**Small Site Low Impact Development (LID) Plan**

**Project Name:**

**Insert Project Name - Then Tab**

**Insert Address 1 Then Press ENTER To Insert Address 2 Or TAB To Next Field**

**Prepared for:**

**Insert Owner/Developer Name - Then TAB**

**Insert Address 1 Then Press ENTER To Insert Address 2 Or TAB To Next Field**

**Insert City, State, Zip - Then Tab**

**Insert Telephone - Then TAB**

**Prepared by:**

**Insert Consulting Firm Name - Then Tab**

**Insert Address - Then TAB**

**Insert City, State, Zip - Then Tab**

**Insert Telephone - Then TAB**

**Insert Date Prepared/Revised - Then Tab**

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# Project Description

## Project Category

Check which box best represents the proposed project category. Only check “Yes” for one box.

|  |  |  |
| --- | --- | --- |
| **Category** | **YES** | **NO** |
| 1. Small Scale Residential LID Category   The project is residential, will involve 4 or less dwelling units and will result in the development or redevelopment of more than 500 square feet or impervious area. |  |  |
| 1. Small Scale Commercial/Industrial LID Category   The project will involve 5 or more dwelling units or is at a commercial or industrial site and will result in the development or redevelopment of more than 500 square feet or impervious area, but is not an MS4 LID Category project. |  |  |
| 1. MS4 LID Category   The project is over 5,000 square feet and falls into one of the MS$ LID Categories.  *Note: This category is beyond the scope of this form is subject to the provisions of the Municipal Separate Storm Sewer System permit (MS4) issued by the California Regional Water Quality Control Board.* |  |  |
| 1. Exempt Category   The project will disturb less than 500 square feet of soil. |  |  |

## Project Description

Total Project Area (ft2):

Total Project Area (Ac):

Existing Conditions

|  |  |  |
| --- | --- | --- |
| **Condition** | **Area (ft2)** | **Percentage (%)** |
| Pervious Area: |  |  |
| Impervious Area: |  |  |

Proposed Conditions

|  |  |  |
| --- | --- | --- |
| **Condition** | **Area (ft2)** | **Percentage (%)** |
| Pervious Area: |  |  |
| Impervious Area: |  |  |

Site Characteristics

|  |  |
| --- | --- |
| Drainage Patterns/Connections  [Include a detailed description of existing and proposed drainage patterns. Describe the areas and sub-areas (to include square footage), treatment locations, direction of flow through each area, discharge point(s), ultimate termination point, etc.] | Existing: |
| Proposed: |
| Narrative Project Description:  [Include a detailed description of project areas, type of facilities, activities conducted onsite, materials and products received and stored on site, SIC Code (if applicable), land uses, land cover, design elements, drainage management areas (DMAs), etc.] |  |

# Best Management Practices (BMPs)

## Site Design

|  |  |
| --- | --- |
| Site Design  [Describe site design and drainage plan including; site design practices utilized and how BMPs are incorporated.] |  |

BMP List

[Fill out the table below with information on the BMPs incorporated in each Drainage Management Area (DMA)]

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DMA Designation | Square Footage (sf) | Acreage (Ac) | Design Capture Volume (DCV) | BMP Type [Include make & model if proprietary] | Minimum BMP Size [Include units (i.e. sf, cf)] | BMP Size Provided [Include units (i.e. sf, cf)] |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## BMP Selection

### Infiltration BMPs

|  |  |
| --- | --- |
| Name | Included  [Check all that apply.] |
| Bioretention without underdrains |  |
| Infiltration Trench |  |
| Infiltration Basin |  |
| Drywell |  |
| Proprietary Subsurface Infiltration Gallery |  |
| Permeable Pavement (concrete, asphalt, pavers) |  |
| Other: |  |
| Other: |  |

|  |  |
| --- | --- |
| Description  [Describe Infiltration BMPs. Include descriptions on selection, sizing, and feasibility, as applicable. If infiltration is infeasible, provide brief explanation.] |  |

### Rainwater Harvest and Use BMPs

|  |  |
| --- | --- |
| Name | Included  [Check all that apply.] |
| Above-ground cisterns and basins |  |
| Underground detention |  |
| Other: |  |
| Other: |  |
| Other: |  |

|  |  |
| --- | --- |
| Description  [Describe Rainwater Harvest and Use BMPs. Include descriptions on selection, suitability, sizing, and infeasibility, as applicable.] |  |

### Biofiltration BMPs

*(If Infiltration BMPs and Rainwater Harvest and Use BMPs are Infeasible)*

|  |  |
| --- | --- |
| Name | Included  [Check all that apply.] |
| Bioretention with underdrains (i.e. planter box, rain garden, etc.) |  |
| Constructed Wetland |  |
| Vegetated Swale |  |
| Vegetated Filter Strip |  |
| Tree-Well Filter |  |
| Other: |  |
| Other: |  |

|  |  |
| --- | --- |
| Description  [ Include descriptions on selection, suitability, and sizing.] |  |

### Treatment Control BMPs

Treatment control BMPs can only be used as pre-treatment to LID BMPs.

|  |  |
| --- | --- |
| Name | Included  [Check all that apply.] |
| Media Filter |  |
| Filter Insert |  |
| CDS Unit |  |
| Other: |  |
| Other: |  |

|  |  |
| --- | --- |
| Description  [Include descriptions on selection, suitability, sizing, and infeasibility, as applicable.] |  |

Attachment A

Calculations

[The Design Capture Volume (DCV) is required to design the flow through planter box, vegetated swale, rain garden, and any other volume-based LID system. Include calculations for each BMP using the equation below. If an approved published design standard (i.e. City Manuals, County Manuals, Caltrans, CASQA, etc.) is being used, a reference to the design standard must be included. Calculations must be followed step-by-step with no alterations.

Note:

For Residential LID Projects, the BMP(s) size must be 4% of the tributary area.

For Commercial/Industrial LID Projects, the BMP(s) must be sized to treat the entire design capture volume (DCV).

DCV (ft3) = C x d x A x 43,560 x (1/12)

Where:

C = (0.75 x Impervious Area Percentage) +0.15

D = Design Storm Depth (assume 0.75 inch)

A = Tributary Area (acres)

Impervious Area = Percentage of Impervious area draining to the BMP

Tributary Area = Total area draining to the BMP

Attachment B

City Forms

[Complete and include all City forms]

Attachment C

Master Covenant Agreement (MCA)

Include a Master Covenant Agreement (MCA) form along with an attached Operations and Maintenance (O&M) Plan and Site Plan. The MCA must list the type and dimensions of each BMP. Once the MCA is approved, it will need to be notarized and recorded (along with attachments) with the County Recorder’s Office.

Attachment D

Operations and Maintenance (O&M) Plan

[Include an Operations and Maintenance (O&M) Plan. This should include the components of the BMPs, the frequency of inspections and maintenance, the responsible entity, etc.]

Responsible Party

The owner is aware of the maintenance responsibilities of the proposed BMPs. The contact information for the entity responsible is below:

|  |  |
| --- | --- |
| Name: |  |
| Company: |  |
| Title: |  |
| Address 1: |  |
| Address 2: |  |
| Phone Number: |  |
| Email: |  |

Attachment E

Plans

[Include full sized copies (24” x 36” or larger) of all relevant plans (i.e. grading plans, plumbing plans, drainage plans, etc.) signed, stamped, and dated with wet ink application by a California licensed civil engineer with all water quality notes and details. This is to properly evaluate the site design and ensure all BMPs are located on plans which will be used by the contractor during construction. The plans must indicate the locations of all BMPs, cross-sectional details of all BMPs, conveyance systems, drainage connections, overflow processes, elevations, inverts, etc. All conveyance systems (i.e. ribbon gutters, area drains, storm drains, swales, etc.) must be indicated with inverts and elevations. The cross-sectional details of the BMPs must show the type and depth of all layers (i.e. amended soil layer, gravel layer, etc.) and must follow the criteria from the design standard used.]