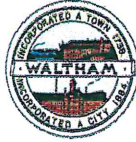


CITY OF WALTHAM



I & I/ Utility PERMIT APPLICATION CHECK LIST REQUIRED:

- ☐ PERMIT APPLICATION WITH SIGNATURE (PORTION IN RED)
- ☐ I AND I FORM WITH SIGNATURE (PORTION IN RED)
*RESIDENTIAL: NUMBER OF BEDROOMS BEFORE CONSTRUCTION AND AFTER CONSTRUCTION
- ☐ IF PROPERTY HAS BEEN VACANT FOR MORE THAN 5 YEARS OR SQUARE FOOTAGE HAS CHANGED OR USE HAS CHANGED THEN I/I FLOW CALCULATIONS WILL BE REQUIRED (SIGNED AND STAMPED BY A REGISTERED CIVIL ENGINEER). *NOT REQUIRED FOR RESIDENTIAL PROPERTIES
- ☐ IF PROPERTY HAS NOT BEEN VACANT FOR MORE THAN 5 YEARS A LETTER FROM THE PROPERTY OWNER STATING PREVIOUS USE OF PROPERTY AND WHEN PROPERTY WAS VACATED AS WELL AS THE NEW USE OF THE SPACE. *NOT REQUIRED FOR RESIDENTIAL PROPERTIES
- ☐ COPY OF THE DEED
- ☐ DETERMINED IF 17-25 REQUIRED FOR ANY UTILITY/STREET WORK.
- ☐ LETTER OF AUTHORIZATION REQUIRED BY OWNER IF PERSON OTHER THAN PROPERTY OWNER WILL BE SIGNING PERMIT FORMS
- ☐ DRAINAGE CALCULATIONS SIGNED AND STAMPED BY A PROFESSIONAL CIVIL ENGINEER (IF COVERING OVER 150 SQUARE FEET OR OWNER OCCUPIED OVER 600 SQUARE FEET). DRAINAGE CONTROL O&M AND PHOSPHORUS REDUCTION CALCS, UNLESS OWNER OCCUPIED
* NEEDED FOR EXTERIOR WORK ONLY
- ☐ PLOT PLAN SIGNED AND STAMPED BY A REGISTERED LAND SURVEYOR (OR LETTER FROM BUILDING DEPARTMENT STATING THAT THERE WILL BE NO INCREASE IN LOT COVERAGE, INCLUDES ALL IMPERVIOUS AREAS AND ADDITIONS)
***APPLICATIONS FOR A PROPOSED OR REPLACEMENT UTILITY SHALL BE ACCOMPANIED BY AN ACCURATE SITE SURVEYOR'S PLAN.**
- ☐ REGISTRY LAND PLAN (REFERRED TO IN DEED) & OTHERS USED BY SURVEYOR
*NEEDED FOR EXTERIOR WORK ONLY
- ☐ READ AND UNDERSTAND PLAN AND UTILITY REQUIREMENTS, INSPECTION REQUIREMENTS AND APPLICABLE CITY STANDARDS & DETAIL REQUIREMENTS PROVIDED ON THE ENGINEERING WEB-SITE
- ☐ SUBMIT 2 HARD COPIES & ELECTRONIC COPIES. ELECTRONIC COPIES MUST HAVE THREE SEPARATE FILES, ONE PLANS, ONE BACKUP INFO, ONE PERMIT APPLICATION. **ELECTRONIC COPIES SHALL BE SUBMITTED BY EMAIL OR FOR LARGE FILES DROP BOX, FLASH DRIVES ARE NOT ALLOWED.** ALL SUBSEQUENT CORRESPONDENCE MUST BE SENT TO, OR COPY, JANICE DEVENEVY (jidevenev@city.waltham.ma.us) AND TRACY DOHERTY (tdoherty@city.waltham.ma.us).

Note: The application will be processed when all materials are submitted. You will receive a call as soon as the Review is complete.



I&I/UTILITY PERMIT APPLICATION APPROVAL SHEET

(RED TO BE FILLED OUT BY APPLICANT)

APPLICANT'S NAME: (print) _____ PHONE: _____

ADDRESS: (print) _____ E-MAIL: _____

PROPERTY OWNER'S NAME: (print) _____ PHONE: _____

ADDRESS: (print) _____ E-MAIL: _____

PROPERTY LOCATION: (print) _____

INTERIOR WORK ONLY (YES/NO) _____ ADDRESS (YES/NO) _____

*BRIEF DESCRIPTION OF PROJECT (i.e., Addition, etc...) _____

All Utility Work (new or relay) Must Be Approved by Engineering and Permitted by C.P.W. and Shown on a Plan

* For interior work only, Engineering may request letter form Owner stating no exterior will be performed and if needed a new permit will be submitted prior to any work*

IS THE PROPERTY SUBJECT TO CONSERVATION COMMISSION JURISDICTION (YES/NO) _____
(Attach copy of property location from City Wetland GIS Map)

I/we agree to abide by all the laws of The Commonwealth of Massachusetts and the ordinances and policies of the City of Waltham. Also, once approved, any changes to water, sewer or drainage must be resubmitted for approval using a new permit form.

PROPERTY OWNER SIGNATURE _____

APPLICANT SIGNATURE _____

PRINT NAME _____

PRINT NAME _____

BELOW FOR CONSOLIDATED PUBLIC WORKS & ENGINEERING DEPARTMENT APPROVAL ONLY

STREET: _____ LOT NUMBER: (Deed) _____

STREET NUMBER ASSIGNED: _____ PARCEL ID NO.: (given/edited/verified by Assessors) _____
(unit numbers assigned by the Building Department)

17-25 Required: Yes ☐ No ☐ Street under moratorium until: _____ City Council Order No.: _____

UTILITIES

WATER ☐ Existing

WATER ☐ Proposed

SEWER ☐ Existing

SEWER ☐ Proposed

DRAIN ☐ Existing

DRAIN ☐ Proposed



PAGE 2

I&I/UTILITY PERMIT APPLICATION APPROVAL SHEET

COMMENTS:
ENGINEERING:
CPW:

Michael Chiasson, Director, Public Works Date

Robert Winn, P.E., City Engineer Date

APPROVED FOR APPLICATION TO OTHER DEPARTMENTS

NOTE: ANY REQUIRED UTILITY MAINS AND ANY ON-SITE DRAINAGE ARE TO BE INSTALLED, INSPECTED BY THE CITY AND TESTED PRIOR TO ACTIVATION OF SERVICE LINES. (ALL OLD UTILITY CONNECTIONS ARE TO BE CAPPED AT THEIR RESPECTIVE MAIN) NOTIFY THE CITY TWO (2) BUSINESS DAYS IN ADVANCE AT (781) 314-3800 WHEN ON-SITE DRAINAGE SYSTEM OR UTILITIES ARE READY FOR INSPECTION. INSPECTION MUST OCCUR PRIOR TO BACKFILLING OPERATION.

Prior to receiving an occupancy permit from the Building Department, a CERTIFIED (STAMP & SIGNATURE) SURVEY RECORD (as-built site plan) must be submitted to the Engineering Department showing information as required under both the Building/Engineering Departments Plan Rules, Regulations, and policies and all attachments and/or addendum.



INFILTRATION AND INFLOW MITIGATION FEE COVENANT AND PAYMENT FORM

Name – Owner of Property

Telephone

Address

Fax

E-mail

Project/Property Address (hereafter, Property)

☐ Commercial (Refer below for I/I Requirements)

☐ Residential

Number of Bedrooms prior to Construction

Number of Bedrooms after the Construction

The above and ensuing information related to this Covenant is provided by Owner of the Subject Property. By executing this Covenant, the Owner represents, certifies, and warrants the truth and accuracy of all information contained herein and understands and agrees that the city is relying on this.

The City also reserves the right, which is agreed and assented to by the Owner, to check and reassess the Property's Use and retest or recalculate the flow of sewer gallonage from the Property from time to time and correct and recalculate Owner's I & I Mitigation obligations when and where appropriate. I & I to be calculated by MA P.E. (civil). residential is exempt.

The Owner / Applicant agrees to the following:

1. To accept and abide by all provisions of the general ordinances of the City of Waltham governing the use of sewers.
2. To pay all installation costs of said sewer and its connection to the public sewer in said street, including all labor, materials, testing and other expenses necessary for the proper construction of said sewer as determined by the City.
3. To maintain the sewer at no expense to the City.
4. For himself, his heirs, devisees, and assigns, that the City shall have access to said premises at all reasonable hours to see that the sewer complies with all laws, by-laws, ordinances, rules, and regulations relating to the sewer.
5. To notify the City two business days in advance at (781) 314-3800 when the sewer is ready for inspection. Inspection must occur prior to backfilling operations.
6. If applicable, to notify the Board of Health at (781) 314-3305, one business day in advance of when the septic system is to be abandoned.
7. To provide the Engineering Department with as-built plans prior to receiving an occupancy permit from the Building Department.

(Applicant)

(Date)

▼ Department Use Only ▼

FEE WORKSHEET (to be calculated by City Engineer per City Ordinance Section 16-32 (Fee in lieu of project only if sewer flow is equal to or less than 2,000 gpd))

Residential:

☐ Owner occupied single family (\$750.00) \$ _____

☐ Other residential

Number of bedrooms (total all units) _____ / 3 x \$1,000
(\$1,000 minimum, rounded up to nearest \$100 increment) \$ _____
From 310 CMR 15.200 requires 110 gpd per bedroom (Title 5)

=====

Commercial

Gallons of flow per day _____ x 4 x \$3.00 \$ _____

****Required - Gallons Per Day Use Calculated by Massachusetts P.E. with date and stamp by Title 5 Regulations**

Commercial (\$1,000 minimum, rounded up to nearest \$1)

Example:

From 310 CMR 15.203, an office building produces 75 gpd per 1,000 sf *From 310 CMR 15.200 (Title 5)

A 10,000-sf office building produces 750 gallons per day

The fee in lieu of removal = 750 x 4 x \$3.00 = \$9,000

(Authorized by City Engineer)

(Date)

(Authorized by Public Works Director)

(Date)

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REQUIREMENTS FOR PLANS AND DRAINAGE CALCULATIONS

Be advised that the attached "Plan and Utility Requirements" apply to all plans being prepared for submittal to the City of Waltham. Also below is the "Policy on Drainage Calculations." Test pits shall be shown on the drawings, including the date of the test.

All plans submitted to the Department that fail to meet any provisions of the attached or below requirements **MUST** be accompanied by written documentation detailing the deviations and the reasons for said deviations. Only the City Engineer may grant exceptions to the attached requirements.

Please pay special attention to the requirements for As-Built plans set forth in the attached requirements.

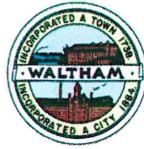
POLICY ON DRAINAGE CALCULATIONS

The Department "Plan and Utility Requirements" call for drainage calculations to be submitted with all plans filed. This policy serves to identify what projects require such calculations.

In our efforts to follow current storm water regulations, as well as protecting the integrity of the City's storm drainage system and our environment, the following policy regarding the presentation of storm water calculations shall apply to all projects within the city:

1. Plans for all non-residential projects involving the construction of new buildings or additions to existing buildings or addition/modification to impervious surface shall be accompanied by drainage calculations, regardless of the size of the building or addition.
2. Plans for all residential projects involving the construction of new buildings, additions to existing buildings or addition/modification to impervious surface where the proposed exceeds 150 square feet, shall be accompanied by drainage calculations. **An exception for small single-family owner-occupied residential projects up to 600 square feet of new impervious area, stormwater calculations are not required, provided storage volumes, methods, and details described on page 2 and 3 are met and shown on the drawings. Also, for single-family owner-occupied residential projects, replacing existing impervious surfaces or driveways does not require drainage, provided no additional new impervious surface is added and current impervious surface meets zoning regulations. An I/I Utility permit application and schematic drawing of proposed work needs to be submitted to CPW and Engineering. A City Inspector will confirm the size of existing impervious surface before and after the work.**
3. **Residential and non-residential projects replacing existing impervious surface, parking lots, or driveways and the pavement is only partially removed (mill and overlay) does not require a I/I Utility Permit, provided no additional new impervious surface is added and current impervious surface meets zoning and ordinance regulations.**
4. **Residential and non-residential projects replacing existing impervious surface, parking lots, or driveways where pavement is fully removed will require drainage.**
 - a. **If drainage exists and no additional new impervious surface is added and current impervious surface meets zoning and ordinance regulations, applicant is only required to provide a map showing the existing drainage system and structures, including invert**

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elevations and depth of sumps in structures. Drainage system must be adequate and have adequate sumps in the structures. An I/I Utility permit application and drawing showing drainage and proposed work must be submitted to CPW and Engineering. A City Inspector will confirm the size of existing impervious surface before and after the work

b. If existing drainage does not exist, applicant must provide drainage meeting the City's drainage requirements.

5. Drainage calculations shall include calculations showing the proposed drainage system ability to remove 60% of the phosphorus load from additional and modified impervious areas. Owner-occupied single-family residential permit submissions are not required to show phosphorus load reduction calculations.

In the preparation of required drainage calculations, the entire site shall be included, i.e., the entire building and all impervious surface, not just the roof area of an addition. All additional or modified impervious surface flow shall be retained/recharged on site. All impervious surfaces shall be shown and calculated in square feet, existing and new. Consideration shall be given to existing drainage patterns on single and two-family residential additions.

Any buildings, impervious areas, etc. removed/demolished shall not be considered for credit on drainage, unless application is for a small single-family owner-occupied residential system with 600 square feet or less of new or modified impervious area.

Calculations or drawings shall clearly show existing impervious area, proposed impervious area, and treated impervious area.

REQUIREMENTS FOR PLANS AND DRAINAGE CALCULATIONS

Stormwater infiltration policy for small residential owner-occupied projects up to 600 square feet of new or impervious area. Stormwater calculations not required provided the storage volume requirement is met.

<u>Impervious Area</u>	<u>Infiltration Requirement</u>
Between 0 and 149 S.F.	- Not applicable
Between 150 S.F. & 200 S.F.	- 25.5 C.F.
Between 201 S.F. & 300 S.F.	- 38.3 C.F.
Between 301 S.F. & 400 S.F.	- 51.0 C.F.
Between 401 S.F. & 500 S.F.	- 63.8 C.F.
Between 501 S.F. & 600 S.F.	- 76.5 C.F.

Below are some typical devices and the amount of storage and infiltration provided. The applicant is not required to use one of these devices. The specifications and storage volume shall be provided for any alternatives selected.

NDS Flo-Well Engineered Drywell

11.7 C.F. - With 6" of crushed stone around the outside and 6" stone below

19.8 C.F. - With 12" of crushed stone around the outside and 12" stone below

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4'x4'x4' Drywell (See City Detail)

95.5 C.F. - With 12" of crushed stone around the outside and 12" stone below

152.6 C.F. - With 24" of crushed stone around the outside and 12" stone below

4'x4'x3' Low Profile Drywell (See City Detail)

71.4 C.F. - With 12" of crushed stone around the outside and 12" stone below

116.3 C.F. - With 24" of crushed stone around the outside and 12" stone below

Crushed Stone Trench (See City Detail)

0.35 C.F. per 1.0 C.F. of crushed stone.

All projects proposing more than 600 square feet of impervious area must comply with the Waltham Stormwater requirements

Plan and Utility Requirements

1. Two hard copies and two electronic copies, PDF and AutoCAD or AutoCAD compatible, of all utility and Stormwater plans shall be provided as part of the permit submittal process.
2. Any changes to the approved drawings and requirements, must be re-submitted for approval using a new permit application. If small changes are required in the field, the inspector will determine if a resubmittal is required, or if the change can be documented on the as-built plan.
3. All plans/lots other than those having a single or a two-family dwelling shall comply with 2021 ALTA/NSPS or latest version standards.
4. Note: All work to be on the North American Vertical Datum of 1988 (NAVD 88).

Plot Plans

All plot plans submitted shall be on 8½" x 11½", 11"x 17", or 24" x 36" paper or mylar with a ½" border. All plans will be done in a compatible ink and will be drawn to a scale of 1 inch = 20 feet or 1 inch = 40 feet. A proposed site plan **MAY NOT** be substituted for a plot plan or survey record (as-built site plan). The plan shall show:

1. Current deed (copy with Registry Stamp, Book, and Page) and latest Registry Plan (with Registry Stamp, Book, and Plan Number). If none, state "no plan recorded". Copies of other Registry plans used.
2. Plot plans for new construction must show curb cuts (see Consolidated Public Works requirements) with curb returns and curbing. Drives (not to exceed 10% grade, parking (including all treated areas), and proposed elevations of the following: top of foundation (and garage floor), back of walk (street line) at the drive, gutter line and the center of the existing street opposite the drive. Also, plan shall show location of the front door.
3. All plot plans shall be stamped and signed in ink by a MA Registered Land Surveyor with phone number and email address shown on plan. The plan, stamp and signature must be original.

Site Plans

1. All survey plans shall be stamped and signed in ink by a MA Registered Land Surveyor. The plan, stamp and signature must be original. Submit two hard copies and an electronic version
2. All plans/lots other than those having a single or a two-family dwelling shall comply with 2021 ALTA/NSPS or latest version standards.
3. All work to be on the North American Vertical Datum of 1988 (NAVD 88).
4. All plans shall be prepared with a title block in the lower right-hand corner which identifies the project by title and location, name and address of the owner, the engineer with address, email and phone number, surveyor with address, email and phone number, scale of the plan, date of the plan and date of the survey. The title block shall also have a place for the name and initials of (1) the designer, (2) the draftsman and (3) the checker and the date each task was completed. The Department will not review plans which have not been reviewed and/or checked by the design engineer prior to submittal.
5. All revisions to the plans must be indicated in a revision block with the corresponding revision number and the change highlighted on the drawing with a cloud and revision number. All changes to the approved permit must be

submitted and approved by the Engineering department and Consolidated Public Works.

6. North Arrow in the upper left-hand corner (pointing towards the top of the sheet). Street numbers (if existing) shown inside the building. Example (# 69).
7. Building Zone for the lot (if in two or more zones, show the zone line(s) mathematically on the plan with area in each zone).
8. Flood Plain Zone with the Community Panel Number from the latest F.E.M.A. map. If in the 100-year flood zone, show and label the 100-year flood line on the plan and indicate its elevation.
9. The North American Vertical Datum of 1988 (NAVD) must be used for any elevation information on the plan. A benchmark must be shown on the plan. All lot lines (even contiguous lot lines) with bearings, distances (to the nearest one-hundredth foot), central angles, radii, and arcs. Lots over 25,000 square feet must be on North American Datum of 1983 for horizontal control with a coordinate shown of at least one corner and a disc supplied in AutoCAD (current version) of the plan.
10. All existing topography shall be shown with one-foot contours in areas where the proposed topography differs from existing, extending to 20 feet of said areas. Projects with no change in topography are exempt from this requirement.
11. Street names with width and whether "public" or "private". Lot numbers and lot areas (to the nearest square foot).
12. All plans shall clearly indicate the erosion control measures proposed to protect adjacent wetlands and/or municipal storm drainage systems. At a minimum, the entire limit-of-work line downgradient of the work site shall be lined with hay bales to control siltation.
13. All buildings (existing and proposed) with all building dimensions (existing and proposed) and all offset distances to street lines and property lines must be to the nearest one hundredth [0.00] of a foot. The location of the main entrance to all buildings shall be noted.
14. Lots that do not comply with current zoning are to be accompanied by a letter from the City of Waltham Building Department stating that the lot has been approved for old lot status (prior to 1952) and/or reduced frontage requirements.
15. Lot coverage and the F.A.R. (floor area ratio) and height of building shall be shown on the plan. All impervious areas are to be shown.
16. List all grants, waivers, variances, conditions, etc., given to the lot together with the granting authority and date.
17. All wetland areas shall be shown as flagged, located, and presented to the Waltham Conservation Commission. A copy of the plan presented to the Conservation Commission shall be given to the Department after obtaining approval from the Conservation Commission and before getting approval from Consolidated Public Works and Engineering.
18. All roadway and sidewalk requirements shall be in conformance with city standards and details provided on the Engineering website.
[0000 - utility roadway details 21.10.27.pdf \(waltham.ma.us\)](#)

Utilities

1. All proposed utility and stormwater designs shall be stamped by a MA Registered Professional Civil Engineer, and meet all site plan requirements.
2. Waltham City Ordinances, Section 13-1(A) states the following (underground only):
 - (a) "No person shall install telegraph, telephone, electric light or power or any other electric lines or wires in the city without permission of the Council."It is anticipated that the project you have proposed will have electric service connected to it. This is to advise you that the Waltham City Ordinance, Section 13 requires City Council approval for the installation of wires and conduits.
3. All water, sewer and drain utility requirements shall be in conformance with city standards and details provided on the Engineering website.
[0000 - utility roadway details 21.10.27.pdf \(waltham.ma.us\)](#)
4. Existing street utilities and elevations shall be shown, including all service connections within 10 feet of new connection location, including connections from the opposite side of the street.
5. No water, Sewer or Drains shall be deeper than 10 feet without Engineering Approval.
6. All existing utilities shall be cut and capped at the city main.
7. For sites over one-acre, an NPDES Construction General Permit shall be submitted, along with the stormwater pollution prevention plan (SWPPP).

Stormwater

1. Storm drainage from all proposed developments must be analyzed by a MA Registered Professional Civil Engineer to show that peak rates of flow after development will not exceed those determined for existing conditions. Methodology shall include TR-55 or TR-20 as developed by the Soil Conservation Service or other acceptable methods. Peak storm flow rates shall be determined for pre- and post-development conditions for the 10-yr., 25-yr., and 100-yr. storm events. Piped drainage systems shall be designed with capacity for a 25-yr. storm event. Detention basins/tanks/pits shall be designed to be capable of safely storing/infiltrating the 100-yr. storm event, **2.1 inches over 30 minutes**. (Reference NOAA ATLAS 14 and Waltham Policy on Drainage Calculations). In general, it is required that all impervious surface drainage be retained/recharged on site for a 100-year storm with no connection to city system.
2. Infiltration test and location of all test pits must be shown on the plan, together with date of test/observations. Infiltration systems shall not be closer than 10 feet from property line or any structures. Infiltration test is not required for Owner occupied residential systems up to 600 square feet of new or modified impervious area. Infiltration systems with lower ground permeability rates may be required to provide an overflow to the City stormwater system.

3. Large development projects shall consider the use of detention basins or underground storage tanks to retain any flows, and if allowed, discharge either on-site or off-site to existing waterways, with flows not to be discharged directly or indirectly to existing municipal storm drainage systems. Smaller parcels can consider use of underground storage tanks with orifice regulated outflows.
4. The handling of on-site drainage must be indicated on the plans and drainage calculations shall be prepared by a Massachusetts Registered Professional Civil Engineer and submitted for review and approval.
5. Clearly show and summarize existing impervious area s.f. new impervious area s.f. and treated impervious area s.f.
6. Landscape shall not be altered in a way that results in any runoff of surface water to abutting properties.
7. All drainage designs shall comply with the City of Waltham requirements and guidance set forth in the Massachusetts Department of Environmental Protection Stormwater Standards and Policies, the more stringent policy shall apply.
8. All basement sumps, existing or new, shall be shown on the drawings, including piping and discharge location and detail of on-site infiltration system. Sump pump on-site infiltration system shall be in accordance with Engineering Standards and details and shall be a minimum of 10 feet from structures and property line.
9. Sump Pump Connections to Drain System
 - a) Connection of sump pumps to the City's drainage system is discouraged but may be allowed if a sump discharge on property will or is detrimental to public safety and/or if ground conditions will not properly infiltrate.
 - b) If a sump pump connection is requested, approval must be provided by the City Engineer and the CPW Director as part of a permit submittal process.
 - c) The City has standard details for piping and connection of the sump pumps to the City's drain system, [0000 - utility roadway details 21.10.27.pdf \(waltham.ma.us\)](#) Professional Engineer of record may propose changes for approval.
 - d) It is encouraged that the sump pump piping exits the house from the front. If discharging on the side or the house, the property line will need to be confirmed by a registered surveyor.
 - e) The Owner will be responsible for the proper operation, including requirement that no illicit flow enter the sump pump system. Also, any needed repair associated with the sump pump and piping system, including the piping in the street, will be the responsibility of the Owner. Language describing this responsibility must be added to the property deed, filed/recorded at the south Middlesex registry of deeds, and submitted to the Engineering department for confirmation.
 - f) The Water and Sewer department or Engineering department will inspect the installation in the street and an as-built drain tie card developed and added to the document system. The sump pump installation must be inspected inside the building to assure that no potential exists for contamination of the groundwater or any extraneous flow entering the sump pump.

Stormwater Control Systems O&M Requirements

1. O & M requirements shall be provided for all stormwater control systems except owner occupied single family residential permit submissions.
2. The Long-Term Stormwater Operation and Maintenance Plan shall at a minimum include:

- (a) Stormwater management system(s) owners;
 - (b) The party or parties responsible for operation and maintenance, including how future property owners will be notified of the presence of the stormwater management system and the requirement for proper operation and maintenance;
 - (c) The routine and non-routine maintenance tasks to be undertaken after construction is complete and a schedule for implementing those tasks;
 - (d) A plan that is drawn to scale and shows the location of all on site drainage systems along with the discharge point;
 - (e) A description and delineation of public safety features; and
 - (f) An estimated operations and maintenance budget.
3. The responsible party shall:
- (a) maintain an operation and maintenance log¹, including inspections, repairs, replacement, and disposal (for disposal, the log shall indicate the type of material and the disposal location);
 - (b) make this log available to the City upon request
4. The responsible party shall submit a copy of the O&M log and Compliance Statement by January 1st of each year to the City Engineering office. The O & M Compliance Statement shall identify the party responsible for implementation of the Operation and Maintenance Plan and state that:
- (a) the site has been inspected for erosion and appropriate steps have been taken to permanently stabilize any eroded areas;
 - (b) all aspects of the stormwater system have been inspected for damage, wear and malfunction, and appropriate steps have been taken to repair or replace the system or portions of the system so that the stormwater at the site may be managed in accordance with the design intent;
 - (c) future responsible parties must be notified of their continuing responsibility to operate and maintain the structure; and
 - (d) the Operation and Maintenance Plan for the stormwater system is being implemented in accordance with the plan.

Water

- 1. Existing water services shall be shown and replaced with new services unless it is demonstrated that existing service is adequate and material is either ductile iron or copper.
- 2. One water service and meter shall be provided for each building. Additional meters can be provided by Owner, if desired, after the City meter.
- 3. Proposed water connection (with the size of main - must maintain 5 feet of cover) Necessary details for water systems shall be shown. Connection at the main shall be shown and all existing connections to the main from any location on the street, shall be shown within 20 feet of proposed connection.
- 4. All plans that include a proposed water service line, shall show the design water flow for the service and the proposed water meter size. Single and two-family dwellings are exempt from this requirement and shall be fitted with a 5/8-inch meter. All plans showing or requiring a fire service line shall show a connection to a City of Waltham main. Separate fire service and water service lines shall be provided from the City Main. No connections shall be made to water service

¹ This is a rolling log in which the responsible party records all operation and maintenance activities.

lines or combinations thereof. The owner shall install the fire service from the main to the building and shall be responsible for the fire service connection in its entirety for perpetuity. Three gate configurations with tees are generally required.

5. 4-inch water connections and valves at the main are not allowed. If 4-inch connection is required, a 6-inch connection shall be provided, with a 6-inch valve, and then a reducer can be provided to extend a 4-inch pipe onto the property.

Sewer

1. Existing sewer service shall be shown and replaced with a new service unless it is demonstrated that existing service is adequate and material is either ductile iron or PVC.
2. A separate sewer connection to the City main is required for each building. Connection at the main shall be shown and all existing connections to the main from any location on the street, shall be shown within 20 feet of the proposed connection.
3. sewer connection (with the size of main and invert elevations) showing the two sewer manholes (upstream and downstream) in the street. Necessary details for sewer systems shall be shown.
4. Sewer laterals may not tie into manholes and must tie into a main directly in front of the lot (if not available the main must be extended by owner).
5. If MWRA Toxic Reduction and Control (TRAC) permit or Gas/Oil separator permit is required through the MWRA, applicant shall acknowledge this and indicate if permit has been or will be submitted to the MWRA.

Record As-built Plans and Information

1. Prior to receiving an occupancy permit from the Building Department, a CERTIFIED (STAMP & SIGNATURE) SURVEY RECORD (as-built site plan) must be submitted to the Engineering Department and approved.
2. All plans must be followed by a SURVEY RECORD (as-built plan) at the completion of final inspection (survey record to be certified with stamp, signed in ink, by a MA Registered Land Surveyor and stating the date of the record field survey). Note, Engineering may require the as-built plan and revised calculations to be stamped by the MA Registered Professional Design Civil Engineer of Record, if utility or drainage designs are modified from approved permitting plans. The as-built drawing survey of record will show all the items described below. All as-built plans (final), with the exception of Owner Occupied one- and two-family dwellings, will be accompanied by an AutoCAD file (latest version) on disc or transferred using other method. All plans/lots other than those having an Owner Occupied single- or two-family dwelling shall comply with 2021 ALTA/NSPS standards. The as-built plan submittal shall include an electronic version of the final Operation and Maintenance Plan for the site stormwater management system.
3. The following, if constructed, shall always be provided on an as-built plan:
 - Foot print building dimensions (not the foundation but the finished building new or old) all around the building to the nearest 0.01'.
 - All appropriate offsets to the nearest 0.01' from the finished building to the property lines and the street lines are required.

- All water, sewer and drain services are to be shown with their size and type.
 - Distance from a house corner along the house to the water and/or sewer connection entering the building must be shown.
 - Ties (at least two) to the sewer cleanout from building corners and to the connection with the sewer main in the street. Rim and invert elevations of any sewer manholes installed must be shown.
 - Distance from the nearest sewer manhole in the street to the service connection along the sewer main.
 - Ties (at least two) to the water service gate and to the water service connection at the main.
 - Ties to city utilities may be shown on a separate sheet but must be drawn to scale.
 - Distance from the nearest main water gate along the main to the service connection.
 - Show all drain galleys, tanks, swales, catch basins, drain grates (length, width, depth) and connections (including roof drains) with type and size if installed. Elevations (rim and invert and/or top and bottom) of all drain manholes, galleys, grates, etc. must be provided
 - All drives, patios, walks, etc. together with type, i.e., asphalt, concrete, pavers, etc.
 - Show all curbing and curb returns together with any street walks and drives built and/or removed together with drive way width at street line.
 - All sump pumps with discharge point from structure and termination locations (galley, swale, tank, etc.) shall be shown on the plan together with type of pipe and size.
4. As-built submittal shall include the Final Long – Term Stormwater O&M Plan

Inspections

1. ANY REQUIRED UTILITY MAINS AND ANY ON-SITE DRAINAGE ARE TO BE INSTALLED, INSPECTED BY THE CITY AND TESTED PRIOR TO ACTIVATION OF SERVICE LINES. (ALL OLD UTILITY CONNECTIONS ARE TO BE CAPPED AT THEIR RESPECTIVE MAIN)
2. NOTIFY THE CITY TWO (2) BUSINESS DAYS IN ADVANCE AT (781) 314-3800 WHEN ON-SITE DRAINAGE SYSTEM OR UTILITIES ARE READY FOR INSPECTION. INSPECTION MUST OCCUR PRIOR TO BACKFILLING OPERATION.

END