From:	Jeremy Prue
To:	Jennifer Curtis
Cc:	Nicole Briand
Subject:	RE: Town Application for Parking Expansion
Date:	Monday, November 7, 2022 4:54:48 PM
Attachments:	image001.png 21014 Town Office Parking Expansion Plans.pdf

Hi Jenn,
Please see the attached PDF for the revised plan set for the 11/17 Planning Board meeting, as requested.

Please see my responses to the 10/27 Planning Board meeting comments below in red.

Thank you,

Jeremy Prue, P.E.
Project Manager

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From: Jennifer Curtis <planning@bowdoinham.com>
Sent: Friday, October 28, 2022 12:03 PM
To: Nicole Briand <nbriand@bowdoinham.com>; Jeremy Prue <jrprue@pte-maine.com>
Subject: Town Application for Parking Expansion

Good morning,

The Planning Board found the application complete last night, and would like to schedule a public hearing for their next meeting on November 17th, or whenever the applicant would like to come back. (Please let me know if I should schedule the public hearing on the 17th – I'd need to get notices out pretty soon).

They had a few comments on their concerns about the stormwater management meeting the performance standards (from the draft minutes):

> The Board expressed concerns about the stormwater flow and its potential impacts on downstream neighboring properties. They noted that the Engineering Consultant stated that sheet flow would flow northeast.

The plan set has been revised to address these concerns, and stormwater sheet flow arrows have been added to indicate the flow of stormwater runoff across the proposed development. The plan revisions include:

- **The slope that will be receiving the majority of the stormwater runoff from the parking lot and carrying that to the infiltration basin has been re-designed to be very gradual (approximately 4% or 25:1).**
- **Along the top of the proposed slope, we have proposed the planting of 16 evergreen shrubs with Erosion Control Mix (ECM) spread at the surface to mitigate erosion.**
- **A 4'x16' infiltration basin has been proposed at the bottom of this slope to retain stormwater runoff on-site and allow infiltration into the ground.**

Both a vegetated buffer and an infiltration basin are accepted Best Management Practices (BMPs) for treating stormwater by MaineDEP.

Ms. Krueger would like more assurance that sheet flowing water off a steep hill towards other people's properties won't create any issues with erosion on the town property or adjacent property to the north. She would like to see something at the edge of the parking lot to slow down the flow of stormwater, to ensure that it doesn't cause damage to adjacent property.

As described above, the Grading Plan has been revised to show the direction of sheet flow across the proposed development and the grading has been revised to direct runoff to a gradual, vegetated slope, and then to an infiltration basin. Additionally, a row of evergreen shrubs has been proposed along the top of the slope for the length of the parking lot to mitigate erosion on the proposed slope. Both the vegetated slope and the infiltration basin will mitigate erosion, reducing runoff velocity, and increasing the retention time on site. The infiltration basin will retain stormwater runoff, treat the runoff by filtering through stone, and infiltrate that stormwater into the ground. Therefore, the Applicant does not foresee any erosion damage to adjacent properties.

The Board was concerned that there is a 1' change in grade in approximately 10', which seemed steep.

The Grading Plan has been revised to make the proposed slopes more gradual than previously proposed.

The Board is concerned that the grading would create rivulets and erosion at the north side of the new parking area.

The majority of the stormwater will sheet flow to the lower right hand corner of the parking lot (elevation 103.19), and sheet flow down a gradual, vegetated slope to an infiltration basin. A minority of the stormwater will sheet flow to the north of the parking lot where there is a gradual 2% grassed area and a row of evergreen shrubs with erosion control mix spread at the surface to mitigate erosion from the proposed development. The stormwater from the proposed development is designed to infiltrate on site via the proposed infiltration basin

and the existing forested buffer.

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