

Hillside New Residential Guide

New Single Family/Duplex/Townhouse



All new residential construction within Boise's designated Hillside Areas require a building permit and Plan Review approval. Construction in hillside areas must comply with the Hillside Ordinance.

Prior Planning Approvals

All Planning & Zoning Division approvals must be completed prior to submitting for a building permit. Approvals could include but not be limited to approval of a development or site located in a hillside or floodplain, Design Review approval for sites on substandard lots or located in a historic district, approval through a Planned Unit Development or Conditional Use Permit, or approval and completion of a lot line adjustment or subdivision. Building permit applications cannot be accepted for sites on land undergoing a subdivision per the City Subdivision Ordinance.

Submittal Requirements

See the #404 Hillside New Residential Submittal Checklist for required documents and drawings.

Review Process

Applicants must attend an intake at the Permit Counter to submit plans and documents. Incomplete submittals will not be accepted. Accepted plans will be processed and routed to the appropriate disciplines for review.

Our goal is to meet established review timeframes 80% of the time. The proposed first review time frame goals are:

- Sites in hillside or floodplain, townhouses, substandard lots, or plans needing review by Fire: 10 to 14 working days

For additional information on the review process, see the flowchart linked to the application on the PDS website.

Additional Requirements for New Residential in Hillside Locations

1. **Engineered Soils Report:** The Engineered Soils Report must be submitted with the plans and specifications when applying for a building permit.
2. **Engineered Foundation Design:** The Engineered Foundation Design must be submitted as part of the plans and specifications when applying for a building permit. Additional engineering may be required for bracing when prescriptive requirements are not met.
3. **Engineered Site Grading and Drainage Plan:** The Engineered Site Grading and Drainage Plan must be submitted as part of the plans and specifications when applying for a building permit. The Building Division approves the plan, with review assistance from the Public Works Department.
4. **Engineered Retaining Walls:** All retaining walls over four feet in height or any retaining wall supporting a surcharge must be designed by a State of Idaho licensed structural engineer. Retaining wall height is measured from the bottom of the footing to the top of the wall.
 - Note: When more than one retaining wall is planned and the horizontal distance between retaining walls is less than ten (10) feet, and the sum total of all retaining walls exceeds four (4) feet in height, then those retaining walls must also be designed by a structural engineer.
 - Engineered Retaining Wall designs must be submitted for review and approval prior to scheduling any retaining wall inspections.
5. **Erosion & Sediment Control Plan:** An Erosion & Sediment Control (ESC) plan is required for all residential construction within Boise's designated Hillside Area. The plan must be included in the

www.cityofboise.org/pds

City of Boise Planning & Development Services

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building permit plan set, reviewed and approved by the City prior to the start of any earth disturbing activity. The ESC plan must be prepared or approved by an individual who has successfully completed a City-approved Plan Designer Construction Site Erosion and Sediment Control training program.

Engineered Soils Report Requirements

A site specific soils investigation must be conducted by a State of Idaho Licensed Engineer qualified in soil classification and investigation. The soils report shall be prepared, stamped and signed by the licensed soils engineer in accordance with the 1997 Uniform Building Code (UBC) Appendix Chapter 33 and should contain the following information:

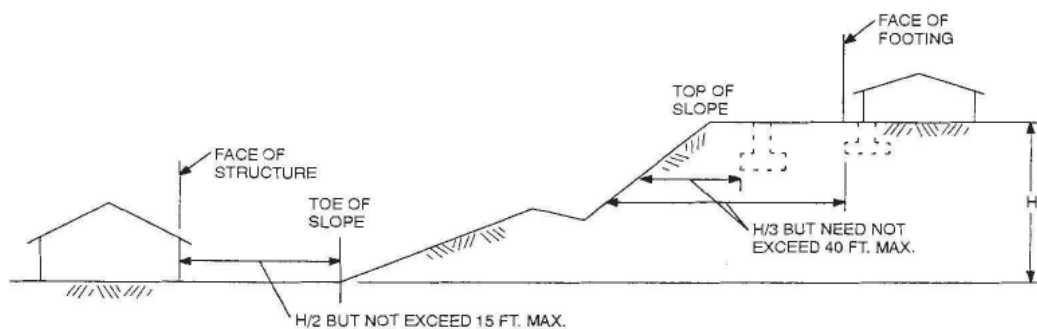
1. A plot plan showing the location of all test borings and/or excavations.
2. Description and classification of the materials encountered.
3. Elevation of the water table, if encountered.
4. Recommendations for foundation type and design criteria including bearing capacity, provisions to minimize the effects of expansive and collapsible soils and the effects of adjacent loads.
5. Expected total and differential settlement.
6. Data regarding the nature, distribution and strength of existing soils.
7. Conclusions, opinions and recommendations covering the adequacy of the site to be developed as proposed in the construction and grading plans, including the stability of slopes.
8. Recommendation for foundation and retaining wall drain systems as well as roof drain runoff and sprinkler systems.

9. Specify type of damproofing for foundation walls enclosing basement areas below grade, as per the International Residential Code (IRC).

Engineered Foundation Design Requirements

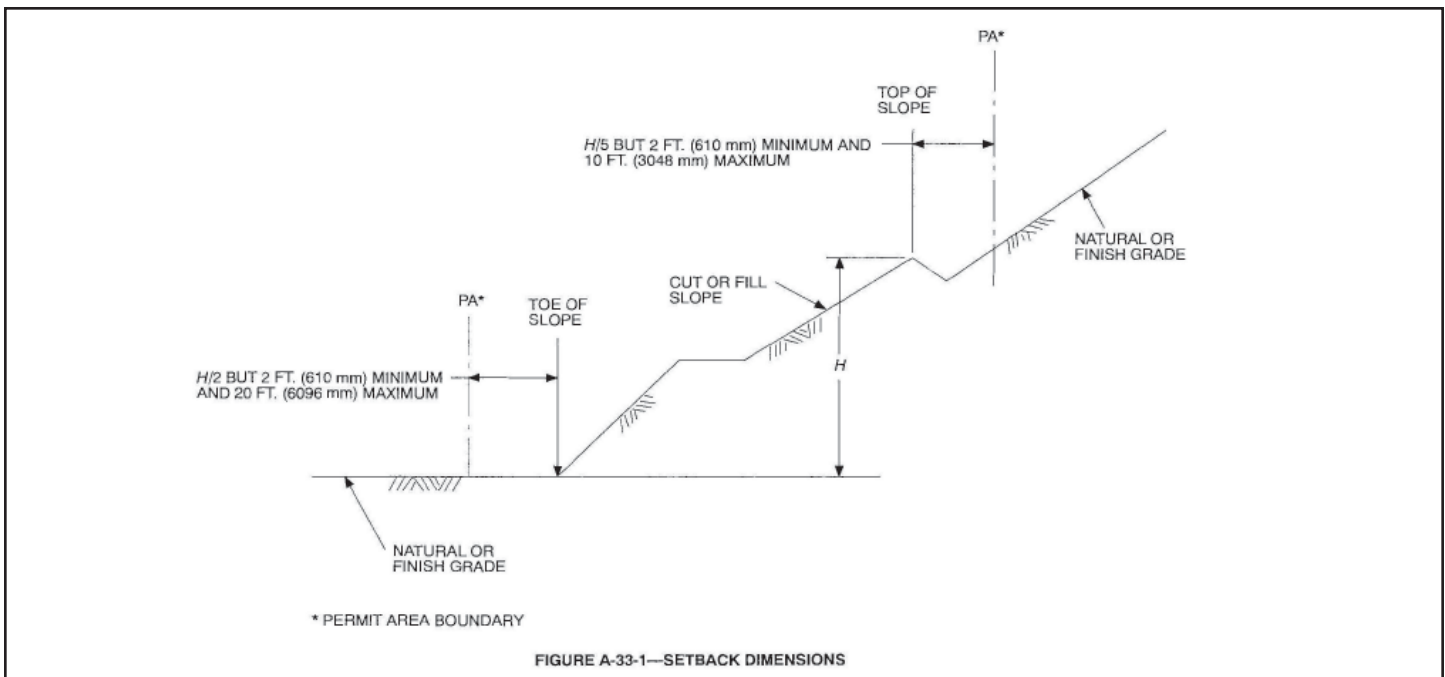
All foundations within hillside areas must be prepared, stamped and signed by an Idaho Licensed Structural Engineer, designed in accordance with the International Building Code (IBC) as required by Boise City Code, and include the following information:

1. The foundation shall be designed using the applicable information from the soils report. The foundation plans should reference the engineering company, soils report number and date of the report used in designing the foundation.
2. Indicate the foundation footing and wall sizes as well as the reinforcing required for the loads imposed.
3. When the walls and/or footings are to be stepped, indicate the top of footing and top of wall elevations in the same datum as shown on the grading plan.
4. All foundations shall be located at a distance from the top and/or toe of slope or portion thereof on the individual lot in accordance with the IRC, or as demonstrated by an engineered design that the intent of this section has been met (See Figure R403.1.7.1 below). The distances are measured horizontally from the face of the footing.
5. Designate all walls on foundation plan to correspond with engineering designs. Note: All engineered foundation design requirements are to be incorporated into the foundation drawing, which must be stamped by the designing engineer. A generic foundation wall design attached to the plans will not be accepted.



For SI: 1 foot = 304.8 mm.

FIGURE R403.1.7.1
FOUNDATION CLEARANCE FROM SLOPES



Engineered Site Grading & Drainage Plans and Specification Requirements

All Engineered Grading and Drainage Plans shall be drawn to scale and shall be of sufficient clarity to indicate the nature and extent of work proposed, and show in detail that they will conform to the provisions of the Boise City Hillside Ordinance, the applicable subdivision overall drainage plan, and the 1997 Uniform Building Code Appendix Chapter 33.

The plans shall indicate the location of the work, the name of the lot owner and the name of the designing engineering company. The plans and specifications shall be prepared, stamped and signed by a State of Idaho Licensed Civil Engineer.

The plans shall include the following information:

1. A general vicinity map for the proposed site.
2. Property limits and accurate contours (at two foot intervals) of existing ground and details of terrain and area drainage.
3. Limiting dimensions, elevations and finish contours (at two foot intervals) to be achieved by the grading, and proposed drainage channels and related construction.
4. Detail all surfaces, subsurface and roof drainage devices; as well as retaining walls, cribbing, dams, and other protective devices to be constructed as part of the proposed work. Indicate the drainage area and the estimated runoff of the area served by any drains. If subsurface disposal is proposed, provide basis for drain field design.
5. Specifically address the manner and maintenance of revegetation. Note: Required vegetation not installed before final inspection requires a bond.
6. Location of any buildings/structures on the subject property, plus any buildings/structures on adjacent property owner's land (if within 15 feet of the subject property) or if it may be affected by the proposed grading operations.
7. Indicate the location of existing subdivision drainage systems complete with locations of existing storm drains, interceptor drains, area drains, etc. that will be used by the lot drainage system. Note: The project engineer should consult all subdivision drainage plans. The soils report must insure the established overall subdivision drainage system is maintained. Reference the individual lot requirements. The project engineer may wish to consult with the subdivision engineer and/or the Boise City Engineer with the Public Works Department.
8. Indicate the setback distance of slopes and/or cuts and fills from boundaries (individual lot property lines) to show compliance with the requirements of the 1997 Uniform Building Code Appendix Chapter 33 and Figure A-33-1 (See above).

9. Specify the quantity (cubic yards) of the proposed excavation. Indicate the amount of excavated material to be removed from the site and/or the amount of excavated material to be used as fill on the site (Identify the location where any exported excavation material will be moved to).
10. Indicate the location of any proposed cuts or fills and specify the proposed elevations of the cuts and fills. Specify the soils to be used as fill material.
11. Provide detailed sections of the means of stabilizing of the sloped fill, such as benching, terracing, retaining walls, etc. Specify manner of ground preparation of the existing slopes to receive fill, as well as soil cohesion and compaction requirements.

Soils Engineer

The Soils Engineer shall do the professional site inspection and approval concerning:

- The preparation of ground to receive fills,
- Testing for required compaction,
- Stability of all finish slopes and
- The design of buttress fills where required.

If, in the course of the inspection, the soils engineer finds that the work is not being done in conformance with the approved plans, the discrepancies shall be reported in writing to Planning & Development Services (PDS). Recommendations for corrective measures, if necessary, shall be submitted.

The final inspection of the site grading and drainage work shall be performed by the Designing Engineer. An approval letter, stamped and signed by the inspecting engineer, shall be submitted to PDS prior to issuance of the Building Final. The approval letter shall be specific in addressing the accuracy of the final grading and drainage of site work. The letter should indicate:

1. That all surface, subsurface, roof drainage and any other drainage crevices called for on the grading and drainage plan have been installed and function properly.
2. All final grading contours are true to line and accurate in accordance to the approved grading and drainage plan. If on-site modifications are required to the approved plan, then a revised stamped grading and drainage plan reflecting those changes must be submitted with the approval letter. Any changes may require additional hillside development approval from Planning & Zoning.

3. The approval letter should address the reason for the modifications and the impact of the change on the original grading and drainage design.

A bond may be required as per Appendix Sec. 3311 of the 1997 Uniform Building Code in such form and amounts as may be deemed necessary to assure that the work, if not completed in accordance with the approved plans and specifications, will be corrected to eliminate any hazardous conditions. This includes required revegetation.

Erosion & Sediment Control Permit

All construction sites within Boise City limits must have an Erosion & Sediment Control (ESC) permit in place during construction and through final landscaping. Measures must be implemented by, and be under the direct supervision of, an individual who successfully completed a City-approved Responsible Person construction site erosion and sediment control training program.

Erosion & Sediment Control Plans

An Erosion & Sediment Control (ESC) plan is required for all residential construction within Boise's designated Hillside Area. The plan must be included in the building permit plan set, reviewed and approved by the City prior to the start of any earth disturbing activity.

The ESC plan must be prepared or approved by an individual who has successfully completed a City-approved Plan Designer Construction Site Erosion and Sediment Control training program.

- In lieu of class attendance, individuals qualified in ESC, or who hold a valid certification from an authority recognized in Erosion and Sediment Control may apply for Certification by Experience. An application with an attached resume listing ESC work experience and certifications must be submitted for City review. A Boise City Plan Designer Certification number must be obtained prior to plan submittal to Boise City for Certification by proof of experience or reciprocity.
- The individual preparing or approving the plan must affix their signature and City-issued certification number to the ESC plan and report.

For more information about ESC plan requirements, and permit fees, go to www.cityofboise.org/pds or contact an Erosion Control Inspector at 384-3802 for assistance.

Flood Plain Areas

Construction in flood plain areas must comply with the Flood Plain Ordinance. This typically requires elevation certificates to be filed with the Public Works Department to establish existing grade and after floor framing is in place, prior to further construction. Contact Public Works at 384-3900 for assistance.

Fees

Building Division Fees

A plan review fee is due at the time of submittal. Building permit fees and Erosion & Sediment Control fees will be collected when permit is issued. Contact the Permit Counter at 384-3802 for specific fee information.

Sewer Connection

If the new site is within the Boise Sewer District, a sewer connection fee will be collected *at the time the building permit is issued*. If located within another sewer district, then fees are paid directly to that district.

Impact Fees

Verify amount of the Boise City Park, Police and Fire Impact Fees by calling 384-3720. These fees must be paid *at the time the building permit is obtained*.

Road Impact Fees

The Ada County Highway District (ACHD) determines if fees are required. Provide written proof of payment (or written confirmation that no fees are due) to the PDS Permit Desk. Contact Ada County Highway District (318 E. 37th Street, Garden City) at 387-6100.