Stormwater Requirements Checklist

Municipal Regional Stormwater Permit (MRP)

Stormwater Controls for Development Projects

Section ONE - Enter Project Data

1	Project Name:		
2	Project Address (include cross street):		
3	APN or parcel/tract #:		
4	Project Watershed[1] (creek or receiving water):	Depth to seasonal high groundwater: _____ ft	
5	Property Owner's Name:		
6	Applicant name and role:	☐ Owner ☐ Engineer/Architect ☐ Developer	
7	Applicant signature (Required):	Date:	
8	Applicant Address:		
9	Applicant Phone:	Applicant Email Address:	
10	Development type: (check all that apply)	☐ Residential ☐ Commercial ☐ Industrial ☐ Mixed-Use ☐ Streets, Roads, etc. ☐ Detached Single Family Home ☐ Redevelopment[2]	
11	Project Description: (note any past or future phases of the project)		
12	☐ Check box if other permit applications have been submitted in the past year. Provide permit number(s): _____		
13	Total Area of Site: _____ acres	14	Greatest slope on site: _____ % (if project is <1 Acre)
15	Total Area of land disturbed during construction (include clearing, grading, excavating and borrow stockpile area): _____ acres		

Section TWO - Impervious Surfaces Table

Enter the amount of impervious surface created and/or replaced by the project:

	Type of Impervious Surface[3]	a Pre-Project Impervious Surface (sq.ft.)	b Existing Impervious Surface to be Replaced[4] (sq.ft.)	c New Impervious Surface to be Created (sq.ft.)	d Post-project landscaping (sq.ft.), if applicable
16	Roof area(s)				N/A
17	Sidewalks, patios, paths, driveways[5]				
18	Parking lots				
19	Streets (private)				
20	Streets (public)				
21	*Totals:*				
22	Area of Existing Impervious Surface to remain in place		N/A		
23	Total Impervious Surface Created/Replaced *(sum of totals for columns b and c):*				

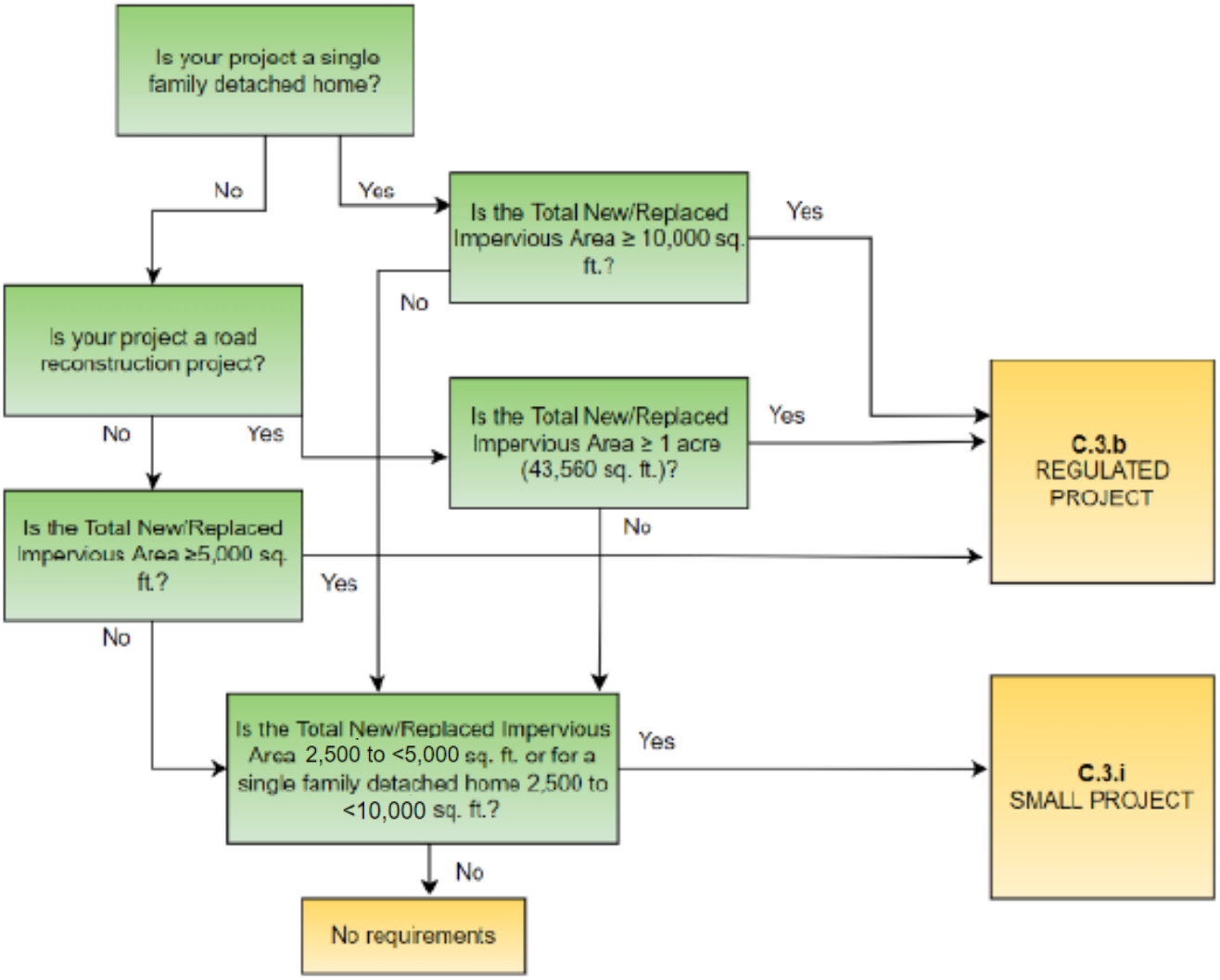
[1] Watershed is defined by the maps from the Alameda County Flood Control District at http://acfloodcontrol.org/resources/explore-watersheds

[2] As defined by MRP: creating, adding and/or replacing exterior existing impervious surface on a site where past development has occurred.

[3] A surface covering or pavement of a developed parcel of land that prevents the land's natural ability to absorb and infiltrate rainfall/stormwater.

[4] Replaced impervious area means any impervious area that is removed and replaced in kind or upgraded. See Chapter 2 of the *C.3 Technical Guidance Manual.*

[5] Gravel, artificial turf, playground, and any other pervious pavement type surfaces shall be considered impervious, except when it is constructed as part of appropriately designed pervious pavement system.



Section THREE - Is the project a "C.3 Regulated Project" per MRP Provision C.3.b or a Small Project per MRP Provision C.3.i?

		Yes	No
24	Is the project a single family home AND does it create/replace ≥ 10,000 ft^2 of impervious surface? *If YES, your project is a C.3.b Regulated Project; continue to Question 27*	☐	☐
25	Is the project a road reconstruction project AND does it create/replace ≥ 1 acre (43,560 ft^2) of impervious surface? *If YES, your project is a C.3.b Regulated Project; continue to Question 27*	☐	☐
26	Is the total impervious surface created/replaced ≥ 5,000 ft^2. *If YES, your project is a C.3.b Regulated Project*	☐	☐
27	If the answer to any question above is yes, then the project is a **C.3 Regulated Project**. Mark YES and answer Question 28; if NO, continue to Question 29. Additional Information: If your project IS a C.3.b 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. If your project IS NOT a regulated by C.3.b or C.3.i, you are not subject to stormwater treatment requirements, however you are *encouraged* to incorporate site design and source control measures. The municipality may determine that source controls and site design measures are required for your project.	☐	☐
28	Is the total amount of create/replaced impervious surface ≥ 50 percent of the pre-project impervious surface (reported in row 21 above)? *If YES, stormwater treatment requirements apply to the entire site; if NO, these*	☐	☐

	requirements apply only to the impervious surface created and/or replaced.		
29	Does the project create/replace 2,500 ft^2 to 5,000 ft^2 impervious surface (or 2,500 ft^2 to 10,000 ft^2 of impervious surface for a single family detached home)? If YES, your project is considered a "Small Project" and must implement site design measures and source control requirements (Refer to Section FIVE and SIX).	☐	☐
30	Is the project installing a total of ≥ 3,000 ft^2 of new pervious pavement systems (not including private-use patios at residences)? (Pervious pavement systems include pervious concrete, pervious asphalt, pervious pavers, and grid pavers etc. and are described in the C.3 Technical Guidance at www.cleanwaterprogram.org). If YES, stormwater treatment system inspection requirements (C.3.h) apply. (Municipal staff – add this site to your list of sites needing a final inspection at the end of construction and on-going O&M inspections.)	☐	☐

Section FOUR - Applicability of C.6 Stormwater Requirements

		Yes	No
31	Does the project disturb ≥ 1.0 acre (43,560 ft^2) of land? (Reported in Question 15 above). *If Yes, obtain coverage under the state's Construction General Permit at https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp. Submit your WDID# and evidence of Notice of Intent coverage before grading or building permits are issued.*	☐	☐
32	Include the Clean Bay Blueprint (https://city.fremont.gov/stormwaterpermit) in the plan set (all projects).	☐	☐
33	Include an erosion/sediment control plan sheet in the plan set if the project scope includes land disturbing activities (clearing, grading, excavating or material stockpiling).	☐	☐
34	Is the site a "High Priority Site" which can be determined by any of the following criteria: ➢ Require a grading permit, ➢ Adjacent to a creek or waterway ➢ Any other relevant factors that can be a threat to water quality (Municipal staff will make the final determination)	☐	☐
35	Is the site a "Hillside Site" that disturbs ≥5,000 ft^2 of land? ➢ "Hillside Sites" are located on hillsides, as indicated on a jurisdictional map of hillside development areas or as indicated by meeting jurisdictional hillside development criteria. ➢ If no map or criteria exist, then Hillside Sites are sites with ≥ 15% slope	☐	☐

Section FIVE - Select Appropriate Site Design Measures

➢ C.3.i Small Projects *(determined in Section THREE above)* **must implement at least one** of site design measures listed below.
➢ C.3.b Regulated Projects *(determined in Section THREE above)* **must implement appropriate and feasible** site design measures.
➢ Projects not regulated by C.3 are *encouraged* to implement appropriate site design measures and those directed by the municipality.

Yes	No	
☐	☐	a. Direct roof runoff onto vegetated areas via disconnected downspouts, unless it is a C.3 regulated project discharging runoff to a low impact development treatment measure.
☐	☐	b. Direct roof runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use.
☐	☐	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, patios, driveways, bike lanes and/or parking lots with permeable surfaces[6].
☐	☐	f. Minimize land disturbance and impervious surface creation (especially parking lots).
☐	☐	g. Maximize permeability by clustering development and preserving open space.
☐	☐	h. Use micro-detention, including distributed landscape-based detention.
☐	☐	i. Protect sensitive areas, such as wetland and riparian areas; minimize changes to the natural topography.
☐	☐	j. Use self-treating area (see Section 5 of C.3 Technical Manual at https://city.fremont.gov/stormwaterpermit
☐	☐	k. Use self-retaining area(s) (see Section 5 of the C.3 Technical Manual)

[6] Use the specifications in the *C.3 Technical Guidance* or for small projects see the *BASMAA Pervious Paving Factsheet*. For these documents and others go to www.cleanwaterprogram.org and click on "Resources."

Section SIX - Select Stormwater Source Controls

- C.3.b Regulated Projects *(determined in Section THREE above*) **must** select and implement appropriate source control measures.
- C.3.i Small Projects *(determined in Section THREE above*) and projects not regulated by C.3 are *encouraged* to select and implement appropriate source control measures and those directed by the municipality.

Features that Require source controls	Source Control Included? Mark Yes, No, or Not Applicable (N/A)	Yes	No	N/A
Storm Drains (excluding single family homes)	Mark public and private storm drain inlets with the "No Dumping! Drains to Bay" medallions.	☐	☐	☐
	Mark stormwater treatment measures located in the public right-of-way with stencils that read "Stormwater Treatment Area – Do not alter landscape." ➢ *Both the medallion and stencil may be obtained from the City of Fremont Environmental Services Division located at 39550 Liberty Street. Medallions can also be ordered online through the Storm Drain Marker Request Form*	☐	☐	☐
Parking garage	Enclosed parking garages shall be designed such that floor drains are not required.	☐	☐	☐
Pool/Spa/ Fountain	Provide a sanitary sewer clean out within 10 feet of pool, spa, or fountain to facilitate draining. Contact Union Sanitary District for connection requirements.	☐	☐	☐
Floor Drains	Plumb interior floor drains to sanitary sewer. Applicant must contact Union Sanitary District for connection requirements www.unionsanitary.com or 510-477-7500).	☐	☐	☐
Landscaping	▪ Retain as practicable. ▪ Select diverse species appropriate to the site. Select plants that are pest and/or diseases-resistant, drought tolerant, and/or attract beneficial insects. ▪ Minimize use of pesticides and quick-release fertilizers. ▪ Use efficient irrigation system; design to minimize runoff.	☐	☐	☐
Food Service Equipment (non-residential)	▪ Provide sink or other area for equipment cleaning, which is: ○ Connected to an oil-water separator prior to discharge to sanitary sewer. ○ 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. ▪ Contact Union Sanitary District for connection requirements.	☐	☐	☐
Refuse Areas	▪ Provide a roofed and enclosed area for dumpsters, recycling containers, etc. designed to prevent stormwater run-on and run-off and waste materials from being dispersed by wind or water ▪ Connect any drains in or beneath dumpsters, compactors, and tallow bin areas serving food service facilities to the sanitary sewer.	☐	☐	☐
Outdoor Process Activities	▪ 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. Contact Union Sanitary District for connection requirements.	☐	☐	☐
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, and contain by berms or equivalent. ▪ Process equipment areas must not discharge to the storm drain system. Union Sanitary District may accept discharges from some process equipment areas depending on the process. Contact Union Sanitary District for connection requirements.	☐	☐	☐
Vehicle/ Equipment Cleaning	▪ Roof, pave, and berm wash area to prevent stormwater run-on and runoff, plumb to the sanitary sewer, and sign as a designated wash area. ▪ Commercial car wash facilities shall discharge to the sanitary sewer. ▪ Contact Union Sanitary District for connection requirements.	☐	☐	☐
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. ▪ Tanks, containers, or sinks used for parts cleaning/rinsing shall not connect to the storm drain system. These units/sinks may only connect to the sanitary sewer system if allowed ▪ by an industrial waste discharge permit. Contact Union Sanitary District for discharge ▪ requirements.	☐	☐	☐
Metal roofs	Coat all metal roofs, including galvanized roofs, with rust-inhibitive paint.	☐	☐	☐
Fire Sprinklers	Design for discharge to landscape area or sanitary sewer. Contact Union Sanitary District for connection requirements.	☐	☐	☐
Miscellaneous Drain or Wash	▪ Drain condensate from air conditioning units to appropriately sized landscaping area. ▪ Discharge boiler drain lines, roof top equipment, and all wash water to the sanitary sewer.	☐	☐	☐

Water	▪ Contact Union Sanitary District for connection requirements.			
Architectural Copper	Discharge rinse water to sanitary sewer or collect and dispose properly offsite.	☐	☐	☐
Fuel Dispensing Areas	▪ The fueling area is defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater. ▪ Fueling areas must be Portland cement concrete or equivalent smooth impervious surface that are graded at the minimum slope necessary to prevent ponding and separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. ▪ Provide a roof cover that extends a minimum of ten feet in each direction from each pump. The overhead cover must not drain onto the fueling area. Rainwater from the overhead cover must be discharged to a landscaped area or to a stormwater treatment measure prior to discharge to the storm drain system. ▪ Design the fuel dispensing and transfer area pads with no slope (flat), if possible. ▪ Do not place a storm drain inlet in or near the fuel dispensing area. ▪ Hydraulically isolate the fuel dispensing and transfer areas from the rest of the site to contain spills, prevent run-on, and prevent stormwater runoff from carrying pollutants away. Locate drains around the perimeter of the pad and drain accumulated water to an on-site containment system (for eventual pump-out and off-site disposal). ▪ Post signs explaining the operation of shut-off valves to employees, if applicable. ▪ The fueling station must have a spill cleanup plan and all employees must be trained on proper spill response procedures. Dispensing equipment must be inspected routinely for proper functioning and leak prevention.	☐	☐	☐
Loading Docks	▪ Pave the loading area with an impervious paving that is compatible with materials that will be loaded/unloaded. For example, use Portland Cement Concrete if gasoline or other materials that react with asphalt will be loaded/unloaded. ▪ Cover and/or grade to minimize run-onto and runoff from the loading area. ▪ Implement one of the following methods: o If feasible, design the facility so loading/unloading occurs in an indoor loading bay. Provide a 10-foot no obstruction zone within the building to allow trucks to extend inside and to provide a staging area. Clearly identify the no obstruction zone on the building plan. Clearly mark the no obstruction zone at an interior transfer area using bright floor paint. o For buildings with less than 10 bays, provide a roof overhang that extends at least 10 feet beyond the loading dock (or building face if there isn't a loading dock). If the building includes 10 or more bays, or a cover is deemed otherwise infeasible, consider the next option. o Install door skirts between the trailers and the building. ▪ Position roof downspouts to direct stormwater away from the loading area. ▪ Hydraulically separate stormwater runoff from loading dock and direct to a stormwater treatment measure prior to discharge to the storm drain system. ▪ Equip the drainage system with an emergency spill shut-off diversion valve. The bypass on the shut-off valve must flow to an adequately sized spill containment vault. The size of the spill containment vault should be equal to 125% of the volume of the largest container handled at the facility. ▪ Post signs explaining the location and operation of shut-off valves to employees.	☐	☐	☐
Conditionally Exempted Non-Stormwater Discharges	Certain discharges are exempt from stormwater discharge requirements if it is determined the non-stormwater discharge is not polluted. Refer to the Municipal Regional Permit Provision C.15 for specific requirements for the following discharges: ▪ pumped groundwater, water from foundation drains/crawl space pumps/footing drains; ▪ pumped groundwater from non-drinking water aquifers; ▪ planned, unplanned, and emergency discharges of the potable water system	☐	☐	☐

Section SEVEN - Implement Construction Best Management Practices (BMPs)

Best Management Practice (BMP)	**Yes**	**No**
Implement temporary erosion controls to stabilize all disturbed 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 stockpiles, 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 property to prevent contact with stormwater.	☐	☐
Contractor shall train and provide instructions 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.	☐	☐
Protection of stormwater treatment areas. Include the following erosion control standard notes on the plan set: ▪ Keep construction traffic out of stormwater treatment area locations and minimize compaction of existing soils. ▪ Protect stormwater treatment facilities from construction site runoff. Once imported materials are installed in stormwater treatment facilities, runoff from unstabilized areas must be diverted away from such facilities. ▪ The construction BMPs shown on the plan are minimum requirements. The City Engineer or Stormwater Inspector is authorized to require additional BMPs to prevent non-stormwater discharges.	☐	☐

PROJECTS THAT ARE <u>NOT</u> C.3 REGULATED, STOP HERE!
(Projects that marked "YES" in Section THREE, Question 27 above)

ONLY C.3 REGULATED PROJECTS NEED TO COMPLETE THE REMAINDER OF THIS DOCUMENT

Section EIGHT - Stormwater Treatment Measures and Hydraulic-Sizing

Complete the table below & provide a Stormwater Management Plan in the plan set.

36	**Yes** ☐	**No** ☐	Is the project using biotreatment to treat the C.3.d amount of runoff? If YES, indicate the biotreatment measures to be used, and the hydraulic sizing method below:
	LID Measures		Hydraulic sizing method[7]
	☐ Bioretention area		
	☐ Flow-through planter		
	☐ Pervious pavement		
	☐ Other (specify):		
37	**Yes** ☐	**No** ☐	Is the project a Special Project? (See Appendix J of the C.3 Technical Guidance for criteria.) If YES, complete the City of Fremont Special Projects Packet downloadable at: https://city.fremont.gov/stormwaterpermit. 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 that is treated.

Non-LID Treatment	Hydraulic sizing method[7]	% of C.3.d amount of runoff treated
☐ Media filter		
☐ Tree Well Filter		

Section NINE - Hydromodification Management (HM) Requirements

38	Does the project create and/or replace 1 acre (43,560 ft^2) of impervious surface? (Refer to Question 23)
	☐ Yes. *Continue to Question 39.*
	☐ No. *The project is NOT required to incorporate HM measures. Skip to Question 43 and check "No."*
39	Is the total impervious area increased over the pre-project condition?
	☐ Yes. *Total post-project impervious surface area (Question 23) is greater than pre-project impervious surface area (Question 22.a.) Continue to Question 40.*
	☐ No. *Total post-project impervious surface area (Question 23) is the same as or less than pre-project impervious surface area (Question 22.a.). The project is NOT required to incorporate HM measures. Skip to Line 43 and check "No."*
40	Is the site located in a tidally influenced area? *(See HM 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 Line 43 and check "No".*
	☐ No. *Continue to Question 41.*
41	Is the site located in a high slope zone or special consideration watershed, as shown on the HM Susceptibility Map?
	☐ Yes. *Project is subject to HM requirements. Attach map indicating project location. Skip to Question 43 and check "Yes."*
	☐ No. *Continue to Question 42.*
42	For sites located in a white area on the HM Susceptibility Map, has an engineer or qualified environmental professional determined that runoff from the project flows only through a hardened channel or enclosed pipe from the point of discharge all the way to the tidally influenced area?
	☐ Yes. *Project is exempt from HM requirements. Attach signed statement by qualified professional. Go to Question 43 and check "No."*

[7] **Hydraulic Sizing Method:** Indicate which of the following MRP Provision C.3.d.i hydraulic-sizing methods were used (Reference C.3 Technical Manual, Chapter 7):

1. Volume based approach – 80% capture approach (recommended volume-based approach).
2. Flow-based approach – 0.2-Inch-per-hour intensity approach (this is the recommended flow-based approach AND the basis for the 4% standard sizing approach used to multiply as a factor against the effective impervious area (EIA))
3. Combination hydraulic sizing approach – If a combination flow and volume design basis was used, indicate which flow-based and volume-based criteria were used and provide sizing worksheet

Regardless of sizing method used, treatment must be sized at a minimum of 3% of the EIA. Sizing standards below 3% of the EIA will not be accepted.

	☐ No. *Project is subject to HM requirements. Attach map indicating project location. Go to Item 43 and check "Yes."*
43	Is the project a Hydromodification Management Project?
	☐ Yes. *The project is subject to HM requirements in MRP Provision C.3.g.*
	☐ No. *The project is EXEMPT from HM requirements.*

- *If the project is subject to the HM requirements, incorporate in the project flow duration 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 https://www.clearcreeksolutions.info/downloads. Guidance is provided in Chapter 9 of the C.3 Technical Guidance.*

Section TEN - Stormwater Management Measures Operations & Maintenance Agreement

44	Property Owner (As shown on Title Report):	
45	Entity Type	☐ Corporation ☐ Limited Liability Company ☐ General Partnership ☐ Limited Partnership ☐ Nonprofit Organization ☐ Private Landowner ☐ Other: _____
46	A Stormwater Management Measures Operations & Maintenance Agreement (O&M Agreement) and O&M Manual between the property owner and the City is required for all projects incorporating stormwater treatment and/or flow duration controls. The O&M Agreement runs with the land and must be recorded with Alameda County Recorder's Office. ➢ *An approved, notarized O&M Agreement and Manual must be received with the final tract map or prior to permit issuance, whichever comes first (as applicable).* ➢ *Template documents may be found at https://city.fremont.gov/stormwaterpermit.* ➢ *Title report must be provided to verify property ownership.* ➢ *Appropriate documents must be provided to verify signing authority of the person executing the O&M Agreement.*	
	☐	Check the box to acknowledge that final tract map will not be approved, nor permits issued without an approved O&M Agreement and Manual.