

FLOOD MITIGATION / CAPITAL PROJECTS UPDATE: JANUARY 2025



Settle down.

Version 1.0

2025-01-06

PRESENTATION OUTLINE

- 2024 Flood Mitigation Recap
- South Ruckle (WP3) Status Update
- South Ruckle Permitting Update
- South Ruckle Draft Detailed Design Drawings
- FMP Costs to Date
- FMP Capital Plan
- Updates on other Capital Projects
- 2025 Communication Plan









WP1 - CITY PARK - 2024 CONSTRUCTION







WP1 – STORMWATER SYSTEM – MARCH 7, 2024



WP1 – STORMWATER SYSTEM – 2024 CONSTRUCTION









WP1 – RIVERSIDE DRIVE – 2024 CONSTRUCTION









WP7 – HABITAT CHANNEL – 2024 CONSTRUCTION









WP2C – DOWNSTREAM INDUSTRIAL DIKE – 2024 CONSTRUCTION









WP2C – EFFLUENT OUTFALL – CONSTRUCTION



STATUS UPDATE BY WORK PACKAGE

WP3, South Ruckle Dike and Drainage Network

- A. Draft detailed design received and under review
- B. Comprehensive application documents submitted to Inspector of Dikes office
- C. Working with Interfor and Grand Forks Railway regarding north end dike tie-in
- D. FortisBC working on design for relocating poles on 10th St
- E. Telus completed design for relocating communication lines
- F. Working with operations to locate and/or adjust City owned utilities where needed
- G. Removing trees in construction area
- H. Working with Community Garden to adjust fence and other infrastructure
- I. Communicating with impacted and neighboring property owners

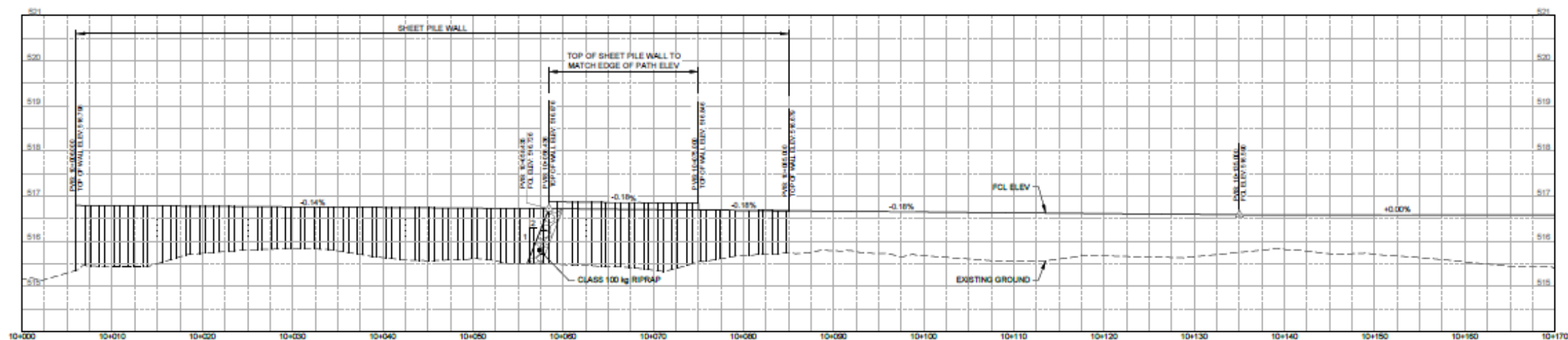
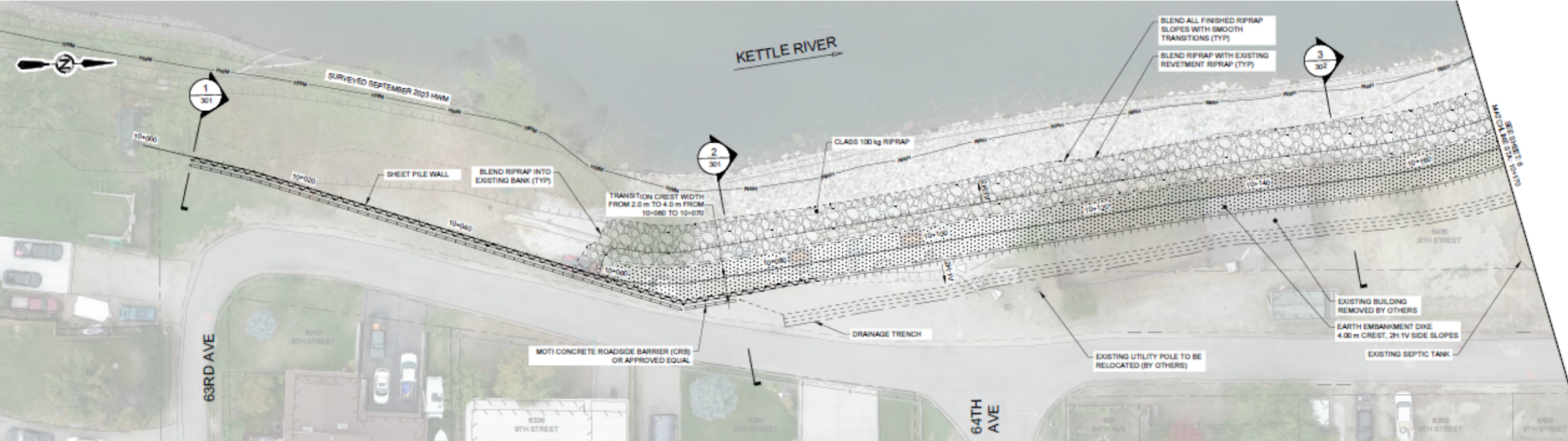
WP3 PERMITTING UPDATE

Permit Name	South Ruckle Dike (North of 63 rd Ave)	South Ruckle Dike (South of 63 rd Ave)
Heritage Inspection Permit (HIP)	In Hand	In Hand
Archeological Impact Assessment (AIA)	Complete	Still required
Site Alteration Permit (SAP)	Confirmed as Not Required	Not Required unless a discovery is made
Dike Maintenance Act Permit (DMA)	Province proceeding with First Nations consultation. Feedback requested by 1/16th	Province proceeding with First Nations Consultation. Comments requested by 1/16th
Letter of Advice (LOA) from Fisheries	Received	On hold pending final design
Fish Act Authorization (FAA)	Not Required	Assumed not required
Fish Collection Permit	Not Required	Assumed not required
Species at Risk Act (SARA) Permit	Covered by LOA	Awaiting LOA. On hold pending final design
Water Sustainability Act (WSA) Permission	S11 not required for dike. S11 notifications may be necessary for discharge structure(s)	S11 not expected to be required. Pending final design
License of Occupation (LOO)	No longer the preferred mechanism by Province for dikes	No longer the preferred mechanism by Province for dikes
Statutory Right-Of-Way over Crown Land	Application submitted. FN consultation proceeding. Feedback requested by 1/16th	Application on hold pending final design
Interfor, Grand Forks Rail, TSBC, Rail tie-in Approval	Communicating with Interfor and GFR. GFR engaged with TSBC.	Not required

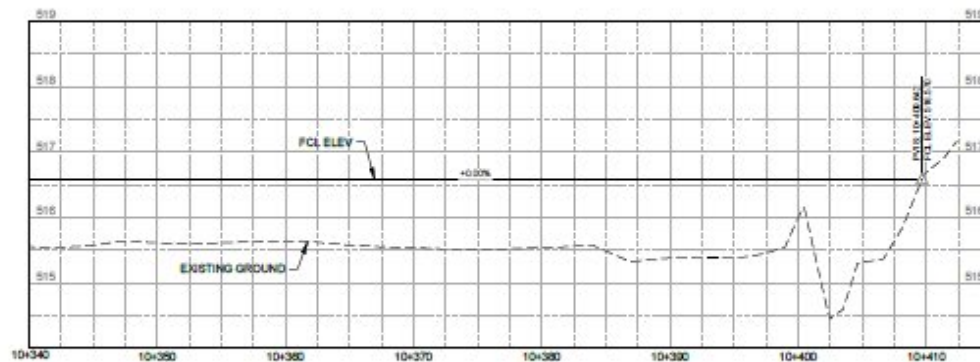
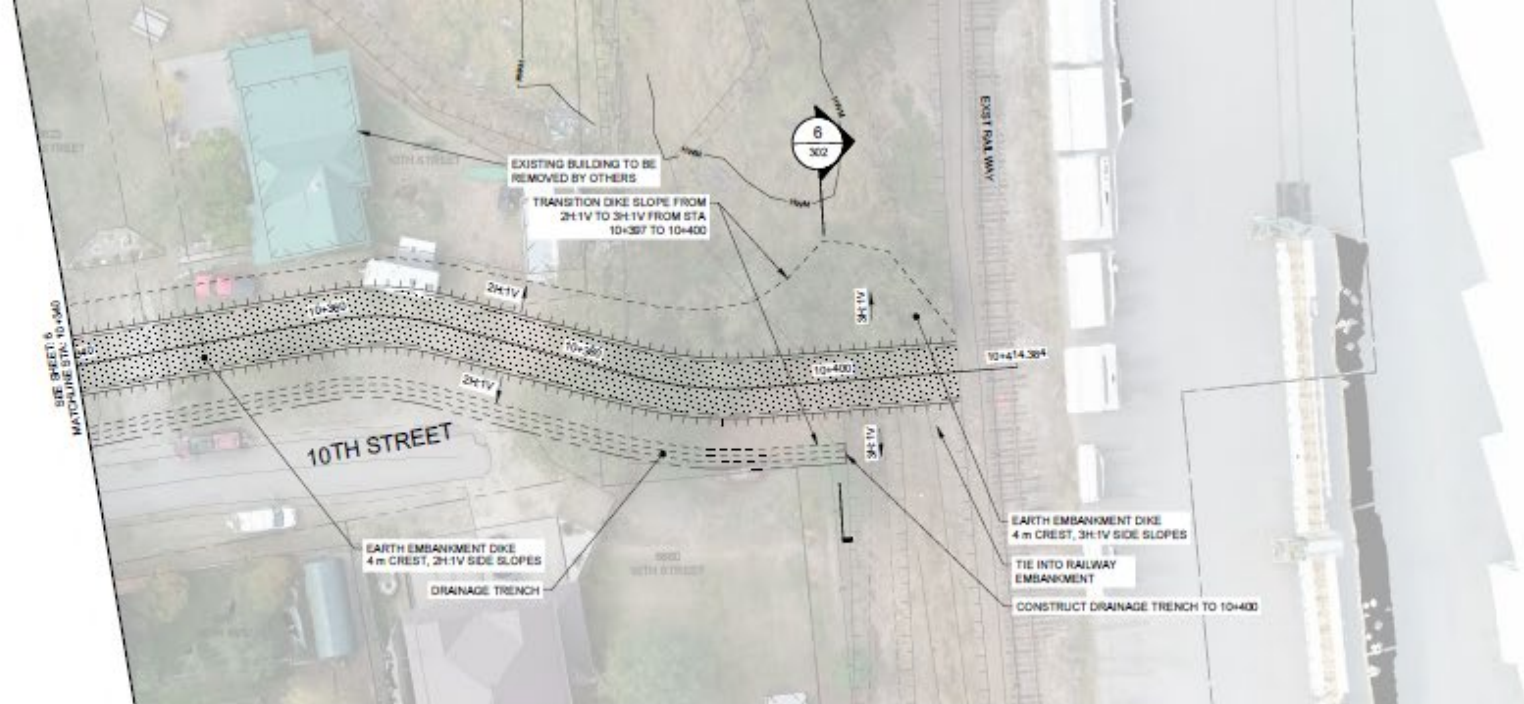
WP3 - SOUTH RUCKLE DIKE - DRAFT DETAILED DESIGN PHASE 1 - NORTH OF 63RD AVENUE



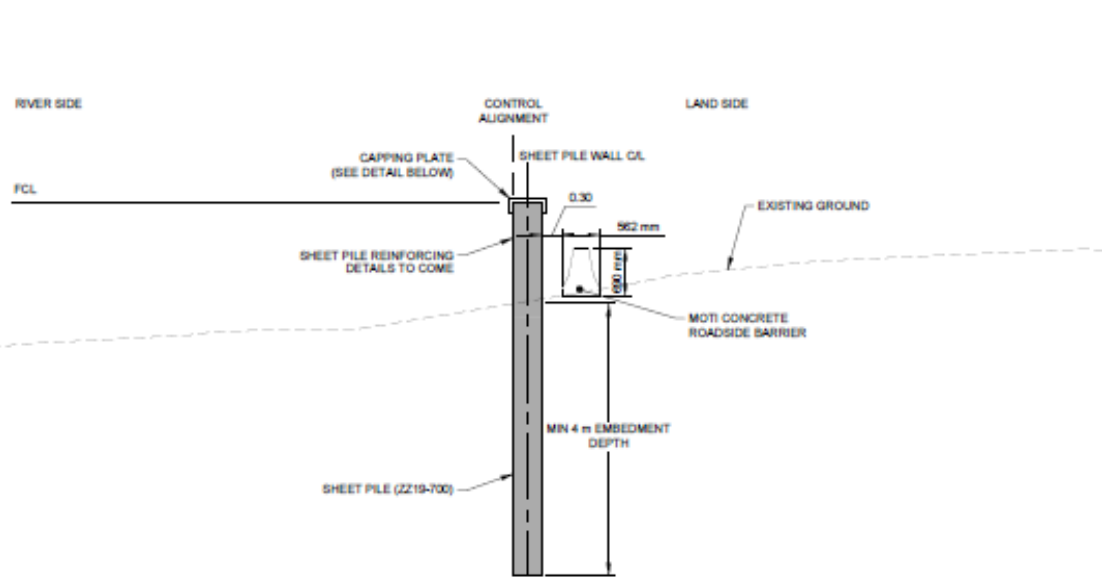
COMPLETE SET OF FULL SIZE DRAWINGS AT: GRANDFORS.CA/FMP



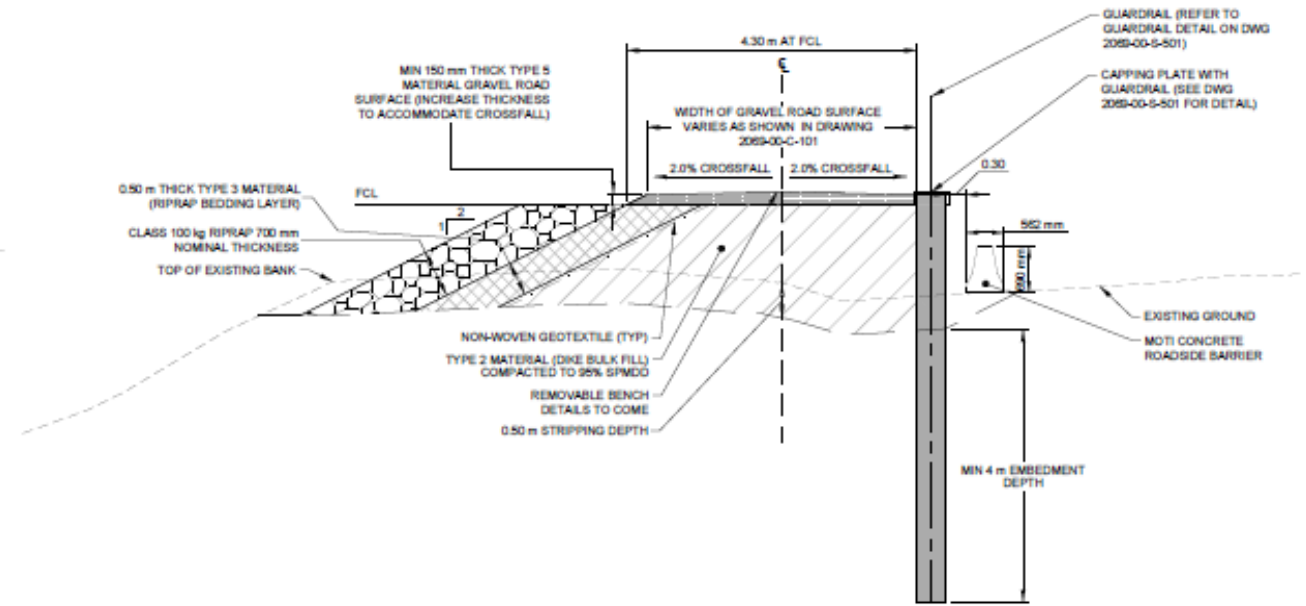
DRAFT DETAILED DESIGN – PLAN & PROFILE 1



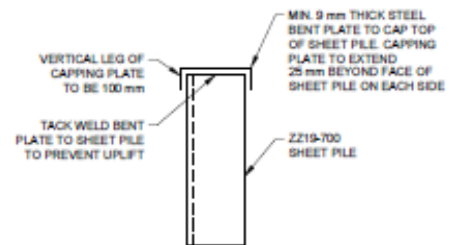
DRAFT DETAILED DESIGN – PLAN & PROFILE 3



1 TYPICAL SECTION
SHEET PILE WALL
STA 10+006 TO STA 10+060

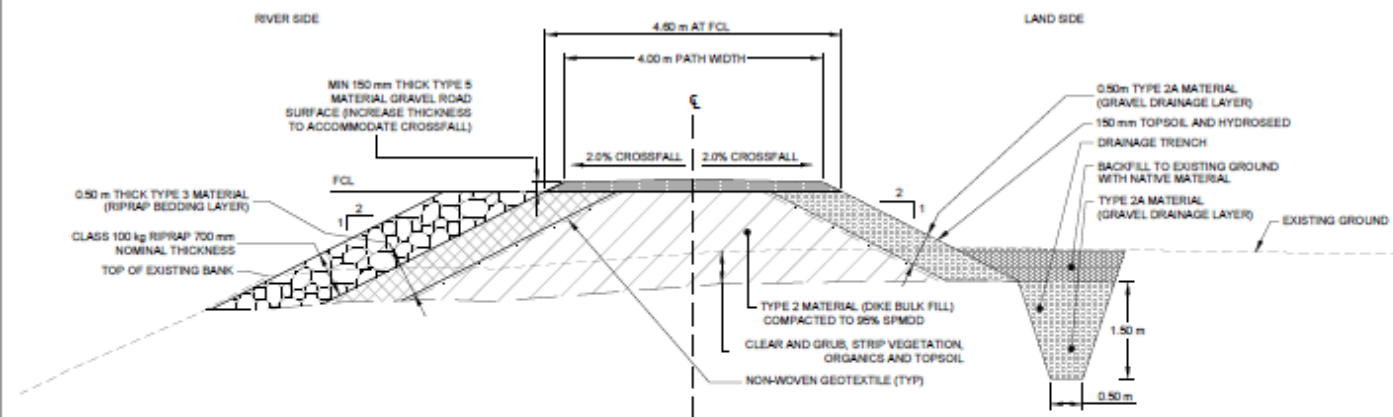


2 TYPICAL SECTION
DIKE WITH RIPRAP AND SHEET PILE
STA 10+060 TO 10+085

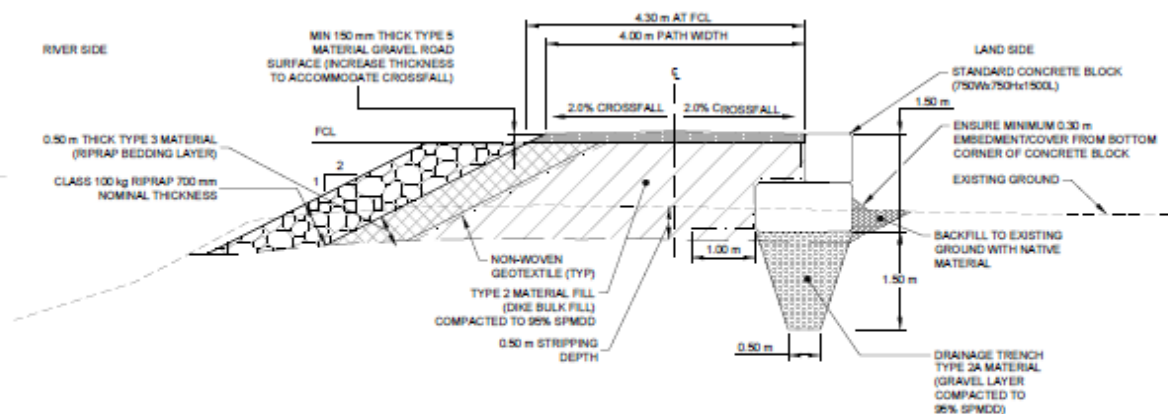


DETAIL NTS
CAPPING PLATE
THIS DETAIL APPLIES WHERE THERE IS NO GUARDRAIL. WHERE A GUARDRAIL IS REQUIRED REFER TO GUARDRAIL AND CAPPING PLATE DETAIL ON DRAWING 2069-00-S-501

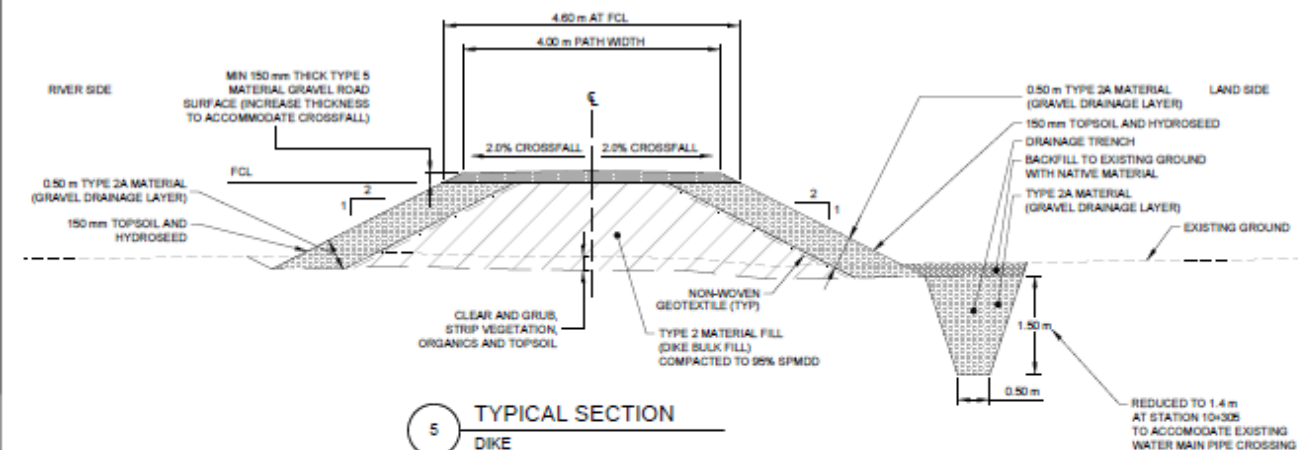
DRAFT DETAILED DESIGN – SHEET PILE CROSS SECTIONS



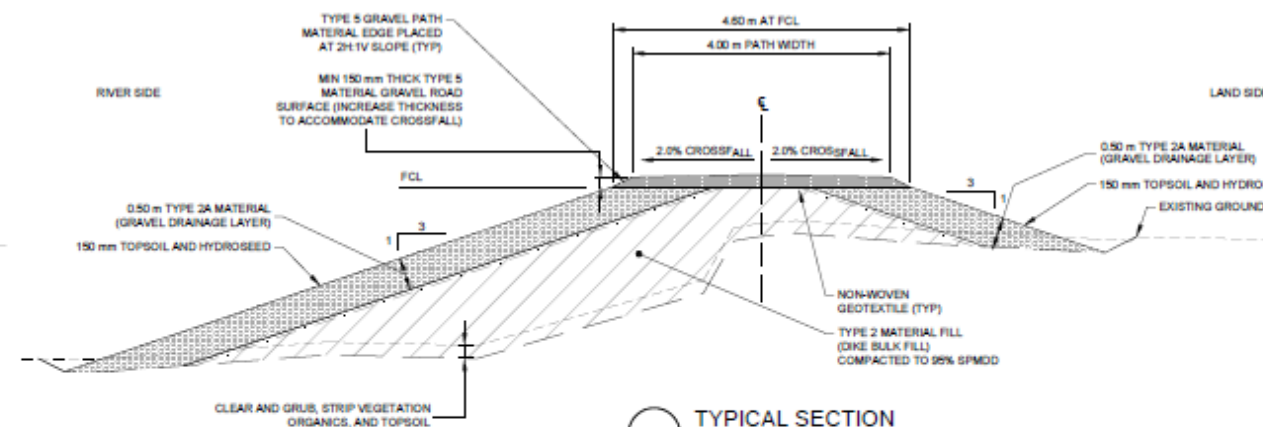
3 TYPICAL SECTION
DIKE WITH RIPRAP
STA 10+085 TO 10+225 AND STA 10+244.50 TO 10+290



4 TYPICAL SECTION
CONCRETE BLOCK RETAINED DIKE
STATION 10+225 TO 10+244.50



5 TYPICAL SECTION
DIKE
STATION 10+290 TO 10+400



6 TYPICAL SECTION
DIKE AT RAILWAY TIE IN
STATION 10+400 TO STA 10+409

DRAFT DETAILED DESIGN – EARTH BERM CROSS SECTIONS

FLOOD MITIGATION PROGRAM COSTS TO DATE

Scope	Actuals to Nov 30th, 2024
WP1 - Downtown	\$ 23,383,827
Riverside Drive Stormwater Interceptor	\$ 4,742,080
WP2 a&b - North Ruckle	\$ 8,400,452
WP2c - Rockwool	\$ 4,985,142
WP3 – South Ruckle	\$ 604,658
WP 5 - Johnson Flats	\$ 1,850,019
WP 6 – Rural Erosion (Phase 1), by RDKB	\$ 309,598
WP 7 - Floodplain Restoration	\$ 2,106,539
Haz-mat Assessments	\$ 70,311
Demolition	\$ 1,326,080
Capital Projects Subtotal	\$ 47,778,706
Property (land)	\$ 6,662,181
Property (improvements)	\$ 7,392,035
Add. City Contributions (LAP)	\$ 3,466,064
Property Subtotal	\$ 17,520,280
Additional City Contributions (non-LAP)	\$ 1,270,643
Grand Total	\$ 66,569,628

CURRENT FLOOD MITIGATION CAPITAL PLAN

2024+ Capital Plan

Project	Scope	April 2024 Reforecast (BAC)	Actual Costs (AC) to Nov 30th	Estimate to Complete (ETC)	Estimate at Completion (EAC) = AC + ETC	Variance at Completion (VAC) = BAC - EAC	Percent Complete
WP1	Program Wide Schematic Design; Downtown Dikes and Pump Stations	\$ 23,591,822	\$ 23,383,827	\$ 207,995	\$ 23,591,822	\$ -	99.1%
WP1	Riverside Drive Stormwater Interceptor	\$ 4,761,540	\$ 4,742,080	\$ 19,461	\$ 4,761,540	\$ -	99.6%
WP2 a&b	North Ruckle Trail Dike	\$ 8,439,271	\$ 8,400,452	\$ 38,819	\$ 8,439,271	\$ -	99.5%
WP2c	Rockwool Trail Dike	\$ 5,683,726	\$ 4,985,142	\$ 431,973	\$ 5,417,115	\$ 266,611	92.0%
WP3	South Ruckle Dike and Drainage Network	\$ 5,509,846	\$ 604,658	\$ 4,905,188	\$ 5,509,846	\$ -	11.0%
WP5	Johnson Flats Erosion Protection	\$ 1,850,019	\$ 1,850,019	\$ -	\$ 1,850,019	\$ -	100.0%
WP6	Rural Erosion Protection (Phase 1), by RDKB	\$ 814,992	\$ 309,598	\$ 505,394	\$ 814,992	\$ -	38.0%
WP7	Floodplain Naturalization and Habitat Offsetting	\$ 2,130,999	\$ 2,106,539	\$ 24,460	\$ 2,130,999	\$ -	98.9%
All	Haz-mat Assessments	\$ 70,311	\$ 70,311	\$ -	\$ 70,311	\$ -	100.0%
All	Demolition	\$ 1,328,080	\$ 1,326,080	\$ -	\$ 1,326,080	\$ 2,000	100.0%
	Totals	\$ 54,180,607	\$ 47,778,706	\$ 6,133,289	\$ 53,911,995	\$ 268,611	88.6%

UPDATE ON OTHER CAPITAL PROJECTS

Project	Status	Next Update	Remarks
Valley Heights Electrical	Prelim Design and Budgeting	Jan 27 th Regular Meeting	Selected by Council as a strategic priority for 2025 Decision before Council Jan 27 th regarding next steps
East Zone Water Reservoir	Planning	Today (Jan 13)	Selected by Council as a strategic priority for 2025 Decision before Council Jan 13 th regarding next steps
Sewer Modeling	RFP Development	February 2025	RFP for consultant under development
68th Ave Trunk Sewer	Pending	Summer 2025	On hold pending further sewer modeling West End developments proceeding
Downtown Stormwater	Planning	February 2025	Future steps to be identified through the Strategic Plan
Utility Upgrades - Central Ave	Planning	February 2025	Future steps to be identified through the Strategic Plan

CITY OF GRAND FORKS UPDATE

February 7th 2025

*** Upcoming Council Meeting ***
Monday February 10, 2025 at 10:00 am
Regular and Committee of the Whole Meetings at City Hall

*** Capital Projects Update ***


FMP South Ruckle Dike and Drainage

- . A list
- . Of
- . Things
- . About
- . This project
- . Progress

Water System Improvements

- . A list
- . Of
- . Things
- . About
- . This project
- . Progress

Next Regular Update February 28, 2025.



Regular Updates
Posted Friday before Council Meetings

WP3—SOUTH RUCKLE



- . Advancing detailed design
- . Conducting investigative excavations to assess ground conditions more accurately
- . Working with City staff for removal of city infrastructure in construction area
- . Continuing outreach to residents and property owners in project area to discuss updates and gather feedback

MORE INFORMATION: [GRANDFORKS.CA/FMP](https://grandforks.ca/fmp)



Highlight Updates
Posted as progress warrants



THANK YOU