From: Shelly Lizotte
To: Janine Murchison

Cc: Penny Thompson; Ellen Angel
Subject: RE: PD Site design

**Date:** Thursday, February 27, 2025 10:14:45 AM

Attachments: image001.png

Thank you for your quick response.

Good to know that you have access to acceptable gravel materials. It's been frustrating to see gradations on what the suppliers are calling type "D" meeting the specs but still having large stones – much bigger than the 4" screen.

Rob wasn't worried about the fencing of the east side of the building, but he did suggest that the portion around the police vehicle parking have some type of screen if it's a chain link, so that it's a visual break. We could add plantings on the outside of this – perhaps. We will fence the generator and the transformer. I'm thinking that based on MEP comments, we may need to change the lower service drive area. I moved the equipment out of the direct path of plowing, but they would really like to get the generator closer to the building to eliminate long runs of expensive power lines.

I think it will be better to have downspouts and gutters for the building. The eave is at least 15' high around the building and that will create a lot of splatter. Still include a crushed stone area around the building, probably 3' wide and in the front, I'd like to put it below grade and into basins. If we do this, we can add a basin or two in the parking area as you suggested, and outlet it all on the far side of the service drive. What are your feelings on doing a type F basin, or a Nyloplast basin in front of the building to catch each downspout, maybe hidden just outside of the stone drip edge but behind some plantings? I'll sketch something and send it through.

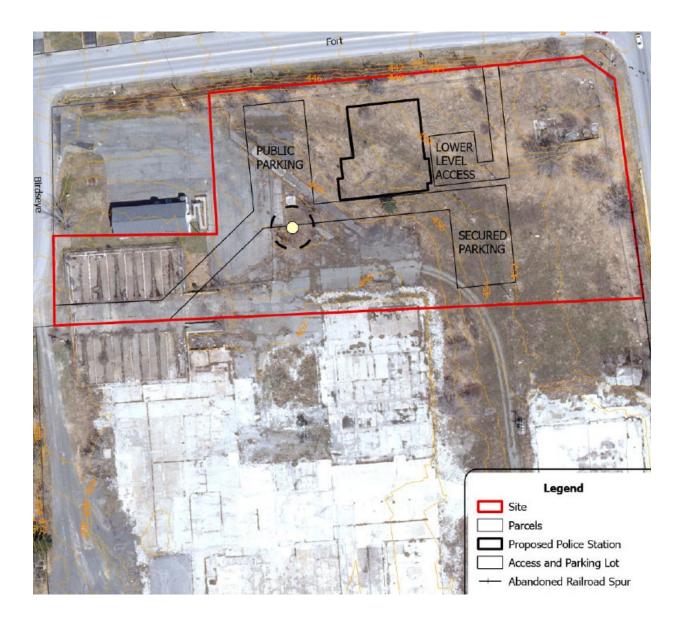
I would like to know definitively if the entrance drive could be considered part of the redevelopment of the lot, rather than come from the Police Department funding.

There's about 450' of road development to City specs and due to the existing utilities – we will have to include at least five utility poles, an 8" water main water main and hydrant and possibly a sidewalk/curbing. It could be up to \$250,000 to construct this possibly more.

Without any curb or basins, we can probably run part of the underdrain back to the catch basin at the end of Birds eye avenue, and the remainder can daylight beyond the end of the road. I need to get the utility district to get the invert of that basin, as the surveyor didn't record it.

I was thinking just one underdrain (type B) on the south side, and to increase the cross slope to 3% on both the subgrade and the surface-similar to what you had sketched. If we were working with a clean/remediated site, I'd just do a deeper ditch on the south side and not even bother with the underdrain. The image below is from the Environmental Media Management Plan done by County Environmental – it used an older site sketch, but you can see the amount of concrete/pavement that remains. Wouldn't it be great if all those old foundations were already gone – at least within the "boundary" of the PD lot. So, if the City would separate the cost of the entrance drive out of the PD project, we could cut back significantly more of the concrete to allow for the full depth ditch along that south side.

Again, appreciate your input! Thanks Shelly



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From: Janine Murchison < Janine. Murchison@sewall.com>

Sent: Wednesday, February 26, 2025 8:19 PM

To: Shelly Lizotte <rlizotte@artifexae.com>; Penny Thompson cariboumaine.org>

Cc: Ellen Angel <eangel@artifexae.com>

Subject: RE: PD Site design

Hi Shelly!

I spoke to Penny this evening so that she knows I am responding to your questions; see below in red. Several of these items will still need committee input and street lighting may need discussions with Versant.

Thanks

lan

## Janine S. Murchison, PE

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From: Shelly Lizotte < rlizotte@artifexae.com> Sent: Wednesday, February 26, 2025 6:34 PM

To: Janine Murchison < <a href="mailto:Janine.Murchison@sewall.com">"> Penny Thompson <a href="mailto:pthompson@cariboumaine.org">pthompson@cariboumaine.org</a>

Cc: Ellen Angel < eangel@artifexae.com>

Subject: PD Site design

Hi Jan, Penny

Here are a few questions/comments to discuss with the committee and some comments on the plan Jan attached. I will have more comments later.

If the entrance drive for the new PD is going to (someday) be a City street, we will need to make sure it meets the City Design standards.

The Residential "Local" road classification seems to fit for this, given the plan for future development of the remaining lot. The table in 13-710 Access Management points out the minimum standards for the City roads. Below is a list of some of those where I need to get clarification from the City.

- Vertical Curbing (it says if required) so I assume that would be a decision outside of the committee, maybe the planning board? Agreed that this may be a question for committee or someone else, but if not doing ditches (as noted below) then suggest installing vertical curb (granite or concrete (as less expensive)) and a storm drain/underdrain with catch basins.
- Sidewalk I had originally included a sidewalk on the north side, the minimum is 5' wide. I removed the sidewalk a few weeks ago after brief discussion. Does the City want a sidewalk here and how far? If a sidewalk is required, then the committee may want to revisit; now would be the time to install. Or, perhaps one could be added to the south side as part of a future development?
- Total of 24" of gravel, 18" / 6". We have been specifying MDOT type B subbase and Type A for base materials. Contractors in our area have told us that the type B is more readily available, and that they prefer it to the type "D", which doesn't always get screened properly and large rocks seem to be more frequent. If this isn't as big of an issue in your area, then we can leave it as type D. I am not familiar with the materials availability in your area. Recommend 18" of Type 'D' and 6" of type 'A'; Type 'D' gravel is readily available and we spec it out all the time.
- We usually spec 4" to 5" of asphalt on heavy duty areas 4" is required for this street classification. Recommend 4" minimum of pavement as well; 2.5" of 19.0mm HMA and 1.5" of 12.5mm HMA. Don't believe the contractors when they tell you that no one is making/using 19.0mm anymore; that is not true as we spec it on all road projects in Maine.

For the parking areas and police access drives we will use our standard section, 18" of gravel and 3 ½" of pavement. We can increase these if you feel it is necessary, but these are old fill areas and may be over excavated anyway with additional gravel backfill so it'll likely be close to type "d" spec anyway. While the parking lot is essentially for the cars and pickups, need to design for the plow truck; however, in effort to keep cost down a bit, agree with recommended min 18" of gravel (12" Type 'D' and 6" Type 'A') but would recommend 4" of pavement (2.5" of

19.0mm HMA and 1.5" of 12.5mm HMA). However, would recommend 24" of gravel for the access road down to the mechanical room, especially due to plow/garbage truck usage and the fact that it is not getting paved (would love to have an additive alternate to pave that, if committee were in favor).

The entrance road will have underdrain instead of a full depth ditch. Agree with this; assuming the road will still be sloped to the south, recommend curbing on both sides and a catch basin or two to collect the underdrain (with a pipe to daylight at east end somewhere); will Type 'C' underdrain be used on the north side and Type 'B' underdrain be used on the south side? Or just Type 'B' underdrain on the south side? Or something else? The south side of the entrance road is lacking a good amount of topography data, and my intention there was to provide just a ditch for surface drainage. There is no reason that we can't make it deeper/wider, but doing so is likely to start getting into more buried remnants and more over-excavation so I chose to draw the limits at just about where the proposed property boundary is. Beyond that area, most of the items will be either full removal, or abandon in place (if there is a significant length as in pipes/drains rebar, etc.) Agreed. Anything that remains will be removed when the City finishes working on the redevelopment plan for the rest of the lot. We could chase these removals over the whole lot but that would be costly for the PD budget. Agreed!

- We will be doing a landscaping plan. I work with Sam Coplon, he's from the Bar Harbor area but does projects all over the state. I will need to give him some guidance on what we want to do with some of these areas. Sam has great reputation; looking forward to seeing what he comes up with. Be aware that Caribou is a zone 3 for most plantings.
- Has there been any thought to what the City wants for a sign for the police department? Should there be something closer to the corner at Birds eye avenue, or should it go in the island between the police vehicle entrance and visitor parking? Committee needs to discuss this one.
- There should also be flagpoles, and there are options for where you want those. Our earlier renderings showed them in the grass area between the sidewalk and the building. Recommend this location (on east side of entry door so does not block any sign on the building?) for easy personnel access to raise/lower/maintain, but committee should have some input on this one, too. They could go somewhere near the sign (if there is one) Or, somewhere on the North side maybe? They will be lit, so will need to have buried electrical which could come from the building or be fed from the street (utility poles). Suggest feeding them from the building on separate circuit; open to any recommendations from your electrical folks as well.
- Does the City want us to provide street lighting on the entrance drive? If so, it should match the typical that is used within the city, and it will be fed from the City grid rather than from the new PD. Good point! This may need to be discussed with Versant (and the committee).
- Preference for location and type of landscaping. We could include a planting/flower area close to Birds eye avenue, to
  add some visual interest to the entrance/drive. This would be a nice addition to a monument type of sign also, maybe
  built into the sign itself like a planter. Should we include any signs or identification on the North side of the lot?
   Committee needs to discuss this one.
- Any thoughts on exterior fixtures? Any benches and/or anything like that? Need committee input.
- Does the City want to remove the fence along Fort Street and not replace it? It can run back into the northwest corner of the building to secure the police parking, but the rest of the frontage there would look much better without the fence. If you want to fence the whole length, it will be going cross slope dropping about 6 feet along that side, so it may be a bit awkward. Maybe some kind of vegetation would be better along that slope to break up the elevation change. (it's a full 19 feet from the street level, up to the finish grade on that side) My first thought is to put the fence back for security purposes (especially at basement mechanical room area); need to ask Chief/committee. Installing the fence on the slope should be ok; may need an extra post or two so it blends in good.
- The heat pump is going to be quite large (about 7 feet tall also) and it will be on the center of the north side of the building. We can provide some screening for that if we do not have the fence.
  - Thanks for clarifying; I could not remember what that 'box' was supposed to be! Fence/plantings to be discussed with committee.

I'm working on ironing out the sewer, water, storm drainage and other utility details with the Utility district as we work through the MEP coordination process.

I will be out Friday but can join the meeting on my phone. Hopefully we can work some of these out via. email so we don't take over the architectural/mechanical decisions that are still being made.

## Thanks Shelly

## Rayshelly Lizotte PE, LEED AP

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