What Plans Do I Need for a Building Permit?

This brochure is intended to give you general information about the plans required for most building permits for work on a house or duplex. Your individual project may require more or less detail than described here. Please see one of our plans examiners in the Development Services Center (DSC) for additional information.

After you begin work, you may decide to make changes to the plans that were originally approved. To revise your plans after they have been approved, you will need to show the changes on three additional sets of plans and bring them along with the stamped/approved set of the original plans back to the Development Services Center for review by a plans examiner and city planner. Please do not mark up the originally approved set! When the revisions are approved, one stamped plan set will be returned to you to be kept with the originally approved plans.

Plan preparation

Four (4) sets of plans are required when you apply for a building permit. One set will be stamped approved and returned to you to keep at the job site. A copy of your approved plans will become a permanent record with the City of Portland.

- Check records for work permitted in the past. There may be drawings on file for work done after 1976.
- Residential plans may be drawn by anyone with enough skill to draw straight lines, to measure accurately and to put those measurements down on paper. Plans must be scale.
- Minimum submittal requirements for various types of residential projects are available in the Development Services Center (DSC) and online at www.portlandoregon.gov/bds/36658 under specific project types.

- Typical plans include:
  - Site plan
  - Floor plans
  - Elevation views
  - Cross section and detail drawings

- Your plans must clearly show all the work you intend to do on the building as well as the existing conditions. Existing conditions and new construction must be clearly delineated. Plans must also show where the building sits on your property in relationship to property lines and other buildings on the site.

- The plans must be on substantial paper.
  - Drawings may not contain color.
  - Permanent black ink must be used.
  - Clear black and white photocopies are best.
  - Please do not turn in a tracing paper original.
  - Line quality and contrast must be easy to read and strong enough to scan. Photographs may not be part of the plan.
  - Dimensions and notes must be printed to match 12 point font minimum.

- All plans must be drawn to scale.
  - $\frac{1}{4}$ inch = 1 foot is the most common scale used for residential floor plans and section views.
  - 1 inch = 10 feet is the minimum scale accepted for site plans.
  - The scale used must be clearly shown and the site plan must show the entire lot.
  - Building elevations must be to scale and show the slope of the ground adjacent to the building.
Sample site plan

A well-prepared site plan is the most important document in your project submittal materials. All major review groups need to approve your site plan.

Site plans must be clearly legible and reproducible. A complete and accurate site plan will help to speed your permit application reviews and reduce the need to send you checksheets for missing information.

This sample drawing on the next page has been designed to help you prepare complete site plans for your project. Make sure your site plan includes all the information from the Site Plan Checklist.

Site Plan Checklist

The site plan must be accurately drawn to scale and show:

- Lot and building setback dimensions
- Dimension distances between structures and property
- Property corner elevations (If there is more than 4 foot elevation differential, the site plan must show existing and proposed contour lines at 2 foot intervals. A separate grading plan may also be required to legibly show grading changes)
- Location and dimensions of easements and driveway
- Footprint of proposed and existing structures (including decks)
- Location of wells/septic systems
- Lot area
- Building coverage area and percentage of coverage
- Arrow pointing in the north direction
- Impervious area (structures, paving, roof overhang, etc.)
- Location of utilities (storm and sanitary sewers, water, gas, etc. including size of service and street location)
- Location of stormwater facility
- Surface drainage
- Width of adjacent right of way and curb height
- Landscape plans
- All trees 6 inches or greater in diameter: Identify tree diameter (inches), species, and location. Tree preservation and tree density requirements may apply to your project. See www.portlandoregon.gov/trees.
- Minimum scale, 1 inch = 10 feet (show scale on plan)
- Minimum size, 11 x 17 inches
- White space sufficient for City approval stamps and notes
- Any additional requirements specific to your site or project (If required, see DSC staff for any specific requirements needed for your site or project)
A Sample Site Plan
For Successful New Single Family Residential (NSFR) Project Submittals

Instructions: This sample site plan provides an example of how to prepare a site plan. Your submittal must include a site plan that includes all of the existing and proposed conditions included on this sample site plan.

Your site plan must be drawn on 11"x17" or larger paper and drawn to a scale of 1" = 10'.

Please be aware that since every project is unique there may be some situations where you will be asked to provide additional information.

A Existing on-site tree to be retained or removed
B Root protection zone/fencing - typically 1 foot radius per inch of tree diameter (measured 4.5 feet above the ground)
C Proposed on-site new tree with species and size
D Existing street tree to be retained or removed
E Proposed street tree
F Right-of-way configuration (sidewalk, planting strip, curb and street name)
G Existing and proposed locations of underground utilities
H Distance from building to property lines
I Distance from garage entry to property line
J Finished grade elevations at property corners and building corners
K Retaining wall with top of wall (TOW) elevation and bottom of wall (BOW) elevations
L Two foot grade elevation contours, existing
M Two foot grade elevation contours, proposed
N Location and size of existing easements
O Stormwater disposal type and size
P White space for City stamps

LOT AREA .....................5,000 SQ FT

IMPERVIOUS AREA
DRIVEWAY ....................360 SQ FT
PATIO ..........................100 SQ FT
WALK ............................90 SQ FT
ROOF AREA (INCL. OVERHANG) ......1,334 SQ FT

TOTAL .........................1,884 SQ FT

BUILDING COVERAGE
BUILDING FOOTPRINT ............1,196 SQ FT

LEGAL DESCRIPTION
PARCEL 1,
PARTITION PLAT 1992-X,
R-12345X

PROJECT ADDRESS
3030 SE NEIGHBORHOOD STREET
PORTLAND, OR 97207
Floor plans and foundation plans

A floor plan, also known as a plan view, is what you would see if you were to look straight down at a floor or basement with the roof or floors above removed. You will need to provide a roof plan and one floor plan for each level of the building on which work is being done, that clearly shows existing and proposed work.

- If you are constructing a new building or an addition, you will also need to provide us with a foundation plan. This plan should show the layout, dimensions and details of continuous concrete slabs, footings, reinforcing steel, and the strength of the concrete to be used. The location of the crawl space access and the foundation vents must also be shown.

- A floor plan for each level of the building being constructed or remodeled must show the location of all full and partial height walls, the size and proposed use of all rooms affected by the work and a north arrow.
• The location, size and type of each window must be shown on the floor plan.

• The location of bearing walls, headers, beams, and other structural members supporting loads from above must also be shown on the floor plans or shown on separate framing plans. Floor plans must show all steps and stairs.

• Plumbing fixtures, heating and cooling equipment, electrical outlets, switches, etc. are typically shown on the floor plan, but can be shown on separate plans.

• The floor plan must also show the location of all smoke detectors.
Section drawings
- Section drawings, sometimes called cross sections, are what you would see if you cut vertically through a building from the tip of the roof down through the ground, and then looked at what the cut exposed. Include gutters and downspouts
- Section drawings are a useful way of displaying structural information and information about construction materials that are needed to do our code review. Full sections for residential construction are usually drawn at a scale of at least $\frac{1}{4}$ inch = 1 foot and wall section and details at a scale of least at $\frac{1}{2}$ inch = 1 foot. Partial sections may be drawn at a larger scale to show something in detail such as footings, overhangs and stairs.
- To get a building permit for new construction or an addition, you must provide section drawings that show typical building conditions.
- For simple projects, a single section drawing showing:
  - the size of the footing and the distance between ground level and the bottom of the footing;
  - the size of the foundation wall and how high it will rise above the ground;
  - the size and spacing of structural members such as beams, joists, studs and rafters which are not shown on other drawings;
  - wall, ceiling and roof coverings and finishes;
  - wall, floor and ceiling insulation;
  - ceiling heights;
  - eaves, decks and other projections.
- For more complex buildings or additions, full sections through the work in multiple directions and at different locations may be required to fully explain the work. Separate structural section drawings or details may be required, in addition to building or architectural sections, to show the structural connections.
- For buildings containing new or revised stairways, stair details must be provided which indicate the construction materials, structural support and dimensional relationships to surrounding construction.
- The purpose of building plans is to provide the City of Portland with a complete and accurate description of your proposed project. If there is something you think you will need to explain when you come to the Development Services Center, please put it on the drawings.

Sample Section Plan
**Building elevation drawings**

Building elevation drawings are exterior views of the building, sometimes identified as front, rear, left, right; or north, south, east, west. Any project that requires a change in the exterior of the building must have building elevation drawings.

Elevations must be drawn to scale, $\frac{1}{4}$ inch = 1 foot is the normal scale.

Elevations show the level at which the ground meets the building, the slope of the ground where it meets the building, the vertical location, size of windows and doors, the type of siding and roofing, the height and configuration of guardrails and similar features on the exterior of the building.
Helpful information

Bureau of Development Services
City of Portland, Oregon
1900 SW 4th Avenue, Portland, OR 97201
www.portlandoregon.gov/bds

General Office Hours:
Monday through Friday, 8:00 am to 5:00 pm
BDS main number: 503-823-7300

Permit Information is available at the following location:
Development Services Center (First Floor)
For Hours Call 503-823-7310
or visit www.portlandoregon.gov/bds

Permitting Services (Second Floor)
For Hours Call 503-823-7310
or visit www.portlandoregon.gov/bds

Important telephone numbers
BDS main number ........................................................503-823-7300
DSC automated information line .................................503-823-7310
Building code information ..........................................503-823-1456
Zoning code information .............................................503-823-7526
Permit information for electrical, mechanical, plumbing, sewer, and sign ..............................................503-823-7363
Permitting services ......................................................503-823-7357
Resource and records ..................................................503-823-7660
BDS 24-hour inspection request line requires IVR number and 3 digit type of inspection code ..........................503-823-7000

For Information about
Residential (1 & 2 family dwellings)...............................503-823-7388
City of Portland TTY ....................................................503-823-6868
Tree Hotline .................................................................503-823-8733

Tips
- Verify utility locate information with actual location of service connections before you draw them on the plans.
- The permitting process will move along more efficiently with complete and accurately prepared plans.
- Requesting the latest submittal requirements for each type of residential project is a good idea.
- All drawings/plans must be executed in the designated scale and the scale must be shown on the drawing/plan.
- Plans must be on substantial paper and in black ink. A crisp photo copy is acceptable.
- Use the checklist on page two to make sure that you include all required items on your site plan.
- Simple projects may only need a single section drawing; more complex projects will require full sections and multiple views.
- If you have questions, concerns or need help, visit or call staff in the Development Services Center.

Scheduling an inspection
- Call 503-823-7000, the BDS 24-hour inspection request line
- Enter your IVR or permit number
- Enter the three-digit inspection code for the type of inspection you are requesting
- Enter a phone number where you can be reached during weekdays and if you want the inspection in the morning or afternoon
- There must be an adult over age 18 to let the inspector inside
- The inspector will need to view your set of the approved plans at the job site. Make sure they are available along with all your inspection cards.

For more detailed information regarding the bureau’s hours of operation and available services;

Visit our Web site
www.portlandoregon.gov/bds

All information in this publication is subject to change.