



## I. BUILDING PERMIT APPLICATION DOCUMENTS AND/OR INFORMATION

This checklist has been designed to provide a brief overview of the City of Brier submittal requirements for all written documentation. For a comprehensive list of requirements, please review the remainder of this guide. Please note that applications missing one or more of the items listed are considered incomplete and may delay the permit review process. **Initial** each box under the Applicant heading on the checklist to confirm that items are included in your submittal. Staff will check off each box when the item is confirmed to be included in the submittal package.

APPLICATION DOCUMENTS			
Staff	Applicant	Qty.	Documents Required
		1	Completed and signed Building Permit Application
		2	Submit copies of site plan (1"=20' scale) <b>See Section II for more info</b>
		2	Submit full plan sets (24" x 36") <b>See Section II for more info</b>
		2	Architect/Engineer of Record & stamp – If prepared by an Architect/Engineer ALL SHEETS of calculations must be stamped <b>See Section II B.8.A for more info</b>
		2	Structural Calculations
		2	Truss Engineering (specifications)
		2	Manufactured beam calculations
		2	Manufactured floor joist layout (If using)
		2	WA State Energy Code Compliance forms
		2	(A.) Window Glazing Schedule
		2	(B.) Heat Load Calculations
		2	(C.) Energy Credits
		1	Geotechnical Design Report (If required)
		1	Copy of Washington State Contractor's License
		1	Land Disturbing Activity Application (If applicable)
		—	Plan review fees are due at time of submittal, remaining fees paid at permit issuance
		1	Flood Cert. based on construction documents <b>(If in SFHA)</b>
		1	Completed "Flood Plain Development" application <u>if project located within SFHA (Special Flood Hazard Area)</u>

## II. PLANS AND DRAWINGS

Submit by emailing all applications and plans to [buildingpermits@ci.brier.wa.us](mailto:buildingpermits@ci.brier.wa.us). Send as PDF documents, we do not open online storage links.

**A. Format:** All drawings submitted shall conform to the following requirements:

1. **Title Block** – Locate on right hand margin and provide:
  - a. Project/Owner name

- b. Drawing title and drawing number
- c. Revision block
- d. Project Address
- e. Parcel Number
- f. Name, address, and phone of firm or contact responsible for the drawing.

## **2. Scale(s)**

- a. Unless site size dictates a different scale, site plan (civil) drawings shall be 1"=20'
- b. Architectural plans shall be 1/4"=1' unless impractical

## **3. North arrow** – all drawings shall include a north arrow

# **B. Description of submittal Drawings**

## **1. Site Plan** (See example pg. 6)

- a. Indicate scale by bar graph. (For Floodplain requirements list vertical datum using NAVD 88)
- b. Property lines: Show the location and dimension.
- c. Easements: Show the location for all existing and proposed utility, open space, drainage, native growth protection and access easements and/or private roads; draw to scale and accurately dimension. Show all Tracts.
- d. Existing and proposed structures: Show location, dimension and use of all existing and proposed buildings and structures on the site; show distances to property lines from closest point including projections.
- e. Zoning code setbacks: Show front, side, rear and street setbacks. Designate which are the front, side, and rear property lines.
- f. Rockeries, block walls and fences: Indicate location, length and height.
- g. Streets and alleys: Show location, name or number of all streets and alleys adjacent to the site. Show edge of pavement, curb, gutter, sidewalk, street trees, and any other road appurtenances.
- h. Driveway approach, Driveway and parking: Show location of onsite parking and driveway, width, type (asphalt, concrete, or gravel), and finished slope of driveways.
- i. Adjacent R.O.W.
- j. Spot elevations and topography: Show surface elevation at each corner of the site and at the corner of structure base. Show existing and proposed contours at 5' intervals (contour lines should be light toned).
- k. Footings on or adjacent to slopes must comply with International Residential Code R403.1.7. Indicate all existing and proposed retaining structures and/or rockeries with top and bottom elevations. Show maximum heights above and below grade.
- l. Show where all roof, footing, driveway, and other drains will be connected and/or disposed of. Footing and roof drains must run separately until the point of connection to the infiltration system. Show design and calculations for size.
- m. Erosion sedimentation plan may be included on copies of site plan. Show how sediment and erosion shall be kept from leaving the building site.
- n. Show demolition and additions, if applicable. ***(Separate Demolition permit required).***
- o. Show existing trees to scale, noting type and size, and trees to be removed, if applicable.  
**Significant Tree Removal requires a separate permit)**
- p. Show architectural features that project into the setback, including chimneys, flues, belt courses, sills, pilasters, ornamental features, cornices, eaves, gutters, dormer extensions, greenhouse or bay windows, and similar features. Show Decks, porches, patios, walkways, and other minor structural elements that may be allowed to intrude into a setback; show the distance to the property line and height of these elements.
- q. Show dimensions of garages and all other proposed parking areas. Indicate proposed tandem parking.

- r. Impervious Surface: show the locations and dimensions of all impervious surfaces, including driveways, walkways, decks and sheds. Show total lot size, total impervious surface area (new and existing).
- s. Show all proposed and existing utilities, including the locations of sewer, water, electricity and gas lines, and any underground storage tanks, drain fields and reserve drain field areas.
- t. If present, critical areas on site, adjacent to or within 200 feet (such as wetlands, slopes, top and toe of slope, rivers, streams, etc.)
- u. If present, any surface waters within 200 feet of property.
- v. Show Building height and lot grade Calculations.
- w. Show lot coverage calculations.

## **2. Floor Plan (must match the orientation of the site plan)** (See example pg. 8)

- a. Give square footage for each floor, including decks and garages.
  - 1. Ex. Building Data: (Square footage breakdown for this project)
    - a. Living area \_\_\_\_\_ No of Stories \_\_\_\_\_
    - b. Deck \_\_\_\_\_ Lot Sq. Ft \_\_\_\_\_
    - c. Garage \_\_\_\_\_ % of lot cover \_\_\_\_\_
    - d. Carport \_\_\_\_\_ Bldg. Height \_\_\_\_\_
    - e. Unfinished Basement \_\_\_\_\_
- b. Floor layout: Show arrangement of walls, note proposed use and dimensions of all rooms; show stairs, hallways, restrooms, and decks.
- c. Windows and doors: Show location and dimensions of all windows, doors and skylights and indicate opening direction and size. Indicate header sizes over openings.
- d. Beam locations, materials, spacing and sizes (calculations for manufactured beams).
- e. Fixture location: Show location of hot water heater, heating unit, fans, smoke detectors, bathroom fixtures, mechanical equipment, etc.
- f. Identify floor joist sizes, directions of run, spans and spacing (provide separate sheet(s) with layout if using manufactured floor joists).
- g. Ceiling joists, floor joists, manufactured trusses or roof rafter sizes, directions of run, spans and spacing (provide truss specs if using manufactured trusses).
- h. Location of plumbing/heating fixtures and equipment.
- i. Shear wall locations with foundation, hold-down, nail spacing & other related requirements.
- j. Show locations for all switches, outlets, receptacles, and electrical appliances.

## **3. Elevations** (See example pg. 9)

- a. Show elevations from north, south, east and west; provide finished floor level for each floor; show existing and proposed grades; show maximum building height; show maximum site slope.
- b. Roof: Show roof overhangs and chimney clearances from roof. Indicate pitch of roof.
- c. Siding: Note exterior siding and roof covering.
- d. Openings: Show doors, windows, skylights, sliders or other type of openable vents in windows.
- e. Decks and porches: Indicate height of guardrails and spacing of intermediate railing. Show rise/run of stairs with handrail grasp dimension and height above nosing of stair tread.

## **4. Door and Window**

- a. Show door size and type for doors between the garage and dwelling.
- b. Show window size, opening and direction and size.
- c. Show bedroom egress window location(s), clear open size, sill height, and type of opening, i.e., slider, casement, etc.
- d. Show location of safety glazing on windows and doors.

## **5. Foundation** (See example pg. 7)

- a. Foundation Wall: Show foundation plan, shape, all dimensions; include maximum wall height(s) and all connections. Provide typical foundation sections at various points around the foundation system.
- b. Show typical foundation and floor section with all materials labeled; show size and spacing of all members; all dimensions, wall thickness, reinforcing bar size and spacing, reinforcing bar.
- c. Posts and footings: show location and size of beams, posts, interior footings and their dimensions and connections.
- d. Crawl spaces: If crawl space is included, show location and size of all vents, access size and location.
- e. Floor Joists: Show floor joist size, spacing, direction, support, connections, blocking, etc.
- f. Other Spaces: Show and label space within foundation (i.e. basement, garage, recreation room)
- g. Retaining Walls: Retaining structures in excess of 4' in height (measured from bottom of footing to top of wall) require engineered design with calculations. Design must be stamped by a Washington State Engineer.
- h. Clearance, footing depth below grade, clearance between grade and sill plate, maximum wall height, connections, anchor bolt size and spacing, connection between floor diaphragm and foundation, slab thickness, slab or floor insulation, drainage for foundation retaining wall.
- i. Engineered Foundation: Stamped engineered plans with calculations are required for non-conventional foundation systems and/or sites with special soils conditions.

## **6. Roof, Deck and Floor Framing Plans**

- a. Roof, Floor and Deck Joists: Show joist size, spacing, direction, support, connections, blocking, etc.
- b. Show all connection details, including post-beam, post-footing, collar tie, etc. Note: Roof collar tie details require engineered calculations to be submitted.
- i. Size, lumber species, grade, spacing and spans of all framing members. Specify panel identification index for sheathing.
- c. Clearly show bearing/shear walls and specify nailing schedule.
- d. Show materials and method of connection of all posts to beams.
- e. Call out any special connection method in detail.
- f. Designs out of the scope of the conventional framing provisions of the International Residential Code shall be designed and stamped by a Washington State Registered Professional Engineer.
- g. Show lateral bracing in compliance with IRC R602.10, or provide details on the plans, designed and stamped by a WA licensed professional engineer. The engineer's analysis of seismic and/or wind loads must accompany the design. Plans shall detail all building connections for all designed lateral load connections.

## **7. Architectural Cross Sections and Details** (See example pg. 10)

- a. Provide framing section: show floor, wall, roof framing members size and spacing; show insulation and all materials used on interior.
- b. Show typical roof section with all materials labeled; indicate size and spacing of all members; include all dimensions, venting, insulation, and connections.
- c. Complete detailed cross sections of footing/foundations. Show backfill to top of interior footings.
- d. Mud sill and anchorage material (cedar or pressure treated).
- e. Post to beam connections.
- f. Floor construction--show required clearances of earth to wood or specify treated lumber.
- g. Wall construction including exterior and interior wall covering and insulation.

- h. Ceiling construction (size and spacing of joists or pre-manufactured truss spacing) and insulation.
- i. Components of roof covering.
- j. Show compliance with ventilation requirements for attic space.
- k. Full height section through fireplace and chimney, including reinforcing materials.
- l. Full height section through stairways including dimensions of riser and tread framing materials; riser height, tread width; handrail height above tread nosing; and clearance to ceiling above the stairs, include framing anchor connection of stringer to floor framing, and grasp dimensions, distance between any intermediate rails, fire blocking, minimum head room and landing size. Also specify a minimum one-hour fire protection for usable space under stairs.

## **8. Structural Notes**

- a. All pages of the structural construction documents and revisions to those documents shall bear the seal and stamp of the responsible professional engineer.
- b. Submittals including construction documents and structural calculations may be reproductions of the original signed and sealed documents.
- c. Specify all design load values, including dead, live, snow, wind, lateral retaining wall pressures and soil bearing values.
- d. Specify minimum design concrete strength, concrete sack mix, and reinforcing bar grade.
- e. Specify the grade and species of all framing lumber.
- f. Specify the combination symbol (strength) of all GLU-LAM beams with calculations.
- g. Specify metal connectors, including joist hangers, clips, post caps, post bases, etc.

## **9. Lateral (Seismic) Design**

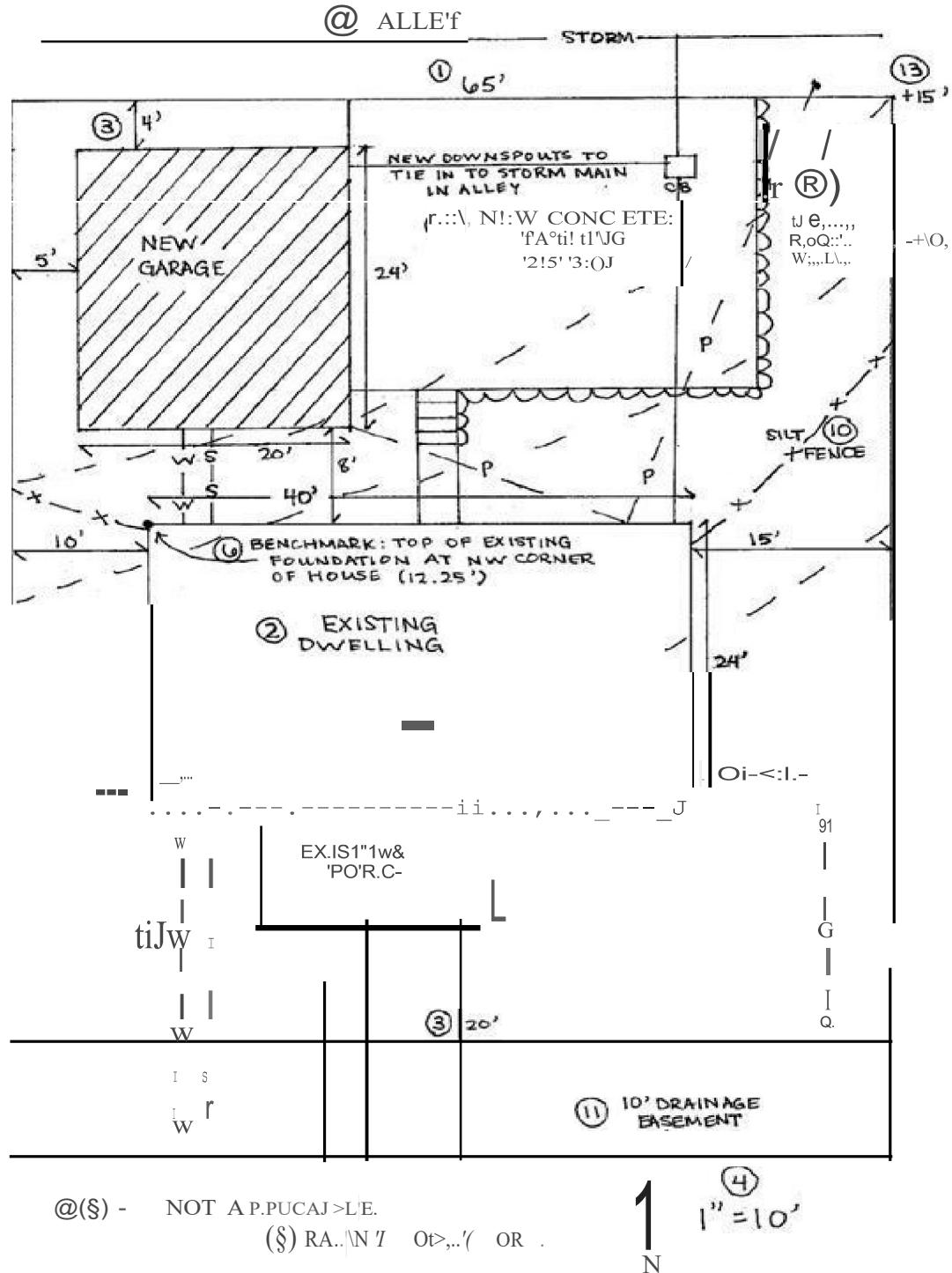
- a. Provide lateral Wind and Seismic calculation comparison.
- b. Provide complete lateral calculation analysis for controlling wind or seismic load.
- c. Provide details showing complete load path transfer at roof perimeter, interior shear walls, cantilevered floors, offset shear walls, and ceiling diaphragm to shear walls (if used).
- d. Engineer's stamp required on drawing and calculations.
- e. Provide shear wall schedule noting nail spacing, blocking, bolts, top and bottom plate nailing and shear wall capacities on the plans.
- f. Locate hold down straps on plan.
- g. Provide hold down details for various conditions.

## **10. Energy Code Compliance**

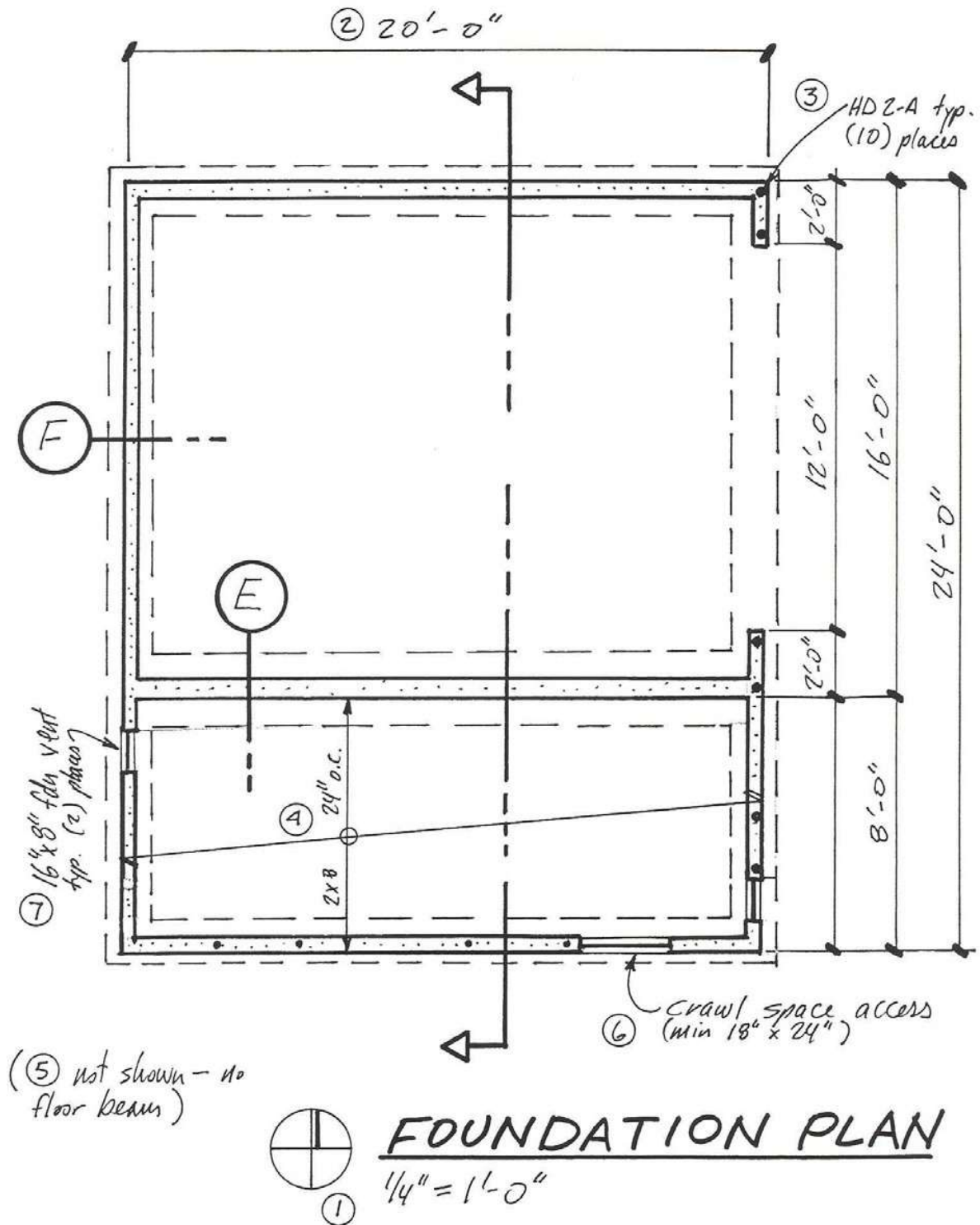
Show insulation U-values/R-values in appropriate locations on architectural sections and u-value of windows and skylights.

PLEASE REFER TO THE **CURRENT ADOPTED EDITION** OF THE INTERNATIONAL RESIDENTIAL CODE, CITY OF BRIER CODE, AND OTHER INFORMATION BROCHURES FOR VARIOUS CODE REQUIREMENTS.

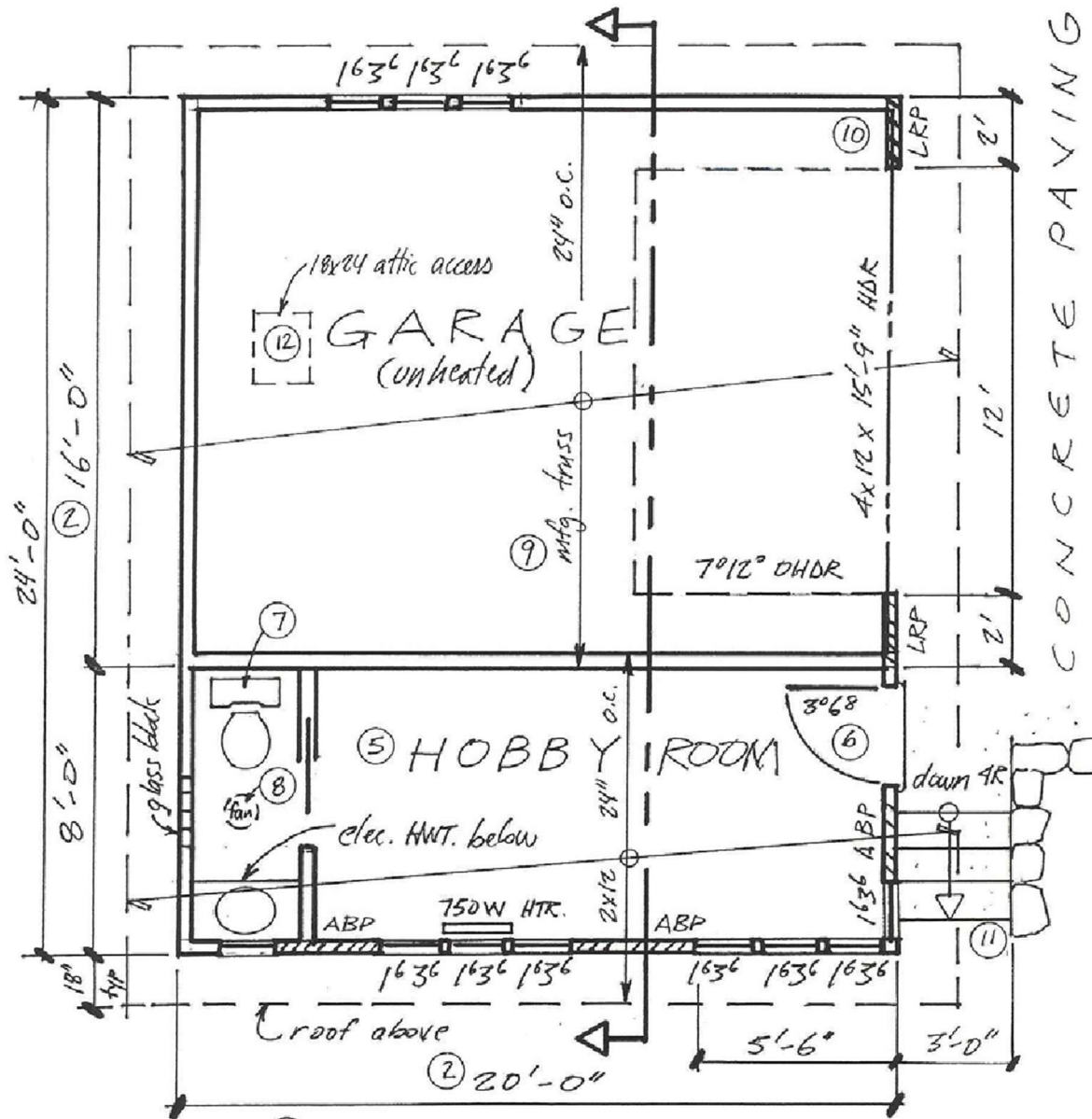
# EXAMPLE SITE PLAN



## EXAMPLE FOUNDATION PLAN



## EXAMPLE FLOOR PLAN



Floor area: (3)

Garage 16'x20' = 320 #

Room 8'x20' = 160

480 #

(13) not shown - see key plan

(14) not shown - all new construction



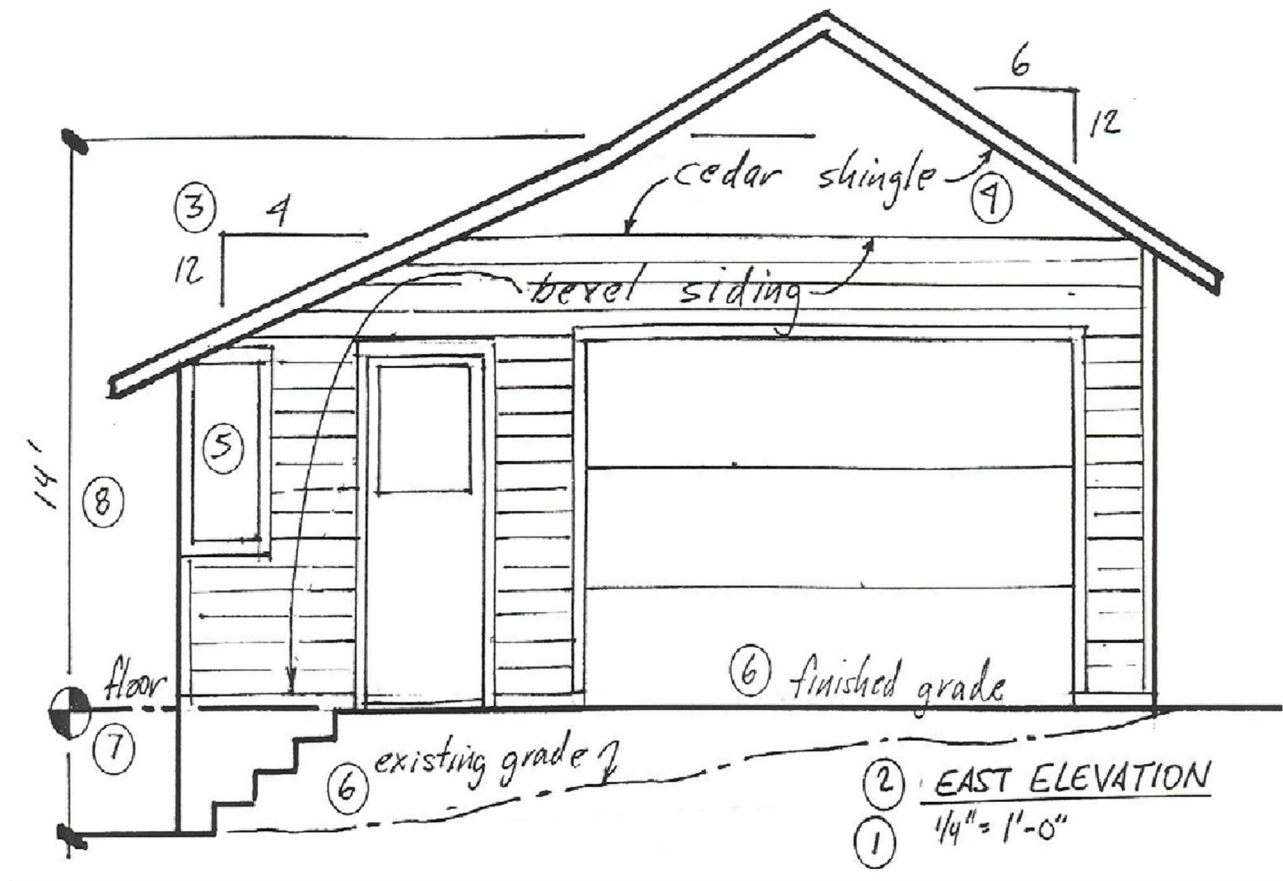
**FLOOR PLAN**

1/4" = 1'-0"

(A)



## EXAMPLE ELEVATION PLAN



## CROSS SECTION EXAMPLE

