



## **Off-Site Levy Review**

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Town of Coaldale

FINAL DRAFT REPORT

February 2023

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February 15, 2023

Our Reference: 27907

**Town of Coaldale**  
1920 – 17 Street  
Coaldale, Alberta  
T1M 1M1

Attention: Jason Siemens, P.L.(Eng.)

Dear Jason:

**Reference: Town of Coaldale Off-Site Levy Review**

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Enclosed is the Final Draft Report for the Town of Coaldale Off-Site Levy Review. We trust that it meets your needs.

The purpose of the report is to provide the full costing details for water, wastewater, stormwater, transportation, and facility infrastructure required to accommodate the Town's 25-year growth boundary. The Town needs to consider what rates are appropriate to remain attractive to development, with these provided for the Town's reference in the development of their bylaw. It is noted that these rates presented are higher than the current off-site levy rates.

This analysis does not consider debenture-based financing, which, when factoring the time value of money, would increase rates to factor in debt carrying costs and levy collection rates. However, a finance factor has been applied to project costs to account for inflation. The Town may wish to consider debenture-based financing information in its consideration of these rates.

We sincerely appreciate the opportunity to undertake this project on your behalf. Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Sincerely,



Evan Abramenko, P.L.(Eng.), LEED GA  
Municipal Manager



## Corporate Authorization

This document entitled "Off-Site Levy Review" has been prepared by ISL Engineering and Land Services Ltd. (ISL) for the use of Town of Coaldale. The information and data provided herein represent ISL's professional judgment at the time of preparation. ISL denies any liability whatsoever to any other parties who may obtain this report and use it, or any of its contents, without prior written consent from ISL.

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Krista Audia, P.Eng.  
Technical Author

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Senior Reviewer

## Executive Summary

### Background

The Town of Coaldale (the Town) engaged ISL Engineering and Land Services Ltd. (ISL) to undertake an off-site levy review to ensure up-to-date rates are used and adequate capital is collected from land development to fund off-site infrastructure required to support growth. The Town previously updated its off-site levy rates in 2007 based on the Off-Site Levy and Development Charges Review (MPE, 2007).

Since then, a new Infrastructure Master Plan (IMP) incorporating water, wastewater, stormwater, and transportation was developed by MPE Engineering Ltd. (MPE) in 2020 as well as a new Transportation Master Plan (TMP) by WATT Consulting Group (WATT), also in 2020. Based on the changes to future infrastructure upgrading needs, it is appropriate that the Levy Bylaw be updated to reflect future growth areas and supporting infrastructure.

The recommendations of this Off-Site Levy Review are based on the following principles:

- That the capital cost of infrastructure improvements that support and benefit growing areas should be borne by those growing areas. These costs should be financed through levies collected on development in each area of the Town.
- That the capital cost of infrastructure improvements with Town-wide benefit should be appropriately shared between growing areas and the existing population, with the component borne by the growing areas to be financed through levies collected on development by the Town.
- That the capital cost and implementation of on-site and adjacent improvements should be borne by the subject development and included in Standard Development Agreements, with inclusion in the levy program.
- That levies should reflect as closely as possible the full capital costs of constructing new infrastructure, with adjustments over time to reflect additional or reduced costs.
- That the establishment of levies and future adjustments be done through a transparent process.

### Off-Site Levy Rate Summary

Off-site levy rates may be evaluated using either uniform or benefiting area rates; however, the Town has elected to maintain uniform rates for all types of infrastructure as outlined above. A summary of the off-site levy rates is provided in Table ES.1.





Table ES.1 Off-Site Levy Rate Summary

Infrastructure	Current Levies		Proposed Levies					Change in Levies	
	Inside Town Boundary <sup>1</sup>	Outside Town Boundary <sup>1</sup>	Priority 1	Priority 1A	Priority 1B	Combined	Combined Minus Existing Balances	Inside Town Boundary	Outside Town Boundary
	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha
Water	\$12,267	\$12,486	\$53,041	\$0	\$0	\$53,041	\$50,204	\$37,937	\$37,718
Wastewater	\$26,263	\$6,309	\$55,313	\$13,522	\$0	\$68,834	\$68,834	\$42,571	\$62,525
Stormwater	\$21,136	\$5,534	\$0	\$0	\$0	\$0	\$0	-\$21,136	-\$5,534
Transportation	\$35,163	\$35,641	\$6,854	\$10,325	\$43,593	\$60,771	\$59,449	\$24,286	\$23,808
Facilities	-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$85,575 <sup>2</sup>		\$115,207	\$23,847	\$43,593	\$182,647	\$178,487	\$92,912 <sup>3</sup>	

<sup>1</sup> These off-site levy rates are based on the Off-Site Levy and Development Charges Review (MPE, 2007).

<sup>2</sup> This off-site levy rate is not the sum of the rates outlined above for each infrastructure type from Off-Site Levy and Development Charges Review (MPE, 2007), but the off-site levy rate outlined in the Off-Site Levy Bylaw (Coaldale, 2007).

<sup>3</sup> This change in off-site levy rate is not the sum of the change in rates outlined above for each infrastructure type from Off-Site Levy and Development Charges Review (MPE, 2007), but the off-site levy rate outlined in the Off-Site Levy Bylaw (Coaldale, 2007).

## Conclusions

The Town's off-site levies will be charged to any new or incremental development in the Town that will impact the need for upgrades in infrastructure, including the following:

- Water supply and distribution infrastructure
- Wastewater sewer collection infrastructure
- Transportation infrastructure

Additional assumptions pertaining to the infrastructure projects and the proportions of costs carried in the off-site levy rate calculations for each infrastructure type are outlined in the following sections. General assumptions are as follows:

- Off-site levy rates can be broken down using uniform or benefiting area rate methodology.
- Potential grant funding of infrastructure is not included in this report.
- Details of potential endeavours to assist will be detailed by the Town in the formal off-site levy policy and/or future development agreements.
- Off-site levy rates are based on net development area as noted above.
- Cost estimates are based on the supporting planning documents as well as Town project budgets and estimates.
- Preliminary cost estimates have been included for reference only to provide an estimation of the potential off-site levy rates. This Off-Site Levy Review and associated rates as well as the Town's bylaw are expected to be finalized once these preliminary cost estimates have been finalized.
- Project timelines are based on the Town's proposed project construction/implementation years.
- Residual benefit of the infrastructure projects for the existing population were provided by the Town and vary depending on type of infrastructure and specific project.

The current payment and timing policy, as specified in the existing bylaw, requires that the levies be paid based on the following: "...50% payable upon signing of a Development Agreement; and, 50% payable four (4) months after signing of a Development Agreement" and "no development shall proceed until payment of the levy...above is paid in full". Comparing this payment and timing policy to the surrounding municipalities, the Town is consistent with other municipalities.



## Recommendations

Recommendations related to the Town's off-site levy update are as follows:

- The Town should finalize the preliminary cost estimates for the Priority 1B projects prior to finalizing the off-site levy rates and Off-Site Levy Bylaw.
- The Town should consider implementing those rates contained herein; however, the Town may choose to set lower rates to be competitive with other municipalities.
- The Town may wish to consider lower levy rates for non-residential development, given its typically positive implications on the municipal tax base.
- The Town should consider the suitability of the recommended rates for its purposes.
- The Town should determine which timing methodology to utilize in the Off-Site Levy Bylaw.
- The Town should review the Off-Site Levy once a year to update the associated assumptions, costing, and schedules.

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## 1.0 Introduction

The Town of Coaldale (the Town) engaged ISL Engineering and Land Services Ltd. (ISL) to undertake an off-site levy review to ensure up-to-date rates are used and adequate capital is collected from land development to fund off-site infrastructure required to support growth. The Town previously updated its off-site levy rates in 2007 based on the Off-Site Levy and Development Charges Review (MPE, 2007).

Off-site levy policies (which include not only rates, but in some situations more important issues such as who frontends upgrade costs, the levy collection timing, etc.) may impact a municipality's ability to attract and maintain developments. This is especially true for commercial and industrial developments that may not require the same level of services as residential developments, which makes it easier for them to locate in a rural environment. A healthy commercial and industrial base is critical for a municipality's fiscal sustainability as revenues from residential developments often only cover in the order of 80% to 90% of their associated costs. The opposite is true for commercial and industrial developments, as their revenues may cover in the order of 140% to 160% of their associated costs.

Since then, a new Infrastructure Master Plan (IMP) incorporating water, wastewater, stormwater, and transportation was developed by MPE Engineering Ltd. (MPE) in 2020 as well as a new Transportation Master Plan (TMP) by WATT Consulting Group (WATT), also in 2020. Based on the changes to future infrastructure upgrading needs, it is appropriate that the Levy Bylaw be updated to reflect future growth areas and supporting infrastructure.

The recommendations of this Off-Site Levy Review are based on the following principles:

- That the capital cost of infrastructure improvements that support and benefit growing areas should be borne by those growing areas. These costs should be financed through levies collected on development in each area of the Town.
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- That the capital cost and implementation of on-site and adjacent improvements should be borne by the subject development and included in Standard Development Agreements, with inclusion in the levy program.
- That levies should reflect as closely as possible the full capital costs of constructing new infrastructure, with adjustments over time to reflect additional or reduced costs.
- That the establishment of levies and future adjustments be done through a transparent process.

## 2.0 Background Document Review

As part of this Off-Site Levy Review, ISL performed a review of the existing Town of Coaldale Off-Site Levy Bylaw, the Municipal Government Act, and the off-site levy bylaws of neighbouring municipalities. A brief summary of these reviews is discussed in this section.

### 2.1 Previous Off-Site Levy Review

The current Off-Site Levy Bylaw came into effect in 2008 based on the Town of Coaldale Off-Site Levy and Development Charges Review (MPE, 2007). A summary of the findings in this report is as follows:

- Future water, wastewater, stormwater, and transportation infrastructure projects were considered in the calculation of the proposed off-site levy rates.
- Based on the proposed infrastructure projects and developable land areas, it was observed that only infrastructure projects required to facilitate future development were included in the levy rate calculations. Existing system upgrades appear to have largely been excluded with the exception of lagoon and pump station upgrades.
- The Off-Site Levy and Development Charges Review (MPE, 2007) noted proposed levy rates ranging from \$59,970/ha to \$94,829/ha for the area within and outside of the Town's 2007 municipal boundary, respectively. These rates were based on the current project costs only.
- With the incorporation of inflation and financing costs as well as the application of a uniform levy rate to all development areas, the following rates were proposed.
  - \$84,700/ha with gross area application
  - \$94,100/ha with net area application, assuming 10% of the development area is allocated to Municipal Reserve (MR).

### 2.2 Current Off-Site Levy Bylaw

This report identified future developable areas, infrastructure to service those areas, costing of the infrastructure projects, and preparation of off-site levy rates to inform the Off-Site Levy Bylaw (Coaldale, 2008). A summary of the findings in the bylaw is as follows:

- Off-site levies were applied to both undeveloped land within the Town's 2007 municipal boundary and undeveloped land outside the Town's municipal boundary.
  - The levy charges apply to any development within the town boundary in excess of one acre.
- It was not specified whether the off-site levies were calculated based on gross or net development area. However, based on the Off-Site Levy and Development Charges Review (MPE, 2007), these charges are based on gross development area as net area application increases the proposed levy rates.
- Water, wastewater, stormwater, and transportation infrastructure project costs were included in the development of proposed levy rates.
- An allocation of project costs to existing development, if applicable, was not specified in the Off-Site Levy Bylaw.
- A uniform levy rate was applied in the Off-Site Levy Bylaw. The total off-site levy rate was \$55,000/ha and increased to \$85,575/ha in 2008 to account for financing over a 50-year period.

## 2.3 Municipal Government Act

The governing authority for the off-site levy bylaw is the Municipal Government Act (MGA), which states in Section 648(2), that the off-site levy may be used to pay for all or part of the capital cost of any or all of the following:

- New or expanded facilities for the storage, transmission, treatment or supplying of water;
- New or expanded facilities for the treatment, movement or disposal of wastewater;
- New or expanded storm sewer drainage facilities;
- New or expanded roads required for or impacted by a subdivision or development; and
- Land required for or in connection with any facilities described above.

As of January 1, 2018, an addition to the MGA states in Section 648(2.1) that an off-site levy may also be used to pay for all or part of the capital cost, including the cost of any related appurtenances and land required for or in connection with any of the following purposes:

- New or expanded community recreation facilities;
- New or expanded fire hall facilities;
- New or expanded police station facilities; and
- New or expanded libraries.

It should be noted that facility costs have not been included in this Off-Site Levy Review, but may be added in the future following studies addressing the potential need for and benefit of these facilities.

## 2.4 Off-Site Levy Bylaws of Neighbouring Municipalities

The review of the off-site levy bylaws of neighbouring municipalities is intended to create a benchmark for the Town of Strathmore and included the following municipalities:

- |                     |                        |                   |
|---------------------|------------------------|-------------------|
| • City of Brooks    | • Town of High River   | • Town of Nanton  |
| • City of Calgary   | • City of Lethbridge   | • Town of Okotoks |
| • Town of Coalhurst | • City of Medicine Hat | • Town of Taber   |

Table 2.1 provides an overview of the current levy rates and significant policies of interest, which may be currently under review. These rates are the combined total for water and wastewater rates as well as stormwater and transportation where applicable. It should be noted that these rates are based on the net developable area when area application is specified in the municipality's bylaw.

Table 2.1    Summary of Neighbouring Municipalities for Off-Site Levy Bylaw Comparison

Municipality	Year <sup>1</sup>		Rate Type	Developable Area Considered	Infrastructure Inclusion					Off-Site Levies per Hectare	
	Bylaw	Rate			Water	Wastewater	Stormwater	Transportation	Facilities	Minimum	Maximum
Brooks	2007	2007	Benefiting Area	Net	●	●	●	●		\$15,803	\$60,252
Calgary	2019	2022	Benefiting Area	Net	●	●	●	●	●	\$490,527	\$540,755
Coalhurst	2013	2017	Uniform	Not Specified	●	●	●	●		\$126,000	
High River	2020	2022	Benefiting Area	Net	●	●	●	●	●	\$144,719	\$258,334
Lethbridge	2022	2023	Uniform	Net	●	●	●	●		\$290,000	
Medicine Hat	2019	2019	Benefiting Area	Net	●	●	●	●		\$139,557	\$407,359
Nanton	2010	2012	Uniform	Not Specified	●	●				\$85,030	
Okotoks	2020	2022	Uniform	Gross	●	●		●		\$202,580	
Taber	2016	2016	Uniform	Net	●	●				\$74,162	

<sup>1</sup> Bylaw year refers to the year in which the most recent amendment to the bylaw was completed. The rate year refers to the year that the rate applies to when various rates are identified and dependent on the year of application.

## 3.0 Growth Projections/Future Developable Areas

### 3.1 Growth Projections

The existing population of the Town is 8,771 people based on the 2021 Federal Census (Statistics Canada, 2022).

Population projections for the growth area were derived as part of the IMP (MPE, 2020). Based on the 2.37% annual growth rate, the following horizons were assessed:

- Medium-term to 2029 or 10-year horizon (population of 10,985)
- Long-Term to 2044 or 25-year horizon (population of 15,609)
- Full build-out of the Town to 2057 (population of 20,988)
  - This population is based on the 30 people/ha density for the residential areas outside of the 25-year boundary for an additional population of 5,379 beyond the 25-year horizon population.

As this was based on the growth rate experienced by the Town prior to the 2021 Federal Census, a revised population projection scenario was developed. Therefore, the annual growth rate was based on the 10-year average from 2011 to 2021. This information is summarized in Table 3.1.

Table 3.1 Population Growth Rate Horizon

Census	Year	Population <sup>1</sup>	Growth Rate
Federal Census	2011	7,493	-
	2012	7,508	0.20%
Municipal Census	2013	7,526	0.20%
	2014	7,749	2.97%
	2015	7,979	2.97%
Federal Census	2016	8,215	2.97%
	2017	8,371	1.90%
	2018	8,529	1.90%
Municipal Census	2019	8,691	1.90%
	2020	8,731	0.46%
Federal Census	2021	8,771	0.46%
Average			1.59%

<sup>1</sup> Populations between census documents were interpolated for clarity.

This rate was applied to project the population to full build-out of the Town boundary. Table 3.2 shows the population projections for the Town at 5-year intervals with the Town reaching the estimated full build-out population of 20,988, based on the assumptions in the IMP, between 2076 and 2077.





Table 3.2 Population Projections

Year	Population	Year	Population
2021	8,771	2055	14,996
2025	9,342	2060	16,227
2030	10,109	2065	17,559
2035	10,939	2070	19,000
2040	11,836	2075	20,559
2045	12,808	2076	20,886
2050	13,859	2077	21,218

It should be noted that the TMP (WATT, 2020) assumed an annual growth rate of 2% for traffic volume. This assumes that all traffic zones are 100% developed with the exception of Zone 308, which is 50% developed. This zone consists of the three southernmost residential quarter sections, which are largely outside of the 25-year growth horizon. It is recommended that the projected service population and construction year for the infrastructure upgrade projects be adjusted over time based on future growth projections as they evolve.

### 3.2 Development Timeline

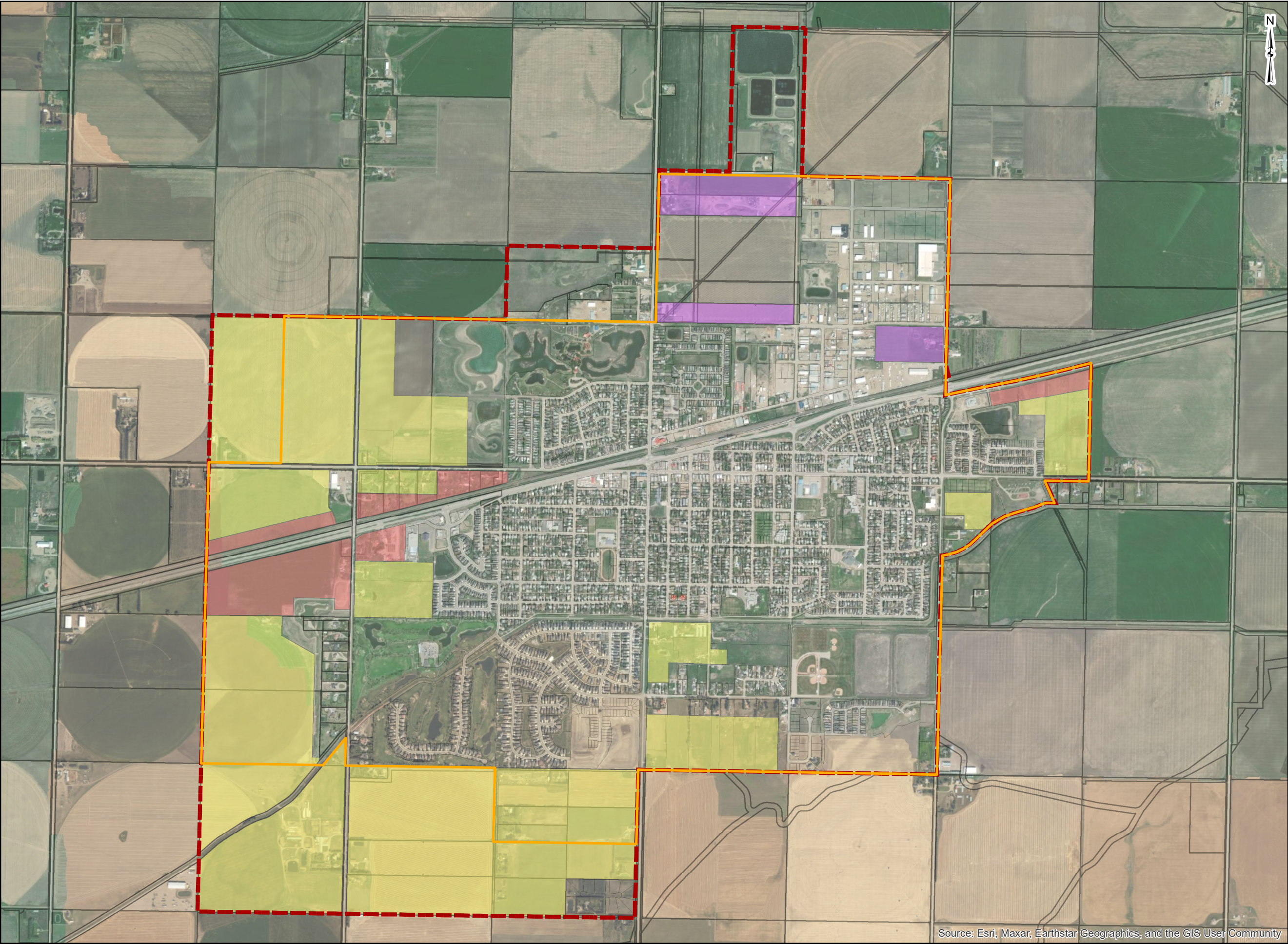
The future development timeline was outlined in the 2020 IMP and broken into 10-Year and 25-Year, growth horizons. This was refined by the Town to account for more recent development planning and execution. Full build-out of the Town was not considered in the IMP; therefore, this area was based on the undeveloped area not identified in either of the IMP growth horizons.

A summary of these gross growth areas is provided in Table 3.3 and shown in Figure 3.1.

Table 3.3 Growth Area Summary

Growth Boundary	Area	Percentage of Total
	ha	
Existing	926.12	66%
25-Year Horizon	305.25	22%
Full Build-Out	179.26	13%
Total	1,410.63	100%





Legend

Future Development  
Area Land Use

- Commercial
- Industrial
- Institutional
- Residential
- 25-Year Growth Boundary
- Town Boundary

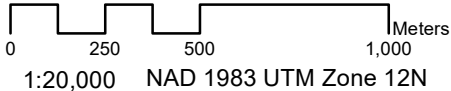


FIGURE 3.1  
FUTURE DEVELOPMENT AREAS  
TOWN OF COALDALE  
OFF-SITE LEVY REVIEW



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



### 3.3 Developable Area

The Town's gross developable area includes approximately 1,410 ha of land. It is understood that not all of this area is able to be developed. Areas may be dedicated as road rights-of-way, environmental reserves, and municipal reserves. For the purpose of this Off-Site Levy Review, the net developable area was calculated by excluding highway rights-of-way and taking a 10% reduction from the remaining gross area to allow for environmental reserve and municipal reserve requirements.

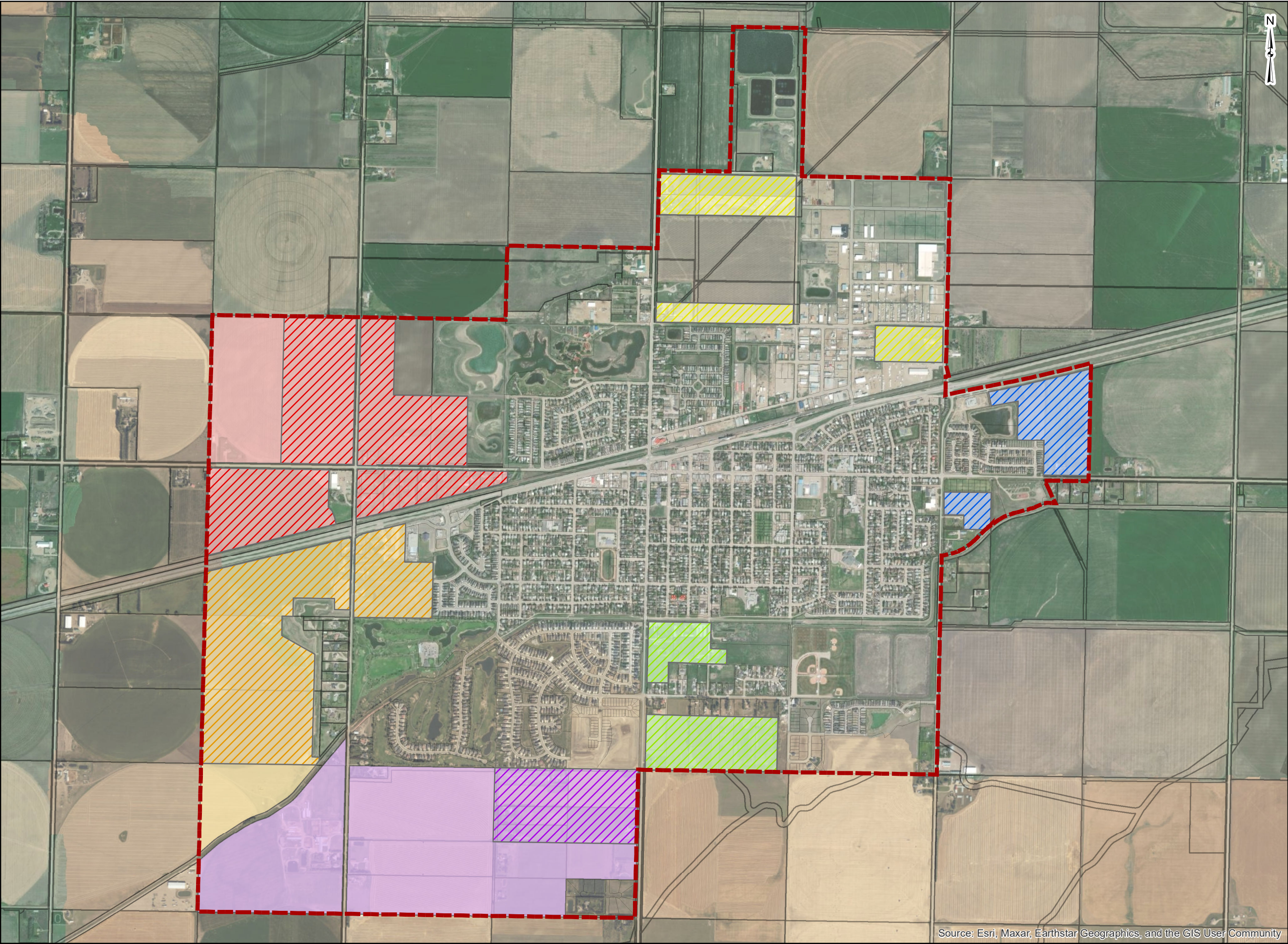
ISL has reviewed the total developable area and has divided these areas by quadrants and benefiting areas as shown in Figure 3.2. A summary of the gross and net developable areas for these benefiting areas is included in Table 3.4.

Table 3.4 Benefiting Area Summary

Benefiting Area	25-Year Horizon		Full Build-Out <sup>1</sup>	
	Gross	Net	Gross	Net
	ha	ha	ha	ha
East	23.58	21.22	23.58	21.22
Northeast	31.57	28.41	31.57	28.41
Northwest	132.28	119.05	101.08	90.97
Southeast	30.80	27.72	30.80	27.72
Southwest	162.81	146.53	31.27	28.14
West	103.47	93.12	86.95	78.26
<b>Total</b>	<b>484.51</b>	<b>436.06</b>	<b>305.25</b>	<b>274.73</b>

<sup>1</sup> The full build-out area includes the 25-Year Horizon area.





Legend

Benefiting Areas

- East
- Northeast
- Northwest
- Southeast
- Southwest
- West

Benefiting Area Within 25-  
Year Growth Boundary  
(Colour Varies)

Town Boundary

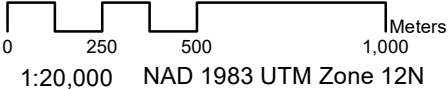


FIGURE 3.2  
BENEFITING AREAS  
TOWN OF COALDALE  
OFF-SITE LEVY REVIEW



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



## ■ 4.0 Off-Site Levy Assumptions

The Town's off-site levies will be charged to any new or incremental development in the Town that will impact the need for upgrades in infrastructure, including the following:

- Water supply and distribution
- Wastewater sewer collection
- Transportation infrastructure
- Facilities

It should be noted that stormwater infrastructure has not been included in the calculation of off-site levy rates as part of this Off-Site Levy Review.

Additional assumptions pertaining to the infrastructure projects and the proportions of costs carried in the off-site levy rate calculations for each infrastructure type are outlined in the following sections. General assumptions are as follows:

- Off-site levy rates can be broken down using uniform or benefiting area rate methodology.
- Potential grant funding of infrastructure is not included in this report. Oversizing considerations will not be detailed herein. Details of potential endeavours to assist will be detailed by the Town in the formal off-site levy policy and/or future development agreements on a case-by-case basis.
- No interest or carrying charges have been included at this stage.
- Details of potential endeavours to assist will be detailed by the Town in the formal off-site levy policy and/or future development agreements.
- Off-site levy rates are based on net development area as noted above.
- Cost estimates are based on the supporting planning documents as well as Town project budgets and estimates with an inflation factor applied to account for the increased cost of the project in the proposed construction year.
- Project timelines are based on the Town's proposed project construction/implementation years.
- Residual benefit of the infrastructure projects for the existing population were provided by the Town and vary depending on type of infrastructure and specific project.

### 4.1 Water Infrastructure Assumptions

Assumptions pertaining to water infrastructure projects as part of this Off-Site Levy Review are as follows:

- Existing system upgrade projects, proposed future system projects, and associated costs are largely based on the 2019 Infrastructure Master Plan and subsequent technical memorandums.
- Projects are considered to benefit future development only or shared between future development and the existing population.
- All projects are considered to provide global benefit to the Town. Therefore, levy rates were calculated on a uniform basis.



## 4.2 Wastewater Infrastructure Assumptions

Assumptions pertaining to wastewater infrastructure projects as part of this Off-Site Levy Review are as follows:

- Existing system upgrade projects, proposed future system projects, and associated costs are largely based on the 2019 Infrastructure Master Plan as well as design and construction updates.
- Projects are considered to benefit future development only or shared between future development and the existing population.
- All projects are considered to provide global benefit to the Town. Therefore, levy rates were calculated on a uniform basis.

## 4.3 Transportation Infrastructure Assumptions

Assumptions pertaining to transportation infrastructure projects as part of this Off-Site Levy Review are as follows:

- Existing system upgrade projects, proposed future system projects, and associated costs are largely based on the 2019 Infrastructure Master Plan and 2020 Transportation Master Plan in addition to other local transportation studies such as Traffic Impact Assessments (TIAs), etc. This was supplemented by the Town's budgets and preliminary cost estimates.
  - Preliminary cost estimates have been included for reference only to provide an estimation of the potential off-site levy rates. This Off-Site Levy Review and associated rates as well as the Town's bylaw are expected to be finalized once these preliminary cost estimates have been finalized. This is required for the Off-Site Levy Bylaw to be in compliance with the Municipal Government Act.
- Projects are considered to benefit future development only or equally shared between future development and the existing population.
- All projects are considered to provide global benefit to the Town. Therefore, levy rates were calculated on a uniform basis.

## 4.4 Existing Off-Site Levy Accounts

The Town provided the current balances in their off-site levy accounts for each type of infrastructure. These balances are summarized in Table 4.1.

Infrastructure Type	Existing Off-Site Levy Account Balances	
	\$	\$/ha
Water	\$766,000	\$2,788
Wastewater	\$114	\$0
Stormwater	\$568,000	\$2,068
Transportation	\$357,000	\$1,299
Facilities	\$0	\$0
<b>Total</b>	<b>\$1,691,114</b>	<b>\$6,156</b>

## 5.0 Costing Details

### 5.1 Inflation Factor

As noted, no interest or carrying charges have been included at this stage; however, an annual inflation factor has been applied to the infrastructure project costs to account for increased costs in the proposed construction year. The inflation factor calculations start in 2016 to account for those transportation infrastructure projects that are based on the West Coaldale Area Structure Plan Traffic Impact Assessment (MPE, 2015) and are carried to 2047 to account for the 25-year growth horizon of the Town. The inflation factor for each project from cost estimate year to proposed construction year is based on the annual inflation rates as outlined in Table 5.1 below.

Table 5.1 Annual Inflation Rate

Year	Annual Inflation Rate	Year	Annual Inflation Rate
2016	1.27%	2022	6.80%
2017	1.56%	2023	3.20%
2018	2.31%	2024	2.40%
2019	1.88%	2025	2.20%
2020	0.89%	2026	2.20%
2021	2.20%	2027-2047	2.00%

Inflation rates from 2016 to 2022 are actual inflation rates obtained from the Bank of Canada based on the consumer price index (CPI) data from 1914 onward (Bank of Canada, 2022). The inflation rates for 2023-2025 are target values as outlined in the Fiscal Plan Moving Forward 2022-25 (Alberta Treasury Board and Finance Communications, 2022). The inflation rates for 2027 and beyond are consistent with the previous target inflation rates of 2%. It should be noted that the inflation rate for 2022 is based on the inflation rate in January 2023.

### 5.2 Project Priority

The projects were categorized based on levy suitability and cost estimate status. The three priorities are outlined as follows:

- Priority 1: Suitable levy projects with established cost estimates.
- Priority 1A: Potentially suitable levy projects with established cost estimates.
- Priority 1B: Potentially suitable levy projects with preliminary cost estimates.

Suitable levy projects are those that are specifically outlined in supporting documents compared to potentially suitable levy projects that may not be specifically outlined in supporting documents and/or have already been constructed or are currently in progress. Established cost estimates are those outlined in reports or other supporting documents. Preliminary cost estimates are those that have been provided by the Town based on past project experience and have been included for reference only to provide an estimation of the potential off-site levy rates. This Off-Site Levy Review and associated rates as well as the Town's bylaw are expected to be finalized once these preliminary cost estimates have been finalized.

## 5.3 Water Infrastructure

### 5.3.1 Water Infrastructure Projects

In order to facilitate Coaldale's anticipated growth, the following are recommended water projects to be included in the Off-Site Levy Bylaw. The locations of each levied upgrade are shown on Figure 5.1 and summarized in Table 5.2 below. Details for each project are provided in the project sheets in Appendix A.

Table 5.2 Water Infrastructure Project Summary

Project ID	Year	Priority	Growth Benefit	Levied Project Cost
W1	2032	1	75%	\$2,773,220
W2	2038	1	75%	\$2,238,272
W3	2028	1	75%	\$9,560,179

### 5.3.2 Water Infrastructure Rates

Based on the water infrastructure upgrade projects and costs outlined above, the levy rates for the water infrastructure are summarized in Table 5.3.

Table 5.3 Water Infrastructure Levy Rate Summary

Priority	Benefiting Area	Area	Total Levied	Off-Site Levy
		ha		\$/ha
1	Global	274.73	\$14,571,670	\$53,041
Total		274.73	\$14,571,670	\$53,041

## 5.4 Wastewater Infrastructure

### 5.4.1 Wastewater Infrastructure Projects

In order to facilitate Coaldale's anticipated growth, the following are recommended wastewater projects to be included in the Off-Site Levy Bylaw. The locations of each levied upgrade are shown on Figure 5.2 and summarized in Table 5.4 below. Details for each project are provided in the project sheets in Appendix B.

Table 5.4 Wastewater Infrastructure Project Summary

Project ID	Year	Priority	Growth Benefit	Levied Project Cost
WW1	2023	1	90%	\$1,646,105
WW2	2028	1	90%	\$4,345,960
WW3	2038	1	100%	\$8,046,493
WW4	2028	1	50%	\$1,57,212
WW5	2022	1A	50%	\$3,714,771

## 5.4.2 Wastewater Infrastructure Rates

Based on the wastewater infrastructure upgrade projects and costs outlined above, the levy rates for the wastewater infrastructure are summarized in Table 5.5.

Table 5.5 Wastewater Infrastructure Levy Rate Summary

Priority	Benefiting Area	Area	Total Levied	Off-Site Levy
		ha		\$/ha
1	Global	274.73	\$15,195,770	\$55,313
1A	Global	274.73	\$3,714,771	\$13,522
Total		274.73	\$18,910,541	\$68,834

## 5.5 Transportation Infrastructure

### 5.5.1 Transportation Infrastructure Projects

In order to facilitate Coaldale's anticipated growth, the following are recommended transportation projects to be included in the Off-Site Levy Bylaw. The locations of each levied upgrade are shown on Figure 5.4 and summarized in Table 5.6 below. Details for each project are provided in the project sheets in Appendix C.

Table 5.6 Transportation Infrastructure Project Summary

Project ID	Year	Priority	Growth Benefit	Levied Project Cost
T1	2025	1	50%	\$438,829
T2	2035	1	50%	\$576,798
T3	2025	1	75%	\$867,268
T4	2025	1A	90%	\$2,836,509
T5	2027	1B	50%	\$676,131
T6	2020	1B	50%	\$600,385
T7	2035	1B	50%	\$216,381
T8	2030	1B	100%	\$4,024,587
T9	2024	1B	100%	\$6,458,531

### 5.5.2 Transportation Infrastructure Rates

Based on the transportation infrastructure upgrade projects and costs outlined above, the levy rates for the transportation infrastructure are summarized in Table 5.7.

Table 5.7 Transportation Infrastructure Levy Rate Summary

Priority	Benefiting Area	Area	Total Levied	Off-Site Levy
		ha		\$/ha
1	Global	274.73	\$1,882,895	\$6,854
1A	Global	274.73	\$2,836,509	\$10,325
1B	Global	274.73	\$11,976,015	\$43,593
Total		274.73	\$16,695,420	\$60,771

### 5.6 Summary of Levy Rates

Off-site levy rates may be evaluated using either uniform or benefiting area rates; however, the Town has elected to maintain uniform rates for all types of infrastructure as outlined above. A summary of the off-site levy rates is provided in Table 5.8 and full detail of the rates is outlined in Appendix E.



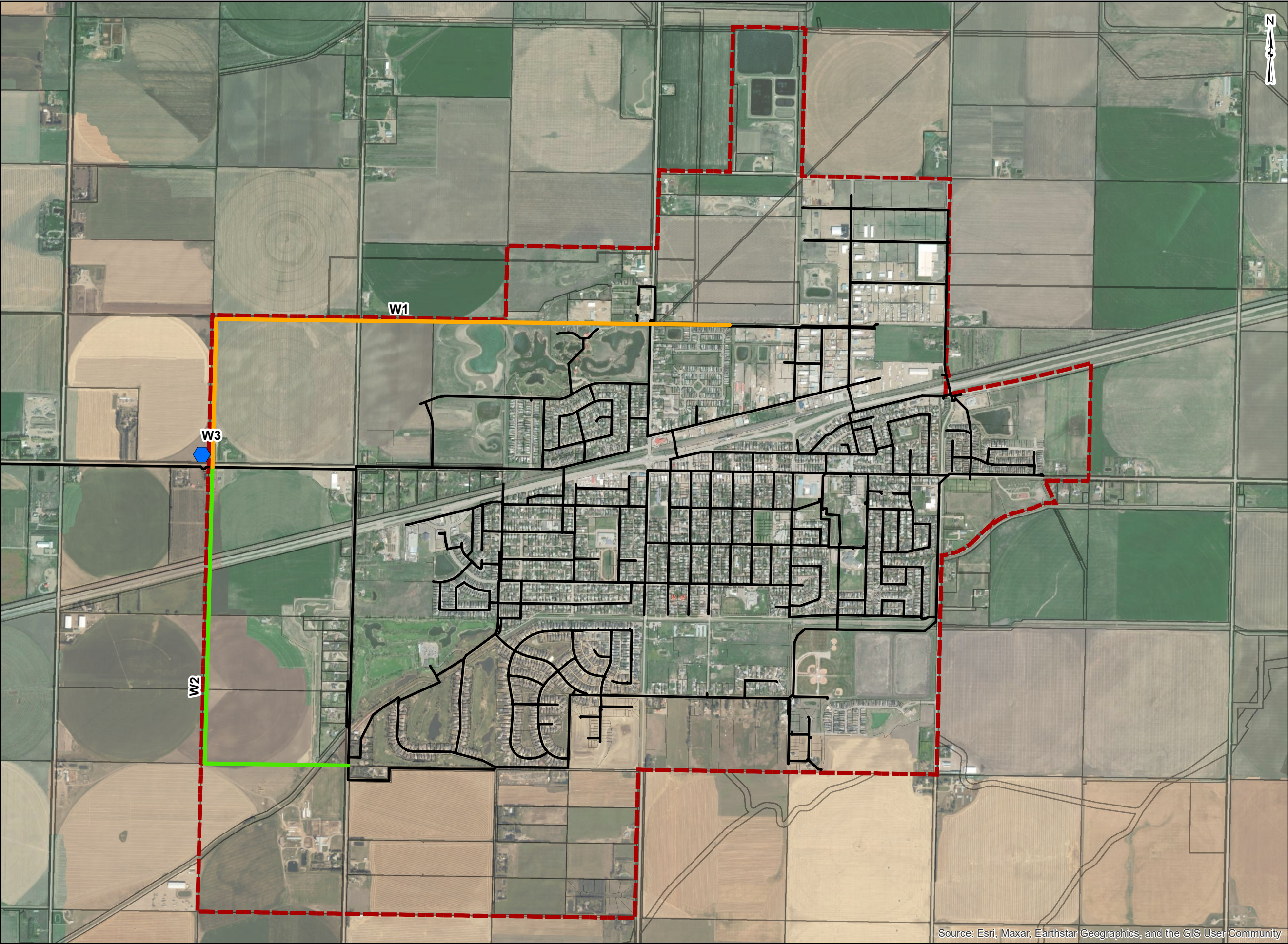


Table 5.8    Off-Site Levy Rate Summary

Infrastructure	Current Levies		Proposed Levies					Change in Levies	
	Inside Town Boundary <sup>1</sup>	Outside Town Boundary <sup>1</sup>	Priority 1	Priority 1A	Priority 1B	Combined	Combined Minus Existing Balances	Inside Town Boundary	Outside Town Boundary
	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha
Water	\$12,267	\$12,486	\$53,041	\$0	\$0	\$53,041	\$50,204	\$37,937	\$37,718
Wastewater	\$26,263	\$6,309	\$55,313	\$13,522	\$0	\$68,834	\$68,834	\$42,571	\$62,525
Stormwater	\$21,136	\$5,534	\$0	\$0	\$0	\$0	\$0	-\$21,136	-\$5,534
Transportation	\$35,163	\$35,641	\$6,854	\$10,325	\$43,593	\$60,771	\$59,449	\$24,286	\$23,808
Facilities	-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$85,575 <sup>2</sup>		\$115,207	\$23,847	\$43,593	\$182,647	\$178,487	\$92,912 <sup>3</sup>	

<sup>1</sup> These off-site levy rates are based on the Off-Site Levy and Development Charges Review (MPE, 2007).  
<sup>2</sup> This off-site levy rate is not the sum of the rates outlined above for each infrastructure type from Off-Site Levy and Development Charges Review (MPE, 2007), but the off-site levy rate outlined in the Off-Site Levy Bylaw (Coaldale, 2007).  
<sup>3</sup> This change in off-site levy rate is not the sum of the change in rates outlined above for each infrastructure type from Off-Site Levy and Development Charges Review (MPE, 2007), but the off-site levy rate outlined in the Off-Site Levy Bylaw (Coaldale, 2007).





Legend

- West Reservoir and Pump Station
- Proposed Water Main Improvements
  - North Main Loop (300mm)
  - South Main Loop (300mm)
- Existing Watermain
- Town Boundary

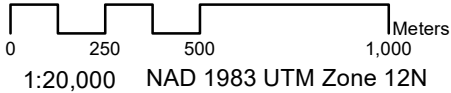


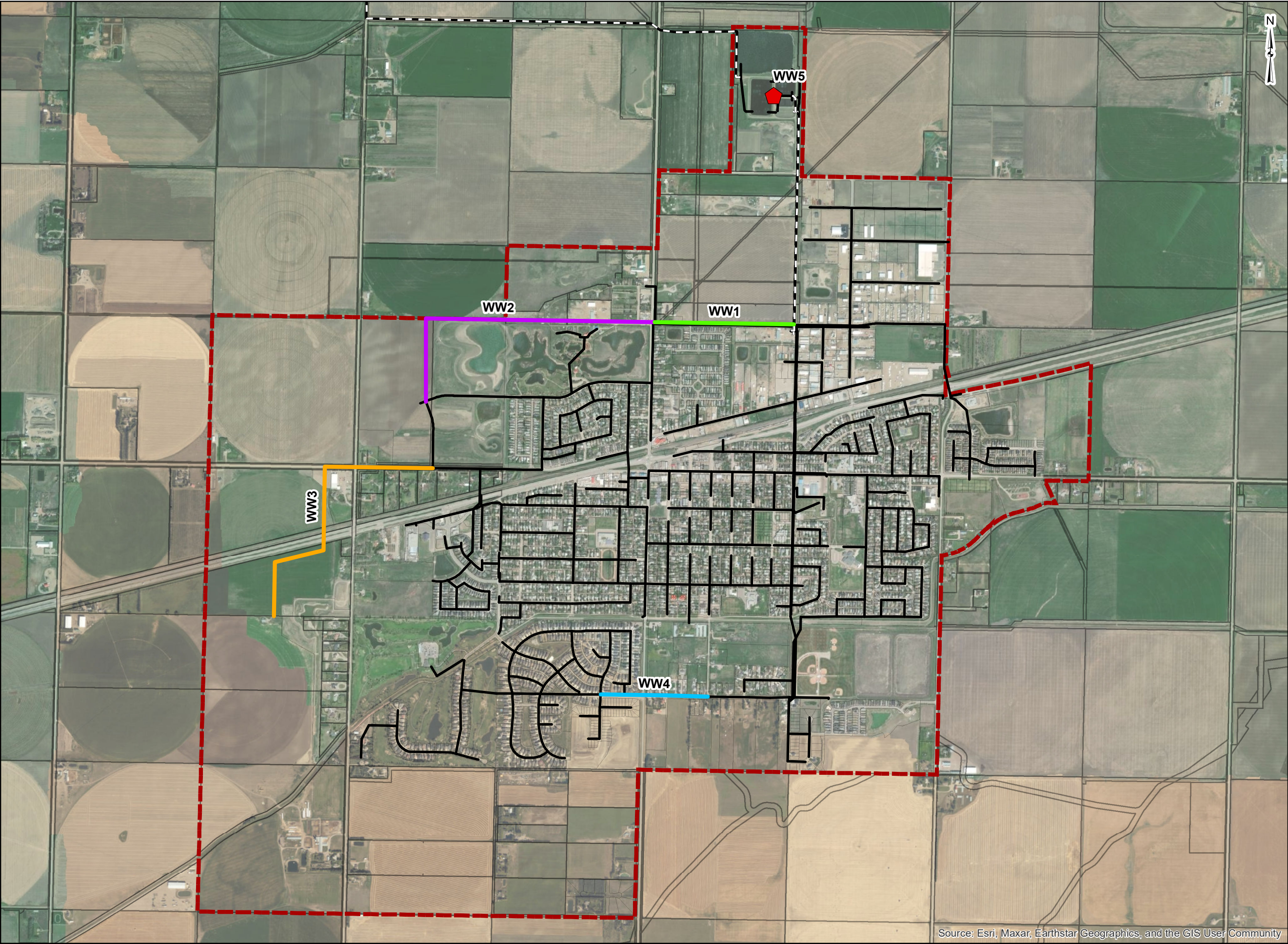
FIGURE 5.1  
WATER INFRASTRUCTURE PROJECTS  
TOWN OF COALDALE  
OFF-SITE LEVY REVIEW



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community







**Legend**

- Lagoon and Lift Station Capacity Upgrades
- Proposed Sanitary Sewer Improvements**
  - West Main Trunk - Phase 1 (750mm)
  - West Main Trunk - Phase 2 (750mm)
  - West Main Trunk - Phase 3 (450/600mm)
  - 30 Avenue Upgrade (375mm)
- Existing Sanitary Sewer
- Existing Forcemain
- Town Boundary

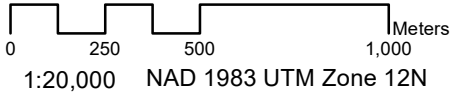
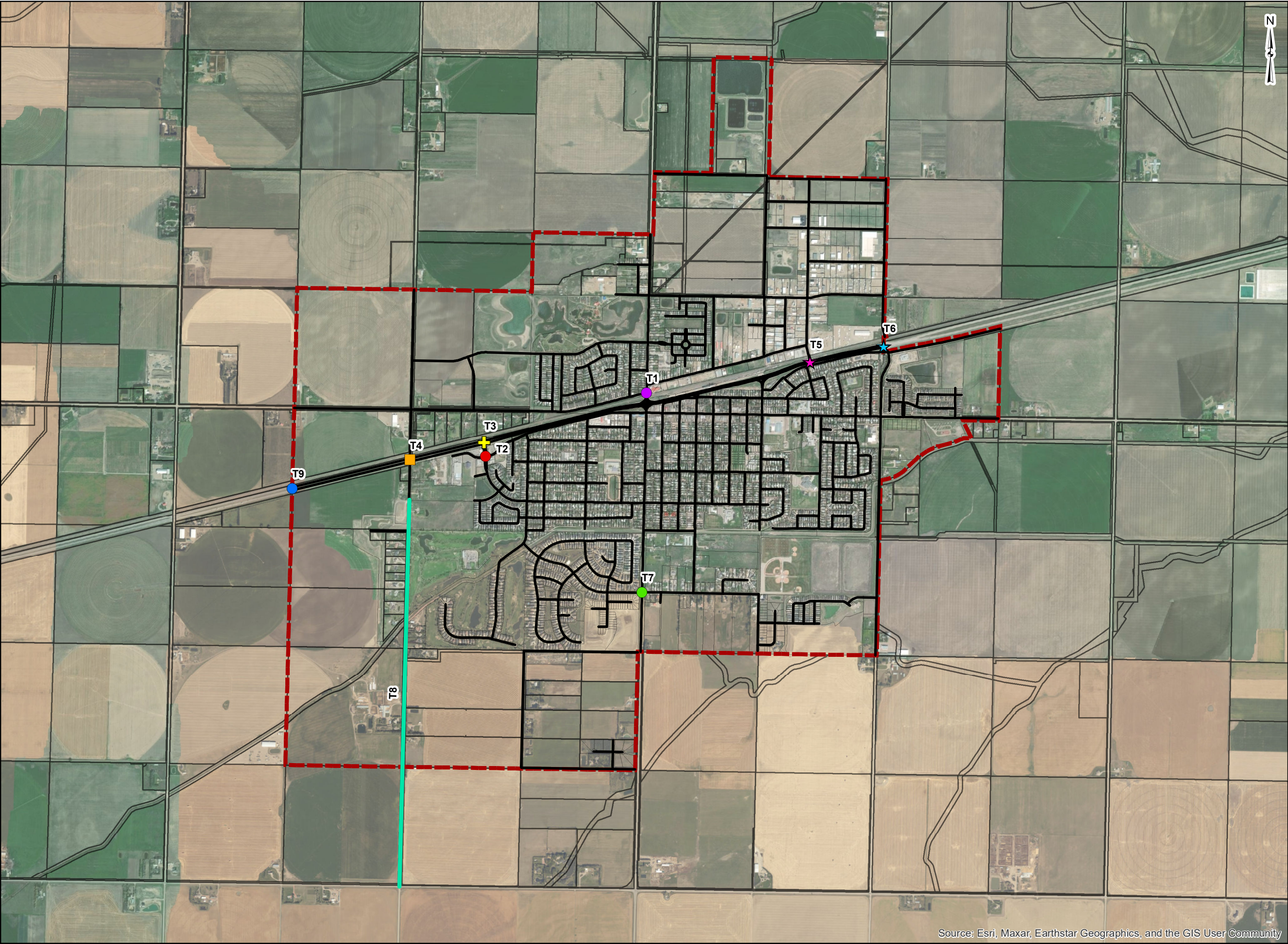


FIGURE 5.2  
WASTEWATER INFRASTRUCTURE  
PROJECTS  
TOWN OF COALDALE  
OFF-SITE LEVY REVIEW



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community





Legend

Proposed Road Improvements

18 Avenue/20 Street Intersection Upgrades

21 Avenue/Land O'Lakes Drive Intersection Upgrades

30 Avenue/20 Street Intersection Upgrades

New West Coaldale Highway 3 Intersection

Highway 3/30 Street Geometric Improvements

Highway 3/11 Street Signalization

Highway 3/8 Street Signalization

Land O'Lakes Drive At-Grade Pedestrian Crossing

30 Street Urbanization to Highway 512

Existing Road

Town Boundary

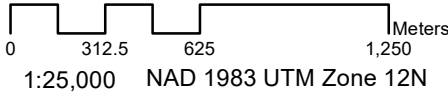


FIGURE 5.3  
TRANSPORTATION INFRASTRUCTURE  
PROJECTS  
TOWN OF COALDALE  
OFF-SITE LEVY REVIEW



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



## 6.0 Collection Timing

### 6.1 Current Off-Site Levy Bylaw

The current payment policy outlined in the Town's Off-Site Levy Bylaw is quoted as follows: "...50% payable upon signing of a Development Agreement; and, 50% payable four (4) months after signing of a Development Agreement" and "no development shall proceed until payment of the levy...above is paid in full".

### 6.2 Off-Site Levy Bylaws of Neighbouring Municipalities

During the review of the neighbouring municipalities, the timing of the off-site levy collection was noted and is summarized in Table 6.1.

Table 6.1 Summary of Payment Timing Policies for Neighbouring Municipalities

Municipality	Off-Site Levy Collection Timing
Brooks	Insufficient information.
Calgary	"...30% within one year of the date of execution of Interim Indemnity Agreement, 30% within two years of the date of execution of an Interim Indemnity Agreement, and the remaining 40% within three years of the date of execution of an Interim Indemnity Agreement" or "on or before the release of the development completion permit."
Coalhurst	"50% of the Levy is payable upon signing of the Development Agreement. The remaining 50% shall be paid by December 31 of the same calendar year."
Fort Macleod	"Unless otherwise agreed upon, the Off-Site Levy is due prior to the issuance of Subdivision approval for the Development Region or the issuance of a Development Permit in relation to the subject parcel."
High River	"...10% paid prior to the execution of the Development Agreement or release of the development permit; 45% paid within one year of the execution of the Development Agreement or release of the Development Permit; and 45% paid within two years of execution of the Development Agreement or release of the Development Permit."
Lethbridge	"50% of the assessed fees will be paid prior to the start of construction upon execution of the service agreement and 50% will be paid prior to the first building permit being issued within the development phase."
Medicine Hat	"...imposed on a subdivision area by subdivision approval, the levies shall be paid at the...date of plan endorsement" or "where levies are imposed on a development area by the issuance of a development permit...shall be paid on the date of issuance of the development permit."
Okotoks	"...if the subdivision plan area is less than 0.5 ha upon execution of a subdivision servicing agreement or, if no subdivision servicing agreement is to be executed, prior to endorsement of the plan of subdivision; or if the subdivision plan is 0.5 ha or greater: 50%...paid upon execution of a subdivision servicing agreement; and 50%...paid on or before the on-year anniversary of execution of the subdivision servicing agreement" or "in respect of land that is subject to development shall be paid in full prior to release of the development permit."

Municipality	Off-Site Levy Collection Timing
Taber	<p>“...shall enter into a Development Agreement with the Municipality and such Development Agreement shall ensure that: provision be made for the payment of Off-Site Levies as specified in this Bylaw, or that provision may be made for the deferring of payment of the Off-Site Levies to a future time certain or uncertain; and no further Off-Site Levies shall be required to be paid under Development Agreements that have been previously collected in full in respect to all of the lands which are the subject of the Development or Subdivision application.”</p>

As outlined in Table 6.1, the Town’s current payment is comparable to those of surrounding municipalities. The off-site levy collection and timing policy may be outlined in either the Off-Site Levy Bylaw or in the Terms of the Agreement for the Development or Subdivision or subsequent agreements; this is the Town’s decision.



## 7.0 Conclusions and Recommendations

### 7.1 Conclusions

The Town's off-site levies will be charged to any new or incremental development in the Town that will impact the need for upgrades in infrastructure, including the following:

- Water supply and distribution infrastructure
- Wastewater sewer collection infrastructure
- Transportation infrastructure

Additional assumptions pertaining to the infrastructure projects and the proportions of costs carried in the off-site levy rate calculations for each infrastructure type are outlined in the following sections.

General assumptions are as follows:

- Off-site levy rates can be broken down using uniform or benefiting area rate methodology.
- Potential grant funding of infrastructure is not included in this report.
- Details of potential endeavours to assist will be detailed by the Town in the formal off-site levy policy and/or future development agreements.
- Off-site levy rates are based on net development area as noted above.
- Cost estimates are based on the supporting planning documents as well as Town project budgets and estimates.
- Preliminary cost estimates have been included for reference only to provide an estimation of the potential off-site levy rates. This Off-Site Levy Review and associated rates as well as the Town's bylaw are expected to be finalized once these preliminary cost estimates have been finalized.
- Project timelines are based on the Town's proposed project construction/implementation years.
- Residual benefit of the infrastructure projects for the existing population were provided by the Town and vary depending on type of infrastructure and specific project.

The current payment and timing policy, as specified in the existing bylaw, requires that the levies be paid based on the following: "...50% payable upon signing of a Development Agreement; and, 50% payable four (4) months after signing of a Development Agreement" and "no development shall proceed until payment of the levy...above is paid in full". Comparing this payment and timing policy to the surrounding municipalities, the Town is consistent with other municipalities.

## 7.2 Recommendations

Recommendations related to the Town's off-site levy update are as follows:

- The Town should finalize the preliminary cost estimates for the Priority 1B projects prior to finalizing the off-site levy rates and Off-Site Levy Bylaw.
- The Town should consider implementing those rates contained herein once they are finalized; however, the Town may choose to set lower rates to be competitive with other municipalities.
- The Town may wish to consider lower levy rates for non-residential development, given its typically positive implications on the municipal tax base.
- The Town should consider the suitability of the recommended rates for its purposes.
- The Town should determine which timing methodology to utilize in the Off-Site Levy Bylaw.
- The Town should review the Off-Site Levy once a year to update the associated assumptions, costing, and schedules.





## 8.0 References

- Bank of Canada. 2023. Inflation Calculator. Retrieved from: <https://www.bankofcanada.ca/rates/related/inflation-calculator/>
- City of Brooks. 2007. Bylaw No. E-002-008.
- City of Calgary. 2019. Bylaw No. 2M2016: Calgary Off-site Levies Bylaw.
- City of Calgary. 2022. Off-Site Levies, Charges and Fees.
- City of Lethbridge. 2022. Bylaw No. 6275: Off-Site Levy Bylaw.
- City of Medicine Hat. 2019. Bylaw No. 4496.
- ISL Engineering and Land Services Ltd. 2020. Opinion of Probable Cost – Single Lane Roundabout (Stage 1).
- ISL Engineering and Land Services Ltd. 2022. Coaldale Industrial ASP TIA.
- MPE Engineering Ltd. 2016. Highway 3 and 30<sup>th</sup> Street Intersection Improvements Order of Magnitude Cost Estimate.
- MPE Engineering Ltd. 2019. Infrastructure Master Plan.
- MPE Engineering Ltd. 2020. Town of Coaldale – Highway 3 and 30 Street Traffic Impact Assessment.
- MPE Engineering Ltd. 2022. Treated Reservoir and Pump Station Project Scoping Document.
- MPE Engineering Ltd. 2022. West Coaldale Transportation and Connectivity Study.
- MPE Engineering Ltd. 2022. West Coaldale Trunk Main Preliminary Design Study.
- Statistics Canada. 2022. Census Profile, 2021 Census of Population. Retrieved from: <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>
- Town of Coaldale. 2022. 30<sup>th</sup> Avenue and 20<sup>th</sup> Street Intersection Upgrades Preliminary Cost Estimate.
- Town of Coalhurst. 2012. Bylaw No. 360-12: Off-Site Levy.
- Town of Fort Macleod. 2012. Bylaw No. 1750: Off-Site Levy Bylaw.
- Town of High River. 2020. Bylaw No. 4586/2020: Town of High River Off-Site Levy Bylaw.
- Town of Nanton. 2010. Bylaw No. 1223/10.

Town of Okotoks. 2017. Bylaw No. 04-17: Off-Site Levy Bylaw.

Town of Taber. 2016. Bylaw No. 2-2016: Offsite Levy Bylaw.

WATT Consulting Group. 2019. Cottonwood Estates Transportation Impact Assessment.

WATT Consulting Group. 2020. Highway 3/Highway 845 Functional Planning Study.

WATT Consulting Group. 2020. Town of Coaldale Transportation Master Plan.

WATT Consulting Group. 2021. South Coaldale Transportation Impact Assessment.

WATT Consulting Group. 2022. Southwest Coaldale Area Structure Plan – Traffic Analysis.



**APPENDIX**  
Water Project Sheets

A

## Project W1: North Coaldale Loop

**Project Timeline:** 2032

**Priority:** 1

### Project Description

This project includes approximately 3,590 m of 300 mm watermain from 30 Street to 18 Avenue along 14 Avenue and the town boundary.

### Reference Documents

- Infrastructure Master Plan (MPE, 2019)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 75% of the project capital cost has been levied.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$3,697,626
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$924,407
Leviable Project Cost	\$2,773,220
Off-Site Levies Collected to 2022	-
Remaining Levy	\$2,773,220

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$10,095

## Project W2: South Coaldale Loop

**Project Timeline:** 2038

**Priority:** 1

### Project Description

This project includes approximately 2,390 m of 300 mm watermain from 30 Street to 18 Avenue along Township Road 91 and the town boundary.

### Reference Documents

- Infrastructure Master Plan (MPE, 2019)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 270 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 75% of the project capital cost has been levied.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$2,984,362
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$746,091
Leviable Project Cost	\$2,238,272
Off-Site Levies Collected to 2022	-
Remaining Levy	\$2,238,272

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$8,147

## Project W3: West Reservoir and Pump Station

**Project Timeline:** 2028

**Priority:** 1

### Project Description

This project includes a new reservoir and pump station along 18 Avenue at the west town boundary.

### Reference Documents

- Infrastructure Master Plan (MPE, 2019)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 270 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 75% of the project capital cost has been levied. The cost estimates outlined in the IMP have been supplemented with the Treated Water Reservoir and Pump Station Project Scoping Document (MPE, 2022).

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$12,746,906
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$3,186,726
Leviable Project Cost	\$9,560,179
Off-Site Levies Collected to 2022	-
Remaining Levy	\$9,560,179

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$34,799



## APPENDIX

### Wastewater Project Sheets

# B

## Project WW1: West Coaldale Main Trunk – Phase 1

**Project Timeline:** 2023

**Priority:** 1

### Project Description

This project includes approximately 755 m of 750 mm wastewater main from 13 Street to 20 Street along 14 Avenue.

### Reference Documents

- Infrastructure Master Plan (MPE, 2019)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 270 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 90% of the project capital cost has been levied. The cost estimates outlined in the IMP have been supplemented with the West Coaldale Trunk Main Preliminary Design Study (MPE, 2022) for this project.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$1,829,005
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$182,901
Leviable Project Cost	\$1,646,105
Off-Site Levies Collected to 2022	-
Remaining Levy	\$1,646,105

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$5,992



## Project WW2: West Coaldale Main Trunk – Phase 2

**Project Timeline:** 2028

**Priority:** 1

### Project Description

This project includes approximately 1,695 m of 750 mm wastewater main from 20 Street to 16 Avenue along 14 Avenue and 26 Street.

### Reference Documents

- Infrastructure Master Plan (MPE, 2019)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 270 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 90% of the project capital cost has been levied. The cost estimates outlined in the IMP have been supplemented with the West Coaldale Trunk Main Preliminary Design Study (MPE, 2022) for this project.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$4,828,845
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$482,884
Leviable Project Cost	\$4,345,960
Off-Site Levies Collected to 2022	-
Remaining Levy	\$4,345,960

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$15,819

## Project WW3: West Coaldale Main Trunk – Phase 3

**Project Timeline:** 2038

**Priority:** 1

### Project Description

This project includes approximately 1,695 m of 450 mm and 600 mm wastewater main from 26 Street northwest along 18 Avenue and west of 30 Street.

### Reference Documents

- Infrastructure Master Plan (MPE, 2019)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 270 ha.

### Assumptions and Rationale

This project is required to facilitate development; therefore, benefit has been allocated to the Town's growth area only. The cost estimates outlined in the IMP have been supplemented with the West Coaldale Trunk Main Preliminary Design Study (MPE, 2022) for this project.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$8,046,493
Grant Funded	-
Developer Build Contribution	-
Town Contribution	-
Leviable Project Cost	\$8,046,493
Off-Site Levies Collected to 2022	-
Remaining Levy	\$8,046,493

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$29,289

## Project WW4: 30 Avenue Upgrade

**Project Timeline:** 2028

**Priority:** 1

### Project Description

This project includes approximately 580 m of 375 mm wastewater main upgrade from Elm Drive to 17 Street along Cottonwood Drive/30 Avenue.

### Reference Documents

- Infrastructure Master Plan (MPE, 2019)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 270 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 50% of the project capital cost has been levied.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$2,314,424
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$1,157,212
Leviable Project Cost	\$1,157,212
Off-Site Levies Collected to 2022	-
Remaining Levy	\$1,157,212

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$4,212

## Project WW5: Lagoon and Lift Station Capacity Upgrades

**Project Timeline:** 2022

**Priority:** 1A

### Project Description

This project includes capacity and treatment upgrades at the existing lagoon and lift station site.

### Reference Documents

- Infrastructure Master Plan (MPE, 2019)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 270 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 50% of the project capital cost has been levied. The cost estimates outlined in the IMP have been supplemented with construction estimates for this project. It should be noted that \$645,000 of previously collected levies was already spent on this project; therefore, this was removed from the total for the levy rate calculation.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$12,466,178
Grant Funded	\$4,391,636
Developer Build Contribution	-
Town Contribution	\$3,714,771
Leviable Project Cost	\$3,714,771
Off-Site Levies Collected to 2022	-
Remaining Levy	\$3,714,771

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$13,522



**APPENDIX**  
Transportation Project Sheets

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## Project T1: 18 Avenue/20 Street Intersection Upgrades

**Project Timeline:** 2032

**Priority:** 1

### Project Description

This project includes upgrades to the intersection of 18 Avenue and 20 Street (Highway 845).

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 50% of the project capital cost has been levied. It is likely that the TMP cost was underestimated; therefore, it is recommended that these costs be reviewed.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$877,657
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$438,829
Leviable Project Cost	\$438,829
Off-Site Levies Collected to 2022	-
Remaining Levy	\$438,829

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$1,597

## Project T2: 21 Avenue/Land O'Lakes Drive Intersection Upgrades

**Project Timeline:** 2025

**Priority:** 1

### Project Description

This project includes upgrades to the intersection of 21 Avenue and Land O'Lakes Drive in the form of a roundabout.

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 50% of the project capital cost has been levied. The cost estimates outlined in the TMP have been supplemented with the Opinion of Probable Cost – Single Lane Roundabout (Stage 1) (ISL, 2020) estimates for this project.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$1,153,596
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$576,798
Leviable Project Cost	\$576,798
Off-Site Levies Collected to 2022	-
Remaining Levy	\$576,798

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$2,100

## Project T3: Land O'Lakes Drive At-Grade Pedestrian Crossing

**Project Timeline:** 2024

**Priority:** 1

### Project Description

This project includes an at-grade pedestrian crossing of Highway 3 at Land O'Lakes Drive.

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)
- West Coaldale Transportation and Connectivity Study (MPE, 2022)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 25% of the project capital cost has been levied. The cost estimates for this project have been based on the West Coaldale Transportation and Connectivity Study (MPE, 2022) estimates.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$1,156,358
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$289,089
Leviable Project Cost	\$867,268
Off-Site Levies Collected to 2022	-
Remaining Levy	\$867,268

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$3,157



## Project T4: Highway 3/30 Street Geometric Improvements

**Project Timeline:** 2032

**Priority:** 1A

### Project Description

This project includes geometric improvements at the intersection of Highway 3 and 30 Street. Signalization at the intersection was completed in 2021.

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)
- Town of Coaldale – Highway 3 and 30 Street Traffic Impact Assessment (MPE, 2020)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 90% of the project capital cost has been levied. The cost estimates outlined in the TMP have been supplemented by the Highway 3 and 30<sup>th</sup> Street Intersection Improvements Order of Magnitude Cost Estimate (MPE, 2016). These cost estimates have been provided by the Town and are to be updated when more recent cost estimates become available.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$3,151,677
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$315,168
Leviable Project Cost	\$2,836,509
Off-Site Levies Collected to 2022	-
Remaining Levy	\$2,836,509

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$10,325

## Project T5: Highway 3/11 Street Signalization

**Project Timeline:** 2038

**Priority:** 1B

### Project Description

This project includes an upgrade to the intersection of Highway 3 and 11 Street through signalization of the intersection.

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)
- Coaldale Industrial ASP TIA (ISL, 2022)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 50% of the project capital cost has been levied. The cost estimates for this project are preliminary estimates based on the TIA as provided by the Town and are to be updated when more detailed cost estimates become available to finalize the off-site levy rates.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$1,352,261
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$676,131
Leviable Project Cost	\$676,131
Off-Site Levies Collected to 2022	-
Remaining Levy	\$676,131

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$2,461

## Project T6: Highway 3/8 Street Signalization

**Project Timeline:** 2032

**Priority:** 1B

### Project Description

This project includes an upgrade to the intersection of Highway 3 and 8 Street through signalization of the intersection.

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)
- Coaldale Industrial ASP TIA (ISL, 2022)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 50% of the project capital cost has been levied. The cost estimates for this project are preliminary estimates based on the TIA as provided by the Town and are to be updated when more detailed cost estimates become available to finalize the off-site levy rates.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$1,200,769
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$600,385
Leviable Project Cost	\$600,385
Off-Site Levies Collected to 2022	-
Remaining Levy	\$600,385

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$2,185

## Project T7: 30 Avenue/20 Street Intersection Upgrades

**Project Timeline:** 2025

**Priority:** 1B

### Project Description

This project includes an upgrade to the intersection of 30 Avenue and 20 Street through signalization of the intersection.

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)
- Cottonwood Estates Transportation Impact Assessment (WATT Consulting Group, 2019)
- South Coaldale Transportation Impact Assessment (WATT Consulting Group, 2021)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; however, it does provide residual benefit to the existing town. Therefore, 50% of the project capital cost has been levied. The cost estimates for this project are based on the 30<sup>th</sup> Avenue and 20<sup>th</sup> Street Intersection Upgrades Preliminary Cost Estimate (Coaldale, 2022) as provided by the Town.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$432,763
Grant Funded	-
Developer Build Contribution	-
Town Contribution	\$216,381
Leviable Project Cost	\$216,381
Off-Site Levies Collected to 2022	-
Remaining Levy	\$216,381

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$788

## Project T8: 30 Street Urbanization to Highway 512

**Project Timeline:** 2038

**Priority:** 1B

### Project Description

This project includes an upgrade of 30 Street from 23 Avenue to Highway 512 through urbanization of approximately 2.5 km of 30 Street.

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)
- Coaldale Industrial ASP TIA (ISL, 2022)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; therefore, the project capital cost has been levied. The cost estimates for this project are preliminary estimates based on the TIA as provided by the Town and are to be updated when more detailed cost estimates become available to finalize the off-site levy rates.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$4,024,587
Grant Funded	-
Developer Build Contribution	-
Town Contribution	-
Leviable Project Cost	\$4,024,587
Off-Site Levies Collected to 2022	-
Remaining Levy	\$4,024,587

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$14,650

## Project T9: New West Coaldale Highway 3 Intersection

**Project Timeline:** 2043

**Priority:** 1B

### Project Description

This project includes a new intersection at Highway 3 and the Town's west boundary.

### Reference Documents

- Town of Coaldale Transportation Master Plan (WATT Consulting Group, 2020)
- Coaldale Industrial ASP TIA (ISL, 2022)

### Benefitting Areas

All water infrastructure projects have been assumed to provide a global benefit to the Town's 25-year growth horizon area of approximately 275 ha.

### Assumptions and Rationale

This project is required to facilitate development; therefore, the project capital cost has been levied. The cost estimates for this project are preliminary estimates based on the TIA as provided by the Town and are to be updated when more detailed cost estimates become available to finalize the off-site levy rates.

### Project Costs

Item	Cost
Estimated Construction Cost <sup>1</sup>	\$6,458,531
Grant Funded	-
Developer Build Contribution	-
Town Contribution	-
Leviable Project Cost	\$6,458,531
Off-Site Levies Collected to 2022	-
Remaining Levy	\$6,458,531

<sup>1</sup> The project construction cost includes contingency and engineering costs and has been inflated based on the proposed construction year of the project.

### Off-Site Levy Rates

Item	Cost
	\$/ha
2022 Levy Rate	\$23,509



**APPENDIX**  
Facility Project Sheets

D

Table A1: Current Levy Rate Summary

Infrastructure Upgrade	Current Levies	
	Inside Town Boundary	Outside Town Boundary
	\$/ha	\$/ha
Water	\$12,267	\$12,486
Wastewater	\$26,263	\$6,309
Stormwater	\$21,136	\$5,534
Transportation	\$35,163	\$35,641
Facilities	\$0	\$0
<b>Total</b>	<b>\$94,829</b>	<b>\$59,970</b>
<b>Total Bylaw</b>	<b>\$85,575</b>	

Note: The total bylaw is based on the levy rate imposed as of May 1, 2009 in the Off-Site Levy Bylaw (Coaldale, 2008)

Table A2: Existing Levy Account Balances

Infrastructure Upgrade	Existing Off-Site Levy Account Balance	
	\$	\$/ha
Water	\$766,000	\$2,837
Wastewater	\$114	\$0
Stormwater	\$568,000	\$2,104
Transportation	\$357,000	\$1,322
Facilities	\$0	\$0
<b>Total</b>	<b>\$1,691,114</b>	<b>\$6,263</b>

Note: The per hectare total of the existing levy account balances is based on the net developable area of the 25-year horizon.

Table A3: Uniform Off-Site Levy Rate Summary - 25-Year Horizon - Net Area

Infrastructure Upgrade	Proposed Off-Site Levies				
	Priority 1	Priority 1A	Priority 1B	Combined	Combined Minus Existing Balances
	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha
Water	\$53,041	\$0	\$0	\$53,041	\$50,204
Wastewater	\$55,313	\$13,522	\$0	\$68,834	\$68,834
Stormwater	\$0	\$0	\$0	\$0	\$0
Transportation	\$6,854	\$10,325	\$43,593	\$60,771	\$59,449
Facilities	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$115,207</b>	<b>\$23,847</b>	<b>\$43,593</b>	<b>\$182,647</b>	<b>\$178,487</b>

Table A4: Change in Off-Site Levy Rate

Infrastructure Upgrade	Change in Levies	
	Inside Town Boundary	Outside Town Boundary
	\$/ha	\$/ha
Water	\$37,937	\$37,718
Wastewater	\$42,571	\$62,525
Stormwater	-\$21,136	-\$5,534
Transportation	\$24,286	\$23,808
Facilities	\$0	\$0
<b>Total</b>	<b>\$92,912</b>	



**Table A3: Water Off-Site Levy Calculations - 25-Year Horizon - Net Area**

Priority	ID	Project	Description	Cost Estimate Year	Proposed Construction Year	Original Construction Cost	Contingency	Material Testing	Engineering	Original Capital Cost	Updated Capital Cost	Levies Spent	Remaining Capital Cost	Grant Funded	Developer Built/Financed	Existing Town Contribution	Total Levied	Uniform Model
																		274.73
1	W1	North Coaldale Loop	300mm DR18 PVC Water Pipe	2019	2032	\$ 1,966,000	\$ 393,200	\$ 58,980	\$ 283,104	\$ 2,701,284	\$ 3,697,626	\$ -	\$ 3,697,626	\$ -	\$ -	\$ 924,407	\$ 2,773,220	\$ 2,773,220
	W2	South Coaldale Loop	300mm DR18 PVC Water Pipe	2019	2038	\$ 1,409,000	\$ 281,800	\$ 42,270	\$ 202,896	\$ 1,935,966	\$ 2,984,362	\$ -	\$ 2,984,362	\$ -	\$ -	\$ 746,091	\$ 2,238,272	\$ 2,238,272
	W3	West Reservoir and Pump Station	New Reservoir and Pump Station	2022	2028	\$ 7,420,000	\$ 2,230,000	\$ 290,000	\$ 1,160,000	\$ 11,100,000	\$ 12,746,906	\$ -	\$ 12,746,906	\$ -	\$ -	\$ 3,186,726	\$ 9,560,179	\$ 9,560,179
Sub-Total Water Priority 1						\$ 10,795,000	\$ 2,905,000	\$ 391,250	\$ 1,646,000	\$ 15,737,250	\$ 19,428,894	\$ -	\$ 19,428,894	\$ -	\$ -	\$ 4,857,223	\$ 14,571,670	\$ 14,571,670
Sub-Total Water Priority 1 per Hectare																		\$ 53,041
Total Water						\$ 10,795,000	\$ 2,905,000	\$ 391,250	\$ 1,646,000	\$ 15,737,250	\$ 19,428,894	\$ -	\$ 19,428,894	\$ -	\$ -	\$ 4,857,223	\$ 14,571,670	\$ 14,571,670
Total Water per Hectare																		\$ 53,041

Priority	ID	Project	Description	Cost Estimate Year	Proposed Construction Year	Original Construction Cost	Contingency	Material Testing	Engineering	Original Capital Cost	Updated Capital Cost	Levies Spent	Remaining Capital Cost	Grant Funded	Developer Built/Financed	Existing Town Contribution	Total Levied	Uniform Model	
																		274.73	
1	WW1	West Coaldale Main Trunk - Phase 1	750mm Wastewater Main Installation	2022	2023	\$ 1,307,000	\$ 261,400	\$ 47,052	\$ 156,840	\$ 1,772,292	\$ 1,829,005	\$ -	\$ 1,829,005	\$ -	\$ -	\$ 182,901	\$ 1,646,105	\$ 1,646,105	
	WW2	West Coaldale Main Trunk - Phase 2	750mm Wastewater Main Installation	2022	2028	\$ 3,101,000	\$ 620,200	\$ 111,636	\$ 372,120	\$ 4,204,956	\$ 4,828,845	\$ -	\$ 4,828,845	\$ -	\$ -	\$ 482,884	\$ 4,345,960	\$ 4,345,960	
	WW3	West Coaldale Main Trunk - Phase 3	450mm and 600mm Wastewater Main	2022	2038	\$ 4,239,000	\$ 847,800	\$ 152,604	\$ 508,680	\$ 5,748,084	\$ 8,046,493	\$ -	\$ 8,046,493	\$ -	\$ -	\$ -	\$ 8,046,493	\$ 8,046,493	
	WW4	30 Avenue Upgrade	375mm Wastewater Main Upgrade	2019	2028	\$ 1,332,000	\$ 266,400	\$ 39,960	\$ 191,808	\$ 1,830,168	\$ 2,314,424	\$ -	\$ 2,314,424	\$ -	\$ -	\$ 1,157,212	\$ 1,157,212	\$ 1,157,212	
Sub-Total Wastewater Priority 1						\$ 9,979,000	\$ 1,995,800	\$ 351,252	\$ 1,229,448	\$ 13,555,500	\$ 17,018,767	\$ -	\$ 17,018,767	\$ -	\$ -	\$ 1,822,997	\$ 15,195,770	\$ 15,195,770	
Sub-Total Wastewater Priority 1 per Hectare																			\$ 55,313
1A	WW5	Lagoon and Lift Station Capacity Upgrades	Capacity and Treatment Upgrades	2022	2022	\$ 11,512,926	\$ 129,554	\$ -	\$ 823,698	\$ 12,466,178	\$ 12,466,178	\$ 645,000	\$ 11,821,178	\$ 4,391,636	\$ -	\$ 3,714,771	\$ 3,714,771	\$ 3,714,771	
Sub-Total Wastewater Priority 1A						\$ 11,512,926	\$ 129,554	\$ -	\$ 823,698	\$ 12,466,178	\$ 12,466,178	\$ 645,000	\$ 11,821,178	\$ 4,391,636	\$ -	\$ 3,714,771	\$ 3,714,771	\$ 3,714,771	
Sub-Total Wastewater Priority 1A per Hectare																			\$ 13,522
Total Wastewater						\$ 21,491,926	\$ 2,125,354	\$ 351,252	\$ 2,053,146	\$ 26,021,678	\$ 29,484,945	\$ 645,000	\$ 28,839,945	\$ 4,391,636	\$ -	\$ 5,537,769	\$ 18,910,541	\$ 18,910,541	
Total Wastewater per Hectare																			\$ 68,834

Priority	ID	Project	Description	Cost Estimate Year	Proposed Construction Year	Original Constuction Cost	Contingency	Material Testing	Engineering	Capital Cost	Updated Capital Cost	Levies Spent	Remaining Capital Cost	Grant Funded	Developer Built/Financed	Existing Town Contribution	Total Levied	Uniform Model	
																		274.73	
	T1	18 Avenue/20 Street Intersection Upgrades	Upgrade	2020	2032	\$ 450,000	\$ 112,500	\$ 14,063	\$ 70,313	\$ 646,875	\$ 877,657	\$ -	\$ 877,657	\$ -	\$ -	\$ 438,829	\$ 438,829	\$ 438,829	
	T2	21 Avenue/Land O'Lakes Drive Intersection Upgrades	Upgrade	2020	2025	\$ 739,955	\$ 110,993	\$ 21,274	\$ 106,369	\$ 978,590	\$ 1,153,596	\$ -	\$ 1,153,596	\$ -	\$ -	\$ 576,798	\$ 576,798	\$ 576,798	
	T3	Land O'Lakes Drive At-Grade Pedestian Crossing	New	2022	2024	\$ 810,200	\$ 162,040	\$ -	\$ 122,000	\$ 1,094,240	\$ 1,156,358	\$ -	\$ 1,156,358	\$ -	\$ -	\$ 289,089	\$ 867,268	\$ 867,268	
Sub-Total Transportation Priority 1						\$ 2,000,155	\$ 385,533	\$ 35,336	\$ 298,681	\$ 2,719,705	\$ 3,187,611	\$ -	\$ 3,187,611	\$ -	\$ -	\$ 1,304,716	\$ 1,882,895	\$ 1,882,895	
Sub-Total Transportation Priority 1 per Hectare																			\$ 6,854
1A	T4	Highway 3/30 Street Geometric Improvements	Upgrade	2016	2032	\$ 1,808,000	\$ 167,000	\$ -	\$ 200,000	\$ 2,175,000	\$ 3,151,677	\$ -	\$ 3,151,677	\$ -	\$ -	\$ 315,168	\$ 2,836,509	\$ 2,836,509	
Sub-Total Transportation Priority 1A						\$ 1,808,000	\$ 167,000	\$ -	\$ 200,000	\$ 2,175,000	\$ 3,151,677	\$ -	\$ 3,151,677	\$ -	\$ -	\$ 315,168	\$ 2,836,509	\$ 2,836,509	
Sub-Total Transportation Priority 1A per Hectare																			\$ 10,325
1B	T5	Highway 3/11 Street Signalization	Upgrade	2022	2038	\$ 700,000	\$ 140,000	\$ 21,000	\$ 105,000	\$ 966,000	\$ 1,352,261	\$ -	\$ 1,352,261	\$ -	\$ -	\$ 676,131	\$ 676,131	\$ 676,131	
	T6	Highway 3/8 Street Signalization	Upgrade	2022	2032	\$ 700,000	\$ 140,000	\$ 21,000	\$ 105,000	\$ 966,000	\$ 1,200,769	\$ -	\$ 1,200,769	\$ -	\$ -	\$ 600,385	\$ 600,385	\$ 600,385	
	T7	30 Avenue/20 Street Intersection Upgrades	Upgrade	2022	2025	\$ 290,300	\$ 66,800	\$ 7,300	\$ 36,300	\$ 400,700	\$ 432,763	\$ -	\$ 432,763	\$ -	\$ -	\$ 216,381	\$ 216,381	\$ 216,381	
	T8	30 Street Urbanization to Highway 512	Upgrade	2022	2038	\$ 2,000,000	\$ 500,000	\$ 62,500	\$ 312,500	\$ 2,875,000	\$ 4,024,587	\$ -	\$ 4,024,587	\$ -	\$ -	\$ -	\$ 4,024,587	\$ 4,024,587	
	T9	New West Coadale Highway 3 Intersection	Upgrade	2023	2043	\$ 3,000,000	\$ 750,000	\$ 93,750	\$ 468,750	\$ 4,312,500	\$ 6,458,531	\$ -	\$ 6,458,531	\$ -	\$ -	\$ -	\$ 6,458,531	\$ 6,458,531	
Sub-Total Transportation Priority 1B						\$ 6,690,300	\$ 1,596,800	\$ 205,550	\$ 1,027,550	\$ 9,520,200	\$ 13,468,912	\$ -	\$ 13,468,912	\$ -	\$ -	\$ 1,492,897	\$ 11,976,015	\$ 11,976,015	
Sub-Total Transportation Priority 1B per Hectare																			\$ 43,593
Total Transportation						\$ 10,498,455	\$ 2,149,333	\$ 240,886	\$ 1,526,231	\$ 14,414,905	\$ 19,808,200	\$ -	\$ 19,808,200	\$ -	\$ -	\$ 3,112,781	\$ 16,695,420	\$ 16,695,420	
Total Transportation per Hectare																			\$ 60,771



## **APPENDIX**

### Detailed Off-Site Levy Calculations

# E

## Town of Coaldale Off-Site Levy Fact Sheet

### General Off-Site Levy Overview

#### What is the purpose of this Off-Site Levy Review?

- To ensure adequate capital is collected from new developments in the Town to fund infrastructure required to support Town growth. These costs should be financed through levies collected on the development within the Town.
- To update the existing levy rates and bylaw from the previous 2007 Off-Site Levy and Development Charges Review.



#### Why update the current Off-Site Levy Bylaw?

- Levy rates, as well as other issues such as timing, may impact a municipality's ability to attract and maintain developments.
- The Town annexed additional lands from Lethbridge County in 2018, increasing the available development area and services required to accommodate this development.
- A new Infrastructure Master Plan and Transportation Master Plan were completed in 2020 to outline the infrastructure needs due to anticipated future growth.

#### What types of infrastructure can be included in an off-site levy?

The governing authority for the off-site levy bylaw is the Municipal Government Act (MGA), which states that the off-site levy may be used to pay for all or part of the capital cost of any or all of the following:



- New or expanded facilities for the storage, transmission, treatment or supplying of water;
- New or expanded facilities for the treatment, movement or disposal of wastewater;
- New or expanded storm sewer drainage facilities;
- New or expanded roads required for or impacted by a subdivision or development; and
- Land required for or in connection with any facilities described above.

As of January 1, 2018, an off-site levy may also be used to pay for the following:

- New or expanded community recreation facilities (i.e., parks, pools, arenas, etc.);
- New or expanded fire hall facilities;
- New or expanded police station facilities; and
- New or expanded libraries.

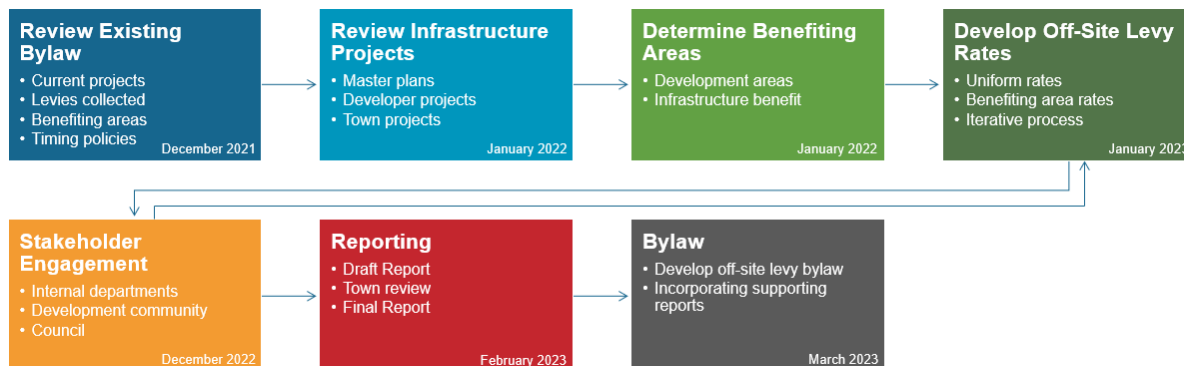


#### What are the benefits of off-site levies?

- Levies provide a standardized system (levy rates, payment timing, etc.) for developers to contribute to town infrastructure project needs to accommodate their development. This benefits both the existing town and new developments.
- The Town can better budget for upcoming infrastructure projects based on proposed development horizons, associated off-site levy rates and collections timelines, as well as debenture-based financing impacts to the Town.

## Town of Coaldale Off-Site Levy Review

### Off-Site Levy Review Methodology



### Off-Site Levy Assumptions

- Water, wastewater, and transportation infrastructure projects are included. Stormwater and facility infrastructure projects were not included.
- All projects are considered to provide global benefit to the Town. Therefore, levy rates were calculated on a uniform basis and based on the net developable area.
- Projects were separated into priority categories:
  - Priority 1 – Suitable levy projects with established cost estimates.
  - Priority 1A – Potentially suitable levy projects with established cost estimates.
  - Priority 1B – Potentially suitable levy projects with preliminary cost estimates.
- The growth boundary and development areas are based on the 25-year growth horizon.
- An annual inflation factor was applied to the infrastructure project costs to account for increased costs in the proposed construction year.
- Grant funding has been applied for those projects that have already received funding.
- No interest or carrying charges have been included at this stage.

### Off-Site Levy Rates

Infrastructure	Proposed Levies				
	Priority 1	Priority 1A	Priority 1B	Combined	Combined Minus Existing Balances
	\$/ha	\$/ha	\$/ha	\$/ha	\$/ha
Water	\$53,041	\$0	\$0	\$53,041	\$50,204
Wastewater	\$55,313	\$13,522	\$0	\$68,834	\$68,834
Stormwater	\$0	\$0	\$0	\$0	\$0
Transportation	\$6,854	\$10,325	\$43,593	\$60,771	\$59,449
Facilities	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$115,207</b>	<b>\$23,847</b>	<b>\$43,593</b>	<b>\$182,647</b>	<b>\$178,487</b>





### Off-Site Levy Review Questions

Questions regarding the Off-site Levy Review can be directed to:

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