



Town of Drayton Valley

Boundary Change Application Report

Application Area – Phase 2

July 2011

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1. Executive Summary

The following report reflects the financial impacts associated with the revised annexation boundary lands (“Application Area – Phase 2”). Application Area – Phase 2 is situated north and east of the current Town of Drayton Valley (the “Town”) boundary and is illustrated in Map 1, contained in Appendix A, of this report. The Town’s request to annex Application Area – Phase 2 is jointly supported by the Town and Brazeau County (the “County”).

Our conclusions regarding the impact of the annexation of Application Area - Phase 2 to the Town are as follows:

1. The capital improvements to be paid for by the Town would not pose any issues with regard to breaching debt capacity limits or debt service limits.
2. The tax rate impacts on the Town are reasonable.
3. The County will experience a nominal tax saving.
4. Residents of Application Area - Phase 2 will be afforded tax protection (as outlined in this report).

The additional lands provided for in Application Area – Phase 2 are largely undeveloped and the majority of this area will be earmarked by the Town for future residential growth. In addition, Application Area – Phase 2 provides a small strip of lands east of Highway 22 that are suitable for commercial development. The lands contained in Application Area – Phase 2 are necessary to support residential growth of Town beyond 2035 when undeveloped residential lands contained within current Town boundaries and those requested to be added through the Town’s 2010 annexation application (“Application Area – Phase 1”) are exhausted.

The advantages of Application Area – Phase 2 are:

- Because the lands are largely undeveloped the Town may extend infrastructure services in concert with future land development—a “just-in-time” capital staging plan approach. The capital staging plan associated with Application Area – Phase 2 is anticipated to commence in 2035 with residential development of the area.
- The Town and the County have agreed to explore entering into joint agreement on the construction of various treatment and transmission facilities in order to defray water and wastewater infrastructure costs. There are various water and sanitary sewer transmission lines that may jointly serve Town lands (Application Area – Phase 2) and County lands (the Hamlet of Rocky Rapids, and country residential lands east of the Town). Furthermore the Town and County have agreed to explore expansion of the Town’s water and sewer treatment plants to



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support the provision of water and sewer services within the County (the Hamlet of Rocky Rapids and country residential lands east of the Town).

- The operating support required to extend Town services to existing residents of Application Area – Phase 2 is nominal. As such the impact on the Town and County's administration will be minor.
- The tax base transferred from the County to the Town for Application Area – Phase 2 is proximate to anticipated tax levy requirements of the area. It is anticipated that Application Area – Phase 2 will place a small additional tax burden (approximately \$40k to \$50K per year) on Town residents.
- It has been agreed that existing residents of Application Area – Phase 2 will be taxed at County mill rates for a period of 50 years. As such, area residents will enjoy lower tax rates of the County and over time will see the level of service provided to them raised to an urban standard. It should be noted that any subdivision save the first parcel out from agriculture lands, or change of use of these existing lands will result in those properties being taxed at the tax rates of the Town rather than of the County.

Our review has considered fiscal impacts associated with Application Area – Phase 2 for a 50 year period, from 2011 to 2060. Details outlined further in this report are summarized below:

- The existing (2011) assessment and tax base of the County associated with Application Area – Phase 2 is outlined in the table below:

Table 1 – Application Area – Phase 2, Existing Assessment and Tax Base

Annexation Application 2	Assessment	Mill Rate	Tax
Residential and Farm	\$ 4,314,150	0.00300	\$ 12,942.45
Non Residential	\$ 268,680	0.00850	\$ 2,283.78
Linear (Estimated)*	\$ 4,200,000	0.00850	\$ 35,700.00
Non Taxable	\$ 428,760	n/a	\$ -
Total Application 2	\$ 9,211,590		\$ 50,926.23

- There are no incremental capital works associated with Application Area – Phase 2 until such time as residential development of the area commences. It is anticipated that development of the residential area will commence in 2035 once all other residential development holdings are exhausted.



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- As there are no incremental capital works associated with Application Area – Phase 2 until 2035 there is no incremental debt impact on the Town until 2045. Furthermore the debt impacts at this time are nominal and result in debt capacity and debt service costs far below regulated maximums.
- The operating costs associated with the Town supporting existing Application Area – Phase 2 residents are nominal. The table below summarizes the operating costs and associated program recoveries associated with Application Area – Phase 2.

Table 2 – Application Area – Phase 2, Operating Costs and Program Recoveries

Program Recoveries	2011	2016	2021	2026	2031
Water	-	-	-	-	-
Wastewater	-	-	-	-	-
Solid Waste	-	-	-	-	-
Police	10,579	12,264	14,217	16,482	19,107
	10,579	12,264	14,217	16,482	19,107
Program Expenditures	2011	2016	2021	2026	2031
Water	-	-	-	-	-
Wastewater	-	-	-	-	-
Solid Waste	-	-	-	-	-
Police	35,263	40,880	47,391	54,939	63,689
Fire	21,053	24,406	28,293	32,799	38,023
Common Services	7,105	8,237	9,549	11,070	12,833
Roads	21,053	24,406	28,293	32,799	38,023
Storm	2,289	2,654	3,077	3,567	4,135
Parks	-	-	-	-	-
Administration	16,447	19,067	22,104	25,624	29,706
	103,211	119,649	138,706	160,799	186,410
Tax Requirement	92,632	107,385	124,489	144,317	167,303

- The table below outlines the incremental cost burden on the Town associated with Application Area – Phase 2 prior to residential development of the area in 2035.



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Table 3 – Application Area – Phase 2, Tax Requirement in Excess of Taxes

Description		2011	2016	2021	2026	2031
Tax Requirement		\$ 92,632	\$ 107,385	\$ 124,489	\$ 144,317	\$ 167,303
Taxes Generated		\$ 50,926	\$ 63,615	\$ 79,466	\$ 99,266	\$ 124,000
Impact on Town		\$ 41,705	\$ 43,770	\$ 45,023	\$ 45,051	\$ 43,303

- As such tax levy rates for the Town will remain at those rates outlined in Application Area - Phase 1 analysis which are summarized below.

Table 3A – Application Area – Phase 1, Tax Levy Projections

	Revised Annexation Area 1 - Per Annum Tax
Fiscal Period	Levy % Increase
2009 - 2011	4.00%
2012 - 2016	2.50%
2017 - 2022	0.00%
2023 - 2026	0.50%
2027 - 2031	0.00%
2032 - 2033	0.00%

- It is assumed that the County's operating costs and program recoveries associated with supporting existing Application Area – Phase 2 residents are of a magnitude similar to that being anticipated by the Town. As such, the County will gain a nominal tax savings (tax requirement \$92,632 less taxes generated \$50,626, which equals \$41,705 in cost savings).
- Once residential development of Application Area – Phase 2 commences in 2035, capital infrastructure must be put in place to support new residents. A summary of direct capital investments required to support Application Area - Phase 2 development is outlined in the table below.



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Table 4 – Application Area – Phase 2, Capital Plan 2035 to 2060

Description	2011 Cost	Anticipated Cost In Year of Construction
<u>Water</u>		
Water Mains	\$ 3,520,000	\$ 9,506,604
Ravine Crossing	\$ 200,000	\$ 406,559
<u>Sewer</u>		
Trunk Sewer	\$ 2,100,000	\$ 5,671,553
Lift Station	\$ 1,500,000	\$ 4,097,858
Force mains	\$ 200,000	\$ 406,559
Ravine Crossing	\$ 200,000	\$ 406,559
<u>Stormwater</u>		
Trunk Sewers	\$ 2,100,000	\$ 6,481,775
Ponds	\$ 2,400,000	\$ 18,905,178
<u>Roads</u>		
Arterial	\$ 13,400,000	\$ 36,189,912
Collector	\$ 25,160,000	\$ 67,950,611
Ravine Crossing	\$ 2,000,000	\$ 5,463,811
Total	\$ 57,680,000	\$ 155,486,978

- As most of the capital investment for Application Area - Phase 2 is directly attributable to land development, the majority of capital financing will come from offsite levies charged to developers. The table below outlines anticipated capital plan financing sources.

Table 5 – Application Area – Phase 2, Capital Plan Financing 2035 to 2060

Financing Source	2011 Cost	Anticipated Cost In Year of Construction
Offsite Levy	\$ 55,680,000	\$ 150,023,167
Debenture	\$ 2,000,000	\$ 5,463,811
Total	\$ 57,680,000	\$ 155,486,978



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- Once residential development commences in Application Area – Phase 2 operating programs will need to increase to provide service to these residents. A summary of operating costs and program recoveries for Application Area - Phase 2 is outlined in the table below.

Table 6 – Application Area – Phase 2, Operating Plan 2035 to 2060

Program Recoveries	2036	2041	2046	2051	2056
Water	262,483	1,486,611	3,274,137	5,829,664	7,115,316
Wastewater	140,786	797,364	1,756,128	3,126,820	3,816,397
Solid Waste	121,697	689,247	1,518,009	2,702,844	3,298,919
Police	79,938	452,741	997,124	1,775,398	2,166,937
	604,904	3,425,963	7,545,398	13,434,725	16,397,570
Program Expenditures	2036	2041	2046	2051	2056
Water	218,736	1,238,843	2,728,448	4,858,053	5,929,430
Wastewater	117,322	664,470	1,463,440	2,605,683	3,180,331
Solid Waste	202,828	1,148,745	2,530,015	4,504,740	5,498,199
Police	266,460	1,509,136	3,323,745	5,917,992	7,223,124
Fire	159,081	900,976	1,984,325	3,533,129	4,312,313
Common Services	53,690	304,080	669,710	1,192,431	1,455,406
Roads	159,081	900,976	1,984,325	3,533,129	4,312,313
Storm	17,300	97,981	215,795	384,228	468,964
Parks	34,998	198,215	436,552	777,288	948,709
Administration	124,282	703,888	1,550,254	2,760,257	3,368,995
	1,353,775	7,667,309	16,886,610	30,066,931	36,697,783
Tax Requirement	748,872	4,241,347	9,341,212	16,632,207	20,300,213

- The inflation rate applied, 3.0% to 2011 unit budget costs has a compounding impact on costs and will be over 2 times the 2011 operating budget by 2036 and over 4.25 times the base by 2060.
- Operating costs are also significantly impacted by growth of the area which see the base population of 200 grow to 10,800 by the end of the review period.
- Assessment stemming from residential development of Application Area – Phase 2 is outlined in the table below.



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Table 7 – Application Area – Phase 2, Growth Assessment 2035 to 2060

Year	Assessment
2036	\$ 48,173,379
2041	\$ 266,278,876
2046	\$ 572,360,164
2051	\$ 994,601,797
2056	\$ 1,184,767,598

- In order for the Application Area – Phase 2 to satisfy its own tax burden mill rates would need to increase as outlined in the table below. It should be noted that these mill rate increases would only be applied to lands that have developed subsequent to annexation. Existing Application Area – Phase 2 lands that are not further developed will be taxed at the mill rates of the County for a period of 50 years from the annexation date.

Table 8 – Application Area – Phase 2, Self Sustaining Tax Impact 2035 to 2060

Year	Mill Rate Increase
2032 - 2036	3.00%
2037 - 2041	4.00%
2042 - 2046	4.25%
2047 - 2051	0.10%
2052 - 2056	0.10%
2057 - 2060	0.75%

It should be noted that the mill rate increases reflected in the table above represent the mill rate increases that would be required if Application Area - Phase 2 residents were required to fund capital and operating costs impacts for their neighbourhoods on their own—a self-sustained approach, without any burdening of costs onto existing Town and Application Area Phase 1 residents. It is our view that the resulting mill rate impacts outlined above therefore represent the maximum impact that would be faced by the Town. Clearly all fiscal impacts would be shared across existing Town, Application Area Phase 1 and Application Phase 2. As the tax base for this entire area is significantly larger than that of the Application Area - Phase 2 alone and as the existing Town and Application Area - Phase 1 hold the bulk of the Town's industrial and commercial tax base, it is anticipated that fiscal impacts would be diluted and therefore would be lower than that outlined above.

It should be further noted that the fiscal impact outlined above does not consider indirect capital investments that the Town may be required to make to support Application Area - Phase 2 residents. (which may include new or expanded recreation facilities, emergency response facilities, public works and administrative support infrastructure that may have to be built to support the increased population



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of the community). It is our view that these facilities, while having some impact, would not exceed the tax recovery that would be created if Application Area –Phase 2 rates were to be applied more broadly. At the very least, the Application Area – Phase 2 rates would provide sufficient tax recoveries to make indirect infrastructure investments in some reasonable fashion. By way of example, a 3% increase in existing Town mill rates in 2032 would provide \$3.8M in additional tax recoveries that could be applied to construction of indirect infrastructure for Application Area – Phase 2 residents. This level of annual indirect infrastructure funding would continue through 2060 and grow by the mill rate increases outlined for Application Area – Phase 2.

Regardless of dilution impacts of the broader tax base, it is our view that the fiscal impacts on Application Area – Phase 2 are reasonable and manageable.

2. Development Staging

In order to develop the appropriate capital, operating, assessment and taxation plans for Application Area – Phase 2, the timeframes and pace associated with area development had to be established. The Application Area - Phase 2 development staging plan was established using the assumptions contained in the Corvus Business Advisors, “Boundary Change Application Report” and “Addendum 2 Revised Application Area – Area 1” (collectively, the Application Area – Phase 1 Report) as well as those outlined in the Mackenzie Associates Consulting Group reports, “Examination of Long-Term Growth Requirements of the Drayton Valley Urban Community” and “Land Use Planning Analysis Phase 2 Drayton Valley Annexation Proposal”. (Note: the Town submitted these reports to the Municipal Government Board as part of its application to annex the Application Area Phase 1.

We have assumed that the Application Area - Phase 2 residential lands would develop after residential land inventories within existing Town boundaries and Application Area - Phase 1 have been exhausted in 2035. This assumption is premised on the desire to limit concurrent front ending of development supporting infrastructure that would otherwise occur if development of Application Area - Phase 2 commenced earlier.

We have further assumed that development growth rates and development densities established in the Mackenzie Long Term Growth Requirement study would also apply to Application Area - Phase 2. These assumptions include:

- Annual growth rates of 2.5%.
- Residential Densities (households per hectare) of 10.0
- Population Densities (persons per household) of 2.6

Given these assumptions the residential development of Application Area - Phase 2 is outlined in the table below:



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Table 9 – Application Area – Phase 2 Residential Development

Year	Residential Development (ha.)		Year	Residential Development (ha.)
2035	8.05		2044	25.37
2036	20.82		2045	26.00
2037	21.34		2046	26.65
2038	21.88		2047	27.32
2039	22.42		2048	28.00
2040	22.98		2049	28.70
2041	23.56		2050	29.42
2042	24.15		2051	30.16
2043	24.75		2052	21.75
			Total	433.33

3. Capital Plan

The Town has asked ISL Engineering and Land Services to undertake a preliminary review of direct capital investment requirements associated with Application Area – Phase 2. ISL Engineering’s assessment included water, sanitary, stormwater and road requirements for the Application Area - Phase 2 as well as infrastructure (utility trestles etc.) that are required to extend services from existing Town and Application Area - Phase 1. ISL Engineering’s assessment did not consider indirect infrastructure investments, such as recreational, public works or other infrastructure that may be required to support Application Area - Phase 2 residents. Furthermore, ISL Engineering’s infrastructure assessment was expressed in 2011 dollars. Maps 2, 3, 4 and 5 contained in Appendix A of this report highlight capital requirements for the Application Area - Phase 2 as well as those required to fully development existing Town and Application Area - Phase 1 (note existing Town and Application Area - Phase 1 capital impacts are contained within the Application Area - Phase 1 Report).

We have assumed that direct capital requirements would be undertaken in a staged fashion at the pace of development where ever possible. This staging of capital construction has been applied to road, water and sewer lines and other infrastructure that may be segmented. For infrastructure that cannot be segmented we have assumed that infrastructure would be constructed at the outset of Application Area - Phase 2 development, as in the case of utility trestles, or at the mid-point of development as in the case of lift stations or upgrades to the road segment related to the ravine cross at the unnamed creek at the existing northeast Town boundary.



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In addition to staging assumptions we have escalated 2011 construction costs to reflect in year of construction amounts. We have continued to apply the inflation factors used in the Application Area - Phase 1 Report, which is 3% per annum.

The resulting capital staging plan for Application Area - Phase 2 is outlined in Table 10 of Appendix B attached and summarized in Table 11 below.

Table 11 – Application Area – Phase 2, Capital Plan 2035 to 2060

Description	2011 Cost	Cost In Year of Construction
<u><i>Water</i></u>		
Water Mains	\$ 3,520,000	\$ 9,506,604
Ravine Crossing	\$ 200,000	\$ 406,559
<u><i>Sewer</i></u>		
Trunk Sewer	\$ 2,100,000	\$ 5,671,553
Lift Station	\$ 1,500,000	\$ 4,097,858
Forcemains	\$ 200,000	\$ 406,559
Ravine Crossing	\$ 200,000	\$ 406,559
<u><i>Stormwater</i></u>		
Trunk Sewers	\$ 2,100,000	\$ 6,481,775
Ponds	\$ 2,400,000	\$ 18,905,178
<u><i>Roads</i></u>		
Arterial	\$ 13,400,000	\$ 36,189,912
Collector	\$ 25,160,000	\$ 67,950,611
Ravine Crossing	\$ 2,000,000	\$ 5,463,811
Total	\$ 57,680,000	\$ 155,486,978

4. Capital Plan Financing

It has been assumed that financing of Application Area - Phase 2 infrastructure would largely be accomplished through offsite levies. This financing is consistent with the financing approach currently used by the Town for direct support to development and that reflected in the Application Area - Phase 1 report. We have however elected to treat financing of the ravine road upgrade as though it were financed through Town debt. This assumption reflects common convention more than what might be permitted with offsite legislation. That is, the ravine road crossing might be permitted as an offsite cost, however our experience is that most municipality's treat major, remote road structures (bridges, overpasses etc.) as a municipal cost.



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We have further assumed that the ravine road debt financing would be for a 20 year period and that interest of 2.5% semi-annual would be applied which is consistent with financing used in the Application Area - Phase 1 Report.

The table below summarizes capital plan financing and table 13 in Appendix B, attached, reflects detail financing for the period 2035 to 2060.

Table 12 – Application Area – Phase 2, Capital Plan Financing 2035 to 2060

Financing Source	2011 Cost	Cost In Year of Construction
Offsite Levy	\$ 55,680,000	\$ 150,023,167
Debenture	\$ 2,000,000	\$ 5,463,811
Total	\$ 57,680,000	\$ 155,486,978

5. Debt Impact

As indicated above, the ravine road upgrade will be financed through issuing debt for a 20 year period with interest on outstanding debt set at 2.5% semi-annually.

As indicated in the Application Area - Phase 1 Report, the debt covenants of municipality's established through regulation set two parameters that debt must not exceed. These parameters include:

- A debt capacity limit which is the total amount of debt that can be held by the municipality, which is 1.5 times the municipality's revenues and;
- A debt service limit which is the total amount of debt payments that can be afforded in any year by a municipality which is 0.25 times the municipality's revenues.

In the Application Area - Phase 1 Report we indicated that the Town's debt capacity limit stood at \$84.9M in 2031 whereas outstanding debt was \$37.3M or 44% of the maximum. The addition of \$5.5M in debt in 2045 would not pose any issues with regard to breaching the debt capacity limit parameter.

Further, in the Application Area - Phase 1 Report, we indicated that the Town's debt service limit stood at \$14.2M in 2031 whereas debt payments at the time were \$3.9M or 27% of the maximum. The addition of \$435K in debt servicing costs in 2045 would again not pose any issues with regard to breaching the debt servicing limit parameter.



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Table 14, in Appendix B attached outlines the outstanding principal and debt payments associated with borrowing for the ravine road upgrade.

6. Operating Plan Impact

We have developed an operating plan for Application Area - Phase 2 for a 50 year period. The plan has been developed by applying per capita unit costs and related program recoveries for various municipal services, inflating these to year of delivery dollars and applying this inflated unit cost to the estimated population projections for the Application Area - Phase 2.

The operating plan impacts may best be considered in two parts - the first relating a period of minimal growth where existing farmlands remain largely undeveloped and then a growth period commencing in 2035.

Table 15 in Appendix B attached outlines the operating plan impacts from 2011 to 2031 and Table 16 in Appendix B outlines the operating plan impacts from 2035 to 2060. It is assumed that operating program costs and recoveries provided by the County to Application Area - Phase 2 residents is similar in magnitude to that anticipated by the Town, which is approximately \$92K.

Table 17 below outlines the tax levy requirements for the entire 50 year period.

Table 17 - Application Area – Phase 2, Tax Levy Requirements

	Tax Requirement			Tax Requirement
2011	92,632		2036	748,872
2016	107,385		2041	4,241,347
2021	124,489		2046	9,341,212
2026	144,317		2051	16,632,207
2031	167,303		2056	20,300,213



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7. Assessment

The County has provided information regarding the current assessment base associated with existing residents of Application Area - Phase 2. The information provided also outlined 2011 mill rates and associated taxes of the area. See Table 18 below.

Table 18 - Application Area – Phase 2, Assessment Base Existing Area Residents

Annexation Application 2	Assessment	Mill Rate	Tax
Residential and Farm	\$ 4,314,150	0.00300	\$ 12,942.45
Non Residential	\$ 268,680	0.00850	\$ 2,283.78
Linear (Estimated)*	\$ 4,200,000	0.00850	\$ 35,700.00
Non Taxable	\$ 428,760	n/a	\$ -
Total Application 2	\$ 9,211,590		\$ 50,926.23

The Town has agreed to tax property within Application Area - Phase 2 at County mill rates for 50 years from the date of annexation of lands. This will permit owners of those properties to enjoy lower County mill rates. Should properties within Application Area - Phase 2 be subdivided or rezoned then these properties would no longer be taxed at Town mill rates.

For the proposes of estimating the future assessment based of properties within Application Area - Phase 2 we have assumed that the market value of properties will escalate at 2.5% per annum which is consistent with property value escalation factors contained in the Application Area - Phase 1 Report.

As previously indicated growth within Application Area - Phase 2 is not anticipated until such time as existingTown and Application Area - Phase 1 residential land inventories are exhausted in 2035. Thereafter all Town residential growth would occur in Application Area - Phase 2. The pace of residential growth was previously outlined in Table 9. The associated assessment base stemming from Application Area - Phase 2 growth is outlined in the table below.

Table 19- Application Area – Phase 2, Assessment Base Future Growth

Year	Assessment
2036	\$ 48,173,379
2041	\$ 266,278,876
2046	\$ 572,360,164
2051	\$ 994,601,797
2056	\$ 1,184,767,598



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The assumptions used in estimating future assessment include:

- That the average assessment for residential households expressed in 2011 dollars is \$90K.
- That property values will escalate at 2.5% per annum.

8. Town Tax Impacts

We have considered tax requirements and resulting tax levy impacts on the Town for two timeframes. The first timeframe, 2011 to 2031, is the period prior to the residential growth anticipated for Application Area - Phase 2. During this timeframe the assessment base and tax requirement of the area is expected to remain at 2011 levels and be amended only for escalation and market value impacts. The second timeframe, 2032 to 2060, is the period of residential growth, when all residential development of the Town is assumed to occur in Application Area - Phase 2. During this timeframe the assessment base and tax requirements for the area will not only be impacted by escalation and market value changes but by increases in growth.

Furthermore, the Town has also agreed to tax existing Application Area - Phase 2 residents at County mill rates for a period of 50 years. i.e. throughout our period of analysis. We have assumed that the County mill rate will escalate at the rate of 2% to reflect the increase in municipal service costs of the County.

Based upon information previously outlined in this report regarding capital plans, capital financing plans, and operating plans for Application Area - Phase 2, we have determined the tax requirements for the Application Area - Phase 2 Area from 2011 to 2031. We have also determined that taxes that would be generated from the Application Area - Phase 2 based upon escalated County mill rates. The table below outlines tax requirements and taxes generated from Application Area - Phase 2 from 2011 to 2031.

Table 20- Application Area – Phase 2, Estimated Tax Impact on the Town 2011 to 2031

Description	2011	2016	2021	2026	2031
Tax Requirement	\$ 92,632	\$ 107,385	\$ 124,489	\$ 144,317	\$ 167,303
Taxes Generated	\$ 50,926	\$ 63,615	\$ 79,466	\$ 99,266	\$ 124,000
Impact on Town	\$ 41,705	\$ 43,770	\$ 45,023	\$ 45,051	\$ 43,303

The net impact on the Town outlined in the table above is considered nominal and would not result in any need to amend the tax levy projections of the Town created for the Application Area – Phase 1 analysis. Table 21 below outlines tax levy projections for the Town stemming from Application Area - Phase 1 analysis. It should be noted that these mill rate increases would only be applied to lands that have developed subsequent to annexation. Existing Application Area – Phase 2 lands that are not



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further developed will be taxed at the mill rates of the County for a period of 50 years from the annexation date.

Table 21- Application Area – Phase 2, Estimated Tax Levy Rates of the Town from 2011 to 2031

	Revised Annexation Area 1 - Per Annum Tax
Fiscal Period	Levy % Increase
2009 - 2011	4.00%
2012 - 2016	2.50%
2017 - 2022	0.00%
2023 - 2026	0.50%
2027 - 2031	0.00%
2032 - 2033	0.00%

For the period 2032 to 2060 we have calculated the tax levy required if Application Area – Phase 2 residents were to self-fund tax requirements for the Application Area - Phase 2, without any burdening of tax requirements onto existing Town and Application Area - Phase 1 area residents.

It should be noted that the combined approach would have reflected a much larger assessment base upon which those costs would fall. As such and as the bulk of commercial and industrial tax holdings, (which contribute greater tax recovery than residential properties) are contained in the existing Town and Application Area - Phase 1, the impacts will be lower than those outlined under the self-sustained analysis approach. Therefore, the self-sustained analysis errs on the side of conservatism - the tax levy impacts reflected below are maximum impacts and considerably higher than that would occur in reality.

Based upon information previously outlined in this report regarding capital plans, capital financing plans, and operating plans for Application Area - Phase 2, we have determined the tax requirements for Application Area - Phase 2 Area from 2032 to 2060. We have also determined mill rate increases that would be needed on a self-funded or self-sustained basis to meet tax requirements for Application Area - Phase 2. It should be noted that these mill rate increases would only be applied to lands that have developed subsequent to annexation. Existing Application Area – Phase 2 lands that are not further developed will be taxed at the mill rates of the County for a period of 50 years from the annexation date.



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Table 22- Application Area – Phase 2, Tax Requirements 2031 to 2060

	2036	2041	2046	2051	2056
Tax Requirement	748,872	4,241,347	9,341,212	16,632,207	20,300,213

Table 23- Application Area – Phase 2, Tax Levy Impacts – Based Upon Application Area – Phase 2 Self-Funding

Year	Mill Rate Increase
2032 - 2036	3.00%
2037 - 2041	4.00%
2042 - 2046	4.25%
2047 - 2051	0.10%
2052 - 2056	0.10%
2057 - 2060	0.75%

While we must recognizing that mill rate impacts under a self-sustained approach for Application Area - Phase 2 are significantly higher than would be achieved under more comprehensive combined area (existing Town, Application Area - Phase 1 and Application Area - Phase 2) analysis; the results achieved are reasonable and believed not to place a significant burden on Town residents.

9. County Tax Impacts

It is assumed that the County's operating costs and program recoveries associated with supporting existing Application Area – Phase 2 residents are of a magnitude similar to that being anticipated by the Town. As such, tax requirements for Application Area - Phase 2 are assumed to be greater than the tax recovery associated with the area resulting in a small tax burden for the Application Area - Phase 2 being placed on other County residents. The loss of the Application Area - Phase 2 Area will therefore result in a nominal tax savings for the County which we estimate to be in the \$40K to \$50K range (tax requirement \$92,632 less taxes generated \$50,626, which equals \$41,705 in cost savings).



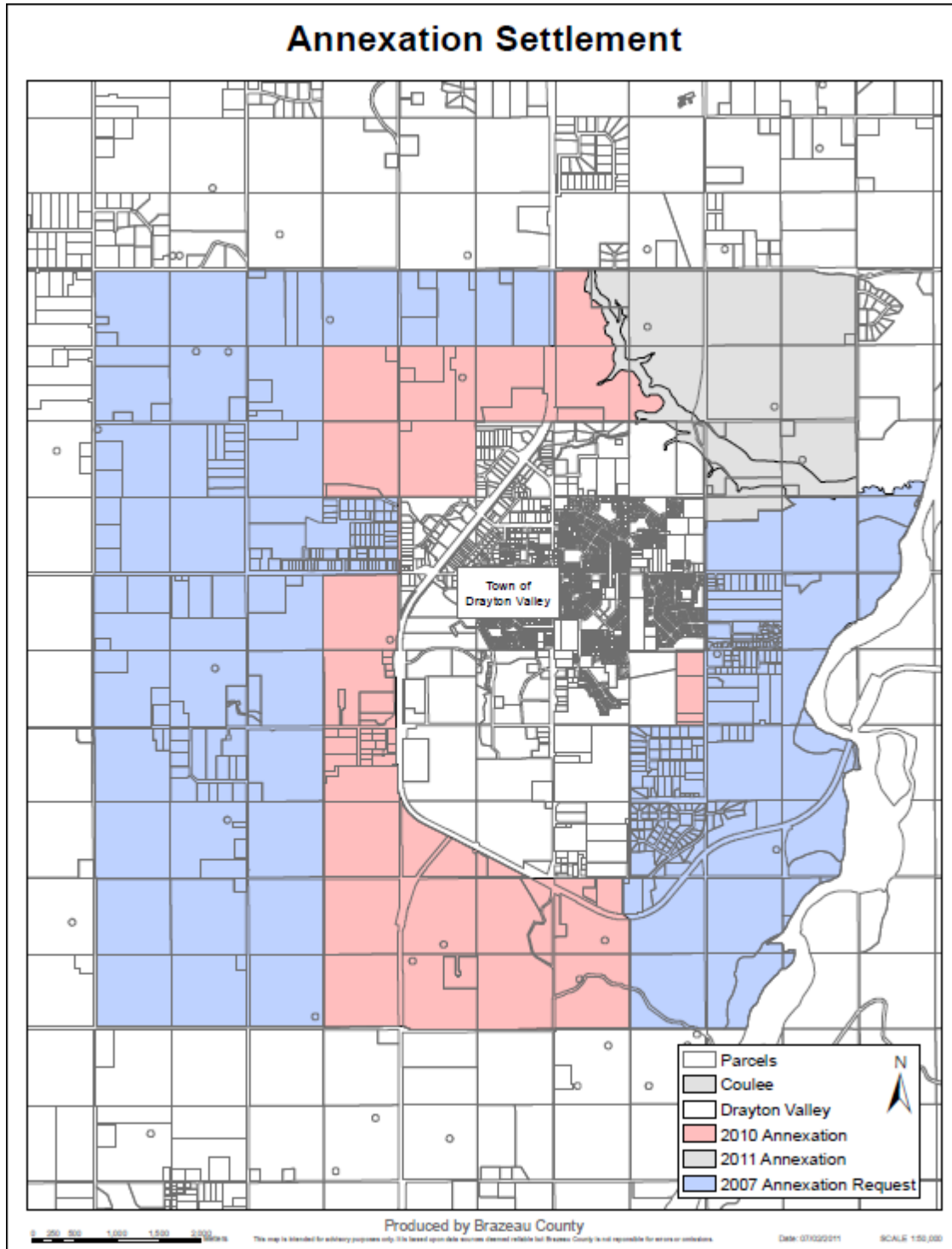
Boundary Change Application Report Application Area – Phase 2

Appendix A - Maps and Illustrations



Boundary Change Application Report Application Area – Phase 2

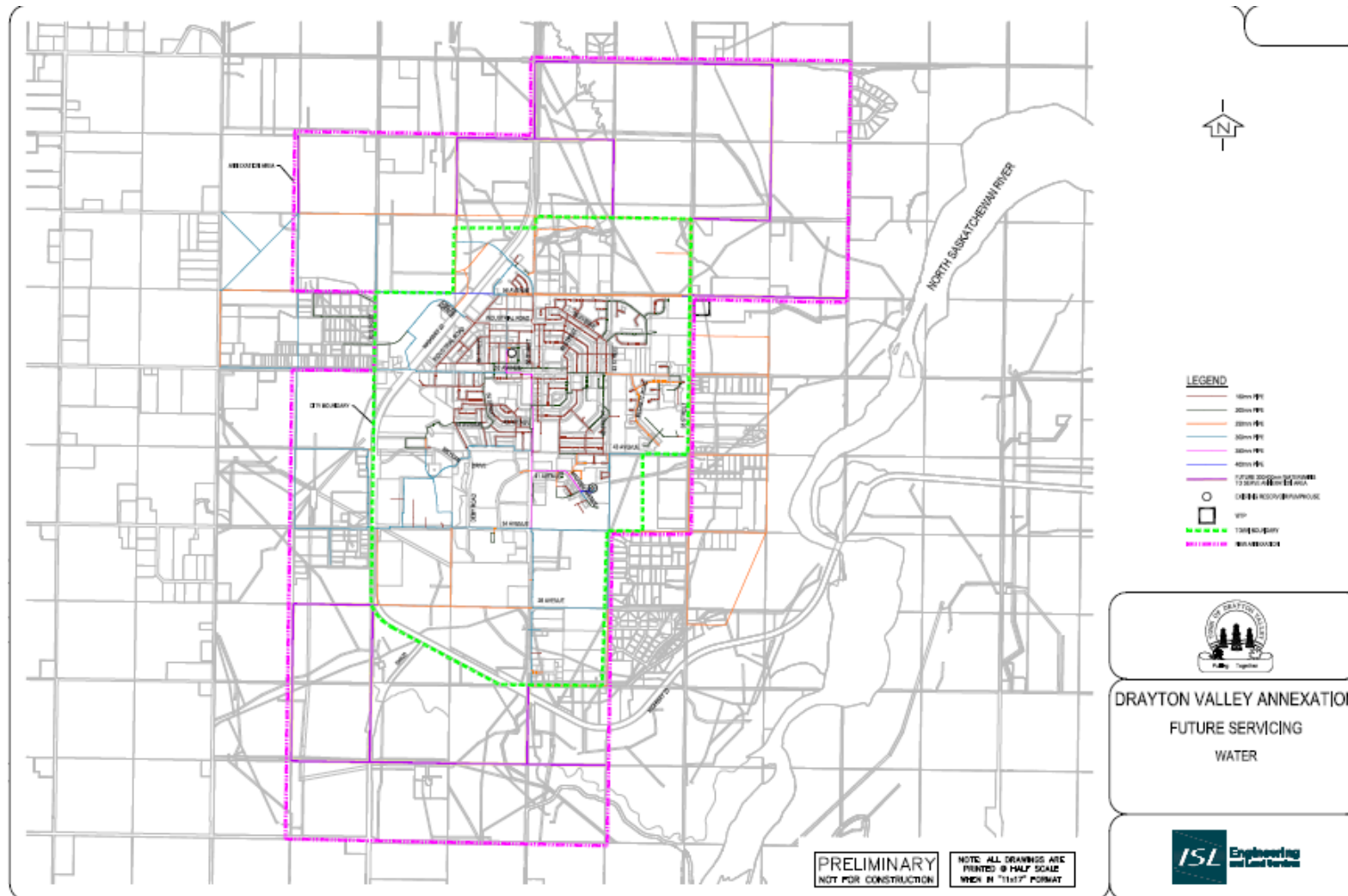
Map 1 – Application Area - Phase 2 Boundaries





Boundary Change Application Report **Application Area – Phase 2**

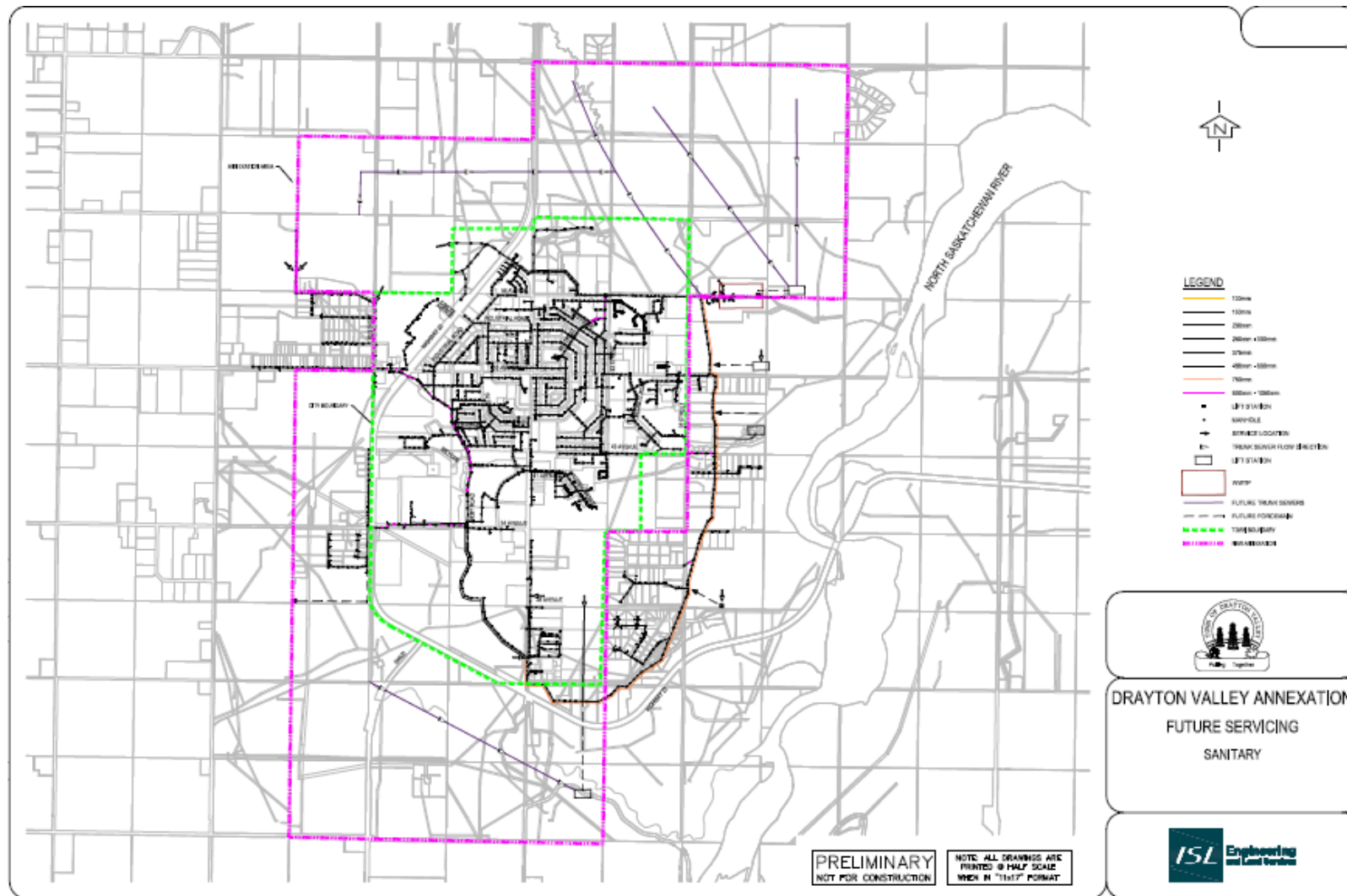
Map 2 – Application Area - Phase 2 Water Infrastructure Map





Boundary Change Application Report Application Area – Phase 2

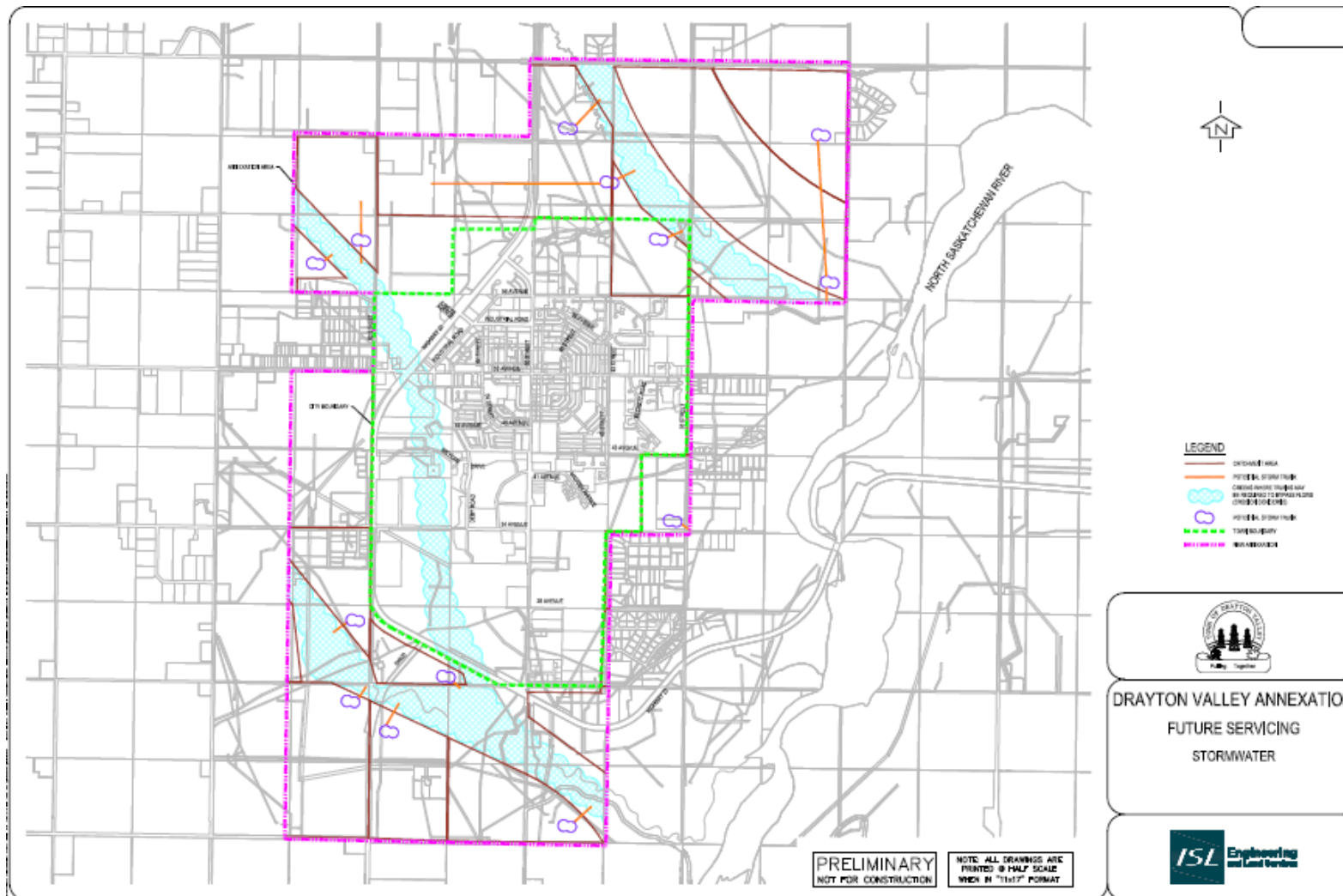
Map 3 – Application Area - Phase 2 Sanitary Infrastructure Map





Boundary Change Application Report Application Area – Phase 2

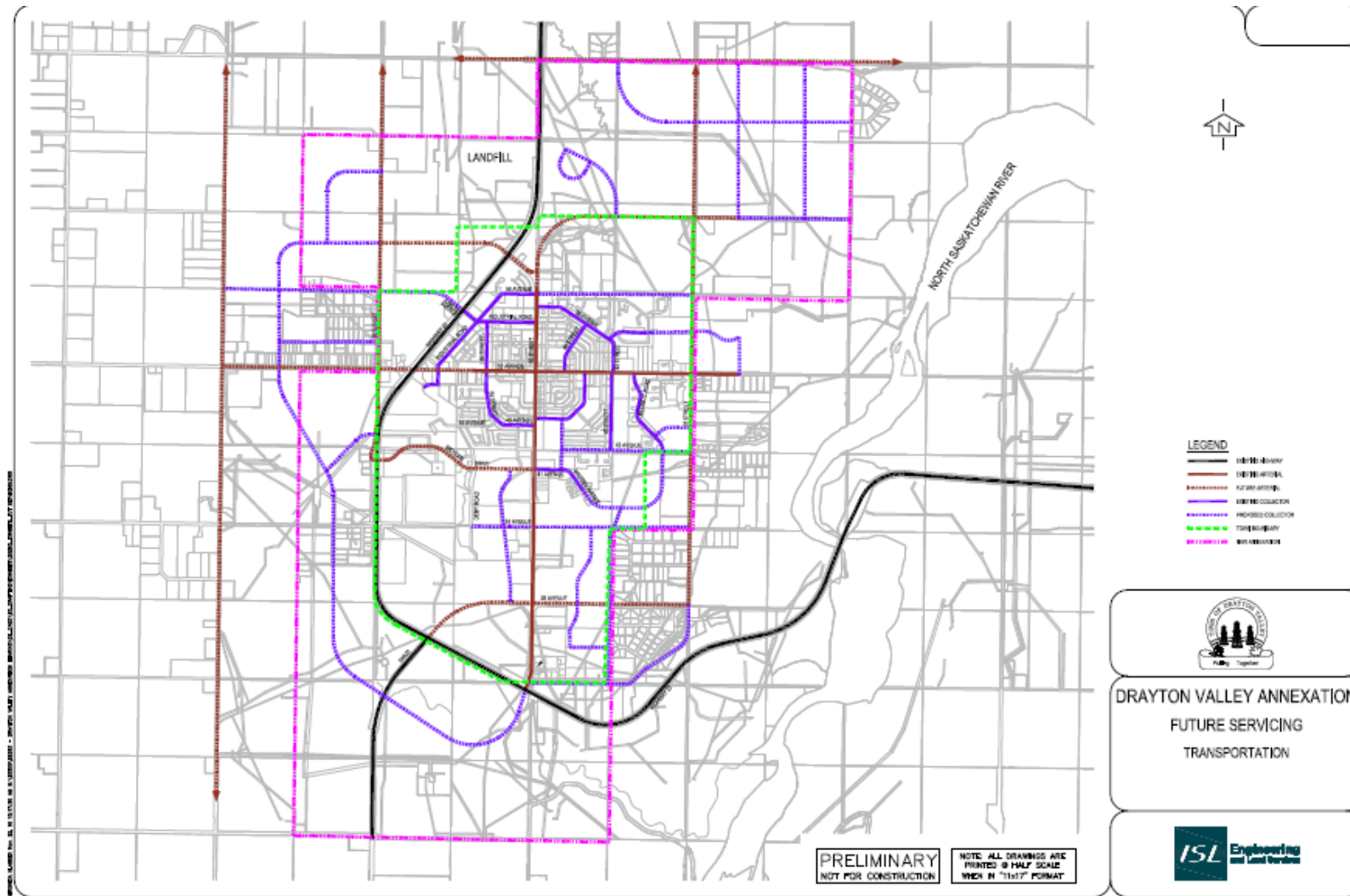
Map 4 – Application Area - Phase 2 Stormwater Infrastructure Map





Boundary Change Application Report Application Area – Phase 2

Map 5 – Application Area - Phase 2 Transportation / Road Infrastructure Map





Boundary Change Application Report Application Area – Phase 2

Appendix B – Supporting Tables



Boundary Change Application Report Application Area – Phase 2

Table 10 – Application Area - Phase 2,Capital Plan

Year	Development %	Inflation Factor	Water		Sewer				Stormwater		Roads			Total
			Water Mains	Ravine Crossing	Trunk Sewer	Lift Station	Forcemains	Ravine Crossing	Trunk Sewers	Ponds	Arterial	Collector	Ravine Crossing	
	2011 Costs	3.0%	\$ 3,520,000	\$ 200,000	\$ 2,100,000	\$ 1,500,000	\$ 200,000	\$ 200,000	\$ 2,400,000	\$ 7,000,000	\$ 13,400,000	\$ 25,160,000	\$ 2,000,000	\$ 57,680,000
2035	1.9%	2.033	132,928	406,559	79,303		406,559	406,559	90,632	264,345	506,031	950,130		\$ 3,243,046
2036	4.8%	2.094	354,133		211,273				241,454	704,242	1,348,121	2,531,248		\$ 5,390,471
2037	4.9%	2.157	373,876		223,051				254,916	743,504	1,423,278	2,672,365		\$ 5,690,990
2038	5.0%	2.221	394,720		235,486				269,127	784,954	1,502,626	2,821,349		\$ 6,008,262
2039	5.2%	2.288	416,725		248,615				284,131	828,715	1,586,398	2,978,639		\$ 6,343,223
2040	5.3%	2.357	439,958		262,475				299,971	874,916	1,674,839	3,144,698		\$ 6,696,858
2041	5.4%	2.427	464,485		277,108				316,695	923,693	1,768,212	3,320,015		\$ 7,070,207
2042	5.6%	2.500	490,381		292,557				334,350	975,189	1,866,789	3,505,106		\$ 7,464,372
2043	5.7%	2.575	517,719		308,867				352,990	1,029,555	1,970,863	3,700,516		\$ 7,880,510
2044	5.9%	2.652	546,582		326,086				372,670	1,086,953	2,080,739	3,906,820		\$ 8,319,849
2045	6.0%	2.732	577,054		344,265	4,097,858			393,446	1,147,551	2,196,740	4,124,625	5,463,811	\$ 18,345,349
2046	6.2%	2.814	609,225		363,458				415,381	1,211,527	2,319,208	4,354,573		\$ 9,273,370
2047	6.3%	2.898	643,189		383,721				438,538	1,279,069	2,448,504	4,597,340		\$ 9,790,361
2048	6.5%	2.985	679,047		405,113				462,986	1,350,377	2,585,008	4,853,642		\$ 10,336,173
2049	6.6%	3.075	716,904		427,698				488,798	1,425,661	2,729,122	5,124,232		\$ 10,912,415
2050	6.8%	3.167	756,871		451,542				516,048	1,505,141	2,881,271	5,409,908		\$ 11,520,782
2051	7.0%	3.262	799,183		476,785				544,898	1,589,285	3,042,345	5,712,343		\$ 12,164,838
2052	5.0%	3.360	593,624		354,151				404,744	1,180,502	2,259,818	4,243,062		\$ 9,035,901
		Total	\$ 9,506,604	\$ 406,559	\$ 5,671,553	\$ 4,097,858	\$ 406,559	\$ 406,559	\$ 6,481,775	\$ 18,905,178	\$ 36,189,912	\$ 67,950,611	\$ 5,463,811	\$ 155,486,978



Boundary Change Application Report Application Area – Phase 2

Table 13 – Application Area - Phase 2,Capital Plan Financing

Year	Offsite Levy	Debenture	Total Financing	Year	Offsite Levy	Debenture	Total Financing
2035	3,243,046		3,243,046	2044	8,319,849		8,319,849
2036	5,390,471		5,390,471	2045	12,881,538	5,463,811	18,345,349
2037	5,690,990		5,690,990	2046	9,273,370		9,273,370
2038	6,008,262		6,008,262	2047	9,790,361		9,790,361
2039	6,343,223		6,343,223	2048	10,336,173		10,336,173
2040	6,696,858		6,696,858	2049	10,912,415		10,912,415
2041	7,070,207		7,070,207	2050	11,520,782		11,520,782
2042	7,464,372		7,464,372	2051	12,164,838		12,164,838
2043	7,880,510		7,880,510	2052	9,035,901		9,035,901
					150,023,167	5,463,811	155,486,978



Boundary Change Application Report

Application Area – Phase 2

Table 14 – Application Area - Phase 2, Debt Servicing Schedule

First Half Issue				Principal Borrowed	Year	Semi-Annual Interest Rate
				\$ 5,463,810.59	2045	2.500%
				Term (Years)	20	
				Payments	40	
				Annuity Payment	\$217,657.63	
Year	Reserve Transfer Point	Rate	Principal Payment	Interest Payment	Total Payment	Ending Balance
2045	1	2.500%	\$ 81,062.37	\$ 136,595.26	\$ 217,657.63	\$ 5,382,748.22
2045	2	2.500%	\$ 83,088.93	\$ 134,568.71	\$ 217,657.63	\$ 5,299,659.29
2046	3	2.500%	\$ 85,166.15	\$ 132,491.48	\$ 217,657.63	\$ 5,214,493.14
2046	4	2.500%	\$ 87,295.30	\$ 130,362.33	\$ 217,657.63	\$ 5,127,197.84
2047	5	2.500%	\$ 89,477.69	\$ 128,179.95	\$ 217,657.63	\$ 5,037,720.15
2047	6	2.500%	\$ 91,714.63	\$ 125,943.00	\$ 217,657.63	\$ 4,946,005.52
2048	7	2.500%	\$ 94,007.49	\$ 123,650.14	\$ 217,657.63	\$ 4,851,998.03
2048	8	2.500%	\$ 96,357.68	\$ 121,299.95	\$ 217,657.63	\$ 4,755,640.35
2049	9	2.500%	\$ 98,766.62	\$ 118,891.01	\$ 217,657.63	\$ 4,656,873.73
2049	10	2.500%	\$ 101,235.79	\$ 116,421.84	\$ 217,657.63	\$ 4,555,637.94
2050	11	2.500%	\$ 103,766.68	\$ 113,890.95	\$ 217,657.63	\$ 4,451,871.26
2050	12	2.500%	\$ 106,360.85	\$ 111,296.78	\$ 217,657.63	\$ 4,345,510.41
2051	13	2.500%	\$ 109,019.87	\$ 108,637.76	\$ 217,657.63	\$ 4,236,490.54
2051	14	2.500%	\$ 111,745.37	\$ 105,912.26	\$ 217,657.63	\$ 4,124,745.17
2052	15	2.500%	\$ 114,539.00	\$ 103,118.63	\$ 217,657.63	\$ 4,010,206.17
2052	16	2.500%	\$ 117,402.48	\$ 100,255.15	\$ 217,657.63	\$ 3,892,803.69
2053	17	2.500%	\$ 120,337.54	\$ 97,320.09	\$ 217,657.63	\$ 3,772,466.15
2053	18	2.500%	\$ 123,345.98	\$ 94,311.65	\$ 217,657.63	\$ 3,649,120.17
2054	19	2.500%	\$ 126,429.63	\$ 91,228.00	\$ 217,657.63	\$ 3,522,690.54
2054	20	2.500%	\$ 129,590.37	\$ 88,067.26	\$ 217,657.63	\$ 3,393,100.17
2055	21	2.500%	\$ 132,830.13	\$ 84,827.50	\$ 217,657.63	\$ 3,260,270.04
2055	22	2.500%	\$ 136,150.88	\$ 81,506.75	\$ 217,657.63	\$ 3,124,119.16
2056	23	2.500%	\$ 139,554.65	\$ 78,102.98	\$ 217,657.63	\$ 2,984,564.51
2056	24	2.500%	\$ 143,043.52	\$ 74,614.11	\$ 217,657.63	\$ 2,841,520.99
2057	25	2.500%	\$ 146,619.61	\$ 71,038.02	\$ 217,657.63	\$ 2,694,901.38
2057	26	2.500%	\$ 150,285.10	\$ 67,372.53	\$ 217,657.63	\$ 2,544,616.28
2058	27	2.500%	\$ 154,042.23	\$ 63,615.41	\$ 217,657.63	\$ 2,390,574.05
2058	28	2.500%	\$ 157,893.28	\$ 59,764.35	\$ 217,657.63	\$ 2,232,680.77
2059	29	2.500%	\$ 161,840.61	\$ 55,817.02	\$ 217,657.63	\$ 2,070,840.16
2059	30	2.500%	\$ 165,886.63	\$ 51,771.00	\$ 217,657.63	\$ 1,904,953.53
2060	31	2.500%	\$ 170,033.79	\$ 47,623.84	\$ 217,657.63	\$ 1,734,919.74
2060	32	2.500%	\$ 174,284.64	\$ 43,372.99	\$ 217,657.63	\$ 1,560,635.10



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Table 15 – Application Area - Phase 2, Operating Impacts 2011 to 2035

Program Recoveries	2011	2016	2021	2026	2031
Water	-	-	-	-	-
Wastewater	-	-	-	-	-
Solid Waste	-	-	-	-	-
Police	10,579	12,264	14,217	16,482	19,107
	10,579	12,264	14,217	16,482	19,107
Program Expenditures	2011	2016	2021	2026	2031
Water	-	-	-	-	-
Wastewater	-	-	-	-	-
Solid Waste	-	-	-	-	-
Police	35,263	40,880	47,391	54,939	63,689
Fire	21,053	24,406	28,293	32,799	38,023
Common Services	7,105	8,237	9,549	11,070	12,833
Roads	21,053	24,406	28,293	32,799	38,023
Storm	2,289	2,654	3,077	3,567	4,135
Parks	-	-	-	-	-
Administration	16,447	19,067	22,104	25,624	29,706
	103,211	119,649	138,706	160,799	186,410
Tax Requirement	92,632	107,385	124,489	144,317	167,303

Table 16 – Application Area - Phase 2, Operating Impacts 2036 to 2060

Program Recoveries	2036	2041	2046	2051	2056
Water	262,483	1,486,611	3,274,137	5,829,664	7,115,316
Wastewater	140,786	797,364	1,756,128	3,126,820	3,816,397
Solid Waste	121,697	689,247	1,518,009	2,702,844	3,298,919
Police	79,938	452,741	997,124	1,775,398	2,166,937
	604,904	3,425,963	7,545,398	13,434,725	16,397,570
Program Expenditures	2036	2041	2046	2051	2056
Water	218,736	1,238,843	2,728,448	4,858,053	5,929,430
Wastewater	117,322	664,470	1,463,440	2,605,683	3,180,331
Solid Waste	202,828	1,148,745	2,530,015	4,504,740	5,498,199
Police	266,460	1,509,136	3,323,745	5,917,992	7,223,124
Fire	159,081	900,976	1,984,325	3,533,129	4,312,313
Common Services	53,690	304,080	669,710	1,192,431	1,455,406
Roads	159,081	900,976	1,984,325	3,533,129	4,312,313
Storm	17,300	97,981	215,795	384,228	468,964
Parks	34,998	198,215	436,552	777,288	948,709
Administration	124,282	703,888	1,550,254	2,760,257	3,368,995
	1,353,775	7,667,309	16,886,610	30,066,931	36,697,783
Tax Requirement	748,872	4,241,347	9,341,212	16,632,207	20,300,213