#### Minutes – Standing Policy Committee on Finance – February 7, 2020

#### REPORTS

# Item No. 3Waverley Street at CN Mainline (Rivers) Grade Separation,<br/>Project ID: 1805001413, Quarterly Project Status Report No. 14<br/>For the Period Ended September 30, 2019

#### STANDING COMMITTEE DECISION:

The Standing Policy Committee on Finance concurred in the recommendation of the Winnipeg Public Service and received as information the financial status of the Waverley Street at CN Mainline (Rivers) Grade Separation project, as contained in this report.

#### Minutes – Standing Policy Committee on Finance – February 7, 2020

#### DECISION MAKING HISTORY:

The Chairperson called Councillor Gilroy to the Chair.

Moved by Councillor Chambers, That the report of the Winnipeg Public Service be received as information.

Carried

Councillor Gillingham resumed the Chair.

# ADMINISTRATIVE REPORT

# Title:Waverley Street at CN Mainline (Rivers) Grade Separation,<br/>Project ID: 1805001413,<br/>Quarterly Project Status Report No. 14<br/>For the Period Ended September 30, 2019

#### Critical Path: Standing Policy Committee on Finance

#### AUTHORIZATION

Author	Department Head	CFO	CAO
B. Neirinck, P. Eng.	D. Patman, acting for	P. Olafson,	M. Ruta,
	J. Berezowsky	Interim CFO	Interim CAO

#### **EXECUTIVE SUMMARY**

Project On	Schedule:	Yes	$\mathbf{N}$	No	
•					

Percent of Schedule Complete:	81%

Project On Adopted Budget: Yes 🗹	No 🗆
Percent of Adopted Budget Spent:	46%

This is the fourteenth quarterly report to SPC Finance on this Project. The reporting period covers the period from July 1, 2019 to September 30, 2019. Expenditures to September 30, 2019 total \$71,449,274. The Total Forecasted Cost of the project is estimated at \$88.1M (down \$9.823M since last report).

On August 18, 2019, traffic was transitioned under the new underpass for the first time. This critical project milestone was originally scheduled to occur in late September 2019, and was thus achieved approximately 5 weeks ahead of schedule.

Construction work on Contract 2 was ongoing, primarily including progress on construction of new pavements through the underpass. Following the transition of traffic from the detour road to the new underpass roadway, detour road removals commenced.

Subsequent to the reporting period, Substantial Performance was achieved on November 1, 2019. Work remaining in 2020 includes landscaping and installation of art.

The project is currently within budget and on schedule.

On July 9, 2019 the amended Provincial funding agreement was signed by the City of Winnipeg reducing the Provincial contribution to \$29,000,000. Although funding agreement amendments are now completed for both Provincial and Federal funding, the percent of adopted project budget spent (including the above stated 46% of adopted budget spent) continues to be calculated on the basis of the original \$156.282M adopted project budget.

Major contracts and work on the project are nearing completion. The updated Total Forecasted Cost includes contingency amounts of \$3.3M.

The Advisory Committee has reviewed this report and recommends that the report be sent to the Standing Policy Committee on Finance.

#### RECOMMENDATIONS

That the financial status of the Waverley Street at CN Mainline (Rivers) Grade Separation project, as contained in this report, be received as information.

#### **REASON FOR THE REPORT**

The Asset Management Administrative Standard FM-004 requires all projects with a total estimated cost of \$23 million (2019) or more report quarterly to the Standing Policy Committee on Finance. This threshold is adjusted annually for construction inflation as part of the annual Capital Budget approval. The Standing Policy Committee on Finance may also request reporting on any capital project.

#### IMPLICATIONS OF THE RECOMMENDATIONS

No implications.

#### HISTORY/DISCUSSION

See Appendix C – Key Project Events (History)

#### **Construction** (Update from last report)

The project is currently in the construction phase. The project has been divided into two construction contracts designated Contract 1 (now complete) and Contract 2 (underway).

#### Contract 2

Contract 2 is being performed by Maple Leaf Construction and consists of all the major components of the underpass project including: the underpass bridge structure; pump station; temporary detour roadways; installation of water and sewer infrastructure and extensive improvements to the surrounding transportation network.

Progress was made on the construction of new pavements throughout the project. Pavement construction on Waverley Street through the underpass was completed, as well as the rehabilitation of the existing lanes of Taylor Avenue which will serve as the final westbound lanes.

Over the weekend of August 16, 2019 starting at 5:30 PM and scheduled to reopen on August 19, 2019 at 6:00 AM, Waverley Street (detour roadway) and Taylor Avenue (at Waverley Street) were completely closed to all vehicular traffic in order to complete the transitioning of traffic from the temporary detour road configuration to the new underpass roadway. Pedestrians and cyclists were able to use the pathway on the east side of the underpass during this time. The weekend closure work was completed approximately 12 hours ahead of schedule. On August 18, 2019 at approximately 6:00 PM, Waverley Street and Taylor Avenue were re-opened to traffic, with traffic on Waverley Street operating under the new underpass for the first time.

In late August, 2019 with the detour road no longer in service, CN forces completed decommissioning of the at-grade crossing including removal of crossing protection (flashing lights, bells and gates, etc.).

On September 28, 2019, traffic on westbound Taylor Avenue was transitioned to the two recently rehabilitated westbound lanes, effectively marking the completion of the twinning of Taylor Avenue as part of this project. Miscellaneous lane closures on Taylor Avenue remained in effect after this date to facilitate final paving tie-ins and landscaping works.

Work also continued on the pump station. Building superstructure components (masonry walls and wood roof), as well as the installation of mechanical, electrical and process equipment, was completed. Manitoba Hydro completed the installation of natural gas and electrical services to the pump station. On August 19, 2019, the pump station was fully operational and automated. The contractor did not achieve the contract critical stage of September 23, 2019 for pump station commissioning; however, commissioning is expected to be achieved this calendar year with no impact to the overall project schedule. Commissioning was not achieved due to some minor items of work (flooring finishes, submission of the operations and maintenance manual, pump service monorail, etc.) that were still incomplete, and are required to achieve pump station commissioning in keeping with the construction contract.

#### <u>Other</u>

Various external utilities have been engaged to perform modification and/or relocation of their services to accommodate the proposed works.

Manitoba Hydro continued to progress with installation of street lighting throughout the project area. All street and pathway lighting was completed in time for opening to traffic. Additionally, Manitoba Hydro completed installation of electrical and natural gas services to the pump station.

Outfront Media completed the installation of one (out of a total of two) new bus shelters on the project.

On September 12, 2019, the travel time information system (using the variable message sign supplied by ATS Traffic Manitoba) was discontinued.

#### Public Art Component

On September 5, 2019 Public Works received a copy of the fully executed Public Art Agreement between Figureground Studio Inc. (the selected artist), the Winnipeg Arts Council, and the City of Winnipeg. The effective date of the agreement is May 28, 2019. Final installation of the public art component is expected to occur in 2020.

### Table 1 – Contracts

			Contracts				
Bid Compan Opportunity Name #		Description	Original Contract Award Value (GST & MRST extra as applicable)	Total Approved Over- Expenditures (Over- Expenditure amount only)	Date of Award	Date of Total Completion	Estimated % Complete
RFP 66-2014	Dillon Consulting Limited	Consulting Services for Preliminary Engineering Study	\$ 1,011,904.00	\$ 50,000.00	30-Apr-14	30-Sep-15	100
RFP 150-2016	Dillon Consulting Limited	Consulting Services for Detailed Design, Contract Administration, and Post- Construction Services	11,368,000.00	655,430.00	29-Feb-16		90
Single Source	Fireseeds North Infrastructure	Independent Road Safety Audit	62,347.50		27-Sep-16		75
Single Source	ATS Traffic Manitoba	Supply of Variable Message Sign	34,300.00	3,680.00	16-Dec-16	19-Sep-19	100
Bid-Opp 472- 2016	Borland Construction Inc.	Contract 1 - Preliminary Underground Works and Security Fencing	2,088,994.00	871,763.57	23-Nov-16	23-Nov-17	100
Single Source	Canadian National Railway Company	Supply of Rail Materials, Installation, Signals, Flagging, Railway Utility Relocation	6,800,000.00		30-Jan-17		90
Single Source	Manitoba Hydro	Relocation of Electrical Distribution - Four Electric Service Agreements	1,228,002.00		29-Mar-17	31-Dec-18	100
Bid-Opp 473- 2016	Maple Leaf Construction Ltd.	Contract 2 - Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works	44,701,918.80	2,145,869.57	20-Apr-17		90
Single Source	Bell Canada	Communication Cable Relocation Works	800,000.00	36,107.95	9-May-17	14-Dec-18	100
Single Source	Manitoba Hydro	Fiber Optic Cable and Street Lighting - Two Electric Service Agreements	283,612.00		27-Jun-17	30-Sep-17	100
Single Source	Manitoba Hydro	Relocation of Various Natural Gas Pipelines	17,653.43		29-Jun-17	31-Dec-18	100
Single Source	Shaw	Relocation of Various Underground Services	27,821.30		29-Jun-17	31-Dec-18	100
Single Source	BelIMTS (MTS Inc.)	Relocation of Communication Cables	90,160.73		18-Jul-17	30-Sep-17	100
Single Source	Manitoba Hydro	Natural Gas Service to Pump Station	49,004.00		8-Dec-17		100
Single Source	Manitoba Hydro	Electrical Service to Pump Station	140,571.04		13-Dec-17	Ű	100
Single Source	Hydro	Relocation of Utility Pole at Grant Ave.	5,850.00			31-Dec-18	100
Single Source	Pembina Trails SD	Relocation of Fiber Optic Cable Public Art Component	428,571.43	5,390.00	24-Apr-18 7-May-18		20
Single Source	Council	Supply and Install Bus	31,110.00		17-Nay-18		50
	Canada LP	Shelters	51,110.00		17-0ep-10		50
Single Source	Manitoba Hydro	Street Lighting - Waverley, and Distribution Relocation	755,864.09		18-Oct-18	30-Sep-19	100
Single Source	Manitoba Hydro	Street Lighting - Wilkes	10,579.04		24-Oct-18	31-Dec-18	100
Single Source	Manitoba Hydro	Project Pathway Lighting	268,029.24		26-Mar-19	30-Sep-19	100
		Total	\$ 70,326,172.60	\$ 3,768,241.09			

#### Upcoming Procurements:

Description	Anticipated Award Date
N/A	

#### **Schedule** (Update from last report)

The project is currently on schedule. Originally planned to occur in the Fall of 2019, the underpass was opened to traffic for the first time on August 18, 2019. This important project milestone was achieved approximately 5 weeks ahead of schedule.

Progress was made on pavement construction through the remainder of the reporting period, including detour pavement removal, and a continuation of pavement construction at the intersection of Waverley Street and Taylor Avenue. Subsequent to the reporting period, Substantial Performance of Contract 2 was achieved on November 1, 2019.

Final landscaping and the installation of the public art component will occur in 2020.

Deliverable		Original Targeted Completion Date	Revised Targeted Completion Date	Actual Completion Date	Estimated % Complete
1	Preliminary Design	2015 Q1		2015 Q1	100%
	Detailed Design	2017 Q1		2017 Q1	100%
3	Contract 1 Works - Total Performance	2017 Q2	2017 Q4	2017 Q4	100%
4	Detour Roadway	2017 Q4		2017 Q4	100%
5	Underpass Bridge Structure	2018 Q3		2018 Q3	100%
6	Underpass Roadway	2019 Q3		2019 Q3	100%
7	Contract 2 Works - Total Performance	2020 Q3			80%

#### Table 2 – Milestones

#### **<u>Risk</u>** (Update from last report)

There are two new risks to report.

In late September 2019 after a period of heavy rainfall, a failure of the slope in the northwest quadrant of the underpass was observed. Investigation and monitoring of the slope suggests that extreme groundwater conditions coupled with a localized layer of silt below the surface contributed to the failure. Additional investigation work is ongoing to develop a repair, which is expected to include slope drainage improvements and regrading the area. The failure is shallow and has not impacted project components such as the path, roadway, or bridge. The estimated design and construction cost is \$135,000.

Ongoing discussions with the Water and Waste Department and recent past experience with other similar underpass pump stations in the City suggest that this project's pump station backup generator may require the installation of a load bank. When there is a power outage to the pump station, the backup generator goes into operation. If the generator operates with little to no electrical load (for example, if the underpass is dry and the pumps are not running), it can damage the generator over time. A load bank provides a sufficient level of electrical load to the generator to prevent this damage from occurring. The estimated design and construction cost is \$115,000.

Weather risks were monitored during the reporting period. With all pavement construction works completed and Substantial Performance achieved as of November 1, 2019 (after the report period end date), weather risk has been mitigated. Furthermore, with Substantial Performance now achieved, all lanes and sidewalks are open to the public, thus the risk to traffic impacts have been mitigated.

Significant Risks and Mitigation Strategies											
Risk Statement and Explanation	Risk Mitigation Management Plan										
New:											
Repair of the shallow slope failure in the northwest underpass slope will be required, at an estimated design and construction cost of \$135,000	Conduct geotechnical investigation and develop a repair to prevent ongoing maintenance issues.										
Installation of a load bank for the pump station backup generator may be required, at an estimated design and construction cost of \$115,000	Ongoing discussions with the Water and Waste Department to confirm requirements, plan to install in 2020.										
Ongoing:											
N/A											
Mitigated:											
Poor weather conditions in the Fall of 2019 could lead to a delay in achieving Substantial Performance of the project.	With Substantial Performance achieved on schedule, this risk has been mitigated.										
Vehicle, pedestrian and cycling traffic negatively impacted by construction (e.g. delays, wayfinding difficulty)	With Substantial Performance achieved on schedule, this risk has been mitigated.										
Encountering poor subsurface soil and groundwater conditions may delay the project and increase cost	With the bridge, pump station substructure, and bulk excavation complete, this risk has been mitigated.										
Failure of third party utilities to relocate services could delay the project	Third party utilities in CN right-of-way have been successfully relocated onto the bridge.										
Encountering poor subsurface soil and groundwater conditions (Bridge component)	A highly localized bedrock fissure resulted in schedule and cost impacts to bridge construction totaling 2 weeks delay and approximately \$730,000 in additional costs; expected and are within budgeted contingency amounts.										
Delay in completion of Bridge Construction delays Fall 2018 rail work, delays project 9 - 12 months.	Bridge completed on August 31, 2018. City worked with CN to compress fall 2018 rail works to maintain project schedule.										
Manitoba Hydro Utility Relocations	MB Hydro - All major electrical distribution lines have successfully been relocated.										

Table 3 – Significant Risks and Mitigations Strategies

Changes to railway requirements (addition of	Third track concept no longer being pursued.
third track) may result in increased design and	City and CN will continue to discuss future
construction costs and schedule impacts	impacts.
Failure to obtain a Crossing Agreement with	Crossing Agreement executed by CN on May
CN	19, 2017
Failure to assemble required land could delay the project	An expropriation by-law was approved by Council on July 13, 2016. The City took possession of expropriated lands on January 12, 2017.
Lead-time for delivery of specialized large	Procurement of the specialized materials was
diameter pipe material could delay Feeder	added to Contract 1 works, and has
Main renewal work	successfully been supplied for Contract 2.
Maintaining the project schedule (administrative)	Developed a schedule that includes contingency, ongoing schedule reviews. Delegated authority to CAO to award competitively tendered construction contracts exceeding \$5,000,000 allowed for timely award of Contract 2.

#### Financial (Update from last report)

For further information, refer to Appendix B – Financial Forecast

The financial forecast is disclosed in Appendix B. Expenditures for the current reporting period were \$6,655,104 and primarily consist of construction progress. Expenditures to date total \$71,449,274.

Currently, the Total Forecasted Cost of the project is \$88.1M, a reduction of \$9.823M since the last report (period ending June 30, 2019). The forecasted surplus is \$68.182M. The Total Forecasted Cost includes \$3.3M in contingencies. The reason for the reduction in the Total Forecasted Cost can be attributed to the following:

- With construction nearing completion, additional savings in material quantities have been identified.
- Utility relocation and street lighting work by Manitoba Hydro are now complete and costs are lower than previously expected.
- Internal Financing and Overhead Costs (which are calculated as a function of actual costs incurred) were updated and have been proportionately reduced given the overall project savings. Of note, external debt financing costs have been reduced due to the reduction in borrowed amounts due to previously reported cost savings.
- As the project nears total completion, major project risks have been mitigated. Contingency amounts have accordingly been reduced proportional to the reduction in project risk exposure. Contingency amounts were \$11M at last report (period ending June 30, 2019) and have been reduced to \$3.3M for the present reporting period.

The Total Forecasted Cost and associated forecasted surplus amounts are shared between the City and other levels of government in accordance with the respective contribution agreements. As the City's contribution is funded through debt financing, the forecasted surplus will result in the City taking on less debt.

#### **Funding** (Update from last report)

As of the report period end date, total claims submitted to the Federal Government was \$18,637,430.88, and total claims submitted to the Provincial Government was \$18,692,135.05

The majority of the City's share of project cost is to be funded by debt. To the report date, \$17,000,000 of debt has been issued on the project (no change from last report).

On June 5, 2019 the amended Federal funding agreement was signed by the City of Winnipeg reducing the Federal contribution to \$29,000,000.

On July 9, 2019 the amended Provincial funding agreement was signed by the City of Winnipeg reducing the Provincial contribution to \$29,000,000.

Funding Forecast and Receivable											
Funding Source		Adopted Budget		Amended Budget	Committed (in thousands						
	(in	thousands)	(in	thousands)		,					
Class of Estimate		Class 3									
Cash to Capital	\$	700	\$	700	\$	700					
External Debt	\$	63,332	\$	53,832	\$	29,223					
Provincial Funding for Road Improvements	\$	500	\$	500	\$	500					
Provincial Building Manitoba Fund	\$	45,875	\$	45,875	\$	29,000					
Federal Building Canada Fund	\$	45,875	\$	45,875	\$	29,000					
CN Rail Contribution	\$	-	\$	9,500	\$	9,500					
Total	\$	156,282	\$	156,282	\$	97,923					

Table 4 – Project Funding Forecast and Receivable

#### Property Acquisition (Update from last report)

Approximately 13 private landowners have been impacted by the expropriation process associated with this project. The impacts include partial takings, temporary easements, and permanent easements. Meetings were held with individual property owners and are occurring as the land acquisition process progresses.

Five landowners have reached negotiated settlements. Negotiations are ongoing with the remaining landowners. Failure to reach a negotiated settlement will result in the matter being referred to the Land Value Appraisal Commission (LVAC). The LVAC is an

independent tribunal that determines the due compensation payable for government land purchases and expropriations.

#### Stakeholder Engagements/Communications (Update from last report)

Project details continue to be updated on the project website: <u>www.winnipeg.ca/WaverleyUnderpass</u>.

Ongoing project newsletters and project website updates issued during the reporting period are summarized as follows:

- On August 6, 2019, a ribbon cutting event was held with elected officials from the City as well as Provincial and Federal governments marking the upcoming opening of the underpass to traffic. The City issued a news release with details of the day's events. Construction Update #9 was posted to the project website and issued to stakeholders, serving to inform the public and project stakeholders of the weekend closure and subsequent opening of the underpass to traffic expected on August 19, 2019.
- On August 12, 2019 the City issued a news release announcing the weekend closure of Waverley Street and Taylor Avenue and details of the opening of the underpass to traffic.
- On August 16, 2019 at 5:30 PM, Waverley Street and Taylor Avenue were completely closed to vehicular traffic in the vicinity of the project area. Pedestrians and cyclists were diverted from the temporary detour road to the new pathway on the east side of the underpass.
- On August 18, 2019 at approximately 6:00 PM, Waverley Street and Taylor Avenue were re-opened to traffic, with traffic on Waverley Street operating under the new underpass for the first time.
- On August 19, 2019 an update to the project website was issued, including the release of a video with additional information about the project.

#### Subsequent Events after Report Period End Date

- On October 29, 2019 the Winnipeg Arts Council issued a release with additional information related to the selected public artwork for the project. An update to the project website was issued providing additional information about the proposed public artwork.
- On November 1, 2019, Contract 2 (Bid-Opportunity 473-2016 awarded to Maple Leaf Construction Ltd.) achieved substantial performance of the contract.
- On November 4, 2019, Construction Update #10 was posted to the project website, serving to provide the public with notification that the project is effectively complete, and indicating that final landscaping work will occur in 2020. This is expected to be the final Construction Update for the project.
- On November 6, 2019, the Acting Interim Chief Administrative Officer approved an overexpenditure to the Canadian National Railway Company (CN) in the amount of 43.09% or \$2,930,000.00 plus applicable M.R.S.T. and G.S.T. The expected final contract cost is estimated to be \$9,730,000.00 plus applicable M.R.S.T. and G.S.T. The original award of

contract to CN in the amount of \$6,800,000 was limited to the supply of rail materials only, and extension of the contract was required to include rail construction work on the project completed by CN.

#### **FINANCIAL IMPACT**

#### **Financial Impact Statement**

Date:

January 9, 2020

Project Name: Waverley Street at CN Mainline (Rivers) Grade Separation Project ID: 1805001413 Quarterly Project Status Report No. 14 For the Period Ended September 30, 2019

#### COMMENTS:

There is no financial impact associated with the recommendation of this report. See Appendix B as to the financial status of this project.

"Original signed by J. Peters, CPA, CGA" J. Peters, CPA, CGA

J. Peters, CPA, CGA Acting Manager of Finance & Administration

#### CONSULTATION

This Report has been prepared in consultation with:

n/a

#### **OURWINNIPEG POLICY ALIGNMENT**

01-3 Prosperity Direction 1: Provide efficient and focused civic administration and governance. This report supports demonstration of accountability through service performance measurement and reporting.

#### WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

N/A

#### SUBMITTED BY

Department:Public WorksDivision:EngineeringPrepared by:C.D. Ward, P. Eng., Bridge Projects EngineerDate:January 10, 2020

#### **Appendices**

Appendix A – Key Project Facts

Appendix B – Financial Forecast

Appendix C – Key Project Events (History)

# Appendix A – Key Project Facts

Appendix A – Key Project Facts							
Project Name	Waverley Street at CN Mainline (Rivers) Grade Separation						
Business Owner (Department)	Public Works Departement						
Project ID	1805001413						
Project Sponsor	Brad Neirinck, P.Eng., Manager of Engineering						
Department Responsible for Project Delivery	Public Works Department						
Consultant Engineer (Company Name)	Dillon Consulting Limited						
Adopted Budget	\$156,282,000						
Class of Estimate (Adopted)	Class 3 (-20% to +30%)						
Range of Estimate (Adopted)	\$125,000,000 to \$203,167,000						
Amended Budget	N/A						
Class of Estimate (Amended)	N/A						
Range of Estimate (Amended)	N/A						

#### Project Scope

• Underpass bridge structure, land drainage including pump station, roadways, active transportation pathways, and landscaping;

• Temporary roadway and railway detours to facilitate underpass construction;

• Twinning of Taylor Avenue from Waverley Street to Lindsay Street, and twinning of Hurst Way from Waverley Street to approximately 45 Hurst Way;

• Improvements to Waverley Street from Wilkes Avenue to Grant Avenue, including intersection improvements;

• Professional services for detailed design, contract administration, and post-construction services;

Land acquisition; and

• Utility relocations.

Major Capital Projects Advisory Committee Membership:

James Berezowsky, Director of Public Works (Chair)

- Brad Neirinck, Manager of Engineering, Public Works (Project Sponsor)

Tim Shanks, Manager Water Services, Water and Waste

- Jocelyn Peters, Acting Manager of Finance, Public Works

Marc Pittet, Manager of Real Estate and Land Development, Planning Property and Development

Gord Chappell, Administrator Real Estate, Planning Property and Development

- Georges Chartier, Chief Asset and PM Officer, Chief Administrative Office

- Rob Taylor, Manager of Capital Projects, Chief Administrative Office

## **Appendix B – Financial Forecast**

	Budget (in 000's)														S	urplus				
Project Component Deliverables		Adopted Budget Council Approved Change		Council		Actual Costs		Projected Costs				Total	(Deficit)		V	ariance	CI	h		
				proved	Amended Budget		To Sept. 30, 2019**		Remainder of 2019		2020		Forecasted Costs		From Amended Budget		F	Last Report		ari
Engineering, Design and Other	\$	11,422	\$	-	\$	11,422	\$	11,915	\$	683	\$	500	\$	13,098	\$	(1,676)	\$	(1,928)	\$	
Construction	\$	88,280	\$	-	\$	88,280	\$	54,890	\$	7,945	\$	800	\$	63,635	\$	24,645	\$	26,709	\$	(
Land Acquisition	\$	4,200	\$	-	\$	4,200	\$	1,079	\$	250	\$	2,769	\$	4,098	\$	102	\$	233	\$	
Internal Financing/Overhead Costs	\$	10,090	\$	-	\$	10,090	\$	3,565	\$	204	\$	200	\$	3,969	\$	6,121	\$	2,055	\$	
Contingency	\$	42,290	\$	-	\$	42,290	\$	-	\$	-	\$	3,300	\$	3,300	\$	38,990	\$	31,290	\$	
Total Project Budget	\$	156,282	\$	-	\$	156,282	\$	71,449	\$	9,082	\$	7,569	\$	88,100	\$	68,182	\$	58,359	\$	

#### Appendix B - Project 1805001413 Financial Forecast As at September 30, 2019

46%

% of Project Budget Spent

Budget)

(Actual Costs to Date / Adopted & Amended

\* Amended budget and actual costs to date have been agreed to the City's general ledger and Monthly Capital Expenditures Report

This project was approved on December 12, 2012 (Preliminary Engineering Study) and February 24, 2016 (Detailed Design and Construction).

\*\* Reduction in Internal Financing/Overhead costs when compared to Quarterly Project Status Report 13 is the result of the reallocation of project costs to more accurately align actual costs with the budget for those activities.

46%

Change in Variance

\$ (2,064)

252

(131)

4,066

9,823

\$ 7,700

# Appendix C – Key Project Events (History)

- On January 29, 2013, Council approved the 2013 Capital Budget that included an amount of \$1.2 million to undertake the preliminary engineering study for the Project.
- On April 30, 2014, Dillon Consulting Limited was awarded the consulting services for a preliminary engineering study under RFP 66-2014.
- On June 25, 2014, Council concurred with the Executive Policy Committee (EPC) that Waverley Underpass be identified as one of the City's top six highest priority major capital projects.
- On December 9, 2014, a public open house was held as part of the ongoing public engagement during the preliminary engineering study phase of the project.
- On March 24, 2015, EPC established Waverley Underpass as the City's highest ranking project of four significant capital projects.
- On March 25, 2015, Council approved the prioritization established by EPC.
- On May 19, 2015, the Administration submitted an application for infrastructure funding to the New Building Canada Fund.

#### <u>2016</u>

- On January 15, 2016, the Province of Manitoba provided approval-in-principle for their portion of funding to a maximum amount of \$45.9 million under the New Building Canada Fund.
- On January 20, 2016, the Federal Government provided approval-in-principle for their portion of the funding to a maximum amount of \$45.882 million under the New Building Canada Fund.
- On February 24, 2016, Council approved the addition of the Waverley Underpass project in the 2016 Capital Budget in the amount of \$155.082 million including the Provincial and Federal funding.
- On February 29, 2016, Dillon Consulting Limited was awarded consulting services for detailed design, contract administration, and post-construction services for the Project.
- On March 22, 2016, Council approved the 2016 Capital Budget which includes the Waverley Street at CN Mainline (Rivers) Grade Separation project as noted above.
- On April 21, 2016, the project website (www.winnipeg.ca/WaverleyUnderpass) went live.
- On June 15, 2016, Council approved the expropriation of lands related to the project.
- On July 13, 2016, Council approved By-Law No. 89/2016 for the expropriation of lands related to the project.
- On July 29, 2016, the City was informed by the Province of Manitoba that a waiver of the expropriation inquiry hearing had been granted by the Lieutenant Governor at the Cabinet meeting held on July 27, 2016.
- On August 26, 2016, the Director of Public Works approved an over-expenditure to Dillon Consulting Limited in the amount of \$158,530.00 for the incorporation of train and vehicle detection in the project area, to enable the use of new innovative technology to assist in the movement of traffic during construction.
- On September 6, 2016, the Director of Planning Property and Development approved Offers of Compensation for land acquisitions under \$25,000.
- On September 20, 2016, Standing Policy Committee on Property and Development, Heritage, and Downtown Development approved Offers of Compensation over \$25,000, to be made to land owners and other interested parties.

- On September 22, 2016, a website update occurred, providing notification of the Open House event, posting the open house materials including display boards, and posting a link for viewers to provide feedback through an online survey.
- On September 28, 2016, Council approved the consolidation/registration of land assembly corresponding to the expropriation, By-law 89/2016.
- On October 6, 2016, an Open House event was held. Two sessions were held at the Caboto Center at 1055 Wilkes Avenue, one from 3:30 pm to 5:30 pm, and a second session from 7:00 pm to 9:00 pm. The event was attended by approximately 500 members of the community. Feedback on the project was provided to the project team members. A corresponding update to the project website was made including posting of three 3D animated flythrough videos of the project.
- On October 17, 2016, Contract 1 was posted to the City of Winnipeg Bid-Opportunities website.
- On October 26, 2016, Council approved the delegation of authority to the Chief Administrative Officer to award competitively tendered construction contracts exceeding \$5,000,000, and the delegation of authority to the Chief Administrative Officer for negotiation and award of single source contracts with the Canadian National Railway Company exceeding \$5,000,000.
- On October 26, 2016, Council approved By-law 105/2016 for the opening of parts of Waverley Street and Taylor Avenue for the purposes of construction.
- On November 3, 2016, Bid-Opportunity 472-2016 closed, and the City received six responsive bid submissions for the work of Contract 1 Preliminary Underground Works and Security Fencing.
- On November 23, 2016, Borland Construction Inc. was awarded Bid-Opportunity 472-2016 for the Waverley Street Underpass at CN Mile 3.89 Rivers Sub: Contract 1 – Preliminary Underground Works and Security Fencing, in the amount of \$2,088,994.00.
- On December 16, 2016 the Manager of Materials approved the single source purchase of a variable message sign from ATS Traffic Manitoba in the amount of \$34,300.00 (Materials Management reference #1141-2016), to be used as part of the travel time information system for the project.
- On December 14, 2016, Council approved a cost-sharing arrangement for CN Rail to contribute \$9,500,000 as their cost apportionment for the project, to be used as a part of the City's portion of project funding.

#### <u>2017</u>

- On January 9, 2017, Contract 2 was posted to the City of Winnipeg Bid-Opportunities website.
- On January 12, 2017, the City of Winnipeg obtained possession of permanently expropriated lands and the right to enter and construct on lands subject to expropriated easements.
- On February 1, 2017, the first of several electronic newsletters (Construction Update #1) was issued, providing the public with an update on construction of the project.
- On February 10, 2017, the City was advised that CN property required for the project was sold to a private company. The land was identified as CN land at the start of the expropriation process, and was therefore not subject to expropriation because CN land cannot be expropriated. At that time, an interest in the required lands was expected to be obtained via the forthcoming crossing agreement between the City and CN.

- On February 13, 2017, the City of Winnipeg awarded a Single Source Purchase Order (Materials Management reference number 98-2017) to CN for the supply of rail materials.
- On March 14, 2017, SPC Property and Development, Heritage and Downtown Development approved the purchase of privately owned lands required for the project which were not subject to the expropriation bylaw.
- On March 20, 2017, the City of Winnipeg issued a notice in accordance with Section 8(1) of the Railway Safety Act for work related to construction of the new at-grade crossing of the Waverley Street Detour Road at the CN Rivers Subdivision Mile 3.94. Notices were issued to representatives of Grant Memorial, the Reh-Fit Center, and CN in accordance with the Act.
- On March 24, 2017, Bid-Opportunity 473-2016 closed, and the City received five responsive bid submissions for the work of Contract 2 Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works.
- On March 29, 2017, the City of Winnipeg entered into four Electric Service Agreements with Manitoba Hydro (Materials Management reference number 247-2017) for the relocation of various electrical distribution lines required for the project.
- On April 20, 2017, Maple Leaf Construction Ltd. was awarded Bid-Opportunity 473-2016 for the Waverley Street Underpass at CN Mile 3.89 Rivers Sub: Contract 2 – Underpass Structure, Railworks, Roadworks, Land Drainage Sewer, Pumping Station and Landscaping Works, in the amount of \$44,701,918.80.
- On April 25, 2017, the City of Winnipeg issued a notice in accordance with Section 8(1) of the Railway Safety Act for work related to alteration of the existing at-grade crossing of Waverley Street at CN Rivers Subdivision Mile 3.89. A notice was issued to CN in accordance with the Act.
- On April 26, 2017, the City issued a news release announcing the award of Contract 2 to Maple Leaf Construction Ltd.
- On May 5, 2017, a groundbreaking ceremony was held with the Mayor, Federal and Provincial Ministers, and CN representatives marking the commencement of underpass construction. Construction Update #2 was posted to the project website and issued to stakeholders. The City issued a news release with details of the day's events.
- On May 9, 2017, the City of Winnipeg awarded a Single Source Purchase Order (Materials Management reference number 411-2017) to The Bell Telephone Company of Canada or Bell Canada for works associated with the project.
- On May 17, 2017, Borland Construction Inc. achieved Substantial Performance of Contract 1 works.
- On May 18, 2017, the Chief Financial Officer approved a contract over-expenditure for Contract 1 in the amount of \$871,763.57, primarily to cover the cost associated with adding the supply of specialized feeder main materials with long lead time to Contract 2.
- On May 24, 2017, the City received a copy of the duly executed Crossing Agreement with CN, executed by CN on May 19, 2017 and effective May 1, 2017.
- On June 19, 2017, the City entered into an easement agreement with Manitoba Hydro related to provision of an easement through the linear greenspace along Taylor Avenue, necessary for the relocation of electrical distribution lines.
- On June 29, 2017, the City of Winnipeg authorized Manitoba Hydro to proceed with adjustment of various natural gas pipeline relocations.

- On June 29, 2017, the City of Winnipeg authorized Shaw Cablesystems G. P. to proceed with relocation of various underground services to accommodate the work.
- On June 30, 2017, the City of Winnipeg entered into two Electric Service Agreements with Manitoba Hydro (Materials Management reference number 538-2017) for the renewal of street lighting in the Vicinity of Waverley Street at Grant Avenue and for the relocation of Fiber Optic Cable along Taylor Avenue.
- On July 5, 2017, the City received a copy of the fully executed contribution agreement between the Government of Manitoba and the City of Winnipeg.
- On July 18, 2017, the City of Winnipeg authorized Bell MTS (MTS Inc.) to proceed with relocation of communication cables required for the project.
- On July 19, 2017, Council passed By-Law No. 50/2017 to prohibit the sounding of engine whistles at CN River Subdivision Mile 3.94.
- On July 26, 2017, a news release and website update were issued corresponding to the launch of a travel time information system.
- On July 31, 2017, a project scope change was initiated to proceed with detailed design and construction of a new retaining wall structure in the vicinity of 1360 Taylor Avenue, for the purposes of maintaining parking on City owned land currently leased to Mondo Foods Co. Ltd.
- On August 24, 2017, the Acting Chief Administrative Officer approved an over-expenditure for Contract 2 (Bid-Opportunity 473-2016) in the amount of 1.71% or \$763,486.40, primarily to cover the additional costs associated to address these poor subgrade soil conditions.
- On September 13, 2017, the Chief Administrative Officer approved an over-expenditure to Dillon Consulting Limited's contract in the amount of \$290,000 for consulting services related to design and contract administration services for a retaining wall structure at 1360 Taylor Avenue.
- On September 11, 2017, Construction Update #3 was posted to the project website, serving to provide notice of the weekend closure and subsequent detour roadway configuration.
- On September 22, 2017, rehabilitation of Waverley Street in the vicinity of Grant Avenue, including intersection improvements was completed.
- On September 25, 2017, the City issued a news release announcing the upcoming weekend closure of Waverley Street and Taylor Avenue and details of the detour roadway configuration.
- On September 28, 2017, a final inspection of the temporary at-grade detour crossing at CN Rivers Subdivision Mile 3.94 occurred between CN and City representatives.
- On September 29, 2017 at 5:30 PM, Waverley Street and Taylor Avenue were completely closed to vehicular, cyclist and pedestrian traffic in the vicinity of the project area.
- On September 30, 2017, CN officially closed the existing public crossing at Mile 3.89 Rivers Subdivision.
- On October 2, 2017 at 6:00 AM, Waverley Street and Taylor Avenue were re-opened to traffic now operating on the detour configuration, which is expected to be in effect until the fall of 2019, at which time traffic is expected to be transitioned under the new underpass roadway.
- On October 2, 2017 at 6:00 AM, CN officially opened the new temporary public crossing at Mile 3.94 Rivers Subdivision, complete with anti-whistling status.
- On October 9, 2017, renewal of the Midtown Feeder Main works was completed.

- On October 20, 2017, the Chief Administrative Officer approved a third contract overexpenditure for Dillon Consulting Ltd. in the amount of \$206,900 for redesign of the in-line casing pipe installation to an offline trenchless replacement in order to mitigate the risk of project delay.
- On October 31, 2017, the City issued a news release warning drivers to expect additional delays in the project area for several days while rail traffic was being transitioned to the rail detour.
- On November 8, 2017 the rail detour was completed and successfully put into operation.
- On November 23, 2017, Borland Construction Ltd. achieved Total Performance for Contract 1 (Bid Opportunity 472-2017). The final contract amount was \$2,861,800.30.
- On November 28, 2017 the CAO concurred with the recommendation that approximately \$350,000 of the existing approved Capital Budget for this project be reallocated for Public Art on the project, together with \$100,000 from the Land Dedication Reserve Fund (subject to approval), for a total approximate Public Art budget of \$450,000.
- On November 30, 2017 Manitoba Sustainable Development issued authorization to the City under *The Water Rights Act* to divert groundwater for construction dewatering purposes for the project.
- On December 6, 2017, Construction Update #4 was posted to the project website, serving to provide the public with the current status of the project and how it is expected to proceed over the winter of 2017-2018.
- On December 7, 2017 Infrastructure Canada confirmed in writing that sole source elements of the project associated with CN rail related works will be considered eligible for the Federal funding contribution.
- On December 8, 2017 the City entered into a Natural Gas Service Agreement with Manitoba Hydro (Gas) for provision of natural gas service to the underpass pump station, required for operation of a backup generator to provide electricity for pumps in the event of power loss, in the amount of \$49,004.00.
- On December 13, 2017 the City entered into an Electric Service Agreements with Manitoba Hydro (Materials Management reference number 1076-2017) for provision of electric service to the underpass pump station, in the amount of \$140,571.04.
- On December 18, 2017 the City invoiced CN for a total of \$3,230,000.00 representing 34% of their total \$9.5M contribution to the project.
- On December 21, 2017 a quarterly progress report was submitted to the Province, along with the first claim under the Contribution Agreement in the amount of \$5,001,847.99.

#### <u>2018</u>

- On February 21, 2018 the City of Winnipeg entered into an Electric Service Agreements with Manitoba Hydro for relocation of a single wood utility pole in the vicinity of Grant Avenue and Waverley Street, in the amount of \$5,850.00.
- On February 27, 2018 the contribution agreement between the City of Winnipeg and the Federal Government was finalized.
- On March 2, 2018 the first claim was submitted to Infrastructure Canada in the amount of \$7,529,886.57. The first claim was later revised to 7,456,733.19 the second Federal claim was submitted on March 15, 2018, in the amount of \$433,389.16.
- On March 13, 2018, the City Centre Community Committee approved the application for Land Dedication Reserve funding in the amount of \$100,000.00 from the City Centre Land Dedication Reserve (River Heights Fort Garry Ward allocation) to assist in incorporating Public Art into the Waverley Underpass project.

- On March 16, 2018, CN's existing contract for supply of rail materials was expanded to include rail construction work.
- On April 16, 2018, Construction Update #5 was posted to the project website, serving to provide the public with the current status of the project and how it is expected to proceed over the 2018 summer construction season.
- On April 16, 2018 Oversight Committee Meeting #1 was held between City of Winnipeg, Province Government, and Federal Government representatives.
- On April 24, 2018 the City of Winnipeg awarded a single source contract to the Pembina Trails School Division (Materials Management reference number 347-2018) for relocation of a fiber optic cable in conflict with the proposed work, in the estimated amount of \$121,880.00
- On May 7, 2018, the CFO authorized award of a single source contract to the Winnipeg Arts Council for a public art component for the project, in the total amount of \$450,000.00 (inclusive of GST). Of that, \$350,000.00 is to be funded by the Waverley Underpass project, and the remaining \$100,000 coming from the City Centre Land Dedication Reserve (River Heights – Fort Garry Ward allocation).
- On May 16, 2018, the City entered into an easement agreement with Manitoba Hydro for provision of an easement through the linear greenspace along Taylor Avenue necessary for the relocation of natural gas services.
- On June 20, 2018 installation of the last of two problematic caisson foundations was concluded, marking the completion of foundation work required for the rail bridge.
- On June 28, 2018 a news release and project website update were issued informing the public of an upcoming full closure of Waverley Street over the weekend of July 6 – 9, 2018 for track reconstruction.
- Over the weekend of July 6, 2018 starting at 10:00 AM through July 8, 2018 ending at 7:00 PM, Waverley Street (detour roadway) was completely closed to all traffic, cyclists and pedestrians in order to complete rail track reconstruction at the at-grade crossing with the detour road. The work was completed approximately 12 hours ahead of schedule.
- On July 31, 2018 the property owner representative for 1360 Taylor Avenue was informed that the City will not be proceeding with construction of a retaining wall, and that the City will work with the owner to review site and parking alterations.
- On August 15, 2018, the City executed an agreement with the Winnipeg Arts Council (WAC) for overall management and execution of a Public Art component on the project.
- On August 31, 2018 the critical stage for bridge completion was achieved.
- On September 20, 2018 a "fly through" video of the project site was posted to the project website. The video provides a bird's eye view of the project site taken during the 2018 summer construction season, approximately mid-way through the project.
- On October 16, 2018, construction of the new eastbound lanes of Taylor Avenue were completed and traffic was diverted to these new lanes, allowing work on the existing westbound lanes of Taylor Avenue to commence.
- On October 17, 2018 rail work commenced for construction of permanent rail track over the new bridge structure.
- On October 18, 2018, the City of Winnipeg entered into three Electric Service Agreements with Manitoba Hydro (Materials Management reference number 926-2018) for the installation of street lighting along Waverley Street, and relocation of a single distribution line support pole vicinity Hurst Way, in the amount of \$755,864.09.

- On October 23, 2018 The Winnipeg Arts Council received submissions in response to a national call to artists for expressions of interest and qualifications.
- On October 24, 2018, the City of Winnipeg entered into an Electric Service Agreement with Manitoba Hydro for the installation of street lighting along Wilkes Avenue, in the amount of \$10,579.04.
- On December 14, 2018 all train traffic was diverted off the temporary rail detour and onto the new rail carrying bridge structure, marking substantial completion of the rail work.
- On December 18, 2018, Construction Update #7 was posted to the project website, serving to provide the public with the current status of the project and how it is expected to proceed over the coming winter of 2018/19.
- On December 21, 2018, backfilling around the pump station substructure was completed and operation of the groundwater depressurization system ceased.

#### <u>2019</u>

- On January 18, 2019, the Chief Administrative Officer approved a second over-expenditure for Contract 2 (Bid-Opportunity 473-2016) in the amount of 3.09% or \$1,382,383.17 (for a total over-expenditure of 4.80% or \$2,145,869.57).
- On February 4, 2019, the Director of Public Works approved an over-expenditure- to ATS Traffic Manitoba in the amount of 10.73% or \$3,680.00 for continued technical services for the variable message sign.
- On March 8, 2019 Infrastructure Canada requested that the federal contribution agreement be amended to reflect the reduction in the project Estimate at Completion.
- On March 15, 2019, the Director of Public Works approved an over-expenditure to Bell Canada in the amount of 4.51% or \$36,107.95 for additional costs associated with the installation of temporary and permanent communication cabling within the CN right-of-way.
- On March 26, 2019, the City of Winnipeg entered into an Electric Service Agreement with Manitoba Hydro (Materials Management reference number 324-2019) for the installation of pathway lighting in the project area.
- On April 17, 2019 CN made payment to the City in the amount of \$6.84M, in partial fulfillment of their \$9.5M contribution to the project.
- On April 25, 2019 Council authorized the Public Service to proceed with amendment of the Federal and Provincial funding agreements to reflect the estimate at completion of \$97.923M.
- On April 23, 2019 Construction Update #8 was posted to the project website, serving to provide the public with the current status of the project and how it is expected to proceed over the 2019 summer construction season.
- On June 5, 2019 the amended Federal funding agreement was signed by the City of Winnipeg reducing the Federal contribution to \$29,000,000. As part of the amending process, the Public Service has requested that the surplus amount be directed to projects within the City of Winnipeg.
- On June 12, 2019, landowners adjacent to the temporary detour crossing were provided notice in accordance with Section 8(1) of the Railway Safety Act pertaining to the upcoming removal and decommissioning of the temporary at-grade rail crossing of the Waverley Street detour road crossing of the CN Rivers Subdivision at Mile 3.94.
- On July 9, 2019 the amended Provincial funding agreement was signed by the City of Winnipeg reducing the Provincial contribution to \$29,000,000.

- On August 6, 2019, a ribbon cutting event was held with elected officials from the City as well as Provincial and Federal governments marking the upcoming opening of the underpass to traffic. The City issued a news release with details of the day's events. Construction Update #9 was posted to the project website and issued to stakeholders, serving to inform the public and project stakeholders of the weekend closure and subsequent opening of the underpass to traffic expected on August 19, 2019.
- On August 12, 2019 the City issued a news release announcing the weekend closure of Waverley Street and Taylor Avenue and details of the opening of the underpass to traffic.
- On August 16, 2019 at 5:30 PM, Waverley Street and Taylor Avenue were completely closed to vehicular traffic in the vicinity of the project area. Pedestrians and cyclists were diverted from the temporary detour road to the new pathway on the east side of the underpass.
- On August 18, 2019 at approximately 6:00 PM, Waverley Street and Taylor Avenue were reopened to traffic, with traffic on Waverley Street operating under the new underpass for the first time.
- On August 19, 2019 an update to the project website was issued, including the release of a video with additional information about the project.
- On August 19, 2019, the pump station was fully operational and automated.
- On August 20, 2019, the Director of Public Works approved a contract over-expenditure to Pembina Trails School Division in the amount of \$5,390.00 for the adjustment of fibre pit boxes required due to construction.
- On September 5, 2019 Public Works received a copy of the fully executed Public Art Agreement between Figureground Studio Inc. (the selected artist), the Winnipeg Arts Council, and the City of Winnipeg. The effective date of the agreement is May 28, 2019.
- On September 12, 2019, the travel time information system (using the variable message sign supplied by ATS Traffic Manitoba) was discontinued.
- On September 28, 2019, traffic on westbound Taylor Avenue was transitioned to the two recently rehabilitated westbound lanes, effectively marking the completion of the twinning of Taylor Avenue as part of this project.