



**PRELIMINARY GRADING AND DRAINAGE PLAN GUIDELINES**  
**City of Santa Maria**  
**Community Development Department**  
(Revised 6/15/11)

The purpose of the Preliminary Grading and Drainage Plan is to verify, early in the design process, that the proposed project does not impact City drainage facilities, and that the site has adequate space to accommodate retardation/retention basins and other related storm drainage infrastructure. The Preliminary Grading and Drainage Plan is typically submitted in conjunction with a discretionary permit such as a tentative map, conditional use permit, or planned development permit application.

All preliminary grading and drainage plans shall contain, at a minimum, the following information:

1. A north arrow and scale.
2. Names of adjacent streets.
3. Distances between structures and property lines.
4. Location and height of retaining walls.
5. The existing and proposed elevation contours at one foot intervals for the site, spot elevations, and existing grade elevations within 5 - 10 feet of the boundaries of the site.
6. The finish floor and pad elevation(s) of existing and proposed structures.
7. The flow line and top of curb elevations along all existing and proposed street frontages.
8. The top and toe elevations of all landscaped berms and/or mounds.
9. Areas subject to inundation or storm water overflow and direction of flow of all surface drainage.
10. The number of cubic yards of earthwork that will be required to implement the project.
11. The maximum height of any cut or fill banks, and the approximate amount of cut and fill.
12. The method of storm water disposal, including:
  - a. The capacity, location and size of any required drainage retardation/ retention basins.
  - b. The high water elevation.
  - c. The top and bottom elevation of the retardation/retention basins.
  - d. The inlet and outlet elevations.
  - e. The overland escape route and elevation.

- f. The calculations of the capacity of the basins and the bleeder rate of the basin outlet.
- g. Retardation/ retention basins should be located within landscaped areas.
- h. If any retardation/retention is to be proposed on a paved surface, the Community Development Department shall be contacted for guidelines.
- i. Landscaped basins shall have slopes no steeper than 4:1 (4 feet of horizontal distance for each 1 foot of depth).
- j. With the exception of basins that are one foot or less in depth, no more than 50% of the total landscaped street frontage shall be encumbered by retardation/retention basins.
- k. The volume of water shall be computed according to the Retardation Basin Capacity information that follows below.

\*Contact the Engineering Division to determine whether or not on-site retardation of storm water is required.

### **RETARDATION BASIN REQUIREMENTS AND CAPACITY**

With the exception of a single family residence or sites less than 10,000 square feet, all lots or subdivisions shall have a storm drainage retardation basin, or other in-lieu improvements, which will assist in restricting the flow of storm water into the public streets or available drainage facilities. The drainage system must be capable of storing the water entirely on private property before overflowing onto/into the public street or drainage facility when the retardation basin becomes full. Plans and improvements shall be approved by the City Public Works Department and the Santa Barbara County Flood Control District. The volume required on site in cubic feet is computed as follows:

- a) All sites less than 1/2 acre:  
 Residential:  $(0.051) \times (\text{area of site in sq. ft.}) = \text{cu. ft. of volume}$   
 Commercial/Industrial:  $(0.070) \times (\text{area of site in sq. ft.}) = \text{cu. ft. of volume}$
- b) All sites greater than 1/2 acre but less than 1 acre:  
 Residential: Interpolate between (0.051) and (0.07)  
 Commercial/Industrial: Interpolate between (0.07) and (0.10)  
 {Multiply times area of site in square feet} = cu. ft. of volume
- c) All sites greater than 1 acre but less than 2 acres:  
 Residential:  $(0.07) \times (\text{area of site in sq. ft.}) = \text{cu. ft. of volume}$   
 Commercial/Industrial:  $(0.10) \times (\text{area of site in sq. ft.}) = \text{cu. ft. of volume}$
- d) All sites greater than 2 acres shall conform to Santa Barbara County Flood Control Districts Urban Hydrograph SBUH requirements utilizing formulas and procedures as defined therein.

Contact: Santa Barbara County Flood Control District  
 Development Engineer  
 123 Anapamu Street  
 Santa Barbara, California 93101 (805) 568-3440

NOTE: See City of Santa Maria Grading & Drainage Plan Standards for final grading plan requirements.