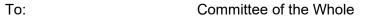
Memo



From: **DMAF Program**

Date: 2021-11-08

Subject: DMAF Update Report, November 2021

Purpose

To provide Mayor and Council with a high-level overview of the current status of the DMAF Program.

Background

1. Stakeholder and Rightsholder Engagement

Program staff continue to connect regularly with impacted or concerned residents of Grand Forks through emails, letters, phone calls and meetings. Two public engagement sessions were held in late August, where residents and business owners could connect with staff and learn more about the proposed work. Work Package 1 (WP1), downtown, will directly impact eight occupied properties along the dike alignment. Upon receipt of the detailed design for the downtown dike, staff intend to engage with residents and business owners of these properties individually to present the design, answer questions, and discuss concerns.

Formal First Nations consultation is ongoing through the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD). Consultation with First Nations forms part of permitting application processes under the Water Sustainability Act (WSA), Heritage Conservation Act (HCA), Land Act for occupation of crown land, and Dike Maintenance Act (DMA). The Ministry recently advised our engineering consultant, who has applied for permits under these acts on our behalf, that the consultation process for First Nations has been extended by 30 days due to COVID-19.

Program staff continue to conduct informal consultation with First Nations, in particular with the Osoyoos Indian Band (OIB). Other First Nations with claims in the area have deferred to the OIB for all aspects of the work, except for Splatsin who have asked to be consulted only on archaeological matters. Staff reached out to Splatsin recently to offer support for their review of the Site Alteration Permit (SAP) for WP1. We intend to connect with them regarding the program more broadly in the coming weeks.

Program staff and our engineering consultant, Associated Engineering (AE), have had two productive 90-minute meetings with Rockwool lately. Another is scheduled for Nov 18th. The goal has been to develop a compromise solution to the dike alignment east of Rockwool that a) meets all of Rockwool's operational constraints, and b) is achievable within the program's budget. The current concept is a set-back earth embankment dike wherever possible, with a narrower sheet pile wall in areas with limited space or where Rockwool has proposed installing new buildings. Rockwool has advised that once this hybrid solution is drafted, it will need to be approved by senior management at corporate headquarters in Denmark. Program staff and Rockwool management in Grand Forks have agreed that completing the Rockwool dike, segment 'c' of Work Package 2 (WP2), prior to Freshet 2022 is no longer achievable.

Program staff also presented the draft detailed design for WP2 to Interfor management recently, accompanied by Associated Engineering. Interfor's comments were incorporated into the final detailed design and their ideas regarding access and laydown space will be used to streamline construction. Program staff are working on a new Statutory Right of Way for the dike on Interfor's property.

2. Program Financing and Budget

A meeting was held with Parliamentary Secretary Jennifer Rice and Boundary-Similkameen MLA Roly Russell on August 19th where the City thanked the province for the funding and provided feedback on the process. To date, the City has received \$23.2 million of the \$31.7 million committed by the province.

Program staff submitted two claims to Infrastructure Canada's DMAF office in July for funding committed by the federal government. Staff continue to engage with DMAF analysts and management to adjust these claims to meet their expectations and the requirements of the collective agreement. A third claim for reimbursement is under development.

The majority of the estimates reflected in the current FMP Budget remain based off of the schematic design and have not changed lately. With the recent completion of WP 2 Segments a&b detailed design, and with WP1 detailed design soon to be completed, these numbers will be revised shortly to reflect more accurate construction estimates. The true test of the program's budget will come when the construction management contractors are hired for WPs 1 and 2 and begin compiling cost estimates from subtrades.

3. Land Acquisition Program (LAP)

The Land Acquisition Program is winding down with 71 of 74 single family residences now acquired, in addition to the twenty vacant parcels, the manufactured home park and one rural property. Three properties are undergoing expropriation proceedings. These are:

- 1. 6956 4th Street,
- 2. 6902 1st Street, and
- 3. 7186 Riverside Drive

4. Flood Mitigation Program (FMP)

a. Permitting

The primary permit application for WP1 was submitted to the Deputy Inspector of Dikes (DIOD) under the DMA on August 5th, 2021. Program staff had a placeholder of 90 days for the permitting process in the schedule, which would have meant receiving approval on Nov 2nd. However, detailed design drawings for WP1 were not submitted to the DIOD until the end of October for review. In addition, the Ministry has advised that First Nations consultation processes have been extended by 30 days due to COVID 19. Staff are now forecasting early December for receipt of WP1 permits.

The same 90-day window was used for the permitting process in the WP2 a&b schedule, and the primary permit application was submitted to the DIOD on October 20th. In the case of WP2 a&b, detailed design was complete prior to submission of the permit application. This may expedite the approval process; however, the extended First Nations consultation period will also apply. Staff are forecasting receipt of WP2 a&b permits by mid-January.

Program staff continue to provide support to Associated Engineering with the permitting application process. This has included meeting with regulators with the Department of Fisheries and Oceans (DFO) and FLNRORD to discuss the process and streamline it wherever possible. Staff have also been liaising with residents in and around the dike alignment to obtain letters of support required by regulators.

b. Procurement

Associated Engineering was the successful proponent for WP2 detailed design. The contract was awarded to them on August 19th following a three-week tendering and negotiation process, and the contract is now fully executed. Program staff are currently developing procurement documents for the following:

1. An Expression of Interest (EOI) for aggregate supply

- 2. Construction Manager at Risk (CMAR) Requests for Proposals (RFPs) for WPs 1 and 2
- 3. Various smaller Requests for Quotations (RFQs) for the demolition and salvage of houses in the dike alignment

c. Design

With the exception of mechanical and electrical drawings for the two stormwater pump stations, WP1 detailed design was completed at the end of October. Mechanical and electrical drawings are expected mid-November, but are not holding up permit review and or the CMAR RFP process. The design was originally expected to be completed much earlier; however, it was necessary that the Ground Water (GW) and Inflow & Infiltration (I&I) studies be completed beforehand since they informed the final dike, stormwater and sanitary design. Some back and forth with the regulators that involved design changes also extended the process.

WP2 a&b detailed design was finalized on Oct 20th. Draft detailed design for segment c, the Rockwool section, is underway and expected by mid-November. However, final detailed design will need to wait until Rockwool senior management approve the draft concept.

d. Utility Coordination

Utility coordination is a critical issue for program staff and our engineering consultant to manage. There are dozens of locations where utilities cross over or under the proposed dike in both WP1 and WP2. Some of these will remain in place but still require careful planning. Others will be abandoned or removed completely. In many cases, however, crossings need to be rerouted or redesigned to accommodate dike construction. In addition, the majority of utility infrastructure in the North Ruckle neighborhood will be removed and salvaged.

Program staff are working closely with AE to coordinate work with four third party utilities: Fortis BC gas, Fortis BC electric, Telus and Shaw. The redesign of third party utility crossings are of greatest concern since they are not within the City's control. Program staff are also working closely with the City's utility department to coordinate the redesign and/or removal of the City's own infrastructure as required. This includes water, sanitary, power, stormwater, and fibre-optic network.

e. Construction

While dike construction is not expected to begin until the New Year, some preparatory work has been taking place, particularly in North Ruckle. This has included the drilling of geotechnical investigation bore holes, an archeological impact assessment, and site cleanup at some properties. Haz-mat assessments and leachable

lead analyses have also been conducted for high priority homes in the dike alignment that will need to either be moved or demolished in the very near term. The results of these will inform safe work procedures and appropriate material disposal if a home does need to be demolished.

f. Schedule

Simplified schedules for WP1 and WP2 a&b are presented below in Figures 1 and 2. Both still show completion of construction in mid-April with the goal of protecting the downtown and North Ruckle by freshet. It is worth pointing out, however, that there is essentially no float or contingency left in either schedule, and that the two projects need to happen concurrently in order for both to be completed. Nearly all activities are on the critical path of each project, meaning that if the start date or duration of one activity slips, the project end date will too. Another key to maintaining these schedules will be the receipt of permits from FLNRORD, which is largely out of the City's control. If permits for WP2 aren't received by mid-January, that project will likely not be completed on time.

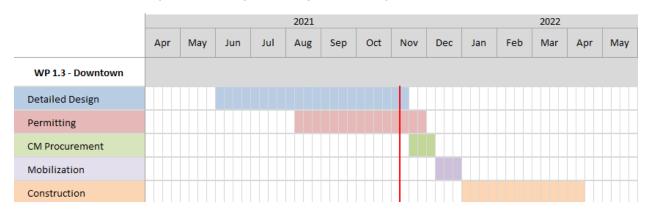


Figure 1 - Work Package 1 Simplified Schedule

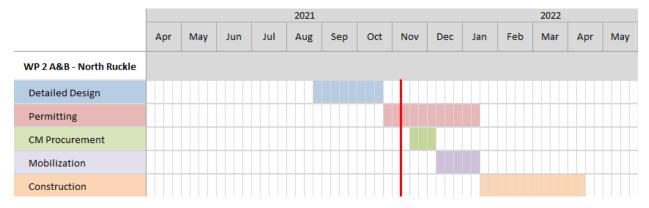


Figure 2 - Work Package 2 (a&b) Simplified Schedule

5. Reinvestment Program (RP)

Separate in some respects from the Land Acquisition and Flood Mitigation Programs is the Reinvestment Program (RP). This program, also under the DMAF umbrella, involves the sale and relocation of houses purchased through the LAP as well as the sale of salvaged building materials from these houses. The program has the potential to generate income which will be reinvested into the DMAF program. It also has the added benefit of reducing landfill and demolition costs which would otherwise come out of the FMP budget. In addition, by arranging for the sale and relocation of houses, the program has the potential to add much needed housing stock to the City of Grand Forks.

In August the City conducted a Reinvestment Program RFP, where the public were provided the opportunity to view and bid on 27 houses in North Ruckle. This program had limited success with only a few outbuildings selling. The City is revisiting the conditions of the RFP and other aspects of the process and intends to conduct a second round of the Reinvestment RFP in the coming months.

Attachments

1. 211108 – DMAF Update Presentation, November 2021