



City of Atascadero Community Development Department

PUBLIC INFORMATION - BUILDING SERVICES

Community Development Department 6500 Palma Avenue Atascadero, CA 93422 (805) 461-5035 fax (805) 461-7612

GRADING AND DRAINAGE PLAN REQUIREMENTS FOR "ENGINEERED" PROJECTS \geq 5,000 CU YDS

2010 CGBC - ENGINEERING STANDARDS - CALIFORNIA STATE ENERGY COMPLIANCE (TITLE 24)

"Engineered" grading projects include all of the requirements for a "Regular" grading project as well as additional requirements for projects that include 5,000 cubic yards of earth or more.

STANDARD: The Atascadero City Municipal Code requires that all residential grading projects be permitted in conjunction with a development project (i.e. a building.) Any grading without a corresponding building, on residential properties, must be by written request and approval of the Community Development Director.

Regular Grading. Grading will move less than five thousand (5,000) cubic yards and is located on slopes less than twenty percent (20%), the application for a grading permit shall include the following:

1. Plans on minimum 24"X36" paper size also known as ARCH D size paper.
2. Title Block for the project with address, owner name, person responsible for plans.
3. North Arrow and plans drawn to engineering scale (i.e. 1"=10')
4. Cut and Fill quantity information, designated areas for disposal of additional soil.
5. Site contour information at two or one foot intervals showing existing onsite and neighboring drainage patterns.
6. Show existing structures to be removed or left in place.
7. Any proposed retaining walls with elevations at the top and bottom of wall.
8. Construction notes including 24-hour contact information for person responsible for erosion control.
9. A drainage plan (see content and requirement information below.)
10. A drainage basin if 1,000 or more square feet of impervious surface (roof, driveway, patios, etc.) are proposed.
11. Drainage arrows with spot elevations and any other drainage facilities needed.
12. Location of native tree(s) and protection fencing if closer than 20' to drip line. If the project is within 20' to a native tree drip line then an arborist report is required. Place arborist's recommendations on the plans. Native trees include: Oaks, California Black Walnut (Planning please list them)
13. Erosion control notes and details. Erosion control is required for every project.
14. Low impact development features to reduce impacts to stormwater quality and increases in volume. Low Impact development features not required, however, we encourage you to include them since the design features help reduce pollution going to rivers and streams and can help with onsite drainage issues.
15. Specify City Standard Drawing 423, 424, or 425 (drive approach standards) when new driveways are proposed. The City Standard drawings <http://www.atascadero.org/publicworks>, Access Engineering, Standard Plans and Drawings.
16. Show driveway width. Driveway width is dependent on driveway length. Access driveway width requirements by going to <http://www.atascadero.org/publicworks>, Access Engineering, Standard

Plans and Drawings, Drawing F4.

17. Dimensions showing location of proposed structure(s) to the property lines.
18. Property lines with bearings and distances.
19. Benchmark for the project (a vertical elevation for the project that won't be disturbed by grading operations.)
20. A soils engineering report, including data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and criteria for corrective measures when necessary and opinions and recommendations covering adequacy of sites to be developed by the proposed grading.
21. Where required by the Building Official, an engineering geology report, including a description of site geology, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading. (These reports are typically required in high landslide or liquefaction potential areas. You may want to check with the Building Official prior to project submittal to see if an engineering geology report is needed.)
22. If grading exceeds one acre in total area then a Stormwater Pollution Prevention Plan will need to be developed. The Stormwater Pollution Prevention Plan is a State of California required document that outlines the activities that you will implement on your project to protect stormwater quality. A copy of your Stormwater Pollution Prevention Plan and your Notice of Intent will need to be provided to the City prior to issuance of building permits. Information related to the Stormwater Plan and Notice of Intent can be found at this website:
http://www.swrcb.ca.gov/water_issues/programs/stormwater/
23. Location of flood plain and flood plain elevations. If the property is located partially or fully in a flood plain. If the structure is located in a flood plain the plan will need to demonstrate compliance with the City's Flood Plain Ordinance which can be accessed at:
<http://qcode.us/codes/atascadero/>. Access Title 7, Chapter 11 *Flood Damage Prevention*.

Engineered Grading. An engineered grading plan shall be prepared and certified by a registered civil engineer when any of the following is satisfied:

- where the grading will move five thousand (5,000) cubic yards or more soil; or
- is located on slopes of twenty (20) percent or greater; or
- the project is located within a Geologic Hazard Overlay Zone or Flood Hazard Overlay Zone.

An Engineered Grading Plan shall include specifications covering construction and material requirements in addition to the abovementioned information required for "regular" grading.

Drainage Plan Requirements:

A detailed drainage plan shall be submitted with or be made part of plot plan, precise plan, conditional use permit or grading permit application for a project that:

1. Involves a land disturbance (grading or removal of vegetation down to duff or bare soil by any method) of more than one acre; or
2. Is located in an area identified by the City Engineer as having a history of flooding or erosion that may be further aggravated by or have a harmful effect on the project; or
3. Will result in an impervious surface of more than twenty thousand (20,000) square feet; or
4. Is subject to local ponding due to soil conditions and lack of identified drainage channels; or
5. Is located within a designated Flood Hazard overlay zone; or
6. Involves land disturbance or placement of structures within fifty (50) feet of any watercourse shown on the most current USGS 7 1/2 minute quadrangle map; or

7. Involves hillside development on slopes steeper than ten (10) percent or driveways over twelve (12) percent slope.

Drainage plans shall be prepared by a registered civil engineer.

Basic Drainage Plan Contents: A drainage plan shall include the following information about the site:

1. Flow lines of surface waters onto and off the site.
2. Existing and finished contours at two (2) foot intervals or other topographic information approved by the City Engineer.
3. Building pad, finished floor and street elevations, existing and proposed.
4. Existing and proposed drainage channels including drainage swales, ditches and berms.
5. Location and design of any proposed facilities for storage or for conveyance of runoff into indicated drainage channels, including sumps, basins, channels, culverts, ponds, storm drains, and drop inlets.
6. Estimates of existing and increased runoff resulting from the proposed improvements.
7. Proposed flood proofing measures where determined to be necessary by the City Engineer.
8. Engineered Plan Content. Engineered drainage plans shall include an evaluation of the effects of projected runoff on adjacent properties and existing drainage facilities and systems in addition to the information required by subsection (a) of this section.