Minute No. 511
Report - Standing Policy Committee on Infrastructure Renewal and Public Works Committee – June 27, 2008

Item No. 2 Improvements to the intersection of Dugald Road and Ravenhurst Street (Transcona Ward)
File SC

COUNCIL DECISION:

Council concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and adopted the following:

1. That a traffic control signal be installed at the intersection of Dugald Road and Ravenhurst Street and that modifications to the intersection geometry which are required in order to accommodate the signalization of the intersection also be constructed, including installation of a median separating eastbound and westbound traffic approaching the intersection, an eastbound left turn storage lane and a right-turn cut-off island in the southbound approach.

2. That the project as identified in Recommendation 1 be approved as a new Capital Project for 2009 and the City's portion of the project costs be funded as a first call against the 2009 Capital Budget.

3. That the Winnipeg Public Service be authorized to amend Development Agreement 42/87, or enter into a separate agreement, to have the developer front end portions of the project in 2008 with funding that are already obligated to contribute to the intersection improvements.

4. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report - Standing Policy Committee on Infrastructure Renewal and Public Works Committee – June 27, 2008

DECISION MAKING HISTORY:

Moved by Councillor Clement,

That the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works be adopted by consent.

Carried

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On July 9, 2008, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Infrastructure Renewal and Public Works and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On June 27, 2008, the Standing Policy Committee on Infrastructure Renewal and Public Works concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

RE: Improvements to the Intersection of Dugald Road and Ravenhurst Street

FOR SUBMISSION TO: **STANDING POLICY COMMITTEE ON INFRASTRUCTURE RENEWAL AND PUBLIC WORKS**

ORIGINAL REPORT SIGNED BY: **DIRECTOR OF PUBLIC WORKS**

REPORT DATE: **June 11th, 2008**

RECOMMENDATION:

1. That a traffic control signal be installed at the intersection of Dugald Road and Ravenhurst Street and that modifications to the intersection geometry which are required in order to accommodate the signalization of the intersection also be constructed, including installation of a median separating eastbound and westbound traffic approaching the intersection, an eastbound left turn storage lane and a right-turn cut-off island in the southbound approach.

2. The project as identified in Recommendation #1 be approved as a new Capital Project for 2009 and that the City's portion of the project costs be funded as a first call against the 2009 Capital Budget.

3. That the Public Service be authorized to amend Dev. Agreement 42/87, or enter into a separate agreement, to have the Developer front end portions of the project in 2008 with funding that are already obligated to contribute to the intersection improvements.

Report Summary

Key Issues:

- A recent traffic study indicates that the Transportation Association of Canada's warrant for new traffic control signals is met at the intersection of Dugald Road and Ravenhurst Street.

- Because Dugald Road is a two-lane roadway, geometric modifications including the construction of a median separating eastbound and westbound traffic and an eastbound left turn storage lane are required to safely and efficiently accommodate the operation of a traffic control signal. A right-turn cut-off island is recommended to improve the safety and efficiency of the southbound movement under traffic signal control.

- Through Development Agreement AG 42/87 relating to the Canterbury Park subdivision, the City has an agreement with Novamet Development Corporation for a 40% contribution towards the installation costs for traffic control signals and a 20% contribution towards the costs for intersection geometric improvements, including through lanes, auxiliary lanes, channelization and transitions, at the intersection of Dugald Road and Ravenhurst Street.

- Novamet Development Corporation has agreed to finance the entire cost of the project, for initiation in 2008 and completion by the end of 2009. An amendment to Development Agreement AG 42/87 will be made or a separate agreement entered into wherein the City will agree to reimburse the developer for the City's portion of the design and construction costs as monthly progress payments as construction proceeds in 2009.

Implications of the Recommendation(s):

General Implications

None
For the organization overall and/or for other departments
x For the community and/or organizations external to the City
Involves a multi-year contract

Comment(s): Approval of the recommendations of this report will increase traffic safety at the intersection of Dugald Road and Ravenhurst Street and will reduce delays to southbound traffic at the intersection.

Policy Implications

x No
Yes

Comment(s):

Regulatory Implications

x None
Eliminates or reduces regulatory impact
Proposes regulatory impact

Comment(s):

Environmental Implications

x No
Yes

Comment(s):

Human Resources Implications

x No
Yes

Comment(s):

Financial Implications

Within approved current and/or capital budget
x Current and/or capital budget adjustment required

Comment(s): The installation costs for the proposed improvements are estimated to be $2.3M and are to be partially funded from contributions from the developer for the Canterbury Park subdivision under Development Agreement AG 42/87. The developer will finance the design and construction costs and will be reimbursed for the City's portion as monthly progress payments as construction proceeds in 2009. Once installed, the estimated cost for annual operation and maintenance of the new traffic control signal is $6,000. These new annual operating costs will be addressed in the development of the 2009 Operating Budget. Although the recommendation is that the project be funded as a first call against the 2009 Capital Budget, this project was not included in the 2009-2013 forecast of the 2008 Adopted Capital Budget. The additional required Capital budget would be made available by deferring a portion of the 2009 Regional and Local Streets Program currently in the 2009 forecast of the 2008 Adopted Capital Budget.

Report

REASON FOR THE REPORT:

Council approval is required for the addition of a new project to the Capital Budget where additional funds are required.

HISTORY:

At the April 8, 2008 meeting of the Standing Policy Committee on Infrastructure Renewal and Public Works, the following motion was passed:

> *The Standing Policy Committee on Infrastructure Renewal and Public Works forwarded the recommendation of the East Kildonan-Transcona Community Committee to the Winnipeg Public Service.*

At the March 10, 2008 meeting of the East Kildonan – Transcona Community Committee, the following motion was passed:

> *The East Kildonan-Transcona Community Committee concurred in the recommendation of the Winnipeg Public Service, as amended, and recommends to the Standing Policy Committee on Infrastructure Renewal and Public Works:*
>
> 1. *That a traffic control signal be installed and the appropriate geometric modifications that would be required be constructed to include a fully channelized intersection with a raised median separating eastbound and westbound traffic approaching the intersection, a proper eastbound left turn storage lane and a right-turn cut-off island in the southbound approach (see Drawing T-3189 - Appendix A prepared in 2003).*
>
> 2. *That a final concept plan and cost estimate be prepared for consideration by the Standing Policy Committee at its meeting on May 26, 2008.*

DISCUSSION:

Dugald Road has a two-lane, undivided roadway with gravel shoulders and ditch drainage. It is a Regional Street and Full Time Truck Route with a speed limit of 80 km/h. At its intersection with Dugald Road, Ravenhurst Street has a two-lane undivided roadway with gravel shoulders and ditch drainage. Ravenhurst Street is a Regional Street and Full Time Truck Route between Pandora Avenue East and Dugald Road. The speed limit on Ravenhurst Street is 70 km/h. Southbound Ravenhurst Street is controlled by a stop sign at Dugald Road. Traffic on Dugald Road is free flowing. The

CNR Redditt Subdivision crosses Ravenhurst Street at a point approximately 130 metres north of Dugald Road. The traffic signal controlled intersection of Dugald Road and P.T.H. 101 is located approximately 500 metres east of Ravenhurst Street. Figure 1 provides an aerial view of the intersection of Dugald Road and Ravenhurst Street.

Figure 1 – Site Plan



A manual traffic study was conducted on April 11 and 14, 2008. Based on this study, there were 14,942 vehicles which approached the intersection in an average weekday 24-hour period with 6,266 vehicles approaching westbound (42%), 5,521 vehicles approaching eastbound (37%) and 3,155 vehicles approaching southbound (21%). A

summary of the A.M. and P.M peak traffic periods is provided in Table 1 below.

Table 1: Dugald Road & Ravenhurst Street
Peak Period Traffic Summary
April 11 & 14, 2008

Period	Dugald Road				Ravenhurst Street	
	Westbound		Eastbound		Southbound	
	Thru	Right	Left	Thru	Left	Right
AM Peak Hour	509	163	53	122	189	172
PM Peak Hour	200	201	163	571	179	42

The level of conflicting traffic approaching the intersection during the busiest six hours produces a signal warrant of 103 based on guidelines contained in the Transportation Association of Canada (TAC) *Manual of Uniform Traffic Control Devices for Canada*. Generally, traffic control signals are recommended when the conflicting traffic volumes result in a warrant value of 100 or more.

In the three year period ending December 31, 2006, the latest for which data is available, there were 18 reported collisions at the intersection of Dugald Road and Ravenhurst Street, none of which involved a pedestrian. Of the 18 total collisions, 12 involved a southbound motorist on Ravenhurst Street in collision with an eastbound or westbound motorist on Dugald Road. For comparison, it is noted that the average number of collisions at signalized intersections in Winnipeg is 11 collisions per year.

Due to the two-lane geometry on Dugald Road, the following intersection improvements would be required prior to installation of traffic control signals: a raised median separating eastbound and westbound traffic approaching the intersection, an eastbound left turn storage lane and a right-turn cut-off island in the southbound approach. As indicated in a Public Works memo to the East Kildonan – Transcona Community Committee dated March 5, 2008, the Department's design drawing T-3189 for these intersection improvements was reviewed. No specific changes to this drawing were necessary. Drawing T-3189 is attached in Appendix A for reference.

Cost Estimates

Traffic control signals at the intersection of Dugald Road and Ravenhurst Street are estimated to cost $279,650. This includes the cost to install underground works for a tie line and communication link to the existing traffic control signal at the intersection of Dugald Road and the Perimeter Highway PTH 101.

An updated cost estimate was obtained for the intersections improvements needed to accommodate signalization of the intersection (i.e., a raised median separating eastbound and westbound traffic approaching the intersection, an eastbound left turn

storage lane and a right-turn cut-off island in the southbound approach). The geometric improvements are estimated to costs $2,020,350. The total cost for these improvements and the traffic control signals is estimated at $2.3M.

Project Funding

Through Development Agreement AG 42/87 relating to the Canterbury Park subdivision, the City has an agreement with Novamet Development Corporation for a 40% contribution towards the installation costs for traffic control signals and a 20% contribution towards the costs for intersection geometric improvements, including through lanes, auxiliary lanes, channelization and transitions, at the intersection of Dugald Road and Ravenhurst Street.

Novamet Development Corporation has agreed to finance the design and construction costs of the project which will start in 2008 and is expected to be completed by the end of 2009. An amendment to Development Agreement AG 42/87 between the City and the developer will be made or a separate agreement entered into wherein the City will agree to reimburse the developer for the City's portion of the project costs, as monthly progress payments as construction proceeds in 2009.

Recommendation

Based on the updated traffic study, the warrant for traffic control signals is met at the intersection of Dugald Road and Ravenhurst Street. As such, installation of a traffic control signal and the required intersection geometric improvements (a raised median separating eastbound and westbound traffic approaching the intersection, an eastbound left turn storage lane and a right-turn cut-off island in the southbound approach) is recommended.

It is further recommended that the project be approved as a new Capital Project for 2009 and that the City's portion of the project costs be funded as a first call against the 2009 Capital Budget.

Financial Impact Statement

Date: June 4, 2008

Project Name:

Improvements to the Intersection of Dugald Road and Ravenhurst Street

First Year of Program **2009**

	2009	2010	2011	2012	2013
Capital					
Capital Expenditures Required	$ 1,784,070	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	1,784,070	-	-	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Developer Agreement AG42/87		-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ 3,000	$ 175,487	$ 175,487	$ 175,487	$ 175,487
Less: Incremental Revenue/Recovery	100,511	-	-	-	-
Net Cost/(Benefit)	$ (97,511)	$ 175,487	$ 175,487	$ 175,487	$ 175,487
Less: Existing Budget Amounts	(97,511)	175,487	175,487	175,487	175,487
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: It is recommended that the funding requirement for this project be approved as a first call on the 2009 Capital Budget as this project was not included in the 2009-2013 forecast of the 2008 Adopted Capital Budget. The additional required Capital Budget for this project would be made available by deferring a portion of the 2009 Regional and Local Streets Program currently in the 2009 forecast of the 2008 Adopted Capital Budget. The Developer is obligated to fund its share of these intersection improvement costs pursuant to the Developer Agreement AG42/87. Debt and Finance costs are applicable to the City's internal funded portion of this project.

"Original Signed by Darcy Stewart, CA"

Manager of Finance & Administration

IN PREPARING THIS REPORT THERE WAS:

Internal Consultation With and Concurrence By: **N/A**

External Consultation With: **N/A**

THIS REPORT SUBMITTED BY:

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APPENDIX A

Proposed Intersection Improvements at Dugald Road and Ravenhurst Street

(Drawing T-3189)


H:\wordfiles - Traffic Management Branch\


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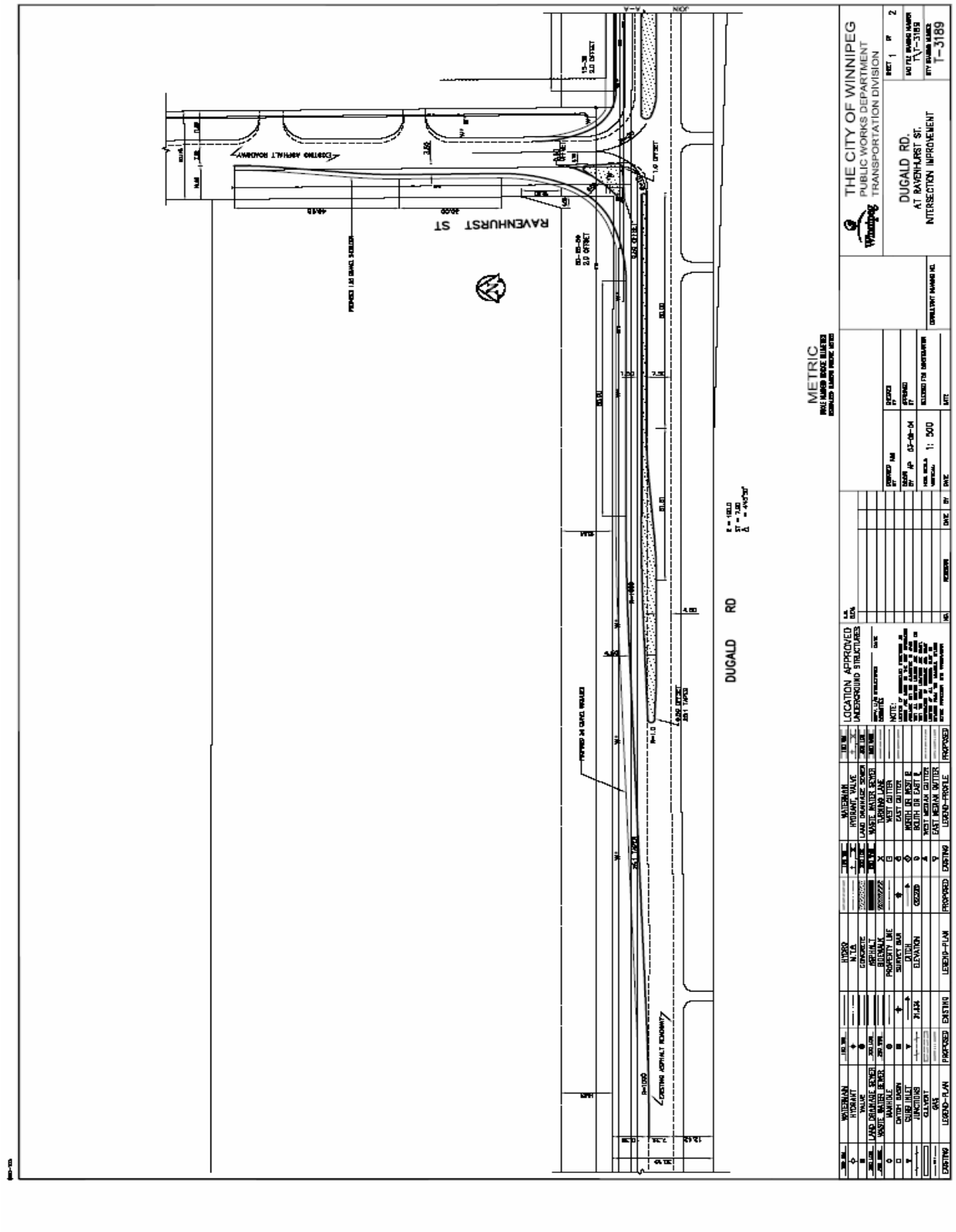
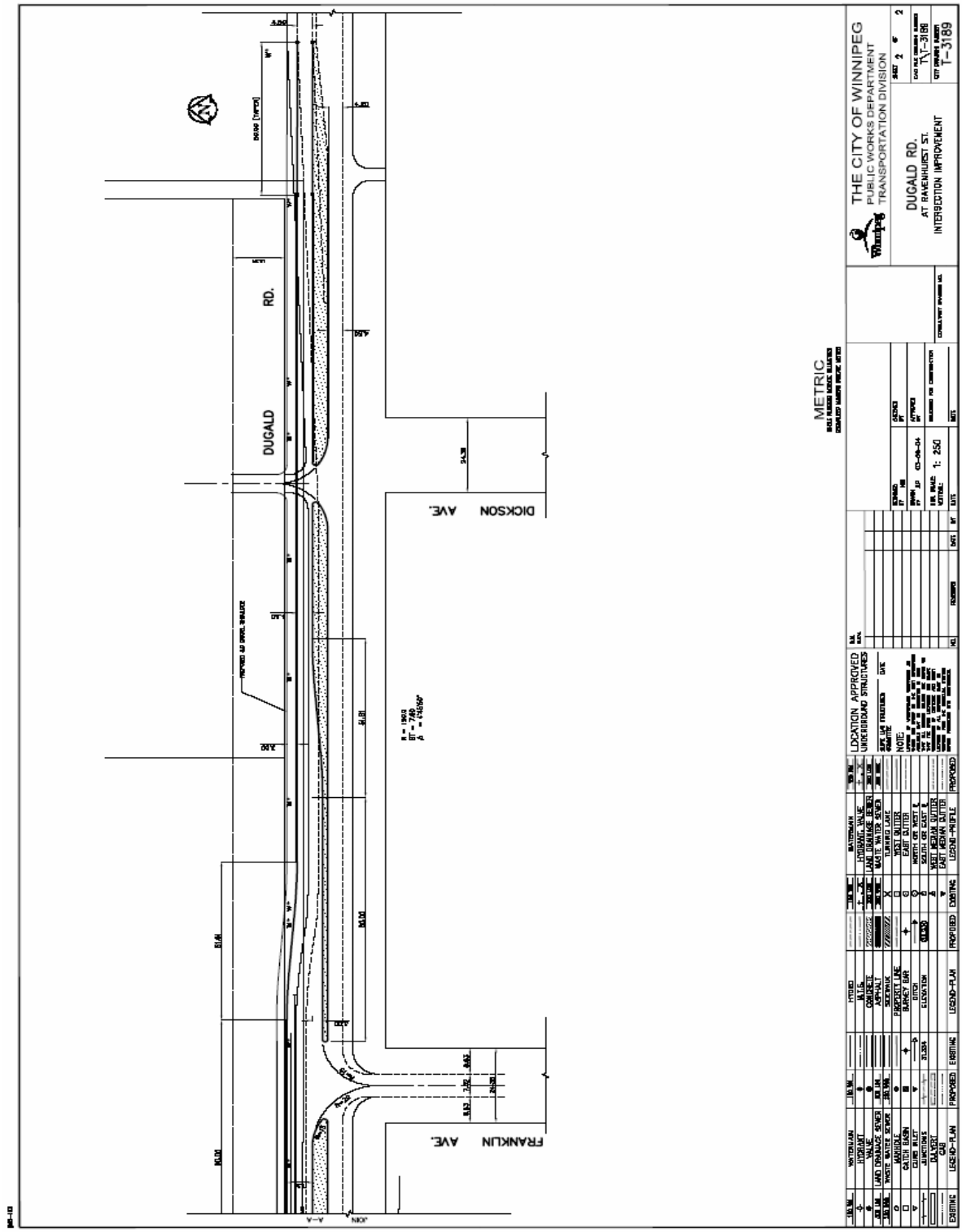

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
TRANSPORTATION DIVISION
DUGALD RD.
AT RAVENHURST ST.
INTERSECTION IMPROVEMENT
T-3189
METRIC
RAVENHURST ST
DUGALD RD
LOCATION APPROVED
UNDERGROUND STRUCTURES


DUGALD RD.
DICKSON AVE.
FRANKLIN AVE.
METRIC
THE CITY OF WINNIPEG
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