



City of Redwood City Stormwater Pollution Prevention Program

Drainage Guidelines for Commercial Development

General Requirements

- A. Developers or builders with sites with over one acre of new or improved impervious surface, or significant redevelopment projects affecting more the 50 % of the site, are required to file a "Notice of Intent" with the RWQCB, prepare a SWPPP, provide stormwater control measures and to enter into a Maintenance Agreement (See City Engineer for more specific requirements).
- B. Sites with and less than one acre but more than 10,000 square feet of new or improved impervious surface are required to provide pollutant source control measures in their project.
- C. The types of measures may be any combination of one or more items from the "Model List of Source Control Measures."
- D. Refer to the publication untitled "Start at the Source", published by the Bay Area Stormwater Management Agencies Association for further information.
- E. Designers are encouraged to use pervious or porous pavements to reduce the affects of contaminant run-off.
- F. Use construction Best Management Practices (BMP) with best technology available as appropriate to control runoff during construction. (See "Blueprint for a Clean Bay")

Design Criteria

- A. Storm drainage systems shall be designed to control the amount of runoff from the site in accordance with the following criteria:
 - Use the Rational Formula $Q = CiA$
 - The rainfall intensity is shown on the IDF curve. (Attachment "G" of Design Criteria)
 - Pre-Development Discharge is set at 10-year storm level.
 - Post-Development Discharge must be equal or less than Pre-Development Discharge.
 - Detain from between 10-year and 30-year storm level using pipe system and/or surface ponding based on the City's Synthetic Unit Hydrograph model (see Attachment "O").
 - If possible, contain the 100-year storm flow on-site with combined use of parking lot and piping system; allow for overland release to a City street.
- B. Provide for treatment of the rainfall equivalent to 0.2 in/hr intensity.
- C. See Sample Calculations.

Additional Data

- A. Complete the "NPDES Permit Compliance Checklist."
- B. Complete the "Operations and Maintenance Information" form.
- C. Provide signed statement accepting responsibility for Operation and Maintenance for the Control Measures.
- D. Approval of San Mateo County Mosquito Abatement District (<http://www.mosquitoes.org>)