



February 17, 2020

City of Seattle Submission Package for Accessory Dwelling Units:

PHASE ONE

Conceptual Plans and Elevations for a Garage ADU

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This contemporary Detached Accessory Dwelling Unit is an 822 square-foot addition atop a two-car garage. Designed to be low cost and take sustainable measures, the design includes an optional 462 square-foot sod roof (see Option B). With an open and flexible floor plan, the design is customizable towards a variety of backgrounds. In a simplification of the structural system and a careful selection of materials, the design is quick to erect and conservative in cost. Including a potential for 49 standard-sized solar panels, bamboo floors, and natural ventilation, the design makes the most of the natural energy produced on most Seattle project sites. Lastly, the design boosts privacy from the primary residence to encourage the ability to lease out the unit if desired.

The categories for this DADU design are:

- Garage DADUs
- Low Cost DADUs

Low Cost

Through material selection and the option to omit the roof deck, the DADU design has the potential to be as affordable as construction costs allow.

Green Building and Design

Solar panels that power the DADU, bamboo flooring, cross ventilation, the option to use cross laminated timber as structural members, and the option to add a roofgarden (sod roof) promote sustainability. In the case of building atop of an existing garage, the existing garage materials will be retained, increasing the sustainability and decreasing the construction cost.

Privacy

Privacy is a major consideration in the DADU design, assuming that neighbors will be adjacent to the side yards of the DADU. To ensure a sense of privacy for the adjacent neighbors, large windows are supplemented by functional spaces such as the closet, bathroom, stairwell, and an art wall.

Context

The foundation for this DADU is a 2-car garage for homeowners who desire off-street parking and/or want to preserve the required parking space for the principal unit. This DADU is designed to fit within the context of dense Settle residential zoning, making a small space feel much larger. The DADU design does this through the potential for an open floor plan coupled with the expansive windows in the living area.

Culturally Responsive Design

The floor plan design for the DADU is designed to make maximum use of a livable area that totals under 1000 SF. The potential for the floor plan to be open or closed is a response that is not only culturally responsive, but also caters to functionality.

Constructibility

Being in the confines of a rectangular prism and being completely orthogonal allows this DADU ease of constructibility utilizing Cross Laminated Timber or Stick Framing construction.

CARRIAGE HOUSE DADU

Baseline -Metal Roof with No Roof Deck

01	General Requirements	general conditions	\$44,500	
02	Existing Conditions	demolition	\$5,000	
03	Concrete	new concrete	\$4,000	
05	Metals	structural steel, railings	\$7,500	
06	Wood, Plastics, Composites	framing, siding, soffits, interior millwork	\$60,000	
07	Thermal & Moisture Protection	roofing, WRB, flashing, gutters, insulation	\$15,000	
08	Openings	windows & doors, shower doors, garage doors, door hardware, skylight	\$28,000	
09	Finishes	drywall, tile, painting	\$29,500	
10	Specialties	closets , bath hardware	\$3,000	
11	Equipment	appliances, AV	\$5,500	
12	Furnishings	cabinets, countertops, blinds	\$29,500	
22	Plumbing		\$9,500	
23	HVAC	heat pump	\$12,000	
26	Electrical	line & low volt	\$19,500	
31	Earthwork	excavation, grading	\$5,000	
32	Exterior Improvements	retaining wall, walkway, landscaping	\$7,500	
33	Utilities		\$4,000	
			subtotal	\$289,000
			contractor fee 10%	\$28,900
			tax 10.1%	\$32,108
			total	\$350,008

Option - Roof Deck

01	General Requirements	general conditions	\$7,500	
05	Metals	railings	\$10,000	
06	Wood, Plastics, Composites	framing	\$13,000	
07	Thermal & Moisture Protection	deck membrane, break metal, flashing	\$14,000	
08	Openings	hatch	\$7,000	
09	Finishes	painting, finishes	\$5,000	
26	Electrical	lighting & outlets	\$5,000	
			subtotal	\$61,500
			contractor fee 10%	\$6,150
			tax 10.1%	\$6,833
			total add	\$74,483

Major Materials

Concrete - Foundation

Smooth surface concrete garage floor

Bamboo - Living area flooring, excluding kitchen

Cork - Kitchen flooring

Ceramic Tile - Bathroom flooring

Corrugated Metal - Roofing

(Option B): Sod Roofgarden

Stained black cedar - Siding

Cross Laminated Timber framing system thru-out

(Option B): Standard Stick Framing system thru-out

Low-E Insulated Glass - Glazing

Metal - Garage door frame w/diffuse glass panels

Operable Skylight for cross ventilation - (1) Light

Solar Tubes - Off the grid interior lighting

Solar Panels - Off the grid electricity with battery storage capability

Mechanical Systems

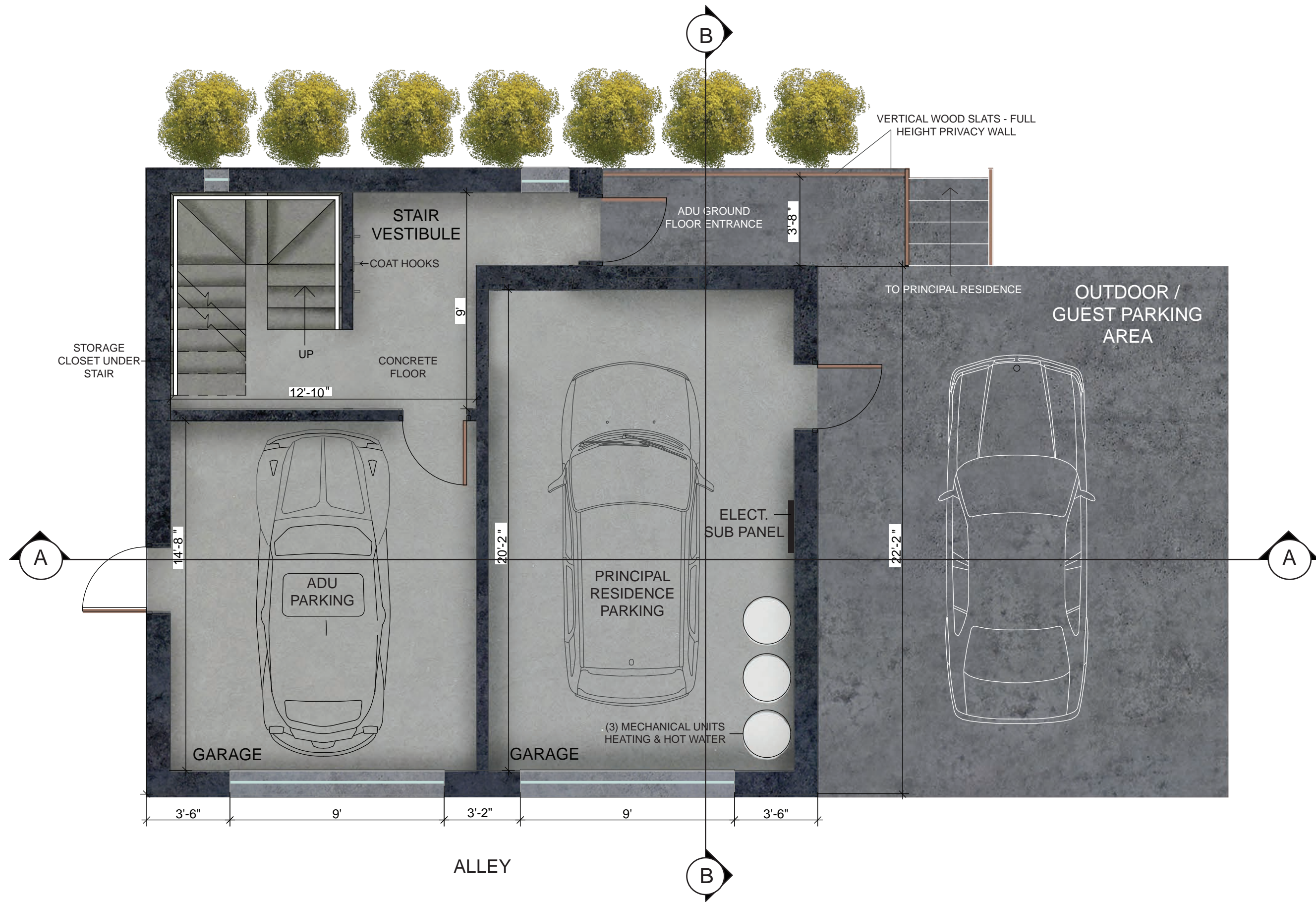
Electric power for all systems

Ductless Mini Split System (HVAC)

(Option B): Radiant Floor heat (In addition to whole house ventilation system)

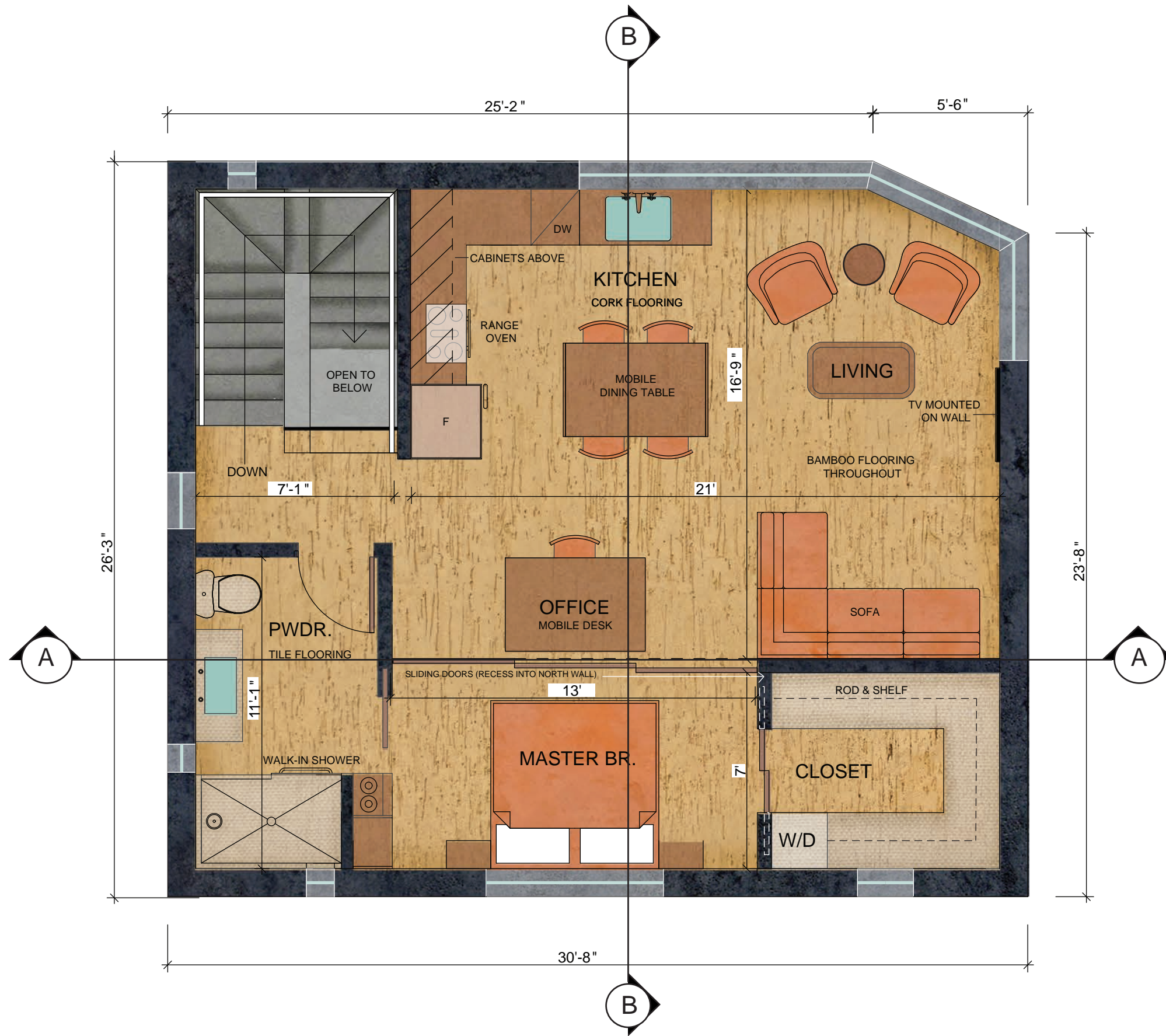
Natural Ventilation

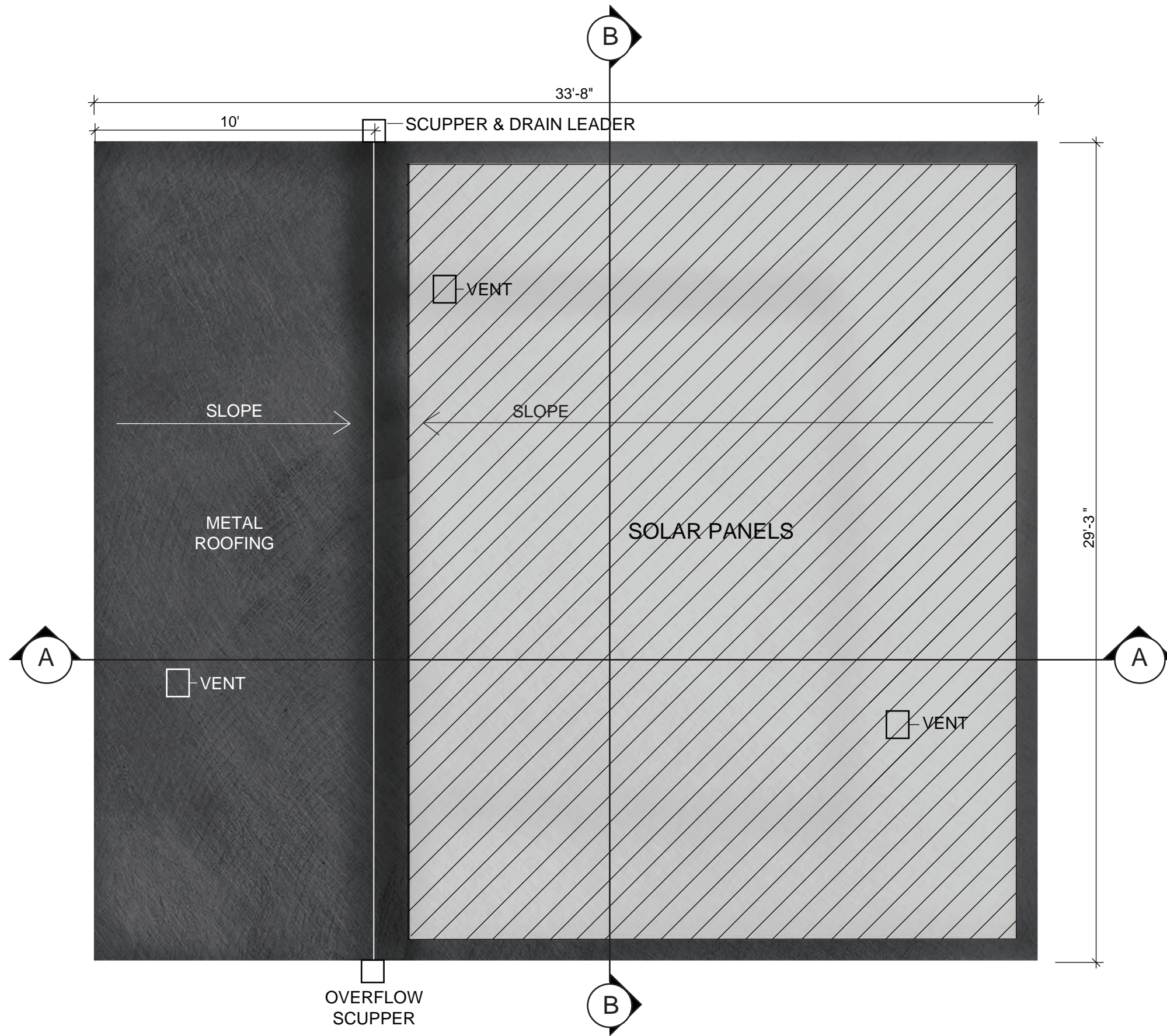
Solar Panels (Potential for 49 standard 35"x65" 30kWh/mo. panels without roof deck, potential for 24 standard 35"x65" 30kWh/mo. panels with roof deck) in conjunction with Solar Battery and Transformer



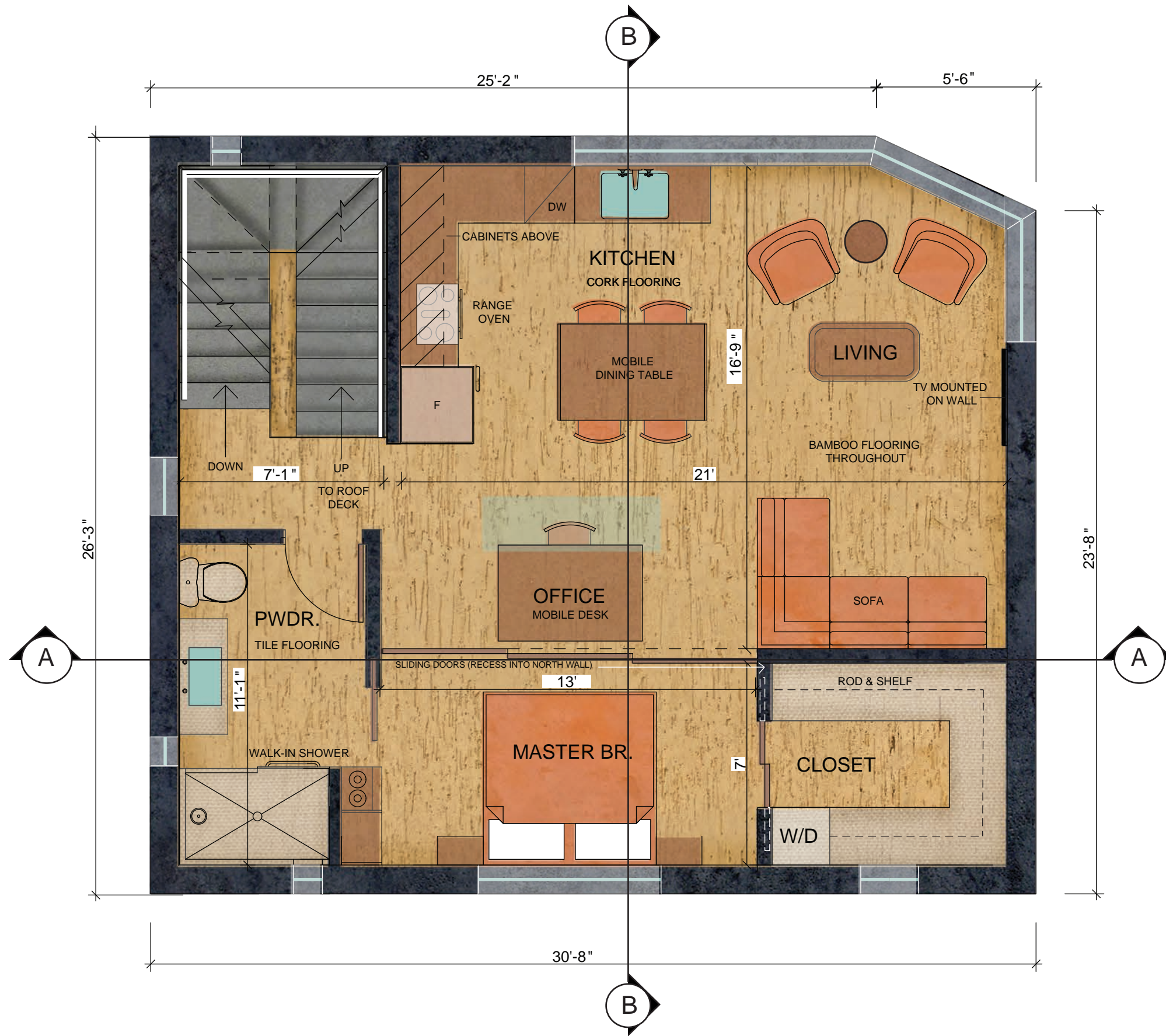
GARAGE DADU
 FIRST PHASE: CONCEPTUAL PLAN DESIGN @ GROUND LEVEL GARAGE
 02/17/20

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













SEE SECTIONS A & B FOR
ELEVATION HEIGHTS

DADU
DESIGN DEVELOPMENT
02/17/20

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



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DADU
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EAST ELEVATION - OPTION A
SCALE: 1/4" = 1'-0"



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SOUTH ELEVATION - OPTION A
SCALE: 1/4" = 1'-0"



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DADU
DESIGN DEVELOPMENT
02/17/20

NORTH ELEVATION - OPTION B (ROOF DECK)
SCALE: 1/4" = 1'-0"



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DADU
DESIGN DEVELOPMENT
02/17/20

SOUTH ELEVATION - OPTION B (ROOF DECK)
SCALE: 1/4" = 1'-0"



STAINED WOOD SLAT GAURDRAIL

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