

### Stormwater Submittal Checklist

The following information shall be shown on the grading and stormwater plans:

P = Pass F= Fail N/A = not applicable

P	F	N/A	Requirements
			Project Address, Property Owner's name, address, phone and email
			Civil Engineer, Name, address, phone, email license number, expiration date
			Plan Title: (eg: Grading and Drainage Plan)
			Vicinity Map, Location Map; North Arrow, scale, abbreviations, legends
			Fully dimensioned property lines. Show existing survey monuments, pipes, cross marks, etc.
			Location of existing driveways within 100 feet of the corners of the property.
			Locations of existing improvements, sidewalks, utilities, structures etc.
			Locations of existing trees, pools, landscaping, etc.
			Existing ground elevation, runoff flow directions, flow, and velocity, including the right of way along the property frontage and estimated flows onto this property from adjoining properties
			Proposed ground elevation, runoff flow directions, flow, and discharge velocity (in report)
			Proposed building pad, elevations, and downspouts
			Location of proposed stormwater improvements, elevations of rim and invert, location and elevation of drain inlets in right of way if any.
			Locate sanitary sewer cleanout away from or downstream of stormwater inlets. Show inlet elevations.
			Details of stormwater improvements and maintenance responsibilities
			Written report identifying the drainage areas, coefficients of runoff, slopes, pre and post runoff values, soil types, direction of flow, on a plan. Include in the package pipe profile with HGL/ EGL, detention times, depth to ground water, hydraulic sizing calculations, pollution source controls, vector controls, etc. Identify if preliminary or final calculations and plans. Sign and Stamp final Calculations.
			For projects with stormwater piping please submit hydraulic calculations and/or StormCAD/ AutoCAD storm files and specifications for pipe and apputenances
			Show driplines for existing and proposed trees
			Landscaping with deep root systems shall not be placed on stormwater improvements unless they are an integral part of the stormwater pollution prevention measures. Verify that landscaping does not impact storage volumes in stormwater basins, swales, or other hydraulic structure. <a href="http://www.flowstobay.org/bs_new_development.php">http://www.flowstobay.org/bs_new_development.php</a>
			<b>Site specific</b> Erosion and Sediment Control measures shall be on a separate sheet(s) from the permanent stormwater plan(s) REF: <a href="http://www.dot.ca.gov/hq/construc/stormwater/details.htm">http://www.dot.ca.gov/hq/construc/stormwater/details.htm</a>
			Grading plan shall identify, amount of cut and fill; identify grades of proposed slopes over 15% and check for erosion potential
			Driveway profile shall not exceed 20% combined slope. Elevation at property line = elevation at center line of road. Lower or raise garage as needed.
			Identify all proposed improvements in the public right of way along the frontage of the property, if any. Provide detail of conform at dwy to road
			Complete the appropriate C.3-C.6 checklists for the project.
			BAHM file <a href="http://www.bayareahydrologymodel.org/">http://www.bayareahydrologymodel.org/</a> for projects involving more than 1 acre of impervious surface.

**Maintenance and Operation  
Submittal Checklist**

The following information shall be shown on the Maintenance and Operations plans:

P = Pass F= Fail N/A = not applicable

<b>P</b>	<b>F</b>	<b>N/A</b>	<b>Requirements (Black and White for recording)</b>
			Part A: Maintenance Agreement (8.5x11)
			Part B: Legal Description (8.5x11)
			Part C: Maintenance and Operations Plan (8.5x11 preferred 8.5x14 accepted)
			Exhibits for Part C:
			Project Address, Property Owner's name, address, phone and email
			Plan Title: (Permanent Stormwater Drainage Plan)
			Vicinity Map, Location Map; North Arrow, scale, abbreviations, legends
			Fully dimensioned property lines relative to where permanent stormwater systems are installed.
			Proposed ground elevation, runoff flow directions
			Proposed building pad, elevations, and downspouts
			Location of proposed stormwater improvements, elevations of rim and invert, location and elevation of drain inlets if any.
			Locate sanitary sewer cleanout away from or downstream of stormwater inlets. Show inlet elevations or add note about protecting the stormwater facility from sanitary system discharges during cleaning events.
			Details of stormwater improvements and maintenance requirements
			Landscaping with deep root systems shall not be placed on stormwater improvements unless they are an integral part of the stormwater pollution prevention measures. Verify that landscaping does not impact storage volumes in stormwater basins, swales, or other hydraulic structure.
			Maintenance checklists for each item
			Equipment maintenance requirements from vendor/manufacturer if applicable.