# **Appendix D – Large Project Submittal Requirement**

# I. Stormwater Submittal Requirements for Large Discretionary Projects (> 5,000 square feet of new or replaced impervious area):

At a minimum, the following items shall be provided in order to evaluate the large project proposal with regards to discretionary Stormwater Management review:

#### A. Project Information:

- i. Provide a copy of the Stormwater Control Plan (SWP) Project Information & Threshold Form (Appendix A),
- ii. Provide a project description,
- iii. Include information on any phasing for project construction and/or implementation (project threshold shall be determined based on the total impact of all phases of a phased project),
- iv. List relevant prior permit information (such as a minor land division, subdivision, or prior grading/building permit near the project location).

#### **B.** Conceptual Stormwater Management Plan (SWP):

Provide a conceptual SWP:

- i. Existing and proposed impervious, semi-impervious, disturbed areas,
- ii. Best management practices (BMP) and mitigation proposals(s),
- iii. Consistent with the Preliminary Stormwater Management Report and Watershed Area Maps,
- iv. SWP shall illustrate how stormwater runoff will be conveyed and controlled,
- v. How safe stormwater overflow will be conveyed and controlled. Safe stormwater overflow shall be incorporated into the project design and runoff shall not negatively impact neighboring properties or stormwater (drainage) pathways,
- vi. Accommodation of existing upstream runoff in the project design without impact to upstream properties,
- vii. Natural features (e.g., existing wetlands/streams, natural drainage routes, riparian areas) and required setbacks on and around the project site shall be included in the SWP,
- viii. Existing drainage infrastructure for the site and nearby areas including the location of public and private storm drains, channels, ditches, BMPs, etc. on and around the site shall be included in the SWP,
- ix. A site assessment performed by the project Engineer, Architect, or Designer that notes whether there are any existing stormwater (drainage) issues on or near the site and if any stormwater (drainage) issues or impacts are anticipated resulting from the proposed improvements. If downstream restrictions are/have been identified, additional analysis and improvements may be required,

x. Identify any conflicts between the proposed project design and the County Design Criteria (CDC). If the project does not completely comply with the CDC, the project description shall include a request for a waiver to these criteria and shall provide technical justification for this waiver.

## Notes:

- 1. Diversion of runoff resulting in altered stormwater (drainage) patterns from the project site is not allowed without prior approval by the Director of Public Works.
- 2. Large projects shall incorporate BMPs to minimize and mitigate pollutant and hydrologic impacts due to development. These BMPs shall include Low Impact Development (LID) measures that emphasize the minimization of impacts as a first priority with the General Plan Policy 7.23.2 for Minimizing Impervious Surfaces.
- 3. The SWP may be combined with another plan set, at the discretion of the applicant. All information must be legible and consistent with standard engineering drafting conventions. SWP shall be consistent with grading, landscape, architectural, and utility plans (as applicable).

### C. Watershed Area Map/s:

- i. Provide a map with topographic information showing the existing and proposed boundaries of the drainage area used for design, the project boundaries, and existing and proposed drainage patterns.
- ii. Show all upstream areas draining to/through the project site and show how and where the site drains in both the existing and proposed conditions.
- iii. Projects must demonstrate that the downstream drainage facilities can safely accommodate runoff from the project.

# **D.** Tentative Map (for Minor Land Divisions & Subdivisions):

i. Provide a tentative map showing all existing and proposed private drainage easements for common drainage facilities and facilities serving upstream offsite areas.

# E. Preliminary Stormwater Management Report:

Provide a report with:

- i. Analysis supporting the conceptual stormwater management plan and demonstrating feasibility of methods proposed for compliance with these Design Criteria requirements.
- ii. At a minimum, the report shall address the methods for complying with these items:

1. Minimize Stormwater Pollutants of Concern,

2.Site Design and Runoff Reduction Measures,

- 3. Stormwater Discharge Rates and Volumes.
- 4. May include the Watershed Area Map/s.
- iii. Documentation demonstrating technical infeasibility if design consistent with any portion of these Design Criteria is anticipated to not be achieved.
- iv. Provide soils/infiltration data used to determine the feasibility/infeasibility of infiltration of stormwater on the project site for review.
- v. Provide approval from the project geotechnical engineer for the conceptual SWP prior to discretionary completeness.
- vi. A downstream impact assessment. If downstream restrictions are/have been identified the project shall include the improvements needed to upgrade the storm drain system.

# **II.** Stormwater Submittal Requirements for Large Land Division, Building, and Grading Permits (> 5,000 square feet of new or replaced impervious area):

At a minimum, the following items shall be provided and approved prior to recordation of the final map and/or approval of final improvement plans and/or issuance of any building/grading permits for all large projects:

## A. Project Information:

- i. Provide a copy of the Stormwater Control Plan (SWP) Project Information & Threshold Determination Form (Appendix A).
- ii. Provide a project description.
- iii. Identify any conflicts between the proposed project design and these Design Criteria.
- iv. Include information on any phasing for project construction and/or implementation (project threshold shall be determined based on the total impact of all phases of a phased project).
- v. List relevant prior permit information (such as a minor land division, subdivision, or prior grading/building permit near the project location).

### **B.** Final Stormwater Management Plan (SWP):

Provide a dated, signed and stamped Final SWP:

- i. Adequate construction level details including construction scheduling and phasing,
- ii. Final Stormwater Management Report and Watershed Area Map/s,
- iii. Show existing and proposed impervious, semi-impervious, and disturbed areas,
- iv. Best management practices (BMP) and mitigation proposals(s),
- v. The plan shall clearly illustrate how stormwater runoff from all project areas will be conveyed and controlled (provide spot elevations, slopes, grade breaks, cross sections, roof plan, and other information as necessary) and how safe stormwater overflow has been incorporated into the project design,
- vi. Natural features (e.g., existing wetlands/streams, natural drainage routes, riparian areas) and required setbacks on and around the project site shall be included in the SWP,
- vii. Existing and proposed drainage infrastructure on the site and nearby areas including the location of public and private storm drains, channels, ditches, BMPs, etc. shall be included in the SWP.
- viii. Final details, materials, specifications and methods of construction and methods for permeability/infiltration testing and acceptable thresholds for facilities that rely on infiltration. The design and materials shall be consistent with Section J Storm Drain Facilities.

#### Notes:

- 1. Diversion of runoff resulting in altered stormwater (drainage) patterns from the project site is not allowed without prior approval by the Director of Public Works.
- 2. Large projects shall incorporate BMPs to minimize and mitigate pollutant and hydrologic impacts due to development. These BMPs shall include Low Impact Development (LID) measures that emphasize the minimization of impacts as a first priority with the General Plan Policy 7.23.2 for Minimizing Impervious Surfaces.
- 3. The SWP may be combined with another plan set, at the discretion of the applicant. All information must be legible and consistent with standard engineering drafting conventions. SWP shall be consistent with grading, landscape, architectural, and utility plans (as applicable).

### C. Watershed Area Map/s:

- i. Provide a map with topographic information showing the existing and proposed boundaries of the drainage area used for design, the project boundaries, and existing and proposed drainage patterns,
- ii. Show all upstream areas draining to/through the project site and show how and where the site drains in both the existing and proposed conditions,
- iii. Accommodation of existing upstream runoff in the project design without impact to upstream properties,
- iv. Projects must demonstrate that the downstream drainage facilities can safely accommodate runoff from the project,
- v. Provide a catchment area map showing the entire project site that delineates the watershed area draining to each stormwater mitigation facility.

# **D.** Final Map/Improvement Plans.

- i. Identify existing and proposed easements on the plan and include reference to associated recorded document/s. Private drainage easements shall be provided for all common drainage facilities (see Section E for requirements).
- ii. Shall include language to keep private drainage facilities free and clear of buildings or structures of any kind.
- iii. Acknowledgement that no additional impervious area coverage beyond the limits shown shall be constructed without prior approval by the County of Santa Cruz.

#### E. Final Stormwater Management Report:

Provide a dated, signed and stamped Final Stormwater Management Report:

i. With analysis supporting the final stormwater management plan and demonstrating compliance with these Design Criteria requirements,

- ii. At a minimum, the report shall address the following items:
  - 1. Source Control Measures,
  - 2. Minimize Stormwater Pollutants of Concern,
  - 3. Site Design and Runoff Reduction Requirements,
  - 4. Stormwater Discharge Rates and Volumes,
  - 5. Hydrology,
  - 6. Hydraulics,
  - 7. Safe Stormwater Overflow.
  - 8. May include the Watershed Area Map/s.
- iii. Documentation demonstrating technical infeasibility if design consistent with any portion of these Design Criteria can not be achieved,
- A soils report or additional soils information regarding permeability of the site iv. soils where applicable. Saturated soil permeability and hydraulic conductivity values may be used conservatively from the published physical properties table within the USDA-NRCS soil survey, or use actual test values. Other soil information may be found within this survey, including engineering index properties, restrictive layers and high groundwater occurrence. A web site link to the soil survey is provided from the County DPW Stormwater Management web page. Site-specific soil data from geotechnical investigations shall be used when available and appropriate (such as depth to impervious layer/bedrock; depth to average and seasonal high groundwater; presence of unique geology; geotechnical hazards; documented soil and/or groundwater contamination; etc.). Provide information on all testing protocol followed as well as engineering calculations used to determine the design infiltration rate based on protocol and site conditions. Provide a site map showing locations of borings and testing. Provide approval from the project geotechnical engineer for the Final SWPs which references dated Stormwater Management Plan and Report.

#### F. Maintenance:

- i. Provide a recorded stormwater management maintenance agreement in addition to CC&Rs, road maintenance agreements, easements, and/or other legally enforceable document/s that establishes who is responsible for the operation and maintenance of the stormwater facilities, source control measures, mitigation features, storm drain markings/signage, drainage patterns, and impervious area limits established with the project and which is consistent with and includes all required attachments as specified in Section C.3 of these Design Criteria.
- ii. The recorded maintenance agreement shall identify a single entity who is responsible for submitting the annual maintenance report and paying associated annual fees.

#### G. Fees:

i. Provide impact fee calculation. If the project is located in Santa Cruz County Flood Control and Water Conservation District Zones 5, 6, 7A or 8 impact fees based on the net increase in permitted impervious area will be assessed based on the current Unified Fee Schedule. The project may be eligible for fee credits for existing impervious areas previously permitted or built prior to the establishment of the flood control zone. To establish credit eligibility, documentation should be submitted with the project plans. Documentation such as assessor's records, survey records, permit records, dated aerial photographs or other official records that will help establish and determine the construction date, structure/impervious area footprint, or to confirm that a permit was previously issued is acceptable. Zones 5, 6, 7A and 8 were established in 1969, 1986, 2005 and 1977, respectfully. The County GIS may be used to determine the flood control district within which the project is located.

\*If the project is not part of a land division, Public Works staff will inspect the construction of the drainage related items. Please provide engineer's estimate for the construction of the drainage items (there is a 2% inspection fee). A hold will be placed on the building permit for a preconstruction meeting with the Public Works Construction Engineer (please call at least 48 hours prior to construction to schedule the preconstruction meeting at 831.454.2160). A second hold will be made for approval of the final construction by the Public Works Construction Inspector.

Coordinate with the Surveyor's Office for inspection administration of land divisions' improvements, including the drainage facilities associated with land division(s).