



SAN FRANCISCO

GREEN INFRASTRUCTURE PERMIT GUIDEBOOK

June 2019

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How to Use this Guidebook

Welcome to San Francisco's Green Infrastructure Permit Guidebook! The purpose of this Guidebook is to provide a resource to assist you in navigating the permit processes for green infrastructure (GI) projects in the City and County of San Francisco. There are many public agencies that issue permits in San Francisco, each with their own jurisdiction and process for issuing permits. Therefore, the chapters of this Guidebook are organized by permitting agency. The adjacent icons on this page are used throughout this Guidebook to walk you through the permits that may be relevant to your green infrastructure project.

This Guidebook is not an exhaustive list of permits and does not supersede any permitting requirements by the agencies of the City and County of San Francisco.

Permitting requirements are highly project specific, so it is important to meet with individual agencies during the project design phase to understand what is allowed and required.

Figure 1: Icons used in this Guidebook



Boxes like this one include **QUESTIONS** for you to consider about your project.

NO

YES



Boxes like this include **ACTION ITEMS** for you and your project team to perform during your permitting process.



Permit Requirement

Submittal Requirements:

- Boxes like this identify a likely **PERMIT REQUIREMENT** for your project and include next steps to apply for a permit.

Glossary

Best Management Practice (BMP): Constructed facilities or measures to help protect receiving water quality and control stormwater quantity, also referred to as stormwater controls.

Bioretention: Stormwater facilities that rely on vegetation and engineered soils to capture, infiltrate, transpire, and remove pollutants from runoff.

Buildable Area: The area of a property that is not part of the required yards or set backs under the Planning Code and within the applicable height limit.

Disconnected Downspout: A roof downspout that has been separated from the City's sewer system to redirect roof runoff onto a pervious surface, such as a bioretention planter.

Drainage Management Area (DMA): A discrete area that drains to a single stormwater BMP, to a series of hydraulically-connected BMPs, or directly to the sewer system. A BMP is sized to accommodate runoff from its associated DMA for selected design storm.

Living Roof or Vegetated Roof: Rooftops that include plants and soil as an integral component of the roof.

Permeable Pavement: Any porous load-bearing surface that temporarily stores rainwater prior to infiltration or drainage to a controlled outlet.

Rainwater Harvesting: The practice of collecting and using rainwater from various above ground surfaces, such as roofs and patios.

Public Right of Way: The area across, along, beneath, in, on, over, under, upon, and within the dedicated public alleys, boulevards, courts, lanes, roads, sidewalks, spaces, streets, and ways within the City.



Introduction

Green Infrastructure (GI) is a set of engineered, sustainable stormwater management tools that slow down, clean, and route stormwater to keep it from overwhelming San Francisco's sewer system. They also provide many other benefits, including enhancing neighborhood beautification, providing urban greening, supporting biodiversity, recharging groundwater, and improving air quality through carbon sequestration. Types of green infrastructure include bioretention, rain gardens, permeable pavement, and rainwater harvesting, among others. Just like any construction project, building green infrastructure will involve obtaining the appropriate permits from the relevant public agencies in the City and County of San Francisco. Most permits for GI pertain to **where** your facility is located and **how** stormwater is getting into and out of your GI. This guidebook highlights the general processes for obtaining permits related to green infrastructure from the City and County of San Francisco.

What Types of Permits are There?

The type of permits that a green infrastructure project requires will depend on a number of factors, including the type of green infrastructure facilities you propose to build, the location of the facilities, the methods used to route stormwater on your property, and the configuration of building downspouts, just to name a few. The following public agencies oversee a range of permitting processes in the City and County of San Francisco. Start by reviewing this summary, and proceed to the relevant section(s) for the agencies that may be relevant for your project.



SF Planning | p. 7

SF Planning oversees Environmental Review and Planning Code Review for all projects in San Francisco.

Typical Project Features Reviewed:

CEQA approval for all projects, public access, construction in historic districts, and neighborhood notifications for certain zoning districts.



SF Department of Building Inspection | p. 11

SF Department of Building Inspection (DBI) oversees construction and retrofits of structures on private property, including review of building, electrical, and plumbing plans.

Typical Project Features Reviewed:

Disconnected downspouts, stormwater facilities proposing infiltration, overflow structures, and underdrains.

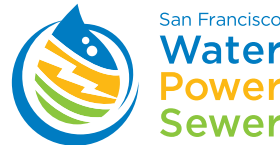


SF Department of Public Health | p. 17

SF Department of Public Health (SFDPH) oversees water quality standards related to the use of on-site alternative water sources.

Typical Project Features Reviewed:

Rainwater harvesting with indoor end-use or spray irrigation.



SF Public Utilities Commission | p. 21

SF Public Utilities Commission (SFPUC) oversees the use of rainwater harvesting, water efficient irrigation, construction site runoff, and cross-connections.

Typical Project Features Reviewed:

Projects with >500 square feet of landscaping, rainwater harvesting systems, and projects that disturb >5,000 square feet.



SF Public Works | p. 25

SF Public Works oversees all construction and proposed work in the public right of way in San Francisco.

Typical Project Features Reviewed:

Any construction in the building frontage zone, sidewalk, or street.

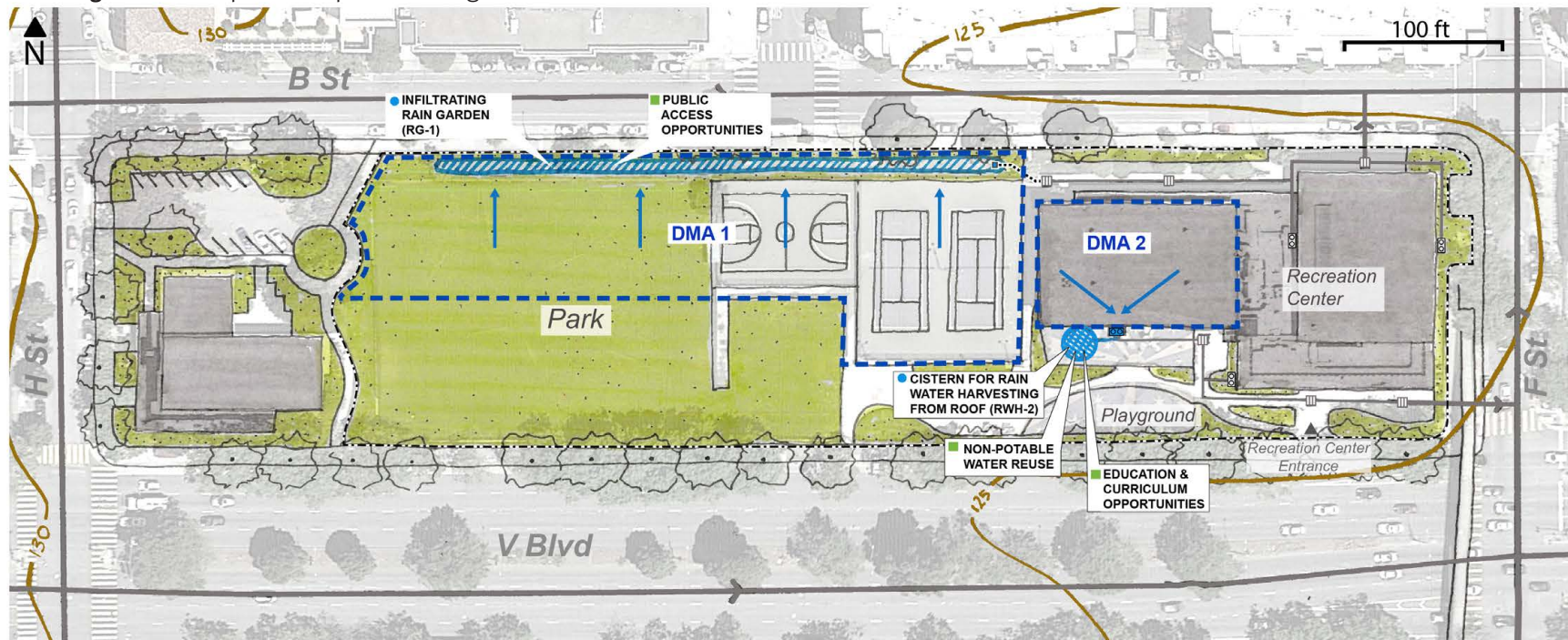
What You Need to Determine Permit Requirements

Concept Design

To determine the permitting requirements for your proposed green infrastructure project, you should have at a minimum completed a concept design. The concept design serves as the blueprint for your project and will be used to determine the permits that your project may trigger. In some cases a concept design will include enough information to apply for a permit, while in other cases you may be required to provide detailed design drawings in your permit application. Your concept design should include the following information on one or more plans or diagrams:

- Project boundary
- Proposed stormwater best management practices (BMPs)
 - Footprint of each proposed BMP
 - Corresponding Drainage Management Area (DMA) for each BMP
 - BMP drainage components (overflow, underdrain, outlet control structures for the BMP itself, etc.)
- Proposed connections to existing conveyance systems or sewers
- Proposed site drainage features (new drains, downspouts, etc.)
- Flow direction arrows for stormwater sheet flow and pipe flow.
- Changes to land cover, including impervious and pervious surfaces
- Areas that require regrading or grading contours
- Labels of proposed uses (playground, parking, etc.)

Figure 2: Example concept level design



Estimated Permit Costs

These examples provide estimated permitting costs for hypothetical Green Infrastructure projects requiring various permits. This is intended to provide an estimate of potential permitting costs for your project based on 2018 fee schedules. Actual permit fees will vary based on project specifications. Permit fees are subject to change, please refer to the fee schedules associated with the appropriate City agency for updated permit costs.

San Francisco Department of Building Inspection: <https://sfdbi.org/FEES>

San Francisco Public Works: <https://www.sfpublicworks.org/services/permits/fee-schedule>

San Francisco Department of Public Health: https://www.sfdph.org/dph/files/EHSdocs/ehsFees/SF_EHB_Fees.pdf

Example 1: Rainwater Harvesting Project

Assumptions:

Rainwater harvesting project with indoor use of non-potable water. Project size is 0.5 acres.

Permits Required:

- DBI Building Permit
- DBI Plumbing Permit
- SFPDPH Alternate Water Source Systems Permit

Estimated Cost:

\$8,200

Example 2: Bioretention with Disconnected Downspout

Assumptions:

Disconnection of building downspout, draining to bioretention on a private property. Project size is 0.5 acres.

Permits Required:

- DBI Building Permit
- DBI Plumbing Permit

Estimated Cost:

\$6,300

Example 3: Bioretention in Public Right of Way

Assumptions:

Bioretention in the building frontage zone, collecting runoff from building roof. Project size is 0.5 acres

Permits Required:

- DBI Building Permit
- DBI Plumbing Permit
- SFPW Minor Sidewalk Encroachment Permit

Estimated Cost:

\$9,500



SF Planning Department

The [San Francisco Planning Department](#) (SF Planning) is responsible for protecting environmental and historic resources, enforcing good land use practices, and ensuring compliance with the City's General Plan, Planning Code, and adopted design guidelines. At a minimum, your green infrastructure project will involve environmental review by SF Planning. In some cases, SF Planning may also review Department of Building Inspection (DBI) Building Permits for green infrastructure projects, which are addressed in the Department of Building Inspection Section of this guidebook (see page 11).

In certain zoning districts and depending on the scope of the project, a **Neighborhood Notification** may be required by SF Planning. A Neighborhood Notification is mailed to residents and owners of properties located within 150 feet of the subject property and registered neighborhood groups. This process involves Planning Department Review, a Notice Preparation Period, and a 30-day Notification Period, which together will add to your project timeline. The following sections provide advice for navigating the environmental review process and some important first steps to begin your green infrastructure project's permitting process.



SF Planning Department: Environmental Review

Any project that requires a permit, regardless of the type of green infrastructure proposed, will have to go through the [California Environmental Quality Act](#) (CEQA) review process. SF Planning's [Environmental Planning Division](#) reviews projects for potential environmental impacts.

For more information on the environmental review process, including information on the Environmental Planning private consultant pool, CEQA and technical analysis guidelines, document templates and forms, and general CEQA information, visit the SF Planning website at: <https://sfplanning.org/permit/environmental-consultant-pools-and-sponsor-resources>



Rainwater Harvesting, Ulloa Elementary, San Francisco

Planning Information Center: First Stop for Permits

To begin the permitting process for your project, we recommend consulting with the San Francisco Planning Department. After reviewing this guidebook and evaluating the types of permits that you might trigger, visit the Planning Information Center at 1660 Mission Street (Ground Floor) for an in-person meeting. Bring your project address, parcel number (block/lot), and concept design.

In addition to the chapters in this guidebook, the following questions will help guide your meeting at the Planning Information Center:

?

Does your project propose any above-grade construction (i.e., rainwater harvesting cisterns, rerouting downspouts, etc.)?

YES NO

Check with SF Planning to determine if your project triggers the neighborhood notification process. This process can take up to 4-6 months!

?

Does your project propose to excavate greater than 2 feet below grade?

YES NO

Check with SF Planning to see if your project is located in an archeological sensitive zone. Excavation greater than 2 feet below grade in an archeological sensitive zone will trigger additional archeological review. Projects that propose to excavate greater than 8 feet below grade will require review by the [Environmental Planning Division](#), regardless of location.

?

Is your project located in a Historic District?

YES NO

Check with SF Planning to confirm whether your project triggers a historic resources review. Non-traditional paving, such as permeable pavements, could require review by SF Planning's [Historic Preservation Division](#).



Disconnected Downspout, 350 Friedell Street, San Francisco

Department of Building Inspection

The [San Francisco Department of Building Inspection](#) (DBI) is the regulatory building safety agency responsible for overseeing enforcement of the City and County of San Francisco's commercial and residential buildings. The two main services DBI provides are permit and inspection services. DBI is responsible for permit issuance including review, approval and issuance of plans to ensure code compliance. DBI also inspects and enforces building safety and code compliance. The four main inspection departments at DBI are Building Inspection, Electrical Inspection, Plumbing Inspection, and Housing Inspection Services.

Green infrastructure retrofit projects will almost always involve permitting with the San Francisco Department of Building Inspection. This will most commonly include DBI Building and Plumbing Permits. Additionally, DBI may forward your project information to SF Planning, San Francisco Department of Public Health, San Francisco Public Utilities Commission, or San Francisco Public Works for additional permit review. Navigate through the flowcharts on the following pages to determine which DBI permits may apply to your green infrastructure project.



Department of Building Inspection: Permits for Construction on Parcels

Most DBI permit applications require the submittal of construction drawings for the proposed work. Therefore, in order to apply for a DBI permit, you should have completed the design phase of your green infrastructure project.

Most construction projects will be required to apply for a Building or Site Permit

Building or Site Permit

Submittal Requirements:

- Complete a Building or Site Permit Application, available at the Public Information Counter on the first floor of 1660 Mission Street, San Francisco, CA 94103.
- Submit two (2) sets of site plans (drawings) of the proposed work (equivalent to 100% design Construction Documents).
- Pay a permit fee, payable to Department of Building Inspection. The permit fee required will depend on the valuation of the project. See the current [DBI fee schedule](#).
- Submit all of the above to Department of Building Inspection, 1660 Mission Street, San Francisco, CA 94103.
- For questions, contact DBI at 415-558-6088.



Does your project propose to construct any of the follow features as part of your stormwater project?:

- Disconnected rooftop downspouts
- Underdrain systems
- Overflow structures
- Infiltrating BMPs

NO

YES

A Plumbing Permit may not be needed. Confirm with DBI Plumbing Inspection Division at 415-558-6570 to determine if your project requires a Plumbing Permit.

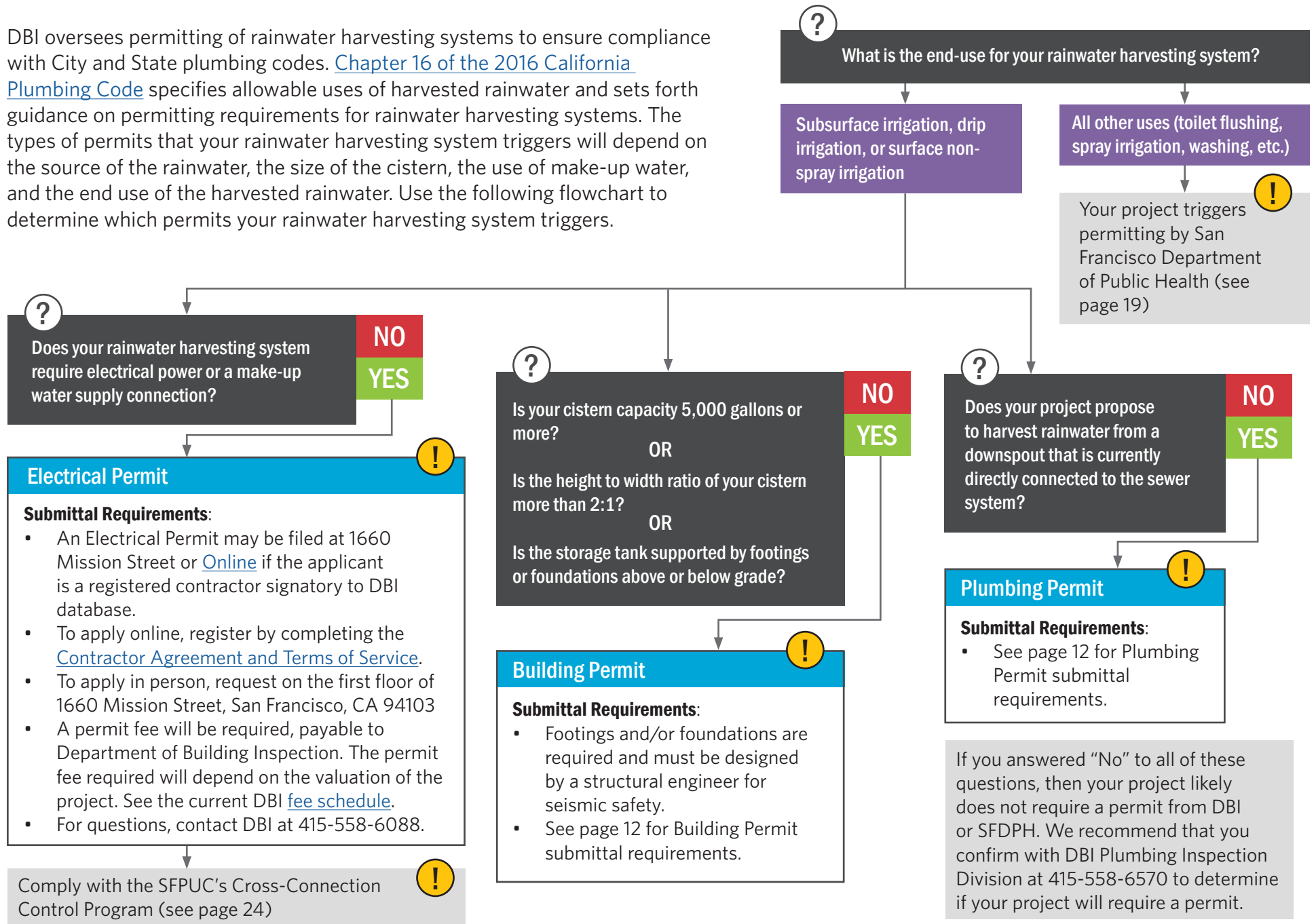
Plumbing Permit

Submittal Requirements:

- A plumbing permit may be filed at 1660 Mission Street or [Online](#) if the applicant is a registered contractor signatory to DBI database.
- To apply in person, request a Stormwater Plan Check on the first floor of 1660 Mission Street, San Francisco, CA 94103.
- Complete an Application/Permit to Install Plumbing and Mechanical Worksheet.
- Submit two (2) sets of site plans (drawings) of the proposed work (equivalent to 100% design Construction Documents).
- Submit the results of any soil infiltration tests or geotechnical site investigations.
- Pay a [permit fee](#), payable to Department of Building Inspection.
- Submit all of the above to the Plumbing Inspection Division, Department of Building Inspection, 1660 Mission Street, San Francisco, CA 94103.
- If assistance is required in filing for a Plumbing Permit you may come to the 3rd floor of 1660 Mission Street, ask for a Plumbing Inspector and he/she will assist you in the process.
- Once the Plumbing permit has been issued, before any work has been covered up, and all necessary tests are in place, the Permit Holder, (the person the permit has been issued to) shall call Inspection Services at 415-558-6570 between the hours of 7:30 AM to 3:00 PM to schedule an inspection appointment.

Department of Building Inspection: Permits for Rainwater Harvesting

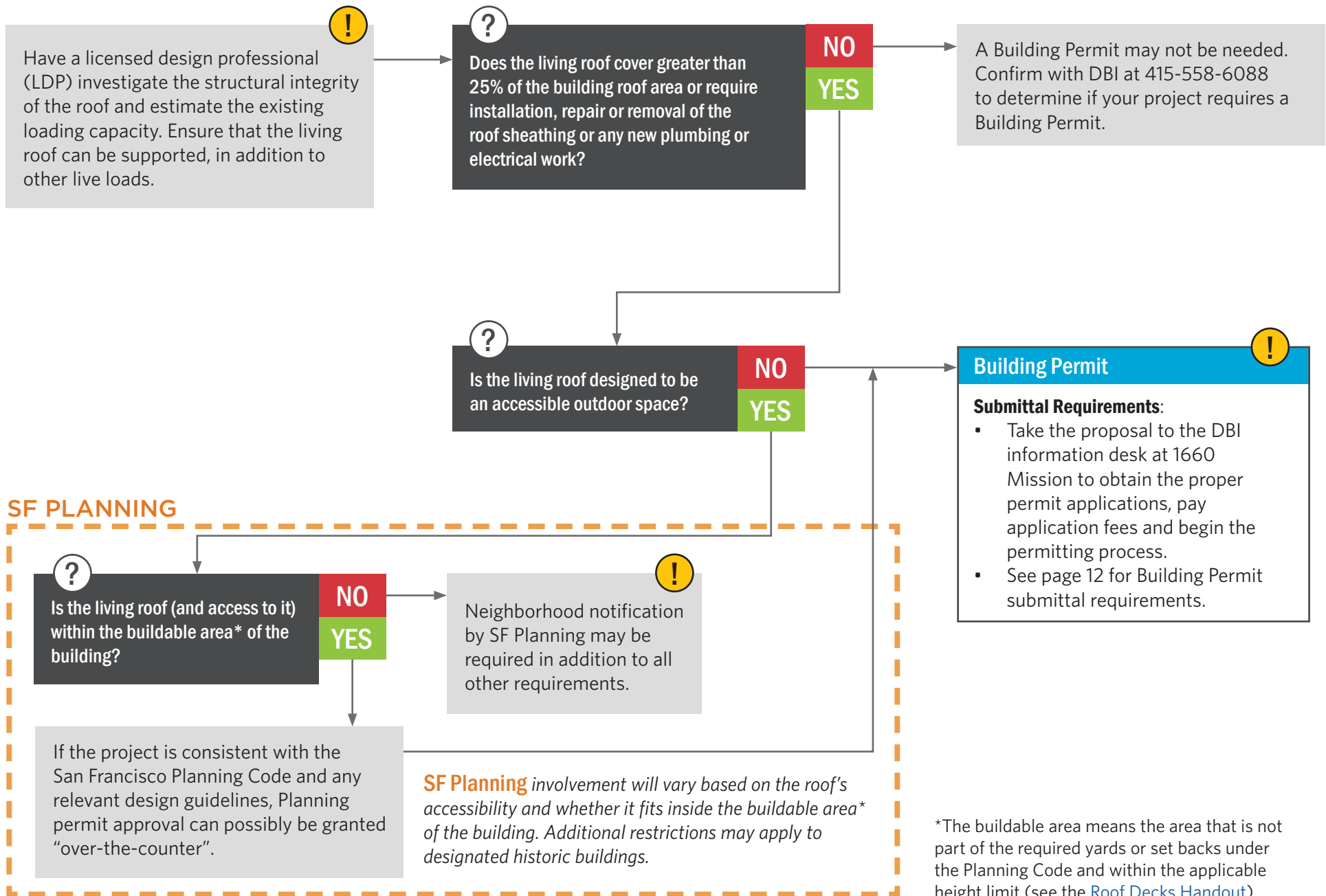
DBI oversees permitting of rainwater harvesting systems to ensure compliance with City and State plumbing codes. [Chapter 16 of the 2016 California Plumbing Code](#) specifies allowable uses of harvested rainwater and sets forth guidance on permitting requirements for rainwater harvesting systems. The types of permits that your rainwater harvesting system triggers will depend on the source of the rainwater, the size of the cistern, the use of make-up water, and the end use of the harvested rainwater. Use the following flowchart to determine which permits your rainwater harvesting system triggers.





Vegetated Roof, 1 Henry Adams Street, San Francisco

Department of Building Inspection: Permits for Living/Vegetated Roofs



*The buildable area means the area that is not part of the required yards or set backs under the Planning Code and within the applicable height limit (see the [Roof Decks Handout](#)).



Bioretention and Permeable Pavement, Wiggle Neighborhood Green Corridor, San Francisco



Department of Public Health

The [San Francisco Department of Public Health](#) (SFDPH) works to improve and protect public health in the City and County of San Francisco. The SFDPH Environmental Health Branch (SFDPH-EH) oversees permitting for the mitigation of contaminated sites in San Francisco, and the on-site treatment and reuse of alternate water types including rainwater, stormwater, foundation drainage, graywater, and blackwater.

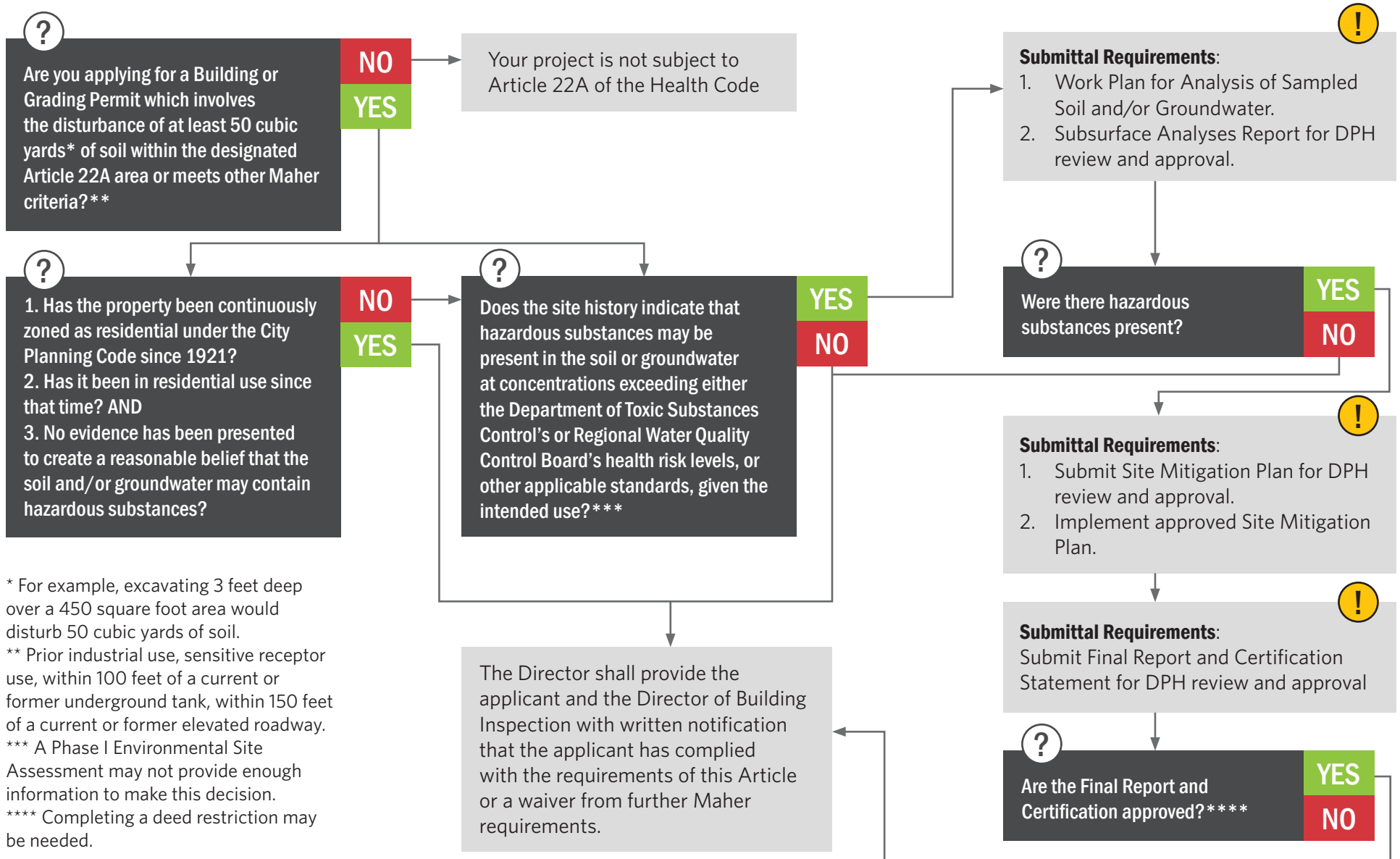
SFDPH-EH may be involved in the permitting of rainwater harvesting systems, depending on the system configuration and the end-use of the harvested rainwater. SFDPH-EH may also oversee projects that propose to excavate soil in an area with a history of industrial land use and soil contamination under the Maher Ordinance. Use the following flowcharts to determine if your project triggers review by SFDPH-EH under the Maher Ordinance or Alternate Water Source Systems Permit.



San Francisco
Department of Public Health

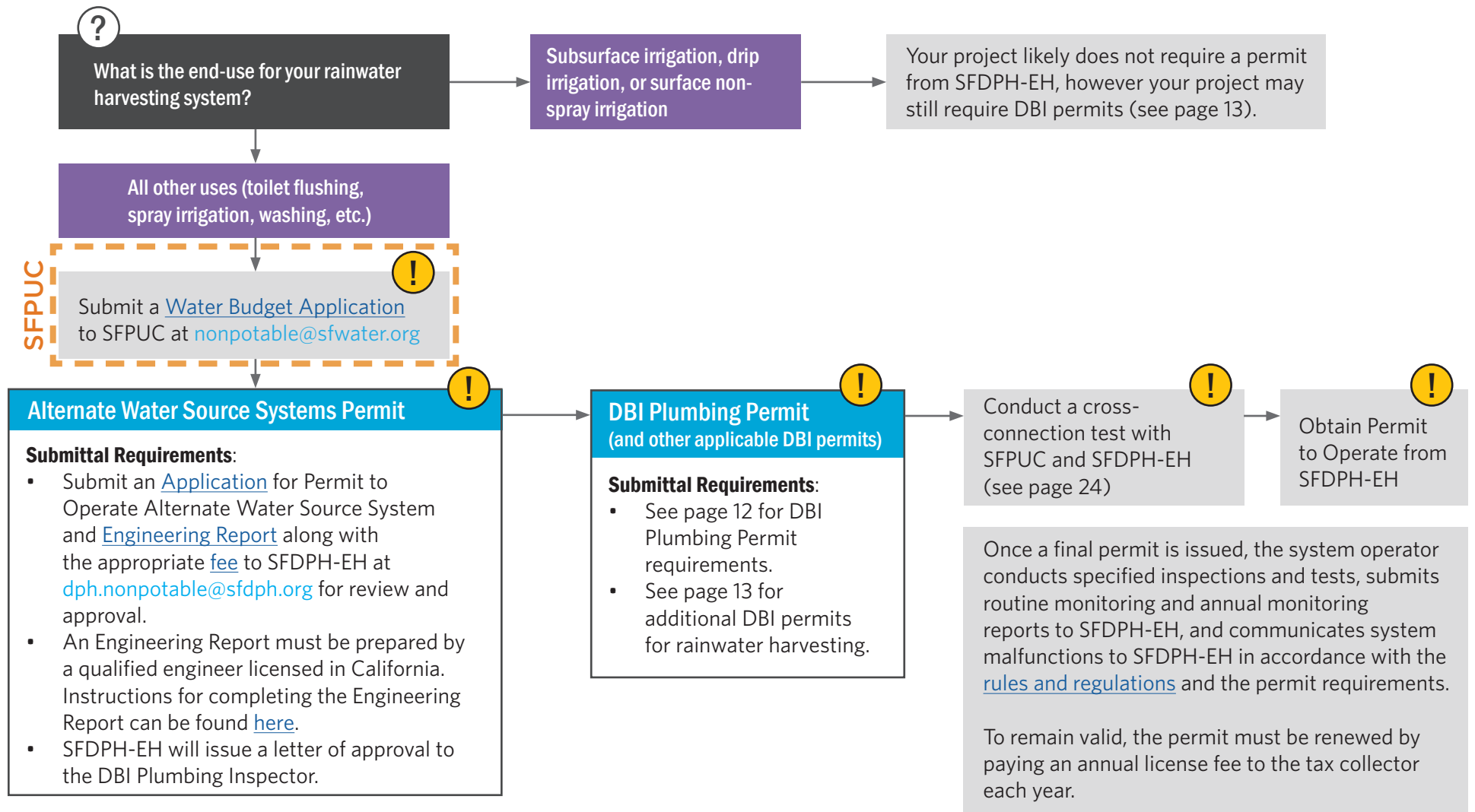
Department of Public Health: Maher Ordinance

The [Maher Ordinance](#) (or [Health Code Article 22A](#)) requires San Francisco Department of Public Health oversight for the characterization and mitigation of hazardous substances in soil and groundwater in designated areas zoned for industrial uses, sites with industrial uses or underground storage tanks, sites with historic bay fill, sites in close proximity to freeways, or underground storage tanks. Use the [online map](#) and follow the chart below to see how your project shall comply with the requirements.



Department of Public Health & SFPUC: Permits for Rainwater Harvesting

Rainwater harvesting systems must adhere to permitting requirements by DBI, and may trigger additional permit requirements by the SFPUC and San Francisco Department of Public Health Environmental Health Branch (SFDPH-EH). Small-scale rainwater harvesting systems that reuse rainwater for subsurface irrigation may not require a permit from DBI or SFDPH-EH. Large-scale systems that reuse rainwater for indoor non-potable uses will likely require oversight and monitoring under a [Alternate Water Source Systems Permit](#).





Disconnected Downspout, 55 Laguna St, San Francisco

San Francisco Public Utilities Commission

The [San Francisco Public Utilities Commission](#) (SFPUC) provides retail drinking water and wastewater services to the City of San Francisco, wholesale water to three Bay Area counties, green hydroelectric and solar power to Hetch Hetchy electricity customers, and power to the residents and businesses of San Francisco through the CleanPowerSF program.

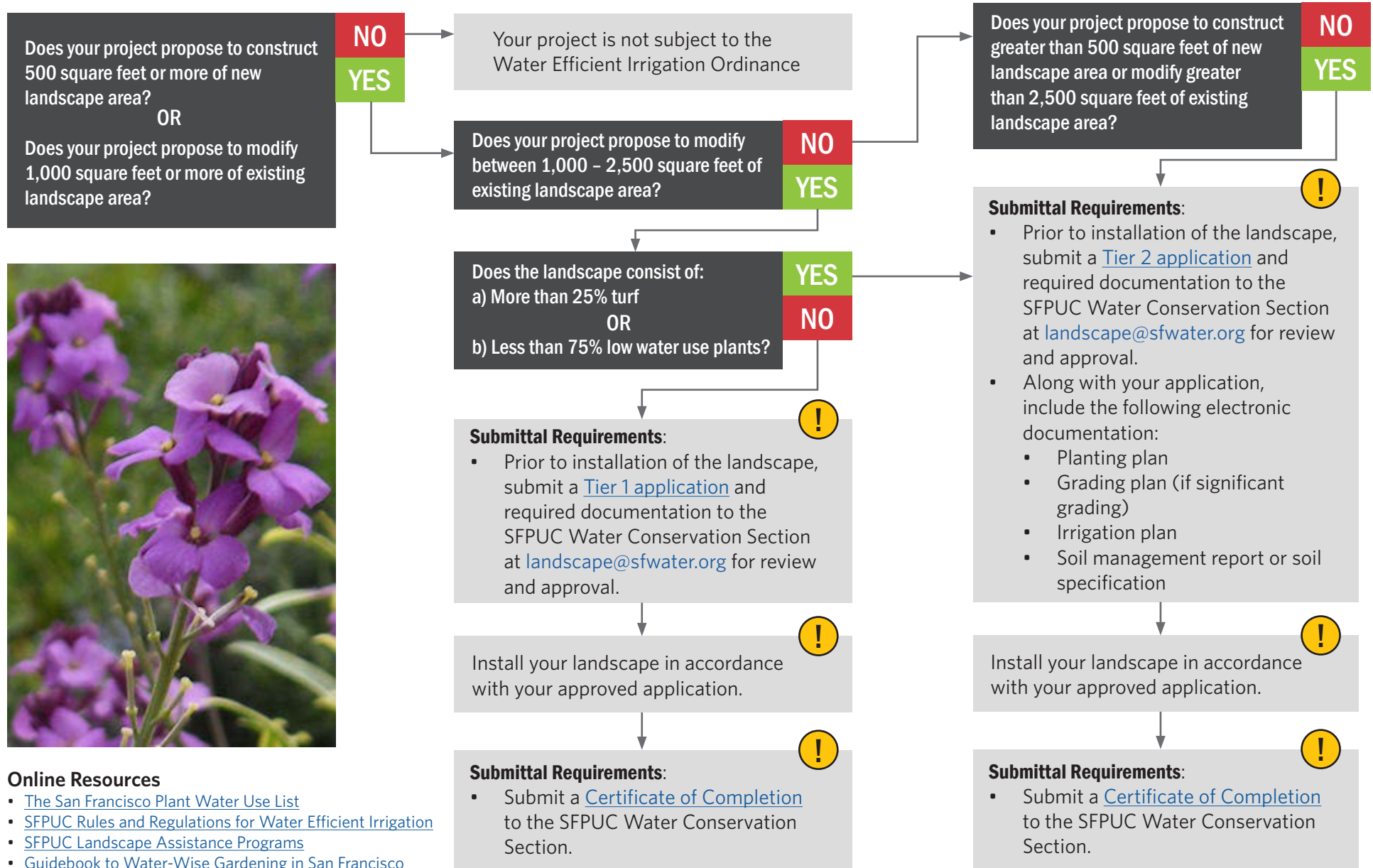
The SFPUC manages three programs that may be triggered by the construction of green infrastructure in San Francisco. The Water Efficient Landscape Ordinance aims to reduce landscape water use through efficient irrigation design and low water-use plantings. The Construction Site Runoff Control Program aims to reduce the discharge of pollution to the local storm drain system, prevent infrastructure damage, and protect water quality in the San Francisco Bay. The Cross-Connection Control Program protects the city's drinking water distribution system from contamination caused by backflow. Use the following flowcharts to determine if your green infrastructure project triggers SFPUC review.



Services of the San Francisco
Public Utilities Commission

SFPUC: Water Efficient Irrigation Ordinance

Whether you're installing a landscape as part of a new construction project or modifying an existing one, the [Water Efficient Irrigation Ordinance](#) applies to all residential, commercial, mixed-use, and public landscaping projects with 500 square feet or more. Follow the chart below to see how your project shall comply with the requirements.

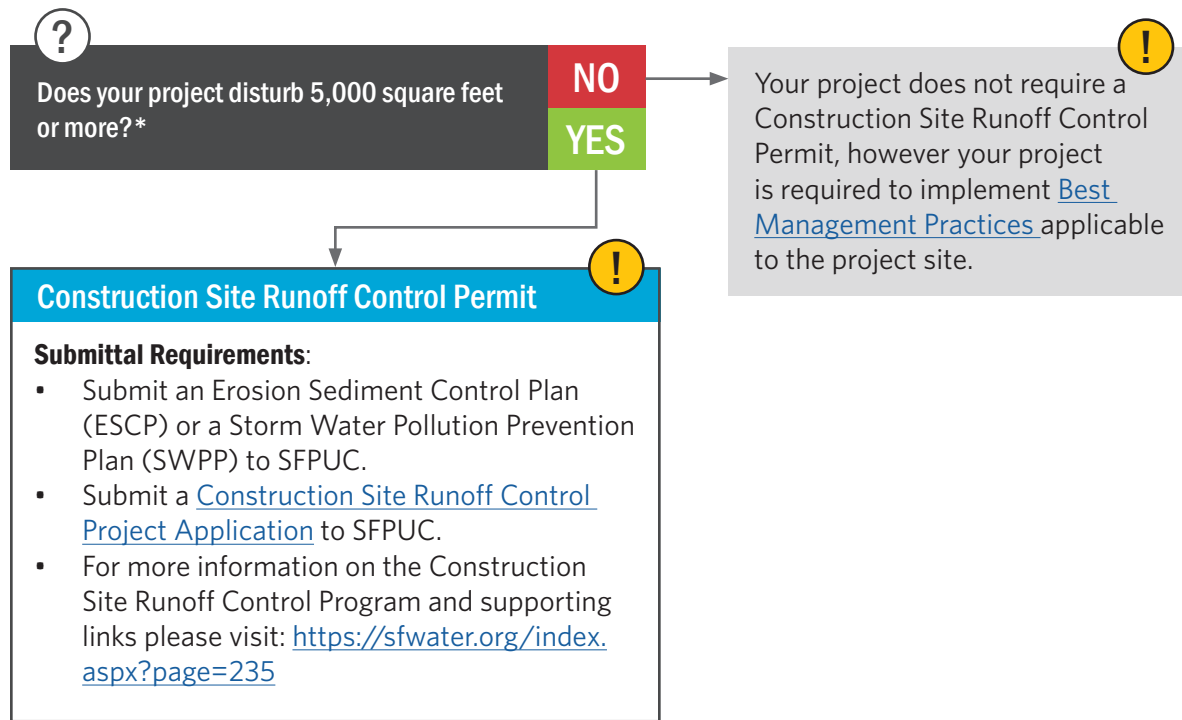


Online Resources

- [The San Francisco Plant Water Use List](#)
- [SFPUC Rules and Regulations for Water Efficient Irrigation](#)
- [SFPUC Landscape Assistance Programs](#)
- [Guidebook to Water-Wise Gardening in San Francisco](#)

SFPUC: Construction Site Runoff Control Program

Stormwater runoff from construction sites is a major source of pollution that can degrade water quality in the San Francisco Bay. To reduce the discharge of pollution to the local storm drain system and prevent infrastructure damage, the City adopted the [Construction Site Runoff Ordinance](#) in 2013. The SFPUC now manages the [Construction Site Runoff Control Program](#) to ensure that all construction sites implement Best Management Practices (BMPs). The State of California also regulates construction site runoff for large projects.

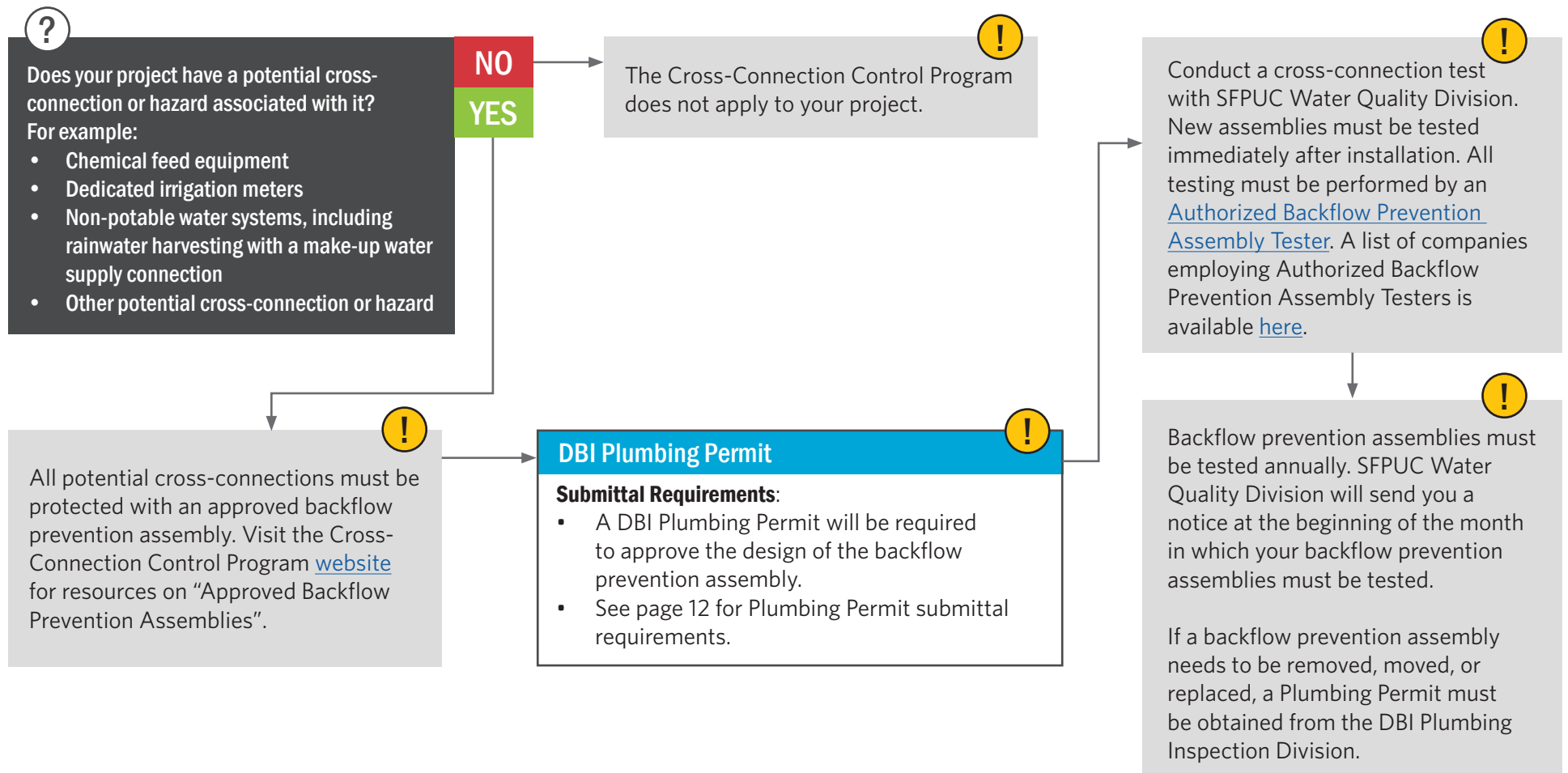


* Projects in the Municipal Separate Storm Sewer System (MS4) that disturb 1 acre or more are required to comply with the State's Construction General Permit (CGP) and the Construction Site Runoff Control Ordinance.



SFPUC: Cross-Connection Control Program

The City and County of San Francisco has a [Cross-Connection Control Program](#) to protect the city’s drinking water distribution system from contamination caused by backflow. Under normal conditions, water from the distribution system flows into a consumer’s premises. When backflow occurs, water from the consumer’s premises flows into the distribution system. If that water is contaminated because of activities on the consumer’s premises (for example, addition of fertilizers or herbicides to an irrigation system or use of non-potable water), the water can carry contaminants into the distribution system, possibly causing illness or even death. The city’s Cross-Connection Control Program is administered by the Water Quality Division of the SFPUC. For more information, see the [Consumer Guide to Backflow Prevention](#).





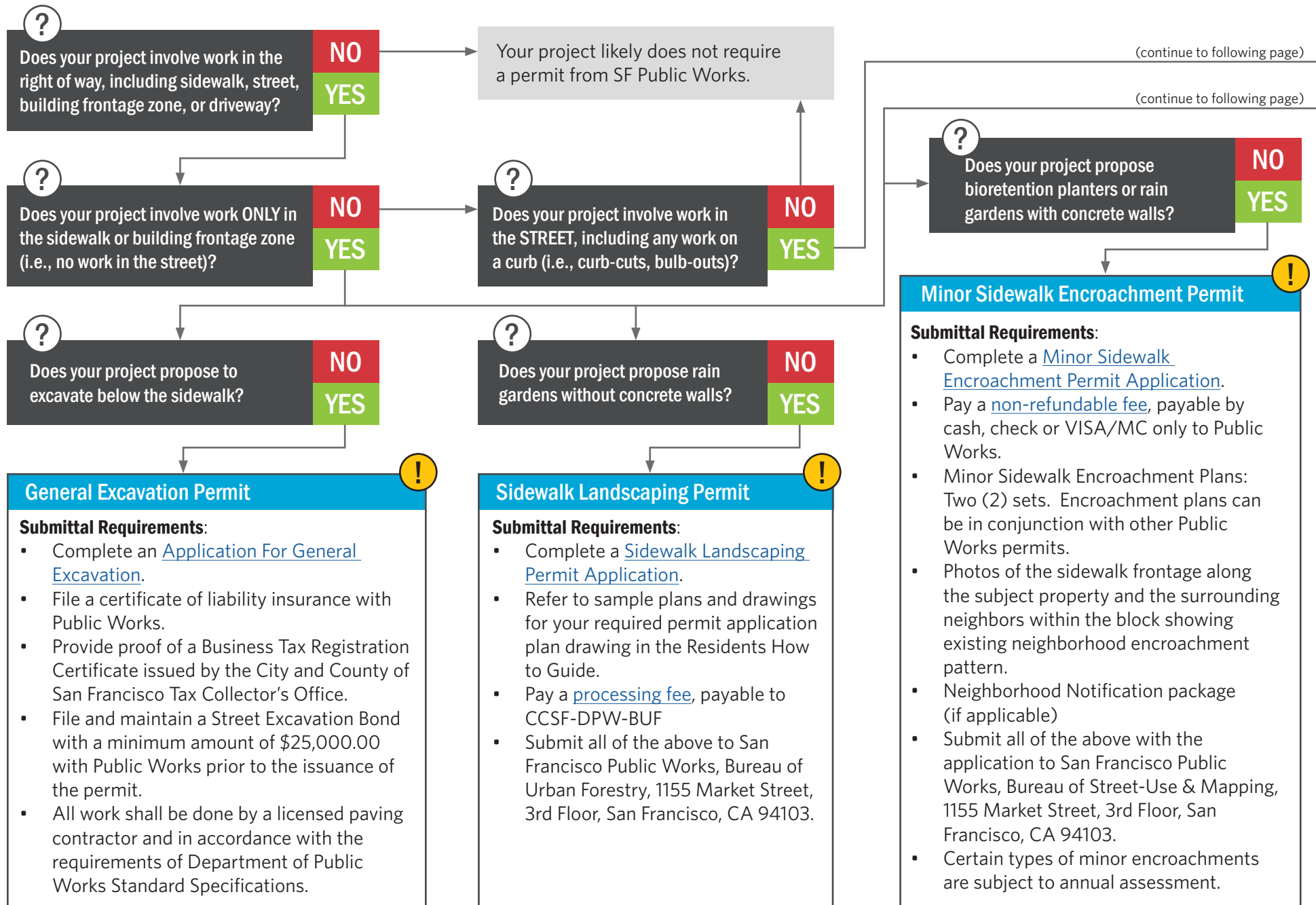
SF Public Works

[San Francisco Public Works](#) (SF Public Works) oversees all construction in the public realm in San Francisco, including work in the street, sidewalk, and building frontage zone. SF Public Works issues permits to ensure safety of the City's public right of way during construction. If your project involves any work in the public right of way, it is very likely that you will be issued a permit from SF Public Works.

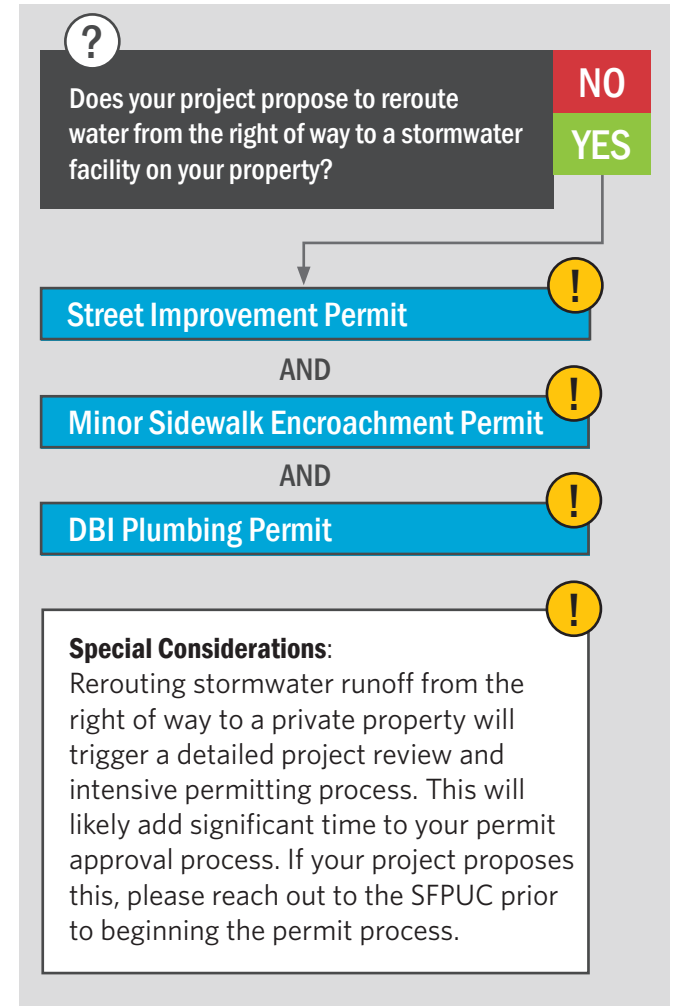
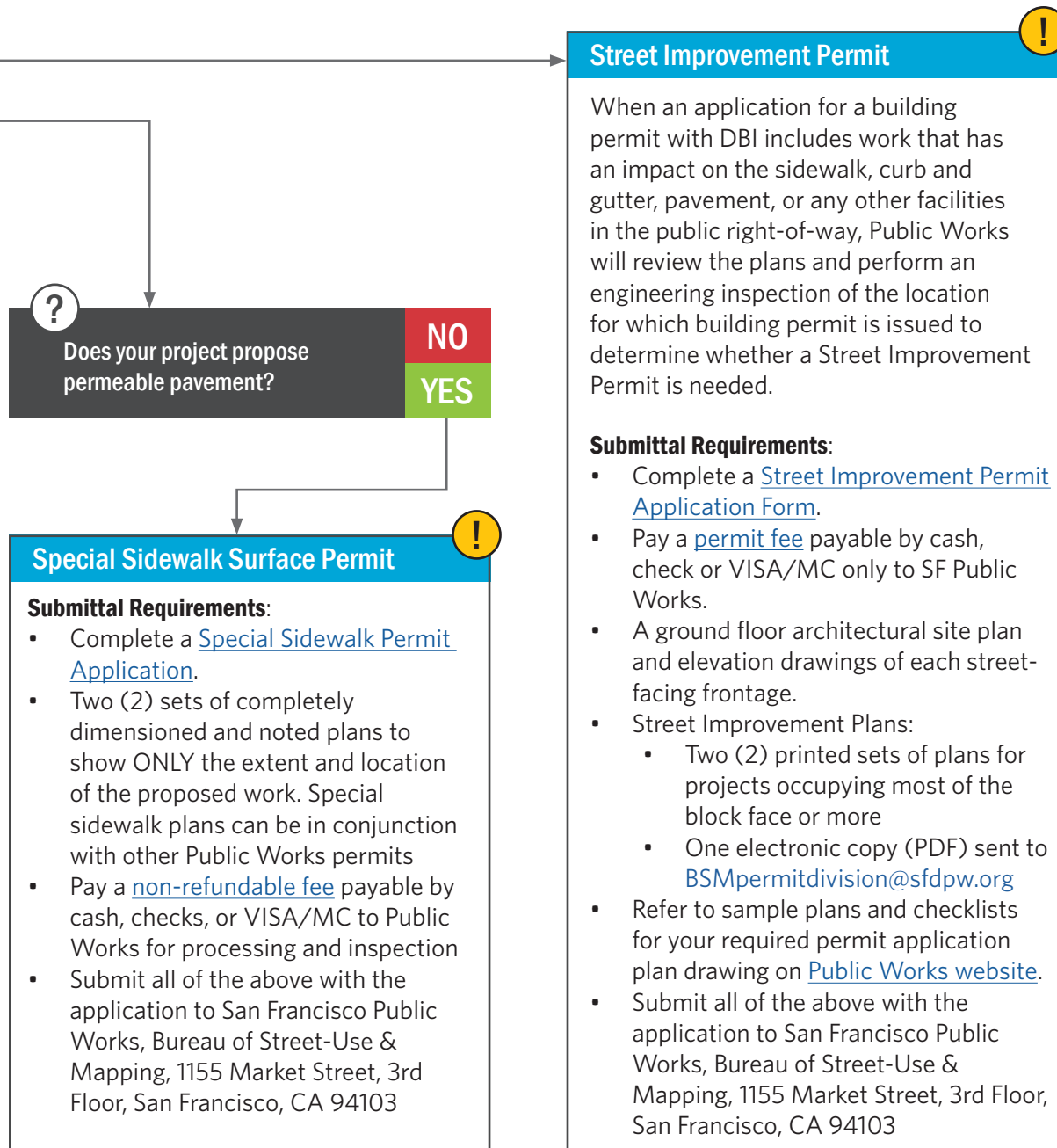
The types of permits vary depending on where your project is located and the type of green infrastructure proposed. Some permit types that may be relevant to your green infrastructure project include: General Excavation Permit, Sidewalk Landscaping Permit, Minor Sidewalk Encroachment Permit, Special Sidewalk Surface Permit, and Street Improvement Permit. If your project involves work in the right of way, use the flow chart on the following pages to determine what type of permits your project may trigger.



SF Public Works: Permits for Work in the Public Right of Way



SF Public Works: Permits for Work in the Public Right of Way



If you answered "No" to all of these questions, but are proposing work in the public right of way please confirm with Public Works at 415-554-5810 to determine if your project will require a permit.



NO PARKING
6 AM - 8 PM
MON WED FRI

Mission Valencia Green Gateway, San Francisco

GREEN INFRASTRUCTURE PERMIT GUIDEBOOK

**UTILITY PLANNING DIVISION, WASTEWATER ENTERPRISE
SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

EMAIL: GIGRANTS@SF WATER.ORG



**San Francisco
Water Power Sewer**
Services of the San Francisco Public Utilities Commission