



CLARK COUNTY
WASHINGTON

COMMUNITY DEVELOPMENT
BUILDING SAFETY

Residential Stormwater Plan Application

Rev 12.10.18

Working together. Securing your safety. Protecting your investment.

Applicant Information

Name: _____ Date: _____

Phone Number: _____ Email: _____

Site Information

Project Address: _____ Parcel Number: _____

Project Impacts

Fill in the following table to summarize the site disturbance and new or replaced hard surfaces planned for the site. Definitions are on page four.

	Description/Surface Type	Area (sf) *
A	Total site area (1 acre = 43,560 sf) <i>Total size of the lot/property</i> <i>For example, ½ acre lot: multiply .5 x 43,560 = 21,780</i>	
B	New hard surface area <i>(Hard surface areas to be created with the project, see definition of hard surface)</i> <ul style="list-style-type: none"> ▪ Roofs/Buildings ▪ Driveways ▪ Other (patios, hard courts) <p style="text-align: right;">Total</p>	
C	Replaced hard surface area <i>(See definition of replaced hard surface)</i> <ul style="list-style-type: none"> ▪ Driveway ▪ Other (patios, hard courts) <p style="text-align: right;">Total</p>	
D	Total new and replaced hard surface area <i>(Add totals of lines B and C)</i>	
E	Native vegetation converted to pasture	
F	Vegetation (including pasture) converted to lawn/landscape	
G	Total area of land disturbing activity <i>(See definition of land disturbing activity)</i>	

TDA ID # _____. If the site includes more than one Threshold Discharge Area (TDA), copy this sheet, fill out the table above for each TDA, and submit one sheet for each TDA.

Use project impact calculations on pages 5 and 6 to determine application requirements.

Submittal requirements

All applications and required materials must be submitted at the Clark County Permit Center.

Indicate which requirements below apply to this project.

- For projects on parcels in a recorded subdivision or short plat approved on or after January 1, 1994:** The drainage details from the approved subdivision engineering plans for your specific lot are required. Submit two clean, readable sets. These plans may be available on Maps Online at gis.clark.wa.gov/mapsonline.

Note: Any deviation from the approved engineering plans may require a separate review with Public Works - Development Engineering.

- Page 1, 2, and 3 of this application form
 - Two (2) Stormwater plans
 - Two (2) Erosion Control site plans
 - Soil Amendment plan and site plan, if required per engineering plans
- For minimum requirement #2 only:**
- Page 1 and 2 of this application form
 - Erosion Control Plan
 - Two (2) Erosion Control site plans
- Project is for postholes / footings only:**
Total soil/land disturbance < 2 cu yards: No plans or CESCL are required.
- Page 1 and 2 of this application form
- For minimum requirements #1-5:**
- Residential project
 - Commercial project

 - All pages of this application form
 - Two (2) Stormwater plans
 - Applicable reports, as required
 - Erosion Control Plan
 - Two (2) Erosion Control site plans
 - Soil Amendment plan and site plan
- For all minimum requirements #1-9:** A [Development Engineering Application](#) is required. This project will need to be designed by an engineer licensed in the state of Washington.

Stormwater Site Plan Checklist

Show and label the following applicable details:

- North arrow
- Two (2) clean, readable site plans on 8.5 x 14 or 11 x 17. For properties one acre or less in size, site plan is required to be drawn to scale; for sites larger than one acre, a proportionate site plan is acceptable
- Contour lines at a minimum of 10' intervals for the entire parcel, include elevation at building and property corners (available through gis.clark.wa.gov/maponline)
- Existing, new, and replaced hard surfaces with dimensions, include all structures, driveways, and easements
- Proposed BMP locations and details (plan view and profile view, as applicable)
- Crawlspace Low Point Drain and Detail
- Drainage patterns, flow paths, and lengths for associated BMPs and natural runoff
- Dimensions of BMPs for infiltration/dispersion systems, rain gardens, and permeable pavement
- Setback dimensions for all applicable BMPs from structures, property lines, easements, on-site septic systems, wells, slopes, and critical areas and associated buffers
- Limits of excavation and soil disturbance
- Boundaries of existing native landscape vs. new lawn and landscape/existing vegetation, fields, creeks, trees, etc.
- Show grades, dimensions, and direction of flow in all (existing and proposed) ditches, swales, culverts, and pipes

For all projects/permits that create ground disturbance, all sites shall have final stabilization of disturbed soils and a permanent vegetative cover established, or approved equivalent permanent stabilization measures, prior to final inspection approval.

Final stabilization for lawn areas shall include visible growth and full coverage of lawn areas.

Landscape areas and other hard surface areas shall be complete and fully cover all disturbed areas.

The undersigned hereby certifies that this application has been made with the consent of the lawful property owner(s) and that all information submitted with this application is complete and correct. False statements, errors, and/or omissions may be sufficient cause for denial or revocation of the permit.

Applicant/Authorized Signature

Date

Definitions

Hard Surface – An impervious surface (see definition), a permeable pavement, or a vegetated roof.

Impervious Surface – A non-vegetated surface which either prevents or retards the entry of water into the soil below, causing water to run off the surface in greater quantities or at an increased rate compared to natural conditions prior to development. Common impervious surfaces include roofs, walkways, patios, driveways, parking lots, storage areas, gravel roads, and packed earthen materials.

Replaced Hard Surface – For structures, the removal and replacement of hard surfaces down to the foundation. For other hard surfaces, the removal down to bare soil or base course and replacement.

Pollution-generating Hard Surface (PGHS) – Hard surfaces that are significant source of pollutants in stormwater runoff, such as those subject to vehicular traffic and industrial activities. Surfaces include roads, driveways, parking areas, galvanized metal roofs, and areas that receive direct rainfall or run-on and which are used to store erodible stockpiles, wastes, or chemicals.

Converted Vegetation (areas) – Surfaces on a project site where native vegetation, pasture, scrub/shrub, or unmaintained non-native vegetation (e.g., Himalayan blackberry, scotch broom) are converted to lawn or landscaped areas, or where native vegetation is converted to pasture.

Land Disturbing Activity – Any activity that results in a change in the existing soil cover (both vegetated and non-vegetated) and/or the existing soil topography. Land disturbing activities include grading, filling, and excavation. Compaction associated with stabilization of structures and road construction shall also be considered a land disturbing activity. Landscape maintenance and gardening are not included.

Native Vegetation – Plants that are indigenous to the coastal Pacific Northwest and which naturally could have occurred on the site. Examples include Douglas Fir, Western Hemlock, Western Red Cedar, Alder, Big-leaf Maple, and Vine Maple; shrubs such as willow, elderberry, salmonberry and salal; and plants such as sword fern, foam flower, and fireweed.

Threshold Discharge Area – An on-site area draining to a single natural discharge location or multiple natural discharge locations that combine within one-quarter mile downstream (as determined by the shortest flow path), as shown in the illustration.

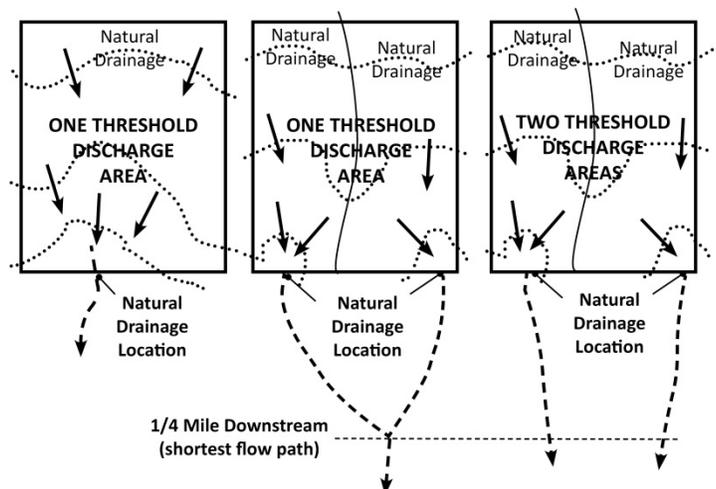


Figure 1.2: New Development Flow Chart

Indicate the path used for determination.

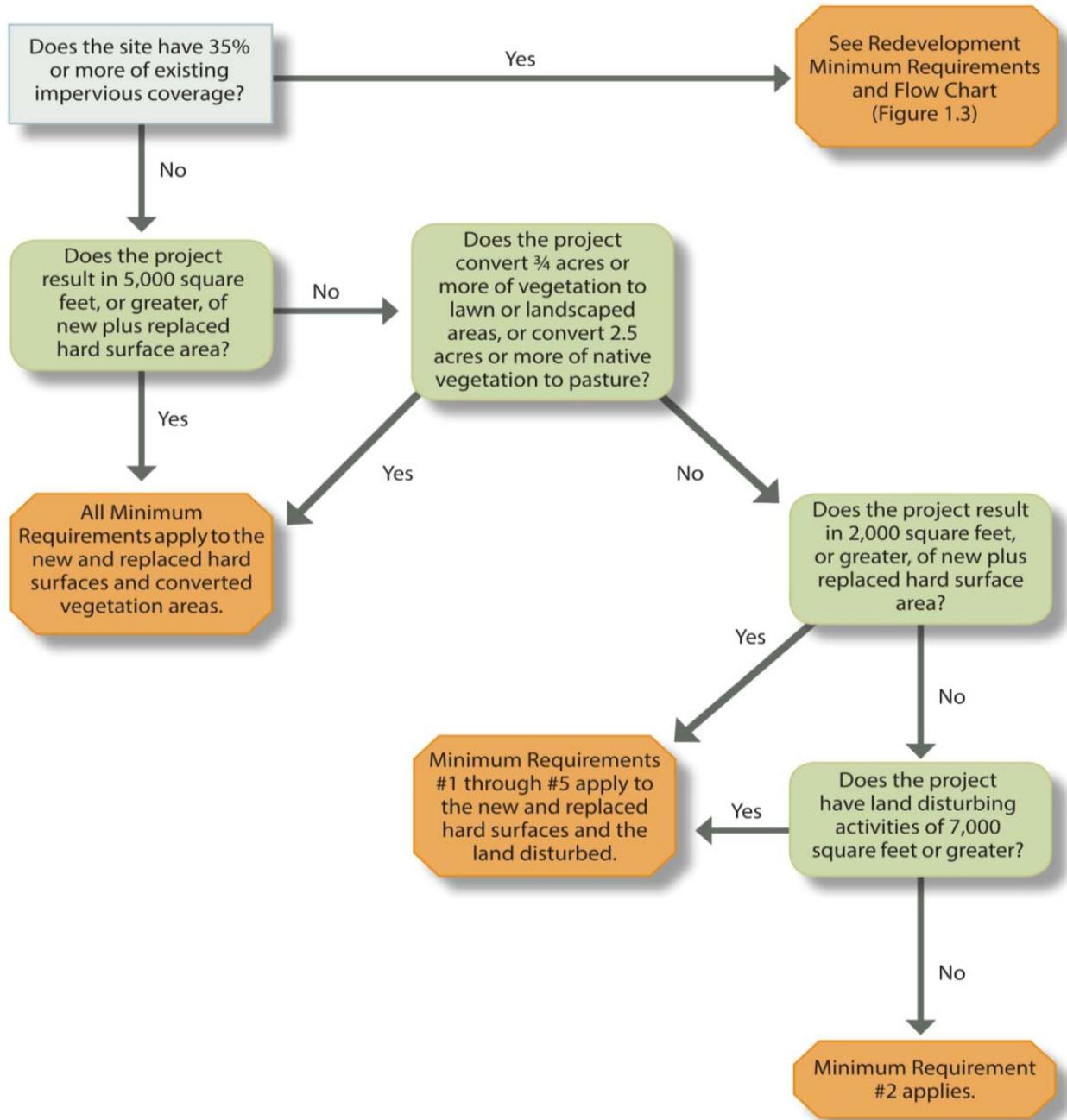
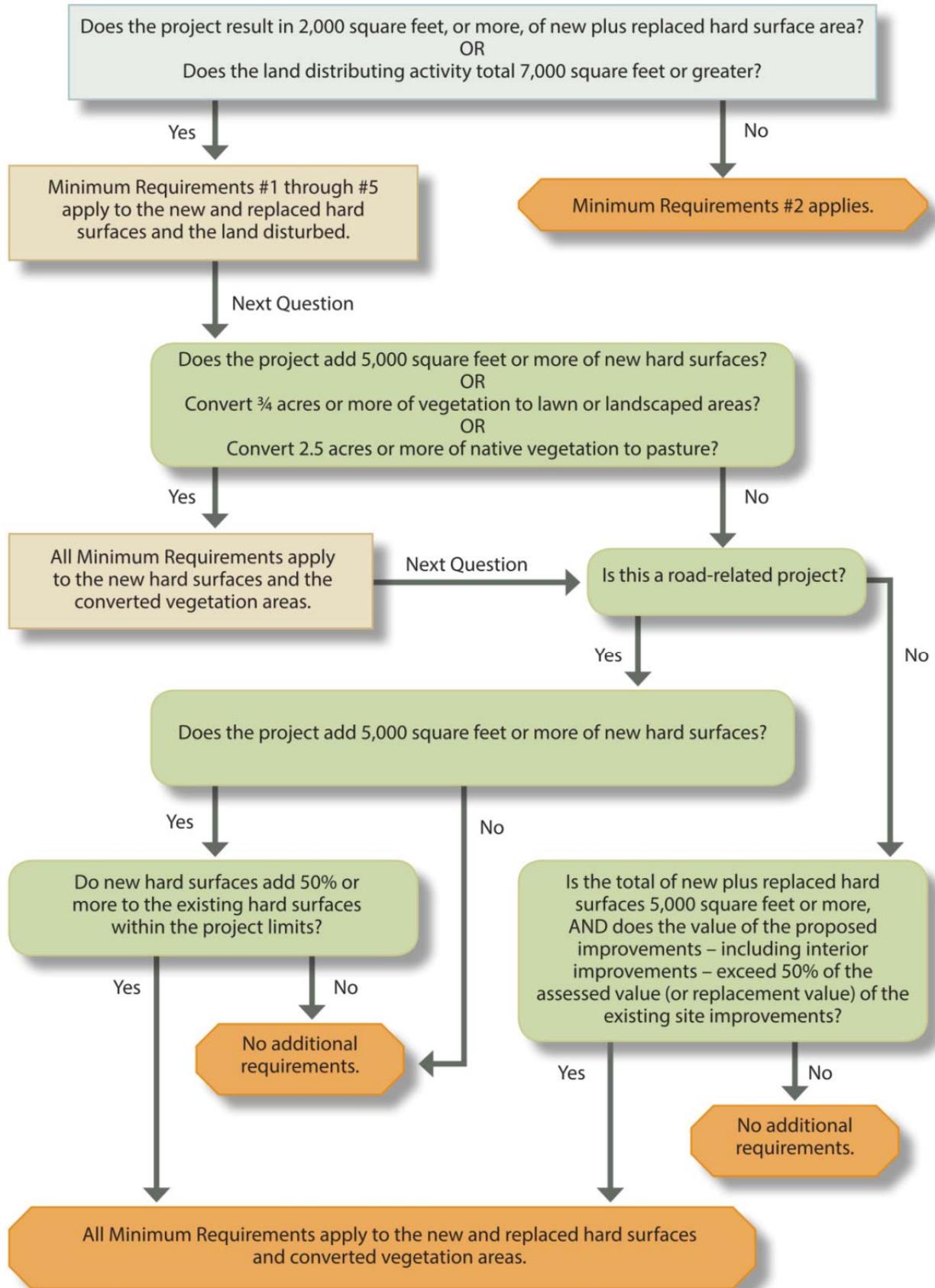


Figure 1.3: Redevelopment Flow Chart

Indicate the path used for determination, if applicable from the results on page five.



Project Thresholds

Projects triggering only Minimum Requirements #1-5 shall either:

1. Use On-site Stormwater Management BMPs from List #1 (see page 12) for all surfaces within each type of surface in List #1; or
2. Demonstrate compliance with the LID Performance Standard. Projects selecting this option cannot use Rain Gardens. They may choose to use Bioretention BMPs as described in [2015 Clark County Stormwater Manual \(CCSM\)](#), Book 1, Chapter 2 and Book 2 Chapter 2 to achieve the LID Performance Standard. Projects selecting this option must implement BMP T5.13, Post-Construction Soil Quality and Depth, if feasible.

Low Impact Development Performance Standard

Stormwater discharge shall match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 8 percent of the 2-year peak flow to 50 percent of the 2-year peak flow. Refer to Clark County Stormwater Manual Book 1, Section 1.5.7.3, Standard Flow Control Requirement of Minimum Requirement #7, information about the assignment of the pre-developed condition. Project sites that must also meet Minimum Requirement #7, Flow Control must also match flow durations between 8percent of the 2-year flow through the full 50-year flow.

Minimum Requirements Discussion and Narrative for Projects Meeting MRs 1-5

The applicant must demonstrate how five minimum requirements will be met. Minimum Requirements describe the minimum stormwater controls and technical specifications for the site.

Generally, small projects must:

- Demonstrate how the minimum requirements will be met using the Stormwater Site Plan and other required submittals (Minimum Requirement #1).
- Control erosion and sedimentation during construction (Minimum Requirement #2).
- Prevent stormwater from coming into contact with pollutants (Minimum Requirement #3).
- Preserve the natural drainage patterns on the site (Minimum Requirement #4).
- Capture and control runoff from the site's new and replaced hard surfaces using practices such as rain gardens, dispersion, or infiltration trenches and drywells (Minimum Requirement #5).

Minimum Requirements are discussed below.

Minimum Requirement #1 – Preparation of a Stormwater Site Plan

All projects shall prepare and submit a Stormwater Site Plan (site plan) for review. The site plan will demonstrate how the project will comply with [Clark County Code 40.386](#) and the [CCSM](#) for control of stormwater. The site plan will be reviewed for compliance and to ensure that stormwater best management practices (BMPs) are correct. A Stormwater Site Plan shall display site-appropriate development principles to retain native vegetation and minimize impervious surfaces to the extent feasible.

Minimum Requirement #2 – Erosion and Sediment Control during Construction

All construction projects are responsible for preventing discharge of sediment and other pollutants from the site during construction. Instructions for documenting and complying with erosion and sediment control requirements are given in the [Erosion Control Plan](#).

Minimum Requirement #3 – Source Control of Pollution

Development and redevelopment projects must use source control BMPs to prevent contamination of stormwater. Source control BMPs must be selected and designed in accordance with the [CCSM](#), Book 3.

Description

Non-residential sites that will include any activities in the Commercial Site Activities list, below, must consult the [CCSM](#), Book 3, and determine the structural and operational source control BMPs that are required for the site. Show any required structural source control BMPs on the site plan, and list any required operational source control BMPs in the “Documentation” section below.

Commercial Site Activities

Check any activity that will take place on the site after construction.

- Manufacturing
- Transportation and Communication Business
- Retail and Wholesale Business
- Service Business
- Public Agency

Documentation

Consult the [CCSM](#), Book 3, and list all required BMPs to be installed to provide source control for activities checked above, or check N/A if no activities above are selected:

Show how any required structural source control BMPs on the site plan.

Minimum Requirement #4 – Preserve Natural Drainage Systems and Outfalls

Maintain natural and existing drainage patterns through the site and onto adjacent property as much as possible.

Minimum Requirement #5 – On-site Stormwater Management

Projects must use On-site Stormwater Management BMPs to disperse, infiltrate, and retain stormwater runoff from the site’s roofs, driveways, parking areas, patios, and landscaped areas to the extent feasible without causing flooding or erosion impacts.

Description

Stormwater generated from hard surfaces on the site must be infiltrated or dispersed into vegetation on the using BMPs such as rain gardens, infiltration trenches and drywells, and dispersion.

Existing Conditions Summary

Describe the existing site conditions. If there are multiple choices, check all that apply.

1. Describe the existing site conditions.

- | | | |
|-----------------------------------|--------------------------------------|----------------------------------|
| <input type="checkbox"/> Forest | <input type="checkbox"/> Prairie | <input type="checkbox"/> Pasture |
| <input type="checkbox"/> Pavement | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Brush |
| <input type="checkbox"/> Trees | <input type="checkbox"/> Other _____ | |

2. Describe how surface water (stormwater) drainage flows across/from the site.

- | | | |
|--------------------------------------|---|--------------------------------------|
| <input type="checkbox"/> Overland | <input type="checkbox"/> Gutter | <input type="checkbox"/> Catch Basin |
| <input type="checkbox"/> Ditch/Swale | <input type="checkbox"/> Storm Sewer Pipe | <input type="checkbox"/> Stream |
| <input type="checkbox"/> Other _____ | | |

3. Describe, discuss and identify the following for the project site:

- Topography – is the site: Flat Rolling Steep
- Natural and man-made drainage patterns (which direction does stormwater flow and how):

- Are there any known historical drainage problems such as flooding, erosion, etc.)?

- Are sensitive and/or critical areas present on the site (check all that apply)?
This information may be found on Clark County Maps Online at www.clark.wa.gov.

- | | | |
|--|---|--|
| <input type="checkbox"/> Streams | <input type="checkbox"/> Lakes/Ponds | <input type="checkbox"/> Wetlands ¹ |
| <input type="checkbox"/> Steep Slopes/Geohazard ¹ | <input type="checkbox"/> Floodplain | <input type="checkbox"/> Springs |
| <input type="checkbox"/> Habitat ¹ | <input type="checkbox"/> Critical Aquifer Recharge Area | |

¹ If the site is on a critical area, Clark County may require additional information, engineering, or other permits.

- Existing utilities
 Storm Water Sewer Other

- Are fuel tanks present on the site?
 Yes No

- Are groundwater wells present on the site and/or within 100 feet of the site?
 Yes No

- Are septic systems present on the site and/or within 100 feet of the site?
 Yes No

- Are there existing public and/or private easements on the project site?
 Yes No
 If Yes, provide Recording Number(s): _____

Adjacent Areas

Describe adjacent properties and roads. Attach a separate sheet, if necessary.

1. Check any adjacent areas that may be affected by site disturbance and describe below (check all that apply):

- | | | |
|---|--|--|
| <input type="checkbox"/> Streams ² | <input type="checkbox"/> Lakes | <input type="checkbox"/> Wetlands ² |
| <input type="checkbox"/> Steep Slopes/Geohazards ² | <input type="checkbox"/> Residential Areas | <input type="checkbox"/> Roads |
| <input type="checkbox"/> Ditches, pipes, culverts | <input type="checkbox"/> Other _____ | |

²If the site is adjacent to a critical area, Clark County may require additional information, engineering, or other permits.

2. Describe how and where surface water enters the site from upstream properties:

3. Describe how and where surface water exits the site and the downstream drainage, including flooding problems, if known:

Soils Assessment

A soils assessment is needed to determine the site suitability for stormwater infiltration features required by state law. The soils report is used to meet on-site stormwater management requirements.

For all sites, the Soils Assessment must include a soils description (item 1, below). Some sites also require infiltration rate testing (item 2, below) and a groundwater assessment (item 3, below).

Sites where full dispersion (BMP T5.30A and BMP T5.30B) are used, do not need to complete soil infiltration testing.

Obtain a Soils Assessment of the site performed by a qualified professional. Ask the qualified professional to fill out items 1 – 3, below, and attach a written report to this form. The professional will need to consult the [CCSM](#), Book 1, Section 2.3.

Qualified professionals include certified soil scientist, professional engineer, geologist, hydrogeologist or engineering geologist registered in the State of Washington or suitably trained persons working under the supervision of the above professionals. A licensed on-site sewage designer can be used to complete the soil description (item 1) and to conduct infiltration tests (item 2) but may not be used to complete the groundwater assessment (item 3), if required.

1. Soil Description

A soil description is required for all sites (available through gis.clark.wa.gov/maponline).

- Soils on the site are described by a qualified professional in accordance with [CCSM](#), Book 1, Section 2.3.1.2, Soil Description
- A Soils Report is attached

Describe the soils on the site:

2. Infiltration Rate Testing

Infiltration rate testing is required for sites that are proposing to use rain gardens or permeable pavements to fulfill Minimum Requirement #5.

- Infiltration rate testing N/A
- Infiltration rate testing conducted by a qualified professional in accordance with [CCSM](#), Book 1, Section 2.3.1.4, Infiltration Rate
- Infiltration testing method, logs, results, and rates are attached or described in the Soils Report.

List the infiltration rate(s) found at each BMP location on the site:

3. Groundwater Assessment

A groundwater assessment is required if permeable pavement is proposed and the seasonal high groundwater elevation in the area is known to be less than five feet below the proposed surface.

- Groundwater assessment N/A
- Groundwater assessment conducted by a qualified professional in accordance with [CCSM](#), Book 1, Section 2.3.1.5, Groundwater Assessment
- Groundwater assessment attached or included with the Soils Report

Documentation

Go through the selection process described below. For each surface to be constructed as part of the project, fill in the first BMP that is feasible using the selection processes.

- Lawn and Landscape Area will be installed or re-graded.
 - BMP T5.13 Post Construction Soil Quality and Depth will be used.
- Roofs will be constructed.
BMP Selected for Roofs: _____
- Other Hard Surfaces will be constructed (e.g. driveway, parking, patio, etc.).
BMP Selected for Other Hard Surfaces: _____

Selection

Project sites usually construct or create up to three types of surfaces that generate stormwater runoff – lawn and landscaped areas, roofs, and other hard surfaces (driveways, patios, parking, etc.).

For each surface constructed or created as part of the project, select a BMP from a prioritized list of required BMPs below. Select the first BMP in the list that is not infeasible. Only one BMP for each surface is required.

List #1 - Clark County Stormwater Manual, Book 1

Lawn and Landscaped Areas

1. Post Construction Soil Quality and Depth BMP T5.13 is required for all lawn and landscaped areas created or re-graded as part of the project.

Roofs

Select the first BMP in the list that is not infeasible for each new roof on the site:

1. Full Dispersion BMP T5.30A and BMP T5.30B or Downspout Full Infiltration BMP T5.10A and BMP T5.10B
2. Rain Garden BMP T5.14A
3. Downspout Dispersion BMP T5.10C
4. Perforated Stub-out Connection BMP T5.10D

Other Hard Surfaces

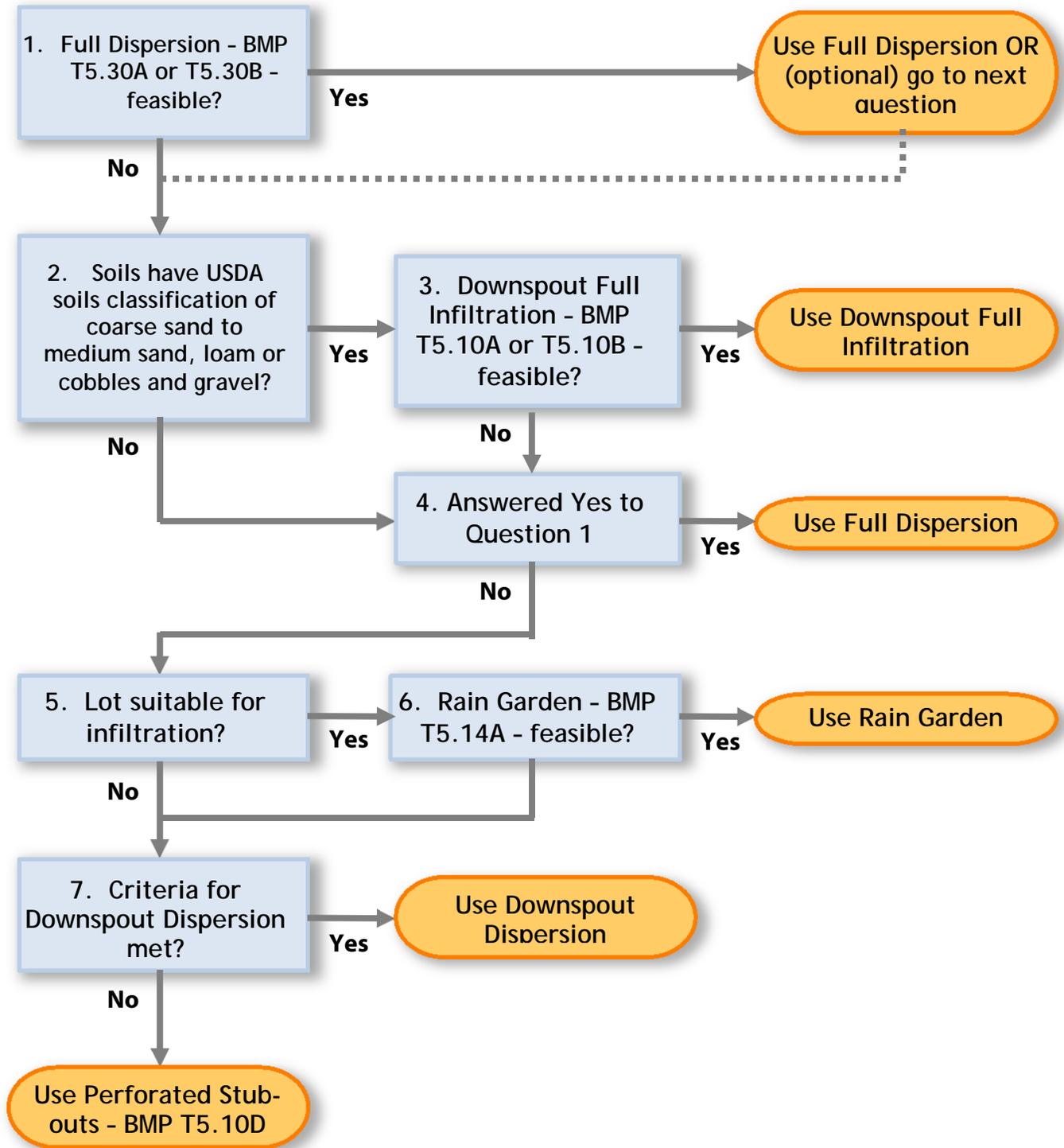
Select the first BMP in the list that is not infeasible for each new or replaced hard surface on the site:

1. Full Dispersion BMP T5.30A and BMP T5.30B
2. Either Rain Garden BMP T5.14A or Permeable Pavement BMP T5.15
3. Either Sheet Flow Dispersion BMP T5.12 or Concentrated Flow Dispersion BMP T5.11

Flow charts on the following pages illustrate the selection process.

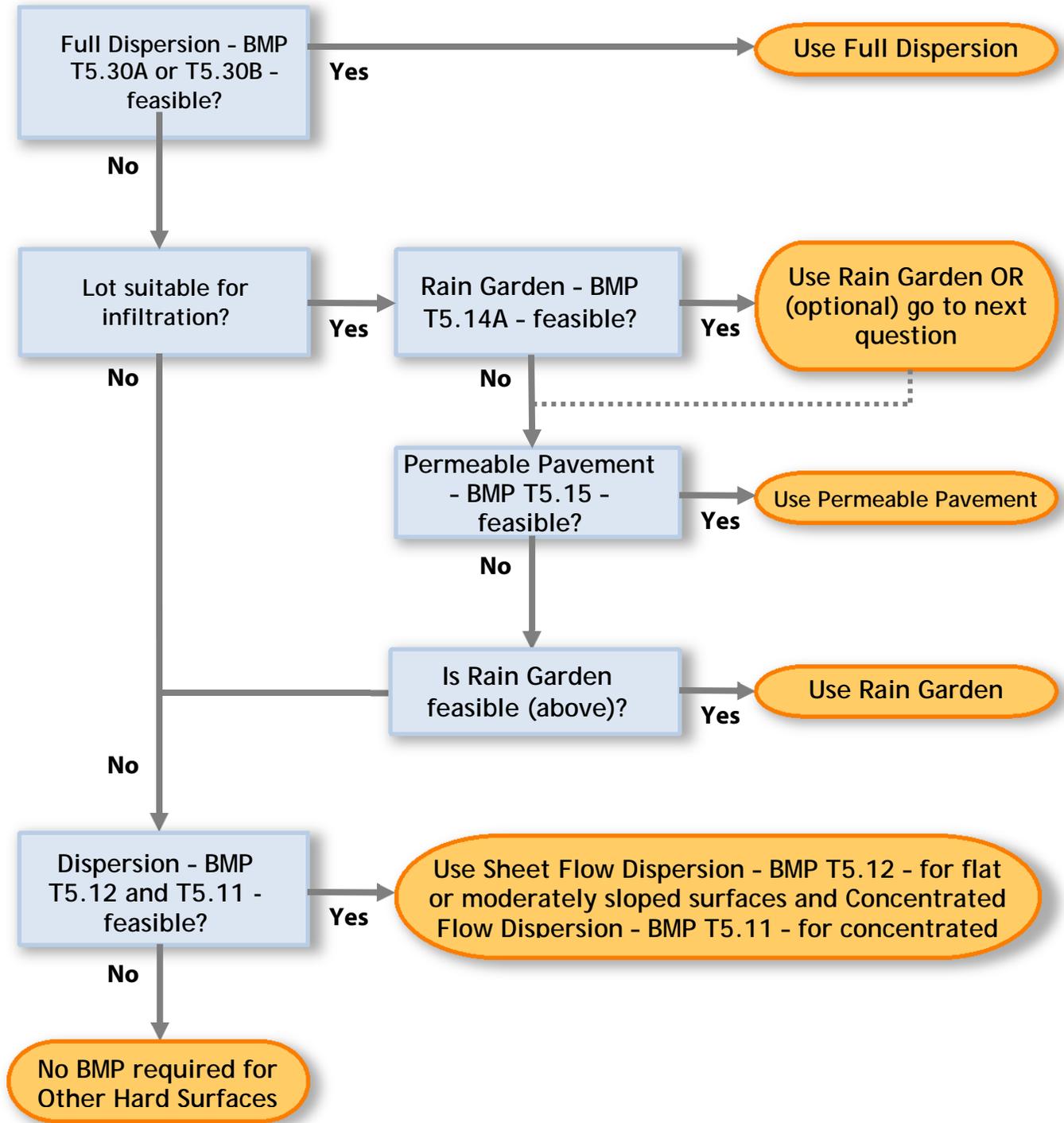
BMP Selection Process for Roofs

Indicate flow path used to determine BMP.



BMP Selection Process for Other Hard Surfaces

Indicate flow path used to determine BMP.



Low Impact Development (LID) Feasibility Checklist for Roof Drainage

Instructions: Fill out this LID Feasibility Checklist for each roof and other hard surface to determine feasibility or infeasibility.

Step 1: Indicate which type(s) of surfaces will be present in Section 1.

Step 2: Consider feasibility criteria and setbacks in Section 2.

Section 1: Surfaces

Roof Other Hard Surfaces

Section 2: Feasibility Criteria

For each type of surface selected in Section 1, above, consider BMPs in the order indicated in the BMP selection process flow chart. Infeasibility must be ascertained using measured or mapped site-specific information, not by general knowledge. Some infeasibility criteria require evaluation by a qualified professional.

For each question, place a mark in either the Yes or No column. For each No answer, move on to the subsequent question within the BMP. If a Yes answer is given, then the BMP is not feasible and is not required in accordance with Minimum Requirement #5. If No answers are given to all questions, then the BMP is feasible and must be used to meet Minimum Requirement #5.

Infeasibility must be documented in writing using the LID Feasibility Checklist beginning on page 16.

ROOF DOWNSPOUT FULL INFILTRATION BMPs T5.10A and T5.10B		Roof			
Feasibility Criteria and Setbacks		YES	NO		
Has a qualified professional determined that soils in the infiltration zone at the location of the roof downspout infiltration BMP do not fall within USDA textural classes of coarse sands to medium sands, loam, or cobbles and gravels?					
Is there less than 3 feet of permeable soil from the proposed finished ground elevation at the drywell or trench location to the seasonal high groundwater table?					
Is there less than 1 foot of soil from the proposed bottom elevation of the roof downspout control to the groundwater elevation?					
Is the proposed location on a slope of 25% (4:1) or greater and cannot reasonably be located elsewhere?					
Is the proposed location less than 100 feet from a closed or active landfill and cannot reasonably be located elsewhere?					
Is the proposed location less than 10 feet from any small on-site sewage disposal drainfield, including reserve areas and grey water reuse systems, and cannot reasonably be located elsewhere?					
Is the proposed location less than 10 feet from an underground storage tank and its connecting pipes that is used to store petroleum products, chemicals, or liquid hazardous wastes in which 10% or more of the storage volume of the tank and connecting pipes is beneath the ground and cannot reasonably be located elsewhere?					
Is the proposed location less than 100 feet upgradient of a septic system unless topography clearly prohibits subsurface flows from intersecting the drainfield and cannot reasonably be located elsewhere?					
Is the proposed location less than 10 feet from any structure, property line, or sensitive area and cannot reasonably be located elsewhere?					
Is the proposed location less than 50 feet from the top of any slope greater than 40% and cannot reasonably be located elsewhere? [Note: at the applicant's request, the Responsible Official may reduce this setback to 15 feet based on a geotechnical evaluation. If requested, submit a geotechnical report with this checklist for county review.]					
Are there Competing Needs? If so, attach a narrative justifying the use of Competing Needs criteria.					
Determination: Is full downspout infiltration feasible?					

DOWNSPOUT DISPERSION BMP T5.10C		Roof			
Setbacks		YES	NO		
Is the proposed location less than 10 feet from any sewage disposal drainfield, including reserve areas and grey water reuse systems, and cannot reasonably be located elsewhere?					
Is the proposed discharge location less than 100 feet upgradient of a septic system drainfield, unless site topography clearly prohibits subsurface flows from intersecting the drainfield and cannot reasonably be located elsewhere?					
Is the proposed discharge point less than 10 feet from any structure or property line and cannot reasonably be located elsewhere?					
Is the proposed discharge point less than 50 feet from the top of any slope greater than 15% and cannot reasonably be located elsewhere? [Note: at the applicant's request, the Responsible Official may reduce this setback to 15 feet based on a geotechnical evaluation. If requested, submit a geotechnical report with this checklist for County review.]					
Are there Competing Needs (see Section 8 Preface)? If so, attach a narrative justifying the use of Competing Needs criteria.					
Determination: Is downspout dispersion feasible?					

FULL DISPERSION BMP T5.30A		Roof		Other Hard Surfaces	
Feasibility Criteria and Setbacks		YES	NO	YES	NO
Will the project protect and maintain less than 65% of the site in a forested native condition?					
Does a professional geotechnical evaluation recommend dispersion not be used due to reasonable concerns about erosion, slope failure or down gradient flooding?					
Is the only location available for the discharge less than 100 feet upgradient of a septic system?					
Is the only area available for the required length of the BMP's flowpath on a slope greater than 20%					
Is the only area available for the required length of the BMP's flowpath above an erosion hazard or toward a landslide hazard area?					
Is the only area available to place the dispersion device (not the flowpath) located in a critical area or critical area buffer?					
Is the only area available to place the dispersion device (not the flowpath) located on a slope greater than 20% or within 50 feet of a geohazard as defined in CCC 40.430?					
Is the only area available to place the dispersion device or required flowpath less than 10 feet from any structure, property line, or sensitive area?					
Are there Competing Needs (see Section 8 Preface)? If so, attach a narrative justifying the use of Competing Needs criteria.					
Determination: Is Full Dispersion into native vegetation feasible?					

DISPERSION TO PASTURE OR CROPLAND BMP T5.30B		Roof		Other Hard Surfaces	
		YES	NO	YES	NO
Applicability and Setbacks					
Is the project site 22,000 square feet or less?					
Will the project protect and maintain less than 75% of the site as pasture or cropland or be covered in more than 15% impervious surfaces?					
Does use of the pasture or cropland for purposes other than plant growth (e.g. unpaved roads, equipment storage, animal pens, haystacks, wheel lines, campsites, trails, etc.) take up more than 10% of the area to be used for dispersion?					
Does the site prohibit a minimum dispersion flow path through pasture or cropland of 300 feet?					
Does a professional geotechnical evaluation recommend dispersion not be used due to reasonable concerns about erosion, slope failure or down gradient flooding?					
Is the only location available for the discharge less than 100 feet upgradient of a septic system?					
Is the only area available for the required length of the BMP's flowpath on a slope greater than 5%?					
Is the only area available for the required length of the BMP's flowpath above an erosion hazard or toward a landslide hazard area?					
Is the only area available to place the dispersion device (not the flowpath) located in a critical area or critical area buffer?					
Is the only area available to place the dispersion device (not the flowpath) located on a slope greater than 20% or within 50 feet of a geohazard as defined in CCC 40.430?					
Is the only area available to place the dispersion device or required flowpath less than 10 feet from any structure, property line, or sensitive area?					
Are crops other than grass, grain, row crops (including berries, nursery stock, and orchards) grown in the proposed flowpath?					
Is the pasture/cropland under different ownership than the project site?					
If the crop or pasture land is predominantly covered in soils with an infiltration rate greater than 4 inches per hour, was the pasture or cropland cleared after November 2009?					
Is there less than 3 feet between the surface elevation along the dispersion flowpath and the average annual maximum groundwater elevation?					
Are there Competing Needs (see Section 8 Preface)? If so, attach a narrative justifying the use of Competing Needs criteria.					
Determination: Is full dispersion to cropland feasible?					

SHEET FLOW DISPERSION BMP T5.12 and CONCENTRATED FLOW DISPERSION BMP T5.11		Roof		Other Hard Surfaces	
		YES	NO	YES	NO
Feasibility Criteria					
Does a professional geotechnical evaluation recommend dispersion not be used due to reasonable concerns about erosion, slope failure or down gradient flooding?					
Is the only location available for the discharge location less than 100 feet upgradient of a septic system drainfield on the site?					
Is the only area available for the required length of the BMP's flowpath on a slope greater than 20%					
Is the only area available for the required length of the BMP's flowpath above an erosion hazard or toward a landslide hazard area?					
Is the only area available to place the dispersion device (not the flowpath) located in a critical area or critical area buffer?					
Is the only area available to place the dispersion device (not the flowpath) located on a slope greater than 20% or within 50 feet of a geohazard as defined by CCC 40.430?					
Is the only area available for the BMP less than 10 feet from any structure, property line, or sensitive area?					
Are there Competing Needs? If so, attach a narrative justifying the use of Competing Needs criteria.					
Determination: Is this BMP feasible?					

RAIN GARDEN BMP T5.14A	Roof		Other Hard Surfaces	
	YES	NO	YES	NO
Infeasibility Criteria and Setbacks				
Has the Responsible Official determined that the BMP is not compatible with surrounding drainage systems?				
Is the land for the BMP within an area designated as an erosion hazard or landslide hazard by the geotechnical report or county critical areas mapping?				
Can the site not reasonably be designed to locate the BMP on slopes less than 8%?				
On properties with known soil or groundwater contamination (typically federal Superfund sites or state cleanup sites under the Model Toxics Control Act (MTCA)) and any of the following criteria:				
<ul style="list-style-type: none"> Is the proposed BMP within 100 feet of an area known to have deep soil contamination? 				
<ul style="list-style-type: none"> Is the site is in an area where groundwater modeling indicates infiltration will likely increase or change the direction of the migration of pollutants in groundwater? 				
<ul style="list-style-type: none"> Is the proposed BMP located in an area where surface soils have been found to be contaminated, and contaminated soils are still in place within 10 horizontal feet of the infiltration area? 				
<i>[End soil / groundwater contamination sub-list.]</i>				
Is the seasonal high water table, bedrock or other impervious layer one foot or less below the rain garden?				
Does field testing indicate that soils have a measured (a.k.a. initial) native soil coefficient of permeability less than 0.3 inches per hour?				
Is the BMP less than 50 feet from the top of slopes greater than 20% and with more than 10 feet of vertical relief and cannot reasonably be located elsewhere?				
Is the BMP less than 100 feet from a drinking water well or a spring used for drinking water and cannot reasonably be located elsewhere?				
Is the BMP less than 10 feet from any small on-site sewage disposal drain field, including reserve areas, and grey water reuse systems and cannot reasonably be located elsewhere? For setbacks from a "large on-site sewage disposal system," see Chapter 246-272B WAC.				
Is the BMP less than 10 feet from an underground storage tank and its connecting pipes that is used to store petroleum products, chemicals, or liquid hazardous wastes?				
Is the BMP less than 100 feet from an underground storage tank and its connecting pipes that is used to store petroleum products, chemicals, or liquid hazardous wastes?				
Are there Competing Needs? If so, attach a narrative justifying the use of Competing Needs criteria.				
<i>The following require professional technical evaluation.</i>				
Does a professional geotechnical evaluation recommend infiltration not be used due to reasonable concerns about erosion, slope failure or down gradient flooding?				

Questions continue on next page

Does the site have groundwater that drains into an erosion hazard or landslide hazard area?				
Is the only area available for siting the BMP threatening the safety or reliability of pre-existing underground utilities, pre-existing underground storage tanks, pre-existing structures and basements, or pre-existing road or parking lot surfaces?				
Would infiltrating water threaten existing below grade basements?				
Would infiltrating water threaten shoreline structures such as bulkheads?				
Is the only area available for siting the BMP one that does not allow for a safe overflow pathway to existing drainage system or natural drainage way?				
Is the site a redevelopment project that lacks usable space?				
Determination: Is this BMP feasible?				

PERMEABLE PAVEMENT BMP T5.15			Other Hard Surfaces	
Feasibility Criteria and Setbacks			YES	NO
Is the area for permeable pavement designated as an erosion hazard or landslide hazard?				
Can the site not reasonably be designed to have a porous asphalt surface at less than 5% slope, or a pervious concrete surface at less than 10% slope, or a permeable interlocking concrete pavement surface (where appropriate) at less than 12% slope, or a grid system at less than the manufacturer's recommended maximum slope limit (generally between 6% to 12%)?				
Would seasonal high groundwater or an underlying impermeable/low permeable layer create saturated conditions within 1 foot of the bottom of the lowest gravel base course?				
Are underlying soils unsuitable for supporting traffic loads when saturated? (Soils meeting a California Bearing Ratio of 5% are considered suitable for residential access roads.)				
Is measured coefficient of permeability in the area for permeable pavement less than 0.3 inches per hour?				
Is the area for permeable pavement less than 50 feet from the top of a slope greater than 20% with more than 10 feet of vertical relief?				
Is the area for permeable pavement less than 100 feet from an active or closed landfill?				
Is the area for permeable pavement less than 100 feet from a drinking water well or a spring used for drinking water?				
Is the area for permeable pavement less than 10 feet from on-site sewage drainage?				
Is the area to be paved less than 10 feet from an underground storage tank and its connecting pipes that is used to store petroleum products, chemicals, or liquid hazardous?				
Are there Competing Needs? If so, attach a narrative justifying the use of Competing Needs criteria.				
<i>The following require professional technical evaluation.</i>				
Does a professional geotechnical evaluation recommend infiltration not be used due to reasonable concerns about erosion, slope failure or down gradient flooding?				
Does the site have groundwater that drains into an erosion hazard or landslide hazard area?				
Would infiltrating and ponded water below new permeable pavement area compromise adjacent impervious pavement?				
Is the only area available for siting the BMP threatening the safety or reliability of pre-existing underground utilities, pre-existing underground storage tanks, pre-existing structures and basements, or pre-existing road or parking lot surfaces?				

Questions continue on next page

Would infiltrating water threaten existing below grade basements?				
Is the area for permeable pavement downslope of steep, erosion prone areas that are likely to deliver sediment?				
Is the area for permeable pavement over fill soils that can become unstable when saturated?				
Is the area for permeable pavement on excessively steep slopes and would the water within the aggregate base layer or at the sub-grade surface be uncontrollable by detention structures and therefore may cause erosion and structural failure, or would surface runoff velocities preclude adequate infiltration at the pavement surface?				
Would installation of permeable pavement threaten the safety or reliability of pre-existing underground utilities, pre-existing underground storage tanks, or pre-existing road sub-grades?				
Determination: Is permeable pavement feasible?				