

Herbaugh, Melinda

From: Hogness, Magda
Sent: Friday, April 21, 2017 11:26 AM
To: PRC
Subject: FW: Capacity Analysis in Madison Valley

Please upload to 3020338. Thanks!

From: Horbelt, Cristofer
Sent: Wednesday, April 19, 2017 10:49 AM
To: Hogness, Magda <Magda.Hogness@seattle.gov>
Cc: Ehlers, Sherell <Sherell.Ehlers@seattle.gov>; Lange, Michelle <Michelle.Lange@seattle.gov>; Pederson, Art <Art.Pederson@seattle.gov>; Courtenay, Ede <Ede.Courtenay@seattle.gov>
Subject: FW: Capacity Analysis in Madison Valley

Magda – Art gave me your name regarding the land use proposal at 2925 E Madison St. I'm providing the emails below so you have the communications SPU Drainage and Wastewater LOB has been involved with regarding this proposal.

Please let me know if have any questions. CKH

From: Robin Thaler [<mailto:robin@mayflyeng.com>]
Sent: Wednesday, April 19, 2017 10:37 AM
To: Horbelt, Cristofer <Cristofer.Horbelt@seattle.gov>
Cc: Lange, Michelle <Michelle.Lange@seattle.gov>; Ovbiebo, Tai <Tai.Ovbiebo@seattle.gov>; 'Tony Hacker' <tonyhackerphd@gmail.com>
Subject: RE: Capacity Analysis in Madison Valley

Thank You for the time you put into addressing this. This is very helpful information.

Have a great day.

Robin

Robin McKennon Thaler PE, LEED AP™
Principal Engineer

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From: Horbelt, Cristofer [<mailto:Cristofer.Horbelt@seattle.gov>]
Sent: Wednesday, April 19, 2017 10:31 AM
To: Robin Thaler <robin@mayflyeng.com>
Cc: Lange, Michelle <Michelle.Lange@seattle.gov>; Ovbiebo, Tai <Tai.Ovbiebo@seattle.gov>; 'Tony Hacker' <tonyhackerphd@gmail.com>
Subject: RE: Capacity Analysis in Madison Valley

Hi Robin – I apologize for the delay in responding. I was able to find some additional information from our CSO group that better describe the infrastructure improvements SPU has made in this area subsequent to the Hanukkah Eve storm.

Prior to the Phase 1 & 2 improvements (Washington Park Stormwater Storage Tank and the above ground 30th Ave and E John pond), SPU developed a model to analyze sewer and stormwater flows throughout the Madison Valley area. This was calibrated to a robust set of observed data, including data recorded during the two largest storms on record in Seattle. This provides great confidence that the model is able to accurately predict a wide range of storm flows. The model was then used to design new facilities to control storm flows that used to flow into the sewer system. The new facilities were sized to be able to control flooding on all storms, including the 100-year storm. More specifically, when the Washington Park Stormwater Storage Tank was constructed, a new pipeline was built to divert stormwater away from the sewer system south of East Madison Street to allow that sewer system to flow freely northward during wet weather rather than back up into basements. The stormwater removed is temporarily stored in the Washington Park tank until there is adequate capacity in the sewer system to return those flows for conveyance and treatment. The above ground pond at 30th Ave and E John St provides a similar service to the area sewer further south where it is needed. SPU is currently initiating a project to improve the hydraulic functionality of the Washington Park Stormwater Storage tank which will provide even more relief to the sewer system.

As previously noted however, I need to reiterate that project specific modeling isn't a service SPU provides, even if the neighborhood offers to pay for it.

With respect to groundwater rate; that is based upon the geotechnical engineer's report. The withdrawal rate must be calculated into the total allowable drainage release rate, where in some cases it is not feasible to meet the flow control requirement. For these reasons, we encourage the use of a watertight foundation, or raising the proposed base elevation to be above the groundwater elevation.

CKH

From: Robin Thaler [<mailto:robin@mayflyeng.com>]

Sent: Friday, April 14, 2017 5:02 PM

To: Horbelt, Cristofer <Cristofer.Horbelt@seattle.gov>

Cc: Lange, Michelle <Michelle.Lange@seattle.gov>; Ovbiebo, Tai <Tai.Ovbiebo@seattle.gov>; 'Tony Hacker' <tonyhackerphd@gmail.com>

Subject: RE: Capacity Analysis in Madison Valley

Hello-

Thanks for getting back to me with the additional information. The changes in the existing infrastructure falls into the category of "good to know" but what I am finding is that some in the neighborhood where the tragedy occurred are very sensitive about new development. I think it would go a long way to assuage their fears to see information showing that the sewer infrastructure in their neighborhood shows capacity for the proposed development. I realize project specific modeling isn't a typical service provided. However, if the public want to see a SPU model is there any way they can request it from SPU(and pay for it as applicable)?

Side questions: How is the groundwater rate from the proposed site calculated?

Thanks Again!

Robin

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From: Horbelt, Cristofer [<mailto:Cristofer.Horbelt@seattle.gov>]
Sent: Friday, April 14, 2017 1:57 PM
To: Robin Thaler <robin@mayflyeng.com>
Cc: Lange, Michelle <Michelle.Lange@seattle.gov>; Ovbiebo, Tai <Tai.Ovbiebo@seattle.gov>
Subject: RE: Capacity Analysis in Madison Valley

Hi Robin – Since I deal primarily with private development wastewater and stormwater regulations for the Drainage and Wastewater LOB, your question got routed to me. (I hope 2017 finds you doing well as well).

Project specific modeling isn't a service SPU provides. With respect to your question about the Madison Valley, SPUs recent projects provided approximately 1.7MG of stormwater storage at 30th & John St (phase 1) and a 1.3MG Tank and 0.9MG above-ground storage in Washington Park (phase 2). The phase 1 and 2 projects rerouted flows from a portion of the upstream basin directly into Washington Park and additional inlets have been added in the E Madison St sag.

The sewer card permit history isn't good for the existing development, but based upon the records available and the date of construction, 1959 according to the King County Assessor's webpage, it's not likely that there is any existing stormwater mitigation in place on the project property. The proposed project will be required to provide their own stormwater detention (peak control, 0.4cfs/acre) for the total drainage discharge (stormwater + groundwater) as well as comply with the requirements for on-site stormwater management.

I hope you find this information useful. CKH

From: Robin Thaler [<mailto:robin@mayflyeng.com>]
Sent: Thursday, April 06, 2017 1:10 PM
To: SPU_DSO <SPU_DSO@seattle.gov>
Cc: 'Tony Hacker' <tonyhackerphd@gmail.com>; 'Sarah Trethewey' <sarahbtrethewey@gmail.com>
Subject: FW: Capacity Analysis in Madison Valley

Hello-

I am consulting for a community group that would like a capacity analysis for the project noted below. Will you please let me know what the process is for requesting this?

Thanks!

Robin

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From: Robin Thaler [<mailto:robin@mayflyeng.com>]
Sent: Thursday, April 06, 2017 11:14 AM
To: 'Ovbiebo, Tai' <Tai.Ovbiebo@seattle.gov>
Cc: 'Tony Hacker' <tonyhackerphd@gmail.com>; 'Sarah Trethewey' <sarahbtrethewey@gmail.com>
Subject: Capacity Analysis in Madison Valley

Hello Tai-

I hope 2017 is finding you well. I'm doing some consulting work for a community group in Madison Valley. They live in the neighborhood where a neighbor, Kate Fleming, passed in the Hanukkah storm of 2006. I know that since that storm there have been improvements constructed by SPU both in the vicinity of 30th Ave East and East John Street, as well as in the arboretum north of East Madison Street. The community group is concerned that the addition of a new development, at 2925 East Madison Street, will add additional surface and ground water to an already overtaxed sewer system. What would be involved in requesting a capacity analysis of the system that the new development will be connecting in to?

Thanks!

Robin

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Principal Engineer

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