

**GREEN INTERNATIONAL AFFILIATES, INC.**

100 AMES POND DRIVE, SUITE 200 TEWKSBURY, MA 01876

T: (978) 923-0400 | WWW.GREENINTL.COM

PROJECT NAME 234 TAYLOR ST PEER REVIEW

DATE 11/3/2023

UPDATED:

PROJECT NO. 22015.1606

Peer Review Comment Form

NO.	SHEET NO.	SECTION	GREEN'S COMMENT	Applicant's RESPONSE	CONFIRMED BY	DATE
APPLICATION						
1	7	Special Permit Application Submission Requirements	Existing sewer, gas, and underground electric/telecom are not provided on the plans. The plans should show all existing utilities. Please confirm all existing utilities are included in the existing plan.			
2	7	Special Permit Application Submission Requirements	In the application the summary table is checked indicating all of the information has been provided. The summary table on the plans is missing gross floor area, density, trip generation and open space. Please provide this information or state why this has been omitted from the summary table.			
3	8	Special Permit Application Submission Requirements	Exterior Lighting Plan is checked but not provided. Please clarify.			
SITE PLAN						
4	General Comment	§38-16.C.2.	The plan set does not have a legend. Please provide a legend.			
5	2 Existing Conditions and Demolition Plan		The facility with inspection ports to the east of the building is not labeled. Please clarify if this is a sewer facility.			
6	2 Existing Conditions and Demolition Plan	§38-16.C.7.	Temporary stockpile location is not shown on the plans. Please provide.			
7	2 Existing Conditions and Demolition Plan		Please clarify which erosion control barrier is being used. The plan calls for erosion control barrier but there are details shown for both silt fence and straw wattles. The callout in the plan should match the detail name for consistency. Please revise.			
8	2 Existing Conditions and Demolition Plan	§38-16.C.5.	The plans should have a delineation and number of square feet of the land area to be disturbed. Please revise.			
9	2 Existing Conditions and Demolition Plan		The existing parking layout is not shown. Please show for clarity.			
10	2 Existing Conditions and Demolition Plan	§38-17.C.4.	There is an existing outfall on the south side of the existing building not shown on plans, but observed in field check. Please show all existing drainage outfalls and connections.			
11	2 Existing Conditions and Demolition Plan		There is an existing catch basin in the northwest corner of the site. This appears to have a large pipe entering it from the building then discharging to a catch basin within the property to the north of the site. The pipe size and inverts should be added to the plans. Is this pipe active? Is there an easement or an agreement between the two properties to allow the site to discharge to the neighboring site? How is this maintained?			
12	2 Existing Conditions and Demolition Plan/Site Plan		The silt fence appears to not wrap around the assumed septic system area. There are no proposed sewer lines shown on the plans. Please confirm there will be no new sewer lines and no construction disturbance in this area.			
13	3 Layout and Material Plan		It is very difficult to tell what is new and what is existing. There are dark bold lines that appear to be existing and remain existing but are bold as if they are proposed or replaced. For example the water lines appear to be proposed based on line color and thickness but they are in the same location as existing. It is unclear if these are being replaced. Please revise the plans to clearly show all of the proposed work.			
14	3 Layout and Material Plan		The plan is missing callouts to locate where the details are being used. Please add callouts to the plan to identify where the details are being used such as bituminous conc. sidewalk, cape cod berm, concrete walk and pads, typical site signs etc..			
15	3 Layout and Material Plan	ADA	Grading elevations for the handicap spaces, curb cuts and ramps are not shown on the plans. An accessible route to the entrance should be provided for all handicap parking spaces. Please revise.			
16	3 Layout and Material Plan	ADA	The accessible parking spaces detail does not resemble the accessible parking shown on the plans. The plans do not have a ramp for the access aisle and the three accessible spaces are not next to each other. Please revise detail to be site specific.			

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17	3 Layout and Material Plan	ADA	There are no details or callouts for detectable warning panels. Will the walkway leading to the parking lot have a detectable warning panel? Will the walkway crossing the driveway have detectable warning panels?			
18	3 Layout and Material Plan		It appears there are two new dumpster locations across from each other. These are right next to new parking that is not protected. Has an autoturn analysis been done for the dump truck to confirm the turning movements will work and not intrude on the parking spaces next to the dumpsters? Will the same dump truck pick up both dumpsters?			
19	3 Layout and Material Plan		It appears there are two new dumpster locations but the detail appears to only be applicable to one of the two based on the shape. Will both dumpsters have enclosures?			
20	3 Layout and Material Plan		The front parking lot has a dimension of 21' width for the roadway at the entrance. Two way traffic should have min of 24' width roadway. Also, the entrance is off-centered from the driving aisle between the parking. Please revise to have the entrance centered and provide a 24' min roadway width.			
21	4 Site Plan		The proposed and existing contours labels are not clearly shown and the existing contours should be shown grey. It seems like proposed contour 349 does not tie into existing contour 349. Please clarify.			
22	4 Site Plan		Snow storage locations should be identified on the plans. Please revise.			
23	4 Site Plan		The new tree line is not shown on the site plan. Please provide.			
24	4 Site Plan		There are four pipes connected to the OCS on one half of the structure and the OCS structure is only 4' inside diameter. Please confirm the size of the OCS and pipe angles to make sure it is constructable.			
25	4 Site Plan	§38-17.C.2.	The site plan doesn't have a scale bar. Please provide scale bar.			
26	4 Site Plan		The OCS is shown right next to the stormwater infiltration system, there should be a pipe shown connecting the two structures. Please revise.			
27	4 Site Plan		Are the RD lines surrounding the proposed building underground or are they above ground (roof gutter)? If they are underground, consider providing cleanouts at the bends.			
28	4 Site Plan		The callout for the water quality unit mentions CB2. Is there a CB1? The invert mentions 12" IN indicating it is an inlet pipe but the plan indicates it is an outlet pipe. Please revise.			
29	4 Site Plan		The stormwater report mentions that the WQU has a grate but the detail doesn't note it. Please label grated inlet cover in the WQU detail.			
30	4 Site Plan		The OCS structure is the inlet and outlet for the stormwater infiltration system. Consider providing a separate structure for the inlet, preferably on the opposite side of the stormwater infiltration system.			
31	4 Site Plan		The OCS detail should have a plan view detail to show the orientation of the weir with respect to the incoming and outgoing pipes. Please revise.			

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32	4 Site Plan		The OCS detail should have a detail for the weir. Are the 4"x6" and 4" x4" orifices side by side on the weir?			
33	4 Site Plan		The inspection ports for the recharge area/cultec system are not labeled on the plan. Please include location of inspection ports for maintenance.			
34	4 Site Plan		Hydrants are not provided. Please confirm this is acceptable with the Littleton Water and Fire department.			
35	4 Site Plan		There are no water services shown for the proposed building. Please confirm there are no additional water services for the proposed building.			
36	4 Site Plan		Please specify materials for drainage pipes connecting WQU to OCS and Roof leaders to OCS.			
37	4 Site Plan		The cultec chamber system has a dimension for the chamber size and it is noted that it varies. Please clarify why the chamber varies, it appears only one chamber size is being used.			
38	4 Site Plan		The cultec chamber system detail indicates 9 chambers by 5 rows but the plans indicate 4 x 12. Please revise amount of chambers and overall size to be consistent between the plans, detail, and HydroCAD calcs.			
ZONING BYLAWS						
39		§173-18.C.	The proposed work requires major topographic changes and removal of existing trees . We defer to the board if there are any issues with the tree removal proposed.			
40		§173-18.D.	Adequate access to each structure for fire and service equipment shall be provided. Confirm this has been reviewed and coordinated with the Littleton Fire Department.			
41		§173-32.B.	The project narrative mentions there are total 44 parking spaces plus 30 leased parking spaces for 90 employees over two shifts. It is unclear how many employees work in the largest shift. So, the requirement of one space per 1.25 employees on the largest shift couldn't be verified. Also, the plan set mentions total proposed spaces is 67 which doesn't match with the narrative of 74 spaces. Please clarify.			
Aquifer and Water Resource District Special Permit						
42		§ 173-63.E	Monitoring wells shall be constructed onsite; a monitoring schedule will be determined by the Planning Board in consultation with the Littleton Water Department. We recommend that the number and location of these monitoring wells be coordinated with the Town of Littleton Water Department.			
STORMWATER REPORT						
43		§38-17.B	The stormwater shall be designed to meet Massachusetts Stormwater Management Standards. The report does not go through each standard stating how the standard has been met. Please explain how each standard has been met with supporting calculations.			
44	Pre and Post Development Drainage Plan	§38-17.C.2.	The pre development drainage plan doesn't have a north arrow and scale bar. Please revise.			

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45	Peak Rate table		The peak rate table for existing conditions shows 1.62 cfs for 2-year storm, 3.74 for 10-year storm, 5.53 for 25-year storm and 8.57 cfs for 100-year storm but the HydroCAD model shows 1.81, 4.27, 5.95 and 8.63 cfs for subcatchment 5S for respective storms. Please clarify.			
46	Peak Rate table		The peak rate table only summarizes one discharge point. The HydroCAD calcs and watershed plans indicate 5 discharge points. All discharge points should be summarized in the table to confirm no increase in peak rates. Please provide.			
47	Pre and Post Development Watershed Plan	§38-17.C.6.	The Applicant is required to add the existing and proposed ground surfaces with runoff coefficient for each on a site plan. Please revise.			
48	Pre Development Watershed Plan		The predevelopment watershed plan appears to have proposed features. Please revise to show no proposed features in the predevelopment watershed plan.			
49			Water quality flow calculations for sizing for the CDS unit were not provided. Please provide back up calculations to confirm the model is correctly sized.			
50	HydroCAD		The summary of areas for 2S: EXCB of the existing watershed plan is the same as 20:EXCB-1 of the proposed watershed plan in HydroCAD. But, there are improvements within this proposed watershed area such as an increase in impervious area along the north edge parking area, there is a new sidewalk along the eastern portion of the site, and the watershed boundaries are different due to the new proposed building. Please revise the areas in HydroCAD to align with what is being shown on the plans.			
51	HydroCAD		On recent past projects the Conservation Commission requested the use of NOAA Atlas 14 rainfall data. The Applicant states that NOAA TP-40 rainfall data is being used in the narrative. Even though this project is not subject to Conservation Commission review, we recommend using NOAA Atlas 14 rainfall data to provide more accurate results.			
52	HydroCAD		The narrative states that the site has C soils, the recharge calculations are calculated based on C soils, and the HydroCAD land cover is using C soils. But, the HydroCAD model for the cultec system has an exfiltration rate for B soils. Please clarify.			
53	HydroCAD		The plans call for a 4"x4" orifice at elevation 345.5 but the HydroCAD calcs indicate the invert is 345.4. Please revise to have consistent inverts.			
54	HydroCAD		The HydroCAD model has a 12" vertical orifice/grate routed to the 4"x6" orifice. It is unclear what this orifice is. The plans notes this as "chambers". Is this the pipe connection between the OCS and the chambers? If so, this pipe should not be modeled because it is not actually functioning the way it is modeled. Please clarify and revise.			
55	HydroCAD		Minimum Tc is not 6 minutes. Please revise minimum Tc to be 6 minutes.			
O&M Plan						
56	O&M		Stormwater Management System Owner and Party Responsible for Maintenance note "Property Owner". The name of the property owner should be listed. Please revise.			
57	O&M	§38-18.B.3	The O&M plan shall include the signature(s) of the owner(s).			
58	O&M/LTPPP	§38-18.B.2	The O&M plan should include maintenance of pipes, outfalls, flared end sections, and the outlet control structure.			
59	O&M/LTPPP		Site specific BMP Maintenance plan reference MA stormwater handbook and manufacturer's specifications. These maintenance documents should be provided in the O&M plan. The schedule of inspections and maintenance should be listed in the O&M plan. Please include maintenance requirements for stormwater recharge system and water quality unit. Please revise.			