



TOWN OF TRUCKEE COMMUNITY DEVELOPMENT DEPARTMENT BUILDING AND SAFETY DIVISION

Town of Truckee Minimum Standards for Year-Round Erosion prevention on
One and Two Family Dwelling Construction Projects
EFFECTIVE DATE: June 4, 2007

These standards are intended to serve as a guideline for preventing erosion on one and two family dwelling projects. Sites within the Town of Truckee are varied from wetland to mountainous. **The responsibility of the designer is to create an effective Erosion Prevention Plan that is site specific, based on the terrain and soil properties.**

For specific details please reference Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California. It can be ordered, viewed, or downloaded at <http://www.cabmphandbooks.com/Construction.asp>.

GOALS:

For construction projects that include earthwork the following goals shall be considered when preparing and implementing an Erosion Prevention Plan:

- Implement a site-specific Erosion Prevention Plan and maintenance schedule to manage stormwater and non-stormwater discharges from the site at all times.
- Limit disturbed areas (areas that are cleared and/or graded) to only those areas necessary for construction. *Natural vegetation is the best and cheapest BMP.*
- Emphasize erosion prevention as the most important measure for keeping sediment on site during construction.
- Utilize sediment control barriers as a supplement to erosion prevention.
- Minimize exposure time of disturbed soil areas by phasing in construction activities.
- Stabilize disturbed soils promptly. Either temporarily or permanently stabilize, landscape, revegetate and/or mulch disturbed soil areas as early/rapidly as possible.
- Stabilize slopes as soon as possible.

REQUIREMENTS:

1. **Grading.** Any ground disturbance including grading, excavating, clearing, grubbing and/or stump removal work shall not occur until:
 - A. A grading permit has been obtained¹ or plans for the building have been submitted,
 - B. An Erosion Prevention Plan has been submitted and approved, and
 - C. Temporary erosion control measures are installed.

Note: Two additional sets of erosion control plans must be submitted to begin grading work before building permits are issued. The Building and Safety Division will review requests to begin grading work at time of plan submittal.

¹ The Town of Truckee Municipal Code requires that a grading permit is required for excavation or fills greater than 20 cubic yards and/or when clearing, grubbing or disturbing ground cover in excess of 500 square feet.

2. **Erosion Prevention Plan.** When submitting plans to the Town for review, include an Erosion Prevention Plan prepared by a certified professional in erosion and sediment control, or a California registered civil engineer, licensed architect, or landscape architect competent to do the work. The plan must show the following:
 - A. The limits of ground disturbance and the type of barrier to be used to delineate this in the field
 - B. A schedule showing timelines within which grading/excavation work will be completed and temporary and permanent erosion control will be installed relative to construction progress
 - C. The quantity of grading material to be removed and/or imported
 - D. Erosion Prevention barriers, their locations and a section view showing their correct installation for all disturbed soils areas
 - E. Methods of retaining and infiltrating 20-year, one hour storm event runoff from newly created impervious surfaces including roofs and driveways such as drip line infiltration trenches² and/or dry wells
 - F. Winterization procedures if construction will occur beyond the normal building season defined as May 1 to October 15
 - G. Methods of protecting dirt stockpiles
 - H. Concrete washout area
 - I. Permanent erosion prevention measures (see Item 4)

3. **Temporary Erosion Prevention Methods.** Grading and excavating shall not occur until temporary erosion control measures have been installed according to the Erosion Prevention Plan. Temporary erosion control shall include the following:
 - A. Sedimentation barriers will be placed at the downhill perimeter of all disturbed soil areas and in intermediate locations as shown on the approved plans.
 - B. Stockpiles will be protected with tarps or other waterproof membranes adequately secured to resist wind forces. An erosion prevention barrier shall protect the perimeter of stockpiles.
 - C. Provide driveway track off control. Soil and construction materials shall not be tracked offsite.
 - D. Erosion control and sediment barriers will be checked prior to anticipated storm events, immediately after storm events and weekly by the contractor or owner/builder.
 - E. Where barriers are removed and/or stockpiles not covered, they shall be available on site for installation as needed within 24 hours.
 - F. Provide a concrete washout area.
 - G. For job sites that have not received an approved final grading inspection by October 15, additional effort shall be made to protect the site for the winter. Include the following:
 1. Install and maintain effective temporary erosion control barriers such as fiber rolls for disturbed soil areas. Silt fences shall have wire backing and metal stakes for winter use.
 2. Stabilize disturbed and bare soil areas with vegetation, mulch, wood chips, erosion control blankets or similar methods.
 3. Clean up and remove construction debris and spoil piles.
 4. Remove or cover dirt stockpiles with plastic and install perimeter containment protection such as silt fences or wattles.

² The California Building Code requires that water drain away from buildings. This must be considered and addressed even with drip line trenches. To prevent moisture migration into the crawl space of the building, assure that the bottom of drip line trenches is below the level of soil on the inside of the footing within the structure.

5. Install permanent mechanical stabilization and drainage improvements where feasible such as drip line trenches, drywells or catch basins.
 6. Restrict parking and storage to paved areas and/or driveways that have track off control (gravel).
 7. For sites that will be active between October 15 and May 1 where the driveway will be used for material storage and/or vehicular access, driveways with slopes more than 10% shall be surfaced with asphalt, concrete or the functional equivalent as approved by the Building Official.
4. **Permanent Erosion Prevention Methods.** Permanent erosion control barriers will include:
- A. Measures to retain, infiltrate and/or detain roof, driveway and site runoff such as infiltration trenches, dry wells and/or other suitable methods;
 - B. Protection of disturbed soil areas by revegetating or by installing pine needles, wood chips, mulch, jute netting, straw blankets and/or other approved suitable method;
 - C. A paved driveway or parking area.

NOTE: Failure to implement an effective Erosion Prevention Plan and accomplish the objective of managing discharge may be grounds for revocation of permits and may result in fines, reinspection fees, construction delays and/or required training.

ADDITIONAL RESOURCES:

EPA guidance document for construction site operators:

http://www.epa.gov/npdes/pubs/sw_swppp_guide.pdf

EPA sample inspection report: http://www.epa.gov/npdes/pubs/sw_swppp_inspection_form.doc

EPA construction SWPPP template: http://www.epa.gov/npdes/pubs/sw_swppp_template.doc

Stormwater and Construction Industry Poster: <http://www.epa.gov/npdes/pubs/swposter-final-fullsize.pdf>

Construction Industry Compliance Assistance: <http://www.cicacenter.org/bmps.html>

National Menu of Stormwater BMPs for Construction (scroll down for BMP fact sheets):

http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min_measure&min_measure_id=4

National Menu of Stormwater BMPs for Post-Construction (scroll down for BMP fact sheets):

http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min_measure&min_measure_id=5

AGREEMENT CONCERNING EROSION CONTROL AND PREVENTION

For and in consideration of the issuance of a grading permit by the Town of Truckee, the Town and the undersigned Owner/Agent agree as follows:

1. Owner shall assure that erosion prevention measures are taken throughout the life of this construction project and will prevent sediment, dust, construction debris and other illicit materials from being discharged from this property.
2. Owner has reviewed the attached copy of the Town of Truckee Erosion Prevention for One and Two Family Dwelling Construction Projects Minimum Standards (TTEPS). A copy of the approved plans for the project that include erosion prevention requirements have been provided to Owner. Owner will comply with these standards and plans in the course of constructing this project.

3. Owner will be responsible for the inspection, maintenance, and correct installation of BMPs (Best Management Practices, site sediment and erosion control methods). Owner shall assure their proper installation before storm events and monitor their effectiveness the day after. Owner shall modify BMPs as the site or precipitation event requires to meet actual field conditions.
4. If owner fails to comply with the terms of this agreement, the Building Official may, at his/her discretion revoke any and for all permits required for the project, impose an enforcement penalty for each violation in the amounts set forth below.

Enforcement

<u>Per Project</u>	<u>Fee</u>
First Violation	Suspended Penalty of \$100
Second Violation	\$200 plus any previously suspended penalty
Third Violation	\$300
Fourth Violation	\$500

Completion of an approved erosion control course within three months of the violation may be accepted by the Building Official in lieu of the enforcement penalty. This option may be used only once annually per individual.

5. Owner shall pay penalty levied upon the Town by the Lahontan Regional Water Quality Control Board for failures on the property plus all costs, including Town's reasonable attorney's fees.
6. Agent by signing this agreement acknowledges that Agent shall be fully responsible and liable for compliance with this agreement if Owner does not perform its terms.

Project Address

Permit Number

Owner/Agent Name (please print)

Owner/Agent Mailing Address

Owner/Agent Telephone Number

Signature of Owner or Agent

Date

TOWN OF TRUCKEE MUNICIPAL CODES MODIFICATIONS:

15.03.140 Grading Permit Exceptions

Delete and replace California Building Code Appendix Chapter 33 Section 3306.2 as follows:

3306.2 Exempted Work. A grading permit is not required for the following:

1. Clearing, grubbing, and excavation or fills less than 20 cubic yards that disturb less than 500 square feet.
2. Excavation for construction of a structure permitted under this code.
3. Cemetery graves.
4. Refuse disposal sites controlled by other regulations.
5. Excavations for wells or trenches for utilities.
6. Mining, quarrying, excavating, processing, or stockpiling of rock, sand, gravel, aggregate or clay controlled by other regulations, provided such operations do not affect the lateral support of, or significantly increase the stresses in, soil on adjoining property.
7. Exploratory excavations under the direction of a registered design professional.
8. Existing nursery and agricultural operations conducted as a permitted main or accessory use.
9. Tree cutting without ground disturbance.

Exemption from the permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction.

15.03.150 Erosion Prevention Standard for One and Two Family Dwelling Construction Projects

Add a new Section 3316.3 to California Building Code Appendix Chapter 33 as follows:

3316.3 Standard for One and Two Family Dwelling Construction Projects. The Town of Truckee Minimum Standards for Erosion Prevention on One and Two Family Dwelling Construction Projects is adopted by reference to be enforced as part of this code.

Erosion Prevention Plan Check Comments:

1. Provide an Erosion Prevention Plan prepared by a certified professional in erosion and sediment control, or a California registered civil engineer, licensed architect or landscape architect competent to do the work.
2. Show the limits of ground disturbance and the type of barrier to be used to delineate this in the field.
3. Provide a schedule showing timelines within which grading/excavation work will be completed and temporary and permanent erosion control will be installed relative to construction progress. Exact dates of events are not required, but the number of days between events is.
4. Identify the quantity of grading material to be removed and/or imported.
5. Show erosion prevention barriers, their locations and a section view showing their correct installation for all disturbed soils areas.

6. Show the methods of retaining and infiltrating 20-year, one hour storm event runoff from newly created impervious surfaces including roofs and driveways such as drip line infiltration trenches³ and/or dry wells.
7. Identify winterization procedures if construction will occur beyond the normal building season defined as May 1 to October 15. Include paving driveways that are steeper than 10% that will be used to provide parking, access, or material storage.
8. Show methods of protecting dirt stockpiles.
9. Provide a concrete washout area. Identify its location and construction on the plans.
10. Identify permanent erosion prevention measures. Include the following:
 - A. Measures to retain, infiltrate and/or detain roof, driveway and site runoff such as infiltration trenches, dry wells and/or other suitable methods;
 - B. Protection of disturbed soil areas by revegetating or by installing pine needles, wood chips, mulch, jute netting, straw blankets and/or other approved suitable method;
 - C. A paved driveway or parking area.

³ The California Building Code requires that water drain away from buildings. This must be considered and addressed even with drip line trenches. To prevent moisture migration into the crawl space of the building, assure that the bottom of drip line trenches is below the level of soil on the inside of the footing within the structure.