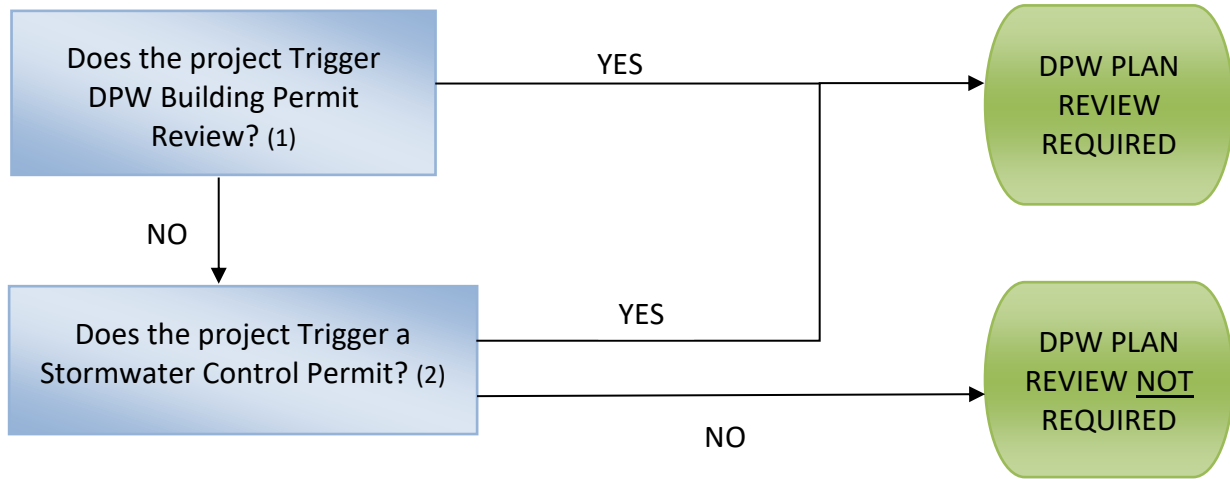




PROPOSED PROJECT SITE PLAN - DPW REVIEW REQUIREMENTS

(A) Determine if plan review by the DPW is required:



(1) DPW Building Permit Review Triggers:

DPW reviews Building Permit plans when the proposed project includes at least one of the following:

- A new building addition is greater than 150 SF
- The addition or alteration of a roof or foundation drain that does or will discharge to the City’s Sanitary Sewer or Stormwater System
- New, abandoned or replaced sanitary or storm sewer connection
- An increase in impervious coverage of the property
- A new, abandoned, or modified curb cut into a public right-of-way (ROW)
- Work in the Alewife Overlay district
- Work in the FEMA Delineated Flood Way
- The work is over 50% (Level 3) of the total building area, with 10 or more fixtures replaced or installed
- A change in use from residential to commercial or industrial
- Areas for food preparation in an existing or proposed food establishment
- Addition or replacement of basement plumbing fixtures

(2) DPW Stormwater Control Permit Triggers:

(From Land Disturbance Regulations, last revised June 30, 2021)

- Disturb one or more acre
- Exceed fifty thousand (50,000) square feet of Gross Floor Area
- Have a project parcel(s) equal to or greater than one acre in size
- Require a Special permit from the Planning Board
- Includes outdoor parking for 10 cars or more
- In the opinion of the City Engineer may result in an adverse impact of the municipal sewer, combined sewer, stormwater drainage system or water resources.

(B) DPW Review – Site Plan Requirements List

If DPW Plan Review is required, the following is a list of items that need to be addressed by the Project Applicant in advance of DPW sign off on the pre-approval of the Building Permit Application. Please note that these are general requirements. Different projects vary in scope -- these requirements might not be applicable to all, or additional requirements may apply.

Submission to the DPW should include, but is not limited to, a Civil Engineering Site/Utility Plan, Stormwater Management Calculations and Report, project narrative and any other required documents to address the items below.

General

Spot grades and contour elevations must refer to Cambridge City Base (CCB= NAVD1988 +11.66' or NGVD1929 +10.84')

Property lines shown.

Plan stamped by Commonwealth of MA Registered Professional Civil Engineer, Land Surveyor. The engineering design must conform to all applicable standards and good engineering practice.

Utility Information

New utility connections must be approved by the DPW. Utility work planned for the property must be shown on the site plan. The following information should be included:

Sewer

New service proposed. Must show location, size, material, connection detail, inverts at building and main, profile (for services 8" or larger, or as needed to confirm/identify conflicts).

Existing service proposed for reuse (location, size, material, inverts). A pipe inspection video of the existing service must be provided to DPW for review. Existing sewer services that have significant defects such as breaks, fractures, deformation or infiltration must be repaired or replaced.

Existing service to be abandoned -- must be cut and capped at main.

Basement plumbing fixtures: backflow preventers (backwater valves) are required at each below-grade plumbing fixture, add note to plan. For more information see [backflow brochure](#).

Food preparation facilities are required to have point of use or exterior grease traps. Grease trap sizing calculations must be submitted.

Floor drains in covered parking areas must discharge to an oil water separator connected to the sanitary sewer. MWRA must be notified prior to installation of the oil/water separator.

Water

Any proposed water work must be coordinated with the Cambridge Water Department.

New service proposed (location, size, material, connection detail).

Existing service to be abandoned (cut and cap location).

Existing service to be reused (location, size, material).

Drainage / Stormwater Management

Confirmation of internal separation of drainage and sewer pipes.

Mitigation of stormwater - improvements over existing conditions. Provide mitigation (stormwater management system for infiltration or storage) for the difference between the projected for year 2070 2-year 24-hour existing peak runoff and the 2070 25-year 24-hour proposed peak runoff. If site constraints exist, provide analysis of 2070 10-year storm or maximum extent possible. Refer to the June 2021 [Supplemental Directive](#) to Stormwater Guidance for more design guidance.

Stormwater Management System proposal. Provide runoff calculations, system sizing calculations, design details, overflow.

Operation and Maintenance Plan for Stormwater Management System with Responsible Operator.

Roof drain routing and discharge point. Roof runoff or site runoff discharge to sewer, abutting properties or sidewalk is not allowed.

Sump pump location and discharge point. Sump pump discharge to sewer, abutting properties or sidewalk is not allowed. For projects that are lowering the basement floor elevation, the engineer must provide an estimate of seasonal groundwater pumping rate. Sump pump discharge must go to an infiltration system on site with an overflow to the City storm drain, or overflow at-grade if feasible to retain within the site.

If a Stormwater Control Permit is required, refer to separate requirements and checklists at our [Stormwater Management webpage](#).

Private Utilities

Existing utilities to be abandoned (gas, electric, tele/com).

New services to be provided (gas, electric, telecom; location and size).

Pole and Conduit approvals required for new underground conduit (electric, tele/ com).

Other utility infrastructure locations (transformers/switch gears).

Standard Construction Details for sewer, water, and drainage work. Standard details can be found at www.cambridgema.gov/Departments/publicworks/constructionstandards

Public Right-of-Way & Other Surface Impacts

Erosion and Sediment Control

Identify and delineate location and type of erosion & sediment control measures (silt fence, hay bales, straw wattles, etc.)

Roadway

All utility work.

Existing and proposed line striping. Disturbed pavement markings should be restored.

Extent and type of pavement resurfacing, should encompass all utility trenches and cuts in roadway. DPW reserves the right to change the limits and type of street and sidewalk restoration based on the actual extent of utility work performed.

Sidewalk

Utility impacts, and extent of in-kind sidewalk restoration. If cement concrete, restore in full panels.

New or modified curb cut; requires separate permit.

Curb cut abandonment or closure. Curb cuts closed must be noted on the project as-built plan. New curb cuts cannot be shown on building permit plans until a curb cut permit is obtained.

Any other reconstruction (confirmation of ADA compliance, standard City materials).

Any foundation removal or new foundation construction within 4 feet of the public ROW requires the submission of a support of excavation plan.

Properties that are reconstructing sidewalk at street intersections are required to set a survey marker at the intersection of the two rights-of-way. Marker must be set by a Land Surveyor and be shown on the as-built plan.

Trees

Conformance with City Tree Ordinance Chapter 8.66 – Tree Protection, and DPW Tree Protection Ordinance Regulations.

Plan must call out trees to be protected and have a tree protection detail. Consider impacts to roots and canopy.

Show all existing public shade trees; for public and private trees over 6" caliper include evaluation of canopy impacts.

Work within 3 feet of a public shade tree requires the Contractor to contact the [City Arborist](#) in advance.

Evaluate opportunities for new trees.

Climate Change Resiliency

Flooding

Identify projected flood elevations at parcel from [Flood Viewer](#)

<https://www.cambridgema.gov/Services/FloodMap>

Build to protect from 2070 10-year flooding event.

Build to recover from 2070 100-year event.

If the parcel is identified as “impacted” consider flood protection for basement spaces. Review [brochure](#) “Flooding: Is Your Property Protected?”

Show sill elevations for doors and windows that access the basement level. DPW may require a building cross section view to document flood elevations.

Constructability

Impacts on Abutters.

Demolition close to the public ROW, might require vibration monitoring.

Commercial Kitchen/Food Preparation and Service

Fats, Oil, Grease (FOG) Controls Design (Sizing, O&M Plan, signage per code)

Sewer Connection Fee

Required one-time fee for new or replaced plumbing fixtures.

Addressing

Clearly identify entrances to new units or tenant spaces for address assignment.

As-Built Plan

After construction is completed, an as-built plan and a CAD file of the as-built plan will be submitted to DPW showing all building and utility as-built locations. The plan must be signed by the design engineer or land surveyor.

City of Cambridge References/Links:

[Department of Public Works webpage](#)

[Engineering Services](#)

[Stormwater Management webpage](#)

[Land Disturbance Regulations](#)

[Wastewater and Stormwater Use Regulations](#)

[Wastewater and Stormwater Management Guidance](#)

[Supplemental Directive to Stormwater Management Guidance](#)

[Wastewater and Stormwater Guidance for Developers and Contractors](#)

[Construction Standards and Standard Details](#)

[Urban Forestry webpage](#)

[Flood Viewer](#)

[GIS \(CityViewer\)](#)

[Flooding Risk brochure](#)

[Backwater valve brochure](#)