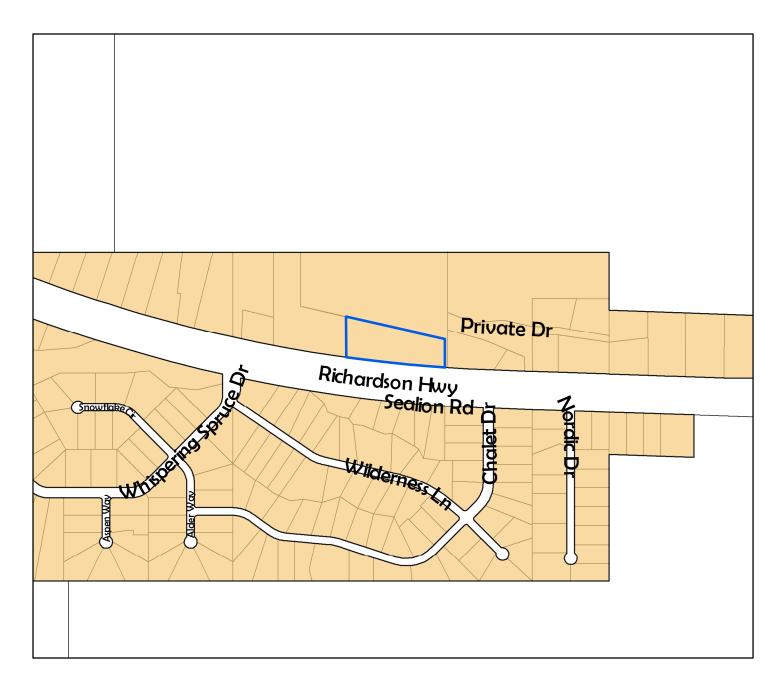
602 W. Egan, Valdez, AK 99686



Conditional Use Permit for Rental Cabins
Planning & Zoning Commission Meeting - March 12, 2025



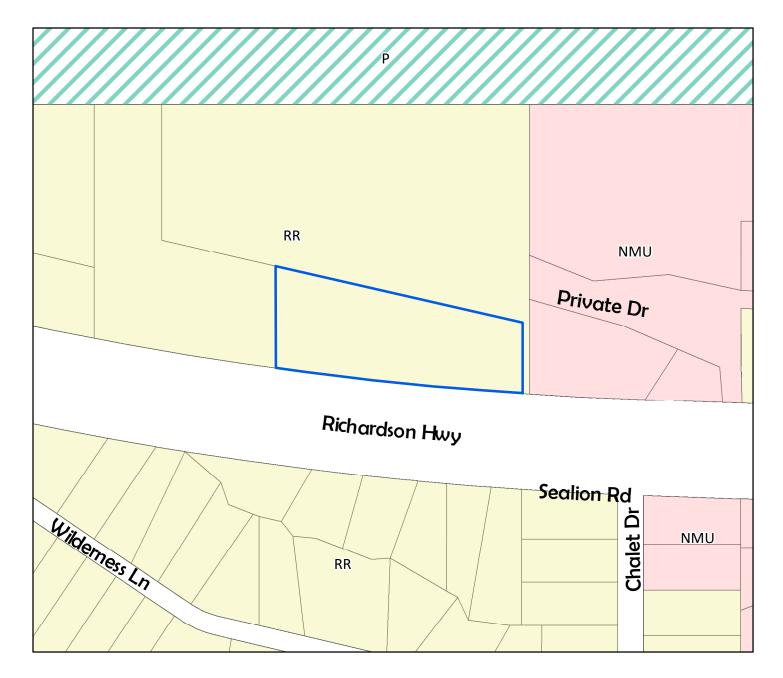




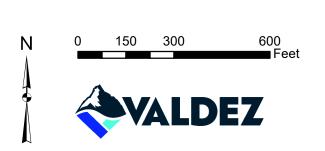
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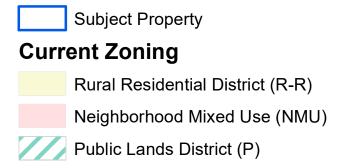


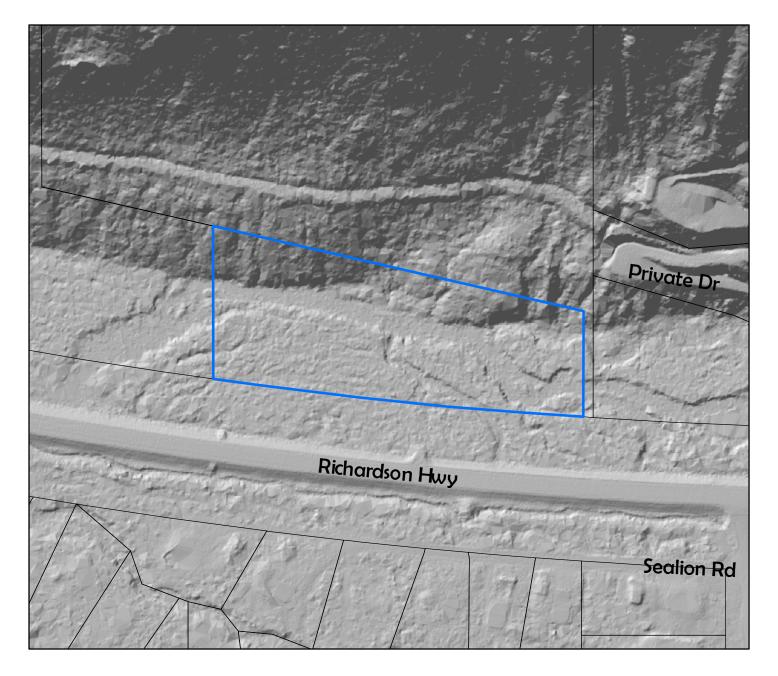




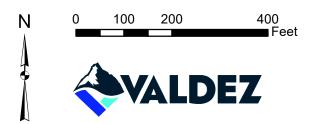
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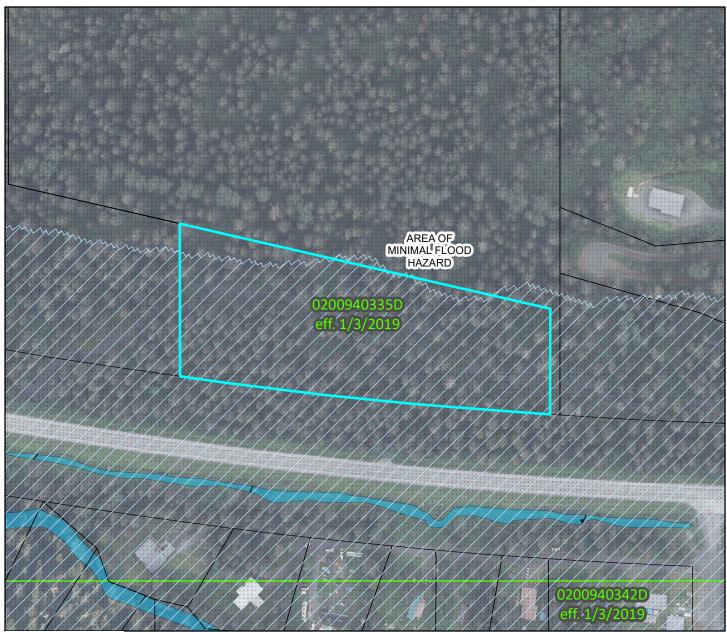


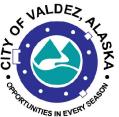




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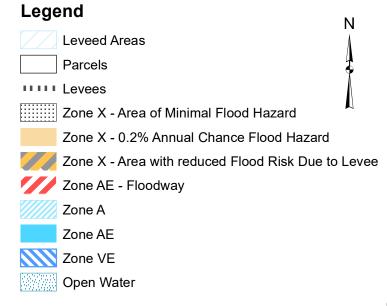
City of Valdez Flood Hazard Data

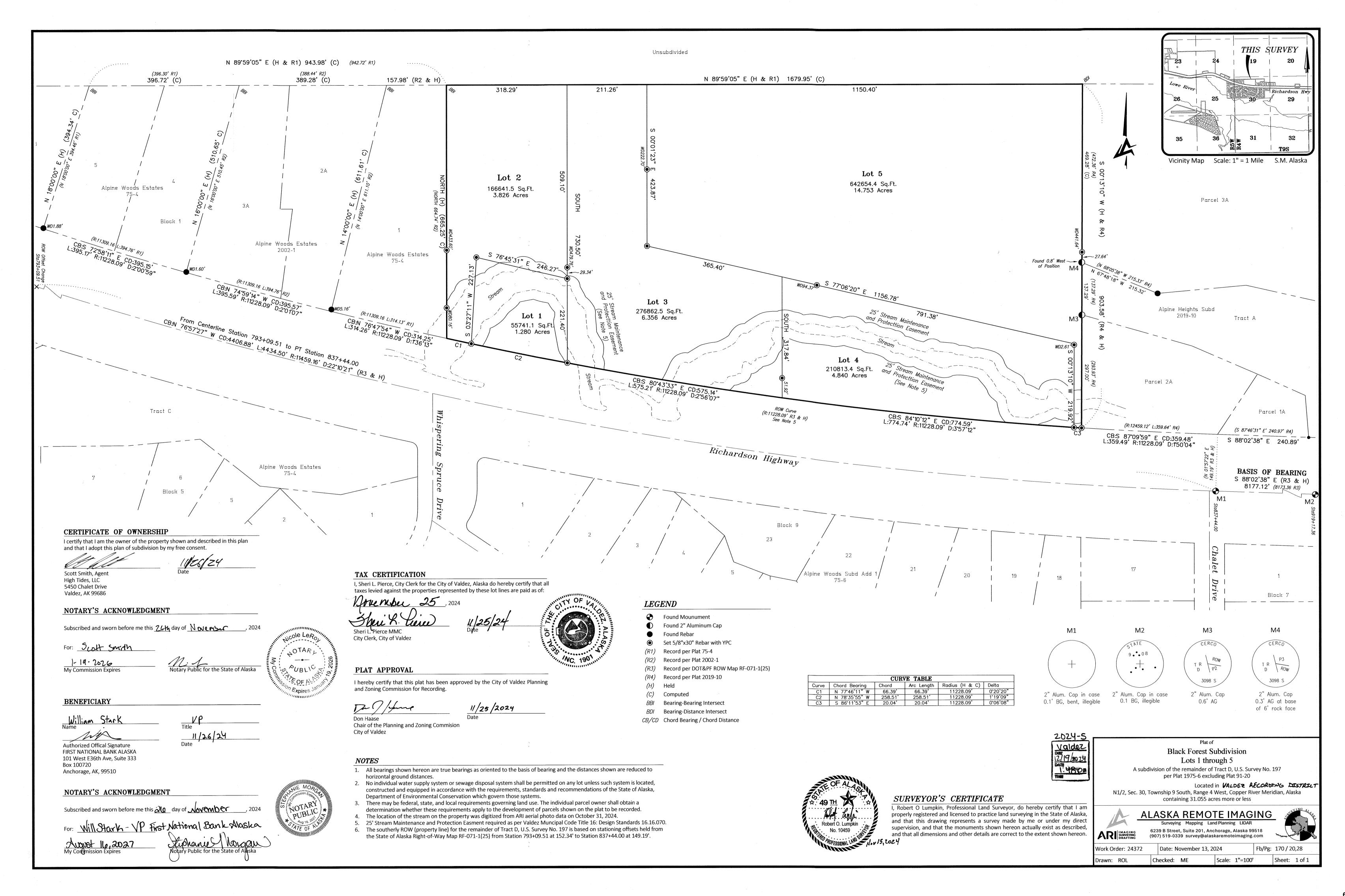


Information displayed is for informational purposes only. The City of Valdez makes no warranties, expressed or implied as to the veracity or accuracy of the information herein.

Date: 3/7/2025

Author: City of Valdez Planning







Bruce Wall, AICP
Senior Planner, City of Valdez-Planning Department

RE: Conditional Use Permit Application for Rental Cabins at 7275 Richardson Highway

Greetings Bruce,

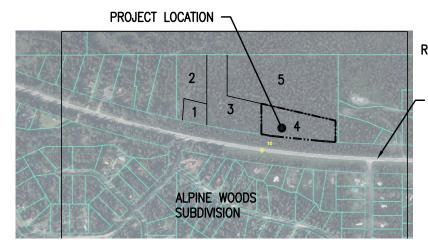
We own adjacent property and are issuing this communication in <u>Support for Approval</u> of the subject application. However, there are two concerns the Applicant should consider:

*Fire Risk: Limit "campfires" to safely-sited fire pits/burn rings. Provide the firewood in order to discourage Itinerant Rental Tenant "bonfires" and "foraging" of firewood from adjacent property. Lastly; Prohibit the use of "aerial" fireworks displays (mortars, cakes, roman candles, etc.). These are prone to ignite the surrounding old-growth forest canopy. There are other nearby locations to enjoy "aerial" displays without incurring a local fire risk.

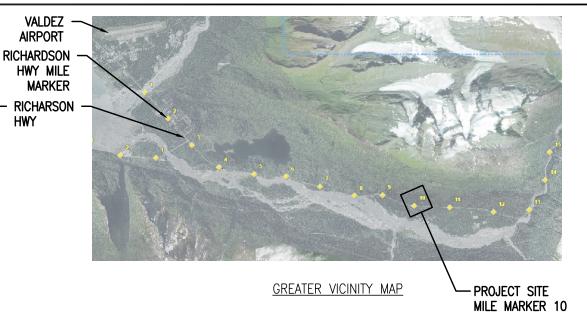
*Salmon Stream Protection: Registered Anadromous Stream #221-60-11370-2219-3015 flows through the property and is subject to protections required by the State of Alaska and Valdez Municipal Code Title 16: Design Standards 16.16.070. The referenced code establishes a 25' "Stream Maintenance and Protection Easement". Maintenance of this required protection is particularly important as the return of salmon in this stream has been in decline for years. Lastly, in effort to protect the stressed returns of salmon, it should be clearly communicated to Itinerant Rental Tenants that the harassment or taking of salmon in all fresh water drainages to Port Valdez is prohibited by ADF&G General Regulations.

Thank you for considering these comments,

Steve & Joy Hanson 3/10/25



LOCAL VICINITY MAP 1" = 1,000'



GENERAL NOTES:

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- 4. MAINTAIN A MINIMUM OF 100' SEPARATION DISTANCE FROM SEPTIC SYSTEM COMPONENTS TO SURFACE WATER.
- 5. SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADEC REGULATIONS AND INTERIM GUIDANCE. LOCATION AND ORIENTATION OF SEPTIC SYSTEM COMPONENTS MAY BE ADJUSTED AS LONG AS MINIMUM SEPARATION DISTANCES ARE ACHIEVED AND MINIMUM REQUIREMENTS ARE MET.
- 6. A FOUNDATION CLEANOUT SHALL BE INSTALLED WITHIN 5' OF EACH BUILDING.



SITE PLAN

= 80

DEFINITIONS:

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A.G. - ABOVE GROUND

FCO - FOUNDATION CLEANOUT

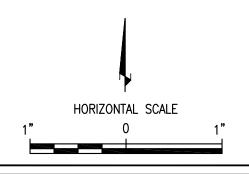
CO - CLEANOUT

TL - TRANSFER LINE

LS - LIFT STATION

ST - SEPTIC TANK

SAS - SOIL ABSORPTION SYSTEM







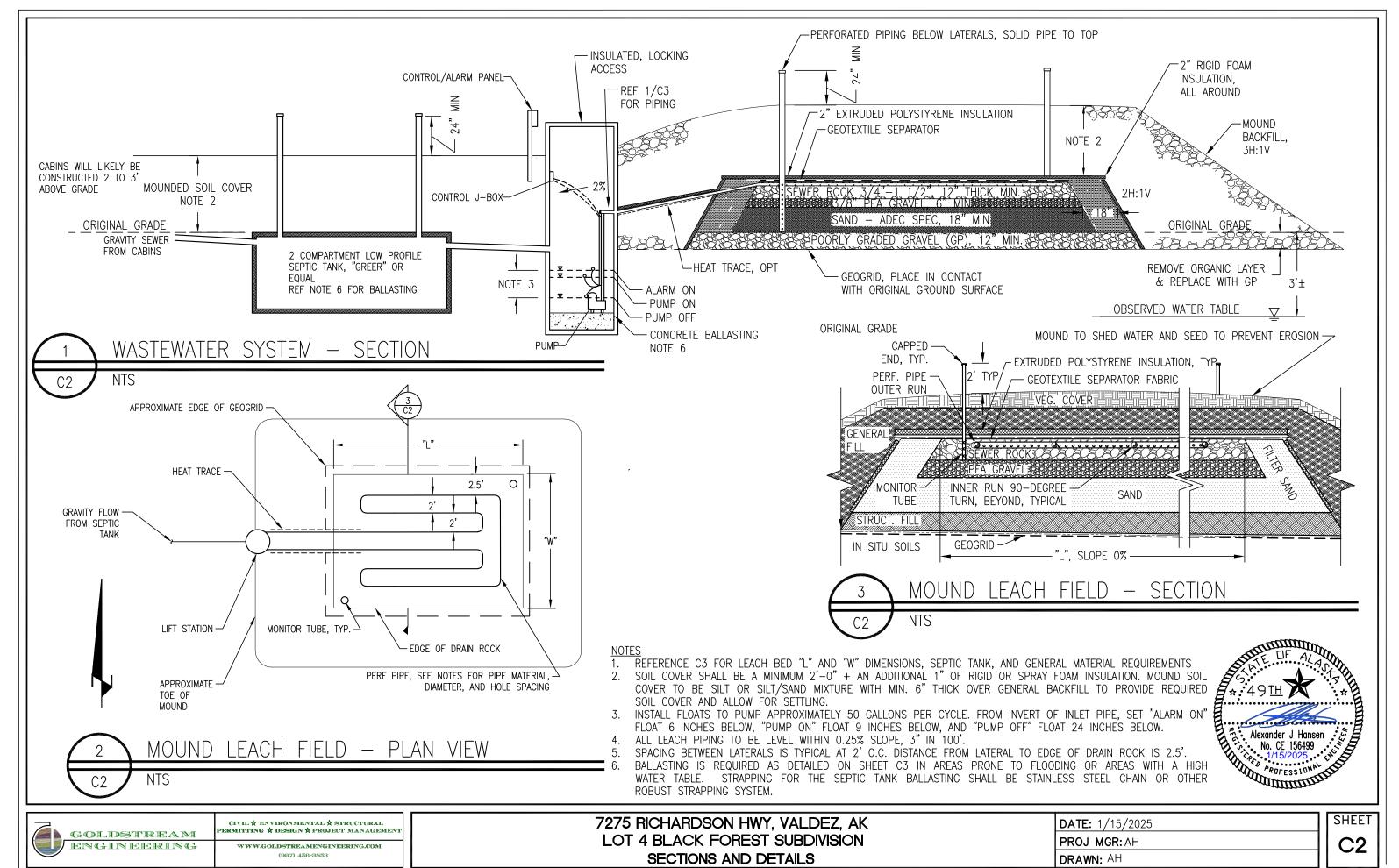
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7275 RICHARDSON HWY, VALDEZ, AK LOT 4 BLACK FOREST SUBDIVISION SITE PLAN

DATE: 1/15/2025 PROJ MGR: AH

DRAWN: AH



GENERAL INFORMATION

PROJECT NAME: 7275 RICHARDSON HWY CABINS LOCATION: 7275 RICHARDSON HWY, VALDEZ, AK

CONTRACTOR: TBD

ENGINEER: GOLDSTREAM ENGINEERING, INC., ALEXANDER J HANSEN, PE

FACILITY DESCRIPTION:

(2) 1—BEDROOM CABINS TO BE USED FOR SHORT TERM RENTALS THAT RECEIVE POTABLE WATER SERVICE FROM A NEW WELL TO BE INSTALLED. 2 ADULTS & 2 KIDS PER CABIN. 3/4 BATH, WASHER, DRYER, AND FULL KITCHEN.

DESIGN FLOW:

2 BEDROOMS RESIDENTIAL @ 150 GPD/BEDROOM = 300 GPD OR

2 SHORT TERM CABIN RENTALS WITH 4 PEOPLE PER CABIN © 50 GPD/PERSON = 400 GPD

=> DESIGN FLOW = 400 GPD

SEPTIC TANK REQUIREMENTS:

1000 GALLONS = MIN TANK CAPACITY FROM OWSIM (APRIL 2024) USE A GREER PLASTIC 1000-GALLON LOW PROFILE TANK.

SOIL INFORMATION:

SOILS INFORMATION OBTAINED FROM OWNER OBSERVATIONS. IN VICINITY OF SAS, SOILS ARE SILTY SAND (SM) WITH THE WATER TABLE ENCOUNTERED AROUND 3' BELOW GRADE, OCTOBER 6, 2024. NO IMPERMEABLE LAYER WAS OBSERVED.

DESIGN APPLICATION RATES:

FROM OWSIM (APRIL 2024):

SOIL TYPE BASED ON ADEC SPEC SAND (SP) APPLICATION RATE = 1.0 G/DAY/FT2

AREA REQUIREMENTS:

 $400 \text{ G/DAY} \div 1.0 \text{ G/DAY/FT}^2 = 400 \text{ FT}^2$

DESIGN LENGTH "L" = 27' DESIGN WIDTH "W" = 15'

=> DESIGN AREA = 405 FT²

OTHER GENERAL NOTES:

- 1. SYSTEM SHALL BE INSPECTED BY ENGINEER PRIOR TO BACKFILLING OVER SAS.
- 2. VEGETATIVE COVER SHOULD BE SEEDED OVER LEACH MOUND AND AREAS OF DISTURBED GROUND SURFACE TO PREVENT INFILTRATION/EROSION.
- 3. ENGINEER SHALL BE MADE AWARE OF ANY FIELD CONDITIONS THAT DIFFER FROM WHAT WAS USED FOR THE BASIS OF DESIGN.

LIFT STATION (LS) REQUIREMENTS:

LS VAULT: "GREER" PRE-FABRICATED PLASTIC LIFT STATION VAULT, ~8"

DEEP WITH LOCKING LID. FILL BOTTOM 1' OF VAULT WITH CONCRETE FOR BALLASTING. RISERS INSTALLED AS NEEDED FOR HEIGHT. RISERS AND LID INSULATED W/ SPRAY FOAM WITH

WATER TIGHT SEAL AT RISER JOINTS.

PUMPS: 1/2 HP, NON-AUTOMATIC, FLOAT OPERATED, FULLY

SUBMERSIBLE, LIBERTY LE 50 PUMP. NO CHECK VALVE, SELF

DRAINING.

ALARM: TWO OUTDOOR HIGH WATER ALARMS. ENCLOSURES TO MEET

TYPE 3R WATER-TIGHT STANDARD. ALARM SYSTEM SHALL BE

INSTALLED ON SEPARATE CIRCUIT FROM PUMPS.

J-BOX: NEMA 3R WATER TIGHT.

MATERIAL REQUIREMENTS:

ABS PIPE: 4" DIAMETER ABS SCHEDULE 40 PIPE.

SOLID PIPE: 1-1/2" (MIN.) TO 2" (MAX) SDR11 HDPE W/ BUTT FUSED,

HEAT WELDED CONNECTIONS OR 1-1/2" (MIN.) TO 2" (MAX)

PEX TUBING W/ PRE-APPROVED FITTINGS.

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HOLES AT 18" ON CENTER. OFF-SET HOLES AT 90°.

<u>PIPE FITTINGS:</u> MOLDED FACTORY FITTINGS DESIGNED FOR APPLICATION TANK CONNECTIONS: "FERNCO" WITH STAINLESS STEEL BACKER BANDS.

<u>LEACH ROCK:</u> MAX 1 1/2", MIN 3/4" PEA GRAVEL: MAX 3/8", MIN 1/4"

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18AAC72.260(a)(4)(D), TABLE C, GROUP A OR B

STRUCTURAL FILL: GRANULAR, NON FROST SUSCEPTIBLE, MAX 12% < #200 SIEVE GENERAL FILL: NON FROZEN, NO ROOTS, TREES OR LARGE ORGANIC MATTER,

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GEOTEXTILE: WOVEN GEOTEXTILE TERRATEX GS OR APPROVED EQUAL UNWOVEN GEOTEXTILE TERRATEX NO4 OR APPROVED EQUAL

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<u>HEAT TRACE:</u> RAYCHEM FROSTGUARD OR APPROVED EQUAL

INSULATION: SHALL MEET ASTM C578 TYPE IV, 25PSI MIN, REF ADEC SPEC.

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BALLASTING:

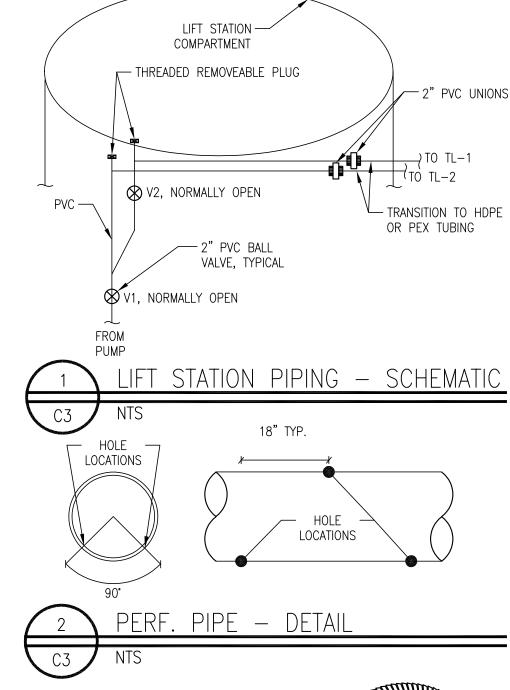
WATER - 62.4 LB/CF SOIL - 90 LB/CF CONCRETE - 150 LB/CF SEPTIC TANK: PER ST REQUIREMENTS L=9' W=5.8' D=4.3' SELF WEIGHT=300 LB

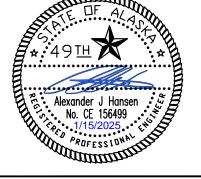
- WEIGHT OF 2' SOIL ABOVE TANK = 9,400 LB (4,700LB/FT OF COVER)
 DISPLACEMENT FOR SUBMERGED TANK = 134 CF, 1000 GAL, 8,400 LB
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 3,300 LBS OF BALLASTING IS NEEDED FOR EACH FT THE TOP OF THE TANK WILL BE SUBMERGED.

LIFT STATION: 2.5' DIAMETER GREER POLY, AREA= 4.9 SF, SELF WEIGHT=200 LB

- DISPLACEMENT PER FT = 4.9 CF, 36.7 GAL, 306 LB
- CONCRETE WEIGHT = 735 LB/FT = 62 LB/INCH
- POUR 4" OF CONCRETE INTO THE BOTTOM OF THE LIFT STATION FOR EVERY FT OF ANTICIPATED SUBMERGED DEPTH. SMOOTH CONCRETE SURFACE FOR LIFT STATION PUMP.





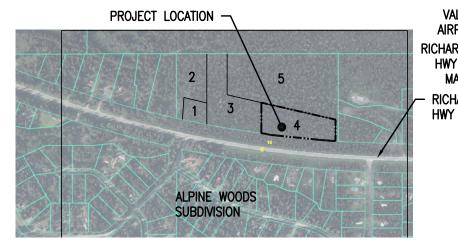


Civil★ environmental★ structural ermitting ★ design★ project management

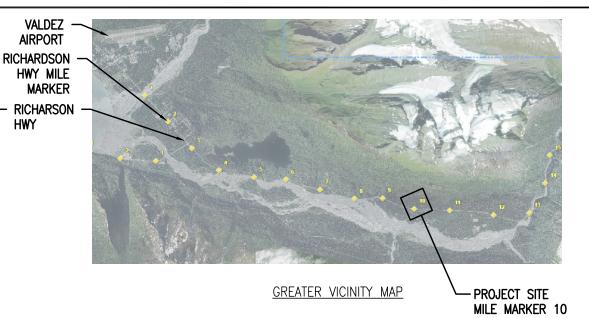
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7275 RICHARDSON HWY, VALDEZ, AK LOT 4 BLACK FOREST SUBDIVISION DESIGN PARAMETERS DATE: 1/15/2025
PROJ MGR: AH
DRAWN: AH

SHEET C3



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SITE PLAN = 80

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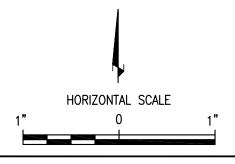
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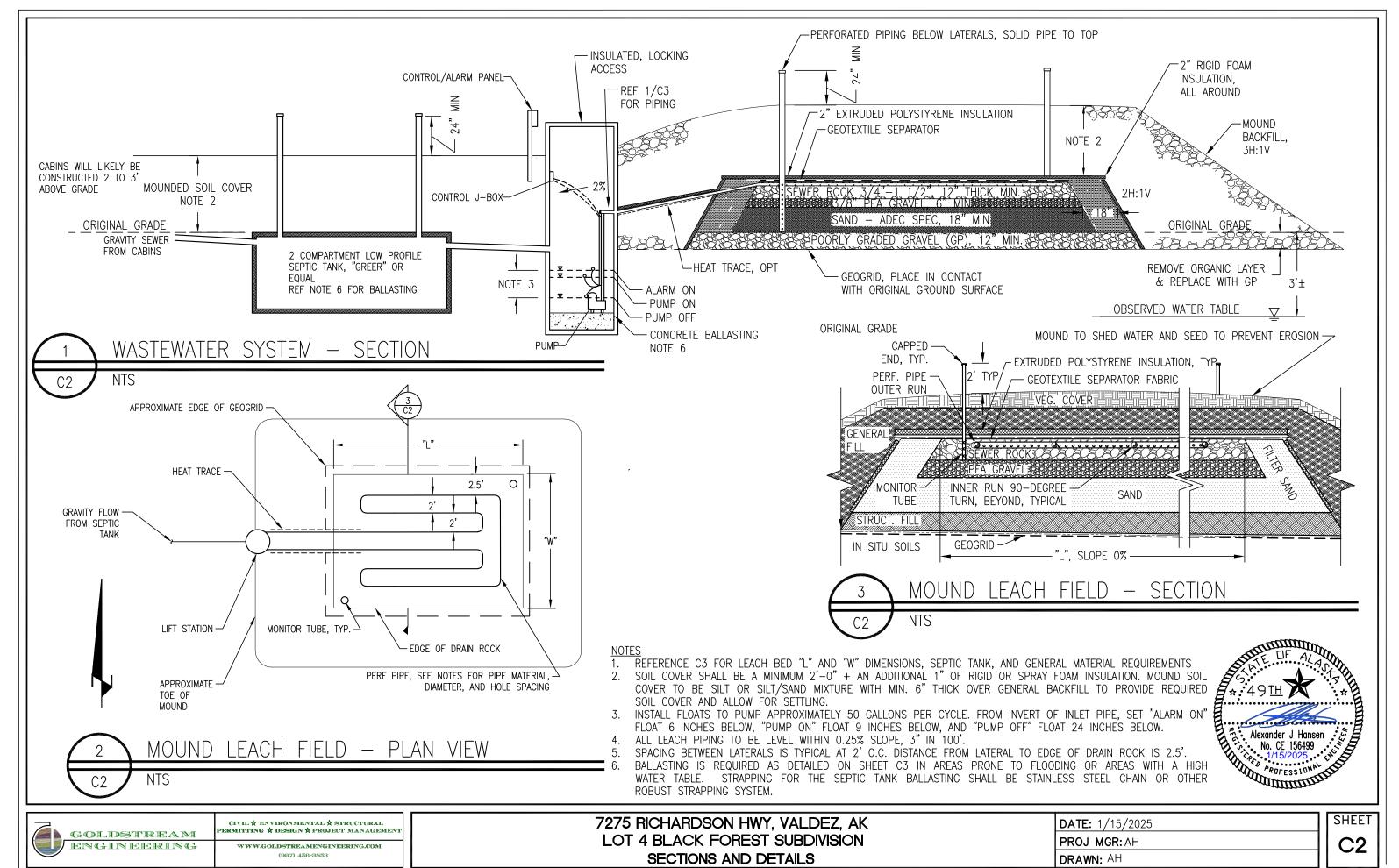
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7275 RICHARDSON HWY, VALDEZ, AK LOT 4 BLACK FOREST SUBDIVISION SITE PLAN

DATE: 1/15/2025 PROJ MGR: AH

DRAWN: AH

SHEET C₁



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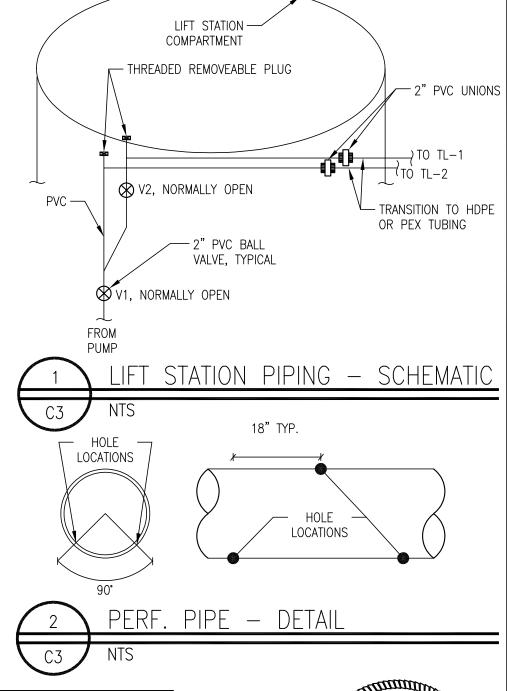
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7275 RICHARDSON HWY, VALDEZ, AK LOT 4 BLACK FOREST SUBDIVISION DESIGN PARAMETERS DATE: 1/15/2025
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SHEET C3