

Residential **SMOKEHOUSE & Similar Structures** Checklist & Guide for a Building Permit

(Per the 2015 IRC as amended by St. Louis County
Ordinances for 1-& 2-Family Dwellings and Townhouses)



SAINT LOUIS COUNTY
Transportation and Public Works

This **Smokehouse & Similar Structures Checklist** is based on St. Louis County's (SLCO) policies, construction codes amended and adopted by ordinance. See list below. It is not a substitute for those codes and ordinances, but serves as a guide to reading them. More information and explanation is provided in commentaries and interpretations published by St. Louis County and acknowledged code organizations.



List of Applicable Codes and Ordinances:

2015 International Residential Code (IRC) & Ordinance #27,654-Ch.1116 ("R" "G", "N", and "M" references and Appendix K - Sound Transmission).

2015 International Building Code (IBC) & Ordinance #27,654-Ch.1116\5 ("B" references).

For inquiries regarding the information provided in this guide, please contact:

St. Louis County Permit Processing _____ (314) 615-5184

St. Louis County Zoning Review _____ (314) 615-3763

St. Louis County Building Plan Review _____ (314) 615-5485

Right-of-Way Owner

State _____ (888) 275-6636

County _____ (314) 615-8517

Municipality _____ Call the project site's Municipality

St. Louis County's Municipal Contracts Matrix shows those municipalities that currently contract for its Code Enforcement services. The Matrix is on our web site at <https://stlouiscountymo.gov/st-louis-county-departments/transportation-and-public-works/residential-building/>

For the electronic plan review, scan QR code or visit us online at <https://stlouiscountymo.gov/st-louis-county-departments/transportation-and-public-works/electronic-plan-review/>



Sections from the Codes, their Referenced Standards, and St. Louis County Ordinances, are shown at ends of statements and are *italicized* in parentheses (.).

NOTICES Regarding Permits



- The applicant (property owner or the owner's authorized agent) is responsible for contacting those agencies that may have legal oversight separate from St. Louis County. Where their requirements conflict, the most restrictive shall govern. Contact them before starting any work approved under a permit issued by St. Louis County. Such agencies may include:
 1. The project site's Municipality - *submit their site plans approval with a building permit application.*
 2. Subdivision Trustees - *may have restrictions, or may prohibit smokehouses or similar structures.*
 3. The Local Fire Protection District - *may only allow a smokehouse of non-combustible materials.*
- Building permit issuance does not authorize construction access to the work site. If a driveway does not exist or cannot be used, the owner/contractor must apply for a permit with the owner of the Right-of-Way to construct somewhere else a temporary entrance into the work site. Provide item 1 or 2 below on the site plan:
 1. Draw existing driveway with an arrow on it pointing into the lot and labeled "construction entrance";
OR
 2. Show and label an alternate access with an arrow pointing into the lot and labeled "construction entrance". Note on the site plan: "A separate special use permit shall be obtained from the street right-of-way owner for a construction entrance before any construction accesses the work site".
- **The Plan Reviewer** may determine the proposed work, construction, or conditions require additional drawings and information be submitted to Code Enforcement-Plan Review for review, beyond the minimum submittal requirements noted in this Checklist.

Submittal Requirements: Construction-Ready Drawings, Their General Notes of Construction, & Zoning



This checklist provides the basic submittal documents required for a permit to construct a smokehouse or similar structure on residential property in St. Louis County's jurisdiction. A smokehouse area shall be **maximum 25 sq. ft.** and shall **not be taller than 8'-0"** measured from the highest point of its roof.

Submit the following as an **electronic** set for sheds in Unincorporated St. Louis County, and in those Municipalities contracting with St. Louis County for Residential Code Enforcement Services. Scale, dimension, and label drawings. Items in brackets [.] are applicable Code and Ordinance sections.

- **Electronic Building Permit Application** filled out, signed and dated by the applicant.
- **Site Plans** with the following (*B107.2.1; SLCO Policy*):
 1. **For properties in Unincorporated St. Louis County:**
 - a. Lot lines, North direction arrow, lot number and subdivision name. Note street(s) adjoining lot.
 - b. Existing dwelling and other structures, like retaining walls. Label each by their function.
 - c. Location and extent of any septic system and/or well existing on the lot.
 - d. The proposed smokehouse location, dimensioned perpendicular to the smokehouse from lot lines and other structures. Minimum distances required are as follows. However, be aware zoning regulations may require setbacks that are more restrictive:

- 1) **15'-0" minimum from property lines and other structures on the lot** for:
 - a) A completely non-combustible smokehouse (example: entirely of metal).
 - b) A masonry-wall smokehouse with combustible roof materials.
 - c) * Measure the distance from a street centerline where a property line adjoins a street.
 - 2) **50'-0" minimum from property lines and other structures on the lot** for:
 - a) A smokehouse of combustible materials (example: wood wall and roof).
 - b) * Measure the distance from a street centerline where a property line adjoins a street.
 - e. Show with arrows water run-off direction(s) and show and label existing swales. Smokehouse location shall not obstruct swales or run-off.
 - f. **Notice:** St. Louis County may note on the site plans: "Siltation and erosion control measures must be provided to prevent siltation/erosion from leaving the construction site".
2. **For properties in a Municipality**, submit site plan(s) signed, dated and marked "Approved", and submit the municipality's approved zoning receipt.
- **Architectural/Structural Drawings:**
 1. **Foundation* or Pier Plan**, scale 1/4" = 1'-0" typical;
 2. **Floor Plan**, label and dimension pit, dimension its distance to exterior walls, scale 1/4" = 1'-0" typical;
 3. **Exterior Building Elevations** Front, Rear and Sides, with dimensioned heights, scale 1/4"=1'-0" typ.;
 4. **Wall/Roof Assembly Section**, from footing to roof cover and from outside to inside. Dimension roof projection. Show roof framing, sheathing, cover, and any overhang, scale 1/2" to 3/4"=1'-0'.
 5. **Construction/Assembly Section Details**, scale 1/2" to 1-1/2"=1'-0'.
 - **Manufacturer's Installation Instructions or Manual:**
 1. Submit an **electronic** set for a pre-fabricated structure proposed as a smokehouse;
 2. Submit the **electronic** Instructions in addition to the required architectural/structural drawings listed above.
 - **See the example drawings at the end of this checklist for reference** in completing your own project-specific drawings. The lists below are Code and Ordinance requirements for a residential smokehouse that are to be provided in your drawings and notes.

Design, Construction & Finish Requirements



The following requirements must be provided in drawings submitted with the building permit application.

Usage

- Provide a note on the plans that effectively states 'the food prepared and cooked in the smokehouse will be only for the family living on the premises.

Maximum Size

- Show and dimension in the drawings the smokehouse with an area of **25-sq. ft. maximum** and **not taller than 8'-0"** measured from the highest point of its roof.

Foundation & Slab

- Provide a continuous concrete foundation to upon which exterior walls may be supported. The foundation may be a turned-down edge 6"-8" thick and extending 8" above grade and at least 12" below grade (*R403.1; R403.1.4; SLCO Policy*).
- Provide a concrete slab minimum 3-1/2" thick that may extend into a turned-down edge at the perimeter. Other approved, solid and non-combustible materials may be proposed (*R506.1*).

- For a smokehouse of combustible construction, provide in the floor slab center 1 of the following:
 1. A non-combustible curbed area or pit that is maximum 24"x24" and minimum 8" deep to contain the charcoal, wood chips, etc. used for smoking/cooking the food.
 2. A metal receptacle having equivalent maximum/minimum dimensions.
- Show and note anchorage for the walls to the concrete turned-down edge or other approved support base. Provide a section detail that shows and labels the anchorage method proposed.

Wall & Roof Construction

- Show and label in drawings wall and roof construction materials, sizes, fastening and connections that shall be stable regarding wind and snow loads.
- Show and label in the section drawings the wall and roof assembly materials proposed. Where studs are proposed, note their size and on-center spacing.
- Wood wall and roof frame assemblies should be fastened as noted in 2015-IRC Tables R602.3(1) - R602.3(4)
- Provide weather-resistant exterior materials for the walls and roof and show and label the materials used in the elevation and wall/roof section drawings (*R703.1*).

Roof Frame Structure & Assembly

- Show in plans the rafter span direction and on-center spacing; note rafter dimensions, species, grade.
- Rafter size and spacing shall support a 20-lbs. psf snow load and roof materials dead load (*R301.4; R301.6*).
- Show and label the material and size of the roof sheathing and of its weather-resistant cover.
- Show and note roof wood planks or wood panel sheathing and fasten in accordance with 2015-IRC Tables R602.3(1) - R602.3(3).
- Show and note roof slope in the elevations and wall section.

Roof Drainage

- Roof drainage may discharge onto flat areas like lawns, as long as the water flows away buildings and adjoining property and does not produce a nuisance. Surface water drainage shall be directed to an approved water course or shall be piped to a storm drain (*R401.3; SLCO Policy*).

Doors

- Show and note in plans and elevations a metal access door and its dimensions, required on a non-combustible or masonry-wall smokehouse.
- Show and note in plans and elevations a wood or metal door and its dimensions, allowed on a wood structure smokehouse.
- Note in the drawings the lock type provided on the smokehouse access door. The lock is required to prevent unauthorized entry.

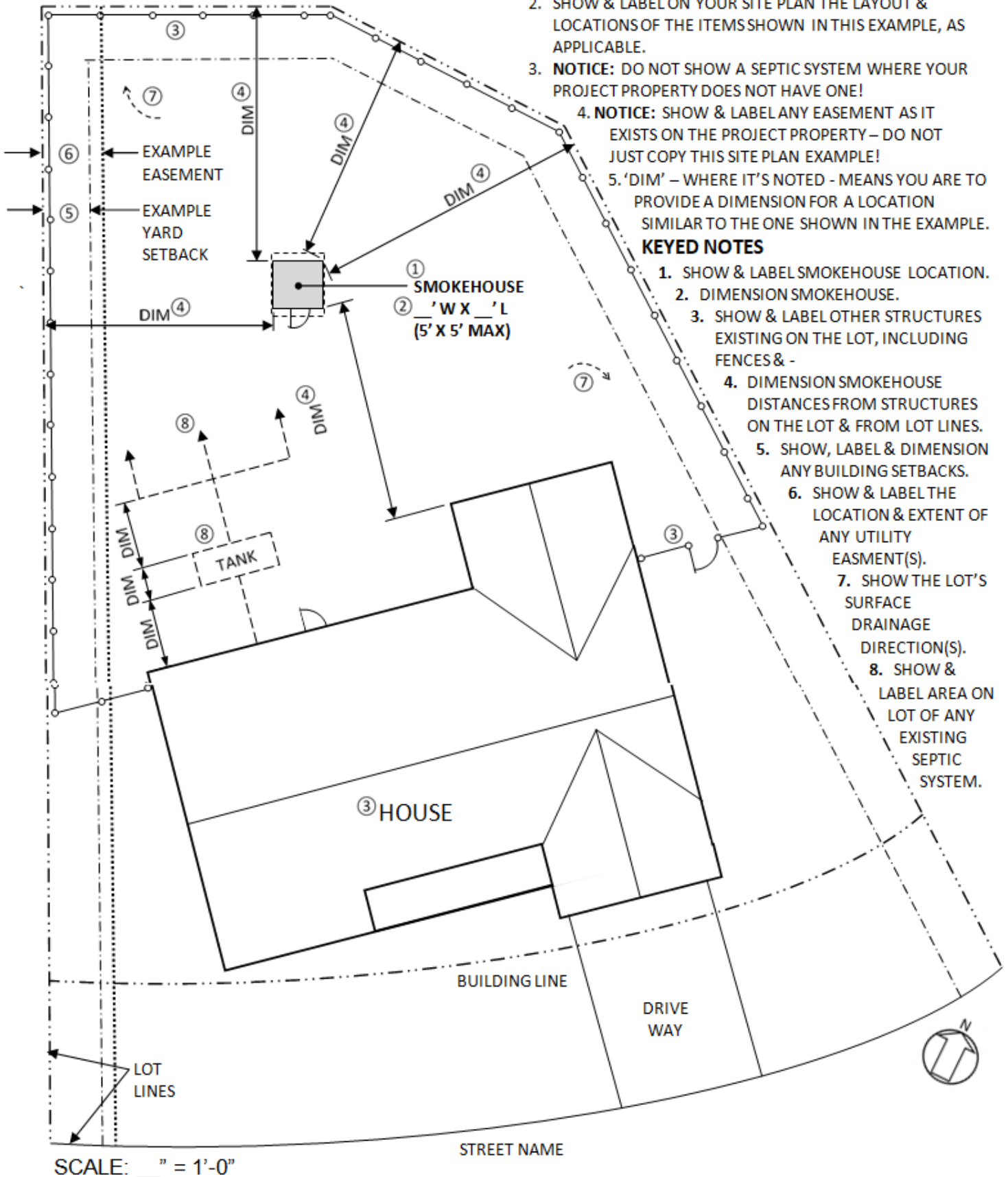
Notice: This Checklist's requirements apply to most simple **Smokehouses** on residential properties. However, the Building Plan Reviewer may determine the new work shown in the drawings requires additional information be provided for compliance with St. Louis County requirements that are in effect at the time this Checklist was last updated. St. Louis County Code Enforcement updates its construction codes every few years.

INSTRUCTIONS

1. DRAW YOUR SITE PLAN TO A SCALE. PROVIDE AN ARROW THAT SHOWS THE DIRECTION OF NORTH.
2. SHOW & LABEL ON YOUR SITE PLAN THE LAYOUT & LOCATIONS OF THE ITEMS SHOWN IN THIS EXAMPLE, AS APPLICABLE.
3. **NOTICE:** DO NOT SHOW A SEPTIC SYSTEM WHERE YOUR PROJECT PROPERTY DOES NOT HAVE ONE!
4. **NOTICE:** SHOW & LABEL ANY EASEMENT AS IT EXISTS ON THE PROJECT PROPERTY – DO NOT JUST COPY THIS SITE PLAN EXAMPLE!
5. 'DIM' – WHERE IT'S NOTED - MEANS YOU ARE TO PROVIDE A DIMENSION FOR A LOCATION SIMILAR TO THE ONE SHOWN IN THE EXAMPLE.

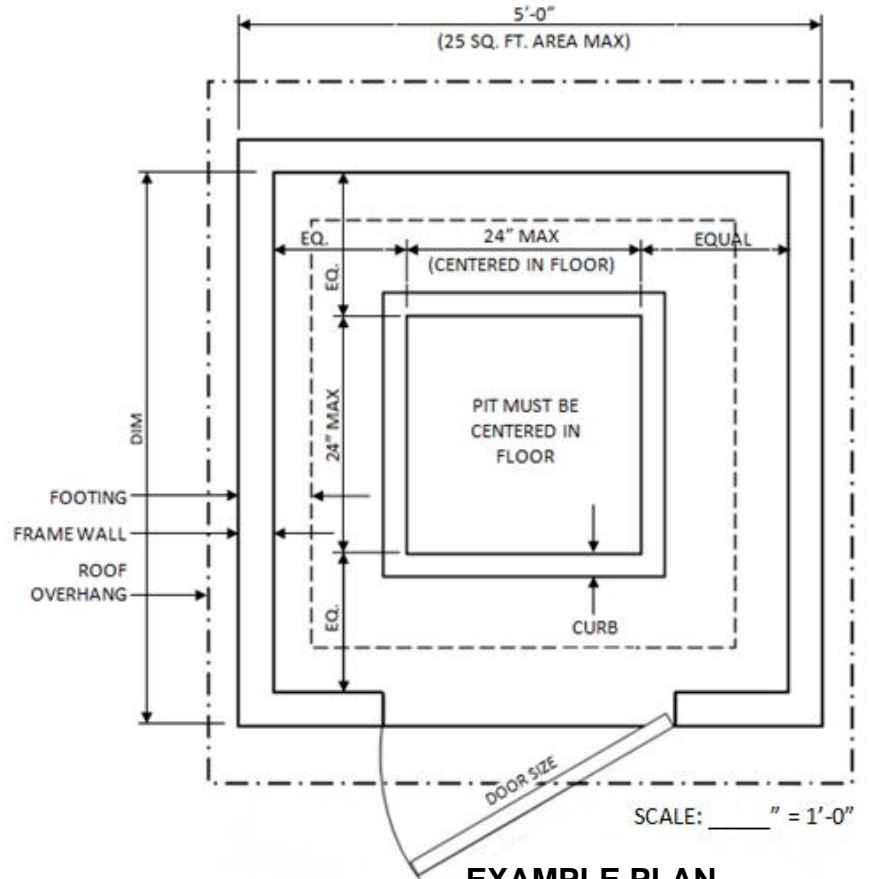
KEYED NOTES

1. SHOW & LABEL SMOKEHOUSE LOCATION.
2. DIMENSION SMOKEHOUSE.
3. SHOW & LABEL OTHER STRUCTURES EXISTING ON THE LOT, INCLUDING FENCES & -
4. DIMENSION SMOKEHOUSE DISTANCES FROM STRUCTURES ON THE LOT & FROM LOT LINES.
5. SHOW, LABEL & DIMENSION ANY BUILDING SETBACKS.
6. SHOW & LABEL THE LOCATION & EXTENT OF ANY UTILITY EASEMENT(S).
7. SHOW THE LOT'S SURFACE DRAINAGE DIRECTION(S).
8. SHOW & LABEL AREA ON LOT OF ANY EXISTING SEPTIC SYSTEM.

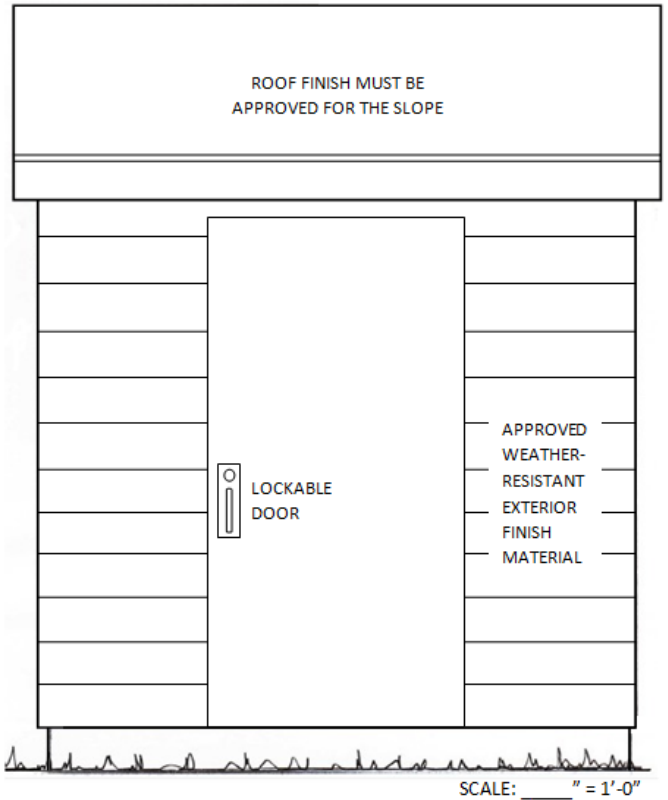
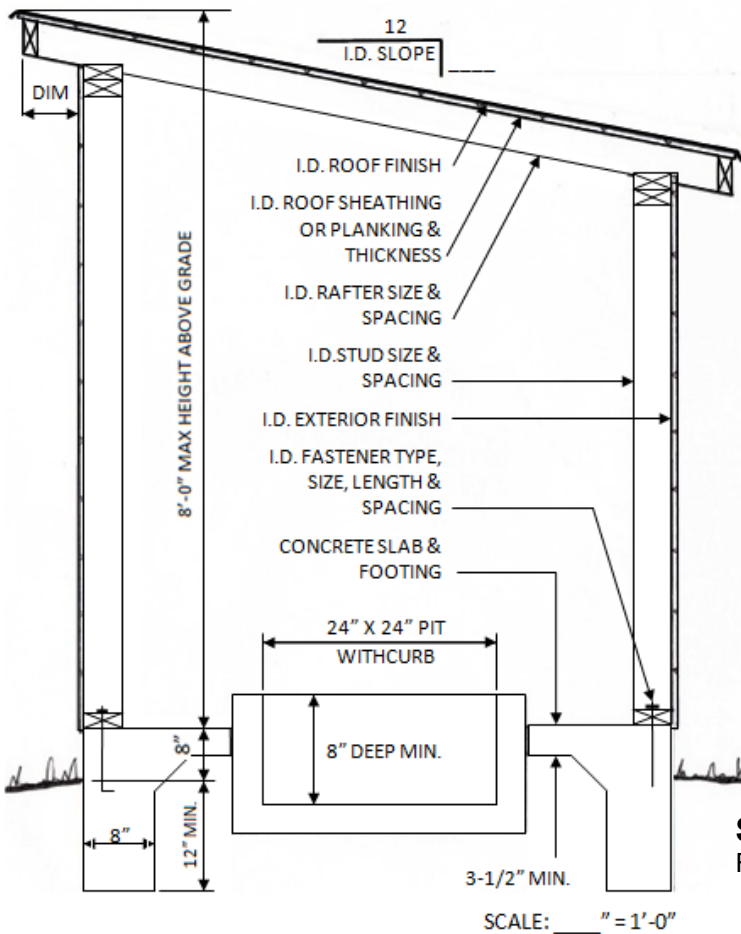


EXAMPLE SITE PLAN FOR A SMOKEHOUSE

**SMOKEHOUSE
EXMAPLE DRAWINGS
FOR COMBUSTIBLE
CONSTRUCTION
DRAWN TO A SCALE
DIMENSIONED
NOTED**



**EXAMPLE PLAN
FOR COMBUSTIBLE CONSTRUCTION**



**SECTION & ELEVATION EXAMPLES
FOR COMBUSTIBLE CONSTRUCTION**