Stormwater Control Plan

For

[Name of Project]

[Date]

[Name of Owner]
[Owner’s Representative and Contact Information]

Prepared by:

 (STAMP)

[Preparer’s Name]
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**Figures**

Vicinity Map x

**Attachments**

Existing Impervious Area Exhibit (if applicable)

Net Impervious Area Exhibit

Drainage Management Areas (DMAs) Exhibit

Stormwater Control Measures Sizing Calculator (applicable Tier Results)

* Tier 2 Treatment
* Tier 2 Storage (if applicable)
* Tier 3 Retention (if applicable)

Other (if applicable)

**Appendices**

Non-retention Based Treatment System Documentation

Non-Vegetated Self-Retaining Area Documentation

Other (if applicable)

# Project Data

Table 1: Project Data

|  |  |
| --- | --- |
| Project Name/Number | [Tract Number, Parcel Map Number, PMT Number] |
| Application Submittal Date | [to be verified by municipal staff] |
| Project Location  | [Street Address if available, or intersection and/or APN]  |
| Project Phase No. | [If project is being constructed in phases, indicate the phase number. If not, enter “NA”] |
| Project Type and Description | [Example entries: “Detached single-family residence,” “5-story office building,” “Residential with 160 single-family homes,” “Five 4-story buildings to contain 200 condominiums,” “100-unit, 2-story shopping mall,” “mixed use retail and residential development (apartments)”, “Industrial warehouse.”] |
| Hydrologic Soil Group | [Examples of HSG’s, specify Group or Groups and indicate where each group occurs on the site]**Group A (Low runoff potential)** are sand, loamy sand or sandy loam types of soils. They have low runoff potential and high infiltration rates even when thoroughly wetted. They consist chiefly of deep, well to excessively drained sands or gravels and have a high rate of water transmission (1 to 8.3 inches per hour).**Group B** are silt loam or loam types of soils. They have a moderate infiltration rate when thoroughly wetted and consist chiefly or moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. They have a moderate rate of water transmission (0.5 to 1 inch per hour).**Group C** are sandy clay loam. They have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine structure. They have a slow rate of transmission (0.17 to 0.27 inches per hour).**Group D** **(High runoff potential)** are clay loam, silty clay loam, sandy clay, silty clay or clay type soils. This HSG has the highest runoff potential. They have very low infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface and shallow soils over nearly impervious material. They have a very slow rate of water transmission (.02 to 0.1 inches per hour). |
| Soil Infiltration Rate |  |
| Total Project Site Area (acres) |  |
| Total New Impervious Surface Area |  |
| Total Replaced Impervious Surface Area |  |
| Total Pre-Project Impervious Surface Area |  |
| Total Post-Project Impervious Surface Area |  |
| Net Impervious Area (Exhibit shall be provided to justify net impervious area results) | [New Imp. Area + Reconstructed Imp. Area – (Total Pre-Project Imp. Area – Total Post-Project Imp. Area)] |
| Watershed Management Zone(s) |  |
| Design Storm Frequency and Depth | [85-percentile depth or 95-percentile depth] |
| Drainage Report Name | [If PCR 4] |

# Setting

## Project Location and Description

[Include site location, division of parcels, existing and intended site use (i.e. parking lot, open space), zoning, setback and open space requirements, project phasing, number of residential units or square footage of office or retail, parking requirements, neighborhood character, other notable project characteristics. A vicinity map may also be useful.]

## Existing Site Features and Conditions

[Include site size, shape, and topography. Hydrologic features, including any contiguous natural areas, wetlands, watercourses, seeps or springs. Existing land uses. Soil types and hydrologic soil groups, vegetative cover, and impervious areas, if any. Wells, landslides, slumps, or rock outcrops, if any. Existing drainage for site and nearby areas, including location of municipal storm drains.]

## Opportunities and Constraints for Stormwater Control

[Examples of opportunities: Existing natural areas, low areas, oddly configured or otherwise unbuildable areas, easements and required landscape amenities including open space and buffers that might be used for bioretention facilities, and differences in elevation, which can provide needed hydraulic head.]

 [Examples of constraints: impermeable soils or near-surface bedrock, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, density/high-intensity land use, heavy pedestrian or vehicular traffic, utility locations, archaeology, safety concerns.]

# Low Impact Development Design Strategies

## Optimization of Site Layout

### Limitation of development envelope

### Preservation of natural drainage features

### Setbacks from creeks, wetlands, and riparian habitats

### Minimization of imperviousness

### Use of drainage as a design element

## Use of Permeable Pavements (self-treating areas)

## Dispersal of Runoff to Pervious Areas (self-retaining areas)

## Stormwater Control Measures

# Documentation of Drainage Design

## Drainage Management Area Characterization

The DMA numbers below correspond with DMA numbers of DMA exhibit. Each DMA has only one surface type. DMAs listed include all impervious surfaces and all vegetated areas except those designated as structural control measures (SCMs).

Pervious areas are further categorized as either self-treating or self-retaining areas.

* Areas designated as self-treating areas are undisturbed areas, or areas planted with native, drought-tolerant, or LID-appropriate vegetation and do not receive runoff from other areas.
* Areas designated as self-retaining are low-lying areas that receive runoff from adjoining areas. Site retaining areas may have natural vegetation, or be landscape, or may be porous pavements (where the soils underlying the porous pavements drain well enough to handle the additional run-on).

Summarize approach to managing different types of drainages.

Table 2: Table of Drainage Management Areas

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DMA ID | Surface Type & description | Area (sf) | Drains to (provide DMA or SCM DMA ID) | Notable or exception characteristics or conditions |
| Self-treating | Self-Retaining | SCM |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Table 3: Table of Runoff Reduction and Structural Control Measures

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DMA ID | scm | scm type | water quality flow rate (cfs) or volume required (cf) | water quality flow rate (cfs) or volume provided (cf) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Sizing Calculations

The pervious area listed below only includes the functional bottom width of the SRA in the receiving self-retaining DMA area column.



Based on Central Coast Post-Construction Requirements Implementation Guidance Series, Series Issue #1: The use of Self-Retaiing Areas to Support Post Construction Stormwater Control Compliance:

[ ]  2:1 SRA Sizing is acceptable [ ]  2:1 SRA Sizing is Un-acceptable

The design storm (inches): \_\_\_\_\_\_\_\_\_

Saturated Soil Infiltration Rates (in/hr) \_\_\_\_\_\_\_\_\_

(A/B Soils 0.75 in/hr, C/D Soils 0.25 in/hr, or site specific in conformance with soil infiltration methodology per County LID Handbook)

Table 4: Table of Areas Draining to Self-Retaining Area

[May substitute with output from Santa Barbara County Sizing Calculator]

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| DMA Name | Area (square feet) | Post-project surface type | Runofffactor | [A]Product(Area x runoff factor) | Receiving self-retaining DMA | [B]Receiving self-retaining DMA Area (square feet)  | Ratio[A]/[B] |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

[Describe design of any non-vegetative SRAs here. For example, pervious pavers with storage to retain paver surface area plus assigned DMA run-on]

### Areas Draining to Bioretention Facilities (PCR 2 Projects)

Table 5: Table of LID Facility Sizing Calculation

[Copy entire table once for each SCM or may substitute table with Santa Barbara County Stormwater Control Measures Sizing Calculator results]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DMA Name | DMAArea (square feet) | Post-project surface type | DMARunoff factor | DMAArea ×runoff factor | SCM Name |
|  |
|  |  |  |  |  | SCM Sizingfactor  | MinimumSCMSize | ProposedSCMSize |
|  |  |  |  |  |
|  |  |  |  |  |
| Total |  | 0.04 |  |  |

# Source Control Measures

## Site activities and potential sources of pollutants

## Source Control Table

Table 6: Source Control Table

[Sample topics listed below]

|  |  |  |
| --- | --- | --- |
|  | Pollutants Associated with Activity |  |
| Potential Pollutant Source | Sediment/ Litter/ Debris | Nutrients/ Organic Matter | Bacteria | Hydro-carbons | Toxics/ Chemicals/ Paint | Other | Source Control BMP Proposed |
| Pets |  | X | X |  |  |  | Good housekeeping/ Illicit Discharge Control/Pet Waste Station |
| Parked Vehicles | X |  |  | X |  |  | Vehicle Maintenance, Fueling and Storage |
| Roads, Fertilizers, Pesticides, Storm Drains, Etc. |  |  |  |  |  |  |  |

## Features, Materials, and Methods of Construction of Source Control BMPs

# Stormwater Facility Maintenance

## Ownership and Responsibility for Maintenance in Perpetuity

[Review the County of San Luis Obispo Requirements for Post-Construction Operation and Maintenance Agreements: <https://www.slocounty.ca.gov/Departments/Planning-Building/Stormwater/Services/Post-Construction-Stormwater-Management.aspx>

Projects that trigger Performance Requirements 2, 3, or 4, are required to record an Agreement with the County on incorporate language into CC&Rs accepting responsibility for inspection, operation and maintenance of facilities. The Agreement /CC&Rs is established in conjunction with a Condition Compliance Monitoring (CCM) permit case.

 Within the Stormwater Control Plan, please indicate whether the project will utilize an Agreement or CC&Rs to meet this requirement, and who the responsible party will be.

 Public Works will request a CCM Case number from the Department of Planning & Building during review of the stormwater control plan.]

## Summary of Maintenance Requirements for Each Stormwater Facility

Complete this section using form SWP-1008, available at: <https://www.slocounty.ca.gov/Departments/Planning-Building/Stormwater/Services/Post-Construction-Stormwater-Management.aspx>

# Construction Checklist

[Complete the first two columns in the checklist, listing each stormwater source control measure and SCM included in the project.]

Table 7 Construction Checklist Table

|  |  |  |  |
| --- | --- | --- | --- |
| SWCP Page No. | Structural Control Measure SCMs | Plan Sheet No. | SCM Detail No. |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Certifications

The design of stormwater treatment facilities and other stormwater pollution control measures in this plan are in accordance with the Post-Construction Stormwater Management Resolution R3-2013-0032 and the current edition of the County’s LID Handbook.