# Minimum Residential Plan Submittal Requirements

# BI-24

In order to make your permit application and the plan review process go as smooth as possible it is important to have a general understanding of the process. Additionally, a complete project submittal including plans that accurately and clearly describe the proposed construction work is very important. Incomplete plans will result in delays since the Building Division staff will be unable to verify compliance with code requirements if plans lack clarity or sufficient detail.

=

By familiarizing yourself with the information provided in this handout you will have a better understanding of the permit process and the necessary components of a complete plan submittal.

## THE PERMIT PROCESS

### *Purpose*

The purpose of codes is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating the design, construction, materials, use and occupancy, location and maintenance of all buildings within the City of San Clemente.

Generally, permits are required for all electrical, plumbing, mechanical or structural projects you may want to perform. Installing water heaters, re-roofing, remodeling or adding a room to your home, repairing decks and stairs, replacing windows, all require a permit. Building retaining walls, garden walls, patio covers, decks, BBQ's, pools/spas, water fountains all require permits. Building permit fees are collected to pay for the plan check services and inspections to make sure the project meets compliance with building codes and local ordinances.

### *Permit Application Submittal*

At this stage you will complete the required permit application and pay necessary review fees. Plans, specifications, details, engineering calculations are submitted along with any other documents required to indicate with sufficient clarity the extent of the proposed work.

## ***Plan Review Process***

The Building and Planning Divisions along with other agencies will review the plans to determine if your project is in compliance with State and local requirements. Many simple projects can be reviewed at the counter during your visit, other projects may require up to three weeks to complete the review. If your plans meet these requirements, a permit is issued. If code compliance issues are found, you will be provided with a clear and concise correction list that identifies deficiencies and may suggest solutions to help correct the problems. The California Building Code requires that all projects, whether prepared and submitted by a property owner or by a design professional be thoroughly reviewed by the Building Division for compliance with codes in effect. Engineering, Fire Authority, Health Dept. and other agencies may be required to review your plans.

## ***Receiving Permit***

Once you have been approved for a permit, you have legal permission to start construction. A permit fee, based on the size (construction valuation) of the job, is collected to cover the cost of the inspection process. Separate permits are typically required for electrical, plumbing, and heating or air-conditioning work.

## ***Job-site Inspection Visits***

On-site inspections will be required at various stages of the construction process to make certain the work conforms to the approved plans and permit, and State and local codes. The number of inspections required will vary depending on the complexity of the project. Inspection approvals will be recorded by the building inspector on the inspection job card. It is important to have the plans and the inspection job card available for the building inspector when they arrive on the job site.

## ***Final Approval***

The Building Division will provide documentation (signed-off FINAL inspection) when construction is complete and code compliance is determined. All review agencies such as the planning division and fire authority also must inspect and approve the final construction prior to a permit final being issued.

# PREPARING YOUR PLANS

The list of items that follows contains a summary of basic plan information required in order for staff to review your project. The checklist does not contain all codes requirements as a complete listing of all building, electrical, mechanical and plumbing regulations is extensive. The following list represents the minimum requirements for most projects so a plan review may begin.

**RESIDENTIAL**
**MINIMUM PLAN SUBMITTAL REQUIREMENTS**

**Building Plans must be Complete and contain the following information in order to perform a plan review:**

- □ All plans must be drawn to scale (1/4" = 1 foot) and fully dimensioned. (Plans done in pencil not accepted)
- □ Minimum plan size not less than 11"x 17" (24'x36" preferred)
- □ Any portion of any structure that deviates from compliance with requirements found in the California Residential Code shall be approved and stamped by a California licensed architect or civil/structural engineer for that irregular or nonconforming portion of work. (CRC Section R301.1.3.1)

Project Data

- □ Occupancy Group
- □ Construction Type
- □ Requirements for fire sprinklers, NFPA 13D system
- □ Current California Codes (CRC, CBC, CFC, CMC, CPC, CEC, CA Energy Code, CalGreen), SC Codes & Ordinances.
- □ Plan Preparer
- □ Include the soils report

Project Description

- □ Description of the proposed Scope of Work
- □ Existing Square Footage
- □ New Square Footage
- □ Renovated/Altered Square Footage

Sheet Index

- □ Cover Sheet or Title Sheet
- □ Site Plan
- □ Architectural Sheets (A1, A2, A3, etc.)
- □ Structural Sheets (S1, S2, S3, etc.)
- □ Detail Sheets (D1, D2, D3, etc.)
- □ Title 24 Energy Calculation Sheet(s), (T24)

Site / Plot Plan

- □ Draw the lot to scale (1"= 20' is typical) and show lot dimensions and a north arrow
- □ Show property address and owner's name
- □ Indicate building distances from all property lines
- □ Show all easements (utilities, access, etc.)
- □ Show streets (and alleys) abutting the property
- □ Show existing grade (ground) elevations at the lot comers and indicate general slope of lot
- □ Show building floor elevations
- □ Show location of all utilities on the site, water, sewer, gas, and electrical

Architectural Floor Plans (each floor level where any work will occur)

- □ Existing Floor Plan
- □ Proposed Floor Plan
- □ Demo Plans including ceiling finished to be removed to expose framing
- □ Show interior and exterior walls layout
- □ Indicate size and use of all rooms
- □ Show how natural light and ventilation will be provided in all habitable rooms
- □ Show locations, height and width of all door and window openings
- □ Show stairs including width, tread rise, and run, handrails, guardrails, etc.
- □ Show location of furnaces, water heater, fireplaces
- □ Show bathroom and kitchen exhaust fans
- □ Indicate locations of smoke detectors
- □ Show plumbing fixture locations
- □ Additions & alterations must clearly indicate existing walls, walls to be removed and new wall construction

Roof Plan

- □ Show ridges, valleys, HIPS, over-hangs
- □ Show roof slopes
- □ Indicate roofing underlayment, material, manufacturer, style/type, weight, ICC ESR number
- □ Show attic ventilation analysis and vent locations

Exterior Building Elevations (2 sides minimum)

- □ Elevations shall be labeled as to the face of the building (ex. front, rear, left, right)
- □ Show all doors, windows
- □ Specify exterior wall materials
- □ Specify roofing materials
- □ Show slope of roof

Building Cross-Sections (in area of proposed work)

- □ Show wall framing construction (ex. 2x4 @I6")
- □ Indicate wall plate height (ceiling height)
- □ Specify exterior and interior finish materials
- □ Specify insulation at walls, raised floors, attic spaces
- □ Show foundation and finish exterior grades

Architectural Details

- □ Provide details of handrails and guardrails
- □ Provide details of stairs
- □ Provide details of roof eaves
- □ Provide details of fire-rated construction (walls and ceilings)
- □ Provide details for attic and eave vents
- □ Provide details for flashing

Foundation Plan

- □ Show size (width & depth) and reinforcing at all continuous and pad foundations
- □ Specify thickness and reinforcement in slab-on-grade
- □ Specify wall anchor bolt size and spacing
- □ Locate all shear wall hold-down anchors
- □ Indicate concrete mix strength

Framing Plans (floors & roof)

- □ Show size, spacing and span direction of floor and ceiling joists as well as roof rafters or trusses
- □ Show all supporting walls, and specify sizes of all beams, headers and posts
- □ Specify lumber grade and species (ex. DF-Larch #1)
- □ Locate and specify type and length of all lateral bracing (i.e. shear walls)
- □ Specify thickness and grade of plywood sheathing at floor, roof and walls
- □ Additions and alterations must show how new framing will be connected to existing building

Structural Framing Connection Details

- □ Provide connection details at roof-to-wall
- □ Provide connection details at floor-to-wall
- □ Provide details of wall- to-foundation
- □ Specify beam and joist hanger sizes
- □ Detail post-beam connections
- □ Detail post-to-footing connections

Structural Engineering Design Calculations

Buildings permit application submittals must include vertical and lateral load structural design calculations prepared by a California licensed architect or civil/structural engineer for any portion of the structure that does not comply with the California Residential Code. A soils report may also be required see BI-20.

Mechanical, (Can be on Architectural Floors Plans or Separate Sheets)

- □ Show the location of all Heating, Cooling, and Ventilation Equipment
- □ Provide Mechanical Equipment Schedule identifying manufacturer, model number, and capacity
- □ Provide Duct Layout including supply and return
- □ Provide information regarding how the HVAC system was sized, Manual S & D
- □ Show the kitchen and bathroom ventilation systems including ducting to the outside

Plumbing,

- □ Provide locations of all plumbing fixtures,
- □ Provide water heater location and size and vent location
- □ Size gas piping system, provide demands, developed lengths, and pipe sizes
- □ Size the water distribution system, Table 610.4 CPC

Electrical,

- □ Show the location of the electrical panels
- □ Provide panel schedules that indicate basic required circuits, wire size, and amps.
- □ Provide the location/layout for all electrical receptacles and lighting
- □ Show the location of Smoke Alarms and Carbon Monoxide Alarms (if applicable) as required
- □ Solar plans for PV will be required under the Energy Code. Include plans for PV as currently provided by PV contractors.

T-24 Energy Compliance

- □ CF1R Forms (***Imprinted on Plans***)
- □ MF1R Forms (***Imprinted on Plans***)
- □ Additions <700 sq ft need only meet the requirements of table 150.1-A

**This checklist does not contain all code requirements and is intended a guide for typical projects. This only represents minimum submission requirements to allow for initial plan review.**

**For additional assistance contact the Building Division at:**

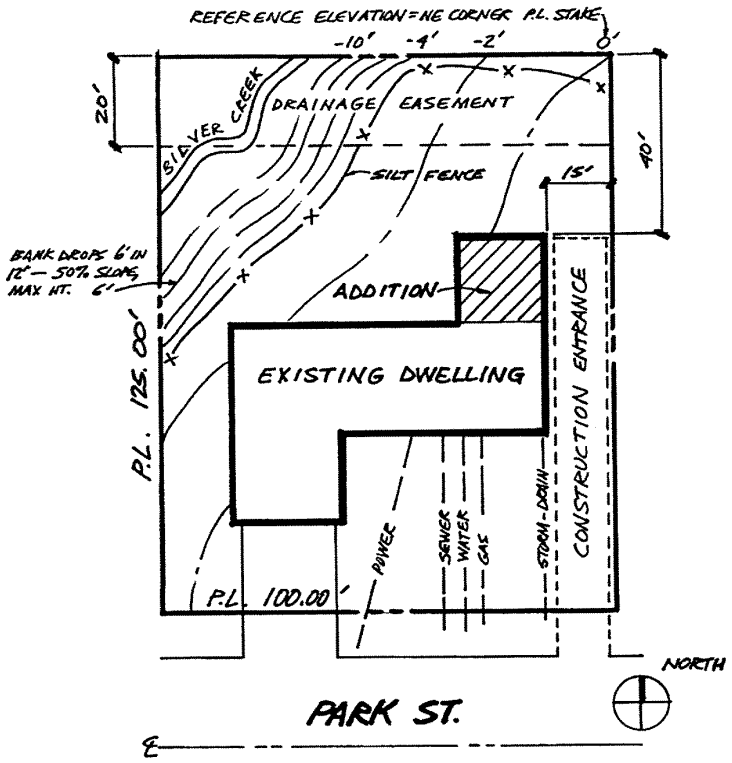
**910 Calle Negocio, Suite #100**
**San Clemente, CA 92673**
**(949) 361-6100**

**********

**The following sheets are examples of what is meant by:**

- **Site Plan**
- **Floor Plan**
- **Elevations**
- **Cross-Sections**
- **Foundation Plan**
- **Framing Plan**

**These examples are SAMPLE ONLY and are not to be used for construction.**



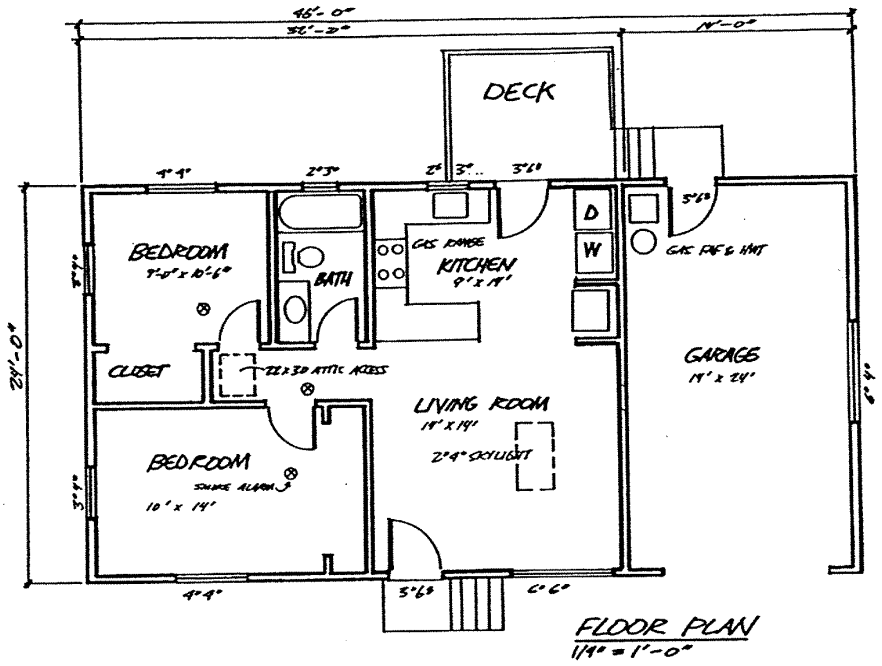

SITE PLAN YOUR SITE ADDRESS

1" = 20'

YOUR NAME & DATE YOUR TELEPHONE NUMBER

# SITE PLAN

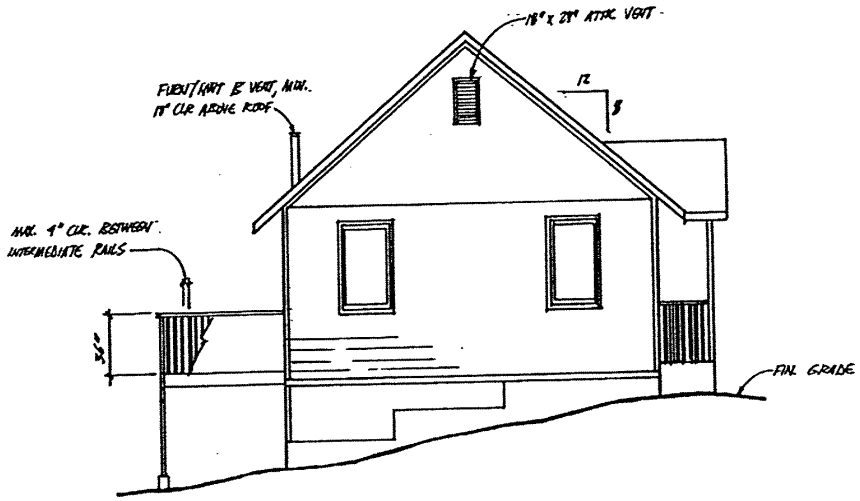
# FLOOR PLAN




The floor plan is a detailed "map" of the new work in your project, and sometimes parts of the existing building, too. We suggest you use the scale 1/4"=1'0", and include the following:

1. A separate plan for each floor level where any work will occur.
2. All walls, windows, doors, skylights, steps, decks, landings, patios, plumbing fixtures, fireplaces, woodstoves, furnaces, laundry equipment, and other appliances.
3. Use and dimensions of each room, like "bedroom", "living room", "walk-in closet" and so on.
4. Location of all smoke detectors, all vent fans, and access to the attic.
5. Indicate the fuels that various appliances will use, like "electric dryer", "gas range", "propane furnace", or "gas log fireplace" for example.

# ELEVATIONS

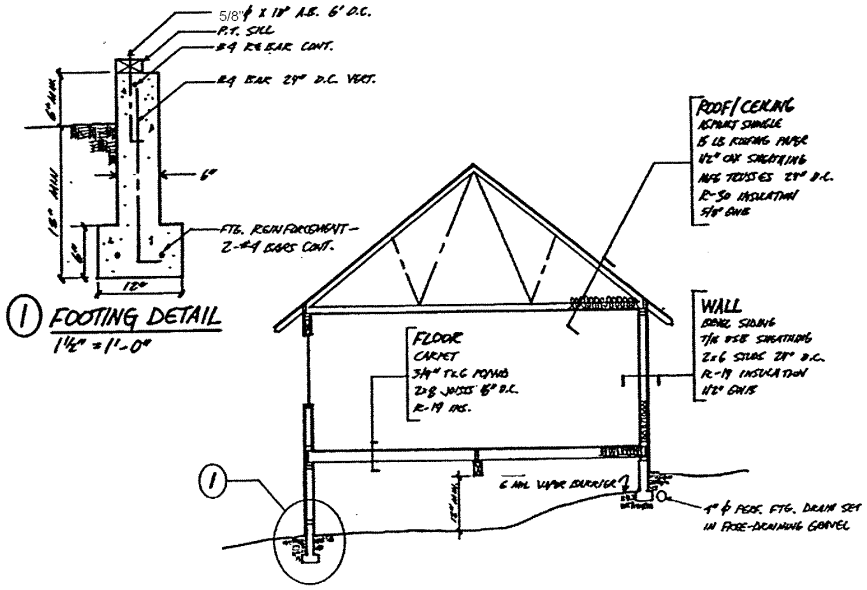



ELEVATION
1/4" = 1'-0"

Elevations show what the building will look like from its exterior. Recommended scale is 1/4"=1'0". Depending on the specific project, sometimes just one elevation (like the "north" side, for example) is sufficient. For other more complex projects, views of the north, east, south and west sides must be shown, including:

1. Final grade - the slope and shape of the ground around the building after the project is complete.
2. Eaves and roof overhangs. Roof pitch. Chimney locations and heights.
3. All windows and doors. All roof/attic vents.
4. All decks, guardrails, landings, porches, stairs and handrails.

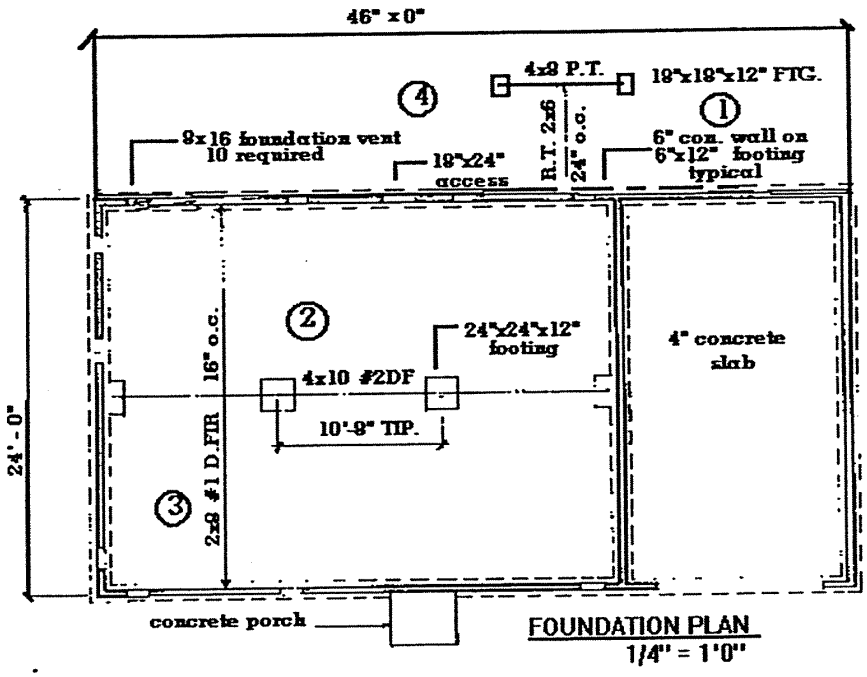
# CROSS SECTION




A cross section is a handy way to show lots of information. It's like slicing through an apple to see the core inside. A good scale to use is, again, 1/4"=1'0", and a complete cross section would include:

1. Footing size and depth below grade, foundation wall thickness, and rebar locations.
2. Final grade of the earth around the building, and the clearance between earth and wood.
3. Beams (don't forget solid blocking), treated sill plates, vapor barrier.
4. Size and spacing of all joists, studs, headers, rafters and trusses. All roof, floor and wall sheathing. Specify the siding, roofing material, and interior wall and ceiling finish materials.
5. All floor, wall and ceiling insulation, expressed in "R" values.

# FOUNDATION PLAN



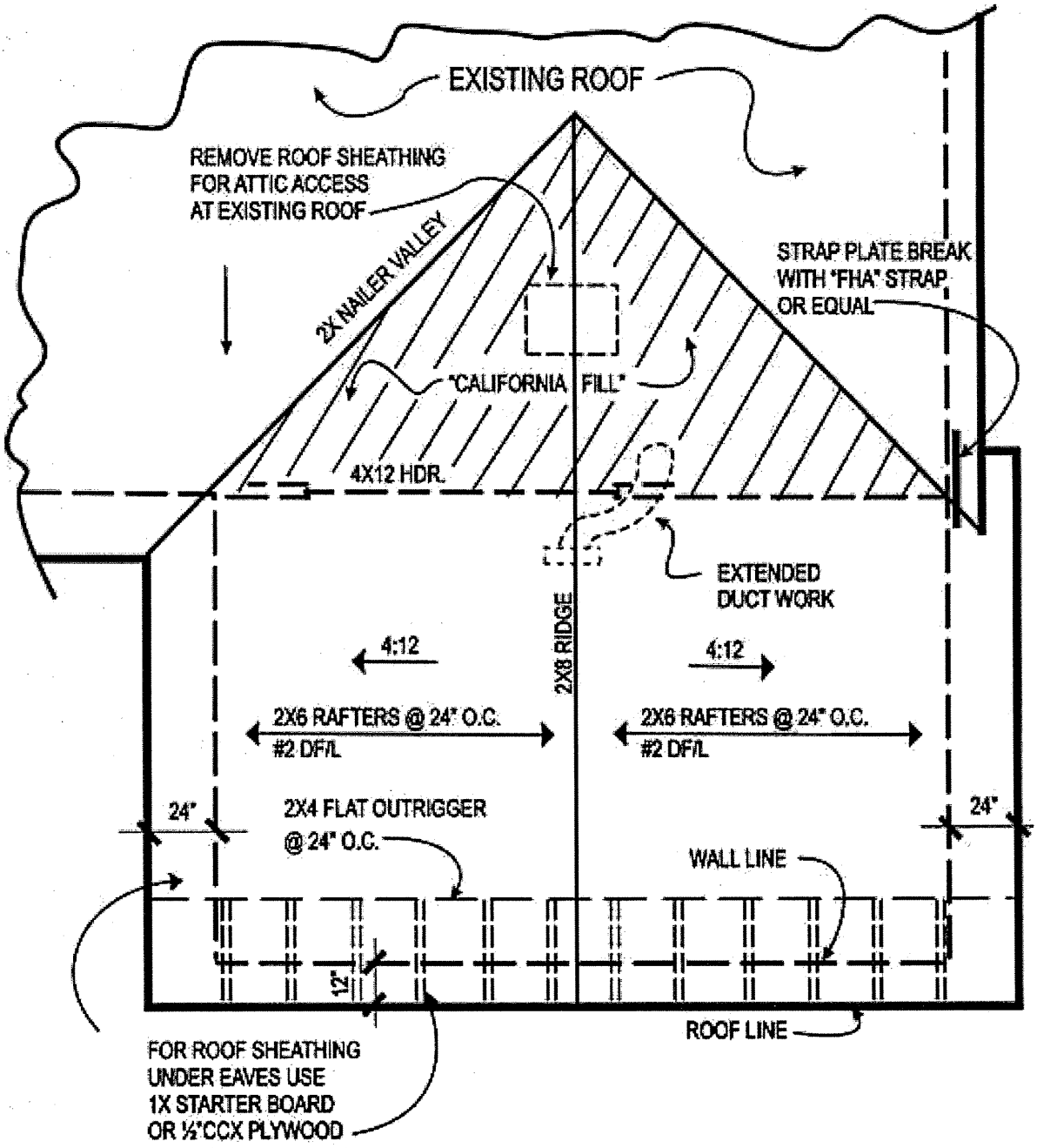

The foundation plan is a detailed drawing of the foundation, as seen from above. Suggested scale is 1/4"=1'0", with dimensions and other important information, including:

1. Shape and dimensions of all footings, foundation walls, grade beams, pier pads.essentially everything that will be masonry block or poured concrete.

2. Location and size of all beams and posts.

3. Floor system joist size, spacing, grade and species of lumber, direction and length of spa(s), and any supports or hangers.

4. Locations and size of all crawlspace vents, access holes, door "blockouts," etc.




## ROOF (FRAMING) PLAN

***SAMPLE NOT FOR CONSTRUCTION PURPOSES***