

CHECKLIST FOR DEFINITIVE AND STREET EXTENSION PLANS

PREPARATION AND REVIEW

The following shall be submitted to the Planning Board with every definitive and street extension plan application. Please check each box to indicate that you have included the information with your application, detailed where in the plans or reports the information can be found, and sign the statement on page C-4. The application will not be accepted by this department for processing unless: (a) the engineer signs and stamps the certification on page C-4 and (b) all portions of this checklist are filled out and accompany the application at the time of submittal.

- Eleven (11) copies of the Definitive Subdivision or Street Extension plan for the Planning Department (this includes the copy we will stamp in with the City Clerk's Office)
- Six (6) copies of the Definitive Subdivision or Street Extension plan distributed directly to individual Departments (see page 3 of application)
- Plans at a scale not greater than 1"= 80'. Size shall not exceed 24"x36". If multiple sheets are used, an index showing the entire subdivision must be provided
- Name, legal address, and telephone number of record owner, subdivider and registered engineer and/or registered land surveyor
- Property identification, including names of abutters from the most recent tax list and Assessor's map numbers of the abutting properties
- Subdivision name, true north point, date, and scale
- Lot Information, including sufficient data to readily determine location, bearing, and lengths of all lot lines
- Ways, Easements, and Right-of-Ways
- Centerline Stations of each street, at fifty (50') foot intervals
- Location of all angle points and tangent points of curves of all ways
- Location of all existing monuments
- Proposed Street Names
- Location of existing underground structures
- Key sketch at a scale of 1"=1,000'
- Areas set aside for conservation and recreation uses
- Signature space to record the signatures of nine (9) members of the Board
- Signature block for City Clerk pursuant to §5.11 ENDORSEMENT AND RECORDING
- Dates of preliminary plan application filing and approval
- Zoning District(s)
- Reference to deed as recorded in Registry
- Detailed Project Narrative
- Final Stormwater Plan which illustrates at a minimum:

- Existing and proposed topography (minimum of 2-foot contour interval) **(see sheet(s) # _____)**
- Existing and proposed watershed delineations **(see sheet(s) # _____)**
- Perennial and intermittent streams **(see sheet(s) # _____ or indicate N/A)**
- Mapping of predominant soils from USDA soil surveys as well as location of site-specific borings and/or test pits **(see sheet(s) # _____)**
- Boundaries of existing predominant vegetation and proposed limits of clearing **(see sheet(s) # _____)**
- Location and boundaries of resource protection areas such as wetlands, lakes, ponds, and other setbacks (e.g., stream buffers, drinking water well setbacks, septic setbacks) **(see sheet(s) # _____)**
- Location of existing and proposed roads, buildings, and other structures **(see sheet(s) # _____)**
- Location of existing and proposed utilities (e.g., water, sewer, gas, electric) and easements **(see sheet(s) # _____)**
- Location of existing and proposed conveyance systems such as grass channels, swales, and storm drains **(see sheet(s) # _____)**
- Drainage flow paths **(see sheet(s) # _____)**
- Location of floodplain/floodway limits and relationship of site to upstream and downstream properties and drainages **(see sheet(s) # _____ or indicate N/A)**
- Location and dimensions of proposed channel modifications, such as bridge or culvert crossings **(see sheet(s) # _____ or indicate N/A)**
- Soils information from test pits or borings at the location of proposed stormwater management facilities, including but not limited to soil descriptions, depth to seasonal high groundwater, depth to bedrock, and estimated hydraulic conductivity. Soils information will be based on site test pits or borings logged by a Massachusetts certified Soil Evaluator, or a Massachusetts Licensed Professional Engineer **(see sheet(s) # _____ and/or page(s) # _____ of narrative or stormwater report)**
- Site Design Features that document the following:
 - Mapped steep slopes greater than 15% and forest stands exceeding 10,000 square feet in area **(see sheet(s) # _____ or indicate N/A)**
 - Delineated building envelopes that avoid steep slopes, forest stands and floodplains, and provide applicable buffers from wetland resource areas **(see sheet(s) # _____ or indicate N/A)**
 - Identification of natural open space provided on-site and calculation of percent natural open space provided **(see sheet(s) # _____)**
 - Methods used to minimize impervious area and calculated total percent impervious onsite (refer to the latest edition of the MASWMS for more information on available methods) **(see page(s) # _____ of narrative)**
 - Methods used to disconnect impervious surfaces and calculated percent of “effective” impervious area (refer to the latest edition of the MASWMS for more information on available methods) **(see page(s) # _____ of narrative)**

- Representative cross-section and profile drawings, notes and details of structural stormwater management practices and conveyances (i.e., storm drains, open channels, swales, etc.), which include:
 - Locations, cross sections, and profiles of all streams and drainage swales and their method of stabilization **(see sheet(s) # _____)**
 - Existing and proposed structural elevations (e.g., invert of pipes, manholes, etc.) **(see sheet(s) # _____)**
 - Design water surface elevations **(see sheet(s) # _____)**
 - Structural details of outlet structures, embankments, spillways, stilling basins, grade control structures, conveyance channels, etc. **(see sheet(s) # _____)**
 - Logs of borings and/or test pit investigations along with supporting geotechnical report **(see page(s) # _____ of narrative or stormwater report)**
- Hydrologic and hydraulic analysis for all structural components of stormwater system (e.g., storm drains, open channels, swales, stormwater management practices, etc.) for applicable design storms, including:
 - Existing condition analysis for watershed boundaries, curve numbers, time of concentrations, runoff rates, volumes, velocities, and water surface elevations showing methodologies used and supporting calculations **(see page(s) # _____ of narrative or stormwater report)**
 - Proposed condition analysis for watershed boundaries, curve numbers, time of concentrations, runoff rates, volumes, velocities, water surface elevations, and routing showing the methodologies used and supporting calculations **(see page(s) # _____ of narrative or stormwater report)**
 - Final sizing calculations for structural stormwater management practices including, contributing drainage area, storage, and outlet configuration **(see page(s) # _____ of narrative or stormwater report)**
 - Stage-discharge or outlet rating curves and inflow and outflow hydrographs for storage facilities (e.g., detention, retention or infiltration facilities) **(see page(s) # _____ of narrative or stormwater report)**
 - Dam breach analysis, where necessary, for earthen embankments over eight (8') feet in height and less than 2,000 feet upstream of a road crossing or structure **(see page(s) # _____ of narrative or stormwater report or indicate N/A)**
- Final landscaping plans for structural stormwater management practices and any site reforestation or revegetation, including:
 - Location of woody and herbaceous vegetative stabilization **(see sheet(s) # _____)**
 - Species, size, planting methods, and maintenance requirements of proposed landscaping **(see sheet(s) # _____ and/or page(s) # _____ of narrative or stormwater report)**
- Structural calculations, where necessary **(see page(s) # _____ of narrative or stormwater report or indicate N/A)**
- Applicable construction specifications **(see sheet(s) # _____)**

- Erosion and sediment control plan that at a minimum meets the requirements of these Regulations and the Massachusetts Stormwater Policy Standard #8 (see sheet(s) # _____ and/or page(s) # _____ of narrative or stormwater report)
- Sequence of construction (see sheet(s) # _____ and/or page(s) # _____ of narrative or stormwater report)
- Maintenance plan, which will include:
 - Description of annual maintenance tasks (see page(s) # _____)
 - Description of applicable easements (see page(s) # _____)
 - Minimum vegetative cover requirements (see page(s) # _____)
 - Access and safety issues (see page(s) # _____)
- Identification of all anticipated applicable local, state and federal permits (see page(s) # _____ of narrative or stormwater report)
- Identification of all necessary legal agreements (e.g., off-site easements, covenants, land trusts) (see page(s) # _____ of narrative or stormwater report)

I attest, as the project engineer, that to the best of my knowledge, all items required above are included as part of this stormwater management Definitive Plan application filing.

Signature: _____

Date: _____

Printed Name: _____

Title: _____

Company: _____

Telephone #: _____

E-Mail Address: _____

STAMP: