



March 9, 2023

Jason Garnham, Director of Planning and Development  
Town of Kittery  
200 Rogers Rd.  
Kittery, ME 03904

**RE: Town of Kittery, Planning Board Services  
35 Badgers Island West Site Plan and Drainage Analysis  
Tax Map 1, Lot 38  
CMA #591.153**

Dear Adam:

CMA Engineers has received the following information for Assignment #153, review of site plan and drainage analysis for a minor subdivision at 35 Badgers Island West.

- 1) February 9, 2023 planning board meeting packet with plans and associated documentation.

The proposed minor subdivision is located at 39 Badgers Island West, Tax Map 1, Lot 38 in the Mixed-Use Badgers Island Zoning District (MU-BI) and the Shoreland Overlay Zone (OZ-SL-250'). The application has been prepared by Ambit Engineering, Inc. of Portsmouth, NH on behalf of Otter Creek Homes. The Owner of the lot is BIW Group LLC.

The project is proposed as four residential, single family, detached condominiums with 3-bedrooms and 2.5 baths. Access is from Badgers Island West. The development is located on a 0.48-acre lot. 49% of the lot is proposed to remain undeveloped. Water supply is proposed off a Kittery Water District (KWD) main from Badgers Island West to the south and wastewater disposal is proposed off a Town sewer main also from Badgers Island West to the south.

We have the following comments that relate to the plans:

Condominium Site Plan

1. The legend should be updated to apply to the plan.
2. The certification items B and C do not appear to apply.
3. Note 8 should be amended to read Kittery Water District and Kittery Sewer Services.
4. There are undefined sharded and brick areas at each unit that should be called out.
5. Note 9 references landscaping, should landscaping elements be defined/called out?

Sheet C1 – Existing Conditions Plan

1. SMH 217 is not shown on the plan. It should be removed from the sewer structure table.
2. CB 159 should be labelled.
3. For the existing CB north of the project, disrepair is one word (no hyphen).
4. The sewer pipes materials, PVC, should be labeled next to the pipe size on the plan.

5. The water main material should be labelled on the plan.
6. Are the features steps, bulkhead, ramp, concrete pad, etc. still on the site or have they been removed?
7. If the existing building has been removed, should it be shown on the plan?
8. The concrete pad multileader at the south of the former building is only pointing to one pad.
9. The existing water service size and material should be shown.
10. The existing sewer service size, material and location should be shown.
11. Note 10 should include the dimensions provided in addition to the requirements.

#### Sheet C2 – Shoreland Development Plan

1. The landscape schedule quantities may not coincide with the number of species shown on the plan.
2. The landscape species 1 and 4 have the same symbol and are not clearly labeled on the plan. These should be different symbols and clearly labeled.
3. “Conveyence” is spelled incorrectly.
4. There is a TBM to the southwest of proposed building D that is “set in 12 pine) but no pine is shown.
5. The tree to the northwest of the site should be labeled as “to remain”.

#### Sheet C3 – Utility Plan

1. The sewer service size and type should be indicated.
2. The water service and sprinkler service materials should be indicated.
3. The sewer on site shows an external drop outside of the manhole near where the service ties into the existing main. Has Kittery sewer services approved an external drop? Alternatively should the drop be located in SMH A or another manhole be placed for the drop?
4. Details of the demo of the existing water service should be specified after coordination with Kittery Water District.
5. Curb stops should be shown on the plan.
6. Sewer service cleanouts should be shown on the plan.
7. The symbol HP should be defined.
8. Where does the electric go underground? It is not clear on the plan. Electrical details should be coordinated with CMP.

#### Sheet C4 – Grading Plan

1. The limits of the construction entrance should be shown on the plan.

#### Sheet C5 – Demolition Plan

1. Should the sheet be printed partially in color or all black and white?

#### Sheet D2 –Details

1. Water service connection details should be approved by KWD.
2. Detail G does not apply to this project and should be removed.

Sheet D3 – Details

1. Sewer chimney and sewer service connections should be approved by KSS.
2. A sewer manhole detail should be provided.

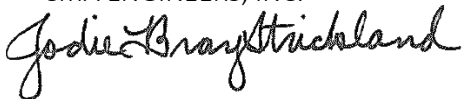
We have the following comments on the drainage analysis:

1. The downstream analysis point DP2 catch basin should be shown on the plans (inverts, pipe sizes, rim elevation, etc.).
2. While flows are decreased, the drainage analysis does not model the capacity of the existing catch basins or pipes to prove that there is current capacity.
3. The Inspection & Long-Term Maintenance Plan should indicate that reports should be submitted to Code Enforcement Officer by the required date.
4. All stormwater generated on site is transported to the existing off-site closed drainage system and relies on maintenance of that system to be performed by others. Are provisions made for failure of the system? Has the applicant considered on-site drainage features to treat and reduce flows further (infiltration features, sedimentation basins, etc.)?
5. The source of the rainfall event amounts should be included.

Should you have any questions, please do not hesitate to call.

Very truly yours,

CMA ENGINEERS, INC.



Jodie Bray Strickland, P.E.  
Project Manager

cc: John Chagnon, P.E., Ambit Engineering