Address: _____ Checked By: _____

General

One set of plans shall be submitted to DPW Engineering, 70 Tapley Street, Springfield, MA 01104- Initial Submission & Final Plan One set of plans shall be submitted to Springfield Water & Sewer Commission (SWSC) Field Services Office, 71 Colton Street, Springfield, MA. Initial Submission & Final Plan NOTE: See SWSC Commercial/ Industrial Water & Sewer Service Reviews handout for general submittal requirements. Plans shall also be submitted to DPW only via CD ROM in two (2) AutoCAD formats (.dxf and .dwg) after approval and plan update Minimum sheet size shall be 24" x 36" unless otherwise approved prior to submission Set shall be comprised of separate sheets as listed below unless otherwise approved by the City Engineer at the pre-application scoping session All plans shall be stamped by Commonwealth of Massachusetts-registered Professional Engineer, Professional Land Surveyor, and/or Professional Landscape Architect, as appropriate

All plans oriented so that north arrow points to top of sheet

All plans shall be shown at 1'' = 40' or less and shall show a graphical scale All plans shall have a title block comprised of the following:

- Project Title
- Sheet Title
- Sheet Number •
- Registrant Stamp (PE, PLS, LA)
- Engineer's name, address
- Scale
- Plan Issue Date
- Plan revision Dates(s) •
- Street address(s) of the project area parcels. •

Two copies of the Traffic Report to be submitted Two copies of the Drainage Report to be submitted

1. Cover Sheet

Title Block

- Project name/title
- Street number and/or lot number (for new buildings, DPW Engineering will assign a street number prior to approval)
- Assessor's map and parcel number(s)
- Name and address of property owner
- Name and address of applicant

- Name and address of engineer
- Name and address of developer
- Name and address of architect
- Name and address of landscape architect
- Revision Date Block

Zoning District

Zoning Requirements Table-"Required vs. Provided"

- Lot Size
- Lot Frontage
- Side Yard Setback
- Front Yard Setback
- Rear yard Setback
- Building Height
- Lot Coverage
- Distance from Residential District
- Parking Spaces

Total Parking Spaces Compact Parking Spaces Handicap Parking Spaces Parking Space Sizes Parking Lot Setback

Locus Map (Show all roads and available building information within 1000 feet) Plan Index with latest revision date of each plan

2. Legend, Abbreviations, and General Notes

Legends General Symbols Abbreviations General Notes Construction Notes Utility Notes

3. Site Survey Plan – Property Plan

Name of Surveyor Date of survey Property lines with bearings and distances Monuments found/ set at all lot corners Easements with bearings and distances suitable for registry filing Name of all abutters Street names Data confirming that applicant has the legal right to use land shown on plan (easement, right of way, license, etc)

4. Existing Condition Plan

Name of Surveyor/ Engineer

Date of survey/ plan preparation

The survey plans shall be consistent with the Procedural and Technical Standards of 250 CMR 6.00 and shall:

- Tie boundary corners to Springfield street line bounds/ benchmarks & describe and locate Springfield bound/ benchmark on the plan.
- Cite reference boundary data taken directly from another reference plan with applicable registry recording number and title of said plan
- Find and/ or set monuments at all lot corners
- Establish property, street, boundary lines, etc with bearings and lengths
- Establish easements with bearings and lengths suitable for registry filing
- Reference elevations to NAVD 88 NOTE: Elevation 100.00 (NGVD 29) = Elevation 99.30 (NAVD 88) in Springfield, MA
- Horizontal features to be the horizontal coordinate system of the Massachusetts State Plan Coordinate System tied into the North American Datum of 1983 (NAD 83)
- Name all abutters, parcel ID numbers, street numbers, etc, consistent with abutters list

• Show street, alley, park, public open space, etc names

Existing Buildings and Structures

- Area of Building
- Number of stories
- Principal use
- Setbacks from property lines
- Floor Elevations
- Door locations with sill elevations

Existing Topography-Contours at 2' intervals (1'contours or additional spot grades if site is flat)

Overhead and underground utilities including but not limited to water, sewer, drainage, electric, telephone, cable TV, gas, septic systems, detention structures, wells, etc

Existing parking/paved areas including pavement type (parking, walkways, etc.)

Adequate utility information outside the site to verify proposed utility connections All utility pipe types, sizes, lengths and slopes within the site.

All existing public mains and appurtenances in the right of way frontage of the site at a minimum, including but not limited to water, sewer, drainage, gas, electric, etc

All utility structure information including rim and invert elevations

NOTE: Contact SWSC for water and sewer locations & profiles

All existing easements with bearings and distances suitable for registry filing Existing pavement markings within site and on connecting roads

Existing features such as walls, curbing, landscaping trees, walks, fences, trees over 12" caliper, lighting, signs, loading areas, dumpster location etc.

Existing sign summary

Water protection district delineation including offsets and buffer zones Areas of Critical Environmental Concern

NHESP mapped areas (Priority and Estimated Habitat of Rare Species Test Pit locations and surface spot elevation

5. <u>Demolition and Erosion Control Plan (show appropriate information form</u> <u>Existing Condition Plan</u>)

Name of Surveyor/ Engineer Date of survey/ plan preparation Property lines with bearings and distances Monuments found/ set at all lot corners Easements with bearings and distances suitable for registry filing Name of all abutters Street names Benchmark locations (Based on NGVD – show year) Existing Buildings and Structures to be removed/ demolished Existing Topography-Contours at 2' intervals (1'contours or additional spot grades if site is flat) Overhead and underground utilities to be removed/ demolished including but not limited to water, sewer, drainage, electric, telephone, cable TV, gas, septic systems, detention structures, wells, etc Existing parking/paved areas to be removed/ demolished All utility pipe types, sizes, and lengths All existing easements with bearings and distances Existing features to be removed/ demolished such as walls, curbing, landscaping trees, walks, fences, trees over 12" caliper, lighting, signs, etc. Wetlands, floodplain, water protection district delineation including offsets and buffer zones Hay bales or hay bale/silt fence combination Anti-tracking area at all construction entrances Protect existing and proposed drainage structures with hay bales and or silt sacks Delineate all stockpile areas Provide safety fencing around stockpiles over 10' in height or otherwise restrict site access All erosion control measures shall be in place prior to demolition. Erosion Control shall conform to the US EPA, MA DEP, City of Springfield Conservation Commission and/ or City of Springfield Stormwater BMP requirements

6. <u>Construction/Layout Plan (show appropriate information form Existing</u> <u>Condition Plan</u>)

Proposed Buildings and Structures

- Area of building or additions
- Number of stories
- Principal use
- Setback dimensions from property lines

Proposed Topography including but not limited to proposed contours at 2' intervals (1'contours or additional spot grades if site is flat) Proposed parking lots, sidewalks, islands, etc Parking lot setbacks to property line Parking lot grades shall not exceed 5% or be less than 0.5% Parking spaces (delineated and dimensioned) Handicap parking Handicap access Wheelchair ramps Sidewalks Pavement type(s) Curb / berm type (s) and limits Granite curb at entrance to layout line Lighted Signs Proposed Sign Schedule Pavement markings Loading areas Walls Fences Landscape areas Dumpster(s) Critical dimensions including aisle widths, parking stall dimensions, curb radius etc... Grading at entrances -show spot grades if required Emergency Vehicle Access (WB-50 unless otherwise approved by City Engineer)

Truck Access (WB-50 unless otherwise approved by City Engineer) Snow Storage Area

Construction notes including the following:

- Contact DPW for review and approval of any modifications of the approved site plans prior to the work being performed.
- Contact SWSC for review and approval of any modifications of the approved site plans prior to the work being performed.
- Any work and material within the city right-of-way shall conform to the City of Springfield requirements
- The contractor must obtain DPW Street Opening & Trench Permits before construction.

All handicap parking, ramps, and access shall conform to ADA requirements

All perimeter erosion control measures shall be in place prior to construction. Erosion Control shall conform to the US EPA, MA DEP, City of Springfield Conservation Commission and/ or City of Springfield Stormwater BMP requirements All pavement markings and signs shall conform to MUTCD requirements

7. <u>Grading and Drainage Plan (show appropriate information from Existing</u> <u>Condition and Construction/ Layout Plan)</u>

Existing and proposed site grading/ topography-Contours at 2' intervals (1'contours or additional spot grades if site is flat)

Proposed parking lots, sidewalks, islands, etc

Parking lot grades shall not exceed 5% or be less than 1.0 %

Floor elevations

Door locations

Proposed drainage infrastructure plan including but not limited to piping, infiltration/ retention / detention structures, drain manholes, headwalls, roof recharge systems, flow direction, etc

Detention basin section showing bottom elevation, invert elevations, 100-year storm event elevation, 1' freeboard, top of basin elevation, outlet structure elevations, etc... Re-development of existing sites shall include the complete separation of sewer and drainage flows to the sewer main. In combined sewer areas, the separate drainage and sewer connections shall connect to the combined main in anticipation of future the mains in the street

Adequate information off site to verify proposed drain connections

Drainage system profiles including rim and invert elevations, material, types, sizes, lengths, utility crossings and slopes

Utility easements with bearings and distances suitable for registry filing Delineate all stockpile areas

Provide safety fencing around stockpiles over 10' in height or otherwise restrict site access

Construction notes including the following:

- Contact DPW for review and approval of any modifications of the approved site plans prior to the work being performed.
- Contact SWSC for review and approval of any modifications of the approved site plans prior to the work being performed.
- Any work and material within the city right-of-way shall conform to the City of Springfield / SWSC requirements
- The contractor must obtain DPW Street Opening & Trench Permits before construction
- All water, sewer, drain and pavement material and construction shall conform to the City of Springfield / SWSC requirements
- All water and sewer construction shall be inspected by the SWSC before being backfilled
- The City of Springfield / SWSC shall be notified at least 24 hours prior to the required inspections

8. <u>Utility Plan (show appropriate information from Existing Conditions and</u> <u>Construction Plan)</u>

All proposed utilities including but not limited to Water, Sewer, Drainage, Electric, Telephone, Cable, TV, Gas, Lighting, Septic Systems, Detention/ Retention/ Infiltration Structures, etc Building finish floor elevation Invert elevations at utility exits from building Adequate utility information outside the site to verify proposed utility connections All utility pipe types, sizes, lengths and slopes All utility structure information including rim and invert elevations Proposed Water & Sewer installations shall conform to SWSC and MA DEP rules & regulations All water services, hydrants, gates, shutoffs, tees Utilities shall be underground if possible All transformer locations Required utility easements with bearings and distances suitable for registry filing Sewer profile showing all utility crossings

Construction notes including the following:

- Any work and material within the city right-of-way shall conform to the City of Springfield / SWSC requirements
- The contractor must obtain DPW Street Opening & Trench Permits before construction
- All water, sewer, drain and pavement material and construction shall conform to the City of Springfield / SWSC requirements
- All water and sewer construction shall be inspected by the City of Springfield before being backfilled
- Contact DPW for review and approval of any modifications of the approved site plans prior to the work being performed.
- Contact SWSC for review and approval of any modifications of the approved site plans prior to the work being performed. The City of Springfield / SWSC shall be notified at least 24 hours prior to the required inspections

9. Landscape Plan – NA

10.

10. Lighting/ Illumination Plan - NA

11. Detail Sheets (typical details)

Pavement / Sidewalk/ Curb/ Berm/ Driveway Section Detail Wheelchair Ramp Detail **Concrete Pad Detail** Catch Basin Detail Drainage Manhole Detail Sewer Manhole Detail Water/Sewer/ Drain Trench Details-hydrants/ valves/ services/ thrust blocks/joint restraints/ etc Water/Sewer/ Drain Details Stormwater BMPs Detention Basin Outlet Structure Control Detail Infiltration Facility Outlet Structure Control Detail Miscellaneous Detention Basin Details Anti Seepage Collar Detail Flared End Detail **Rip Rap Detail** Hay bale/Silt Fence/ Catch Basin Silt Barrier Detail Light Pole Foundation and Conduit Detail **Retaining Wall Details** Traffic & Safety Details Sign Details Fence Detail **Trench Detail** Flowable Fill Trench **Pavement Marking Details**