



**New Development Subcommittee
Proposed Agenda
November 1, 2011 – 1:30 to 3:30 pm
Redwood Shores Library, Meeting Room A
399 Marine Parkway
Redwood City**

- 1. Introductions, Announcements, Minutes & Agree on Agenda – Matt Fabry, All (5 min.)**
Objective: Meet attendees, review and approve previous meeting summary, make announcements, and agree on agenda.

- 2. Low Impact Development Requirements**
 - a. Reminder of December 1, 2011, LID Implementation – Laura Prickett (5 min.)**
*Reminder that Provision C.3.c Low Impact Development requirements and C.3.b.ii Special Land Use Category requirements are effective December 1, 2011.
Permit compliance date: December 1, 2011*

 - b. Tentative Order Amending the MRP -- Laura Prickett, All (15 min.)**
*Review the public draft amendment amending the Municipal Regional Stormwater Permit to include Special Projects criteria, green roof specifications and biotreatment soil specification; review public comments on the draft and talking points for agency staff consideration.
Action after meeting: Agencies should consider testifying at Nov. 9 hearing.*

 - c. Debrief on the October 6 New Development Workshop – All (5 min.)**
Objective: Share about what worked well at the workshop, what needs improvement for next time.

 - d. November 17 LID Feasibility Training – Work group members (5 min.)**
*Objective: Offer recommendations for focused training session on using the LID feasibility worksheets.
Action after meeting: Encourage development review staff to attend training.*

 - e. LID Feasibility Worksheets – Laura Prickett, All (20 min)**
*Objective: Review the final LID feasibility worksheets (screening worksheet, rainwater harvesting/use worksheet, infiltration worksheet) and offer recommendations for the November 17 training session.
Action after meeting: Incorporate the forms in development review process.*

- f. **Revised Impervious Surface Form**– Laura Prickett, All (10 min)
Objective: Review the updated impervious surface form.
Action after meeting: Incorporate revised form in development review process

- g. **Revised NPDES Checklist** – Laura Prickett, All (10 min)
Objective: Review the updated NPDES Checklist.
Action after meeting: Incorporate revised form in development review process

- h. **Consider Need for Subcommittee Session on Revised C.3/C.6 Checklist** – Laura Prickett, All (10 min)
Objective: Review the updated checklist and consider providing a focused session on this checklist (which combines the Impervious Surface Form and the NPDES Checklist) at a future Subcommittee meeting.
Action after meeting: Consider using this form instead of Impervious Surface Form and NPDES Checklist.

- i. **Revised Draft C.3 Technical Guidance**– Laura Prickett, All (15 min)
Objective: Overview of the sections of the C.3 Technical Guidance that are being updated for consistency with LID feasibility.
Action after meeting: Provide comments on the draft revisions.

- j. **Proposition 84 Stormwater Grants and Green Streets** – Matt Fabry, All (5 min)
Objective: Hear about the State Water Board’s grant program, which could help fund green streets and/or countywide green streets plan, and identify volunteers for green streets work group.
Action after meeting: Attend grant workshop in Oakland 12/6/11, 10:00-11:30.

4. Construction Site Control

- a. **Municipal Case Studies – How Are Wet Season Inspections Going?** – All (10 min.)
Objective: Share information and hear how other municipalities are complying with requirements to conduct monthly wet season inspections of sites with over 1 acre of disturbance and high priority sites.

5. Next Meeting – Matt, All (2 min.)

Objective: Schedule next meeting for December 6, 2011?

New Development Subcommittee Meeting Summary

Meeting Date: August 2, 2011

Present: David Huynh, Atherton; Gilbert Yao, Belmont; Matt Fabry, Brisbane and Program Coordinator; Kiley Kinnon, Burlingame; Muneer Ahmed, Colma and Half Moon Bay; Jeanne Naughton, Daly City; Laura Prickett, EOA; Shaun Mao, Menlo Park; Elizabeth Claycomb, Pacifica; Tanisha Werner, Redwood City; Laura Russell, San Bruno; Gavin Moynahan, San Carlos; Camille Leung, County of San Mateo; and Cassie Prudhel, South San Francisco

Subcommittee Actions:

1. Approved summaries of the April and June Subcommittee meetings.
2. Formed a work group to collaborate with Alameda and Santa Clara stormwater programs to prepare an LID feasibility checklist. Work group members are: Jeanne Naughton and Matt Fabry.
3. Recommended that the NPDES Technical Advisory Committee contribute countywide vehicle license fee funds for the proposed Bransten Road green street project in San Carlos.
4. Approved the BMP plan sheet, with revisions identified below.
5. Canceled the October meeting and scheduled the next Subcommittee meeting for November 1.

Requested Technical Advisory Committee Action or Feedback/Guidance (if any):

1. Request for the TAC to work with BASMAA to identify an amount of countywide vehicle license fee funds to contribute to the proposed Bransten Road green street project in San Carlos, while preserving sufficient funds for other green street and parking lot projects within the County.
2. Request that TAC members work to encourage and persuade the municipal staff involved in development review to attend the October 6 New Development Workshop.

Other Information/Announcements:

1. **Annual Reports.** Reviewed Water Board staff's comments on the Provision C.6 section of the 2009/10 Annual Reports and expectations for the 2010/11 Annual Reports.
2. **Annual Report Workshop.** Attendees discussed the July 20 workshop and issues related to completing the Annual Report Form.
3. **New Development Workshop.** The Subcommittee offered recommendations for the October 6 workshop, including sessions to give municipal staff opportunity to practice reviewing example stormwater submittals from applicants.
4. **LID Feasibility Checklist.** Attendees discussed plans to collaborate with the Santa Clara Valley and Alameda countywide stormwater programs to prepare a checklist for projects to determine the feasibility of treating the C.3.d amount of runoff with infiltration or rainwater harvesting and use.
5. **Bransten Road Green Street Project.** Reviewed proposed plans for the Bransten Road project.
6. **Special Projects Criteria.** Reviewed the revised draft criteria for Special Projects that would receive low impact development (LID) treatment reduction credits, which are expected to be included in an upcoming Tentative Order for hearing by the Water Board.
7. **Construction Training.** The Program will partner with the California Building Inspectors Group (CalBIG) to provide BMP training on August 10.
8. **Construction BMP Plan Sheet.** The Subcommittee requested the following revisions: 1) increase font size; 2) add sentence identifying wet season; 3) change check marks to check boxes.
9. **Architectural Copper Flyer.** Reviewed the Santa Clara Valley program's draft flyer.
10. **Pre-Wet Season Reminder.** By September 1, agencies must remind developers and owners of projects that disturb 1 acre or more to prepare for the wet season. See sample letter in agenda packet.
11. **End of Construction General Permit Grandfathering.** September 2 marks the end of the grandfathering of projects that were covered by the previous Construction General Permit. Any

municipal capital projects that were covered under the old permit will need to conduct and submit a risk assessment under the new permit, and revise the SWPPP accordingly, before September 2.

Work That Affects Other Subcommittees: None

Next Steps:

- Comments on the draft architectural copper flyer are due August 16.
- The New Development Workshop work group will develop interactive sessions for the workshop to review example stormwater submittals.
- Matt will send an email to the TAC, requesting that TAC members work to encourage and persuade the municipal staff involved in development review to attend the October 6 New Development Workshop.
- A draft of the LID feasibility checklist will be provided for review and comment before the October 6 workshop.

Next Meeting: November 1, 2011

- Development sites where pollutant mobilization in the soil or groundwater is a documented concern.
- Locations with potential geotechnical hazards.
- Smart growth and infill or redevelopment sites where the density and/or nature of the project would create significant difficulty for compliance with the onsite volume retention requirement.
- Locations with tight clay soils that significantly limit the infiltration of stormwater.

- (iv) By May 1, 2011, the Permittees, collaboratively or individually, shall submit a report on the criteria and procedures the Permittees shall employ to determine when harvesting and re-use, infiltration, or evapotranspiration is feasible and infeasible at a Regulated Project site. This report shall, at a minimum, contain the information required in Provision C.3.c.iii.(1).
- (v) By December 1, 2013, the Permittees, collaboratively or individually, shall submit a report on their experience with determining infeasibility of harvesting and re-use, infiltration, or evapotranspiration at Regulated Project sites. This report shall, at a minimum, contain the information required in Provision C.3.iii.(2).

Provision C.3.c.i(2)(b)(vi)

(vi) Biotreatment (or bioretention) systems shall be designed to have a surface area no smaller than what is required to accommodate a 5 inches/hour stormwater runoff surface loading rate, and infiltrate runoff at a minimum of 5 inches per hour during the life of the facility. The planting and soil media for biotreatment (or bioretention) systems shall be designed to sustain healthy, vigorous plant growth and maximize stormwater runoff retention and pollutant removal. Permittees shall ensure that Regulated Projects use biotreatment soil media that meet the minimum specifications set forth in Attachment L.

~~(vi) By December 1, 2010, the Permittees, working collaboratively or individually, shall submit for Water Board approval, a proposed set of model biotreatment soil media specifications and soil infiltration testing methods to verify a long-term infiltration rate of 5 to 10 inches/hour. This submittal to the Water Board shall, at a minimum, contain the information required in Provision C.3.c.iii.(3). Once the Water Board approves biotreatment soil media specifications and soil infiltration testing methods, the Permittees shall ensure that biotreatment systems installed to meet the requirements of Provision C.3.c and d comply with the Water Board approved minimum specifications and soil infiltration testing methods.~~

(vii) Green roofs may be considered biotreatment systems that treat roof runoff only if they meet certain minimum specifications. ~~By May 1, 2011, the Permittees shall submit for Water Board~~

~~approval, proposed minimum specifications for green roofs. This submittal to the Water Board shall, at a minimum, contain the information required in Provision C.3.c.iii.(4). Once the Water Board approves green roof minimum specifications, the Permittees shall ensure that green roofs installed at Regulated Projects to meet the following requirements of Provision C.3.c and d comply with the Water Board approved minimum specifications:~~

- ~~• The green roof system planting media shall be sufficiently deep to provide capacity within the pore space of the media for the required runoff volume specified by Provision C.3.d.i.(1).~~
- ~~• The green roof system planting media shall be sufficiently deep to support the long term health of the vegetation selected for the green roof, as specified by a landscape architect or other knowledgeable professional.~~

- (c) Require any Regulated Project that does not comply with Provision C.3.c.i.(2)(b) above to meet the requirements established in Provision C.3.e for alternative compliance.

- ii. **Implementation Level** – All elements of the tasks described in Provision C.3.c.i shall be fully implemented.

Due Date for Full Implementation – December 1, 2011

- (1) For any private development project for which a planning application has been deemed complete by a Permittee on or before the Permit effective date, Provision C.3.c.i shall not apply so long as the project applicant is diligently pursuing the project. Diligent pursuance may be demonstrated by the project applicant's submittal of supplemental information to the original application, plans, or other documents required for any necessary approvals of the project by the Permittee. If during the time period between the Permit effective date and the required implementation date of December 1, 2011, the project applicant has not taken any action to obtain the necessary approvals from the Permittee, the project will then be subject to the requirements of Provision C.3.c.i.
- (2) For any private development project with an application deemed complete after the Permit effective date, the requirements of Provision C.3.c.i shall not apply if the project applicant has received final discretionary approval for the project before the required implementation date of December 1, 2011.
- (3) For public projects for which funding has been committed and construction is scheduled to begin by December 1, 2012, the requirements of Provision C.3.c.i shall not apply.

- iii. **Reporting**

C.3.d runoff with LID treatment measures at a Regional Project.³ The Regional Project must achieve a net environmental benefit.

- (3) For the alternative compliance options described in Provision C.3.e.i.(1) and (2) above, offsite projects must be constructed by the end of construction of the Regulated Project. If more time is needed to construct the offsite project, for each additional year, up to three years, after the construction of the Regulated Project, the offsite project must provide an additional 10% of the calculated equivalent quantity of both stormwater runoff and pollutant loading. Regional Projects must be completed within three years after the end of construction of the Regulated Project. However, the timeline for completion of the Regional Project may be extended, up to five years after the completion of the Regulated Project, with prior Executive Officer approval. Executive Officer approval will be granted contingent upon a demonstration of good faith efforts to implement the Regional Project, such as having funds encumbered and applying for the appropriate regulatory permits.

Provision C.3.e.ii

ii. Special Projects

- (1) When considered at the watershed scale, certain land development projects characterized as ~~types of~~ smart growth, high density, ~~and or~~ transit-oriented development can either reduce existing impervious surfaces, or create less “accessory” impervious areas and automobile-related pollutant impacts. Incentive LID Treatment Reduction Credits approved by the Water Board may be applied to these ~~types of~~ Special Projects, which are Regulated Projects that meet the specific criteria listed below in Provision C.3.e.ii.(2). For any Special Project, the allowable incentive LID Treatment Reduction Credit is the maximum percentage of the amount of runoff identified in Provision C.3.d. for the Special Project’s drainage area, that may be treated with one or a combination of the following two types of non-LID treatment systems:
- Tree-box-type high flowrate biofilters
 - Vault-based high flowrate media filters
- (2) Category A Special Project Criteria
- (a) To be considered a Category A Special Project, a Regulated Project must meet all of the following criteria:
- (i) Be built as part of a Permittee’s stated objective to preserve or enhance a pedestrian-oriented type of urban design.
 - (ii) Be located in a Permittee’s designated central business district, downtown core area or downtown core zoning district, neighborhood business district or comparable pedestrian-oriented commercial district, or historic preservation site and/or district.

³ **Regional Project** – A regional or municipal stormwater treatment facility that discharges into the same watershed that the Regulated Project does.

- (iii) Create and/or replace one half acre or less of impervious surface area.
- (iv) Include no surface parking, except for incidental surface parking. Incidental surface parking is allowed only for emergency vehicle access, Americans with Disabilities Act (ADA) accessibility, and passenger and freight loading zones.
- (v) Have at least 85% coverage for the entire project site by permanent structures. The remaining 15% portion of the site is to be used for safety access, parking structure entrances, trash and recycling service, utility access, pedestrian connections, public uses, landscaping, and stormwater treatment.
- (b) Any Category A Special Project may qualify for 100% LID Treatment Reduction Credit, which would allow the Category A Special Project to treat up to 100% of the amount of runoff identified in Provision C.3.d. for the Project's drainage area with either one or a combination of the two types of non-LID treatment systems listed in Provision C.3.e.ii.(1) above.

(3) Category B Special Project Criteria

- (a) To be considered a Category B Special Project, a Regulated Project must meet all of the following criteria:
 - (i) Be built as part of a Permittee's stated objective to preserve or enhance a pedestrian-oriented type of urban design.
 - (ii) Be located in a Permittee's designated central business district, downtown core area or downtown core zoning district, neighborhood business district or comparable pedestrian-oriented commercial district, or historic preservation site and/or district.
 - (iii) Create and/or replace greater than one-half acre but no more than 2 acres of impervious surface area.
 - (iv) Include no surface parking, except for incidental surface parking. Incidental surface parking is allowed only for emergency vehicle access, ADA accessibility, and passenger and freight loading zones.
 - (v) Have at least 85% coverage for the entire project site by permanent structures. The remaining 15% portion of the site is to be used for safety access, parking structure entrances, trash and recycling service, utility access, pedestrian connections, public uses, landscaping, and stormwater treatment.
- (b) For any Category B Special Project, the maximum LID Treatment Reduction Credit allowed is determined based on the density achieved by the Project in accordance with the criteria listed below. Density is expressed in Floor Area Ratios (FARs) for commercial and mixed-use development projects and in Dwelling Units per Acre (DU/Ac) for residential development projects.

- (i) 50% Maximum LID Treatment Reduction Credit

 - For any commercial or mixed use Category B Special Project with a FAR of at least 2:1, up to 50% of the amount of runoff identified in Provision C.3.d. for the Project's drainage area may be treated with either one or a combination of the two types of non-LID treatment systems listed in Provision C.3.e.ii.(1) above.
 - For any residential Category B Special Project with a density of at least 50 DU/Ac, up to 50% of the amount of runoff identified in Provision C.3.d. for the Project's drainage area may be treated with either one or a combination of the two types of non-LID treatment systems listed in Provision C.3.e.ii.(1) above.
 - (ii) 75% Maximum LID Treatment Reduction Credit

 - For any commercial or mixed use Category B Special Project with a FAR of at least 3:1, up to 75% of the amount of runoff identified in Provision C.3.d. for the Project's drainage area may be treated with either one or a combination of the two types of non-LID treatment systems listed in Provision C.3.e.ii.(1) above.
 - For any residential Category B Special Project with a density of at least 75 DU/Ac, up to 75% of the amount of runoff identified in Provision C.3.d. for the Project's drainage area may be treated with either one or a combination of the two types of non-LID treatment systems listed in Provision C.3.e.ii.(1) above.
 - (iii) 100% Maximum LID Treatment Reduction Credit

 - For any commercial or mixed use Category B Special Project with a FAR of at least 4:1, up to 100% of the amount of runoff identified in Provision C.3.d. for the Project's drainage area may be treated with either one or a combination of the two types of non-LID treatment systems listed in Provision C.3.e.ii.(1) above.
 - For any residential Category B Special Project with a density of at least 100 DU/Ac, up to 100% of the amount of runoff identified in Provision C.3.d. for the Project's drainage area may be treated with either one or a combination of the two types of non-LID treatment systems listed in Provision C.3.e.ii.(1) above.
- (4) Category C Special Project Criteria (Transit-Oriented Development)
- (a) Transit-Oriented Development refers to the clustering of homes, jobs, shops and services in close proximity to rail stations, ferry terminals or bus stops offering access to frequent, high-quality transit services. This pattern typically involves compact development and a mixing of different land uses, along with amenities like pedestrian-friendly streets. To be considered a Category C Special Project, a Regulated Project must meet all of the following criteria:

 - (i) Be characterized as a non auto-related land use project. That is, Category C specifically excludes any Regulated Project that is a stand-alone surface parking lot; car dealership; auto and truck

rental facility with onsite surface storage; fast-food restaurant, bank or pharmacy with drive-through lanes; gas station, car wash, auto repair and service facility; or other auto-related project unrelated to the concept of Transit-Oriented Development.

(ii) If a commercial or mixed-use development project, achieve at least an FAR of 2:1.

(iii) If a residential development project, achieve at least a density of 25 DU/Ac.

(b) For any Category C Special Project, the total maximum LID Treatment Reduction Credit allowed is the sum of three different types of credits that the Category C Special Project may qualify for, namely: Location, Density and Minimized Surface Parking Credits.

(c) Location Credits

(i) A Category C Special Project may qualify for the following Location Credits:

- 50% Location Credit: Located within a ¼ mile radius of an existing or planned transit hub.
- 25% Location Credit: Located within a ½ mile radius of an existing or planned transit hub.
- 25% Location Credit: Located within a planned Priority Development Area (PDA), which is an infill development area formally designated by the Association of Bay Area Government's / Metropolitan Transportation Commission's FOCUS regional planning program. FOCUS is a regional incentive-based development and conservation strategy for the San Francisco Bay Area.

(ii) Only one Location Credit may be used by an individual Category C Special Project, even if the project qualifies for multiple Location Credits.

(iii) At least 50% or more of a Category C Special Project's site must be located within the ¼ or ½ mile radius of an existing or planned transit hub to qualify for the corresponding Location Credits listed above. One hundred percent of a Category C Special Project's site must be located within a PDA to qualify for the corresponding Location Credit listed above.

(iv) Transit hub is defined as a rail, light rail, or commuter rail station, ferry terminal, or bus transfer station served by three or more bus routes (i.e., a bus stop with no supporting services does not qualify). A planned transit hub is a station on the MTC's Regional Transit Expansion Program list, per MTC's Resolution 3434 (revised April 2006), which is a regional priority funding plan for future transit stations in the San Francisco Bay Area.

- (d) Density Credits: To qualify for any Density Credits, a Category C Special Project must first qualify for one of the Location Credits listed in Provision C.3.e.ii.(4)(c) above.
- (i) A Category C Special Project that is a commercial or mixed-use development project may qualify for the following Density Credits:
- 10% Density Credit: Achieve an FAR of at least 2:1.
 - 20% Density Credit: Achieve an FAR of at least 4:1.
 - 30% Density Credit: Achieve an FAR of at least 6:1.
- (ii) A Category C Special Project that is a residential development project may qualify for the following Density Credits:
- 10% Density Credit: Achieve a density of at least 30 DU/Ac.
 - 20% Density Credit: Achieve a density of at least 60 DU/Ac.
 - 30% Density Credit: Achieve a density of at least 100 DU/Ac.
- (iii) Commercial and mixed-use Category C Projects do not qualify for Density Credits based on DU/Ac and residential Category C Projects do not qualify for Density Credits based on FAR.
- (iv) Only one Density Credit may be used by an individual Category C Special Project, even if the project qualifies for multiple Density Credits.
- (e) Minimized Surface Parking Credits: To qualify for any Minimized Surface Parking Credits, a Category C Special Project must first qualify for one of the Location Credits listed in Provision C.3.e.ii.(4)(c) above.
- (i) A Category C Special Project may qualify for the following Minimized Surface Parking Credits:
- 10% Minimized Surface Parking Credit: Have 10% or less of the total post-project impervious surface area dedicated to at-grade surface parking. The at-grade surface parking must be treated with LID treatment measures.
 - 20% Minimized Surface Parking Credit: Have no surface parking except for incidental surface parking. Incidental surface parking is allowed only for emergency vehicle access, ADA accessibility, and passenger and freight loading zones.
- (ii) Only one Minimized Surface Parking Credit may be used by an individual Category C Special Project, even if the project qualifies for multiple Minimized Surface Parking Credits.
- (5) Any Regulated Project that meets all the criteria for multiple Special Projects Categories (i.e., a Regulated Project that may be characterized as a Category B or C Special Project) may only use the LID Treatment Reduction Credit allowed under one of the Special Projects Categories (i.e., a Regulated Project that may be characterized as a Category B or C

Special Project may use the LID Treatment Reduction Credit allowed under Category B or Category C, but not the sum of both.)

~~(2) — By December 1, 2010, the Permittees shall submit a proposal to the Water Board containing the following information:~~

- ~~• Identification of the types of projects proposed for consideration of LID treatment reduction credits and an estimate of the number and cumulative area of potential projects during the remaining term of this Permit for each type of project;~~
- ~~• Identification of institutional barriers and/or technical site-specific constraints to providing 100% LID treatment onsite that justify the allowance for non-LID treatment measures onsite;~~
- ~~• Specific criteria for each type of Special Project proposed, including size, location, minimum densities, minimum floor area ratios, or other appropriate limitations;~~
- ~~• Identification of specific water quality and environmental benefits provided by these types of projects that justify the allowance for non-LID treatment measures onsite;~~
- ~~• Proposed LID treatment reduction credit for each type of Special Project and justification for the proposed credits. The justification shall include identification and an estimate of the specific water quality benefit provided by each type of Special Project proposed for LID treatment reduction credit; and~~
- ~~• Proposed total treatment reduction credit for Special Projects that may be characterized by more than one category and justification for the proposed total credit.~~

iii. Effective Date – December 1, 2011.

iv. Implementation Level

- (1) For any private development project for which a planning application has been deemed complete by a Permittee on or before the Permit effective date, Provisions C.3.e.i-ii shall not apply so long as the project applicant is diligently pursuing the project. Diligent pursuance may be demonstrated by the project applicant's submittal of supplemental information to the original application, plans, or other documents required for any necessary approvals of the project by the Permittee. If during the time period between the Permit effective date and the required implementation date of December 1, 2011, the project applicant has not taken any action to obtain the necessary approvals from the Permittee, the project will then be subject to the requirements of Provision C.3.e.i-ii.
- (2) For public projects for which funding has been committed and construction is scheduled to begin by December 1, 2012, the requirements of Provisions C.3.e.i-ii shall not apply.
- (3) Provisions C.3.e.i-ii supersede any Alternative Compliance Policies previously approved by the Executive Officer

(4) For all offsite projects and Regional Projects installed in accordance with Provision C.3.e.i-ii, the Permittees shall meet the Operation & Maintenance (O&M) requirements of Provision C.3.h.

v. **Reporting** –The Permittees shall submit the ordinance/legal authority and procedural changes made, if any, to implement Provision C.3.e with their 2012 Annual Report. Annual reporting thereafter shall be done in conjunction with reporting requirements under Provision C.3.b.v.

Any Permittee choosing to require 100% LID treatment onsite for all Regulated Projects and not allow alternative compliance under Provision C.3.e, shall include a statement to that effect in the 2012 Annual Report and all subsequent Annual Reports.

Provision C.3.e.vi

vi. Reporting on Special Projects

- (1) Beginning December 1, 2011, Permittees shall track any identified potential Special Projects that have submitted planning applications but that have not received final discretionary approval.
- (2) By March 15 and September 15 of each year, Permittees shall report to the Water Board on these tracked potential Special Projects using Table 3.1 found at the end of Provision C.3. All the required column entry information listed in Table 3.1 shall be reported for each potential Special Project. Any Permittee with no potential Special Projects shall so state.
- (3) Once a Special Project has final discretionary approval, it shall be reported in the Provision C.3.b. Reporting Table in the same reporting year that the project was approved. In addition to the column entries contained in the Provision C.3.b. Reporting Table, the Permittees shall provide the following supplemental information for each approved Special Project:
 - (a) Submittal Date: Date that a planning application for the Special Project was submitted.
 - (b) Description: Type of project, number of floors, number of units (commercial, mixed-use, residential), type of parking, and other relevant information.
 - (c) Site Acreage: Total site area in acres.
 - (d) Density in DU/Ac: Number of dwelling units per acre.
 - (e) Density in FAR: Floor Area Ratio
 - (f) Special Project Category: For each Special Project Category, indicate applicability to the subject Special Project. If a Category is applicable, list the specific criteria applied to determine applicability.
 - (g) LID Treatment Reduction Credit: For each applicable Special Project Category, state the maximum total LID Treatment Reduction Credit applied. For Category C Special Projects also list the individual Location, Density, and Minimized Surface Parking Credits applied.
 - (h) Stormwater Treatment Systems: List all proposed stormwater treatment systems and the corresponding percentage of the total

amount of runoff identified in Provision C.3.d. for the Project's drainage area that will be treated by each treatment system.

Draft

Table 3.1 Standard Tracking and Reporting Form for Potential Special Projects

<u>Project Name and No.</u>	<u>Permittee Address</u>	<u>Application Submittal Date</u>	<u>Description</u>	<u>Site Total Acreage</u>	<u>Density DU/Ac</u>	<u>Density FAR</u>	<u>Special Project Category</u>	<u>LID Treatment Reduction Credit</u>	<u>Stormwater Treatment Systems</u>

Project Name and No: Name of the Special Project and Project No. (if applicable)

Permittee: Name of the Permittee in whose jurisdiction the Special Project will be built.

Address: Address of the Special Project; if no street address, state the cross streets.

Submittal Date: Date that a planning application for the Special Project was submitted; if a planning application has not been submitted, include a projected application submittal date.

Description: Type of project (commercial, mixed-use, residential), number of floors, number of units, type of parking, and other relevant information.

Site Acreage: Total site area in acres.

Density in DU/Ac: Number of dwelling units per acre.

Density in FAR: Floor Area Ratio

Special Project Category: For each Special Project Category, indicate applicability. If a Category is applicable, list the specific criteria applied to determine applicability.

LID Treatment Reduction Credit: For each applicable Special Project Category, state the maximum total LID Treatment Reduction Credit available. For Category C Special Projects also list the individual Location, Density, and Minimized Surface Parking Credits available.

Stormwater Treatment Systems: List all proposed stormwater treatment systems and the corresponding percentage of the total amount of runoff runoff identified in Provision C.3.d. for the Project's drainage area that will be treated by each treatment system.

ATTACHMENT L

Provision C.3.c.i.(1)(b)(vi)

Specification of soils for Biotreatment or Bioretention Facilities

Soils for biotreatment or bioretention areas shall meet two objectives:

- Be sufficiently permeable to infiltrate runoff at a minimum rate of 5" per hour during the life of the facility, and
- Have sufficient moisture retention to support healthy vegetation.

Achieving both objectives with an engineered soil mix requires careful specification of soil gradations and a substantial component of organic material (typically compost).

Local soil products suppliers have expressed interest in developing 'brand-name' mixes that meet these specifications. At their sole discretion, municipal construction inspectors may choose to accept test results and certification for a 'brand-name' mix from a soil supplier.

Tests must be conducted within 120 days prior to the delivery date of the bioretention soil to the project site.

Batch-specific test results and certification shall be required for projects installing more than 100 cubic yards of bioretention soil.

SOIL SPECIFICATIONS

Bioretention soils shall meet the following criteria. "Applicant" refers to the entity proposing the soil mixture for approval by a Permittee.

1. General Requirements – Bioretention soil shall:
 - a. Achieve a long-term, in-place infiltration rate of at least 5 inches per hour.
 - b. Support vigorous plant growth.
 - c. Consist of the following mixture of fine sand and compost, measured on a volume basis:
 - 60%-70% Sand
 - 30%-40% Compost
2. Submittal Requirements – The applicant shall submit to the Permittee for approval:
 - a. A sample of mixed bioretention soil.
 - b. Certification from the soil supplier or an accredited laboratory that the Bioretention Soil meets the requirements of this guideline specification.
 - c. Grain size analysis results of the fine sand component performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.
 - d. Quality analysis results for compost performed in accordance with Seal of Testing Assurance (STA) standards, as specified in 4.

- e. Organic content test results of mixed Bioretention Soil. Organic content test shall be performed in accordance with by Testing Methods for the Examination of Compost and Composting (TMECC) 05.07A, "Loss-On-Ignition Organic Matter Method".
- f. Grain size analysis results of compost component performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.
- g. A description of the equipment and methods used to mix the sand and compost to produce Bioretention Soil.
- h. Provide the name of the testing laboratory(s) and the following information:
 - (1) Contact person(s)
 - (2) Address(s)
 - (3) Phone contact(s)
 - (4) E-mail address(s)
 - (5) Qualifications of laboratory(s), and personnel including date of current certification by STA, ASTM, or approved equal

3. Sand for Bioretention Soil

- a. Sand shall be free of wood, waste, coating such as clay, stone dust, carbonate, etc., or any other deleterious material. All aggregate passing the No. 200 sieve size shall be non-plastic.
- b. Sand for Bioretention Soils shall be analyzed by an accredited lab using #200, #100, #40, #30, #16, #8, #4, and 3/8 inch sieves (ASTM D 422 or as approved by municipality), and meet the following gradation:

Sieve Size	Percent Passing (by weight)	
	<i>Min</i>	<i>Max</i>
3/8 inch	100	100
No. 4	90	100
No. 8	70	100
No. 16	40	95
No. 30	15	70
No. 40	5	55
No. 100	0	15
No. 200	0	5

Note: all sands complying with ASTM C33 for fine aggregate comply with the above gradation requirements.

4. Composted Material

Compost shall be a well decomposed, stable, weed free organic matter source derived from waste materials including yard debris, wood wastes or other organic materials not including manure or biosolids meeting the standards developed by the US Composting Council (USCC). The product shall be certified through the USCC Seal of Testing Assurance (STA) Program (a compost testing and information disclosure program).

a. Compost Quality Analysis – Before delivery of the soil, the supplier shall submit a copy of lab analysis performed by a laboratory that is enrolled in the US Composting Council's Compost Analysis Proficiency (CAP) program and using approved Test Methods for the Evaluation of Composting and Compost (TMECC). The lab report shall verify:

- (1) Feedstock Materials shall be specified and include one or more of the following: landscape/yard trimmings, grass clippings, food scraps, and agricultural crop residues.
- (2) Organic Matter Content: 35% - 75% by dry wt.
- (3) Carbon and Nitrogen Ratio: C:N < 25:1 and C:N >15:1
- (4) Maturity/Stability: shall have a dark brown color and a soil-like odor. Compost exhibiting a sour or putrid smell, containing recognizable grass or leaves, or is hot (120F) upon delivery or rewetting is not acceptable. In addition any one of the following is required to indicate stability:
 - (i) Oxygen Test < 1.3 O₂ /unit TS /hr
 - (ii) Specific oxy. Test < 1.5 O₂ / unit BVS /
 - (iii) Respiration test < 8 C / unit VS / day
 - (iv) Dewar test < 20 Temp. rise (°C) e.
 - (v) Solvita® > 5 Index value
- (5) Toxicity: any one of the following measures is sufficient to indicate non-toxicity.
 - (i) NH₄⁻ : NO₃-N < 3
 - (ii) Ammonium < 500 ppm, dry basis
 - (iii) Seed Germination > 80 % of control
 - (iv) Plant Trials > 80% of control
 - (v) Solvita® > 5 Index value
- (6) Nutrient Content: provide analysis detailing nutrient content including N-P-K, Ca, Na, Mg, S, and B.
 - (i) Total Nitrogen content 0.9% or above preferred.
 - (ii) Boron: Total shall be <80 ppm; Soluble shall be <2.5 ppm
- (7) Salinity: Must be reported; < 6.0 mmhos/cm
- (8) pH shall be between 6.5 and 8. May vary with plant species.

- b. Compost for Bioretention Soil Texture – Compost for bioretention soils shall be analyzed by an accredited lab using #200, 1/4 inch, 1/2 inch, and 1 inch sieves (ASTM D 422 or as approved by municipality), and meet the following gradation:

Sieve Size	Percent Passing (by weight)	
	<i>Min</i>	<i>Max</i>
1 inch	99	100
1/2 inch	90	100
1/4 inch	40	90
No. 200	2	10

- c. Bulk density shall be between 500 and 1100 dry lbs/cubic yard
- d. Moisture content shall be between 30% - 55% of dry solids.
- e. Inerts – compost shall be relatively free of inert ingredients, including glass, plastic and paper, < 1 % by weight or volume.
- f. Weed seed/pathogen destruction – provide proof of process to further reduce pathogens (PFRP). For example, turned windrows must reach min. 55C for 15 days with at least 5 turnings during that period.
- g. Select Pathogens – Salmonella <3 MPN/4grams of TS, or Coliform Bacteria <10000 MPN/gram.
- h. Trace Contaminants Metals (Lead, Mercury, Etc.) – Product must meet US EPA, 40 CFR 503 regulations.
- i. Compost Testing – The compost supplier will test all compost products within 120 calendar days prior to application. Samples will be taken using the STA sample collection protocol. (The sample collection protocol can be obtained from the U.S. Composting Council, 4250 Veterans Memorial Highway, Suite 275, Holbrook, NY 11741 Phone: 631-737-4931, www.compostingcouncil.org). The sample shall be sent to an independent STA Program approved lab. The compost supplier will pay for the test.

VERIFICATION OF ALTERNATIVE BIORETENTION SOIL MIXES

Bioretention soils not meeting the above criteria shall be evaluated on a case by case basis. Alternative bioretention soil shall meet the following specification: “Soils for bioretention facilities shall be sufficiently permeable to infiltrate runoff at a minimum rate of 5 inches per hour during the life of the facility, and provide sufficient retention of moisture and nutrients to support healthy vegetation.”

The following steps shall be followed by municipalities to verify that alternative soil mixes meet the specification:

1. General Requirements – Bioretention soil shall achieve a long-term, in-place infiltration rate of at least 5 inches per hour. Bioretention soil shall also support vigorous plant growth. The applicant refers to the entity proposing the soil mixture for approval.

a. Submittals – The applicant must submit to the municipality for approval:

- (1) A sample of mixed bioretention soil.
- (2) Certification from the soil supplier or an accredited laboratory that the Bioretention Soil meets the requirements of this guideline specification.
- (3) Certification from an accredited geotechnical testing laboratory that the Bioretention Soil has an infiltration rate between 5 and 12 inches per hour as tested according to Section 1.b.(2)(ii).
- (4) Organic content test results of mixed Bioretention Soil. Organic content test shall be performed in accordance with by Testing Methods for the Examination of Compost and Composting (TMECC) 05.07A, “Loss-On-Ignition Organic Matter Method”.
- (5) Grain size analysis results of mixed bioretention soil performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.
- (6) A description of the equipment and methods used to mix the sand and compost to produce Bioretention Soil.
- (7) The name of the testing laboratory(s) and the following information:
 - (i) contact person(s)
 - (ii) address(s)
 - (iii) phone contact(s)
 - (iv) e-mail address(s)
 - (v) qualifications of laboratory(s), and personnel including date of current certification by STA, ASTM, or approved equal

b. Bioretention Soil

(1) Bioretention Soil Texture

Bioretention Soils shall be analyzed by an accredited lab using #200, and 1/2” inch sieves (ASTM D 422 or as approved by municipality), and meet the following gradation:

Sieve Size	Percent Passing (by weight)	
	<i>Min</i>	<i>Max</i>
1/2 inch	97	100
No. 200	2	5

(2) Bioretention Soil Permeability testing

Bioretention Soils shall be analyzed by an accredited geotechnical lab for the following tests:

- (i) Moisture – density relationships (compaction tests) shall be conducted on bioretention soil. Bioretention soil for the permeability test shall be compacted to 85 to 90 percent of the maximum dry density (ASTM D1557).
- (ii) Constant head permeability testing in accordance with ASTM D2434 shall be conducted on a minimum of two samples with a 6-inch mold and vacuum saturation.

MULCH FOR BIORETENTION FACILITIES

Mulch is recommended for the purpose of retaining moisture, preventing erosion and minimizing weed growth. Projects subject to the State's Model Water Efficiency Landscaping Ordinance (or comparable local ordinance) will be required to provide at least two inches of mulch. Aged mulch, also called compost mulch, reduces the ability of weeds to establish, keeps soil moist, and replenishes soil nutrients. Aged mulch can be obtained through soil suppliers or directly from commercial recycling yards. It is recommended to apply 1" to 2" of composted mulch, once a year, preferably in June following weeding.

**2011 New Development Workshop: October 6, 2011
Workshop**

Summary of Workshop Evaluations

Total Number of Evaluations: 31 (54% Response) Total Number of Attendees: 57

1) Was the material presented relevant to your job?

NO

YES

Rating (1=No;5=Yes)	1	2	3	4	5
No. of responses	0	1	9	3	17

2) Were the presentations clear and easy to follow?

NO

YES

Rating (1=No;5=Yes)	1	2	3	4	5
No. of responses	1	1	10	15	3

Some were great. I liked going through the worksheets. The county presentation needs work.

3) Was the pace of the presentations appropriate?

NO

YES

Rating (1=No;5=Yes)	1	2	3	4	5
No. of responses	2	1	9	13	5

Too much downtime. Like to cut back on breaks. Breaks too long.

4) Were the presenters knowledgeable about the material?

NO

YES

Rating (1=No;5=Yes)	1	2	3	4	5
No. of responses	0	0	1	12	17

5) Were the presenters well-prepared?

NO

YES

Rating (1=No;5=Yes)	1	2	3	4	5
No. of responses	0	2	6	10	13

6) Did the presenters invite questions and participation?

NO

YES

Rating (1=No;5=Yes)	1	2	3	4	5
No. of responses	0	0	1	7	22

7) Were the handouts informative and useful?

NO

YES

Rating (1=No;5=Yes)	1	2	3	4	5
No. of responses	1	2	3	15	10

8) Overall, how useful was this workshop?

	NOT Useful			VERY USEFUL	
Rating (1=Not useful;5=very useful)	1	2	3	4	5
No. of responses	1	1	8	14	5

9) What was most valuable about today’s training?

- Using worksheets to review case studies (10)
- New requirements, LID Requirements; LID Feasibility/Infeasibility (5)
- Review current requirements,
- Pervious pavement applicability;
- Question from audience were practical and good.
- Glossary.
- Voicing concerns about the issues related to infill and high density development.
- N/A
- First half, as I am in planning.

10) What was the least valuable about today’s training?

- It was all helpful (2)
- A bit too fast paced. (2)
- Too many forms. Confusing.
- Not enough information on the examples.
- San Mateo County process review.
- The C.3 review. Presentations were disorganized, permeable paver guy.
- Pervious pavement presentations.
- 4 to 3 case studies too many.
- All of it.
- The PowerPoint slides were hard to follow. The final session on pervious concrete didn’t seem to be on point. I’d prefer to see the session strictly a regulatory update.
- LID Feasibility.

11) Please offer suggestions for what could be improved.

- We need to rethink how this information is developed. We are exempting detached single-family homes, which is arguably the most detrimental land use pattern and adding a significant amount of forms, regulations, and requirements on infill & high density which is what we should be streamlining & promoting.
- Shorter conference period.(2)
- The forms need to be much more user friendly...They take relatively simple requirements (to identify) and complicate them.
- More time for case study application.
- Go through new worksheet.
- Room was comfortable, but too much echo. Made it a little hard to understand speaker, even with sound system.
- Presentation on LID Post Construction maintenance and inspection.

- See screen better.
- Maybe the training can be divided into those who help people fill out the forms to those who have to analyze the forms. AM/PM
- Cater portions of day to specific groups so planners/engineers don't have to sit through the non-applicable portions.
- Too many handouts. Couldn't quickly find the one I needed. Nothing was placed in context. I still don't understand when LID applies or what a LID treatment reduction credit means.
- Examples are a great way to reinforce a concept. However, there were too many in the afternoon portion. May just one example would have allowed a thorough discussion.
- Provide the PowerPoint slides at a scale that could be read! Reduce the amount of text where possible. Organize the case study materials better so it will be more clear which form goes with each cases study and provide a big picture chart (if possible) of why we have the different forms. I'm new to this so it may be more clear as I study this more.

12) Please offer suggestions for future training topics.

- Go through new worksheets.
- Check contrast on slides, many were too light.
- Hydromodification Management.
- Consider scaling the requirements to transect the more urban fewer requirements.
- Slides were terrible, too much text, font was too small. It was often unreadable.

13) General comments.

- No mayo on the sandwiches.
- Good.
- Fantastic. Thank you.
- Overall useful, nice facilities.
- Overall it was a good training. I learned about what I don't know and where to find the information. Thanks!
- Next time suggest a more centralized location in the county. Look at The Oak Room in San Mateo City Library. They may not be open until 10AM but you could do a mid-day workshop that might be better in terms of staff schedules and commuting.
- Some materials are too small to read.
- Instead of or in addition to handing out hard copies of PowerPoints and forms, provide a CD with all forms electronically. Host the meeting in a more transit accessible location.
- If this is what environmentalists are pushing for, the earth is doomed.
- Thanks!
- A software program to walk applicant thru would be really helpful. Thanks.



Register now for this special training event!

How to Complete the New Low Impact Development (LID) Feasibility Worksheets:

A step-by-step practice session to evaluate LID Feasibility

Mission Blue Center
475 Mission Blue Drive, Brisbane

Thursday, November 17, 2011
9:00 am* – 12:00 noon

This training is for:

- ✓ Municipal Planners
- ✓ Municipal Engineers
- ✓ Development review staff

** Please arrive at 9:30 if you do not need an overview of LID feasibility requirements.*

This is a free training session. A light breakfast will be served.

Why Attend this Training?

Starting December 1, 2011, your municipality needs to implement new LID requirements!

If you missed the October 6 New Development Workshop, arrive at 9:00 am for the following topic:

- ✓ Overview of important LID feasibility requirements (this was covered on October 6).

Whether you attended the October 6 workshop or not, the following should be useful:

- ✓ Overview of the Final LID Feasibility Screening Worksheet, with an explanation of how it differs from the draft worksheet presented on October 6.
- ✓ Overview of worksheets to be used if screening results show more evaluation is needed:
 - Final Rainwater Harvesting Feasibility Worksheet
 - Final Infiltration Feasibility Worksheet
- ✓ Practice filling out the Final LID Feasibility Screening Worksheet.

Email or fax this RSVP to Melissa Morgan, melissa@eoainc.com, fax: (510) 832-2856, by **Thursday, November 10, 2011**. For additional information, contact Melissa at (510) 832-2852 ext. 101.

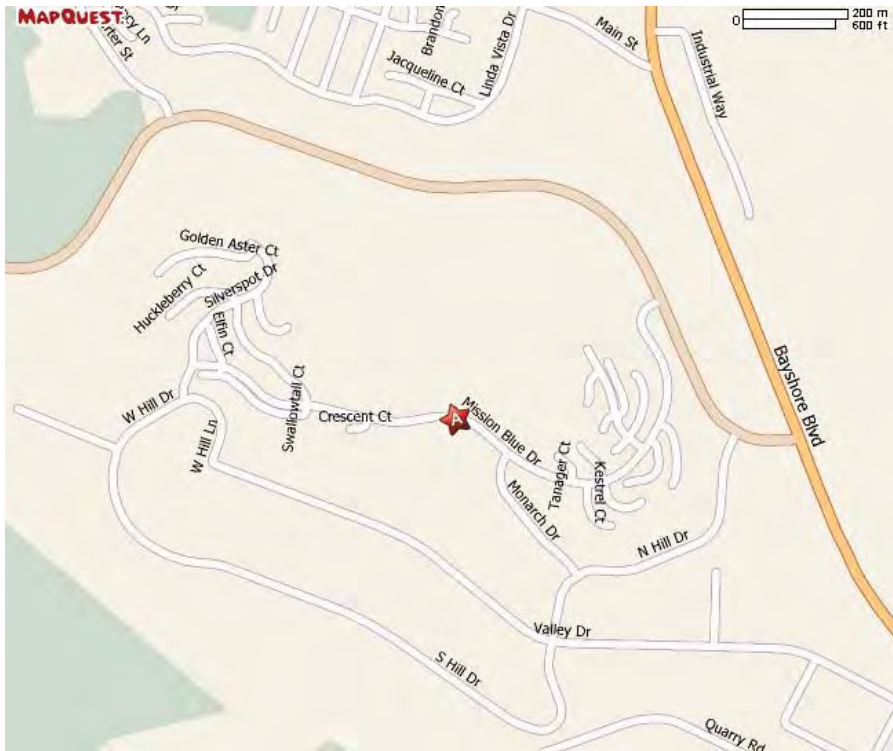
Municipality/Affiliation: _____

Name(s): _____

Phone: _____ **Email:** _____

Please pass this flyer along to appropriate staff within your organization. You will be sent a confirmation, including an agenda and directions, one week prior to the workshop.

Directions to Mission Blue Center:



475 Mission Blue Drive Brisbane

Directions from 101 Northbound

- Exit Bayshore Blvd. / Cow Palace.
- Merge onto Bayshore Blvd.
- Turn LEFT onto Guadalupe Canyon Pkwy.
- Turn LEFT onto Mission Blue Drive.

Directions from 101 Southbound

- Exit Third Street toward Cow Palace.
- Take Brisbane ramp and merge onto Bayshore Blvd. South
- Turn LEFT onto Guadalupe Canyon Pkwy.
- Turn LEFT onto Mission Blue Drive.



STAFF ONLY
 Date of Building Permit: _____
 Permit #: _____

NPDES PERMIT IMPERVIOUS SURFACE DATA COLLECTION WORKSHEET

COMPLETE THIS WORKSHEET FOR EACH NEW OR REDEVELOPMENT PROJECT WHERE 5,000 SQUARE FEET OR MORE OF IMPERVIOUS SURFACE WILL HAVE BEEN CREATED, ADDED AND/OR REPLACED.

What Projects Are Applicable?
 All project applicants proposing to create and/or replace 5,000 sq. ft. or more of impervious surface on the project site must fill out this form and submit it to the Planning Division. Interior remodeling projects and routine maintenance or repair projects, such as re-roofing and re-paving, are NOT required to complete this form.

What is an Impervious Surface?
 An impervious surface is a surface covering or pavement of a developed parcel of land that prevents the land's natural ability to absorb and infiltrate rainfall/stormwater. Impervious surfaces include rooftops, walkways, patios, driveways, parking lots, storage areas, impervious concrete and asphalt.¹

For More Information
 For more information regarding selection of best management practices for stormwater pollution prevention, stormwater treatment, or hydromodification management contact:

Project Name: _____ **APN #** _____ - _____ - _____

Project Description: _____

Applicant's Name: _____ **Phone:** _____

Project Location: _____
 (address)

- 1. Project Type** (Check all that apply):
- Residential Commercial Industrial Public Mixed Use
 Restaurant Uncovered Parking Auto-service Facility Retail Gasoline Outlet

- 2. Project size:**
- a. Total area of project site (parcel) _____ sq. ft.
- b. Area of land disturbance during construction _____ sq. ft. (include clearing, grading, excavating).

	Pre-Project Impervious Surface (IS), in sq.ft.	Proposed Impervious surface (IS), in sq. ft ¹	
		Replaced IS ²	Created IS ³
c. Non-parking impervious surface area (includes land covered by buildings, sheds, patios/ covers, streets, sidewalks, paved walkway)			
d. Areas of uncovered parking			
e. Off-lot impervious surface (streets, sidewalks, and/or bike lanes built as part of new street)	N/A		
TOTAL: 2c through 2e			

¹ Pervious pavement underlain with pervious soil or pervious storage material, such as a gravel layer sufficient to hold at least the volume of rainfall runoff specified in Provision C.3.d of the MRP, is not an impervious surface. See MRP at www.flowstobay.org/ms_municipalities.php.

² "Replaced" means that the project will install impervious surface where existing impervious surface is removed.

³ "Created" means the project will install new impervious surface where there is currently no impervious surface.

f. Area of pre-project landscaping: _____ sq.ft. Area of post-project landscaping: _____ sq.ft.

3. Determine Requirements for Stormwater Treatment and Hydromodification Management (HM)

a. Check box if total proposed impervious surface is equal to or greater than:

10,000 sq. ft.: Stormwater treatment required (sizing requirements in Provision C.3.d of the MRP)

43,560 sq. ft.: If the following two statements apply to the project, then hydromodification management (HM) is required:

Check box if the project replaces existing impervious surface (such as a building, parking lot, roadway, etc.), the total impervious area is increased from the pre-project condition.

Check box if project is located in an area subject to the HM standard (see HM Control Area map at www.flowstobay.org/bs_new_development.php), OR, if further analysis is required, an engineer or qualified environmental professional has determined that runoff from the project flows only through a hardened channel or enclosed pipe along its entire length before emptying into a waterway in the exempt area. (*Attach signed statement by qualified professional.*)

b. Check box if combined area of uncovered parking lot, plus any impervious surface for auto-service facility, retail gasoline outlet, and/or restaurant, is equal to or greater than:

5,000 sq. ft.: If project is approved on or after 12/1/11, stormwater treatment is required.

c. Check box if the project will REPLACE more than 50% of the existing impervious surface.

Project will replace > 50% of the existing impervious surface. The project is required to treat stormwater runoff from the on-site existing impervious surface that is NOT modified, in addition to the impervious surface that created and/or replaced by the project.

This section to be completed by Agency Staff

Reviewed:

Community Development Department

Planning Division: _____

Building Division: _____

Return form to: _____

Data entry performed by: _____

Public Works Department

Engineering: _____

Project Applicant Checklist for NPDES Permit Requirements

I. PROJECT DATA

Project Name _____ Project Address _____

APN _____ - _____ - _____

Applicant Name _____ Applicant Phone _____

Applicant Address _____

Type of Development

- | | | |
|---|-------------------------------------|--|
| <input type="checkbox"/> Residential | <input type="checkbox"/> Commercial | <input type="checkbox"/> Site Area _____ (sq. ft.) |
| <input type="checkbox"/> Industrial | <input type="checkbox"/> Mixed Use | <input type="checkbox"/> Disturbed Area _____ (sq. ft.) ³ |
| <input type="checkbox"/> Streets, Roads, Highways, Freeways, etc. | | <input type="checkbox"/> Existing Impervious Surface _____ (sq. ft.) |
| <input type="checkbox"/> Redevelopment Project as defined by the MRP (a project that creates, adds and/or replaces impervious surface on a site where past development has occurred.) | | <input type="checkbox"/> Total New Impervious Surface (created and/or replaced) _____ (sq. ft.) ^{4,5} |
| <input type="checkbox"/> Special Land Use Categories, as defined by MRP Provision C.3.b.ii.1: (1) auto service facilities ¹ , (2) retail gasoline outlets, (3) restaurants ² , (4) uncovered parking area (stand-alone or part of other project). | | <input type="checkbox"/> Total Surface Parking (includes top level of parking structure) _____ (sq. ft.) ^{4,5} |
| | | <input type="checkbox"/> Project meets municipal definition of "high priority site" for construction site inspections, per MRP provision C.6.e.ii(2)(b). |

¹ Auto service facilities, described by Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, and 7536-7539

² Restaurants described by SIC code 5812

³ If ≥ 1 acre (43,560 sq. ft.) of land will be disturbed, see Section III.

⁴ If $\geq 10,000$ sq. ft. of impervious surface will be created and/or replaced, see Section IV. If ≥ 1 acre (43,560 sq. ft.), see Sections IV and V. If $\geq 5,000$ sq.ft. of impervious surface is created and/or replaced AND project is a special land use category, see Section IV.

"Created" means that new impervious surface is installed where no impervious surface previously existed. "Replaced" means that new impervious surface is installed where existing impervious surface is removed.

⁵ If the project replaces 50% or more of the existing impervious surface with new impervious surface, stormwater runoff from areas of existing impervious surface must be treated, in addition to the runoff from new impervious surface.

II. MINIMUM REQUIREMENTS FOR ALL PROJECTS – All projects must incorporate as many of the following measures as practical (check boxes that apply).

A. SITE DESIGN MEASURES. Project must incorporate the following measures to the maximum extent practicable:

- | | |
|---|---|
| <input type="checkbox"/> Protect sensitive areas, including wetland and riparian areas, and minimize changes to the natural topography. | <input type="checkbox"/> Design areas of "micro-detention" in landscaping to retain rainfall runoff onsite, where appropriate. |
| <input type="checkbox"/> Minimize land disturbance and impervious surfaces (especially parking lots). | <input type="checkbox"/> Maximize permeability by clustering development and preserving open space, where appropriate. |
| <input type="checkbox"/> Minimize impervious areas from being directly connected to the storm drain system (e.g., direct runoff from roof downspouts and other impervious surfaces to landscaped areas where feasible). | <input type="checkbox"/> Concentrate development density, where appropriate, to reduce impervious surface on a watershed basis. |
| <input type="checkbox"/> Install rain barrel or cistern to capture and use rainwater for irrigation or other non-potable use. | <input type="checkbox"/> Use permeable pavement surfaces where feasible. |
| | <input type="checkbox"/> Use "Bay Friendly" landscape design (See <i>Bay-Friendly Landscape Guidelines - Sustainable Practices for the Landscape Professional</i> , www.bayfriendly.org). |

B. SOURCE CONTROL MEASURES.

- Incorporate all applicable source control measures in [enter municipality name] Local Source Control Measures List.

Continued ⇒

C. PERMANENT STORMWATER TREATMENT MEASURES. *Selection of appropriate treatment measures is required for all C.3 Regulated Projects (see Section IV). Municipality may require for smaller projects:*

- | | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Infiltration Trench <input type="checkbox"/> Rainwater harvesting system <input type="checkbox"/> Green Roof <input type="checkbox"/> Bioinfiltration Area/Bioretenion Area⁶ <input type="checkbox"/> Tree Well Filter⁶ <input type="checkbox"/> Vegetated buffer strip⁶ <input type="checkbox"/> Flow-Through Planter Box⁶ | <ul style="list-style-type: none"> <input type="checkbox"/> Extended Detention Basin (dry)⁷ <input type="checkbox"/> Media filter⁷ <input type="checkbox"/> Hydrodynamic separator (allowed only if part of a multi-step treatment process) |
|--|--|

⁶ Regulated Projects (see Section IV) that receive final discretionary approval on or after 12/1/11 must infiltrate or harvest and use the amount of stormwater specified in Provision C.3.d, if feasible. If this is infeasible, maximize infiltration where conditions allow, use soil specifications in C.3. Technical Guidance Appendix K, and provide a surface area no smaller than is required to accommodate a 5-inch per hour surface loading rate.

⁷ Not allowed in projects that receive final discretionary approval on or after 12/1/11.

D. EROSION and SEDIMENTATION CONTROL. *If the project involves any land disturbance, project plans must incorporate all of the following requirements:*

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Stabilize all denuded areas and install and maintain all temporary erosion and sediment controls continuously between October 15th and April 15th of each year, until permanent erosion control have been established. 2. Divert on-site runoff around exposed areas and diverting off-site runoff around the site (e.g., swales and dikes). 3. Prevent erosion and trapping sediment on-site, such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, storm drain inlet protection, soil blankets or mats, covers for soil stock piles, and/or other measures. | <ol style="list-style-type: none"> 3. Provide notes, specifications, or attachments describing the following: <ol style="list-style-type: none"> a) Construction, operation and maintenance of erosion and sediment control measures, including inspection frequency; b) Methods and schedule for grading, excavation, filling, clearing of vegetation, and storage and disposal of excavated or cleared material; c) Specifications for vegetative cover and mulch, including methods and schedules for planting and fertilization; d) Provisions for temporary and/or permanent irrigation. |
|---|---|

E. CONSTRUCTION BMPs. *Project plans must incorporate all of the following BMPs as project notes. Additionally, project plans must include SMCWPPP's Construction BMP page, available for download at (enter municipality website address).*

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater. 2. Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, and non-stormwater discharges to storm drains and watercourses. 3. Use sediment controls or filtration to remove sediment when dewatering site and obtain all necessary permits. 4. Avoid cleaning, fueling, or maintaining vehicles on-site, except in a designated area where washwater is contained and treated. 5. Delineate with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses. | <ol style="list-style-type: none"> 6. Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate. 7. Perform clearing and earth moving activities only during dry weather. 8. Limit and time applications of pesticides and fertilizers to prevent polluted runoff. 9. Limit construction access routes and stabilize designated access points. 10. Avoid tracking dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods. 11. The Contractor shall train and provide instruction to all employees and subcontractors regarding construction BMPs. |
|--|--|

Continued ⇒

III. CONSTRUCTION PROJECTS THAT DISTURB \geq 1 ACRE OF AREA — *For all projects with 1 acre or more of disturbed area, applicants must file a Notice of Intent (NOI) with the State Water Resources Control Board to obtain coverage under the State General Construction Activity NPDES Permit, and must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). Note: Completion of this checklist does not imply certification of the adequacy of the SWPPP by the municipality.*

1. A copy of the project's NOI and SWPPP shall be submitted to the planning, building, or engineering department prior to issuance of a grading or building permit.
2. A copy of the project's NOI and SWPPP shall be kept on-site and made available for review by the municipal inspector upon request.

IV. REGULATED PROJECTS - *The following requirements apply to projects that add and/or replace 10,000 sq. ft. or more of impervious surface, and are therefore Regulated Projects under the Municipal Regional Stormwater Permit (MRP). These requirements will also apply to any Special Land Use Category project that adds and/or replaces 5,000 sq. ft. or more of impervious surface, if it receives final discretionary approval on or after December 1, 2011. These requirements do not apply to one single-family residence that is not part of a larger plan of development.*

1. Incorporate site design measures (see Section IIA).
 2. Incorporate all applicable source control measures listed in the municipality's Local Source Control Measures List.
 3. Enter into an agreement of responsibility and funding for ongoing operation and maintenance of stormwater treatment measure(s).
 4. Treatment measure design must be consistent with Vector Control Plan requirements (Appendix F of the C.3 Technical Guidelines - link at end of this section).
 5. Effective 12/1/11, applicant must complete the LID screening form to determine feasibility of infiltrating or harvesting and using the volume of runoff specified in Provision C.3.d. If this is infeasible, maximize infiltration where conditions allow, use soil specifications in C.3. Technical Guidance Appendix K, and provide a surface area no smaller than is required to accommodate a 5-inch per hour surface loading rate.
 6. Hydraulically size stormwater treatment measures, as follows.
 - A flow-based treatment measure hydraulically sized to manage the flow of runoff produced by a rain event equal to at least 0.2 inches per hour (this is the basis of the 4% rule of thumb; refers to MRP Provision C.3.d.i(2)(c)); or
 - A volume-based treatment measure hydraulically sized to capture 80 percent or more of the volume of annual runoff, using local rainfall data (refers to MRP Provision C.3.d.i(1)(b)), or
 - A treatment measure that uses a combination of flow and volume capacity, hydraulically sized to treat 80 percent or more of the total runoff over the life of the project, using local rainfall data (refers to MRP Provision C.3.d.i(3)).
- For more details, see the C.3 Technical Guidance at: www.flowstobay.org/bs_new_development.php.

V. HYDROMODIFICATION MANAGEMENT PROJECTS – *If your project creates and/or replaces 1 acre or more of impervious surface, it may be considered a Hydromodification Management (HM) Project under the Municipal Regional Stormwater Permit (MRP). The agency may complete an HM Applicability Form, to determine if HM controls are required. For more information on HM, go to www.flowstobay.org/bs_new_development.php. The following requirement applies to HM Projects, which create and/or replace 1 acre or more of impervious surface and are located in areas subject to HM:*

1. Use a flow duration stormwater control measure designed such that post-project stormwater discharge rates and durations match pre-project discharge rates and durations. The Bay Area Hydrology Model (BAHM) has been developed to size flow duration controls. See www.bayareahydrologymodel.org.
2. Enter into an agreement of responsibility and funding for ongoing operation and maintenance of HM control measure(s).

Reviewed by:

Planning: _____ date / /

Engineering: _____ date / /

Building: _____ date / /

C.3 and C.6 Development Review Checklist

Municipal Regional Stormwater Permit (MRP)
Stormwater Controls for Development Projects

INSERT CITY SPECIFIC INFO HERE
ADDRESS
PHONE
FAX
WEB (for those who allow download etc)

Applicability of C.3 and C.6 Stormwater Requirements

1. Enter Project Data (For "C.3 Regulated Projects," data will be reported in the municipality's stormwater Annual Report.)

1.1 Project Name: _____

1.2 Project Address: _____

1.3 Project APN: _____ Project Watershed: _____

1.4 Applicant/Agent Name: _____ Applicant/Agent Phone: _____

1.5 Applicant/Agent Address: _____

1.6 Development type: (check all that apply)

Residential Commercial Industrial Mixed-Use Streets, Roads, etc.

'Redevelopment' as defined by MRP: creating, adding and/or replacing exterior existing impervious surface on a site where past development has occurred¹

'Special land use categories' as defined by MRP: (1) auto service facilities², (2) retail gasoline outlets, (3) restaurants², (4) uncovered parking area (stand-alone or part of a larger project)

1.7 Project Description³: _____

Area of landscaping: Pre-project landscaping: _____ sq.ft. Post-project landscaping: _____ sq.ft.

1.8 Is the site a "High Priority Site" that disturbs less than 1 acre (43,560 sq.ft.) of land? Yes No

- "High Priority Sites" are sites that require a grading permit, are adjacent to a creek, or are otherwise high priority for stormwater protection during construction (see Provision C.6.e.ii(2)).

1.9 Total Area of Site: _____ sq.ft. ; Total Area of Land Disturbed: _____ sq.ft.

- If less than 5,000 sq.ft. of impervious surface is created/replaced, skip to Item 3. Otherwise, continue to Item 2.1.
- If 1 acre (43,560 sq.ft.) or more of land is disturbed, obtain coverage under the state's Construction General Permit at <https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>. Submit to the municipality a copy of your Notice of Intent and Storm Water Pollution Prevention Plan (SWPPP) before a grading or building permit will be issued.

2. Is the project a "C.3 Regulated Project" per MRP Provision C.3.b?

2.1 Enter the amount of impervious surface⁴ created and/or replaced by the project (if the total amount is 5,000 sq.ft. or more):

Type of Impervious Surface	1	2	3
	Pre-Project Impervious Surface (sq.ft.)	Existing Impervious Surface to be Replaced ⁶ (sq.ft.)	New Impervious Surface to be Created ⁶ (sq.ft.)
Roof area(s) – excluding any portion of the roof that is vegetated ("green roof")			
Impervious ⁴ sidewalks, patios, paths			
Impervious ⁴ driveway and uncovered parking ⁵			
Streets (public)			
Streets (private)			
Total Impervious Surfaces:			
Total New Impervious Surface (sum of totals for columns 2 and 3):			

¹ Roadway projects that replace existing impervious surface are subject to C.3 requirements only if one or more lanes of travel are added.
² See Standard Industrial Classification (SIC) codes [here](#)
³ Project description examples: 5-story office building, industrial warehouse, residential with five 4-story buildings for 200 condominiums, etc.
⁴ Per the MRP, pervious pavement underlain with pervious soil or pervious storage material, such as a gravel layer sufficient to hold at least the volume of rainfall runoff specified in MRP Provision C.3.d is not an impervious surface.
⁵ Uncovered parking includes top level of a parking structure.
⁶ "Replace" means to install new impervious surface where existing impervious surface is removed. "Create" means to install new impervious surface where there is currently no impervious surface.

2. Is the project a “C.3 Regulated Project” per MRP Provision C.3.b? (continued)

	Yes	No	NA
2.2 In Item 2.1, does the Total New Impervious Surface equal 10,000 sq.ft. or more? <i>If YES, skip to Item 2.5 and check “Yes.” If NO, continue to Item 2.3.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3 Does the Item 2.1 Total New Impervious Surface equal 5,000 sq.ft. or more, but less than 10,000 sq.ft? <i>If YES, continue to Item 2.4. If NO, skip to Item 2.5 and check “No.”</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4 Is the project a “Special Land Use Category” per Item 1.6? For uncovered parking, check YES only if there is 5,000 sq.ft or more uncovered parking. <i>If NO, go to Item 2.5 and check “No.” If YES, go to Item 2.5 and check “Yes.”</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5 Is the project a C.3 Regulated Project? <i>If YES, skip to Item 4; if NO, continue to Item 3.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Projects that are NOT C.3 Regulated Projects

If you answered NO to Item 2.5, or the project creates/replaces less than 5,000 sq. ft. of impervious surface (see Item 1.8), then the project is NOT a C.3 Regulated Project, and stormwater treatment is not required, BUT the municipality may determine that source controls and site design measures are required. Skip to Item 6.1.

4. Projects that ARE C.3 Regulated Projects

If you answered YES to Item 2.5, then the project is a C.3 Regulated Project. The project must include appropriate site design measures and source controls AND hydraulically sized stormwater treatment measures. Items 4.1 and 4.2 will help you determine the applicability of Low Impact Development (LID) stormwater treatment requirements. IF FINAL DISCRETIONARY APPROVAL IS GRANTED ON OR AFTER **DECEMBER 1, 2011**, LID REQUIREMENTS APPLY, except for “Special Projects.”

	Yes	No	NA
<u>4.1</u> Does the project replace 50% or more of the existing impervious surface with new impervious surface? <i>If yes, stormwater runoff from areas of existing impervious surface must be treated, in addition to the runoff from new impervious surface.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>4.2</u> Is project a “Special Project” per the criteria in Appendix J of the C.3 Technical Guidance, as determined by municipal staff? <i>If 100% non-LID treatment is allowed; skip to Item 5.1. If it is not a Special Project, or less than 100% LID treatment is allowed, continue to Item 4.2.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>4.23</u> Is it feasible to treat the full C.3.d amount of runoff with infiltration or rainwater harvesting and use, per the LID Feasibility Criteria in Appendix I of the C.3 Technical Guidance? ➤ <i>If YES, AND final discretionary approval is granted after 12/1/11, the C.3.d volume of stormwater must be infiltrated or harvested and used. Continue to Item 5.</i> ➤ <i>If NO, maximize infiltration where conditions allow, use soil specifications in C.3. Technical Guidance Appendix K, and provide a surface area no smaller than is required to accommodate a 5-inch per hour surface loading rate. Continue to Item 5.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Is the project a Hydromodification Management (HM) Project?

- 5.1 Does the project create and/or replace 1 acre (43,560 sq. ft.) or more of impervious surface? (Refer to Item 2.1.)
 - YES. Continue to Item 5.2.
 - NO. Skip to Item 5.5 and check “No.”
- 5.2 Is the total impervious area increased over the pre-project condition?
 - YES. Continue to Item 5.3.
 - NO. The project is NOT required to incorporate HM measures. Skip to Item 5.5 and check “No.”
- 5.3 Is the site located in an HM Control Area per the HM Control Areas map (Appendix H of the C.3 Technical Guidance)?
 - YES. Skip to Item 5.5 and check “Yes.”
 - NO. Attach map, indicating project location. Skip to Item 5.5 and check “No.”
 - Further analysis required. Continue to Item 5.4.
- 5.4 Has an engineer or qualified environmental professional determined that runoff from the project flows only through a hardened channel or enclosed pipe along its entire length before emptying into a waterway in the exempt area?
 - YES. Attach signed statement by qualified professional. Go to Item 5.5 and check “No.”
 - NO. Go to Item 5.5 and check “Yes.”
- 5.5 Is the project a Hydromodification Management Project?
 - YES. The project is subject to HM requirements (described in Section 11 of this form). Continue to Item 6.
 - NO. The project is EXEMPT from HM requirements. Continue to Item 6.

Implementation of C.3 and C.6 Stormwater Requirements

6. Select appropriate source controls (Applies to C.3 Regulated Projects; for other projects required at municipality discretion⁷)

Check if project has these features		Features that require source control measures	Source Control Measures (Local Source Control List for detailed requirements)	Is source control measure included in project plans?		Plan Sheet No.
Yes	No			Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Storm Drain	Mark on-site inlets with the words "No Dumping! Flows to Bay" or equivalent.	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Floor Drains	Plumb interior floor drains to sanitary sewer ⁸ [or prohibit].	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Parking garage	Plumb interior parking garage floor drains to sanitary sewer. ⁸	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Landscaping	<ul style="list-style-type: none"> ▪ Retain existing vegetation as practicable. ▪ Select diverse species appropriate to the site. Include plants that are pest- and/or disease-resistant, drought-tolerant, and/or attract beneficial insects. ▪ Minimize use of pesticides and quick-release fertilizers. ▪ Use efficient irrigation system; design to minimize runoff. 	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Pool/Spa/Fountain	Provide connection to the sanitary sewer to facilitate draining. ⁸	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Food Service Equipment (non-residential)	Provide sink or other area for equipment cleaning, which is: <ul style="list-style-type: none"> ▪ Connected to a grease interceptor prior to sanitary sewer discharge.⁸ ▪ Large enough for the largest mat or piece of equipment to be cleaned. ▪ Indoors or in an outdoor roofed area designed to prevent stormwater run-on and run-off, and signed to require equipment washing in this area. 	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Refuse Areas	<ul style="list-style-type: none"> ▪ Provide a roofed and enclosed area for dumpsters, recycling containers, etc., designed to prevent stormwater run-on and runoff. ▪ Connect any drains in or beneath dumpsters, compactors, and tallow bin areas serving food service facilities to the sanitary sewer.⁸ 	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Outdoor Process Activities ⁹	Perform process activities either indoors or in roofed outdoor area, designed to prevent stormwater run-on and runoff, and to drain to the sanitary sewer. ⁸	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Outdoor Equipment/Materials Storage	<ul style="list-style-type: none"> ▪ Cover the area or design to avoid pollutant contact with stormwater runoff. ▪ Locate area only on paved and contained areas. ▪ If storage area will contain non-hazardous liquids, roof the area, drain to sanitary sewer⁸, and contain by berms or similar. 	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Vehicle/Equipment Cleaning	<ul style="list-style-type: none"> ▪ Roofed, pave and berm wash area to prevent stormwater run-on and runoff, plumb to the sanitary sewer⁸, and sign as a designated wash area. ▪ Commercial car wash facilities shall discharge to the sanitary sewer.⁸ 	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Vehicle/Equipment Repair and Maintenance	<ul style="list-style-type: none"> ▪ Designate repair/maintenance area indoors, or an outdoors area designed to prevent stormwater run-on and runoff and provide secondary containment. Do not install drains in the secondary containment areas. ▪ Prohibit floor drains unless connected to wastewater pretreatment systems prior to discharging to the sanitary sewer.⁸ ▪ Connect containers or sinks used for parts cleaning to the sanitary sewer.⁸ 	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Fuel Dispensing Areas	<ul style="list-style-type: none"> ▪ Fueling areas shall have impermeable surface, such as Portland cement concrete, that is a) minimally graded to prevent ponding and b) separated from the rest of the site by a grade break to prevent stormwater run-on. ▪ Fueling area canopy must extend at least 10 ft in each direction from each pump and drain away from fueling area. 	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Loading Docks	<ul style="list-style-type: none"> ▪ Cover and/or grade to minimize run-on to and runoff from the loading area. ▪ Position downspouts to direct stormwater away from the loading area. ▪ Drain water from loading dock areas to the sanitary sewer.⁸ ▪ Install door skirts between the trailers and the building. 	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Fire Sprinklers	Design for discharge of fire sprinkler test water to landscape or sanitary sewer. ⁸	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	Miscellaneous Drain or Wash Water	<ul style="list-style-type: none"> ▪ Drain condensate of air conditioning units to landscaping. Large air conditioning units may connect to the sanitary sewer.⁸ ▪ Roof drains shall drain to unpaved area where practicable. ▪ Boiler drain lines, roof top equipment, and washing and/or steam cleaning activities shall drain to the sanitary sewer.⁸ 	<input type="checkbox"/>	<input type="checkbox"/>	

⁷ See MRP Provision C.3.a.i(7) for non-C.3 Regulated Projects and Provision C.3.c.i(1) for C.3 Regulated Projects.

⁸ Any connection to the sanitary sewer system is subject to sanitary district approval.

⁹ Businesses that may have outdoor process activities/equipment include machine shops, auto repair, industries with pretreatment facilities.

7. Select appropriate site design measures (*Applies to C.3 Regulated Projects; for other projects required at municipality discretion¹⁰*)

Municipal staff will indicate which site design measures have been considered, and which are included in the plans.

7.1 Are appropriate site design measures included in project plans?

Was the site design measure discussed with applicant?		Is the site design measure included in project plans?		Plan Sheet No.	Site Design Measures
Yes	No	Yes	No		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Protect sensitive areas, including wetland and riparian areas, and minimize changes to the natural topography.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Minimize land disturbance and impervious surface (especially parking lots).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Minimize impervious areas from being directly connected to the storm drain system (for example, direct runoff from roof downspouts and other impervious surfaces to landscaped areas where feasible).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Install rain barrel or cistern to capture and use rainwater for irrigation or other non-potable use.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Design areas of "micro-detention" in landscaping to retain rainfall runoff onsite, where appropriate.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Maximize permeability by clustering development and preserving open space, where appropriate.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Concentrate development density, where appropriate, to reduce impervious surface on a watershed basis.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Use permeable pavement surfaces where feasible.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Self-treating area (see Section 4.2 of the C.3 Technical Guidance)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Self-retaining area (see Section 4.3 of the C.3 Technical Guidance)

8. Use construction best management practices (BMPs) (applies to all projects).

8.1 Are construction BMPs included in project plans?

Yes	No	Best Management Practice (BMP)
<input type="checkbox"/>	<input type="checkbox"/>	Attach the San Mateo Countywide Water Pollution Prevention Program's construction BMP plan sheet to project plans and require contractor to implement the applicable BMPs on the plan sheet.
<input type="checkbox"/>	<input type="checkbox"/>	Temporary erosion controls to stabilize all denuded areas until vegetation is established.
<input type="checkbox"/>	<input type="checkbox"/>	Delineate with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.
<input type="checkbox"/>	<input type="checkbox"/>	Provide notes, specifications, or attachments describing the following: <ul style="list-style-type: none"> ▪ Construction, operation and maintenance of erosion and sediment controls, including inspection frequency; ▪ Methods and schedule for grading, excavation, filling, clearing of vegetation, and storage and disposal of excavated or cleared material; ▪ Specifications for vegetative cover and mulch, including methods and schedules for planting and fertilization; ▪ Provisions for temporary and/or permanent irrigation.
<input type="checkbox"/>	<input type="checkbox"/>	Perform clearing and earth moving activities only during dry weather.
<input type="checkbox"/>	<input type="checkbox"/>	Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
<input type="checkbox"/>	<input type="checkbox"/>	Protect all storm drain inlets in the vicinity of the site using sediment controls such as berms, fiber rolls, or filters.
<input type="checkbox"/>	<input type="checkbox"/>	Trap sediment on-site, using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stock piles, etc.
<input type="checkbox"/>	<input type="checkbox"/>	Divert on-site runoff around exposed areas and divert off-site runoff around the site (e.g., swales and dikes).
<input type="checkbox"/>	<input type="checkbox"/>	Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
<input type="checkbox"/>	<input type="checkbox"/>	Limit construction access routes and stabilize designated access points.

¹⁰ See MRP Provision C.3.a.i(6) for non-C.3 Regulated Projects and Provision C.3.c.i(2)(a) for C.3 Regulated Projects.

8. Use construction BMPs (applies to all projects) – continued

8.1 Are construction BMPs included in project plans?

Yes	No	Best Management Practice (BMP)
<input type="checkbox"/>	<input type="checkbox"/>	No cleaning, fueling, or maintaining vehicles on-site, except in a bermed area where washwater is contained and treated, and fluids are collected in drip pans and disposed of as hazardous waste.
<input type="checkbox"/>	<input type="checkbox"/>	Store, handle, and dispose of construction materials and wastes properly to prevent their contact with stormwater.
<input type="checkbox"/>	<input type="checkbox"/>	Contractor shall train and provide instruction to all employees and subcontractors regarding construction BMPs.
<input type="checkbox"/>	<input type="checkbox"/>	Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, and non-stormwater discharges to storm drains and watercourses.

8.2 Is the project a C.3 Regulated Project? (Refer to Item 2.5.)

- YES. Continue to Item 9.
- NO. Do not complete sections 9 & 10. Municipal staff may use sections 11 – 15.

9. Include stormwater treatment measures (applies to C.3 Regulated Projects) – MRP Provisions C.3.c.(2)(b); C.3.d.i; C.3.e.ii

9.1 Are appropriate stormwater treatment measures included? (Municipal staff will indicate which information is required.)

Is Info Applicable / Required?		Have Plans been Reviewed and Accepted?			Information that may be required															
Yes	No	Yes	No	NA																
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If project is a “ Special Project ” (refer to Item 4.1) do plans show that the Special Project Criteria ¹¹ are met? Plans reviewed by _____ Date Reviewed _____															
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If project is a “ Special Project ,” plans may show non-LID measures hydraulically sized to treat C.3.d amount of runoff. Indicate the number of non-LID measures by type, the hydraulic sizing method ¹² , and percentage of project treated: <table border="0" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;"><u>Non-LID Treatment</u></th> <th style="text-align: left;"><u>No. of units</u></th> <th style="text-align: left;"><u>Hydraulic sizing method¹⁰</u></th> <th style="text-align: left;"><u>% of project treated</u></th> </tr> </thead> <tbody> <tr> <td>Media filter</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tree well filter</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Plans reviewed by _____ Date Reviewed _____	<u>Non-LID Treatment</u>	<u>No. of units</u>	<u>Hydraulic sizing method¹⁰</u>	<u>% of project treated</u>	Media filter				Tree well filter						
<u>Non-LID Treatment</u>	<u>No. of units</u>	<u>Hydraulic sizing method¹⁰</u>	<u>% of project treated</u>																	
Media filter																				
Tree well filter																				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Results of LID feasibility/infesibility analysis : ¹³ Stormwater treatment of the C.3.d amount of runoff using infiltration or rainwater harvesting/use is (check one): <input type="checkbox"/> feasible <input type="checkbox"/> infesible Plans reviewed by _____ Date Reviewed _____															
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If infesibility is demonstrated above, <u>maximize infiltration where conditions allow, use soil specifications in C.3. Technical Guidance Appendix K, and provide a surface area no smaller than is required to accommodate a 5-inch per hour surface loading rate.</u> <table border="0" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;"><u>Biotreatment Measures</u></th> <th style="text-align: left;"><u>No. of units</u></th> <th style="text-align: left;"><u>Hydraulic sizing method¹⁰</u></th> </tr> </thead> <tbody> <tr> <td>Bioinfiltration/ Unlined Bioretention area</td> <td></td> <td></td> </tr> <tr> <td>Lined bioretention area (no infiltration)</td> <td></td> <td></td> </tr> <tr> <td>Flow-through planter</td> <td></td> <td></td> </tr> <tr> <td>Vegetated buffer strip</td> <td></td> <td></td> </tr> </tbody> </table> Other (specify): _____ Plans reviewed by _____ Date Reviewed _____	<u>Biotreatment Measures</u>	<u>No. of units</u>	<u>Hydraulic sizing method¹⁰</u>	Bioinfiltration/ Unlined Bioretention area			Lined bioretention area (no infiltration)			Flow-through planter			Vegetated buffer strip		
<u>Biotreatment Measures</u>	<u>No. of units</u>	<u>Hydraulic sizing method¹⁰</u>																		
Bioinfiltration/ Unlined Bioretention area																				
Lined bioretention area (no infiltration)																				
Flow-through planter																				
Vegetated buffer strip																				

¹¹ Refer to the Special Projects Criteria in Appendix J of the C.3 Technical Guidance.

¹² Indicate which of the following Provision C.3.d.i hydraulic sizing methods were used. Volume based approaches: 1(a) Urban Runoff Quality Management approach, or 1(b) 80% capture (recommended volume-based approach). Flow-based approaches: 2(a) 10% of 50-year peak flow approach, 2(b) Percentile rainfall intensity approach, or 2(c) 0.2-Inch-per-hour intensity (recommended flow-based approach and basis for 4% rule of thumb). If a combination flow and volume design basis was used, indicate which flow-based and volume-based criteria were used.

¹³ [Complete the LID Feasibility Screening Worksheet and indicate results here.](#)

9. Include stormwater treatment measures (applies to C.3 Regulated Projects) – continued

9.1 Are appropriate stormwater treatment measures included? -- MRP Provisions C.3.c.(2)(b); C.3.d.i; C.3.e.ii

Is Info Applicable / Required?		Have Plans been Reviewed and Accepted?			Information that may be required															
Yes	No	Yes	No	NA																
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>If feasibility is demonstrated above, plans must show LID treatment measures (non-biotreatment) hydraulically sized to treat the C.3.d amount of runoff from entire project. Indicate the number of non-biotreatment measures by type, and hydraulic sizing method:</p> <table border="1"> <thead> <tr> <th><u>LID Treatment Measure (non-biotreatment)</u></th> <th><u>No. of units</u></th> <th><u>Hydraulic sizing method¹⁰</u></th> </tr> </thead> <tbody> <tr> <td>Rainwater harvesting and use</td> <td></td> <td></td> </tr> <tr> <td>Bioinfiltration</td> <td></td> <td></td> </tr> <tr> <td>Infiltration trench</td> <td></td> <td></td> </tr> <tr> <td>Dry well</td> <td></td> <td></td> </tr> </tbody> </table> <p>Other (specify): _____</p> <p>Plans reviewed by _____ Date Reviewed _____</p>	<u>LID Treatment Measure (non-biotreatment)</u>	<u>No. of units</u>	<u>Hydraulic sizing method¹⁰</u>	Rainwater harvesting and use			Bioinfiltration			Infiltration trench			Dry well		
<u>LID Treatment Measure (non-biotreatment)</u>	<u>No. of units</u>	<u>Hydraulic sizing method¹⁰</u>																		
Rainwater harvesting and use																				
Bioinfiltration																				
Infiltration trench																				
Dry well																				

9.2 Is the project a Hydromodification Management Project? (Refer to Item 5.5.)

- YES. Continue to Item 10.
 NO. Do not complete section 10. Municipal staff may use sections 11 & 12.

10. Incorporate HM Controls (applies to HM Projects).

10.1 Is required HM Project information included? -- MRP Provision C.3.g and Attachment E

Is Item Required?		Is Item in Plans?			Required HM Project Information
Yes	No	Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Site plans with pre- and post-project impervious surface areas, surface flow directions of entire site, locations of flow duration controls and site design measures per HM site design requirement
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soils report or other site-specific document showing soil types at all parts of site
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If project uses the Bay Area Hydrology Model (BAHM), a list of model inputs.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If project uses custom modeling, a summary of the modeling calculations with corresponding graph showing curve matching (existing, post-project, and post-project with HM controls curves), goodness of fit, and (allowable) low flow rate.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If project uses the Impracticability Provision, a listing of all applicable costs and a brief description of the alternative HM project (name, location, date of start up, entity responsible for maintenance).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If the project uses alternatives to the default BAHM approach or settings, a written description and rationale.

11. Stormwater Inspections of Construction Sites During the Wet Season (for municipal staff use only):

If the answer is "Yes" to either of the following questions, refer this project to construction site inspection staff, to add to their list of projects that require stormwater inspections at least monthly during the wet season (October 1 through April 30).

- | | Yes | No |
|--|--------------------------|--------------------------|
| 11.1 Does the project disturb 1 acre (43,560 sq.ft.) or more of land? (See Item 1.9) | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.2 Is the site a High Priority Site? (See Item 1.8) | <input type="checkbox"/> | <input type="checkbox"/> |

12. Confirm Operations and Maintenance (O&M) Submittals (for municipal staff use only):

The following questions apply to C.3 Regulated Projects and Hydromodification Management Projects.

	Yes	No	N/A
12.1 Was maintenance plan submitted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.2 Was maintenance plan approved?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.3 Was maintenance agreement submitted? (Date executed:_____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.4 Indicate the dates on which the Applicant submitted annual reports for project O&M: _____			

13. Comments (for municipal staff use only):

14. NOTES (for municipal staff use only):

Section 1 Notes: _____

Section 2 Notes: _____

Section 3 Notes: _____

Section 4 Notes: _____

Section 5 Notes: _____

Section 7 Notes: _____

Section 8 Notes: _____

Section 9 Notes: _____

Section 10 Notes: _____

Section 11 Notes: _____

Section 12 Notes: _____

15. Project Close-Out (for municipal staff use only):

	Yes	No	NA
15.1 Were final Conditions of Approval met?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2 Was initial inspection of the completed treatment/HM measure(s) conducted? (Date of inspection:_____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.3 Was maintenance plan submitted? (Date executed:_____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.4 Was project information provided to staff responsible for O&M verification inspections? (Date provided to inspection staff:_____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Name of staff confirming project is closed out: _____

Signature: _____ Date: _____

Name of O&M staff receiving information: _____

Signature: _____ Date: _____

Appendices

- Appendix A: O&M Agreement
- Appendix B: O&M Annual Report Form

State Water Resources Control Board

Division of Financial Assistance Proposition 84 Storm Water Grant Program

The Division plans to begin accepting applications on November 15, 2011 for storm water implementation and planning projects. The Division will conduct public workshops in December 2011 to help applicants prepare proposals.

IMPLEMENTATION GRANTS SOLICITATION WORKSHOPS

- Thursday, December 1, 2011, 1 – 2:30 p.m. San Diego**
➤ San Diego Regional Water Board Office, 9174 Sky Park Court, Regional Board Room, San Diego, CA 92123
- Friday, December 2, 2011, 10 a.m. – 11:30 a.m. Riverside**
➤ Santa Ana Regional Water Board Office, 3737 Main Street, Suite 200, High Grove Room (2nd Floor), Riverside, CA 92501
- Tuesday, December 6, 2011, 10 a.m. – 11:30 a.m. Oakland**
➤ Elihu Harris State Office Building, Room 1 – 2nd Floor, 1515 Clay Street, Oakland, CA 94612
- Wednesday, December 7, 2011, 10 a.m. – 11:30 a.m. San Luis Obispo**
➤ Central Coast Regional Water Board Office, 895 Aerovista Place, Watershed Room, San Luis Obispo, CA 93401
- Thursday, December 8, 2011, 10 a.m. – 11:30 a.m. Fresno**
➤ Central Valley (Fresno) Regional Water Board Office, Kings Conference Room, 1685 E Street, Fresno, CA 93706
- Wednesday, December 14, 2011, 10 a.m. – 11:30 a.m. Sacramento (WEBCAST)**
➤ Cal/EPA Building, Byron Sher Auditorium, 1001 I Street, Sacramento, CA 95814
<http://www.calepa.ca.gov/broadcast/>

PLANNING GRANTS SOLICITATION WORKSHOP

- Wednesday, December 14, 2011, 1 p.m. – 2:30 p.m. Sacramento (WEBCAST)**
➤ Cal/EPA Building, Byron Sher Auditorium, 1001 I Street, Sacramento, CA 95814
<http://www.calepa.ca.gov/broadcast/>



State Water Resources Control Board

If you plan to attend one or more of the workshops, please email your RSVP at DFA_Grants@waterboards.ca.gov. Please include in your subject line: Storm Water Workshop and indicate which workshop you will be attending.

For more information for the Proposition 84 Storm Water Grant Program, please see the following link:

http://www.waterboards.ca.gov/water_issues/programs/grants_loans/prop84/index.shtml

Proposition 84, the *Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006*, was approved by California voters in the general election on November 7, 2006. Proposition 84 provides the State Water Resources Control Board \$82 million for matching grants to local public agencies for the reduction and prevention of storm water contamination of rivers, lakes, and streams (PRC § 75050[m]).