Stormwater Requirements Checklist

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

City of Albany
1000 San Pablo Ave
510-528-5760
www.albanyca.org

I. Applicability of C.3 and C.6 Stormwater Requirements

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

I.A.1 Project Name: _____

I.A.2 Project Address (include cross street): _____

I.A.3 Project APN: _____ I.A.4 Project Watershed: _____

I.A.5 Applicant Name: _____

I.A.6 Applicant Address: _____

I.A.7 Applicant Phone: _____ Applicant Email Address: _____

I.A.8 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 occurred[1]

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

I.A.9 Project Description[3]: _____

(Also note any past or future phases of the project.) _____

_____

I.A.10 Total Area of Site: _____ acres

Total Area of land disturbed during construction (include clearing, grading, excavating and stockpile area:_____ acres.

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

I.B.1 Enter the amount of impervious surface[4] created and/or replaced by the project (if the total amount is 5,000 sq.ft. or more):

Table of Impervious and Pervious Surfaces

Type of Impervious Surface	a Pre-Project Impervious Surface (sq.ft.)	b Existing Impervious Surface to be Replaced[6] (sq.ft.)	c New Impervious Surface to be Created[6] (sq.ft.)	d Post-project landscaping (sq.ft.), if applicable
Roof area(s) – excluding any portion of the roof that is vegetated ("green roof")				
Impervious[4] sidewalks, patios, paths, driveways				
Impervious[4] uncovered parking[5]				N/A
Streets (public)				
Streets (private)				
Totals:				
Area of Existing Impervious Surface to remain in place		N/A		
Total New Impervious Surface *(sum of totals for columns b and c):*				

[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] Standard Industrial Classification (SIC) codes are in Section 2.3 of the C.3 Technical Guidance (download at www.cleanwaterprogram.org)

[3] Project description examples: 5-story office building, industrial warehouse, residential with five 4-story buildings for 200 condominiums, etc.

[4] Per the MRP, pavement that meets the following definition of pervious pavement is NOT an impervious surface. Pervious pavement is defined as pavement that stores and infiltrates rainfall at a rate equal to immediately surrounding unpaved, landscaped areas, or that stores and infiltrates the rainfall runoff volume described in Provision C.3.d.

[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.

I.B. Is the project a "C.3 Regulated Project" per MRP Provision C.3.b? (continued)

		Yes	No	NA
I.B.2	In Item I.B.1, does the Total New Impervious Surface equal 10,000 sq.ft. or more? *If YES, skip to Item I.B.5 and check "Yes." If NO, continue to Item I.B.3.*	☐	☐	☐
I.B.3	Does the Item I.B.1 Total New Impervious Surface equal 5,000 sq.ft. or more, but less than 10,000 sq.ft? *If YES, continue to Item I.B.4. If NO, skip to Item I.B.5 and check "No."*	☐	☐	☐
I.B.4	Is the project a "Special Land Use Category" per Item I.A.8? For uncovered parking, check YES only if there is 5,000 sq.ft or more uncovered parking. *If NO, go to Item I.B.5 and check "No." If YES, go to Item I.B.5 and check "Yes."*	☐	☐	☐
I.B.5	Is the project a C.3 Regulated Project? *If YES, skip to Item I.B.6; if NO, continue to Item I.C.*	☐	☐	☐
I.B.6	Does the total amount of Replaced impervious surface equal 50 percent or more of the Pre-Project Impervious Surface? *If YES, stormwater treatment requirements apply to the whole site; if NO, these requirements apply only to the impervious surface created and/or replaced.*	☐	☐	☐

I.C. Projects that are NOT C.3 Regulated Projects

If you answered NO to Item I.B.5, or the project creates/replaces less than 5,000 sq. ft. of impervious surface, 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 Section II.

I.D. Projects that ARE C.3 Regulated Projects

If you answered YES to Item I.B.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. Hydromodification management may also be required; refer to Section II to make this determination. If final discretionary approval was granted on or after **DECEMBER 1, 2011**, Low Impact Development (LID) requirements apply, except for "Special Projects." See Section II.

I.E. Identify C.6 Construction-Phase Stormwater Requirements

		Yes	No
I.E.1	Does the project disturb 1.0 acre (43,560 sq.ft.) or more of land? (See Item I.A.10). *If Yes, 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 is issued.*	☐	☐
I.E.2	Is the site as a "High Priority Site" that disturbs less than 1.0 acre (43,560 sq.ft.) of land? (Municipal staff will make this determination.) ▪ "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 MRP Provision C.6.e.ii(2))	☐	☐

- NOTE TO APPLICANT: All projects require appropriate stormwater best management practices (BMPs) during construction. Refer to the Section II to identify appropriate construction BMPs.
- NOTE TO MUNICIPAL STAFF: If the answer is "Yes" to either question in Section E, refer this project to construction site inspection staff to be added to their list of projects that require stormwater inspections at least monthly during the wet season (October 1 through April 30).

II. Implementation of Stormwater Requirements

II.A. Complete the appropriate sections for the project. For non-C.3 Regulated Projects, Sections II.B, II.C, and II.D apply. For C.3 Regulated Projects, all sections of Section II apply.

II.B. Select Appropriate Site Design Measures

- *Required for C.3 Regulated Projects.*
- *Starting December 1, 2012, projects that create and/or replace 2,500 - 10,000 sq.ft. of impervious surface, and stand-alone single family homes that create/replace 2,500 sq.ft. or more of impervious surface, must include one of Site Design Measures a through f.*[7]
- *All other projects are encouraged to implement site design measures, which may be required at municipality discretion.*
- *Consult with municipal staff about requirements for your project.*

II.B.1 Is the site design measure included in the project plans?

Yes	No	Plan Sheet No.	
☐	☐		a. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.
☐	☐		b. Direct roof runoff onto vegetated areas.
☐	☐		c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas.
☐	☐		d. Direct runoff from driveways and/or uncovered parking lots onto vegetated areas.
☐	☐		e. Construct sidewalks, walkways, and/or patios with permeable surfaces.
☐	☐		f. Construct bike lanes, driveways, and/or uncovered parking lots with permeable surfaces.
☐	☐		g. Minimize land disturbance and impervious surface (especially parking lots).
☐	☐		h. Maximize permeability by clustering development and preserving open space.
☐	☐		i. Use micro-detention, including distributed landscape-based detention.
☐	☐		j. Protect sensitive areas, including wetland and riparian areas, and minimize changes to the natural topography.
☐	☐		k. Self-treating area (see Section 4.1 of the C.3 Technical Guidance)
☐	☐		l. Self-retaining area (see Section 4.2 of the C.3 Technical Guidance)
☐	☐		m. Plant or preserve interceptor trees (Section 4.5, C.3 Technical Guidance)

[7] See MRP Provision C.3.a.i(6) for non-C.3 Regulated Projects, C.3.c.i(2)(a) for Regulated Projects, C.3.i for projects that create/replace 2,500 to 10,000 sq.ft. of impervious surface and stand-alone single family homes that create/replace 2,500 sq.ft. or more of impervious surface.

II.C. Select appropriate source controls *(Applies to C.3 Regulated Projects; encouraged for other projects. Consult municipal staff.[8])*

Are these features in project?		Features that require source control measures	Source control measures (Refer to Local Source Control List for detailed requirements)	Is source control measure included in project plans?		
Yes	No			Yes	No	Plan Sheet No.
☐	☐	Storm Drain	Mark on-site inlets with the words "No Dumping! Flows to Bay" or equivalent.	☐	☐	
☐	☐	Floor Drains	Plumb interior floor drains to sanitary sewer[9] [or prohibit].	☐	☐	
☐	☐	Parking garage	Plumb interior parking garage floor drains to sanitary sewer.[9]	☐	☐	
☐	☐	Landscaping	▪ 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.	☐	☐	
☐	☐	Pool/Spa/Fountain	Provide connection to the sanitary sewer to facilitate draining.[9]	☐	☐	
☐	☐	Food Service Equipment (non-residential)	Provide sink or other area for equipment cleaning, which is: ▪ Connected to a grease interceptor prior to sanitary sewer discharge. [9] ▪ 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.	☐	☐	
☐	☐	Refuse Areas	▪ 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.[9]	☐	☐	
☐	☐	Outdoor Process Activities [10]	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.[9]	☐	☐	
☐	☐	Outdoor Equipment/ Materials Storage	▪ Cover the area or design to avoid pollutant contact with stormwater runoff. ▪ Locate area only on paved and contained areas. ▪ Roof storage areas that will contain non-hazardous liquids, drain to sanitary sewer[9], and contain by berms or similar.	☐	☐	
☐	☐	Vehicle/ Equipment Cleaning	▪ Roofed, pave and berm wash area to prevent stormwater run-on and runoff, plumb to the sanitary sewer[9], and sign as a designated wash area. ▪ Commercial car wash facilities shall discharge to the sanitary sewer.[9]	☐	☐	
☐	☐	Vehicle/ Equipment Repair and Maintenance	▪ 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. ▪ No floor drains unless pretreated prior to discharge to the sanitary sewer. [9] ▪ Connect containers or sinks used for parts cleaning to the sanitary sewer. [9]	☐	☐	
☐	☐	Fuel Dispensing Areas	▪ Fueling areas shall have impermeable surface that is a) minimally graded to prevent ponding and b) separated from the rest of the site by a grade break. ▪ Canopy shall extend at least 10 ft in each direction from each pump and drain away from fueling area.	☐	☐	
☐	☐	Loading Docks	▪ 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.[9] ▪ Install door skirts between the trailers and the building.	☐	☐	
☐	☐	Fire Sprinklers	Design for discharge of fire sprinkler test water to landscape or sanitary sewer.[9]	☐	☐	
☐	☐	Miscellaneous Drain or Wash Water	▪ Drain condensate of air conditioning units to landscaping. Large air conditioning units may connect to the sanitary sewer.[9] ▪ Roof drains shall drain to unpaved area where practicable. ▪ Drain boiler drain lines, roof top equipment, all washwater to sanitary sewer [9].	☐	☐	
☐	☐	Architectural Copper	▪ Discharge rinse water to sanitary sewer [9], or collect and dispose properly offsite. See flyer "Requirements for Architectural Copper."	☐	☐	

[8] 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.

[9] Any connection to the sanitary sewer system is subject to sanitary district approval.

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

II.D. Implement construction Best Management Practices (BMPs) *(Applies to all projects).*

Yes	No	Best Management Practice (BMP)
☐	☐	Attach the municipality's construction BMP plan sheet to project plans and require contractor to implement the applicable BMPs on the plan sheet.
☐	☐	Temporary erosion controls to stabilize all denuded areas until permanent erosion controls are established.
☐	☐	Delineate with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.
☐	☐	Provide notes, specifications, or attachments describing the following: ▪ Construction, operation and maintenance of erosion and sediment controls, include 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 & mulch, include methods and schedules for planting and fertilization; ▪ Provisions for temporary and/or permanent irrigation.
☐	☐	Perform clearing and earth moving activities only during dry weather.
☐	☐	Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
☐	☐	Protect all storm drain inlets in vicinity of site using sediment controls such as berms, fiber rolls, or filters.
☐	☐	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.
☐	☐	Divert on-site runoff around exposed areas; divert off-site runoff around the site (e.g., swales and dikes).
☐	☐	Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
☐	☐	Limit construction access routes and stabilize designated access points.
☐	☐	No cleaning, fueling, or maintaining vehicles on-site, except in a designated area where washwater is contained and treated.
☐	☐	Store, handle, and dispose of construction materials/wastes properly to prevent contact with stormwater.
☐	☐	Contractor shall train and provide instruction to all employees/subcontractors re: construction BMPs.
☐	☐	Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, rinse water from architectural copper, and non-stormwater discharges to storm drains and watercourses.

PROJECTS THAT ARE NOT C.3 REGULATED PROJECTS STOP HERE!

II.E. Feasibility/Infeasibility of Infiltration and Rainwater Harvesting/Use (Applies to C.3 Regulated Projects ONLY)

Except for some Special Projects, C.3 Regulated Projects must include low impact development (LID) treatment measures. LID treatment measures are rainwater harvesting, infiltration, evapotranspiration, and biotreatment (landscape-based treatment with special soils). Biotreatment is allowed ONLY if it is infeasible to treat the amount of runoff specified in Provision C.3.d with rainwater harvesting, infiltration, and evapotranspiration.

	Yes	No	N/A
II.E.1 Is this project a "Special Project"? (See Appendix K of the C.3 Technical Guidance for criteria.) ➢ *If No, continue to Item II.E.2.* ➢ *If Yes, or if there is potential that the project MAY be a Special Project, complete the Special Projects Worksheet.*	☐	☐	☐
II.E.2 Infiltration Potential. Based on site-specific soil report[11], do site soils either: a. Have a saturated hydraulic conductivity (Ksat) less than 1.6 inches/hour), or, if the Ksat rate is not available, b. Consist of Type C or D soils? ➢ *If Yes, infiltration of the C.3.d amount of runoff is infeasible. Continue to II.E.3.* ➢ *If No, complete the Infiltration Feasibility Worksheet. If infiltration of the C.3.d amount of runoff is found to be feasible, skip to II.E.8; if infiltration is found to be infeasible, continue to II.E.3.*	☐	☐	☐

[11] If no site-specific soil report is available, refer to soil hydraulic conductivity maps in C.3 Technical Guidance Appendix I.

II.E.3 Recycled Water. Check the box if the project is installing and using a recycled water plumbing system for non-potable water use.

☐ The project is installing a recycled water plumbing system, and the installation of a second non-potable water system for harvested rainwater is impractical, and considered infeasible due to cost considerations.

- *If you checked this box, there is no need for further evaluation of rainwater harvesting. Skip to II.E.9.*

II.E.4 Potential Rainwater Capture Area

a. Refer to the Table of Impervious and Pervious Surfaces in Section I, and enter the total square footage of impervious surface that will be replaced and/or created by the project. _____ Sq. ft.

b. If I.B.6 indicates that 50% or more of the existing impervious surface will be replaced with new impervious surface, then add any existing impervious surface that will remain in place to the amount in II.E.4.a. _____ Sq. ft.

c. Convert the amount in Item II.E.4.b from square feet to acres (divide by 43,560). If II.E.4.b is not applicable, convert the amount in II.E.4.a from square feet to acres. This is the project's Potential Rainwater Capture Area, in acres. _____ Acres

II.E.5 Landscape Irrigation: Feasibility of Rainwater Harvesting and Use

a. Enter area of onsite landscaping. _____ Acres

b. Multiply the Potential Rainwater Capture Area (the amount in II.E.4.c) times 6.9. _____ Acres

c. Is the amount in II.E.5.a (onsite landscaping) LESS than 2.5 times the size of the amount in II.E.5.b (the product of 2.5 times the size of the Potential Rainwater Capture Area)[12]? ☐ **Yes** ☐ **No**

- *If Yes, irrigation use of the C.3.d amount of runoff is infeasible. Continue to II.E.6.*
- *If No, it may be possible to meet the treatment requirements by directing runoff from impervious areas to self-retaining areas (see Section 4.2 of the C.3 Technical Guidance). If not, refer to Table 11 and the curves in Appendix F of the LID Feasibility Report to evaluate feasibility of harvesting and using the C.3.d amount of runoff for irrigation. If that analysis shows that it is feasible to harvest and use the C.3.d amount of runoff, complete Part 5 (Factors Other than Demand) of the Rainwater Harvesting/Use Feasibility Worksheet. Skip to II.E.7.*

II.E.6 Indoor Non-Potable Uses: Feasibility of Rainwater Harvesting and Use *(check the box for the applicable project type, then fill in the requested information and answer the question):*[13]

☐ a. Residential Project

i. Number of dwelling units (total post-project): _____ Units

ii. Divide amount in (i) by the amount in II.E.4.c (Potential Rainwater Capture Area): _____ Du/ac

iii. Is the amount in (ii) LESS than 255 dwelling units per acre of capture area? ☐ **Yes** ☐ **No**

☐ b. Commercial Project

i. Floor area (total interior post-project square footage): _____ Sq.ft.

ii. Divide amount in (i) by the amount in II.E.4.c (Potential Rainwater Capture Area): _____ Sq.ft./ac

iii. Is the amount in (ii) LESS than 172,000 square feet per acre of capture area? ☐ **Yes** ☐ **No**

☐ c. School Project

i. Floor area (total interior post-project square footage): _____ Sq.ft.

ii. Divide amount in (i) by the amount in II.E.4.c (Potential Rainwater Capture Area): _____ Sq.ft./ac

iii. Is the amount in (ii) LESS than 51,000 square feet per acre of capture area? ☐ **Yes** ☐ **No**

[12] Landscape areas must be contiguous and within the same Drainage Management Area to irrigate with harvested rainwater via gravity flow.
[13] Rainwater harvested for indoor use is typically used for toilet/urinal flushing, industrial processes, or other non-potable uses.

II.E.6 Indoor Non-Potable Uses: Feasibility of Rainwater Harvesting and Use (continued)

☐ d. Industrial Project

i. Estimated demand for non-potable water (gallons/day): _____ Gal.

ii. Is the amount in (i) LESS than 2,400? ☐ **Yes** ☐ **No**

If you checked "No", refer to the curves in Appendix F of the LID Feasibility Report to evaluate feasibility of harvesting and using the C.3.d amount of runoff for industrial use.

☐ e. Mixed-Use Residential/Commercial Project[14]

	Residential	*Commercial*
i. Number of residential dwelling units and square footage of commercial floor area:	_____ Units	_____ Sq.ft.
ii. Percentage of total interior post-project floor area serving each activity:	_____ %	_____ %
iii. Prorated Potential Rainwater Capture Area per activity (multiply amount in II.E.4.c by the percentages in [ii]):	_____ Acres	_____ Acres
iv. Prorated project demand per acre of Potential Rainwater Capture Area (divide the amounts in [i] by the amounts in [iii]):	_____ Du/ac	_____ Sq.ft/ac

v. Is the amount in (iv) in the residential column less than 100 dwelling units per acre of capture area, AND is the amount in the commercial column less than 70,000 square feet per acre of capture area? ☐ **Yes** ☐ **No**

- *If you checked "Yes" for the above question for the applicable project type, rainwater harvesting for indoor use is considered infeasible, unless the project includes one or more buildings that each have an individual roof area of 10,000 sq. ft. or more, in which case further analysis is needed. Complete Sections II.E.5 and II.E.6 of this form for each such building, then continue to II.E.7.*
- *If you checked "No" for the question applicable to the type of project, rainwater harvesting for indoor use may be feasible. Complete the Rainwater Harvesting Feasibility Worksheet, and then continue to II.E.7.*

II.E.7 Identify and Attach Additional Feasibility Analyses

If further analysis is conducted based on results in II.E.1, II.E.2, II.E.5, or II.E.6, indicate the analysis that is conducted and attach the applicable form or other documentation (check all that apply):

☐ Special Projects Worksheet (if required in II.E.1)

☐ Infiltration Feasibility Worksheet (if required in II.E.2)

☐ Rainwater Harvesting and Use Feasibility Worksheet (if required in II.E.5 or II.E.6), completed for:

- ☐ The entire project
- ☐ Individual building(s), if applicable, describe: _____

☐ Evaluation of the feasibility of harvesting and using the C.3.d amount of runoff for irrigation, based on Table 11 and the curves in Appendix F of the LID Feasibility Report (if required in II.E.5).

☐ Evaluation of the feasibility of harvesting and using the C.3.d amount of runoff for non-potable industrial use, based on the curves in Appendix F of the LID Feasibility Report (if required in II.E.6.d).

II.E.8 Finding of Infiltration Feasibility/Infeasibility

Infiltration of the C.3.d amount of runoff is infeasible if any of the following conditions apply (check all that apply):

☐ The "Yes" box was checked for Item II.E.2.

☐ Completion of the Infiltration Feasibility Worksheet resulted in a finding that infiltration of the C.3.d amount of runoff is infeasible.

- *Based on the above evaluation, infiltration of the C.3.d amount of runoff is (check one):*

☐ Infeasible ☐ Feasible

[14] For a mixed-use project involving activities other than residential and commercial activities, follow the steps for residential/commercial mixed-use projects. Prorate the Potential Rainwater Capture Area for each activity based on the percentage of the project serving each activity.

II.E.9 Finding of Rainwater Harvesting and Use Feasibility/Infeasibility

Harvesting and use of the C.3.d amount of runoff is infeasible if any of the following apply (check all that apply):

- ☐ The project will have a recycled water system for non-potable use (II.E.3).
- ☐ Only the "Yes" boxes were checked for Items II.E.5 and II.E.6.
- ☐ Completion of the Rainwater Harvesting and Use Feasibility Worksheet resulted in a finding that harvesting and use of the C.3.d amount of runoff is infeasible.
- ☐ Evaluation of the feasibility of harvesting and using the C.3.d amount of runoff for irrigation, based on Table 11 and the curves in Appendix F of the LID Feasibility Report, resulted in a finding of infeasibility.
- ☐ Evaluation of the feasibility of harvesting and using the C.3.d amount of runoff for non-potable industrial use, based on the curves in Appendix F of the LID Feasibility Report, resulted in a finding of infeasibility.
  - ➢ *Based on the above evaluation, harvesting and using the C.3.d amount of runoff is (check one):*

    ☐ Infeasible ☐ Feasible

II.E.10. Use of Biotreatment

If findings of infeasibility are made in both II.E.8 (Infiltration) and II.E.9 (Rainwater Harvesting and Use), then the applicant may use appropriately designed bioretention facilities for compliance with C.3 treatment requirements.

- ➢ *Applicants using biotreatment are encouraged to maximize infiltration of stormwater if site conditions allow.*

Continue to Section II.F on the next page.

II.F. Stormwater Treatment Measures (Applies to C.3 Regulated Projects)

II.F.1 Check the applicable box and indicate the treatment measures to be included in the project.

Yes	No	
☐	☐	Is the project a **Special Project**? If yes, consult with municipal staff about the need to prepare a discussion of the feasibility and infeasibility of 100% LID treatment. Indicate the type of non-LID treatment to be used, the hydraulic sizing method*, and percentage of the amount of runoff specified in Provision C.3.d that is treated: Non-LID Treatment — Hydraulic sizing method — % of C.3.d amount of runoff treated ☐ Media filter ☐ Tree well filter
☐	☐	Is it **infeasible** to treat the C.3.d amount of runoff using either infiltration or rainwater harvesting/use (see II.E.8 and II.E.9)? If yes, indicate the biotreatment measures to be used, and the hydraulic sizing method: Biotreatment Measures — Hydraulic sizing method ☐ Bioretention area ☐ Flow-through planter ☐ Other (specify):
☐	☐	Is it **feasible** to treat the C.3.d amount of runoff using either infiltration or rainwater harvesting/use (see II.E.8 and II.E.9)? If yes, indicate the non-biotreatment LID measures to be used, and hydraulic sizing method: LID Treatment Measure (non-biotreatment) — Hydraulic sizing method ☐ Rainwater harvesting and use ☐ Bioinfiltration[15] ☐ Infiltration trench ☐ Other (specify):_____

*** Hydraulic Sizing Method:** Indicate which of the following Provision C.3.d.i hydraulic sizing methods were used:

1. Volume based approaches – Refer to Provision C.3.d.i.(1):
   1(a) Urban Runoff Quality Management approach, or
   1(b) 80% capture approach (recommended volume-based approach).

2. Flow-based approaches – Refer to Provision C.3.d.i.(2):
   2(a) 10% of 50-year peak flow approach,
   2(b) Percentile rainfall intensity approach, or
   2(c) 0.2-Inch-per-hour intensity approach (this is recommended flow-based approach AND the basis for the 4% rule of thumb described in Section 5.1 of the C.3 Technical Guidance).

3. Combination hydraulic sizing approach -- Refer to Provision C.3.d.i.(3):
   If a combination flow and volume design basis was used, indicate which flow-based and volume-based criteria were used.

II.G. Is the project a Hydromodification Management[16] (HM) Project? (Complete this section for C.3 Regulated Projects)

II.G.1 Does the project create and/or replace 1 acre (43,560 sq. ft.) or more of impervious surface? (Refer to Item I.B.1.)

☐ Yes. *Continue to Item II.G.2.*

☐ No. *The project is NOT required to incorporate HM measures. Skip to Item II.G.6 and check "No."*

II.G.2 Is the total impervious area increased over the pre-project condition? (Refer to Item I.B.1.)

☐ Yes. *Continue to Item II.G.3.*

☐ No. *The project is NOT required to incorporate HM measures. Skip to Item II.G.6 and check "No."*

[15] See Section 6.1 of the C.3 Technical Guidance for conditions in which bioretention areas provide bioinfiltration.

[16] Hydromodification is the modification of a stream's hydrograph, caused in general by increases in flows and durations that result when land is developed (made more impervious). The effects of hydromodification include, but are not limited to, increased bed and bank erosion, loss of habitat, increased sediment transport and deposition, and increased flooding. Hydromodification management control measures are designed to reduce these effects.

II.G.3 Is the site located in a tidally influenced/depositional area, or in the extreme eastern portion of the county that is not subject to HM requirements? *(See HMP Susceptibility Map in Appendix I of the C.3 Technical Guidance.)*

☐ Yes. *Project is exempt from HM requirements. Attach map indicating project location. Skip to II.G.6 and check "No".*

☐ No. *Continue to II.G.4.*

II.G.4 Is the site located in a high slope zone or special consideration watershed, as shown on the HMP Susceptibility Map?

☐ Yes. *Project is subject to HM requirements. Attach map indicating project location. Skip to II.G.6 and check "Yes."*

☐ No. *Continue to II.G.5.*

II.G.5 For sites located in a white area on the HMP Susceptibility Map, 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. *Project is exempt from HM requirements. Attach signed statement by qualified professional. Go to II.G.6 and check "No."*

☐ No. *Project is subject to HM requirements. Attach map indicating project location. Go to Item G.6 and check "Yes."*

II.G.6 Is the project a Hydromodification Management Project?

☐ Yes. *The project is subject to HM requirements in Provision C.3.g of the Municipal Regional Stormwater Permit.*

☐ No. *The project is EXEMPT from HM requirements.*

☐ HM requirements are impracticable. *(Attach documentation needed to comply with the impracticability provision in MRP Attachment B.)*

- *If the project is subject to the HM requirements, incorporate in the project flow duration stormwater control measures 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. Guidance is provided in Chapter 7 of the C.3 Technical Guidance.*

II.H Stormwater Treatment Measure and/HM Control Owner or Operator's Information:

Name:_____

Address:_____

Phone:_____ Email:_____

- *Applicant must call for inspection and receive inspection within 45 days of installation of treatment measures and/or hydromodification management controls.*

Name of applicant completing the form:_____

Signature:_____ Date:_____

III. For Completion By Municipal Staff

III.1 Alternative Certification: Was the treatment system sizing and design reviewed by a qualified third-party professional that is not a member of the project team or agency staff?

☐ Yes ☐ No Name of Reviewer_____

III.2. Confirm Operations and Maintenance (O&M) Submittal:

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

		Yes	No	N/A
III.2.a	Was maintenance plan submitted?	☐	☐	☐
III.2.b	Was maintenance plan approved?	☐	☐	☐
III.2.c	Was maintenance agreement submitted? (Date executed:_____)	☐	☐	☐

- *Attach the executed maintenance agreement as an appendix to this checklist.*

III.3 Incorporate HM Controls (if required)

Are the applicable items for HM compliance included in the plan submittal?

Yes	No	NA	Documentation for HM Compliance
☐	☐	☐	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
☐	☐	☐	Soils report or other site-specific document showing soil types at all parts of site
☐	☐	☐	If project uses the Bay Area Hydrology Model (BAHM), a list of model inputs.
☐	☐	☐	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.
☐	☐	☐	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).
☐	☐	☐	If the project uses alternatives to the default BAHM approach or settings, a written description and rationale.

- *Municipal staff: Refer to the "Flow Duration Control Review Worksheet for HM Submittals" to review the documentation submitted for HM compliance.*

III.4 Annual Operations and Maintenance (O&M) Submittals:

For C.3 Regulated Projects and Hydromodification Management Projects, indicate the dates on which the Applicant submitted annual reports for project O&M: _____

_____

III.5 Comments:

_____

_____

_____

_____

III.6 Notes:

Section I Notes: _____

Section II Notes: _____

Section III Notes: _____

III.7 Project Close-Out:

III.7.a	Were final Conditions of Approval met?	☐	☐	
III.7.b	Was initial inspection of the completed treatment/HM measure(s) conducted? (Date of inspection: _____)	☐	☐	☐
III.7.c	Was maintenance plan submitted? (Date executed: _____)	☐	☐	☐
III.7.d	Was project information provided to staff responsible for O&M verification inspections? (Date provided to inspection staff: _____)	☐	☐	☐

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